

**MCIB**

Marine Casualty Investigation Board  
*Bord Imscrúdú Taisní Muirí*



**REPORT INTO THE  
COLLISION BETWEEN  
A TANKER 'VARKAN EGE'  
AND  
A SAILING VESSEL 'MEDI MODE'  
23rd AUGUST 2019**

**REPORT NO. MCIB/293  
(No.7 OF 2020)**

The Marine Casualty Investigation Board (MCIB) examines and investigates all types of marine casualties to, or on board, Irish registered vessels worldwide and other vessels in Irish territorial waters and inland waterways.

The MCIB objective in investigating a marine casualty is to determine its circumstances and its causes with a view to making recommendations to the Minister for Transport, Tourism and Sport for the avoidance of similar marine casualties in the future, thereby improving the safety of life at sea and inland waterways.

The MCIB is a non-prosecutorial body. We do not enforce laws or carry out prosecutions. It is not the purpose of an investigation carried out by the MCIB to apportion blame or fault.

The legislative framework for the operation of the MCIB, the reporting and investigating of marine casualties and the powers of MCIB investigators is set out in the Merchant Shipping (Investigation of Marine Casualties) Act, 2000.

In carrying out its functions the MCIB complies with the provisions of the International Maritime Organisation's Casualty Investigation Code and EU Directive 2009/18/EC governing the investigation of accidents in the maritime transport sector.



Leeson Lane, Dublin 2.  
Telephone: 01-678 3485/86.  
email: [info@mcib.ie](mailto:info@mcib.ie)  
[www.mcib.ie](http://www.mcib.ie)

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## Glossary of Abbreviations and Acronyms

AIS	Automatic Identification System
Ch.	Channel
CPA	Closest Point of Approach
DSC	Digital Selective Calling
IRPCS/COLREGs	International Regulations for Preventing Collisions at Sea 1972.
NM	Nautical Miles
OOW	Officer of the Watch
VDR	Voyage Data Recorder
VHF	Very High Frequency (radio transceiver)
VTS	Vessel Traffic Service

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## 1. SUMMARY

- 1.1 On Saturday the 22nd August 2019 at 10.45 hrs the sailing vessel '*Medi Mode*' departed from Arklow and was on route to Kilmore Quay. A decision was made to change the destination from Kilmore Quay to Howth as the weather had deteriorated, and due to an impending night arrival in Kilmore Quay. At 17.45 hrs on the 22nd August, abeam of Rosslare, a course was set for the home port of Howth. The vessel was motor sailing on autopilot with navigation lights and steaming light showing from sunset. At approximately 02.10 hrs on the 23rd August, a southbound vessel appeared off the starboard bow. It's steaming white lights and a green side light were observed by the watchkeeper on the yacht.
- 1.2 On Sunday the 23rd August at 01.00 hrs the tanker '*Varkan Ege*' commenced its sea passage after leaving Dublin Port. The destination was Falmouth and a course was set of 161 degrees with a speed of 7.5 knots.
- 1.3 At 02.15 the officer on watch (OOW) of the '*Varkan Ege*' observed a red light on the starboard bow and he went to check for an echo on the radar. He found a small echo and realised that it was an echo from a sailing vessel. The closest point of approach (CPA) was 0 nautical miles (NM).

He made a large alteration of course to starboard. At 02.22 hrs there was a collision between the two vessels. There was damage to the sailing vessel but nobody was injured. There was no damage to the tanker '*Varkan Ege*'. The sailing vessel was extensively damaged but was able to make way under its own power to Greystones Harbour. Nobody was injured and there was no pollution caused by this incident.

Note all times are local time = UTC+1

## 2. FACTUAL INFORMATION

### 2.1 Vessel Details:

Name of Vessel 1:	<i>'Varkan Edge'</i> .
Port of Registry:	Istanbul.
Type of Vessel:	Chemical/Oil Products Taker.
Official Registry Number:	1482.
Call sign:	TCSZ3.
Gross Tonnage:	2,500 tonnes.
Deadweight:	3,550 tonnes.
Length Overall:	82.255 m.
Breath:	13.5 m.
Depth:	6.5 m.
Freeboard:	3541.73 mm.

There is no Voyage Data Recorder as the vessel is less than 3,000 Tonnes.

Lights:	2 Masthead white lights range 6 miles.
	Sidelights, red port and green starboard, range 3 miles. Visible arc 112.5 degrees.
	Stern white light, range 3 miles.

Name of Vessel 2:	<i>'Medi Mode'</i> .
Port of Registry:	Howth.
Vessel details:	Moody 39 sailing craft built 1978.
Length Overall:	38' 06".
Beam:	13" 04".
Draught:	5' 6".

Auxiliary propulsion:	Thornycroft 48hp diesel engine.
Displacement:	18,150lbs.
Lights:	A combined white, red, green masthead all-round light. Range 1 mile. Visible arc of green and red 112.5 degrees. In addition to the masthead lights 'Medi Mode' has port, starboard and stern lights at deck level. These were not in use at the time of incident.

Particulars of 'Medi Mode' courtesy of [Moodyowners.org](http://Moodyowners.org)

## 2.2 Crew Details

2.2.1 Tanker 'Varkan Ege': On the bridge at the time of the incident the Master was doing paperwork and the second officer was on watch. The Master's report does not mention a lookout until after the event when he orders the lookout to "follow the sailing vessel continuously". We do not know how long these crew members were doing cargo operations prior to departure. The MCIB investigation was not able to determine further details as the vessel has not returned to this jurisdiction since the incident.

2.2.2 The 'Medi Mode' had two persons on board the vessel. They were working a two hour on/off watch system, one person keeping watch and one person was below deck sleeping. They had thirty plus years' experience in the aviation industry and fifty years' sailing experience. They had taken part in many round the world voyages and competitions. Neither crew had formal marine navigational qualifications which would have included knowledge of light identification and *International Regulations for Preventing Collisions at Sea 1972* (COLREGs).

## 2.3 Marine Incident Information

### 2.3.1 Voyage Particulars

The 'Varkan Ege' was on a voyage from Dublin to Falmouth. It was on a course of 161 degrees.

The 'Medi Mode' was on a voyage from Arklow to Kilmore Quay. It changed course off Rosslare and set course for its home port of Howth. It was motor sailing a course of 000 degrees on autopilot.

### 2.3.2 Type of casualty

This was a serious marine casualty involving a collision between two vessels leading to serious damage to the yacht 'Medi Mode'.

## 2.4 Emergency Response

- 2.4.1 At 02.27 hrs August 23rd, the tanker ‘*Varkan Ege*’ contacted Dublin Port VTS and informed them that it had been in a collision with a sailing vessel. Dublin Port VTS advised it to contact Dublin Coast Guard radio on Channel (Ch.) 16. The Coast Guard instructed it to stay on-scene and the Coast Guard in Greystones was alerted.
- 2.4.2 The crewman off-watch on the ‘*Medi Mode*’ pressed the DSC button on his VHF transceiver but no response was received. This should have transmitted a Mayday call giving the vessel’s identification and position on VHF Ch. 16. He also made a Mayday transmission on VHF Ch. 16 but no response was received. VHF contact was made with the ‘*Varkan Ege*’ by the on-watch crewmember, following a change in helm, and it relayed the information to Dublin Coast Guard radio. It relayed the message that ‘*Medi Mode*’ had no injuries and no water ingress. It also reported that the ‘*Medi Mode*’ was making way to Greystones Harbour which was 3 miles west of the collision location.

## 2.5 Weather

The weather over the period, according to the Met Éireann Weather Report, was reasonably good with wind from the south west force 4 to 5 (see Appendix 7.8. Met Éireann Weather Report).

The wind at Rosslare was SW force 5 to 6.

Visibility was good. For the ‘*Medi Mode*’ the wind was on its stern.

## 2.6 Damage

The visible damage to the ‘*Medi Mode*’ was as follows:

- the stem head fitting was torn away, the pulpit, toe rail and surrounding area was severely deformed;
- the mast was held upright by the baby stay forward;
- rudder control was restricted by damage and was unable to use the full range;
- there was damage to the aft bulkhead and door to the aft cabin; and
- the starboard sheet winch was driven down through the cockpit coaming.

## 2.7 Equipment

The ‘*Medi Mode*’ had two radar reflectors, a diamond radar reflector and a tube radar reflector. Both were hoisted in position at the time of the collision.

The tube radar reflector was  $\frac{3}{4}$  ways up the backstay and the diamond radar reflector was about 20 feet up from the deck on the mast spreaders. The '*Medi Mode*' had recently had its radio communications equipment and aerial system rewired.

### 3. NARRATIVE

- 3.1 In the Irish Sea, 3 miles east of Greystones in position 53° 09.864'N 005° 57.596'W, two vessels collided, resulting in one vessel sustaining significant damage. No injuries were sustained. There was no pollution caused.
- 3.2 It has not been possible for the MCIB to interview the crew of the '*Varkan Ege*' as it has not returned to the jurisdiction since the event. The Master's report has been taken into consideration in the following narrative.
- 3.3 Timeline

#### Thursday 22nd August

10.45 hrs: The sailing vessel '*Medi Mode*' left Arklow for Kilmore Quay.

17.45 hrs: The '*Medi Mode*' was off Rosslare Harbour and changed its destination due to impending adverse weather and possible night arrival at Kilmore Quay, which would be difficult. Its new destination was its home port of Howth. Its new course was set at 000°. It was motor sailing on autopilot for some hours before and up to the collision. Navigation lights and steaming light were switched on before sunset.

#### Friday 23rd August

01.00 hrs: According to the Master's report the '*Varkan Ege*' commenced sea passage after leaving Dublin port with a destination of Falmouth. The Master's report states its engine was set at 50% and its speed was 7.5 knots. The Master was on the bridge. The Second Mate was on watch on the bridge. Reports indicate that there was also a crewmember on the bridge as a lookout/observer.

02.00 hrs: The watch changed on '*Medi Mode*'.

02.10 hrs: The watchkeeper on the '*Medi Mode*' saw the vessel '*Varkan Ege*' ahead and on its starboard side. The watchkeeper in his report stated a port green light was seen on its starboard bow (this is an error as a port side light is red). In his interview he stated that it was green to green at all times with the '*Varkan Ege*'. There was no radar on '*Medi Mode*'. Its speed was 7.9 knots.

02.12 hrs: The crew on the '*Medi Mode*' believed that the situation was green to green i.e. each vessel had the other clear on its starboard side and that it would pass well clear of the tanker '*Varkan Ege*'. The watchkeeper did not take any compass bearing on the '*Varkan Ege*'.

It maintained its course and speed at this time.

- 02.15 hrs: The watchkeeper on the 'Varkan Ege' reported a red light on the starboard bow. This indicated that the vessel being observed had its port side towards the 'Varkan Ege', and was most likely in a crossing situation.
- 02.16 hrs: The 'Varkan Ege' watchkeeper checked his radar where he found a weak echo which he identified as a sailing vessel. No mention is made of the steaming light on the 'Medi Mode' which would have identified it as a vessel under power (Rule 3(b), (c)). No compass bearings were taken on the approaching vessel to assist in establishing the risk of collision.
- 02.17 hrs: The 'Varkan Ege' watchkeeper called the sailing vessel on VHF but he received no reply.
- 02.18 hrs: The 'Varkan Ege' watchkeeper switched the vessel's steering gear from automatic to manual. He informed the master that he was altering course to starboard to avoid collision with the other vessel.

The course alteration to starboard was stated to be large enough to pass astern of the 'Medi Mode'. He stated that 'Medi Mode' altered its course to port. He gave 5 short blasts on the ships whistle as per Part D, Rule 34 of COLREGs (Manoeuvring and warning signals, Section d: *When vessels in sight of one another are approaching each other and from any cause either vessel fails to understand the intentions or actions of the other, or is in doubt whether sufficient action is being taken by the other to avoid collision, the vessel in doubt shall immediately indicate such doubt by giving at least five short and rapid blasts on the whistle. Such signal may be supplemented by a light signal of at least five short and rapid flashes*).

- 02.20 hrs: The 'Varkan Ege' reduced its speed.
- 02.22 hrs: 'Varkan Ege' and sailing vessel 'Medi Mode' collided. The sailing vessel made contact with the tanker on its port side. 'Medi Mode' collided head on and damaged its bow. It then swung to port, then swung to starboard and damaged its starboard side. The 'Varkan Ege' immediately stopped its engine. The VHF, DSC button was pressed on the 'Medi Mode' but no response was received. Mayday transmission was made by 'Medi Mode' but again no response was received.
- 02.22 hrs: 'Varkan Ege' contacted Dublin Port VTS and informed it that they had been in a collision with a sailing vessel. It reported that there

was no pollution incident. It contacted the *'Medi Mode'* by VHF, who informed them it was not taking water. It relayed this information to Dublin Port VTS. Dublin Port VTS instructed it to stay on scene and stay on Ch. 12 VHF. At the same time the *'Varkan Ege'* picked up a DSC distress call from the *'Medi Mode'*.

- 02.24 hr: Dublin Port VTS instructed *'Varkan Ege'* to contact Dublin Coast Guard radio on VHF Ch. 16 or Ch.12.
- 02.27 hrs: The *'Varkan Ege'* was in contact with Dublin Coast Guard radio and information was exchanged. *'Medi Mode'* was unable to transmit or receive messages from Dublin Coast Guard radio. The tanker *'Varkan Ege'* was able to relay any messages from *'Medi Mode'*. *'Medi Mode'* proceeded to Greystones Harbour.
- 02.37 hrs: VHF contact was lost between *'Varkan Ege'* and *'Medi Mode'*. However, *'Medi Mode'* which was heading in the direction of Greystones was visible to the tanker *'Varkan Ege'*.
- 03.45 hrs: *'Medi Mode'* arrived at a pontoon in Greystones Harbour and was met by the Deputy Chief Officer in charge of Greystones Coast Guard. The Coast Guard interviewed the crewmembers of the *'Medi Mode'* and contact details were exchanged. The Coast Guard spoke to the Master of the *'Varkan Ege'* over the VHF and took his details.
- 03.48 hrs Dublin Coast Guard informed the *'Varkan Ege'* that it was free to resume its passage to Falmouth.
- 03.50 hrs: Vessel *'Varkan Ege'* resumed its passage to Falmouth.

## 4. ANALYSIS

The cause of this collision is the result of two main factors:

- The application and implementation, in this case, of the International Regulations for Preventing Collisions at Sea 1972 (COLREGs).
- Human Factors.

4.1 The application and implementation, in this case, of the International Regulations for Preventing Collisions at Sea 1972 (COLREGs).

4.1.2 International Regulations for Preventing Collisions at Sea 1972 (COLREGs).

Any skipper should have a sound working knowledge of these regulations so that he can apply them almost instinctively. It is also necessary to be able to recognize lights, shapes and other signals which are prescribed for different types of vessels under various conditions.

From the analysis of the circumstances the following rules of the COLREGs are considered to apply to this event. Relevant sections of each rule are underlined and their application to the collision is considered.

**Rule 1.** States that the rules apply to all vessels upon the high seas and all waters connected to the high seas and navigable by seagoing vessels.

**Rule 2.** Covers the responsibility of the master, owner and crew to comply with the rules.

4.1.3 **Rule 5. Look-out.**

*Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.*

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The event occurred in the Irish Sea, 3 miles east of Greystones Harbour. The weather was good. It happened at night time and the visibility was good. Both vessels should have observed each other and avoided a close quarters situation developing. A close quarters situation means a situation at which vessels are dangerously approaching each other and the action of one vessel alone may not be enough to avoid a collision. The 'Medi Mode' should have seen the 'Varkan Ege' lights at a range of 6 miles and the 'Varkan Ege' should have observed the 'Medi Mode' lights at a range of 1 mile. The 'Varkan Ege' Master's report does not

indicate that at the time of the collision that there was a lookout on the bridge. However, it is stated in the Master's report that 'the lookout kept an eye on the sailing vessel'. If the lookout saw the sailing vessel at a range of 1 NM he would have approximately 4 minutes to make an alteration of course to try to avoid collision.

#### 4.1.4 Rule 7. Risk of collision.

- (a). Every vessel shall use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists. If there is any doubt such risk shall be deemed to exist.*
- (b). Proper use shall be made of radar equipment if fitted and operational, including long-range scanning to obtain early warning of risk of collision and radar plotting or equivalent systematic observation of detected objects.*
- (c). Assumptions shall not be made on the basis of scanty information, especially scanty radar information.*
- (d). In determining if risk of collision exists the following considerations shall be among those taken into account:
  - (i). such risk shall be deemed to exist if the compass bearing of an approaching vessel does not appreciably change;*
  - (ii). such risk may sometimes exist even when an appreciable bearing change is evident, particularly when approaching a very large vessel or a tow or when approaching a vessel at close range.**

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Look-out in this case is the activity of the watchkeeper or other person in looking out for hazards or other events that may affect safe navigation. The person carrying out this function can be the watchkeeper, or a dedicated person appointed as the 'lookout'.

Neither vessel took compass bearings of each other to determine if there was a risk of collision. Both vessels contravened the express requirement of Rule 7 (d)(i) Risk of Collision to take such bearings. If they had then this would have shown that a risk of collision existed.

On Friday the 23rd August at 02.16 hrs the 'Varkan Ege' watchkeeper checked his radar when he found a weak echo which he identified as a sailing vessel. This was approximately 6 minutes before the collision occurred and would have been when the vessels were roughly 1.5 NM distance from each other.

**4.1.5 Rule 8. Action to avoid collision.**

- (a). Any action to avoid collision shall be taken in accordance with the Rules of this Part and shall, if the circumstances of the case admit, be positive, made in ample time and with due regard to the observance of good seamanship.*
- (b). Any alteration of course and/or speed to avoid collision shall, if the circumstances of the case admit, be large enough to be readily apparent to another vessel observing visually or by radar; a succession of small alterations of course and/or speed should be avoided.*
- (c). If there is sufficient sea-room, alteration of course alone may be the most effective action to avoid a close-quarters situation provided that it is made in good time, is substantial and does not result in another close-quarters situation.*
- (d). Action taken to avoid collision with another vessel shall be such as to result in passing at a safe distance. The effectiveness of the action shall be carefully checked until the other vessel is finally past and clear.*
- (e). If necessary to avoid collision or allow more time to assess the situation, a vessel shall slacken her speed or take all way off by stopping or reversing her means of propulsion.*
  - (i). A vessel which, by any of these Rules, is required not to impede the passage or safe passage of another vessel shall, when required by the circumstances of the case, take early action to allow sufficient sea-room for the safe passage of the other vessel.*
  - (ii). A vessel required not to impede the passage or safe passage of another vessel is not relieved of this obligation if approaching the other vessel so as to involve risk of collision and shall, when taking action, have full regard to the action which may be required by the Rules of this part.*
  - (iii). A vessel the passage of which is not to be impeded remains fully obliged to comply with the Rules of this part when the two vessels are approaching one another so as to involve risk of collision.*

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The 'Varkan Ege' was on a course of 161° and the 'Medi Mode' was on a course of 000°. The 'Medi Mode' reported that the situation was green to green. This means that both vessels were showing green side navigation lights (starboard light) to the other and that they could possibly clear each other Starboard side to

Starboard side. The matter is confused by the fact that the watchkeeper on the 'Medi Mode', in his statement, identified the green light as a Port light. (The Port side light is red). The 'Varkan Ege' reported that the situation was red to green. This is either a head on situation or a crossing situation. Either way it would have led to a close quarter's situation developing (see Appendix 7.7).

#### 4.1.6 Rule 14. Head-on situation

- (a). When two power-driven vessels are meeting on reciprocal or nearly reciprocal courses so as to involve risk of collision each shall alter her course to starboard so that each shall pass on the port side of the other.*
- (b). Such a situation shall be deemed to exist when a vessel sees the other ahead or nearly ahead and by night she could see the masthead lights of the other in a line or nearly in a line and/or both sidelights and by day she observes the corresponding aspect of the other vessel.*
- (c). When a vessel is in any doubt as to whether such a situation exists she shall assume that it does exist and act accordingly.*

#### 4.1.7 Rule 15. Crossing situation.

*When two power-driven vessels are crossing so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of the way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel.*

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Rules 14 and 15 refer to power-driven motor vessels in a head-on or crossing situation. In this case both vessels are considered under the COLREGs to be power driven vessels, Rule 3 (b). 'Varkan Ege' is a power driven vessel and 'Medi Mode' was motor sailing at the time making it a power driven vessel.

'Varkan Ege' observed a red light on its starboard side and should have determined that this was a crossing situation and accordingly should keep well clear by making a large alteration of course to starboard in ample time. The 'Varkan Ege' was the give-way vessel. Given the circumstances that developed and the lights which were apparent to each of the vessels the 'Varkan Ege' was the give-way vessel and the 'Medi Mode' was the stand-on Vessel.

#### 4.1.8 Rule 16. Action by give-way vessel.

*Every vessel which is directed to keep out of the way of another vessel shall, so far as possible, take early and substantial action to keep well clear.*

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In this case it became apparent to the OOW on the 'Varkan Ege' that there was a collision risk.

The 'Varkan Ege''s speed was 7.5 knots and the 'Medi Mode' had a speed of 7.9 knots. This would give a closing speed of approximately 15.4 knots. This type of closing speed would result in close quarter's situation in 4 minutes from the time 'Varkan Ege' saw the lights on 'Medi Mode' as the lights of the 'Medi Mode' had a minimum range of 1 NM. As the give-way vessel (a vessel directed to keep out of the way of another vessel) under the COLREGs, the 'Varkan Ege' was required to take early and substantial action by a large alteration of course to starboard, to avoid collision. It did this, according to the Master's statement, by altering course to starboard.

Friday 23rd August 02.18 hrs: The OOW on 'Varkan Ege' switched the vessel's steering gear from automatic to manual. He informed the Master that he was altering course to starboard to avoid collision with the other vessel. Automatic identification surveillance (AIS) data indicates a course alteration of approximately 60 degrees to starboard by the 'Varkan Ege'. The course alteration to starboard was stated to be large enough to pass astern of 'Medi Mode'. He stated that 'Medi Mode' altered its course to port prior to the collision.

#### 4.1.9 Rule 17. Action by stand-on vessel.

- (a). (i). *Where one of two vessels is to keep out of the way the other shall keep her course and speed.*
- (ii). *The latter vessel may however take action to avoid collision by her manoeuvre alone, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in compliance with these Rules.*
- (b). *When, from any cause, the vessel required to keep her course and speed finds herself so close that collision cannot be avoided by the action of the give-way vessel alone, she shall take such action as will best aid to avoid collision.*
- (c). *A power-driven vessel which takes action in a crossing situation in accordance with subparagraph (a)(ii) of this Rule to avoid collision with another power-driven vessel shall, if the circumstances of the case admit, not alter course to port for a vessel on her own port side.*
- (d). *This Rule does not relieve the give-way vessel of her obligation to keep out of the way.*

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There is a conflict of information in the reports of the Master of the 'Varkan Ege' and that of the watchkeeper of 'Medi Mode'. The former indicates that 'Medi

*Mode* did not hold its course and speed and instead turned to port in contravention of Rule 17(c). The statement from *Medi Mode* advises that it kept its course and speed. The *Medi Mode* crewman said that it was in a green to green situation and presumed that it did not have to alter course and this is what it did. If it had altered to starboard for a head-on situation then this collision would not have occurred. It presumed it was showing a green light but due to yawing from a following wind for a period it may have been showing a red, port side light (see Appendix 7.7).

As a collision occurred it is clear that both vessels may not have taken sufficient action to avoid the collision - *Varkan Ege* under Rule 16 and *Medi Mode* under Rule 17 (b) (c) and (d) above. There is evidence to support the assertion by *Varkan Ege* that *Medi Mode* turned to port before the collision as it collided with the port side of the *Varkan Ege* in a head on mode, in spite of the fact that the AIS on the *Varkan Ege* indicates that it turned to starboard approximately 60 degrees to avoid collision as per Rule 14(a).

4.1.10 **Rule 18. Responsibilities between vessels.** Except where Rules 9, 10 and 13 otherwise require:

**(a). A power-driven vessel underway shall keep out of the way of:**

- (i). a vessel not under command;
- (ii). a vessel restricted in her ability to manoeuvre;
- (iii). a vessel engaged in fishing;
- (iv). a sailing vessel.

**(b). A sailing vessel underway shall keep out of the way of:**

- (i). a vessel not under command;
- (ii). a vessel restricted in her ability to manoeuvre;
- (iii). a vessel engaged in fishing.

**(c). A vessel engaged in fishing when underway shall, so far as possible, keep out of the way of:**

- (i). a vessel not under command;
- (ii). a vessel restricted in her ability to manoeuvre.

**(d). (i). Any vessel other than a vessel not under command or a vessel restricted in her ability to manoeuvre shall, if the circumstances of the case**

*admit, avoid impeding the safe passage of a vessel constrained by her draught, exhibiting the signals in Rule 28.*

- (ii). A vessel constrained by her draught shall navigate with particular caution having full regard to her special condition.*
  - (e). A seaplane on the water shall, in general, keep well clear of all vessels and avoid impeding their navigation. In circumstances, however, where risk of collision exists, she shall comply with the Rules of this part.*
  - (f). (i). A WIG craft shall, when taking off, landing and in flight near the surface, keep well clear of all other vessels and avoid impeding their navigation;*
    - (ii). a WIG craft operating on the water surface shall comply with the Rules of this Part as a power-driven vessel.*
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The application of this rule states that a power driven vessel shall keep out of the way of a sailing vessel. In this case 'Medi Mode' was not a sailing vessel as both engine and sails were being used for propulsion. Rule 18 (a) (iv) does not apply in this case.

#### 4.1.11 Rule 20. Application.

- (a). Rules in this part shall be complied with in all weathers.*
  - (b). The Rules concerning lights shall be complied with from sunset to sunrise, and during such times no other lights shall be exhibited, except such lights as cannot be mistaken for the lights specified in these Rules or do not impair their visibility or distinctive character, or interfere with the keeping of a proper look-out.*
  - (c). The lights prescribed by these Rules shall, if carried, also be exhibited from sunrise to sunset in restricted visibility and may be exhibited in all other circumstances when it is deemed necessary.*
  - (d). The Rules concerning shapes shall be complied with by day.*
  - (e). The lights and shapes specified in these Rules shall comply with the provisions of Annex I to these Regulations.*
- 

From investigations both vessels have complied with this rule and there are no issues arising that have contributed to the collision.

#### 4.1.12 Rule 21. Definitions.

- (a). *“Masthead light” means a white light placed over the fore and aft centreline of the vessel showing an unbroken light over an arc of the horizon of 225 degrees and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam on either side of the vessel.*
- (b). *“Sidelights” means a green light on the starboard side and a red light on the port side each showing an unbroken light over an arc of the horizon of 112.5 degrees and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam on its respective side. In a vessel of less than 20 metres in length the sidelights may be combined in one lantern carried on the fore and aft centreline of the vessel.*
- (c). *“Sternlight” means a white light placed as nearly as practicable at the stern showing an unbroken light over an arc of the horizon of 135 degrees and so fixed as to show the light 67.5 degrees from right aft on each side of the vessel.*
- (d). *“Towing light” means a yellow light having the same characteristics as the “sternlight” defined in paragraph (c) of this Rule.*
- (e). *“All-round light” means a light showing an unbroken light over an arc of the horizon of 360 degrees.*
- (f). *“Flashing light” means a light flashing at regular intervals at a frequency of 120 flashes or more per minute.*

---

From investigations both vessels have complied with this rule and there are no issues arising that have contributed to the collision

#### 4.1.13 Rule 22. Visibility of lights.

*The lights prescribed in these Rules shall have an intensity as specified in section 8 of Annex 1 to these Regulations so as to be visible at the following minimum ranges:*

- (a). *In vessels of 50 metres or more in length: a masthead light, 6 miles; a sidelight, 3 miles; a sternlight, 3 miles; a towing light, 3 miles; a white, red, green or yellow all-round light, 3 miles.*
- (b). *In vessels of 12 metres or more in length but less than 50 metres in length; a masthead light, 5 miles; except that where the length of the vessel is less than 20 metres, 3 miles; a sidelight, 2 miles; a sternlight, 2 miles; a towing light, 2 miles; a white, red, green or yellow all-round light, 2 miles.*

- (c). *In vessels of less than 12 metres in length: a masthead light, 2 miles; a sidelight, 1 mile; a sternlight, 2 miles; a towing light, 2 miles; a white, red, green or yellow all-round light, 2 miles.*
  - (d). *Inconspicuous, partly submerged vessels or objects being towed: a white all-round light, 3 miles.*
- 

From investigations both vessels have complied with this rule and there are no issues arising that have contributed to the collision.

#### 4.1.14 Rule 23. Power-driven vessels underway.

(a). *A power-driven vessel underway shall exhibit:*

(i). *a masthead light forward;*

(ii). *a second masthead light abaft of and higher than the forward one; except that a vessel of less than 50 metres in length shall not be obliged to exhibit such light but may do so;*

(iii). *sidelights;*

(iv). *a sternlight.*

(b). *An air-cushion vessel when operating in the non-displacement mode shall, in addition to the lights prescribed in paragraph (a) of this Rule, exhibit an all-round flashing yellow light.*

(c). *A WIG craft only when taking off, landing and in flight near the surface shall, in addition to the lights prescribed in paragraph (a) of this Rule, exhibit a high intensity all-round flashing red light.*

(i). *A power-driven vessel of less than 12 metres in length may in lieu of the lights prescribed in paragraph (a) of this Rule exhibit an all-round white light and sidelights;*

(ii). *a power-driven vessel of less than 7 metres in length whose maximum speed does not exceed 7 knots may in lieu of the lights prescribed in paragraph (a) of this Rule exhibit an all-round white light and shall, if practicable, also exhibit sidelights; (iii). the masthead light or all-round white light on a power-driven vessel of less than 12 metres in length may be displaced from the fore and aft centreline of the vessel if centreline fitting is not practicable, provided that the sidelights are combined in one lantern which shall be carried on the fore and aft*

*centreline of the vessel or located as nearly as practicable in the same fore and aft line as the masthead light or the all-round white light.*

---

'Varkan Ege' has complied with this rule and there are no issues arising that may have contributed to the collision.

#### 4.1.15 Rule 25. Sailing vessels underway and vessels under oars.

**(a). A sailing vessel underway shall exhibit:**

**(i). sidelights;**

**(ii). sternlight.**

**(b). In a sailing vessel of less than 20 metres in length the lights prescribed in paragraph (a) of this Rule may be combined in one lantern carried at or near the top of the mast where it can best be seen.**

**(c). A sailing vessel underway may, in addition to the lights prescribed in paragraph (a) of this Rule, exhibit at or near the top of the mast, where they can best be seen, two all-round lights in a vertical line, the upper being red and the lower green, but these lights shall not be exhibited in conjunction with the combined lantern permitted by paragraph (b) of this Rule.**

**(d). (i). A sailing vessel of less than 7 metres in length shall, if practicable, exhibit the lights prescribed in paragraph (a) or (b) of this Rule, but if she does not, she shall have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.**

**(ii). A vessel under oars may exhibit the lights prescribed in this Rule for sailing vessels, but if she does not, she shall have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.**

**(e). A vessel proceeding under sail when also being propelled by machinery shall exhibit forward where it can best be seen a conical shape, apex downwards.**

---

'Medi Mode' has not complied with section (e) of this rule but it is unlikely to have contributed to the collision given the time and the conditions involved.

**4.1.16 Rule 32. Definitions.**

- (a). *The word “whistle” means any sound signalling appliance capable of producing the prescribed blasts and which complies with the specifications in Annex III to these Regulations.*
- (b). *The term “short blast” means a blast of about one second’s duration.*
- (c). *The term “prolonged blast” means a blast of from four to six seconds’ duration.*

**4.1.17 Rule 34. Manoeuvring and warning signals.**

- (a). *When vessels are in sight of one another, a power-driven vessel underway, when manoeuvring as authorized or required by these Rules, shall indicate that manoeuvre by the following signals on her whistle: z one short blast to mean “I am altering my course to starboard”; z two short blasts to mean “I am altering my course to port”; z three short blasts to mean “I am operating astern propulsion”. (b). Any vessel may supplement the whistle signals prescribed in paragraph (a) of this Rule by light signals, repeated as appropriate, whilst the manoeuvre is being carried out: (i). these light signals shall have the following significance*
  - one flash to mean “I am altering my course to starboard”.*
  - two flashes to mean “I am altering my course to port”.*
  - three flashes to mean “I am operating astern propulsion”.*
- (ii). *the duration of each flash shall be about one second, the interval between flashes shall be about one second, and the interval between successive signals shall be not less than ten seconds;*
- (iii). *the light used for this signal shall, if fitted, be an all-round white light, visible at a minimum range of 5 miles, and shall comply with the provisions of Annex I to these Regulations.*
- (c). *When in sight of one another in a narrow channel or fairway:*
  - (i). *a vessel intending to overtake another shall in compliance with Rule 9(e)(i) indicate her intention by the following signals on her whistle:*
    - two prolonged blasts followed by one short blast to mean “I intend to overtake you on your starboard side”.*

*two prolonged blasts followed by two short blasts to mean “I intend to overtake you on your port side”.*

- (ii). *the vessel about to be overtaken when acting in accordance with Rule 9(e)(i) shall indicate her agreement by the following signal on her whistle:*

*one prolonged, one short, one prolonged and one short blast, in that order.*

- (d). *When vessels in sight of one another are approaching each other and from any cause either vessel fails to understand the intentions or actions of the other, or is in doubt whether sufficient action is being taken by the other to avoid collision, the vessel in doubt shall immediately indicate such doubt by giving at least five short and rapid blasts on the whistle. Such signal may be supplemented by a light signal of at least five short and rapid flashes.*
- (e). *A vessel nearing a bend or an area of a channel or fairway where other vessels may be obscured by an intervening obstruction shall sound one prolonged blast. Such signal shall be answered with a prolonged blast by any approaching vessel that may be within hearing around the bend or behind the intervening obstruction. (f). If whistles are fitted on a vessel at a distance apart of more than 100 metres, one whistle only shall be used for giving manoeuvring and warning signals.*

---

*‘Varkan Ege’ utilised a sound signal of five short blasts on the whistle in compliance with Rules 32 and 34 to try and establish the intentions of ‘Medi Mode’. It does not appear to have had any effect that may have prevented the collision. It is not clear from investigations if the crew of ‘Medi Mode’ understood the signal being given, as its statement indicates the vessel held its course and speed.*

## 4.2 Human Factors

- 4.2.1 The MCIB was unable to examine the possibility of fatigue and tiredness on the crew of the *'Varkan Ege'* due to the fact that it had left the jurisdiction and has not returned since to enable examination of the working hours of crew. It may have been a factor as the vessel had spent time in Dublin Port involved in cargo operations and subsequently sailed. Collision occurred approximately 2 hours after sailing from Dublin. Tiredness and fatigue cannot be completely ruled out as a contributing factor in the collision.
- 4.2.2 On board the *'Medi Mode'*, given the two hours on and two hours off watch system, with only 2 crew, both could have been fatigued and tired due to being at sea since 10.45 on the 22nd August and due to the limited and disturbed sleep patterns imposed by time and vessel motion. Such tiredness can lead to poor concentration and decision making. This is somewhat borne out by the error in sidelight identification by the *'Medi Mode'* helmsman/watchkeeper who identified a Port side light as being green instead of red. Such error may have resulted in an incorrect assessment of the *'Medi Mode'*'s position in relation to the position of the *'Varkan Ege'* and the resulting action or inaction taken. Tiredness and fatigue of the crew of the *'Medi Mode'* cannot be ruled out as a contributing factor to the collision.
- 4.2.3 The lack of any formal marine navigation qualifications by the crew of the *'Medi Mode'* may also have contributed to the understanding of actions required by the International Regulations for Preventing Collisions at Sea 1972.
- 4.2.4 Efforts by the *'Varkan Ege'* to communicate by VHF with the *'Medi Mode'* prior to the collision were not responded to. It is not clear why no response was received from the *'Medi Mode'*. There is the possibility of failure of the *'Medi Mode'*'s antenna system which was recently overhauled, particularly as inter vessel communication was poor, even at a close distance following the collision. This effort at communication delayed action by *'Varkan Ege'* to manoeuvre to avoid collision.

## 5. CONCLUSIONS

- 5.1 The '*Medi Mode*' believed that no risk of collision existed because the lights were green to green. However, due to yawing from a following wind they were actually showing a red, port side light to the '*Varkan Ege*' when the lookout observed the vessel. Having taken no compass bearings and also that they had no radar, this could not be definitively determined. Even though '*Medi Mode*' saw the '*Varkan Ege*' in plenty of time, it believed it was the stand on vessel and kept its course and speed in the belief that the '*Varkan Ege*' would either alter course or would pass clear on their starboard side. This led to a close quarters situation and subsequent collision.
- 5.2 The '*Varkan Ege*' reported seeing the red light with a CPA of zero at 02.16 hrs and the collision occurred at 02.22 hrs. This gave it 6 minutes to take proper action to avoid collision. A lookout would have detected this at 4 minutes. (Closing speed 15.5k - Range of light 1 NM) It had six minutes to make a large alteration of course to starboard, as it observed the '*Medi Mode*' light at a range of 1.5 NM. A course alteration was made at 02.18 hrs, approximately 4 minutes before the collision. As per COLREGs the '*Varkan Ege*' complied with efforts to avoid collision when it became apparent that collision was possible. It altered course to starboard, it reduced speed and requested '*Medi Mode*' by sound signal to indicate its intentions.
- 5.3 The '*Varkan Ege*' should not have attempted to communicate via VHF with the sailing vessel when it was so close. This is not recommended, and was not successful. This wasted valuable time when an immediate alteration of course to starboard may have been sufficient to avoid collision.
- 5.4 The two crewmembers of the '*Medi Mode*' had many years' experience of sailing, however, they had no formal marine navigation training. They had no recognised course on the COLREGs. This was a contributory factor particularly in relation to International Regulations for Preventing Collisions at Sea 1972 Rule 7: Taking Compass bearings and Rule 17(b) and (d) Action of stand-on vessel.
- 5.5 The '*Varkan Ege*' states in its report that it observed the '*Medi Mode*' altering its course to port just before the collision. '*Medi Mode*' states in its report that it kept its course. This cannot be determined definitively as the '*Medi Mode*' does not have the technology to record this. However, the two vessels were on a collision course before this happened. The collision occurred with the prow of the '*Medi Mode*' striking the port bow of the '*Varkan Ege*'.

## 6. SAFETY RECOMMENDATIONS

- 6.1 The Minister for Transport, Tourism & Sport should issue a Marine Notice highlighting the requirements set out in Chapter 2 of the Code of Practice (CoP): The Safe Operation of Recreational Craft.

In particular attention should be drawn to:

Chapter 2, para 2.1 of the CoP - Training: It is recommended that persons participating in sailboat and motorboat activities undertake appropriate training. A number of training schemes and approved courses are available and information can be obtained directly from course providers.

1.2.1 Compliance with the International Regulations for Preventing Collisions at Sea (1972).

7. APPENDICES

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## Appendix 7.1 Photographs



Photograph No.1 - 'Varkan Ege'.



Photograph No.2 - Sailing vessel 'Medi Mode'.

Appendix 7.1 Photographs



Photograph No.3 - Damage to bow of 'Medi Mode'.



Photograph No.4 - Damage to hull, starboard side.

Appendix 7.1 Photographs



Photograph No.5 - Damage to port bow of 'Medi Mode'.



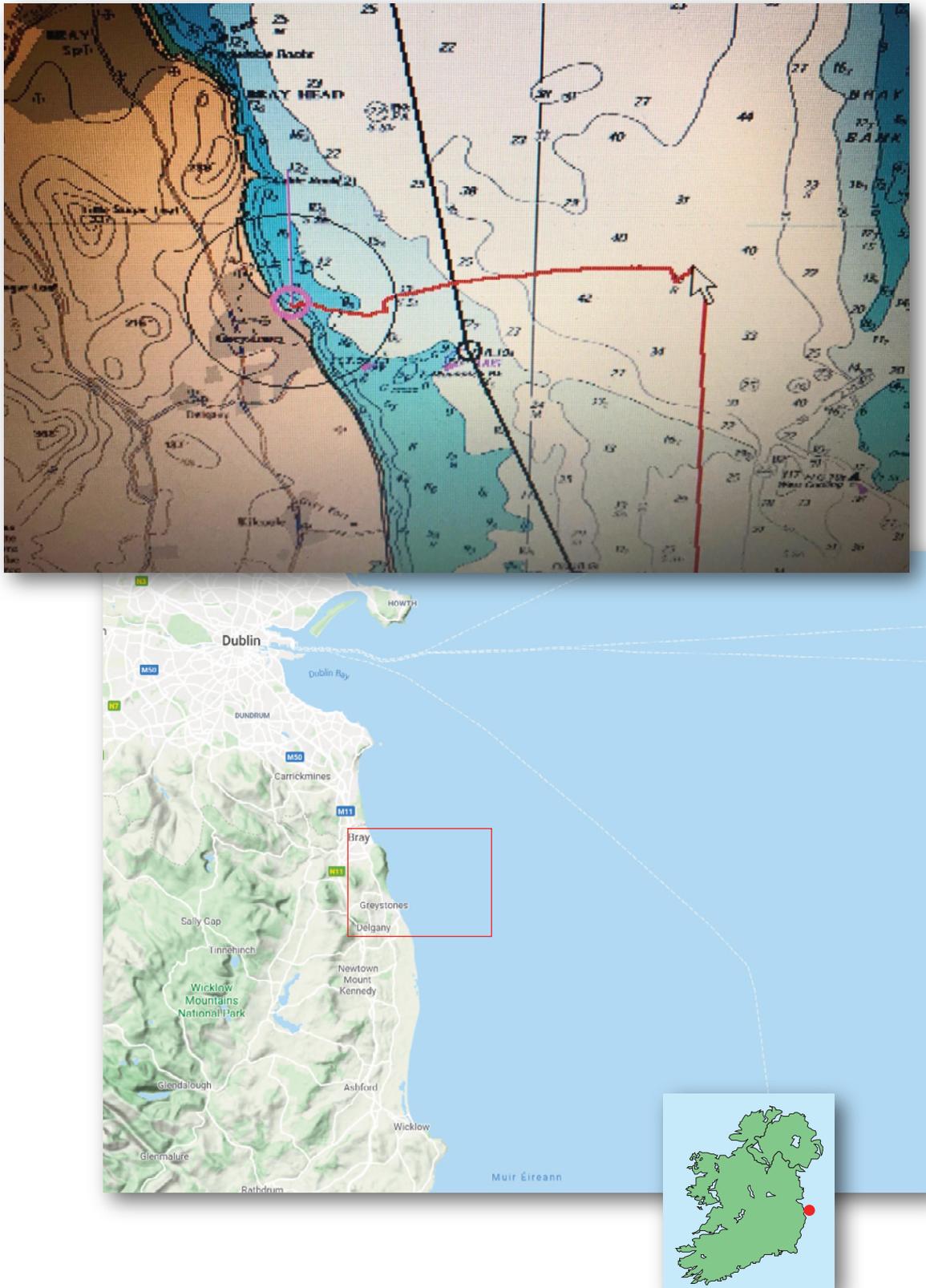
Photograph No.6 - Internal damage to bulhead.

Appendix 7.2 AIS Track of 'Varkan Ege'

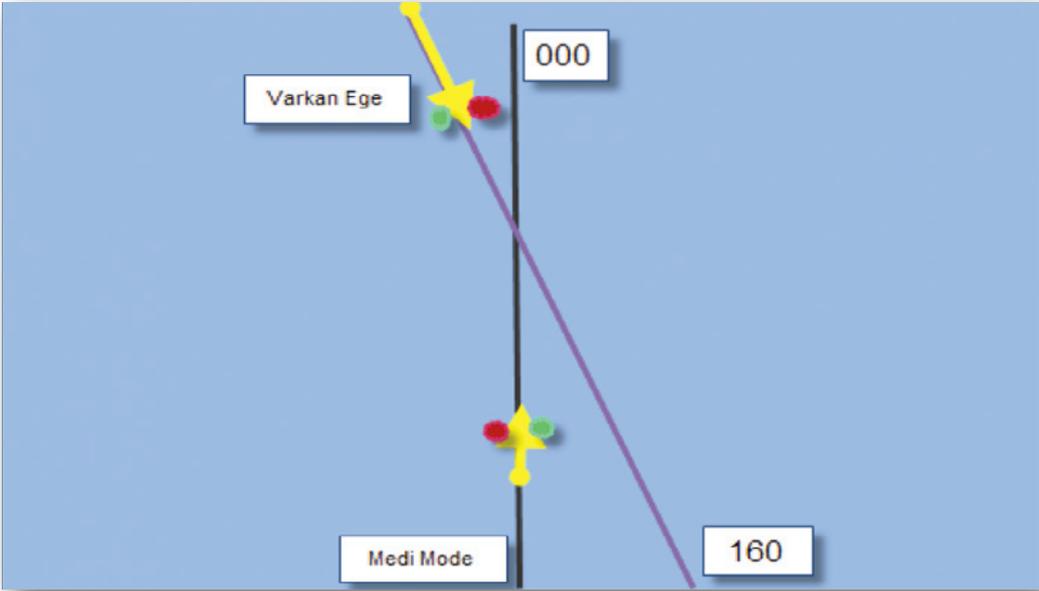


# APPENDIX 7.3

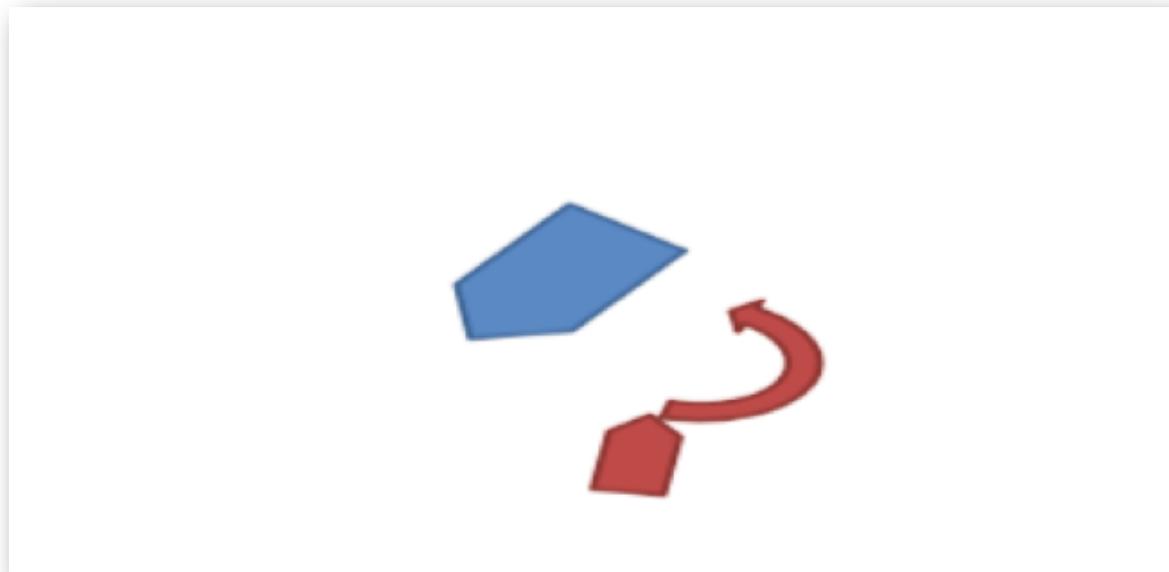
Appendix 7.3 Track from 'Medi Mode'



Appendix 7.4 Demonstration of Incident



### Appendix 7.5 Demonstration of Incident as Described by 'Varkan Ege'



As 'Varkan Ege' was altered course to Starboard 'Medi Mode' altered to Port.

Appendix 7.6 Report from 'Varkan Ege'

VARKAN EGE

August 23, 2019

MASTER'S REPORT

Upon departure of Dublin Port, we commenced sea passage at 01:00lt on 23.08.2019 with a proceed orders to Falmouth with Eco-speed. Thus engine set to only %50 load. After I handover the control to the second mate, I was preparing some documents on the communication computer at bridge. The sky was partly clouded, wind was from Sw 5 beufort force and 4 of the sea state. All navigational equipment in good condition and all equipments turned on as normal navigational mode. Course was 161 and speed was 7,5 kts. No any defect or problem on board.

At 02:15lt, OOW realized a red light on our starboard bow and he check radar for Echo. Due to very small ship and rolling condition with sea it was very hard to decide if it is sailing vessel or buoy. He just found its Echo on radar and realized that the the red light from a sailing vessel which moving with 7,9 kts. According to radar details CPA was 0 and the officer tired to call sailing vessel via VHF however we could not get any response Also due to no AIS data, the officer could not reach the sailing vessel. OOW informed me that he will make a prevent collision maneouver to the her aft. *discuss*  
The OOW switch to the hand control of steering and started to both pump of steering. Then he altered our course to our starboard and to the the astern of sailing vessel as requested COLREG. *time*  
While OOW altering our course to starboard, he realized that the sailing vessel altering her course to the port with a big difference and he called me for assistance. When I been forward side in bridge, I have just seen a green light on our port side and aproaching with a very high speed. I keep the rudder hard to starboard and give 5 short blast horn in order to warn the sailing vessel regarding with danger. Unfortunately at 02:21lt the sailing vessel crushed to the my port bow where 10 meters *6 min* behind from the my good lady's bow, in the position of 53 09,3N – 005 57,5W.

In order to prevent collision we keep our rudder hard to starboard and tried to reduce our speed however the vessel crushed us, due to the sailing vessel altered her course to the her port against to COLREG reg 17. After first crushed on 10 meters aft of my port bow, the Sailing Vessel touched to my port side around accomodation level again.

Upon the incident occured the our logs as below listed as chronologically.

- At 02:21lt, We directly reduced our speed and tried to contacted with Sailing Vessel if any assistance necessary. I raised the general alarm in order to awake all crew and warned them with announced. We opened the deck light and ordered to lookout to follow the sailing vessel continuously.
- At 02:22lt, I have contacted the Dublin VTS which is very near the position of vicinity on ch 12 and they requested us to standby in that channel. Also I ordered all departments head to check Fuel tanks, Ballast tanks for any damage or intake of Seawater and any pollution sea surface. In the meantime, I have received some distress message via VHF DSC which sending by sailing vessel. We reduced our speed and keep her in a sight in order to monitore her stuation if any danger exist.

## Appendix 7.6 Report from 'Varkan Ege'

- At 02:23 It, I finally succeed to contact with sailing vessel on my second attempt via VHF Ch 16 and asked them if any risk of sink or injury occurred at Sailing Vessel. The guy told me that they are not taking water and they did not injured and they want to proceed Greystone Marine Harbour with her own power which is 3 nm away from the position of vicinity. Also I have learned name of the sailing vessel was Medimode. I insist that if any assistance necessary by us we will approach that vessel for assistance however they refused again. So I have decided to stay close to her with a safe distance and follow her movement while proceeding to shore. etc
- At 02:24It, the Dublin VTS requested me to contact Dublin Coast Guard via VHF CH 16. So I have informed them as well, regarding with incident and reported them the sailing Vessel Medimode proceeding to Greystone Marine Harbour with her own power and give her exact location.
- At 02:27It, The Dublin Coastguard asked me additional information regarding with how many crew on board the sailing vessel and if they sail or proceed with engine. I replied that they are proceeding with engine. And called the sailing vessel again and learnt how many people on board. When I contact the sailing Vessel Medimode again I have learnt that there are only 2 people on board. So I informed the Dublin Coastguard accordingly.
- At 02:31It, I informed the company regarding with incident.
- At 02:33It, I requested Officer to carry out a alcohol test in order to keep as a evidence.
- At 0237It, The Dublin Coastguard, requested us to contact her again and ask them to call Dublin Coastguard on VHF Ch 16. Even I tried many times ton VHF the Sailing Vessel did not replied our calls. Then I informed the Dublin Coastguard that I could not contact the Sailing Vessel Medimode however I can see them by eyes and also in radar screen. So the Dublin Coastguard requested us monitore the vessel till she arrive the Greystone Marine Harbour. Also they informed that the coastguard will be wait the vessel at the GreystoneMarine Harbour.
- At 03:04It, Dublin Coastguard call back again and asked some more detailed informations regarding with the incident.
- At 03:24It, Dublin Coastguard called us regarding with if there is any damage on my ship or any pollution around the my vessel. We replied the all with no damage or leakage on my good vessel. *why Solake - Zaher*
- At 03:26It, I have called P&I club at Dublin however could not reach by phone.
- At 03:42It, The Dublin Coastguard requested information regarding with the distance from sailing vessel crushed position to the bow. The distance was 10 meters from the bow.
- At 03:44It The Dublin Coastguard informed that we can continue our voyage and they informed us that Sailing Vessel Medimode is safely arrived the Greystone Marine Harbour and both passenger is safe and Dublin VTS granted that we can continue our voyage.
- At 03:50It increased the speed and resumed the voyage.,
- At 04:20It Received the below greenlight mail from Dublin MRCC via Mail;

Appendix 7.7 Report from 'Medi Mode'

Yacht Medi-Mode collision with MV Varkan Ege.

Medi-Mode:-

Moody 39 Sailing craft Built 1978

2 persons on board: - [REDACTED] (co-owners)

Place:-

Approx 4nm E of Greystones, Irish Sea

N53 09.564 W005 57.596 ( Position is approximate as it was taken from track drawn by electronic navigation chart on laptop.)

Time:-

0230LT (approximately) 23 August 2019

Background:-

Medi-Mode departed Arklow 1045LT 22 August 2019 heading for Kilmore Quay, Wexford. A decision was made to abandon Kilmore Quay due to pending night arrival & forecast inclement weather. (SW/ 5-6)

Abeam Rosslare (1745) course set for Howth. (home base - ETA 0800LT 23 August 2019)

Weather at time:-

SW 3-4. Moderate sea. Visibility good.

Medi-Mode motor sailing north on autopilot, ship traveling south inside Kish Bank. Prior to sunset all external lights were switched on for function check.

Watch system, 2 hours on/2 off set at 2200LT. [REDACTED] stood first watch.

During 0200 handover briefing included 2 ships recently passed Southbound (to starboard) & brightly lit ship traveling North passed well clear to starboard and still clearly visible.

Approx 0210 southbound vessel appeared off starboard bow, observed steaming lights & port green navigation light - otherwise no other lights seen.

Shortly before collision ship appeared to alter course to starboard as green nav light changed to red and collision occurred.

Medi-Mode scraped along port side of ship until separation.

By now both crew in cockpit. DSC button pressed but no response noted. Mayday transmission made but again no response. Presumed antenna damaged in collision.

A quick inspection indicated no physical injuries to crew & no water ingress.

As the situation settled weak VHF contact was made with the ship. (now identified as Varkan Ege)

Varkan Ege relayed the incident details to Dublin Coast Guard together with our status & intention to alter course for Greystones Harbour Marina with which we were familiar.

Further inspection showed no water ingress but steering was partially restricted however it was judged to be adequate for diversion.

Arrived on pontoon at 0345LT (approx). Met by Deputy Chief Officer In Charge, Greystones Coast Guard, [REDACTED] Verbal debriefing followed & contacts exchanged.

Damage:-

Visible: stemhead fitting torn away, pulpit, toe rail & surrounding area severely deformed.

Mast held upright by babystay.

Rudder control impeded -autopilot quadrant.

Further damage to aft bulkhead & door to aft cabin.

Starboard sheet winch driven down through cockpit coaming.

Only a full survey will reveal all.

Present status:-

Medi-Mode is ashore in a cradle at Greystones Marine Services.

Notes:-

Initial phone or verbal reports have been made to the following agencies:-

Greystones Coast Guard

[REDACTED] (insurers)

[REDACTED] (nominated surveyor)

Full reports will follow, also to [COASTGUARDNMOC@DTTAS.GOV.IE](mailto:COASTGUARDNMOC@DTTAS.GOV.IE)

*where exactly did you strike v. As to Deal it out.*

## Appendix 7.8 Met Éireann Weather Report



### Met Éireann

The Irish Meteorological Service

Climate Services  
Glasnevin Hill  
Dublin 9

Seirbhísí Aeráide  
Cnoc Ghlas Naíon  
Baile Átha Cliath 9

Tel: +353-1-8064260  
Fax: +353-1-8064216  
Email:  
LEGAL@MET.ie

Our Ref. **WS1730/1911\_6**  
Your Ref. **MCIB/12/293**

**Re: Estimate of weather conditions at 53°09.40'N, 005°57.70'W off the coast of Greystones, Co. Wicklow on Friday 23 August 2019 between 00:00 and 06:00 hours UTC.**

**Synopsis:** An area of high pressure (1026 hPa) centred over the English Channel and a low pressure (1005hPa) centred west of the Faroe Islands generated a moderate to fresh southwest airflow over Ireland.

**Estimate of weather & sea state conditions:**

**00:00 – 06:00 hours UTC:**

<b><i>Weather:</i></b>	Fair with some occasional cloud cover.
<b><i>Temperature:</i></b>	15 – 16 degrees Celsius.
<b><i>Wind:</i></b>	Moderate breeze (Beaufort Force 4, mean speed of 11 – 16 knots), south-southwesterly (195 – 205 degrees). Occasional gusts up to 20 knots (Force 5).
<b><i>Visibility:</i></b>	Good
<b><i>Sea State:</i></b>	Slight (Significant Wave Height 0.5 – 1.25 metres), with a southerly direction. Mean wave period was 3 seconds.
<b><i>Sea Temperature:</i></b>	~15 degrees Celsius (M2)

Please address all correspondence to [legal@met.ie](mailto:legal@met.ie) and please kindly quote the reference number **WS1730/1911\_6**



## SECTION 36 PROCESS

### Section 36 of the Merchant Shipping (Investigation of Marine Casualties) Act, 2000

It is a requirement under Section 36 that:

- (1) Before publishing a report, the Board shall send a draft of the report or sections of the draft report to any person who, in its opinion, is likely to be adversely affected by the publishing of the report or sections or, if that person be deceased, then such person as appears to the Board best to represent that person's interest.
- (2) A person to whom the Board sends a draft in accordance with subsection (1) may, within a period of 28 days commencing on the date on which the draft is sent to the person, or such further period not exceeding 28 days, as the Board in its absolute discretion thinks fit, submit to the Board in writing his or her observations on the draft.
- (3) A person to whom a draft has been sent in accordance with subsection (1) may apply to the Board for an extension, in accordance with subsection (2), of the period in which to submit his or her observations on the draft.
- (4) Observations submitted to the Board in accordance with subsection (2) shall be included in an appendix to the published report, unless the person submitting the observations requests in writing that the observations be not published.
- (5) Where observations are submitted to the Board in accordance with subsection (2), the Board may, at its discretion -
  - (a) alter the draft before publication or decide not to do so, or
  - (b) include in the published report such comments on the observations as it thinks fit.'

The Board reviews and considers all observations received whether published or not published in the final report. When the Board considers an observation requires amendments to the report that is stated beside the relevant observation. When the Board is satisfied that the report has adequately addressed the issue in the observation, then the observation is 'Noted' without comment or amendment. The Board may make further amendments or observations in light of the responses under Section 36. 'Noted' does not mean that the Board either agrees or disagrees with the observation.

Within the Section 36 process clarifications were needed in order to produce a robust report which required the draft report to issue for a second time. Some correspondence received by the MCIB in response to the first draft report make reference to paragraph numbers as they appear in that draft. It should be noted that some paragraph numbers in this final report are different to the first draft. Where necessary the MCIB comment inserted in each submission makes reference to any change in paragraph order.

## 8. SECTION 36 - CORRESPONDENCE RECEIVED

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Note: The names and contact details of the individual respondents have been obscured for privacy reasons.

## Correspondence 8.1 Dublin Port Company and MCIB response



Ionad an Chalafóirt, Bóthar Alexandra, Baile Átha Cliath 1  
Port Centre, Alexandra Road, Dublin, D01 H4C6  
T: +353 (0) 1 887 6000  
F: +353 (0) 1 855 1241  
R/E: info@dublinport.ie  
www.dublinport.ie

[REDACTED]  
Harbour Master  
Dublin Port Company  
Port Centre  
Alexandra Road  
Dublin 1

[REDACTED]  
Chairperson  
MCIB

8<sup>th</sup> June 2020

**Reference: Draft confidential report into a collision between MT Varkan Ege & Medi Mode off Greystones Harbour 23 August 2019.**

Dear Ms. Callanan,

The report on a number of occasions correctly states that the vessel MT Varkan Ege called *Dublin VTS* on VHF Channel 12. I would like to clarify that the collision in position 53°09.864'N, 005°57.596'W is 8.5 nautical miles from the closest point to the jurisdiction of Dublin Port Company.

As the vessel is reported to have been making way at 7.5 knots the vessel had left the Dublin Port Company jurisdiction approximately 1 hour and 8 minutes prior to the collision.

**MCIB RESPONSE:**  
Noted.

Yours Sincerely

[REDACTED]  
[REDACTED]  
Harbour Master  
Dublin Port Company

Correspondence 8.2 'Medi Mode' Crewmember 1 and MCIB response



Ref: MCIB/12/293

1 June 2020

Marine Casualty Investigation Board  
Leeson Lane  
D02 TR60

Draft Collision Report 23 August 2019

Dear 

In response to the Draft Report recently received, I would like to make comments and observations as follows:-

**Summary**  
1.1. Correct interpretation , viz. green side light,bearing 1 o'clock relative

**Factual information**  
2.1 Vessel 2  
Beam 11"08" - incorrect  
Draught 3'09" - incorrect  
Displacement 1,200lbs - incorrect

**2.2 Crew Details**  
2.2.1 "The Master's report does not mention a lookout," until after the collision at 02.21.  
Able seaman statement not seen.

**2.4.2 The crewman OFF WATCH.**  
DSC apparently received by another vessel inbound to Dublin.

**2.5 Weather**  
Wind was on the stern quarter. Viz.SSW

**2.7 Equipment**  
Normal radio communications, Coastguard weather reports & marinas prior to collision.

**3.2 Timeline**  
02.10 port green - unfortunate amateur cleric typo. Would have been corrected if noted. Intended green sidelight. See summary 1.1  
Otherwise this would indicate the vessel moving astern.  
Speed 7.9 disputed - 4.5 - 5 observed.  
02.12 Visual bearing noted 1 o'clock relative. Outside headsail filling to starboard.  
02.15 unlikely.  
02.16 steady 1 -1.30 until last seconds.  
02.18 no recollection of turning to port.  
Clear recall of blasts immediately after collision.  
02.22DSC apparently received by another vessel inbound to Dublin.

- MCIB RESPONSE: Noted.
- MCIB RESPONSE: Report amended to reflect correct dimensions.
- MCIB RESPONSE: Report amended.
- MCIB RESPONSE: Report amended.
- MCIB RESPONSE: Noted.
- MCIB RESPONSE: Observed by 'Varkan Eye'.
- MCIB RESPONSE: Noted.

**Correspondence 8.2 ‘Medi Mode’ Crewmember 1 and MCIB response**

4 Analysis

4.1.3 lookout called AFTER collision.

4.1.4 constant visual relative bearings.

4.1.5 green light - again as previous. Unfortunate typo See summary 1.1

4.1.8 7.9 knots ?? Averaging 5 knots.

Alter course disputed. Definitely driven through 90deg in collision.

4.1.15 wouldn't be all round visible with sail hoisted.

4.1.17 as previously stated, no recall until after collision.

5. Human Factors

5.2 as previously stated. Fatigue disputed.

5.3 red/white/green aviation relevant.

6.2 15.5knots unlikely, as sailing vessel averaging 5 knots.

6.4 constant eye relative bearings.

Appendix 7.6  
Cursor hides track. Only highlights position after collision, and after initial integrity status checks.

Appendix 7.7  
Content that other vessel projected track should be 1.5cm to the right (E).

Appendix 7.8  
Again disputed.

Master's Report  
02.21 (after collision) crew ordered to lookout.

Appendix 7.9  
Typo as previously stated.

Appendix 7.10  
Wind S-SW

I remain, of course, available to discuss further.

Yours sincerely,



**MCIB RESPONSE:**  
Lookout in COLREGs refers to the act of observing not an individual.

**MCIB RESPONSE:** Noted.

**MCIB RESPONSE:** Speed recored by 'Varkan Ege' bridge equipment.

**MCIB RESPONSE:** Noted.

**MCIB RESPONSE:** Noted.

**MCIB RESPONSE:** Noted.

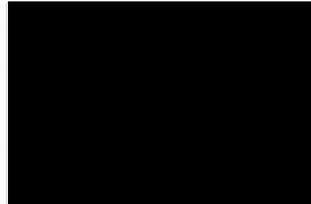
**MCIB RESPONSE:** Noted. Illustration not to scale.

**MCIB RESPONSE:** Noted.

**MCIB RESPONSE:** Specific instruction to track 'Medi Mode'.

**MCIB RESPONSE:** Noted.

Correspondence 8.3 'Medi Mode' Crewmember 2 and MCIB response



MCIB  
Leeson Lane

D02 TR60

Your Reference: MCIB/12/293

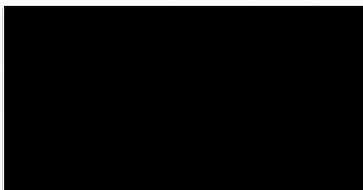
**Draft confidential report into a collision between MT Varkan Ege & Medi  
Mode off Greystones Harbour**

**23 August 2019**

Dear 

Please find enclosed my comments on the above report.

Yours sincerely,



## Correspondence 8.3 ‘Medi Mode’ Crewmember 2 and MCIB response

### Response to draft confidential report into a collision between MT Varkan Ege & Medi Mode off Greystones Harbour 23 August 2019

#### 2. Factual Information.

##### 2.1 Details of the yacht incorrect;

LOA: 38' 06"/11.7m

Beam: 13' 08"/4.11m

Draught: 5' 11"/1.82m

Displacement: 18,078lbs/8200kg

Lights: In addition to the masthead lights Medi Mode also has port, starboard and stern lights at deck level. These were not in use at the time of the incident.

Ref: <https://sailboatdata.com/sailboat/moody-39>

2.2.2 While I acknowledge the fact that neither crew of the yacht had formal qualification in the marine navigation, COLREGS and lights I would point out that, as professionally qualified airline pilots of considerable experience, we are both well grounded in the aviation COLREGS. These aviation COLREGS are very similar to those pertaining to the marine with an added third dimension.

2.4.2 The DSC button was pressed by the off-watch crew who was reacting to the collision, he also made the subsequent Mayday call. Contact with the Varkan Ege was by the on-watch crew, a change of helm having been made.

MCIB RESPONSE: Report amended to reflect correct dimensions and additional lights fitted.

MCIB RESPONSE: Noted.

MCIB RESPONSE: Paragraph amended.

Correspondence 8.3 'Medi Mode' Crewmember 2 and MCIB response

2.7 The radio equipment test results were provided to the authorities.

MCIB RESPONSE: Noted.

**3.2 Timeline.**

3.2 At 02.18 hrs it is stated that the Varken Ege gave 5 shorts blasts of its horn, in my memory of the incident the only sounding of a horn that I observed occurred after the collision.

MCIB RESPONSE: Noted.

**4. Analysis.**

4.1.8 Medi Mode doing 7.9 knots seems very excessive.

MCIB RESPONSE:  
Tracked by equipment on the 'Varken Ege'.

4.1.9 When I took the helm after the collision the autopilot was still engaged and to my knowledge had not been disconnected prior to the collision. This being the case it is unlikely that Medi Mode would have made a turn to port as the heading was being held by the autopilot.

MCIB RESPONSE: Noted.

4.1.16 As mentioned above I have no memory of any whistle until after the collision.

**6. Conclusions.**

6.2 Again I repeat that I have no recollection of any sound warning prior to collision.

MCIB RESPONSE: Noted.

6.4 See my previous comments regarding this issue. In addition I would point out that the concept of the constant bearing, CPA, etc, as mentioned later in the report, is also a tenet of navigation commonly practiced in aviation.







Leeson Lane, Dublin 2.  
Telephone: 01-678 3485/86.  
email: [info@mcib.ie](mailto:info@mcib.ie)  
[www.mcib.ie](http://www.mcib.ie)

