

MARITIME INCIDENT INVESTIGATION REPORT INTO THE ENGINE ROOM FIRE AND SUBSEQUENT SINKING OF PLEASURE VESSEL

"JUST MINE"

13TH NOVEMBER 2020







The Jersey Administration, on behalf of the appointed Minister, conducts marine safety and other investigations on ships flying the flag of the Bailiwick of Jersey and ships which are not flying the Jersey flag which are within Jersey waters in accordance with the obligations set forth in international conventions to which Jersey is a party (either directly or through the United Kingdom).

In accordance with the IMO Casualty Investigation Code, mandated by the International Convention for the Safety of Life at Sea (SOLAS) Regulation XI-1/6, investigations have the objective of preventing marine casualties and marine incidents in the future and do not seek to apportion blame or determine liability.

It should be noted that provisions in the Shipping (Jersey) Law 2012 require Masters, Officers and Owners of vessels to provide such information as is reasonably required by those appointed to conduct such investigations.

If the contents of a report were subsequently submitted as evidence in court proceedings relating to an accident there is a risk that this could offend the principle that individuals cannot be required to give evidence against themselves.

It is for this reason that the Minister is prevented under the above law from authorising publication of a report until a decision has been made not to prosecute any individual in connection with the incident concerned or any prosecution including any appeal has been completed.

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The obligation to publish accident and incident reports in accordance with the IMO Casualty Investigation Code and the International Convention for the Safety of Life at Sea (SOLAS) Regulation XI-1/6, is an acceptable reason for publication of this report in its current format under data protection legislation.

CONTENTS

GLOSSARY OF TERMS

- 1.0 SYNOPSIS
- 2.0 NARRATIVE
- 3.0 CCTV IMAGES
- 4.0 POST INCIDENT
- 5.0 FINDINGS
- 6.0 CONCLUSION
- 7.0 RECOMMENDATIONS

GLOSSARY		
Chart Plotter	Navigational device, common on small craft, that displays the vessel's position and route graphically in relation to charted objects	
DSC	Digital Selective Calling – Automated digital radio communications system linked to a VHF or HF/MF transmitter/receiver.	
ER	Engine Room	
FM-200	Fire extinguishing system fitted to the Engine Room. FM-200 ™, is a trade name for the fire suppression chemical Heptafluoropropane (C3HF7) and is a colourless gaseous halocarbon fire suppression agent. It was the first approved replacement for Halon that had no adverse reaction to the Ozone Layer. It works by removing the heat or free radicals and interferes with the fire triangles chemical reaction. It operates on much smaller concentrations than required by Carbon Dioxide systems.	
GPS	Global Positioning System (provides vessel position from satellite derived information)	
ME	Main Engines	
MRCC	Maritime Rescue Coordination Centre	
МҮ	Motor Yacht	
Pleasure Yacht	Privately owned vessel not used for commercial purposes	
РЖС	Personal Watercraft where rider sits/lies aboard rather than in the craft (Includes vessels such as 'Jet Ski')	
Skipper	Crew member in command of a small vessel	
Tender	Small craft used for transport of personnel/stores to/from a vessel.	
VHF	Very High Frequency Radio equipment.	

1.0 SYNOPSIS

1.1 At 0800 local time (0600 UTC) on the morning of 13th November 2020 the Jersey registered, privately owned, motor cruiser **JUST MINE** weighed anchor off the Greek port of PARALIA AKOLIS to resume passage to ZAKINOS; where it was due to take on fuel and stay overnight (ETA 13/1200 Local time). The vessel was on a positioning voyage from ANTALIA Turkey to SAN REMO (Italy), where the vessel was to berth over the winter, and had just the skipper and a deck hand aboard. The weather conditions were benign throughout the incident with rippled seas and light winds.

1.2 Pre-departure checks had commenced at 0700 with nothing unusual noticed. At 0810, with the vessel proceeding at 13 Kts, the deck hand advised the skipper that he was going to carry out a routine check of the Engine Room (ER). The checks, which took approximately five minutes, revealed nothing unusual; however, whilst exiting the ER, the deck hand noticed a slight smell of smoke. Initially assuming this to be Main Engine exhaust fumes the deck hand closed the ER hatch on the main deck abaft the cabin. Once on deck, and now having some doubt about the smell of smoke, the deck hand reopened the ER hatch, some 30 seconds later. He smelled and now saw white smoke in the ER. Closing the hatch, the deck hand called the skipper and requested an immediate reduction in speed.

1.3 From this point things developed quickly. A further check showed smoke increasing and the ER was sealed, Main Engines shut down, the emergency stops for fuel and ventilation activated, and both bottles of the ER FM-200 fire suppression system deployed. A Distress call was sent on VHF 16 to which the Coastguard responded. Within a few minutes a significant quantity of smoke was appearing on deck. The Skipper deployed the anchor, whilst the deck hand launched a life-raft on the port side, before together they deployed the vessels tender. Having retrieved portable VHFs and their grab bags, as the accommodation also began to fill with thick black smoke, both crew members boarded the tender taking the life-raft in tow. The vessel was abandoned within just over five minutes of first smelling smoke.

1.4 Once clear of **JUST MINE**, contact was re-established with the MRCC using the hand-held VHFs and subsequently a mobile phone. The Coastguard dispatched several vessels to the scene, including two patrol vessels, a pollution control vessel and a fire-fighting tug. Two fishing vessels and a local small pleasure boat also attended. Within seconds of abandoning ship, the aft deck was shrouded in smoke and flames and, within three minutes, the flames were higher than the flying bridge.

1.5 The crew were first taken aboard a fishing vessel, before being transferred to a police launch some twenty minutes later. By this time **JUST MINE** was ablaze from the forward collision bulkhead to the transom and the accommodation had collapsed into the hull. **JUST MINE**'s crew were then transferred back to the fishing vessel for transfer ashore; where they were tested for COVID-19 and supported by the shore authorities, who they also assisted with their investigation. Neither crew member was injured.

1.6 The patrol vessels remained on scene and were joined by the Fire-Fighting tug. During firefighting operations, **JUST MINE** sank in 320m of water in position: 38 17.722N 022 00.725E. There was no pollution. Both crew members were subsequently repatriated by the owners.

1.7 The subsequent investigation determined that: **JUST MINE** caught fire and sank as a result of a fire which started in the Engine Room. Due to the loss of the vessel it has not been possible to identify the seat of the fire or the reason why it occurred.

1.8 The fire was discovered as a result of the deck hand smelling smoke when leaving the space after a regular Engine Room inspection, with the vessel underway, before any alarms sounded.

2.0 NARRATIVE

General description:

2.1 **JUST MINE** was a 23m, twin screw, motor yacht of 61.23 GRT. She was built in Italy by EVO Marine in 2008 to CE build certification rules and had a major refit in 2015; after which she was registered in Jersey on 23rd June 2015 as a pleasure yacht, privately owned through a company in the British Virgin Islands. The registration was changed to allow **JUST MINE** to be commercially operated between 5th April 2017 and 18th March 2018 after which she reverted to the status of a pleasure yacht and was not commercially operated.

MY JUST MINE



General Arrangement – Internal layout of Motor Yacht JUST MINE

Fire Protection & Fire Fighting equipment: (serviced 14 Oct 2020)

Engine Room Bulkheads of FRP construction designed to prevent spread of fire and flame for a period of 15 minutes. All insulation material in ER non-combustible.

Engine Room Fire suppression/extinguishing: FM-200 system (with 2 bottles (one above each Main Engine, remotely operated from aft deck Starboard side)

Pneumatically operated fire dampers (automatically activated when ER fire suppression system operated)

Engine Room Air intakes located to port and starboard of the accommodation additionally fitted with louvres

Engine Room fans remotely stopped from Main deck conning position.

Fuel shut offs remotely operated from main deck locker starboard side aft adjacent to fire suppression controls.

One Fire Pump.

Accommodation: 7 x 1Kg Dry Powder extinguishers throughout the accommodation,

Engine Room: 1 x 4.5Kg Dry Powder extinguisher and 1x 9 Kg Dry Powder extinguisher Fore Deck: 1 x 9Kg Dry Powder extinguisher

Life Saving Appliances: (serviced 14th October 2020)

2 x 6 person Eurovinil Liferafts with hydrostatic release, stowed each side on upper deck abaft the flying bridge

1 x davit launched RIB (tender) stowed abaft flying bridge

19 Lifejackets (including 8 inflatable and 2 children's lifejackets)

Radio Equipment:

1 x Raymarine RAY240E fixed VHF with DSC

2 x ICOM ICM 87 Hand-held VHF

Neither EPIRBs nor SARTs carried or required die to vessel size and operations.

Voyage preparation:

2.2 The Owners had decided that the **JUST MINE** should relocate from ANTALYA (Turkey), where she had been laid up, to overwinter at the Italian port of SAN REMO. The skipper, a 29-year-old Croatian national, flew from France to ANTALYA on 5th November and was joined by the, fifty-year-old, British, deck hand the following day. The deck hand having managed the vessel on behalf of the owners for the previous ten months. The skipper and deck hand had worked together for almost two years and had, during that time, carried out approximately one hundred emergency drills of various types together.

2.3 With the assistance of a local engineering contractor, who serviced both the main engines and the diesel alternators, the next three days were spent preparing **JUST MINE** for the voyage. The annual servicing of the vessels LSA and FFA (including the extinguishers and the FM-200 fire extinguishing system for the Engine Room) had previously taken place on schedule on 14th October 2020. The vessel took aboard 4584L of Marine Gas Oil (MGO), diesel fuel. on 9th November.

From Antalya to Paralia Akolis 10th to 12th November

2.4 **JUST MINE** departed SETUR marina in ANTALYA at 08:00LT (06:00 UTC) on Tuesday 10th November for BODRUM where they anchored at 20:00LT. For all legs, the vessels procedure was for the deck hand to carry out checks in the Engine Room every 30 minutes whilst the vessel was on passage. At 08:00 LT on Wednesday 11th **JUST MINE** went alongside the fuel berth, for approximately three hours, to bunker a further 4393L MGO and obtain clearance to depart Turkey.

2.5 At 11:15LT **JUST MINE** departed for the CORINTH CANAL and Athens but, as the weather worsened, the Skipper decided to anchor off the south coast of ANTIPAROS, between NISOS PAROS and NISOS ANTIPAROS. By 20:00LT the vessel was at anchor.

Friday 13th November Actions prior to discovery of the fire:

2.6 On the morning of 12th November **JUST MINE** resumed passage in improved conditions and, after a short period at anchor off the entrance, transited the CORINTH CANAL by 18:15LT. At this point the decision was made to proceed for a further two hours and anchor for the night. At approximately 20:00 LT **JUST MINE** dropped anchor in a protected bay next to the town of PARALIA AKOLIS.

2.7 **JUST MINE** weighed anchor at 08:00 LT on the morning of Friday 13th November 2020, the crew having breakfasted and conducted pre-sailing checks. The intended destination was ZAKINTHOS, some four hours steaming away, where the vessel was to refuel and remain overnight before continuing to Messina the following day. The weather conditions were benign with rippled seas and light winds persisting throughout the incident (see photographic evidence).

2.8 At 08:10LT, with **JUST MINE** making 13 Knots, the deck hand advised the skipper that he was going to conduct rounds of the Engine Room. This inspection took no more than five minutes and nothing unusual was observed. As the deck hand left the Engine Room, via the ladder and hatch to the main deck abaft the accommodation, he noticed a very slight smell of smoke. Assuming this was exhaust from the main engines he left the space and shut the hatch. On the main deck, no longer smelling smoke caused him to doubt his assumption. The deck hand therefore reopened the ER Hatch.

Discovery of the fire and immediate actions:

2.9 This time the deck hand both smelled and saw a light-coloured smoke. He again closed the hatch and, opening the sliding doors to the saloon, advised the master of smoke in the Engine Room and requested that speed be reduced. The Skipper immediately reduced both Main Engines to idle and declutched the engines. Keeping an eye on the deck hand as he opened the Engine Room hatch for a third time.

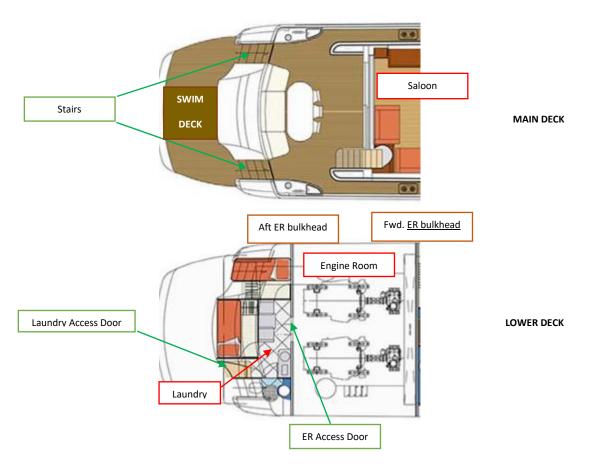
2.10 Opening the hatch the deck hand immediately noticed that the smoke, still white in colour, had significantly increased. He closed and secured the hatch and advised the skipper. At this point the Main Engines were stopped together with the ventilation fans, from the main deck bridge control position at the forward starboard side of the saloon. The skipper then began to broadcast a Distress call on VHF Ch 16.

(Whilst the **JUST MINE**'s VHF radio equipment included a compliant DSC function, this was not particularly user-friendly. The distress button was located on the reverse of the handset and the text for messages inputted via an alpha-numeric keyboard on the front of handset normally hidden by a sliding cover. It was consequently not routinely used and was not used on this occasion);

The local MRCC responded through OLYMPIA RADIO but, as the Skipper was passing the position, the24v battery backup power to the Chart Plotter and GPS failed and only the Latitude was passed.

2.11 Meanwhile the deck hand had moved to the Fire Locker on the starboard side of the main deck aft and activated the Emergency Stop Button. This closed the ER Air intake dampers and the fuel shut offs. He then broke the glass cover and activated both the FM-200[™] bottles for the Engine Room fire suppression system, recalling hearing at least one of them activate. It is not certain if the second bottle activated or not.

2.12 Leaving the main deck bridge control position the skipper joined the deck hand on the open main deck aft. The deck hand then went to check the after bulkhead of the Engine Room gaining access via the transom steps to the swim deck and thence through the Laundry room. Checking the temperature of the ER door with the back of his hand, and in a kneeling position; the deck hand then, carefully, opened the ER door with the skipper observing from some 2metres away. Spotting thick smoke, the deck hand immediately closed and secured ER the door. Both he and the skipper then returned to the main deck the way they had come closing the Laundry door behind them. It is estimated that the time to this point from the initial discovery of smoke was less than four minutes, by which time smoke was seen to be rising from various places on the aft deck mostly on the port quarter.



2.13 The deck Hand then climbed to the upper deck and launched one of the inflatable life-rafts on **JUST MINE**'s port side, whilst the skipper went forward and deployed the anchor, although the 120m of cable did not reach the seabed. On completion the skipper joined the deck hand on the upper deck and, together, they launched the vessel's small tender which was stowed abaft the flying bridge. Both men then returned to the main deck, where the smoke was now thick.

2.14 In turn first the skipper and then the deck hand entered the accommodation to retrieve handheld VHF radios and their grab bags which in the master's case included vessel documents and passports and a laptop. As the deck hand passed through the Saloon on his return, he observed smoke rising from underneath the fixed furniture. From the time of first noticing the smoke to this point is estimated at less than six minutes. Although both crew members passed their stowed lifejackets, in both directions as they passed through the Saloon, neither collected them.

2.15 Both crew members then boarded the tender and, cutting the life-raft painter and attaching it to the tender, motored a safe distance away from the vessel; resuming communication with the Coastguard as they did so, using the hand-held VHFs on VHF 16. JUST MINE was abandoned less than ten minutes after the first discovery of smoke in the ER

Actions by the Shore Authorities

2.16 On receipt of the Distress call the local coastguard immediately activated their emergency response and the following assets were deployed to assist.

Two Patrol vessels: PANAGIOTIS and CAPTAIN ANDREAS

The fire fighting vessel THALIA and an anti-pollution vessel.

A land-based unit also proceeded to the area.

Two local fishing vessels and a small local pleasure vessel in the area also responded and were tasked to assist

2.17 Communication with the crew was difficult using the hand-held VHF radios, so this was supplemented using the deck hand's mobile telephone.

Actions Immediately following Abandonment.

2.18 See still photographs taken from video footage (see FIGs 1 to 12c). Having cleared the vessel the crew released the life raft and kept the vessel under observation in the hope that they might be able to re-board. Over the next three and a half minutes the first signs of flames emerged on the port quarter, in the vicinity of the port side ventilation grill, and the fire then spread rapidly. Steam on the port quarter above the waterline appeared to be coming from the generator overboard discharge. By the end of this short video the flames had spread the full breadth of the vessel and were reaching as high as the mast above the flying bridge

2.19 The crew then transferred to the fishing vessel **PATRAS**, which took both the **JUST MINE**'s tender and the life raft in tow, whilst awaiting the arrival of the Coastguard vessels.

2.20 Some twenty minutes later the **JUST MINE** crew transferred to the patrol vessel **CAPTAIN ANDREAS** with police officers aboard. They conducted several circuits of the **JUST MINE**, which was now wreathed in smoke from stem to stern and ablaze from the collision bulkhead to the transom, the accommodation above the main deck having collapsed into the hull. (see FIGs 13 to 15d))

Subsequent Events

2.21 The **JUST MINE's** crew were then instructed to re-board **PATRAS** which was tasked with landing them ashore where they were met by the appropriate authorities, tested for COVID-19 (negative), and then were cared for by the port authorities whilst assisting them with their investigations. **JUST MINE's** owners and insurers were advised.

2.22 The patrol vessels remained on scene until the arrival of the fire fighting vessel, when attempts were made to extinguish the fire. It was during these operations that **JUST MINE** sank in 320m of water in position 38 17.722N 022 00.725E. It was confirmed that there was no pollution.

2.23 The crew were subsequently repatriated by the vessel owners. The Greek Coastguard released a media statement at 20:00LT on Friday 13th November.

2.24 The incident was reported to the Jersey Shipping Register by the skipper on Monday 23rd November and the Jersey Shipping Administration and the Minister were advised. A Very Serious Marine Casualty Investigation was commenced led by Ports of Jersey Maritime Standards and, following confirmation of the crew nationalities, the United Kingdom, Croatian, and Greek Authorities were notified as 'Substantially Interested States'.

2.3 CREW

At the time of the incident the vessel was crewed by the skipper a 29-year-old Croatian national and a deck hand, a 50-year-old British national. Both were experienced with the operation of the class of vessel concerned and had worked together for some two years. As the vessel was a private leisure vessel, and both under 24m in length and under 150GT, there were no mandatory crew qualifications applicable to the voyage concerned under the Jersey Flag.

2.4 CASUALTY VESSEL DETAILS

Type: Fibre glass construction Leisure Vessel.

Name:	JUST MINE	Registration Number:	ON746372
MMSI:	235110997	IRCS:	2IMN4
Registered Length:	23.03m	Length Overall:	23.03m
Beam:	5.71m	Draft:	1.90m
Net Tonnage:	61.23T	Gross Tonnage:	61.23T
Engine Make/Model:	2 x Caterpillar C32-DITA	Max continuous engine power	2464Kw
Propulsion	Twin screw fixed propeller		
Year of Build:	2008	Date of Registration: 23 rd Ju	ne 2015

2.5 DETAILS OF VESSELS ASSISTING

Two patrol vessels, PANAGIOTIS (NP618) and police vessel CAPTAIN ANDREAS, One anti-pollution vessel, Three private vessels (including two fishing vessels), One firefighting boat (THALIA) and (One road patrol vehicle). 3.0 IMAGES: Still photos from video footage taken on a mobile phone

(FIGs 1 to 12c taken by crew from tender after evacuation 3m30s long)



FIG 1 - Smoke darkening and first flames visible. At anchor with small open FV approaching bow. Taken by crew from tender.



FIG 2 - Significant fire on port side of aft main deck



FIG 3 - Steam on surface of water Port Qtr.



FIG 4 – Flames now visible above height of bulwark



FIG 5 – Flames increasing on Port Quarter to height of flying bridge



FIG 6 – Stbd Qtr. Showing, now drifting, life raft (taken from tender)



FIG 7- Flames moving forward on Port quarter, cover of PWC catches fire



FIG 7a – PWC itself on fire



FIG 8 – Port Qtr showing crane wire in position used to deploy tender.



FIG 9 –Second, of 3, fishing vessels standing-by (landed crew ashore)



FIG 10 – Stern of the vessel well ablaze – crane position (tender launched Port Qtr.)



FIG 11 – Fire engulfs the accommodation and spreads to the flying bridge



FIG 12 a) b) & c) – Fire spreads over the accommodation to the flying bridge and across full breadth of vessel

FIGS 13 to 15d) taken by JUST MINE crew from Police vessel.



FIG 13 a) & b) Accommodation colapsed and smoke full vessel length



FIG 14 a) & b) Flames expend full length of vessel abaft collision bulkhead.

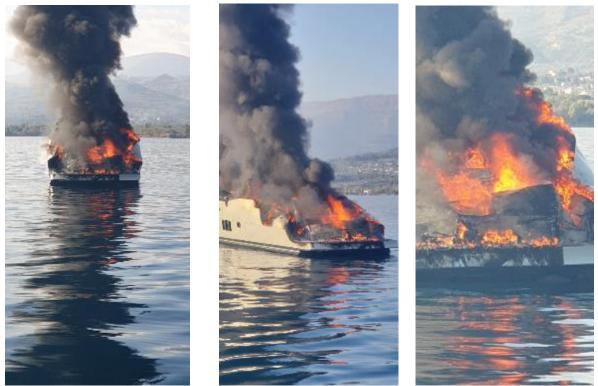


FIG 15 a) b) c) d) accommodation above main deck collapsed, fire full length



4.0 FINDINGS

4.1 THE DISCOVERY OF THE FIRE AND ATTEMPTS TO CONTAIN IT

4.2 The fire was discovered as a result of a regular Engine Room inspection, with the vessel underway, before any alarms sounded. Details of subsequent alarms were not available as these were not manually recorded at the time and the monitoring equipment was lost with the vessel.

4.3 From the video footage the fire appears to have been most severe at the aft end of the Engine Room on the port side but, as there was no visual or CCTV evidence of the start of the fire and loss of the vessel has prevented any subsequent examination, the actual cause of the fire cannot be determined. The deck hand, who was experienced with the vessel, had noted nothing unusual in his inspection immediately before the fire; neither had the skipper in his rounds just before the vessel weighed anchor. The crew reported that since joining the vessel in Turkey and throughout the multileg voyage between 10th and 13th November JUST MINE "had not encountered any mechanical or electrical system failures and, despite the weather, the boat had run smoothly".

4.4 The deck hand was diligent in that, when he could not smell exhaust on the open deck having left the Engine Room, he investigated the slight smell of smoke that he had noticed when leaving the space. He was then able to confirm that there was a problem.

4.5 Initial actions in slowing the vessel and then placing the throttles to neutral were appropriate as was the immediate stopping of the Main Engines when the smoke increased. The actions taken to shut down the ventilation, operate the emergency stops, and activate the fixed firefighting system were all appropriate and were taken quickly. The simultaneous broadcast of a distress message on VHF 16 was also appropriate. It is probable that at least one of the two FM-200 bottles successfully discharged.

4.6 The attempt to assess the heat build-up on the aft ER bulkhead to see what effect, if any, the operation of the fire suppression system had achieved was appropriate. It was, however, unwise in the extreme for the deck hand to then open the access door to the after end the Engine Room. This action could have resulted in a flashover, or in FM-200 entering the Laundry room, and would certainly have allowed additional air to feed the fire and reduced the effectiveness of the fire suppressant. The deck hand was fortunate in being able to subsequently close and secure this door and retreat to the main deck, securing the access doors behind him.

4.7 It appears likely that the automatic closing of the ER fire dampers was not fully effective and allowed the spread of fire from the engine room to the area of the after deck, as air still fed the fire. It is also clear that, by this stage, the smoke boundaries between the machinery space and the accommodation, in way of the Saloon, were not effective.

4.8 The Raising of the Alarm & Distress communications.

4.9 The skipper was proactive in sending a Distress signal early, and the decision for the initial call to be a Distress rather than an emergency call in such circumstances is best practice. It is preferable to subsequently downgrade a Distress message (MAYDAY) to an Urgency message (PAN-PAN) when a situation improves rather than not to have time to send a Distress message when it worsens.

4.10 Best practice is always to initiate a distress call on Digital Selective Calling (DSC) rather than using voice communications on VHF Channel 16, both because this would automatically send a position and because not all shore stations monitor VHF 16. The DSC equipment fitted to JUST MINE, whilst compliant, was not intuitive in use. The button to activate a distress call was located on the back of the handset; whilst any text had to be inputted using an alphanumeric keypad on the front of

the handset, normally concealed by a sliding cover. This function had therefore not been routinely used and the skipper therefore, instinctively, used VHF Channel 16 to raise the alarm.

4.11 Whilst sending the Distress message the 24Volt backup to the navigation equipment Chart Plotter and GPS failed. The skipper had not written down the vessel's position before sending the distress message. When the chart plotter screen went blank the skipper was therefore unable to pass the complete position. It was fortunate that the partial message was acted upon by the Coastguard.

4.12 With the partial message acknowledged, the skipper then prioritised assisting the deck hand with dealing with the emergency to maintaining communication; although, had he taken the hand held VHF's with him at the time he first left the wheelhouse, some communication could have been maintained. Had the situation deteriorated, such that return to the wheelhouse was impossible, this means of emergency communication could have been lost.

4.13 Subsequent to abandoning the vessel VHF communication was re-established with the Coastguard, although difficulties were experienced with reception of the signals from the low powered hand-held sets. Secondary communication was therefore successfully established using the deck hand's mobile telephone.

4.14 Preparing to abandon the vessel and the abandonment itself

4.15 Once it was clear that there was a real risk of the fire spreading the skipper and the deck hand prepared effectively for abandoning the vessel. This, together with most of the response to discovering and containing the fire, was due to their good working relationship and the large number of drills that they had undertaken together.

4.16 The decision to anchor the vessel was reasonable, although ultimately unsuccessful due to the depth of water. The deck hand successfully launched the life-raft, which operated as intended. The skipper and deck hand then successfully deployed the vessel's tender, facilitating the ability to get clear of the burning vessel.

4.17 Both crew members had grab bags readily available and the decision to fetch them was reasonable in the circumstances. The skipper was able to collect the VHF radios from the wheelhouse (see comment in 4.12 above) together with the paperwork which was adjacent ready for arrival at the next port later that morning and a laptop. This approach was however not without risk as smoke was already beginning to fill the accommodation (see comment in 4.7 above). Neither the skipper nor the deck hand could subsequently explain why they had each walked past the lifejackets stowed in the Saloon without collecting them. In less benign conditions this omission could have had serious consequences.

4.18 On leaving **JUST MINE** the crew correctly decided that it was advantageous to take the life raft with them and so took it in tow using the tender. This combination enabled them to stand off a safe distance and await assistance, whilst having the protection of a life raft to fall back on should it be needed.

4.19 The video footage taken by the crew from the tender was significant in documenting the way the fire subsequently spread.

4.20 Response by Shore Authorities and third parties

4.21 The response by the Coastguard in activating their emergency plan was prompt and decisive and was assisted by local fishing vessels.

4.22 Afloat fire-fighting support was dispatched and, by the time assets other than the local fishing vessels were on scene, only this type of response would have been effective. Unfortunately, during the subsequent fire-fighting operations the, severely damaged, **JUST MINE** sank. Although

unlikely to have been salvageable, had the hull remained afloat it is possible the source of the fire and its cause could have been determined.

4.23 An anti-pollution response was also mobilised in case required.

4.24 The fishing vessel on scene was proactive in assisting the crew and then, once released by the on-scene authorities, in transporting the crew to shore; where they were well looked after by the shore authorities.

4.25 Effective surveillance of the scene was maintained until the **JUST MINE** had sunk and it was determined that there was no pollution risk.

4.26 Once released by the shore authorities, arrangements were made on behalf of the owners for the efficient repatriation of the crew.

5.0 CONCLUSION

5.1 **JUST MINE** caught fire and sank as a result of a fire which started in the Engine Room

5.2 Due to the loss of the vessel it has not been possible to identify the seat of the fire or the reason why it occurred.

5.3 The fire was discovered early, and appropriate measures were taken to contain and extinguish it; up to the point that the door on the after bulkhead of the Engine Room was opened.

5.4 The smoke boundaries to the Engine Room were probably not fully efficient prior to the fire. The remote closing of the ventilation is also likely to have been less than fully effective. Whilst it cannot be positively confirmed whether both, or only one, of the FM-200 bottles activated or the reason for any malfunction. The activation of the system did not suppress the fire as intended.

5.5 The vessel was subsequently safely abandoned in an effective manner although, having not taken the hand-held VHFs with him when the skipper left the Main Deck wheelhouse control position, calculated risks were taken re-entering the accommodation; even then lifejackets were forgotten.

5.6 A Distress signal was sent promptly, despite technical difficulties, and the Coastguard responded effectively in accordance with a pre-arranged emergency plan.

5.7 The fact that the VHF DSC function was not used, for the reasons described, possibly prevented an initially more effective Distress call. The failure of the 24V battery supply to the Navigational equipment at a critical time prevented the vessel's position being effectively passed.

5.8 The incident although resulting in the loss of **JUST MINE** caused neither injuries nor pollution.

5.9 From available evidence it is considered that all appropriate efforts had been made to prepare **JUST MINE** for the intended repositioning voyage in a safe manner.

6.0 **RECOMMENDATIONS**

6.1 It is recommended that this report is published by the Jersey Administration, reported to IMO through the Red Ensign Group (REG), and shared with other REG members.

6.2 It is recommended that a Safety Bulletin (provisionally entitled 'Lessons from a fire at sea' is published by Ports of Jersey identifying the lessons from this incident with respect to:

a) Tackling fires aboard, especially use of Fixed Fire Extinguishing systems and the dangers of subsequently attempting to re-enter such spaces

b) The advantages of use of DSC calling for distress alerting and of early use of a Distress as opposed to an Urgency call.

c) The need to have emergency equipment readily available (in particular; life jackets, hand-held radios, and flares).

d) The fact that, in most circumstances, VHF is preferable to use of a mobile phone and why; but that the latter may, in some circumstances, serve as an effective back-up.

e) The need to consider potential evacuation from an early stage during an emergency.

f) The benefit of regular practice of emergency drills even on Pleasure Vessels with small crews.

6.3 Consideration should be given to sharing both this report and the above-mentioned Safety Bulletin with both MARS and CHIRP.

SHIP PARTICULARS

Vessel's name Flag Classification society IMO number Type Registered owner Manager(s) Construction Length overall Registered length Gross tonnage Minimum safe manning Authorised cargo

VOYAGE PARTICULARS

Port of departure Port of arrival Type of voyage Cargo information Manning

Date and time Type of marine casualty or incident Location of incident Place on board Injuries/fatalities Damage/environmental impact Ship operation Voyage segment External & internal environment Persons on board JUST MINE Jersey N/A N/A (Official Number 746372) Pleasure Vessel (non-commercial) Private Private Glass Reinforced Plastic 23.03m 23.03m 61.23 N/A N/A

Paralia Akolis (anchorage) Zakynthos (intended) Coastal No cargo or passengers. 2 crew

Very Serious Marine Casualty 38 17.722N 022 00.725E Engine Room None Vessel sank/ no pollution recorded On passage (repositioning voyage) On passage, coastal waters. Daylight, good visibility, light breeze, rippled sea. 2