



N-CFSAC

Supporting Documentation Package 1

September 10-12, 2024



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Task Statement # 23-24

Review marine casualty Investigations linked to fire and smoke detection devices on Commercial Fishing Vessels (CFVs). Make recommendations to the Coast Guard.



UNITED STATES COAST GUARD

**INVESTIGATION INTO THE CIRCUMSTANCES
SURROUNDING THE FIRE ONBOARD AND
SUBSEQUENT TOTAL CONSTRUCTIVE LOSS
OF**

**COMMERCIAL FISHING VESSEL
MISS DOLORES
(O.N. 938108)**

**THREE NAUTICAL MILES WEST OF ANCLOTE
KEY, FLORIDA ON SEPTEMBER 10, 2010**





16732
17 Nov 2010

MEMORANDUM

From: [REDACTED] LT
Senior Investigating Officer

To: [REDACTED]
CG Sector Saint Petersburg

Thru: [REDACTED]
CG Sector Saint Petersburg (sp)

Subj: FIRE ONBOARD AND SUBSEQUENT TOTAL CONTRUCTIVE LOSS OF
COMMERCIAL FISHING VESSEL MISS DOLORES (O.N. 938108) THREE
NAUTICAL MILES WEST OF ANCLOTE KEY, FLORIDA ON SEPTEMBER 10,
2010

Ref: (a) Title 46 United States Code, Chapter 63
(b) Title 46 Code of Federal Regulations, Part 4
(c) USCG Marine Safety Manual Volume V, COMDTINST M16000.10A

1. **Executive Summary:** On September 10, 2010, at approximately 1000 local time, the MISS DOLORES got underway from Tarpon Springs, FL, for a recreational fishing trip with two passengers, Mr. [REDACTED] the vessel owner, and Mr. [REDACTED] his brother. The vessel transited to approximately three nautical miles West of Anclote Key, FL, where they commenced fishing. At approximately 1215, the [REDACTED] noticed a burning smell and determined it was coming from the engine room. Mr. [REDACTED] entered the engine room to investigate and observed flames emanating the port aft corner in vicinity of the fuel manifold and battery banks. Mr. [REDACTED] unsuccessfully attempted to extinguish the fire with a CO2 extinguisher. Mr. [REDACTED] made a MAYDAY call over VHF radio, channel sixteen; a recreational vessel operating in the area responded to the MAYDAY and took the [REDACTED] onboard. The MISS DOLORES burned out of control for approximately two and a half hours until it reached the waterline. The fire was extinguished when the remaining hull took on water and capsized. The stern of the vessel remained afloat due to reserve buoyancy. The vessel is a total constructive loss; the remaining hull was salvaged on September 20, 2010. Investigation of the remaining portion of the hull and equipment revealed the electrical wiring from the port battery bank showed signs of a severe electrical short. This is the most likely source of ignition. The MISLE activity number is 3847129.

2. **Vessel Data:**

MISS DOLORES	
Official Number	938108
Hailing Port	Tarpon Springs, Florida

Subj: FIRE ONBOARD AND SUBSEQUENT TOTAL CONTRUCTIVE LOSS
 OF COMMERCIAL FISHING VESSEL MISS DOLORES (O.N. 938108)
 THREE NAUTICAL MILES WEST OF ANCLOTE KEY, FLORIDA ON
 SEPTEMBER 10, 2010

16732
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Registered Service	Commercial Fishing Vessel
Actual Service (Time of Casualty)	Recreation
Year Built	1992
Gross Tonnage	30
Length	46.5 feet
Hull Material	Fiberglass
Owner	[REDACTED]
Crew Compliment	Two; No licensed mariner required



Photograph of the MISS DOLORES after construction in 1992.

3. Personnel Data:

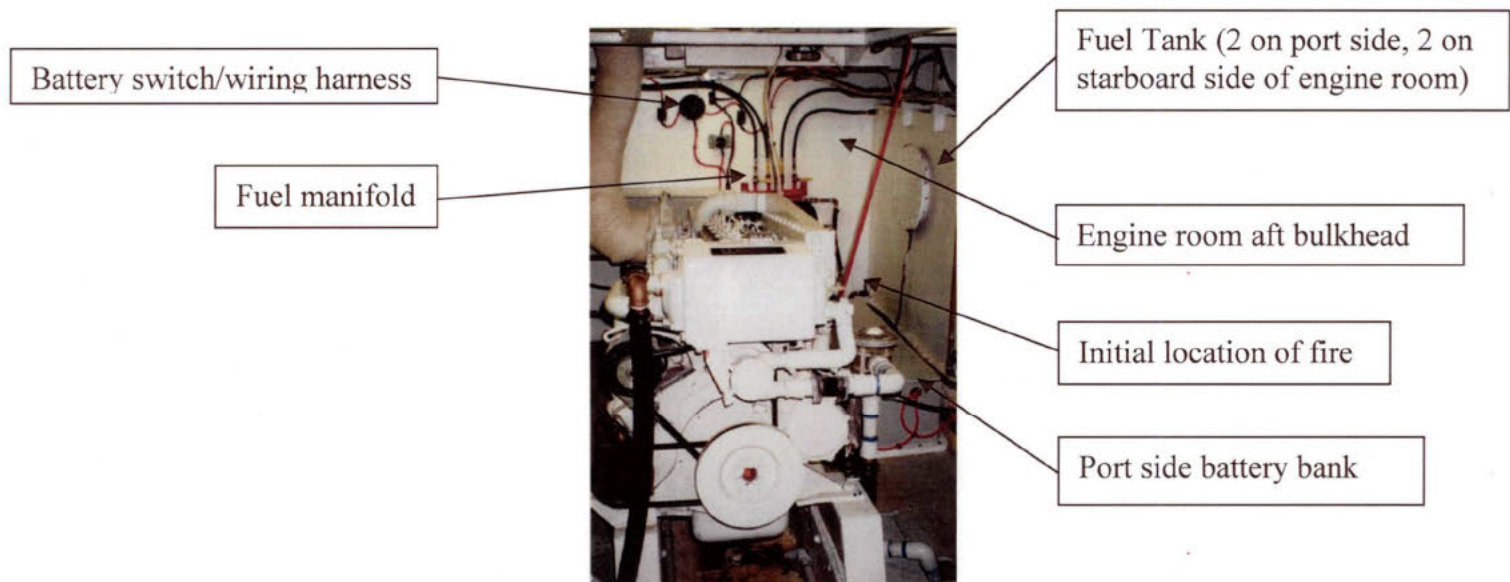
Name	Age	Position	Status
[REDACTED]	[REDACTED]	Master/Owner	At risk, not injured
[REDACTED]	[REDACTED]	Passenger	At risk, not injured

4. **Findings of Fact:**

- a. MISS DOLORES was built by Mr. [REDACTED] in 1992; he performed all maintenance on the vessel. The vessel was U. S. documented as a commercial fishing vessel, but was operating in a recreational capacity at the time of the casualty.
- b. Approximately one month before the incident, Mr. [REDACTED] replaced some wiring along the port side of the engine room because the insulation on the original wiring was stripped off by rats.
- c. On September 10, 2010, at approximately 1000 local time, Mr. [REDACTED] got the MISS DOLORES underway from Tarpon Springs, FL, for a recreational fishing trip. Mr. [REDACTED] brother, Mr. [REDACTED] was also onboard. Mr. [REDACTED] piloted the vessel approximately 3 nautical miles West of Anclote Key where they began fishing using deep sea fishing poles. While fishing, Mr. [REDACTED] maneuvered the vessel in a zig zag pattern in the local area.
- d. At approximately 1130, Mr. [REDACTED] smelled smoke, but was unable to determine the source; he was not alarmed. There was no fire detection system installed in the engine room of MISS DOLORES.
- e. At approximately 1215, Mr. [REDACTED] walked onto the deck, noticed a smoky smell, and determined it was coming from the engine room vent, located on the port aft bulkhead of the cabin. Mr. [REDACTED] entered the engine room to investigate and observed flames emanating from the port aft corner of the engine room. Mr. [REDACTED] attempted to extinguish the fire with a CO2 extinguisher with no success. There was no fixed fire fighting system installed on MISS DOLORES.
- f. The port aft corner of the engine housed the fuel manifold, wiring harness, and two separated battery banks. One battery bank was located on the deck along the port side of the main engine, the second battery bank was located on the aft bulkhead centerline. The RAYCOR filter for the main engine fuel was located on the port aft corner of the main engine.

Subj: FIRE ONBOARD AND SUBSEQUENT TOTAL CONSTRUCTIVE LOSS
OF COMMERCIAL FISHING VESSEL MISS DOLORES (O.N. 938108)
THREE NAUTICAL MILES WEST OF ANCLOTE KEY, FLORIDA ON
SEPTEMBER 10, 2010

16732
17 Nov 2010



Port aft corner of MISS DOLORES engine room; taken after construction

- g. At approximately 1220, Mr. [REDACTED] placed a MAYDAY call on VHF radio channel sixteen. The [REDACTED] were taken onboard a recreational vessel that heard the MAYDAY.
- h. The fire quickly spread from the engine room into the forward cabin and eventually engulfed the entire boat. The fire burned uncontrollably for approximately two and a half hours, burning the forward three quarters of the boat to the waterline.



MISS DOLORES at 1253 local time

Subj: FIRE ONBOARD AND SUBSEQUENT TOTAL CONTRUCTIVE LOSS
OF COMMERCIAL FISHING VESSEL MISS DOLORES (O.N. 938108)
THREE NAUTICAL MILES WEST OF ANCLOTE KEY, FLORIDA ON
SEPTEMBER 10, 2010

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MISS DOLORES at 1420 local time

- i. At approximately 1440, the MISS DOLORES began flooding and eventually capsized and then sank by the bow. The stern remained afloat due to reserve buoyancy.



MISS DOLORES stern remained afloat

- j. At approximately 1630, Mr. [REDACTED] and Mr. [REDACTED] submitted to breath alcohol tests administered by LT [REDACTED] at USCG Station Sand Key; both tests were [REDACTED] for alcohol. Post-casualty drug testing was not required as the vessel was operating in a recreational status at the time of incident.

Subj: FIRE ONBOARD AND SUBSEQUENT TOTAL CONTRUCTIVE LOSS
OF COMMERCIAL FISHING VESSEL MISS DOLORES (O.N. 938108)
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SEPTEMBER 10, 2010

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17 Nov 2010

- k. On September 20, 2010, the remaining hull of the MISS DOLORES was salvaged and taken to Tarpon Springs, FL. Vessel was determined to be a total constructive loss.



MISS DOLORES on September 23, 2010, after salvage

- l. The MISS DOLORES was insured for \$210,000.
- m. Electrical wiring in the port aft corner of the engine room, which originally led from the port battery bank to the wiring harness on the aft bulkhead, was fused solid in two locations near the battery terminal end.
5. **Causal/Human Error Analysis:**
- a. Electrical wiring in the forward port side of the engine room had recently been replaced due to insulation being stripped, most likely by rats. It is unknown if any other wiring had a similar condition and went unnoticed.
- b. The fuel manifold, battery banks, and RAYCOR filters were all in close proximity due to the small size of the engine room. Any electrical fire in either of the battery boxes or wiring harness could quickly melt the fuel hoses and ignite the fuel.
- c. The wiring, which ran from the port batteries to the wiring harness, showed signs of an electrical short in two locations near the battery terminal end. The wire strands were fused together.
- d. Approximately one hour elapsed from the first time a smoldering smell was noticed until Mr. [REDACTED] checked the engine room. When Mr. [REDACTED] entered the engine room at

approximately 1230, the fire was already unable to be extinguished with a handheld portable CO2 extinguisher.

6. **Conclusions:** The fire is believed to have started in the port aft corner of the engine room, most likely initially as an electrical fire. Due to the close proximity of the electrical and fuel components, the fire quickly spread to the fuel lines. The fire spread through the forward cabin area burning two thirds of the vessel to the waterline. Earlier detection of the fire may have allowed the fire to be successfully extinguished.

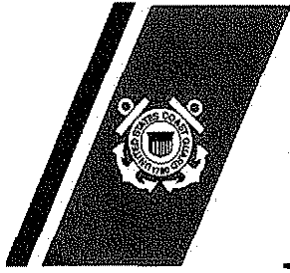
7. **Safety Recommendations:**

- a. It is recommended the Commandant of the Coast Guard establish regulations under Title 46 Code of Federal Regulations (CFR) Part 28 requiring all commercial fishing industry vessels to have a fire-detection system installed to detect engine-room fires.
- b. It is recommended the Commandant of the Coast Guard establish regulations under Title 46 CFR Part 28 requiring all commercial fishing industry vessels to have a fixed fire-extinguishing system installed to protect the engine room of the vessel.

8. **Administrative Recommendations:**

- a. No enforcement action recommended as a result of this investigation.
- b. It is recommended that this casualty investigation be closed.

#



UNITED STATES COAST GUARD

REPORT OF INVESTIGATION INTO THE
CIRCUMSTANCES SURROUNDING A FIRE, VESSEL
LOSS, THREE MISSING AND PRESUMED DEAD
ONBOARD THE FISHING VESSEL LUCKY DIAMOND
ON MAY 10, 2012

FISHING VESSEL LUCKY DIAMOND

AREA SOUTHWEST OF MORGAN CITY,
LA, GULF OF MEXICO



MISLE Activity Number: 4308216
Originating Unit: Marine Safety Unit Morgan City

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**U.S. Department of
Homeland Security**

**United States
Coast Guard**



Commandant
United States Coast Guard

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16732/IIA# 4308216
14 June 2022

**THE FIRE AND SUBSEQUENT LOSS OF THE COMMERCIAL FISHING VESSEL
LUCKY DIAMOND RESULTING IN A LOSS OF LIFE 15 NAUTICAL MILES
SOUTHWEST OF MORGAN CITY ON MAY 10, 2012**

ACTION BY THE COMMANDANT

The record and the report of the investigation convened for the subject casualty have been reviewed. The record and the report, including the findings of fact, analysis, and conclusions are hereby closed.

The investigation's safety recommendations will remain under review and consideration by the responsible program office(s). The response to the recommendations and any resultant actions will be documented separately.



A. L. FAHRIG

Commander, U.S. Coast Guard
Acting, Chief, Office of Investigations & Casualty Analysis (CG-INV)



16732
October 1, 2021

**FIRE, VESSEL LOSS, AND THREE MISSING PRESUMED DEAD ONBOARD THE
FISHING VESSEL LUCKY DIAMOND ON MAY 10, 2012**

**ENDORSEMENT BY THE COMMANDER,
EIGHTH COAST GUARD DISTRICT**

The record and the report of the investigation convened for the subject casualty have been reviewed. The record and the report, including the findings of fact, analysis, conclusions, and recommendations are approved subject to the following comments. It is recommended that this marine casualty investigation be closed.

COMMENTS ON THE REPORT

The loss of these crewmembers was a tragic and preventable accident. I offer my sincere condolences to the families and friends of the mariners who lost their lives.

ENDORSEMENT ON RECOMMENDATIONS

Safety Recommendation 1: It is recommended that the Commandant initiate a regulation change requiring commercial fishing vessels 50 feet or over to have a minimum of one (1) smoke detector in the Galley and in each accommodation space or have it located in an area that is audible from each accommodation space. Early detection is vital during a fire, hence, implementing this change would provide an early warning system and allow crewmembers to fight a fire before it spreads. Additionally, commercial fishing vessels do not have a 24-hour watch standing requirement; all crewmembers could be asleep at the same time as in the case of the Lucky Diamond. Installing a smoke detector is an easy and cost effective tool that could save lives.

Endorsement: I concur with this recommendation. Current regulations requiring smoke detectors in accommodation spaces for commercial fishing vessels is limited to vessels constructed after September 15, 1991 and that operate with more than 16 persons on board. It is recommended that the Commandant should initiate a regulation change requiring ALL commercial fishing vessels with overnight accommodation spaces or galleys, be fitted with an independent modular smoke detecting and alarm unit in compliance with 46 CFR Part 76. Smoke detectors are proven as an effective means of early detection of fires and this regulatory

change would significantly enhance the safety onboard fishing vessels, especially during periods that the crew is asleep. I recommend the Commandant (CG-5P) consider conducting a cost benefit analysis to determine whether or not they should take action on this recommendation.

Safety Recommendation 2: It is further recommended that all smoke detectors be required to be inspected and tested on a monthly basis and batteries replaced at least annually or in accordance with the manufacturer's recommendation. This action should be recorded in a record of equipment maintenance log. It is recommended that this log be maintained by for a minimum of two (2) years and be made available to law enforcement officers. Upkeep and routine performance checks ensure the reliability of this important warning system. A log would allow rotating vessel crewmembers, owners and law enforcement officers and efficient means of recording and evaluating the equipment's maintenance history.

Endorsement: I concur with this recommendation. The Coast Guard Authorization Act of 2010, section 604 provided a new provision requiring a "safety logbook" to record equipment maintenance and required instruction and drills for vessels operating beyond 3 NM. While the vessel did have a smoke detector onboard, the Master confirmed it did not operate as required and there was no record to indicate when it was last checked. The requirement to ensure maintenance of equipment onboard the LUCKY DIAMOND, including the smoke detectors installed as safety equipment, may have alerted the crew to the fire onboard so as to afford them time to fight the fire or safely abandon ship. I recommend the Commandant (CG-5P) consider initiating a regulatory change to enforce the change in law as this would increase the awareness of maintaining equipment onboard for those vessels operating further away from shore in which assistance may not be immediately available in emergency situations.

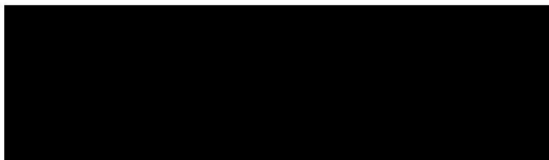
Safety Recommendation 3: In support of Coast Guard Authorization Act of 2010, section 604, it is recommended that the Commandant initiate a regulation change requiring individuals in charge of commercial fishing vessels operating beyond three (3) nautical miles of the baseline to keep a record of equipment maintenance and required instruction and drills. The best way of ensuring crewmembers' familiarity with onboard safety equipment and their reaction during situations is to conduct drills. Record keeping is a good way to hold everyone accountable and ensure crewmembers are performing the required safety exercises.

Endorsement: I concur with this recommendation. Current regulations requiring a master or individual in charge of a vessel to conduct drills is limited to those vessels that operate beyond the boundary line or with more than 16 persons onboard. Had the Master regularly conducted drills, the efforts he made to alert his crew and fight the fire may have been more successful. It is recommended that the Commandant (CG-5P) consider initiating a regulatory change to enforce the change in law as the requirement to conduct drills would have better prepared the master to respond to this and other emergencies, reducing the likelihood of injury.

Safety Recommendation 4: It is recommended that the Commandant initiate a regulation change requiring all commercial fishing vessels 65 feet and over to have a minimum of one (1) fire suit onboard. This suit should include: protective clothing of material to protect the skin from the heat radiating from the fire, rubber boots, rigid helmet providing effective protection against impact, electric safety lamp, axe with a handle provided with high-voltage insulation, and a 60-foot life line. Crewmembers need protective clothing to safely fight a fire. Such equipment should be required to be serviceable and maintained in working order. Not only will it prevent injury, but it will allow

crewmembers to save others during a hazardous and dangerous situation as in the case of the Lucky Diamond.

Endorsement: I do not concur with this recommendation. Current regulations for commercial fishing vessels do not require a fireman's outfit unless the vessel operates with more than 49 individuals onboard. Subchapter T and Subchapter K vessels are a class of inspected vessels with the potential to carry an equal number of passengers and do not require the carriage of this equipment. There is no other evidence outside the need for the crew to familiarize themselves on what safety equipment would have been best used to fight this type of fire while minimizing injury in the amount of time before the fire was of such size that the master decided to abandon the vessel. As such, no further action is recommended by the Commandant (CG-5P).



B. WELBORN
Captain, U.S. Coast Guard
Acting Chief of Prevention
Eighth Coast Guard District
By Direction

MAY 9 2013
16732

FIRST ENDORSEMENT on Report of Investigation MISLE #4308216 of 29 Apr 2013

From: [REDACTED]
J.C. Burton, CAPT, USCG
CG MSU Morgan City

To: COMDT (CG-545)
Thru: CGD ELEVEN (dp)

Subj: FIRE, VESSEL LOSS, AND THREE MISSING AND PRESUMED DEAD ON
THE FISHING VESSEL LUCKY DIAMOND ON MAY 10, 2012

1. This report is forwarded recommending approval.
2. Recommendations 1, 3, and 4 are addressed to the Commandant and compliments Title 46 of the United States Code of Federal Regulations, Subchapter C, – Uninspected Vessels, Part 24. Marine casualties are frequently reported by commercial fishing vessels and in the case of fishing vessel *Lucky Diamond*, mandating simple safety equipment could have prevented injury, loss of vessel, deaths, and cargo.
3. Recommendations 1 and 4 are inexpensive and effective safety measures that could easily be installed on any commercial fishing vessel.
4. The President signed section 604 of the 2010 Coast Guard Authorization Act that included provision to add new safety and equipment requirements for commercial fishing fleet. Safety recommendation 3 supports this endeavor to require equipment maintenance records to assist crewmember in familiarizing themselves with safety measures onboard and their operating status.
5. Recommendation 2 is fully supported without further comment.

#



16732
29 Apr 2013

MEMORANDUM

From: [REDACTED]
Investigating Officer

To: J. C. BURTON, CAPT
MSU Morgan City

Subj: FIRE, VESSEL LOSS, AND THREE MISSING AND PRESUMED DEAD ON THE
FISHING VESSEL LUCKY DIAMOND ON MAY 10, 2012

Ref: (a) CG Marine Safety Manual, Volume V, Investigations and Enforcement,
COMDTINST M160000.10A
(b) CG-545 Policy Letter 1-11; Marine Casualty Report of Investigation

Preliminary Statement:

In accordance with reference (a), an informal investigation was conducted into the fire, sinking, and subsequent loss of the 232 gross ton commercial fishing vessel *Lucky Diamond* on May 10, 2012. The loss of a mechanically propelled vessel of 100 or more gross tons is a Major Marine Casualty. Additionally, there were three missing crewmembers, presumed dead, and one injured crewmember as a result of this incident. The Coast Guard led the investigation and cooperated with the NTSB in accordance with the CG/NTSB Memorandum of Understanding. A causal analysis was conducted for the development of safety recommendations. All times listed in this Report of Investigation are local and approximate. The MISLE activity number is: 4308216.

Executive Summary

The *Lucky Diamond* was a documented, uninspected, sea-going, commercial fishing vessel built in 1987. The regulations that governed the *Lucky Diamond* are found in Title 46 of the United States Code of Federal Regulations, Subchapter C – Uninspected Vessels. On Thursday, May 10, 2012, at 1200, the *Lucky Diamond* was tied stern to stern by a line at a distance of 5 feet with anchored commercial fishing vessel *Miss Carol* in the Gulf of Mexico, southwest of Morgan City, Louisiana, approximately 15 nautical miles southwest of Marsh Island at 29-22.08'N and 090-08.954'W. Four (4) crewmembers were onboard the *Lucky Diamond*. At 2200, the Master woke up to the smell of smoke and, being unable to locate the three (3) crewmembers, ran over to the *Miss Carol*.

The fire intensified onboard the *Lucky Diamond* -- flames and heavy smoke were exiting throughout the entire accommodation and wheelhouse space. The Master of the *Miss Carol* radioed a nearby commercial fishing vessel, *Tommy Gun*, which in turn radioed the Coast Guard for assistance.

Subj: FIRE, VESSEL LOSS, THREE MISSING AND PRESUMED DEAD 16732
ONBOARD THE FISHING VESSEL *LUCKY DIAMOND* ON MAY 10, 2012 29 Apr 2013

The fire remained active until the next morning at 0800. The three missing crewmembers were presumed to still be onboard. The Master suffered first and second degree burns and was evacuated by a Coast Guard helicopter to Our Lady of Lourdes Hospital Burn Center in Lafayette, Louisiana. The *Lucky Diamond* sank outside of navigable channel in 40 feet of water. MSU Morgan City determined that the vessel was unrecoverable, and that the remaining oil on board had burned up in the fire. On May 17, a penetration dive through the vessel was conducted by T & T Bisso, LLC, of Houston, Texas. Most of the interior was burned. The three missing crewmembers were never located.

Vessel Data

Name:	LUCKY DIAMOND
Flag:	U.S.
Vessel Identification Number:	911160
IMO Number:	WDB8011
Status:	Total Constructive Loss - Unsalvaged
Service:	Fishing Vessel – Shrimper
Year Built:	1987
Gross Tons:	232
Net Tons:	158
Length:	92.2 ft
Breadth:	27 ft
Depth:	13.5 ft
Propulsion:	Diesel
Horsepower:	1080
Cargo:	Shrimp
Owner:	TL&S Corporation, 202 Carlie
Operator:	[REDACTED]

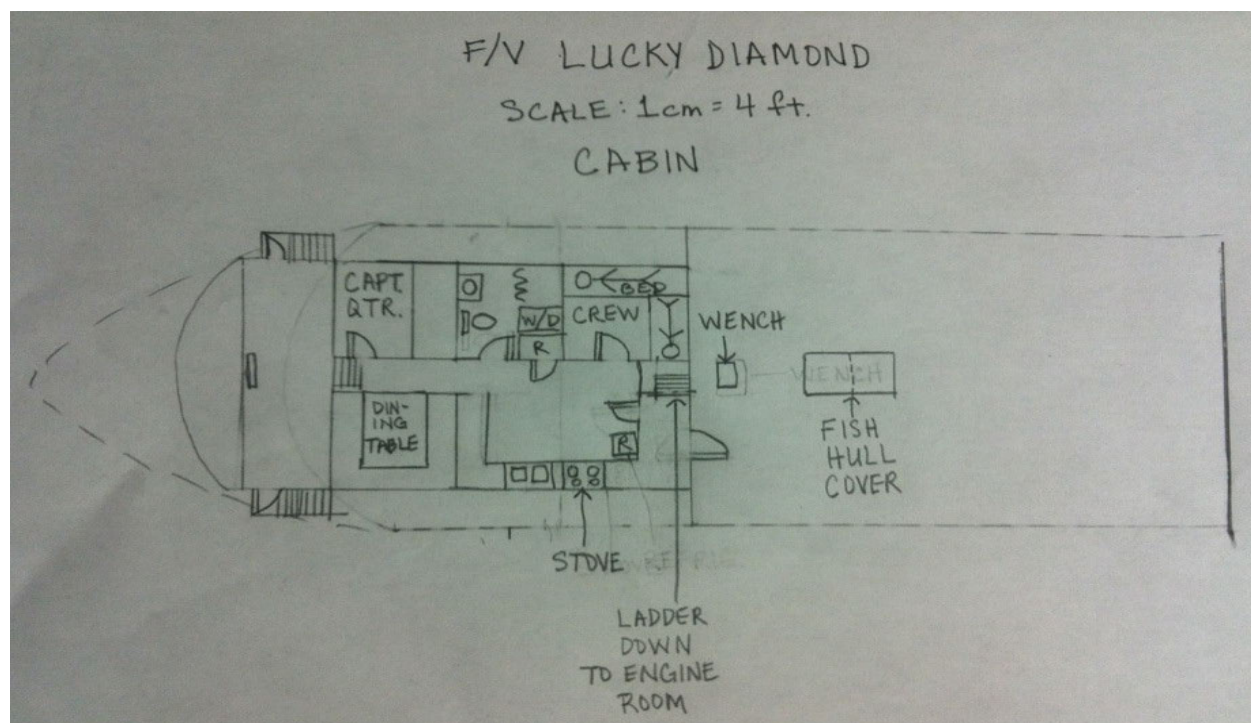
Personnel Data:

Personnel Involved	Status	Position
Teo Dang	Missing and Presumed Dead	Crewmember
Anh Van Le	Missing and Presumed Dead	Crewmember
Phich Luong	Missing and Presumed Dead	Crewmember
[REDACTED]	Injured; 1 st degree burns to face and hands.	Master

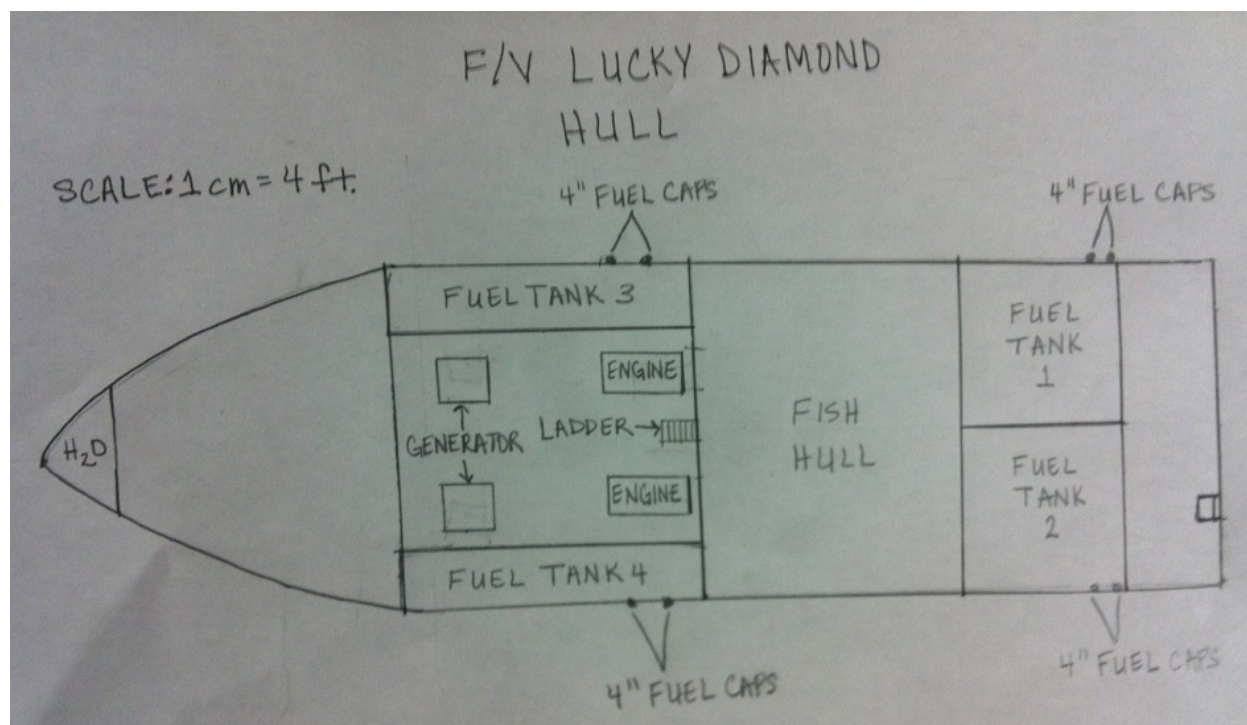


Findings of Fact

1. On April 28, 2012, the commercial fishing vessel *Lucky Diamond* departed its homeport of Sabine Pass, Texas, for a month long voyage to catch shrimp.
2. The *Lucky Diamond* initially had 20,000 gallons of diesel fuel in four 5,000 gallon tanks. Before departing homeport the vessel did not have any known mechanical or engine problems.
3. The four (4) crewmembers onboard the *Lucky Diamond* neither were neither required by regulation to have, nor did they possess Coast Guard Merchant Mariner Credentials.
4. At 1200, the *Lucky Diamond* (unanchored) was tied stern to stern by a distance of 5 feet with the anchored *Miss Carol*. Weather conditions were isolated showers, 10 to 15 knot southeast winds with clear visibility and air temperature of 75 degrees Fahrenheit.
5. The *Lucky Diamond* had accumulated approximately 70,000 pounds of shrimp.
6. At 1600, the crewmembers decided to stop fishing for the afternoon. Three (3) crewmembers hauled the fishing nets in while [REDACTED], Master of the *Lucky Diamond*, went below deck to survey the engine room. The Master noted there were frayed electrical cables that were affixed overhead in the engine room and located just below the crew's cabin space. Otherwise, the report was that everything in the engine room "looked good."
7. At 1700, all four (4) crewmembers gathered at the dining table and ate dinner.
8. Master [REDACTED] went to sleep at approximately 1800 in his cabin located forward on the starboard side, near the wheelhouse, while three (3) crewmembers remained at the dining table located directly across the Master's cabin on the port side.



Sketch of *Lucky Diamond's* Main Deck



Sketch of *Lucky Diamond's* Engine Deck

9. At 2200, Master [REDACTED] woke up to the smell of smoke. A smoke detection system was located outside the Master's cabin, but it did not sound. The smoke detector was not required but since it was installed it should have been in working order.

10. Master [REDACTED] opened his cabin door and noticed smoke coming from the crew's cabin. He also saw a small fire coming up from the deck in front of the crew's cabin door.

11. At 2206, Master ran over to the crew's cabin, opened the cabin door, and yelled for the crew. There was heavy smoke inside the crew's cabin that made it difficult to see in the space. Master [REDACTED] yelled for the crew a second time, but there was no response so he closed the crew's cabin door.

12. At 2212, Master [REDACTED] exited the main cabin area through a doorway located aft and looked for his crewmembers to see if they had already evacuated. When he did not see them outside, he grabbed a hose located near the aft exit door, activated it, and went back inside the vessel to try to put the fire out.

13. He sprayed water at the crew's cabin door and at the fire coming from the main deck. Then the fire re-flashed and caused burns to his face and hands.

14. Master [REDACTED] stated at this point he "knew his friends were still in there but did not know what to do. He tried his best."

15. The fire continued to intensify and could not be contained or controlled by a hose.

16. At 2222, Master [REDACTED] went back outside and boarded the *Miss Carol* by walking across the 5-foot line that was connecting the two fishing vessels.

17. After boarding the *Miss Carol*, Master [REDACTED] yelled and knocked on their aft exit door to wake up the crew of the *Miss Carol*. When [REDACTED], Master of the *Miss Carol* appeared, Master [REDACTED] asked him if he had seen his crew and the answer was "No." Both Captains searched around the *Miss Carol* and did not see any of the *Lucky Diamond*'s crew.

18. Both Captains walked over to the *Lucky Diamond* while two (2) of *Miss Carol*'s crewmembers stayed on the stern of the *Miss Carol* as lookouts.

19. On board the *Lucky Diamond*, Master [REDACTED] walked around the exterior of the vessel while Master [REDACTED] sprayed the stern exit door since the flames were too intense for anyone to enter. After 5 minutes, both left the vessel since the fire was too intense for them to control.

20. Master [REDACTED] radioed a nearby vessel *Tommy Gun*. Master [REDACTED] stated the fire onboard the *Lucky Diamond* was very high and flames were all around the cabin. Dangerous conditions prompted a decision from both Masters not to re-board the *Lucky Diamond*.

21. At 0130, Coast Guard Sector New Orleans, Louisiana, received a radio call from a crewmember onboard the motor vessel *Tommy Gun*. The crewmember reported the *Lucky Diamond*, located 15 nautical miles southwest of Marsh Island (29-22.0SN, 092-08.954W), was

on fire. Three (3) persons were reported to be missing and the Master had abandoned ship to nearby the *Miss Carol*.

22. At 0625 as the fire intensified, Master [REDACTED] of the *Miss Carol* cut the line and drifted away from the *Lucky Diamond*. The three (3) missing crewmembers were presumed to still be onboard the *Lucky Diamond*.

23. At 1751, Master [REDACTED] was taken by a Coast Guard helicopter to Our Lady of Lourdes hospital in Lafayette, LA. He sustained first degree burns.

24. The *Lucky Diamond* was on fire for approximately 12 hours before it sank outside of the navigable channel. MSU Morgan City determined that the vessel was unrecoverable.

25. There was a potential release of 20,000 gallons of diesel fuel, and unknown quantity of lube oil.

Key Investigative Findings:

26. On May 17, 2012, a penetration dive through the *Lucky Diamond* was conducted by T&T Bisso, LLC, from Houston, Texas. Two (2) divers entered the vessel's accommodation area through the aft entrance just forward of the fish hold.

27. The vessel's condition indicated most interior materials were burned throughout the crew's quarters, wheelhouse, and engine room. Interior materials included wooden panels that divided the main cabin space, mattresses, and lagging. It was also indicated that all windows were blown out, and the aft water-tight door was warped from the fire's extensive heat.

28. The divers did not locate any human remains.

Analysis:

1. *Fire:* Master [REDACTED] saw a small fire coming up from the deck near the crew's cabin door and noticed smoke outside of the crew's cabin, located aft. The source of the fire is unknown, but the Master believes the fire originated from frayed electrical cables that were affixed overhead in the engine room and located just below the crew's cabin space. If the wires were exposed, as indicated by the Master's statement, then it creates an unsafe condition. The protective exterior to the wires were missing and the wires could have heated to a point of ignition. As a reference, the electrical cables powered the wheelhouse, stove, lights, etc. and came from the generators located forward of the engine room. The vessel was powered by two (2) Caterpillar (CAT) 3412 diesel engines and two (2) Perkin 60K generators.

2. *System defenses were present, but did not work:* One smoke detection system was installed on the vessel located in the dining area just outside of the Master's stateroom. Master [REDACTED] indicated he woke up to the smell of smoke and at no time did he hear the smoke detection system. Although not required, safety equipment was installed, but was not properly maintained or in good working condition. If the smoke detection system were operational, the crew could have been alerted sooner to the presence of smoke and given the opportunity to

exit the space, investigate the origin of the fire, and extinguish it before it spread uncontrollably and further leading the loss of the vessel and crewmembers.

3. *Injury*: The *Lucky Diamond* was a 92.2 foot vessel, and in accordance with 46 CFR 28.160, this size vessel was required to have a minimum of 6 portable fire extinguishers -- 2 in the engine room, 2 at the pilot house, 1 in the galley, 1 in the fiddley chamber. The Master used a ½ inch water hose located outside of the accommodation space. When the fire was sprayed it flashed back and caused burns to the Master's face and hands.

4. *Sinking*: Once the fire started, it was not properly contained or controlled. The Master injured himself fighting the fire and had to abandon ship to look for assistance. The fire intensified and the line joining the two (2) fishing vessels had to be cut. The *Lucky Diamond* was on fire for approximately 12 hours before sinking, and the fire compromised the integrity of the vessel's hull causing the vessel to sink.

5. *Not an inspected vessel*: Commercial fishing vessels are not inspected by the Coast Guard. As such, it was difficult to ascertain whether there was a failure to keep any part of the vessel or its equipment in its designed operational condition to function within a designated lifetime or operational period. At the time of this report, the vessel was unsalvaged and most of its interior burned, making it difficult to identify any hazardous conditions that may have existed.

Conclusions:

1. In accordance with reference (a), the Initiating Event (first unwanted outcome) for this casualty was a fire of unknown origin.

2. The exact location of the ignition source or sources that caused the fire onboard the *Lucky Diamond* cannot be conclusively identified. A number of possible ignition sources may have been present. Master ■■■ believes that overhead electrical cables in the engine room caused the fire. The Master stated, he checked the engine room space on the night of the fire and frayed electric cables were the only discrepancy that he noticed.

3. The following preventative safety measures were unavailable to the crew and lack of maintenance contributed to the major marine casualty:

a. Inoperable smoke detection/alarm system: Though it was not required to be onboard the vessel per current regulations pertaining to the vessel, the vessel had a smoke detection system designed to emit a loud siren-like sound to alert people to the danger of fire in time to evacuate or stop the fire before it had a chance to grow. The Master of the *Lucky Diamond* stated that the smoke detection system outside of his cabin did not sound. If a safety system is installed, whether required or not, it should be properly maintained. If the detection system had performed as intended, the crew may have had a chance to locate and combat the fire before it intensified.

b. Improper Firefighting Training: The use of a manual water hose to fight the fire instead of a portable fire extinguisher resulted in heated water spray splashing onto the Master causing burns to the Master's face, eyes, and hands.

4. Except for the above, there is no evidence of failure to properly respond to this incident by the Master of the *Lucky Diamond*, the U.S. Coast Guard or any other responsible agency.

Safety Recommendations:

1. It is recommended that the Commandant initiate a regulation change requiring commercial fishing vessels 50 feet or over to have a minimum of one (1) smoke detector in the Galley and in each accommodation space or have it located in an area that is audible from each accommodation space. Early detection is vital during a fire, hence, implementing this change would provide an early warning system and allow crewmembers to fight a fire before it spreads. Additionally, commercial fishing vessels do not have a 24-hour watch standing requirement; all crewmembers could be asleep at the same time as in the case of the *Lucky Diamond*. Installing a smoke detector is an easy and cost effective tool that could save lives.

2. It is further recommended that all smoke detectors be required to be inspected and tested on a monthly basis and batteries replaced at least annually or in accordance with the manufacturer's recommendation. This action should be recorded in a record of equipment maintenance log. It is recommended that this log be maintained for a minimum of two (2) years and be made available to law enforcement officers. Upkeep and routine performance checks ensure the reliability of this important warning system. A log would allow rotating vessel crewmembers, owners, and law enforcement officers an efficient means of recording and evaluating the equipment's maintenance history.

3. In support of Coast Guard Authorization Act of 2010, Section 604, it is recommended that the Commandant initiate a regulation change requiring individuals in charge of commercial fishing vessels operating beyond three (3) nautical miles of the baseline to keep a record of equipment maintenance and required instruction and drills. The best way of ensuring crewmembers' familiarity with onboard safety equipment and their reaction during situations is to conduct drills. Record keeping is a good way to hold everyone accountable and ensure crewmembers are performing the required safety exercises.

4. It is recommended that the Commandant initiate a regulation change requiring all commercial fishing vessel's 65 feet and over to have a minimum of one (1) fire suit onboard. This suit should include: protective clothing of material to protect the skin from the heat radiating from the fire, rubber boots, rigid helmet providing effective protection against impact, electric safety lamp, axe with a handle provided with high-voltage insulation, and a 60- foot life line. Crewmembers need protective clothing to safely fight a fire. Such equipment should be required to be serviceable and maintained in working order. Not only will it prevent injury, but will allow crewmembers to save others during a hazardous and dangerous situation as in the case of the *Lucky Diamond*.

Administrative Recommendations:

1. It is recommended that this casualty investigation be closed.



UNITED STATES COAST GUARD

INVESTIGATION INTO THE CIRCUMSTANCES SURROUNDING THE FIRE AND TOTAL LOSS OF THE COMMERCIAL FISHING VESSEL

SKYE MARIE

**ON THE ANCLOTE RIVER IN TARPON SPRINGS,
FLORIDA ON 05/14/2013**



MISLE ACTIVITY NUMBER: 4592733

U.S. Department of
Homeland Security

United States
Coast Guard



Commandant
United States Coast Guard

U.S. Coast Guard STOP 7501
2703 Martin Luther King Jr. Ave. SE
Washington, DC 20593-7501
Staff Symbol: CG-INV
Phone: (202) 372-1030
Fax: (202) 372-1904

16732/IIA#4592733
18 May 2022

**THE FIRE AND TOTAL LOSS OF THE COMMERCIAL FISHING VESSEL SKYE
MARIE ON THE ANCLOTE RIVER NEAR TARPON SPRINGS, FL ON MAY 14, 2013**

ACTION BY THE COMMANDANT

The record and the report of the investigation convened for the subject casualty have been reviewed. The record and the report, including the findings of fact, analysis, and conclusions are approved. The investigation's safety recommendations remain under review. The Commandant's response to the recommendations and any resulting actions will be documented separately. This marine casualty investigation is closed.

[REDACTED]

J. D. NEUBAUER

Captain, U.S. Coast Guard
Chief, Office of Investigations & Casualty Analysis (CG-INV)



16732
25 Aug 2013

MEMORANDUM

From: [REDACTED] CWO
Investigating Officer

To: G. D. CASE, CAPT
CG SECTOR Saint Petersburg [REDACTED]

Thru: S. R. CALHOUN, CDR [REDACTED]
CG SECTOR Saint Petersburg (sp)

Subj: FIRE ONBOARD AND SUBSEQUENT TOTAL CONTRUCTIVE LOSS OF
COMMERCIAL FISHING VESSEL SKYE MARIE (O.N. 668440) WHILE MOORED
AT F & Y FUELING PIER IN TARPON SPRINGS, FLORIDA ON MAY 14, 2013

Ref: (a) Title 46 United States Code, Chapter 63
(b) Title 46 Code of Federal Regulations, Part 4
(c) USCG Marine Safety Manual Volume V, COMDTINST M16000.10A

1. **Executive Summary:** On May 14, 2013, at approximately 2107 local time, U.S. Coast Guard Sector St. Petersburg received notification that the CFV SKYE MARIE was on fire in Tarpon Springs, FL. The SKYE MARIE's engine room and forward structure were burned until the vessel was overwhelmed by firefighting water, rolled onto its starboard side and sank in approximately eleven feet of water. Previous to the fire, Mr. [REDACTED] the vessel owner, and Mr. [REDACTED] a hired hand, had been doing various fiberglass work on the vessel during the day which included mechanically cutting and applying new fiberglass work around the aft deck of the vessel. After completing fiberglass work, Mr. [REDACTED] prepared the vessel to get underway for fishing the next day. Preparing the vessel included energizing the vessels generator to cool down the fish hold and disconnect any shore ties. Mr. [REDACTED] and Mr. [REDACTED] left the vessel moored at F & Y Fueling Dock at approximately 1730. Witnesses state that sometime later the vessel began smoking and then flames emerged from the mid section of the vessel. Tarpon Springs Fire and Rescue responded to fight the fire. As the fire burned, a fuel tank ruptured, discharging approximately 5000 gallons of diesel fuel into the waterway. The vessel settled on the bottom of the Anclote River in Tarpon Springs, FL. The MISLE activity number is 4592733.

2. **Vessel Data:**

SKYE MARIE	
Official Number	668440
Hailing Port	Tarpon Springs, Florida
Registered Service	Commercial Fishing Vessel

Subj: FIRE ONBOARD AND SUBSEQUENT TOTAL CONTRUCTIVE LOSS 16732
OF COMMERCIAL FISHING VESSEL SKYE MARIE (O.N. 668440) WHILE 25AUG2013
MOORED AT F & Y FUELING PIER IN TARPON SPRINGS, FLORIDA ON
MAY 14, 2013

Actual Service (Time of Casualty)	Commercial Fishing
Year Built	1984
Gross Tonnage	121
Length	71.9 feet
Hull Material	Wood
Owner	██████████
Crew Compliment	Two; No licensed mariner required

3. **Personnel Data:**

Name	Age	Position	Status
██████████	62	Master/Owner	Not at risk
██████████	59	Laborer/Hand	Not at risk

4. **Findings of Fact:**

- a. SKYE MARIE was built by B-Var Boat Yard in 1994; the vessel was U. S. documented as a commercial fishing vessel. Mr. ██████████ was owner operator of the vessel and performed all maintenance on the vessel.
- b. Mr. ██████████ had performed some various fiberglass works on the vessel toward the aft deck, which included mechanically cutting old fiberglass and install new fiberglass.
- c. Mr. ██████████ stated to Coast Guard Investigators he personally did nearly all work on board the vessel to include electrical wiring and electrical installations, i.e. distribution panels and circuit boxes/breakers.
- d. Mr. ██████████ stated to Coast Guard Investigators that he always used correct electrical circuits and relays.
- e. Mr. ██████████ left the SKYE MARIE's service generator energized and secured shore power. He left the generator running so that he could "cool down" the vessel's fish hold for the next day's fishing/bait. Mr. ██████████ left the SKYE MARIE at approximately 1730 local for home.

- f. Witnesses located across the river, approximately 100 feet away, reported hearing the vessel generator sounding like it was "running away" or running at high rpms. They also report seeing smoke, then later flames coming from the aft superstructure of the SKYE MARIE.
- g. The fire quickly spread from amidships into the forward cabin and eventually engulfed the entire boat except for the aft deck. The fire burned uncontrollably for approximately two and a half hours, burning the forward three quarters of the boat to the waterline.
- h. No one was on the vessel when the fire started.
- i. The vessel had no shore tie at the time of the fire.
- j. Tarpon Springs Fire/Rescue was unable to determine a source of the fire.
- k. The vessel sank in approximately 11 feet deep canal in the Anclote River near F & Y Fueling in Tarpon Springs, Florida.



5. **Causal/Human Error Analysis:**

- a. All electrical wiring and installations on the vessel were performed by the Mr. [REDACTED]. When completing the wiring he stated he never used any type of electrical code or manual as guidance for installing wiring or panels.
- b. Mr. [REDACTED] left the vessel with the generator running and electrical system charged. A common practice within the fishing vessel community.

Subj: FIRE ONBOARD AND SUBSEQUENT TOTAL CONTRUCTIVE LOSS 16732
OF COMMERCIAL FISHING VESSEL SKYE MARIE (O.N. 668440) WHILE 25AUG2013
MOORED AT F & Y FUELING PIER IN TARPON SPRINGS, FLORIDA ON
MAY 14, 2013

6. **Conclusions:** It is unknown what started/caused the fire on board the SKYE MARIE. Based on statements given by the owner and witnesses, it is believed that the electrical systems/generator is the most likely origin of the fire. The fire is believed to have started in the engine room, most likely initially as an electrical fire. The fire spread through the forward cabin area burning most of the structure to the waterline. Firefighting efforts overwhelmed the stability of the vessel and caused the vessel to roll to its starboard side and sink in the Anclote River. Earlier detection of the fire may have allowed the fire to be successfully extinguished.

7. **Safety Recommendations:**

- a. It is recommended the Commandant of the Coast Guard establish regulations under Title 46 Code of Federal Regulations (CFR) Part 28 requiring all commercial fishing industry vessels to have a fire-detection system installed to detect engine-room fires.
- b. It is recommended the Commandant of the Coast Guard establish regulations under Title 46 CFR Part 28 requiring all commercial fishing industry vessels to have a fixed fire-extinguishing system installed to protect the engine room of the vessel.

8. **Administrative Recommendations:**

- a. No enforcement action recommended as a result of this investigation.
- b. It is recommended that this casualty investigation be closed.

#



United States Coast Guard

MISLE Incident Investigation Report For PERUGA - FIRE / SINKING

On 08Jan2020 03:45:00 Z



MISLE Activity Number: 6886431
MISLE Case Number: 1205061

I. PRELIMINARY INVESTIGATION – GENERAL INFORMATION

On 07 January 2020 at approximately 2145 hours, the PERUGA, an U.S. flagged fishing vessel, was underway dragging nets between Half-Moon Island Bay and Mississippi Sound with two crewmembers on board. At 2145 hours the crewmember was operating the vessel while the master was sleeping on a rack behind the operator in the cabin. The crewmember smelled smoke and when looking around, the whole cabin was filled with smoke. The master woke up and handed the crewmember a fire extinguisher. The crewmember saw the smoke coming from the engine room hatch and attempted to go down into the engine compartment but the smoke was so heavy that visibility was nearly zero. The crewmember discharged his fire extinguisher into the engine space but did not reduce the fire that engulfed the engine room. The crewmember came back up to the main deck and the fire had spread to the back wall of the main cabin. He attempted to use a second fire extinguisher on the cabin but the fire had already spread too much for the extinguisher to put the fire out.

The crewmember called 911 for assistance, who then notified Coast Guard Station Gulfport of the vessel in distress. While waiting to be rescued, the master and crewmember picked up their outriggers and nets from the water and attempted to steer the boat to the nearest land, Half-Moon Island, to ground the vessel in case they had to abandon ship. After a few minutes the steering seized but the crewmember was able to throttle the engines forward to get them closer to Half-Moon Island. The crewmembers then waited on the stern of the vessel while awaiting rescue.

At approximately 2250, a Coast Guard vessel from Station Gulfport arrived on scene and rescued the two crewmembers from the burning vessel. The Coast Guard and crew left the area with the vessel still burning and afloat. The master (also the owner) returned to the scene on 09 January 2020 and confirmed that the vessel had burned to the waterline and had sunk in the vicinity of Half-Moon Island.

As a result of its preliminary investigation, the Coast Guard has determined that the incident is a reportable marine casualty as defined in 46 CFR part 4 as the vessel suffered a fire and was deemed a total constructive loss. The value of the vessel is estimated to be \$180,000.

I.I EXCEPTIONS

Marine Casualty Investigation: No

Criteria Met:

Pollution Investigation: NA

Criteria Met:

Personnel Investigation: NA

Criteria Met:

I.II DETAILS

Incident Involves: Marine Casualty, Reportable

Level Of Investigation: Informal

IMO Classification: Routine

US Classification: Routine

Serious Marine Incident: No

Was a Marine Board convened by Commandant? No

I.III LOCATIONS

<u>Description</u>	<u>Latitude</u>	<u>Longitude</u>
MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND	30°15.9 N	089°19.9 W
MS Sound	30°09.1 N	089°25.6 W

I.IV INVOLVED PERSONNEL

Name:

Team Lead: Yes
Point Of Contact: Yes
Role: Investigation Administration/Review
Status: Assigned
Department Id: 007725
Type/Rank: Officer/Military Officer (O3)
Agency Type/Agency: Federal - DHS/U. S. Coast Guard
Source Id/Source: 2110486/Direct Access Personnel
Comments:

Name:

Team Lead: No
Point Of Contact: No
Role: Investigation Administration/Review
Status:
Department Id: 007725
Type/Rank: Civilian/GS-13
Agency Type/Agency: Federal - DHS/U. S. Coast Guard
Source Id/Source: 1015626/Direct Access Personnel
Comments:

I.V INVOLVED TEAM

I.VI INVOLVED SUBJECTS

Involved Vessels

Name:	PERUGA
Flag:	UNITED STATES
Primary VIN:	551950
Call Sign:	WYC2177
Damage Status:	Total Constructive Loss: Unsalvaged
Role:	Involved in a Marine Casualty
Classification, Type, Subtype:	Fishing Vessel, Fish Catching Vessel, General
Gross Tonnage:	
Net Tonnage:	
Dead Wt. Tonnage:	
Length:	52.5
Home/Hailing Port:	NEW ORLEANS
Keel Laid Date:	
Delivery Date:	
Place of Construction:	DELACROIX ISLAND LA,
Builder Name:	
Propulsion Type:	
Ahead HP:	
Master:	
Classification Society:	
Owner:	
Operator:	
Inspection Subchapter:	
Most Recent Vessel Inspection Activity:	

Involved Persons

[REDACTED]

Status: At Risk, Not Injured
Role: Subject of Investigation
Gender:
Age:
SSN: [REDACTED]
Birth Date:
Email Address:
Phone Number:
Address (Home/Primary Residence): [REDACTED]

Comments:

[REDACTED]

Status: At Risk, Not Injured
Role: Subject of Investigation
Gender:
Age:
SSN:
Birth Date:
Email Address:
Phone Number (Primary): [REDACTED]
Address (Primary): [REDACTED]

Comments:

Drug and Alcohol Testing. The following people have been determined by the Coast Guard, Law Enforcement Personnel, and/or the Marine Employer to have been directly involved in a Serious Marine Incident as defined in 46 CFR 4.03-2:

Involved Organizations: None

Involved Facilities: None

Involved Waterways: None

Involved Other Subjects: None

II. INCIDENT INVESTIGATION – GENERAL INFORMATION

On 07 January 2020 at approximately 2145 hours, the PERUGA, an U.S. flagged commercial fishing vessel, was underway dragging nets between Half-Moon Island Bay and Mississippi Sound with two crewmembers on board. At 2145 hours the crewmember was operating the vessel while the master was sleeping on a rack behind the operator in the cabin. The crewmember smelled smoke and turned around and saw the whole cabin was filled with smoke. The master woke up and handed the crewmember a fire extinguisher. The crewmember saw the smoke coming from the engine room hatch and attempted to go down into the engine compartment but the smoke was too heavy making visibility nearly zero. The crewmember discharged the fire extinguisher into the engine space but did not reduce the fire that engulfed the engine room. The crewmember came back up to the main deck and the fire had spread to the back wall of the main cabin. The crewmember used a second fire extinguisher on the cabin but the fire had already spread too much for the extinguisher to put the fire out.

The crewmember called 911 for assistance, who then notified Coast Guard Station Gulfport of the vessel in distress. While waiting to be rescued, the master and crewmember picked up their outriggers and nets from the water and attempted to steer the boat to the nearest land, Half-Moon Island, to ground the vessel in case they had to abandon ship. After a few minutes the steering seized but the crewmember was able to throttle the engines forward to get them closer to Half-Moon Island. The crewmembers then gathered on the stern of the vessel while waiting to be rescued.

At approximately 2250, a vessel from Station Gulfport arrived on scene and rescued the two crewmembers from the burning vessel. The Coast Guard and PERUGA's crew left the area with the vessel still burning and afloat. The master (also the owner) returned to the scene on 09 January 2020 and confirmed that the vessel had burned to the waterline and had sunk in the vicinity of Half-Moon Island. The crew did not identify what started the fire but believe that it had to do something with exhaust manifold on the engine and a possible broken fuel line or lube oil line.

The Coast Guard determined the incident is a reportable marine casualty as defined in 46 CFR part 4 as the vessel suffered a fire, a sinking, and was deemed a total constructive loss. The value of the vessel is estimated to be \$180,000.

The initiating event was identified as the likely material failure/malfunction of an engine component, and the subsequent events were identified as the 1) fire, 2) loss of steering, 3) loss of power, 4) loss of propulsion, 5) flooding, and 6) sinking.

The causal factors identified were 1) no fire detection system, 2) no fire extinguishing system, 3) combustible materials used to construct the vessel, and 4) limited safety regulations for commercial fishing vessels that operate within the boundary line.

Personnel Casualty Summary

Total Missing = 0

Total Dead = 0

Total Injured = 0

Total At Risk, Not Injured = 2

Total People At Risk = 2

Vessel(s) Status Summary

Actual Total Loss = 0

Total Constructive Loss Salvaged = 0

Total Constructive Loss Unsalvaged = 1

Damaged = 0

Undamaged = 0

Property Damage Summary

Vessel(s) = \$ 180000

Cargo = \$ 0

Facility(s) = \$ 0

Other = \$ 0

* Includes estimates

II.I LOCATIONS

<u>Description</u>	<u>Latitude</u>	<u>Longitude</u>
MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND	30°15.9 N	089°19.9 W
MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND, LOCATION PERUGA SUNK	30°08.9 N	089°25.7 W
MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND, LOCATION CG45 PICKED UP CREWMEMBERS	30°09.4 N	089°25.1 W

II.II INVOLVED PERSONNEL

Name: [REDACTED]

Team Lead: No
Point Of Contact: No
Role: Investigation Administration/Review
Status:
Department Id: 007725
Type/Rank: Officer - Military Officer (O5)
Agency Type/Agency: Federal - DHS/Federal - DHS
Source Id/Source: 1093152/Direct Access Personnel
Comments:

Name: [REDACTED]

Team Lead: Yes
Point Of Contact: Yes
Role: Investigating Officer - Field Investigation
Status: Assigned
Department Id: 007725
Type/Rank: Officer - Military Officer (O3)
Agency Type/Agency: Federal - DHS/Federal - DHS
Source Id/Source: 2110486/Direct Access Personnel
Comments:

II.III INVOLVED TEAM

II.IV INVOLVED SUBJECTS

Involved Vessels

Name:	PERUGA
Flag:	UNITED STATES
Primary VIN:	551950
Call Sign:	WYC2177
Damage Status:	Total Constructive Loss: Unsalvaged
Role:	Involved in a Marine Casualty
Classification, Type, Subtype:	Fishing Vessel, Fish Catching Vessel, General
Gross Tonnage:	
Net Tonnage:	
Dead Wt. Tonnage:	
Length:	52.5
Home/Hailing Port:	NEW ORLEANS

Keel Laid Date:
Delivery Date:
Place of Construction: DELACROIX ISLAND LA,
Builder Name:
Propulsion Type:
Ahead HP:
Master:
Classification Society:
Owner: [REDACTED]
Operator:
Inspection Subchapter:
Most Recent Vessel Inspection Activity:

Involved Persons

[REDACTED]
Status: At Risk, Not Injured
Role: Subject of Investigation
Gender:
Age:
SSN: [REDACTED]
Birth Date:
Email Address:
Phone Number:
Address (Home/Primary Residence): [REDACTED]

Comments:

[REDACTED]
Status: At Risk, Not Injured
Role: Subject of Investigation
Gender:
Age:
SSN:
Birth Date:
Email Address:
Phone Number (Primary): [REDACTED]
Address (Primary): [REDACTED]

Comments:

Drug and Alcohol Testing. The following people have been determined by the Coast Guard, Law Enforcement Personnel, and/or the Marine Employer to have been directly involved in a Serious Marine Incident as defined in 46 CFR 4.03-2:

Involved Organizations: None

Involved Facilities: None

Involved Waterways

Mississippi Sound
Role: Location
Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND

Involved Other Subjects: None

Case Number: 1205061

II.V EVIDENCE

Control Number: 6886431 - AJJ - 001

Description: CG-2692

Evidence Type: Standard

Collection Information

Date/Time: 10Jan2020 15:00:36 Z

Location:

Collected By: [REDACTED]

Attachments

IMG_0008; CG-2692-Rpt of Marine, Comm Dive, or OCS Casualty;
21Feb2020 15:35:46 Z; No

IMG_0009; CG-2692-Rpt of Marine, Comm Dive, or OCS Casualty;
21Feb2020 15:36:08 Z; No

Control Number: 6886431 - AJJ - 002

Description: Witness Statement - Owner - Engine Room Diagram

Evidence Type: Standard

Collection Information

Date/Time: 10Jan2020 15:01:01 Z

Location:

Collected By: [REDACTED]

Attachments

IMG_0012; Witness Statement/Interview Record;
21Feb2020 15:36:46 Z; No

IMG_0011; Witness Statement/Interview Record;
21Feb2020 15:37:03 Z; No

Control Number: 6886431 - AJJ - 003

Description: Interview Summary - Crew Member

Evidence Type: Standard

Collection Information

Date/Time: 10Jan2020 15:01:19 Z

Location:

Collected By: [REDACTED]

Attachments

Crewmember Interview Summary; Witness Statement/Interview Record;
21Feb2020 15:37:50 Z; No

Control Number: 6886431 - AJJ - 004
Description: Photographs of Incident
Evidence Type: Standard

Collection Information

Date/Time: 10Jan2020 15:01:41 Z
Location:
Collected By: [REDACTED]

Attachments

IMG_0251; Photograph;
21Feb2020 15:38:27 Z; No

IMG_0254; Photograph;
21Feb2020 15:38:33 Z; No

IMG_0255; Photograph;
21Feb2020 15:38:40 Z; No

IMG_0257; Photograph;
21Feb2020 15:38:47 Z; No

IMG_0258; Photograph;
21Feb2020 15:38:53 Z; No

IMG_0269; Photograph;
21Feb2020 15:39:01 Z; No

IMG_0272; Photograph;
21Feb2020 15:39:23 Z; No

IMG_0273; Photograph;
21Feb2020 15:40:36 Z; No

IMG_0274; Photograph;
21Feb2020 15:40:44 Z; No

IMG_0275; Photograph;
21Feb2020 15:40:50 Z; No

IMG_0276; Photograph;
21Feb2020 15:40:57 Z; No

IMG_2845; Photograph;
21Feb2020 15:41:16 Z; No

IMG_2846; Photograph;
21Feb2020 15:41:25 Z; No

IMG_2849; Photograph;
21Feb2020 15:41:40 Z; No

IMG_2852; Photograph;
21Feb2020 15:41:48 Z; No

IMG_2853; Photograph;
21Feb2020 15:41:56 Z; No

IMG_2876; Photograph;
21Feb2020 15:42:05 Z; No

Control Number: 6886431 - MISLE - 0
Description: MISLE Notification #935416 for a report of an incident received by
Evidence Type: Misle Notification

Collection Information

Date/Time: 09Jan2020 20:13:23 Z
Location: Sector Mobile
Collected By: [REDACTED]

Attachments

Control Number: 6886431 - MISLE - 1

Description: MISLE Notification #935504 for a report of an incident received by NRC Notification
Evidence Type: Misle Notification

Collection Information

Date/Time: 09Jan2020 20:13:23 Z
Location: Sector Mobile
Collected By: [REDACTED]

Attachments

Control Number: 6886431 - NRC - 0

Description: NRC Report #1268221
Evidence Type: NRC Notification

Collection Information

Date/Time: 09Jan2020 20:13:23 Z
Location:
Collected By: [REDACTED]

Attachments

Control Number: 6886431 - NRC - 1

Description: NRC Report #1268221
Evidence Type: NRC Notification

Collection Information

Date/Time: 09Jan2020 20:13:23 Z
Location: Sector Mobile
Collected By: [REDACTED]

Attachments

II.VI TIMELINE

06Jan2020 14:00:00 Z to 06Jan2020 14:00:00 Z (Estimated): PERUGA was a wooden hull vessel with a fiberglass exterior.

Timeline Type: Condition
Timeline Subtype: Vessel - Material/Equipment Condition
Location: Unknown

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

System: Construction/Loadline
 Subsystem: Hull
 Component: Side Shell
 Cite:
Involves CG Approved Equipment: No
 Security Violation: No
 Deficiency: No

06Jan2020 14:00:00 Z to 06Jan2020 14:00:00 Z (Known): PERUGA did not have an installed Fire Detection System (smoke detectors, heat detectors, flame detectors, fixed fire extinguishing system, or pre-engineered fire extinguishing system).

Timeline Type: Condition
 Timeline Subtype: Vessel - Material/Equipment Condition
 Location: Unknown

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

System: Fire Fighting
 Subsystem: Fixed Fire Detection System
 Component: Smoke Detectors
 Cite:
Involves CG Approved Equipment: No
 Security Violation: No
 Deficiency: No

07Jan2020 14:00:00 Z to 07Jan2020 14:00:00 Z (Estimated): The PERUGA did not have any smoke detectors installed on board.

Timeline Type: Condition
 Timeline Subtype: Vessel - Material/Equipment Condition
 Location: Unknown

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

System: Fire Fighting
 Subsystem: Fixed Fire Detection System
 Component: Smoke Detectors
 Cite:
Involves CG Approved Equipment: No
 Security Violation: No
 Deficiency: No

07Jan2020 14:00:00 Z to 07Jan2020 14:00:00 Z (Estimated): The PERUGA did not have a heat detector installed on board.

Timeline Type: Condition
Timeline Subtype: Vessel - Material/Equipment Condition
Location: Unknown

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

System: Fire Fighting

Subsystem: Fixed Fire Detection System

Component: Flame Detectors

Cite:

Involves CG Approved Equipment: No

Security Violation: No

Deficiency: No

07Jan2020 14:00:00 Z to 07Jan2020 14:00:00 Z (Estimated): The PERUGA did not have any flame detectors on board.

Timeline Type: Condition
Timeline Subtype: Vessel - Material/Equipment Condition
Location: Unknown

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

System: Fire Fighting

Subsystem: Fixed Fire Detection System

Component: Flame Detectors

Cite:

Involves CG Approved Equipment: No

Security Violation: No

Deficiency: No

07Jan2020 15:00:00 Z to 07Jan2020 15:00:00 Z (Estimated): Commercial Fishing Vessel PERUGA got underway from Shell Beach, LA to conduct commercial fishing in and around the Mississippi Sound with a master and crewmember on board.

Timeline Type: Condition
Timeline Subtype: Vessel - Material/Equipment Condition
Location: Unknown

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

System: Operations/Management
 Subsystem: Vessel Activity
 Component: Underway
 Cite:
Involves CG Approved Equipment: No
 Security Violation: No
 Deficiency: No

08Jan2020 03:40:00 Z to 08Jan2020 03:40:00 Z (Estimated): The PERUGA was underway approximately 1 mile north of Half-Moon Island Bay.

Timeline Type: Condition
 Timeline Subtype: Vessel - Material/Equipment Condition
 Location: Known

Primary Location: Yes
 Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND
 Latitude: 30°15.9 N Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

System: Operations/Management
 Subsystem: Vessel Activity
 Component: Underway
 Cite:
Involves CG Approved Equipment: No
 Security Violation: No
 Deficiency: No

08Jan2020 03:41:00 Z to 08Jan2020 03:41:00 Z (Estimated): There may have been a material failure of an engine component (lube oil line, fuel oil line, piston, etc) that acted as a fuel source.

Timeline Type: Condition
 Timeline Subtype: Vessel - Material/Equipment Condition
 Location: Known

Primary Location: Yes
 Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND
 Latitude: 30°15.9 N Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

System: Engineering
 Subsystem: Diesel Engine (propulsion-direct drive)
 Component: Piping (exhaust)
 Cite:
Involves CG Approved Equipment: No
 Security Violation: No
 Deficiency: No

08Jan2020 03:41:15 Z to 08Jan2020 03:41:15 Z (Estimated): A part may have failed on the main engine.

Timeline Type: Event
 Timeline Subtype: Material Failure/Malfunction
 Location: Known

 Primary Location: Yes
 Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND
 Latitude: 30°15.9 N Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

System: Engineering
 Subsystem: Diesel Engine (propulsion-direct drive)
 Component: Exhaust Manifold
 Cite:
Involves CG Approved Equipment: No
 Security Violation: No
 Deficiency: No
 Failure/Malfunction Type: Catastrophic Failure/Malfunction

08Jan2020 03:42:00 Z to 08Jan2020 03:42:00 Z (Estimated): A fire started in the engine room.

Timeline Type: Event
 Timeline Subtype: Fire - Initial
 Location: Known

 Primary Location: Yes
 Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND
 Latitude: 30°15.9 N Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

Vessel Configured with Main Vertical Zones: No

Non MVZ Affected

Details

Initial/Other: Initial

Space In Which Fire Occurred: Machinery Space

Description Of Spaces Affected: Engine room on a 61 x 21 foot fishing vessel.

Extent Of Damage: Total constructive loss. Entire vessel burned.

Possible Sources Of Ignition

Ignition Source Known: No

Source Category

10.9- Hot exhaust pipe or steam line

Description

The fire spread to the second deck right above where the main engine exhaust manifold started. This leads the Coast Guard to believe that the fire started on the exhaust manifold due to the hot exhaust catching combustibles in the engine room on fire.

Fuel Types

Details

Initial/Secondary: Initial

Fuel Type: 8.6- Liquid Fuel

Source Of Liquid Fuel: 9.7- Oil soaked insulation material

Description: The investigation was unable to determine the fuel source that caused the fire.

Hazardous Material: Yes

Description Of Smoke Produced By The Fire: Black Smoke.

Pattern Of Spread: Vertical on the forward half of the vessel.

08Jan2020 03:44:45 Z to 08Jan2020 03:44:44 Z (Estimated): The crewmember was operating the vessel while the master was sleeping in the cabin right behind him.

Timeline Type: Action

Timeline Subtype: Bridge Operations - Shiphandling

Location: Known

Primary Location: Yes

Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND

Latitude: 30°15.9 N

Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
[REDACTED]	Person	At Risk, Not Injured	Subject of Investigation

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
[REDACTED]	Person	At Risk, Not Injured	Subject of Investigation

08Jan2020 03:45:00 Z to 08Jan2020 03:45:00 Z (Estimated): The crewmember smelt and saw smoke coming from the cabin and the bow engine room hatch. The crewmember attempted to put the fire out with a fire extinguisher but was unsuccessful.

Timeline Type: Action
 Timeline Subtype: Safety and Emergency Operations - Controlling and Fighting Fires
 Location: Known

Primary Location: Yes
 Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND
 Latitude: 30°15.9 N Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
[REDACTED]	Person	At Risk, Not Injured	Subject of Investigation

08Jan2020 03:48:00 Z to 08Jan2020 03:48:00 Z (Estimated): The crewmember attempted to steer the vessel towards the closest land, Half-Moon Island, but the steering wheel would not engage.

Timeline Type: Action
 Timeline Subtype: Bridge Operations - Shiphandling
 Location: Known

Primary Location: Yes
 Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND
 Latitude: 30°15.9 N Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
[REDACTED]	Person	At Risk, Not Injured	Subject of Investigation

08Jan2020 03:48:45 Z to 08Jan2020 03:48:45 Z (Estimated): Steering system was negatively impacted as the fire spread throughout the engine room.

Timeline Type: Condition
 Timeline Subtype: Vessel - Material/Equipment Condition
 Location: Known

Primary Location: Yes
 Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND
 Latitude: 30°15.9 N Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

System: Engineering
 Subsystem: Steering Gear System
 Component: Cable
 Cite:
Involves CG Approved Equipment: No
 Security Violation: No
 Deficiency: No

08Jan2020 03:49:00 Z to 08Jan2020 03:49:00 Z (Estimated): Steering was lost.

Timeline Type: Event
 Timeline Subtype: Loss/Reduction of Vessel Propulsion/Steering
 Location: Known
 Primary Location: Yes
 Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND
 Latitude: 30°15.9 N Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

08Jan2020 03:50:00 Z to 08Jan2020 03:50:00 Z (Estimated): Master and crewmember picked up the riggers out of the water so that the wind and fire would stay at their back.

Timeline Type: Action
 Timeline Subtype: Deck Operations - Fishing Operations
 Location: Known
 Primary Location: Yes
 Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND
 Latitude: 30°15.9 N Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
[REDACTED]	Person	At Risk, Not Injured	Subject of Investigation

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
[REDACTED]	Person	At Risk, Not Injured	Subject of Investigation

08Jan2020 03:51:30 Z to 08Jan2020 03:51:30 Z (Estimated): Generator was negatively impacted as the fire spread throughout the engine room.

Timeline Type: Condition
 Timeline Subtype: Vessel - Material/Equipment Condition
 Location: Known
 Primary Location: Yes
 Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND

Latitude: 30°15.9 N

Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty
System: Engineering			
Subsystem: Generator (propulsion/auxiliary-electric)			
Component: Wiring			
Cite:			
<u>Involves CG Approved Equipment</u> : No			
Security Violation: No			
Deficiency: No			

08Jan2020 03:52:00 Z to 08Jan2020 03:52:00 Z (Estimated): Power was lost.

Timeline Type: Event
Timeline Subtype: Loss of Electrical Power
Location: Known

Primary Location: Yes
Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND
Latitude: 30°15.9 N Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

08Jan2020 03:52:00 Z to 08Jan2020 03:52:00 Z (Estimated): The crewmember called 911 to request assistance. 911 dispatchers contacted the Coast Guard and informed them of the incident and location of the vessel.

Timeline Type: Action
Timeline Subtype: Communications
Location: Known

Primary Location: Yes
Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND
Latitude: 30°15.9 N Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
██████████	Person	At Risk, Not Injured	Subject of Investigation

08Jan2020 03:52:15 Z to 08Jan2020 03:52:15 Z (Estimated): The main engine was negatively impacted as the fire spread throughout the engine room.

Timeline Type: Condition
Timeline Subtype: Vessel - Material/Equipment Condition
Location: Known

Primary Location: Yes
Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND

Latitude: 30°15.9 N

Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

System: Engineering

Subsystem: Diesel Engine (propulsion-direct drive)

Component: Piston

Cite:

Involves CG Approved Equipment: No

Security Violation: No

Deficiency: No

08Jan2020 03:52:30 Z to 08Jan2020 03:52:30 Z (Estimated): Propulsion was lost.

Timeline Type: Event
Timeline Subtype: Loss/Reduction of Vessel Propulsion/Steering
Location: Known

Primary Location: Yes

Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND

Latitude: 30°15.9 N

Longitude: 089°19.9 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

08Jan2020 04:50:00 Z to 08Jan2020 04:50:00 Z (Known): A Coast Guard 45-foot response boat arrived on scene and rescued the 02 crewmembers off of the back deck of the PERUGA.

Timeline Type: Action
Timeline Subtype: Safety and Emergency Operations - Abandon Vessel Operations
Location: Known

Primary Location: No

Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND, LOCATION PERUGA SUNK

Latitude: 30°08.9 N

Longitude: 089°25.7 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
[REDACTED]	Person	At Risk, Not Injured	Subject of Investigation

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
[REDACTED]	Person	At Risk, Not Injured	Subject of Investigation

08Jan2020 05:50:00 Z to 08Jan2020 05:50:00 Z (Estimated): Engine room started to flood due to fire damage to the hull.

Timeline Type: Event
Timeline Subtype: Flooding - Initial
Location: Known

Primary Location: No
Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON
ISLAND, LOCATION PERUGA SUNK
Latitude: 30°08.9 N Longitude: 089°25.7 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

Subdivision Standard: One Compartment

Watertight Subdivision Intact: Intact

Watertight Subdivision Compromised:

Description Of Compromise:

Initial Source Of Flooding Details

Initial Source Of Flooding: Damage to Hull

Area Submerged: entire vessel

Route Of Water Into Vessel: hull penetration due to fire damage.

08Jan2020 05:50:30 Z to 08Jan2020 05:50:30 Z (Estimated): Engine room was flooded.

Timeline Type: Condition
Timeline Subtype: Vessel - Material/Equipment Condition
Location: Known

Primary Location: No
Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON
ISLAND, LOCATION PERUGA SUNK
Latitude: 30°08.9 N Longitude: 089°25.7 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

System: Operations/Management

Subsystem: Vessel Activity

Component: Underway

Cite:

Involves CG Approved Equipment: No

Security Violation: No

Deficiency: No

08Jan2020 05:52:00 Z to 08Jan2020 05:52:00 Z (Estimated): PERUGA Sunk.

Timeline Type: Event
Timeline Subtype: Sinking
Location: Known

Primary Location: No
Description: MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON
ISLAND, LOCATION PERUGA SUNK
Latitude: 30°08.9 N Longitude: 089°25.7 W

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
PERUGA	Vessel	Total Constructive Loss: Unsalvaged	Involved in a Marine Casualty

09Jan2020 14:00:00 Z to 09Jan2020 14:00:00 Z (Estimated): Master submitted CG-2692

Timeline Type: Action
Timeline Subtype: Incident/Casualty Reporting/Notification - CG-2692
Location: Unknown

Subject(s) and Details

<u>Name</u>	<u>Type</u>	<u>Status</u>	<u>Role</u>
[REDACTED]	Person	At Risk, Not Injured	Subject of Investigation

II.VII CORRESPONDENCE

OCMI Endorsement
Source: USCG
Date: 2/24/2020 5:00:04 PM
Attachments:

IIA 6886431 OCMI Endorsement; Other;
[REDACTED]; 05Jun2020 15:10:50 Z; No

COMDT Final Action Memo
Source: USCG
Date: 6/29/2022 5:22:46 PM
Attachments:

6886431_PERUGA_AFAM_SIGNED17Jun2022; Other;
[REDACTED]; 29Jun2022 17:24:26 Z; No

II.VIII CONCLUSIONS – PART 1. CAUSE

Initiating Event:

Material Failure/Malfunction (08Jan2020 03:41:15 Z)

Organization

Laws/Regulations - Limited USCG fire safety regulations for fishing vessels that operate within the boundary line.

In accordance with 46 CFR Part 28 subpart B, the only fire safety equipment the PERUGA was required to have on board were two B-II fire extinguishers which were on board and used during the fire. Subpart D of 46 CFR Part 28 "Commercial Fishing Vessels that operate outside the boundary line" requires those commercial fishing vessels to have the following fire safety equipment: fixed gas fire extinguishing system, fire detection systems, and structural fire protection. It is reasonable to believe that if the Coast Guard had safety regulations that addressed one or more of these issues for vessel inside the boundary line, then it may have prevented the fire from spreading and/or may have notified the crew during the initial fire phase when it is easier to extinguish.

Condition/Vessel - Material/Equipment Condition (06Jan2020 14:00:00 Z); Location Unknown; PERUGA did not have an installed Fire Detection System (smoke detectors, heat detectors, flame detectors, fixed fire extinguishing system, or pre-engineered fire extinguishing system).; PERUGA

Laws/Regulations - No regulations for engineering system.

The regulations in 46 CFR Subchapter C applicable to the PERUGA do not address engineering components such as the fuel system or ignition sources in the engine room. Had such regulations been in place then it is possible the fuel source would have been more robust or inspected/maintained more frequently and prevented the equipment failure.

Condition/Vessel - Material/Equipment Condition (07Jan2020 14:00:00 Z); Location Unknown; The PERUGA did not have any smoke detectors installed on board.; PERUGA

Condition/Vessel - Material/Equipment Condition (08Jan2020 03:41:00 Z); MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND; There may have been a material failure of an engine component (lube oil line, fuel oil line, piston, etc) that acted as a fuel source.; PERUGA

Failures of Defense Against Subsequent Events in the Incident

Subsequent Event # 1:

Loss/Reduction of Vessel Propulsion/Steering (08Jan2020 03:49:00 Z)

Defense Factors

Does Not Exist - There was no way to reasonably stop the PERUGA from losing steering.

Once the fire spread throughout the engine room the steering seized as the crewmember was trying to navigate the PERUGA toward a nearby island. It is believed that the steering gear and its components were melted together as the fire spread throughout the engine compartment, making it impossible to operate. There is no reasonable defense that exists that may have prevented the loss of steering.

Condition/Vessel - Material/Equipment Condition(07Jan2020 15:00:00Z); Location Unknown; Commercial Fishing Vessel PERUGA got underway from Shell Beach, LA to conduct commercial fishing in and around the Mississippi Sound with a master and crewmember on board.; PERUGA

Subsequent Event # 2:

Loss of Electrical Power (08Jan2020 03:52:00 Z)

Defense Factors

Does Not Exist - There is no reasonable defense to prevent the loss of power.

No reasonable defense exists to prevent the vessel from losing power after the engine room was engulfed in flames.

Condition/Vessel - Material/Equipment Condition(08Jan2020 03:51:30Z); MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND; Generator was negatively impacted as the fire spread throughout the engine room.; PERUGA

Subsequent Event # 3:

Loss/Reduction of Vessel Propulsion/Steering (08Jan2020 03:52:30 Z)

Defense Factors

Does Not Exist - There was no reasonable defense that would have prevented the loss of propulsion.

After the engine room was engulfed in flames there was no reasonable defense that could have been in place to prevent the vessel from losing propulsion.

Condition/Vessel - Material/Equipment Condition(08Jan2020 03:52:15Z); MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND; The main engine was negatively impacted as the fire spread throughout the engine room.; PERUGA

Subsequent Event # 4:

Flooding - Initial (08Jan2020 05:50:00 Z)

Defense Factors

Inadequate - PERUGA was constructed of a combustible material.

The PERUGA was constructed of a wood, which is a combustible material. The evidence suggests that the PERUGA burned to the waterline until water was able to flood the engine room compartment. It is reasonable to believe had the PERUGA been constructed of non-combustible materials, such as steel, then the PERUGA may not have burned to the waterline and may not have flooded.

Condition/Vessel - Material/Equipment Condition(06Jan2020 14:00:00Z);
Location Unknown; PERUGA was a wooden hull vessel with a fiberglass exterior.; PERUGA

Condition/Vessel - Material/Equipment Condition(08Jan2020 05:50:30Z);
MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND,
LOCATION PERUGA SUNK; Engine room was flooded.; PERUGA

Subsequent Event # 5:

Sinking (08Jan2020 05:52:00 Z)

Defense Factors

Does Not Exist - No reasonable defense exists that would have prevented the PERUGA from sinking.

After the engine room compartment flooded there were no reasonable defense's that could have been put in place to prevent the vessel from sinking.

Condition/Vessel - Material/Equipment Condition(08Jan2020 05:50:30Z);
MISSISSIPPI SOUND (LAKE BORGNE) EAST OF HALF MOON ISLAND,
LOCATION PERUGA SUNK; Engine room was flooded.; PERUGA

Subsequent Event # 6:

Fire - Initial (08Jan2020 03:42:00 Z)

Defense Factors

Missing - No fixed fire extinguishing systems were installed.

The PERUGA was only equipped with two B-II portable fire extinguishers. Fixed fire extinguishers and pre-engineered fire extinguishers are normally used in vessel spaces with an internal combustion engine and will discharge a fixed gas (normally CO2) upon detection of excessive heat or if manually discharged. It is reasonable to believe had the PERUGA had such a system installed on board the vessel, that the fire may have been detected and extinguished before it was able to spread to the rest of the vessel.

Condition/Vessel - Material/Equipment Condition(06Jan2020 14:00:00Z);
Location Unknown; PERUGA did not have an installed Fire Detection System (smoke detectors, heat detectors, flame detectors, fixed fire extinguishing system, or pre-engineered fire extinguishing system).; PERUGA

Missing - No installed fire detection system.

The PERUGA did not have a fire detection system installed onboard. Common fire detection systems use heat sensors and/or smoke detectors to notify crew members of fires, especially in spaces that go unmanned for hours. The PERUGA had an engine room compartment that would only be checked at least once a day by one of the crew members on board but not actively monitored. It is reasonable to believe, had the PERUGA had a fire detection system installed, the crew may have been notified of the fire in the engine room and may have been able to extinguish the fire before it spread throughout the vessel.

Condition/Vessel - Material/Equipment Condition(06Jan2020 14:00:00Z);
Location Unknown; PERUGA did not have an installed Fire Detection System (smoke detectors, heat detectors, flame detectors, fixed fire extinguishing system, or pre-engineered fire extinguishing system).; PERUGA

Condition/Vessel - Material/Equipment Condition(07Jan2020 14:00:00Z);
Location Unknown; The PERUGA did not have any smoke detectors installed on board.; PERUGA

Condition/Vessel - Material/Equipment Condition(07Jan2020 14:00:00Z);
Location Unknown; The PERUGA did not have a heat detector installed on board.; PERUGA

Condition/Vessel - Material/Equipment Condition(07Jan2020 14:00:00Z);
Location Unknown; The PERUGA did not have any flame detectors on board.; PERUGA

Inadequate - Wooden vessel

The PERUGA was a wooden vessel that had a outer layer of fiberglass. It is likely that once the wood reach its ignition temperature that it accelerated the spread of the fire throughout the engine room, fuel tanks, and eventually to the main deck and cabin. It is reasonable to believe, had the vessel been build out of steel or other non-combustible materials, the fire may not have spread to the rest of the vessel.

Condition/Vessel - Material/Equipment Condition(06Jan2020 14:00:00Z);
Location Unknown; PERUGA was a wooden hull vessel with a fiberglass exterior.; PERUGA

II.IX CONCLUSIONS – PART 2. ENFORCEMENT REFERRALS

None

II.X SAFETY RECOMMENDATIONS

Safety Recommendation # 01 : Fixed Fire Extinguishing Sytem Requirement

To further enhance the safety of commercial fisherman, the Commandant should require documented commercial fishing vessels that operate within the boundary line, and have a dedicated space for propulsion machinery, to have a fixed fire extinguishing system installed similar to the requirement in 46 CFR 28.320 for new commercial fishing vessels with more than 16 persons on board.

Date Created: 20Feb2020 Z
Current Owner Unit: COMDT INV
Date Last Modified: 29Jun2021 15:18:28 Z
Priority: Normal
Final Agency Action:
Final Agency Comment:

Safety Recommendation # 02 : Fire Detection System Requirement

To further enhance the safety of commercial fisherman, the Commandant should require documented commercial fishing vessels that operate within the boundary line to have a fire detection system installed, similar to the requirement of 46 CFR 28.325 for commercial fishing vessels for new commercial fishing vessels with more than 16 persons on board.

Date Created: 20Feb2020 Z
Current Owner Unit: COMDT INV
Date Last Modified: 29Jun2021 15:22:58 Z
Priority: Normal
Final Agency Action:
Final Agency Comment:

Safety Alerts: