IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

ATLANTIC SPECIALTY INSURANCE COMPANY,	)	
Plaintiff,	)	
vs.	)	**CIVIL ACTION NO. 13-458-CG-N**
MR. CHARLIE ADVENTURES, LLC and KIM P. KORNEGAY,	)	
Defendant.	)	

ORDER

This matter is before the court on the motions of Defendants/ Counter-Plaintiffs to exclude the testimony of Plaintiff's experts (Docs. 34 & 35), Plaintiff's response in opposition (Doc. 56), and the relevant assertions contained in the parties' filings with regard to the pending motions for summary judgment (Docs. 38, 44, 52, 54, 56, 57, 60). For the reasons explained below, the court finds that Defendants' motions to exclude should be granted.

I. Background

This case involves an insurance claim for damage to Defendants' yacht, the "Mr. Charlie," and its contents by a fire that occurred on March 3, 2013. Plaintiff seeks a declaration that it does not owe coverage for the fire and Defendants have asserted counterclaims for breach of contract and bad faith. (Docs. 1, 6). Specifically, Plaintiff contends that coverage is excluded by the policy at issue because the loss results from "marine life" and/or Defendants' "failure to maintain the covered yacht in good condition and repair." Plaintiff's experts, Guy Plaisance and Gary Jones, have concluded that the fire originated in the engine compartment in the vicinity of the aft end of the starboard engine and resulted from the seawater intake screen for the starboard strainer being restricted by marine growth. (Docs. 34-2, 35-6).

II. Motions to Exclude Experts

Defendants move to exclude the testimony of Plaintiff's experts, Guy Plaisance and Gary Jones, under Rules 403 and 702. Rule 403 excludes relevant evidence "if its probative value is substantially outweighed by a danger of … unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence." FED. R. EVID. 403. Rule 702 provides for the admission of expert testimony when "the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue." FED. R. EVID. 702(a). The United States Supreme Court in Daubert v. Merrell Dow Pharmaceuticals Inc., 509 U.S. 579 (1993) found that scientific expert testimony is admissible only if the proffered testimony is both relevant and reliable. "[A] district court judge is to act as a 'gatekeeper' for expert testimony, only admitting such testimony after receiving satisfactory evidence of its reliability." Dhillon v. Crown Controls Corporation, 269 F.3d 865, 869 (7th Cir. 2001); see also U.S. v. Majors, 196 F.3d 1206, 1215 (11th Cir. 1999). However, "it is not the role of the district court to make ultimate conclusions as to the persuasiveness of the proffered evidence." Quiet Technology DC–8, Inc. v. Hurel–

Dubois UK Ltd., 326 F.3d 1333, 1341 (11th Cir. 2003). "[A] district court's gatekeeper role under *Daubert* is not intended to supplant the adversary system or the role of the jury." Id. (citing Maiz v. Virani, 253 F.3d 641, 666 (11th Cir. 2001)). "Quite the contrary, '[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.' " Id. (quoting Daubert, 509 U.S. at 596, 113 S.Ct. at 2798).

Rule 702 of the Federal Rules of Evidence provides:

> A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:
>
> (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
>
> (b) the testimony is based on sufficient facts or data;
>
> (c) the testimony is the product of reliable principles and methods; and
>
> (d) the expert has reliably applied the principles and methods to the facts of the case.

FED. R. EVID 702. The rule compels district courts to "conduct an exacting analysis of the foundations of the expert opinions to ensure they meet the standards for admissibility under Rule 702." United States v. Abreu, 406 F.3d 1304, 1306 (11th Cir.2005) (quoting United States v. Frazier, 387 F.3d 1244, 1260 (11th Cir.2004) (internal quotation marks omitted)). Accordingly, under Rule 702, "this Court has an obligation to screen expert testimony to ensure it stems from a reliable methodology, sufficient factual basis, and reliable application of the methodology to the facts." Whatley v. Merit Distribution Services, 166 F.Supp.2d 1350, 1353 (S.D. Ala. 2001) (citations omitted). The Eleventh Circuit requires district courts to engage in a "rigorous three-part inquiry" for assessing the admissibility of expert testimony under Rule 702:

> Trial courts must consider whether: "(1) [T]he expert is qualified to testify competently regarding the matters he intends to address; (2) the methodology by which the expert reaches his conclusions is sufficiently reliable as determined by the sort of inquiry mandated in *Daubert*; and (3) the testimony assists the trier of fact, through the application of scientific, technical, or specialized expertise, to understand the evidence or to determine a fact in issue."

United States v. Frazier, 387 F.3d 1244, 1260 (11th Cir.2004) (quoting City of Tuscaloosa v. Harcros Chems., Inc., 158 F.3d 548, 562 (11th Cir.1999)). These requirements are known as the "qualifications," "reliability," and "helpfulness" prongs. See id. "[T]he proponent of the testimony does not have the burden of proving that it is scientifically correct," but must establish "by a preponderance of the evidence, it is reliable." Allison v. McGhan Medical Corp., 184 F.3d 1300, 1312 (11th Cir. 1999) (citing In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 744 (3d Cir. 1994)); see also Whatley, 166 F.Supp.2d at1354 ("the proponent of the expert testimony has the burden to establish by a preponderance of the evidence that the admissibility requirements of Rule 702 are satisfied.")(citations omitted). Factors that may be relevant include:

> (1) whether the theory or technique can be (and has been) tested, (2) whether the theory or technique has been subjected to peer review and publication, (3) in the case of a particular ... technique, the known or potential rate of error, and (4) whether the theory or technique is generally accepted by the relevant ... community.

Hendrix ex rel. G.P. v. Evenflo Co., Inc., 609 F.3d 1183, 1194 (11th Cir. 2010) (internal quotation marks and alterations omitted). Additional factors that may be taken into account by a district court include:

> (1) Whether the expert is proposing to testify about matters growing naturally and directly out of research he has conducted independent of the litigation, or whether he has developed his opinion expressly for purposes of testifying;
>
> (2) Whether the expert has unjustifiably extrapolated from an accepted to an unfounded conclusion;
>
> (3) Whether the expert is being as careful as he would be in his regular professional work outside his paid litigation consulting;
>
> (4) Whether the field of expertise claimed by the expert is known to reach reliable results for the type of opinion the expert would give.

FED. R. EVID. 702 advisory committee's note to 2000 amendments (internal citations omitted).

A. Guy Plaisance

With regard to Plaisance, Defendants first contend that he is not qualified to testify as an expert on the cause or origin of fires because he is a marine surveyor by trade and has only a high school equivalency with no formal training as a fire investigator. However, "[t]he text of Rule 702 dictates that expert status may be based on *experience*, and the Advisory Committee Notes dictate that experience alone 'may ... provide a sufficient foundation for expert testimony.' " United States v. Frazier, 387 F.3d 1244, 1295 (11th Cir. 2004) (italics in original) (citing Rule 702 cmt. at 290) "After all, '[e]xperts of all kinds tie observations to conclusions through the use of what Judge Learned Hand called "general truths derived from ... specialized experience,' " and 'no one denies that an expert might draw a conclusion from a set of observations based on extensive and specialized experience.' " Id. at 1298 (citing Kumho Tire Co. v. Carmichael, 526 U.S. 137, 149, 119 S.Ct. 1167, 1174, 1178 (1999)). After reviewing Mr. Plaisance's qualifications, the court finds he has sufficient experience to offer opinion testimony on the subject.

Defendants also contend that Plaisance's conclusions are not reliable because they are not based on sufficient facts or data, they are not the product of reliable principles and methods and because the principles and methods are not reliably applied to the facts of the case. Plaisance's report concludes that "the fire resulted due to the lack of required maintenance on the starboard main engine per the manufacturer's recommendations and by the excessive amount of marine growth on the starboard sea strainer screen." (Doc. 34-2, p. 24). Plaisance had both the starboard and port screens analyzed by a metallurgical consultant, Dr. Kendall Clarke. (Doc. 34-2, p. 18). Mr. Plaisance states in his report that Clarke determined that "the starboard sea scoop screen has an open area of 3.55 square inches or 1/5 (20%)" of a new clean screen and the port screen has "an open area of 3.85 square inches or approximately ¼ (26%) compared with a new screen." (Doc. 34-2, p. 18). There is no reported data or analysis to indicate the significance of the difference between a screen that is 20% open as compared to 26% open, but Plaisance testified that apparently the generator and the port engine were getting the minimum flow required to avoid any overheating, because "[t]hey didn't catch on fire." (Doc. 34-1, p. 79). However, Defendants point out that Plaisance incorrectly relied on the measurements because Dr. Clarke actually reported that the starboard screen had the larger open area of 3.85 inches squared whereas the port screen had an open area of 3.5 inches square. (Doc. 34-9, p. 3). So, when Plaisance thought 26% of the screen on the port engine was open, he concluded the extra 6% opening was sufficient to keep it from catching fire, but in fact the fire reportedly started from the exhaust of the engine with the screen that was 26% open and the exhaust from the engine with a screen that was open 6% less, did not catch on fire.

Plaisance also testified that while the percentage that the screens were open matters, there could have been a wide variety of other things that could have obstructed the seawater, such as a plastic bag or a rag being sucked up over it. (Doc. 34-1, pp. 83-86). If the starboard exhausts caught on fire and the port exhausts did not because a plastic bag or a rag obstructed the starboard screen, then it would not have been the marine growth or Defendants failure to have the screens cleaned that caused the fire.

Plaisance also based his opinion that the screen was too clogged to flow the required amount of water for the engine on information he received from John Moran, who is an employee of the company that manufactures the screen. (Doc. 34-2, p. 18). Defendants contend Plaisance should not have relied on Moran because Plaisance does not know Moran's qualifications and only spoke to Moran over the phone. (Doc. 34-1, pp. 36-38, 57-58). Additionally, Plaisance asked Mr. Moran to perform a flow rate calculation, but sent Mr. Moran the data sheet for a different engine than is at issue here. (Doc. 34-1, pp. 36-38). Plaisance later realized the mistake and informed Moran, but Moran did not recalculate the flow rate. Without making new calculations, Moran concluded:

> I think the same basic problem exists. The screen was too clogged to flow the required amount of water (400 1/min or 450 1/min). The pressure loss was too great for the pump to overcome. Unless the pump is made to operate at a higher vacuum it probably wouldn't flow enough water.

(Doc. 34-1, p. 44). The statement above only reports that Moran "thinks" there "probably" would not be enough water flow. Thus, Moran does not appear to be completely certain about the conclusion. According to an email, Plaisance also told Moran that the starboard screen had only 3.55 square inches of open area which, as discussed above, was incorrect. (Doc. 34-1, pp. 45-46). Given all of the problems above, the court does not find that the information from Moran was certain enough to be relied upon without additional verification.

Defendants also contend that Plaisance violated the scientific method because he formed a conclusion first and then attempted to find support for that conclusion after it was already pre-determined. On March 29, 2013, Plaisance reported that he believed the starboard engine had overheated as a result of the screen being too occluded to allow sufficient water flow. (Doc. 34-1, pp. 53-54). Plaisance reported that:

> This overheating condition on the starboard engine could have created an intense exhaust heating in as much as 1300 degrees Fahrenheit (hot exhaust gas) which would have melted the neoprene rubber hose "boots" connecting the fiberglass exhaust tube to the riser and discharge tube.

(Doc. 34-1, p. 54). However, it was later determined that the starboard engine did not overheat. (Doc. 34-1, pp. 25, 54). On April 20, 2013, Plaisance sent an email to Gary Jones and others asking whether it was possible for the exhaust temperature to get above 257 degrees Fahrenheit with limited seawater flow through the engine and the engine not drastically overheat to a point of failure, yet the hot exhaust gas start burning the hose and gas pipe. (Doc. 34-1, pp. 27-31). His email stated that this was his primary question. Plaisance did not know if he ever got an answer to his question. (Doc. 34-1, p. 32-33). Plaisance is sure somebody concurred, whether in writing or orally, but Gary Jones did not respond, there is no record of a response from anyone else and Plaisance does not remember whom or if anyone responded. (Doc. 34-1, pp. 32-34). Thus, Plaisance's conclusion that the marine growth on the screen could caused intense exhaust heating without overheating the engine is apparently based on the fact that he thinks someone told him that was possible. Plaisance has offered nothing to support his contention that it is possible and Plaintiff has not submitted any other authority to show that it is possible. "To fulfill its gatekeeping function under Rule 702, a district court must not simply tak[e] the expert's word for it." Edwards v. Shanley, 2014 WL 4747186, *6 (11th Cir. Sept. 25, 2014) (citation and internal quotations omitted). "If admissibility could be established merely by the *ipse dixit* of an admittedly qualified expert, the reliability prong would be, for all practical purposes, subsumed by the qualification prong." Id. (quoting United States v. Frazier, 387 F.3d 1244, 1258, 1261 (11th Cir. 2004) (en banc)). Here, the expert himself questioned whether it was possible. Plaisance had no experience or knowledge prior to investigating this incident to lead him to believe that it was possible and can point to no other authority on which to base such an opinion.

Defendants point to several other flaws or gaps in Plaisance's analysis, such as that he did not perform a variety of other tests and he did not interview the marine officer who first responded to the scene. While some of these reported shortcomings would merely go to the weight of the testimony, the court finds that because of the other problems discussed above Plaisance has failed to fully support his conclusion that the fire was caused by the screen being occluded by marine growth. Plaintiff has not met its burden of showing by a preponderance of the evidence that Plaisance's opinion stems from a reliable methodology, sufficient factual basis, and reliable application of the methodology to the facts.

B. Gary Jones

In Jones' first report, he stated that the fire originated in the engine compartment in the vicinity of the aft end of the starboard engine. (Doc. 35-5, p. 7). Jones further stated in the first report that the most probable ignition theory involves the release of these searing gases as a result of a restriction of the cool water flow due to the marine growth." (Doc. 35-5, p. 7). However, the report stated that "[u]ntil the scientific materials testing has been completed by Dr. Clark, the cause for this fire is being classified as undetermined." (Doc. 35-5, p. 7). Jones stated that "[t]he investigation remains active and continued contact with Captain Plaisance and Dr. Clark will be maintained to complete any remaining tasks in an expedited manner." In Jones' final report he concluded that:

> The cause for the fire is a result of insufficient intake seawater flow that is necessary to lower the internal hot exhaust gases in the exhaust FRP tube and elbow to a safe and acceptable operating level. The fiberglass tube is rated at approximately 259 degrees F and is connected to the riser and tube with rubber boots. The weak point in this system is at the connector and the release of hot gases here represents a significant hazard.

> It was concluded the lack of required maintenance and the marine growth on the external hull intake strainer/screen contributed to the reduced intake water flow that resulted in the failure of the exhaust tube. The escaping gases then ignited nearby combustibles that eventually involved the entire boat. The basis for this ignition theory is the exclusion of other ignition theories, physical damage patterns on the boat, photographic documentation and the analytical evaluation and interpretation of the evidence by industry experts Dr. Kendall Clark, John Moran of Hendrick Manufacturing, biologist Dottie Byron, Certified Marine surveyor Guy Plaisance and Marine technicians Tom Elliot and Ralph Holloway

(Doc. 35-7, p. 2). Jones' later testified that if Dr. Clark and Plaisance were wrong, he would have to go back to his undetermined status. (Doc. 35-1, p. 5).

Jones' reports indicate that the starboard intake screen was disproportionately occluded with marine growth. (Doc. 35-5, p. 6; Doc. 35-6, p. 3). However, as discussed above with regard to Plaisance's opinion, Dr. Clarke actually found that the starboard intake screen was less occluded with marine growth than the port side intake screen.

Defendants also point out that Jones based his opinion on the exhaust tube being rated for 259 degrees Fahrenheit, when in fact it was rated for 350 degrees Fahrenheit. (Doc. 35-1, p. 6). Plaintiff contends that it does not matter which rating was used because the internal exhaust gases range from 900-1100 degrees Fahrenheit. (Doc. 32-2, p. 5). However, it is unclear what temperature the gases were after they had been cooled by whatever water came in through the screen. Jones' report states that the water is supposed to lower the internal exhaust gases to an acceptable level for the exhaust elbows and tube and that "[a]n exhaust tube failure could result from the hot gasses not getting completely cooled..." (Doc. 32-2, p. 5). There has been no calculation or testing done to determine the approximate temperature of the water flow or of the gases after being cooled by the reported reduced flow of water in the starboard engine. (Doc. 35-1, p. 12). Jones testified that the difference does not affect his opinion, but has not fully explained why it does not. (Doc. 53-5, p. 6).

Jones recommended to Plaisance that several items be inspected because they "will provide physical documentation to prove or disprove this theory." (Doc. 35-1, pp. 14-16). He requested that the turbocharge be inspected because that would "address possible issues such as exhaust gas, back pressure, insufficient cooling water through the cooler, faults in the engine fuel injection system due to incorrect adjustment." (Doc. 35-1, p. 14). Jones testified that the Middleton mechanics were supposed to inspect the turbocharger but Jones does not know if it was ever done. (Doc. 35-1, pp. 15-16). Jones also does not know if Plaisance ever looked into the charge air cooler or faults in the engine fuel injection system due to incorrect adjustment or misalignment of a bearing or leakage in exhaust duct. (Doc. 35-1, pp. 17-18). Jones admits that the water flow could be restricted for reasons other than the screen, such as through the charge air cooler or if a manufacturing defect resulted in a leak in the exhaust duct that persisted long enough. (Doc. 35-1, pp. 17-18). While all of the requested inspections may not have been necessary for Jones' to come to a reliable conclusion, when it was determined that the starboard engine did not overheat as Jones and Plaisance originally believed, more testing or analysis was clearly needed to explain the circumstances.

Because of the above issues combined with Jones' reliance on Plaisance's analysis, which as discussed above was not adequately supported, the court finds that Plaintiff has not met its burden of showing by a preponderance of the evidence that Jones' opinion as to the cause of the fire is reliable. Jones himself reported that the initial information was not sufficient for him to opine as to the cause of the fire. Jones later received information counter to his initial theory when it was determined that the starboard engine did not overheat and the starboard screen was not as obstructed by marine growth as the port side screen. Since Jones relied on Plaisance's analysis, the court finds that Jones' opinion as to the cause of the fire also does not stem from a reliable methodology, sufficient factual basis, and reliable application of the methodology to the facts.

CONCLUSION

For the reasons stated above, Defendants' motions to exclude the expert testimony of Guy Plaisance and Gary Jones (Docs. 34 & 35) are **GRANTED**.

DONE and **ORDERED** this 5th day of November, 2014.

/s/ Callie V. S. Granade
UNITED STATES DISTRICT JUDGE

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

ATLANTIC SPECIALTY INSURANCE COMPANY,	)	
Plaintiff,	)	
VS.	)	CIVIL ACTION NO. CV-13-458
MR. CHARLIE ANDVENTURES, LLC, and KIM P. KORNEGAY,	)	
Defendants.	)	

DEFENDANTS' MOTION TO EXCLUDE THE TESTIMONY OF PLAINTIFF'S EXPERT GUY PLAISANCE

COME NOW, the Defendants, by and through counsel, pursuant to Rules 403 and 702 of the Federal Rules of Evidence and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 591 (1993), and move this Court to exclude testimony offered from Plaintiff's expert, Guy Plaisance, as to cause and origin of the fire, on the grounds that (1) Guy Plaisance is not qualified to testify competently regarding the cause and origin of the fire, (2) the methodology by which he reaches his conclusions is not sufficiently reliable as determined by the sort of inquiry mandated in *Daubert*, and (3) the testimony will not assist the trier of fact, through the application of scientific, technical, or specialized expertise, to understand the evidence or to determine a fact in issue, and is unnecessarily cumulative. In support of this motion, Defendants show unto the Court the following:

INTRODUCTION

Guy Plaisance has been identified by the Plaintiff as an expert witness that they may use to present evidence under Rule 702 of the Federal Rules of Evidence. Plaisance was retained by Atlantic Specialty Insurance Company ("ASIC") on March 4, 2013, to investigate the fire loss of the vessel Mr. Charlie, which occurred on March 3, 2013. (Exhibit 1, at 156). On March 19, 2013, at the request of Plaisance, ASIC retained Gary Jones to conduct a fire cause and origin investigation of the vessel Mr. Charlie. (Exhibit 1, at 25 – 26). Plaisance provided a report on September 9, 2013, as to his investigation into the fire that occurred aboard the Mr. Charlie, and his conclusion as to the cause and origin of the fire. (Exhibit 2).

Plaisance provided a second report dated April 13, 2014, wherein he outlined his opinion as follows:

> Insufficient seawater flow through the starboard main engine cooling system resulted in the excessive rise in exhaust temperature, causing the hot exhaust gas to burn and ignite into a fire, beginning with non-metallic exhaust system components. This fire was greatly exacerbated by the starboard main engine continuing to run expelling 900° F to 1100° F exhaust heat and gases into the local surrounding area of the starboard aft engine room, quickly melting the closely mounted generator diesel fuel filter Racor plastic bowel, thus providing a substantial amount of accelerant, diesel fuel onto the already burning hot exhaust fire.

(Exhibit 3, at 9).

Gary Jones provided an initial fire investigation report on June 28, 2013. At that time, Jones classified the cause of this fire as undetermined. (Exhibit 4, at 6). Jones submitted a second report to ASIC on September 9, 2013, wherein he determined the cause for the fire to be a result of insufficient intake seawater flow due to a clogged intake screen. (Exhibit 5, at 3). Jones summarized his conclusion in an April 13, 2014 report as follows:

> It was concluded the lack of required maintenance and the marine growth on the external hull intake strainer/screen contributed to the reduced intake water flow that resulted in the failure of the exhaust tube. The escaping gases then ignited nearby combustibles that eventually involved the entire boat. The basis for this ignition theory is the exclusion of other ignition theories, physical damage patterns on the boat, photographic documentation and the analytical evaluation and interpretation of the evidence by industry experts Dr. Kendall Clark, John Moran of Hendrick Manufacturing, biologist Dottie Byron, certified marine surveyor Guy Plaisance and marine technicians Tom Elliot and Ralph Holloway.

(Exhibit 6, at 1-2).

ARGUMENT

In *Daubert*, 509 U.S. 579, 597 (1993), the Supreme Court explained that the trial courts are tasked with ensuring that an expert's testimony is relevant and reliable. "This entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." *Id*. at 592-93. This "gatekeeping" function is to be applied not only when an expert relies on scientific principles, but also when testimony is based on other technical or specialized knowledge. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141 (1991).

The admissibility of expert testimony is governed by Rule 702 of the Federal Rules of Evidence, which provides:

> A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:
>
> (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
>
> (b) the testimony is based on sufficient facts or data;
>
> (c) the testimony is the product of reliable principles and methods; and
>
> (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

"Expert testimony may be admitted into evidence if: (1) the expert is qualified to testify competently regarding the matters he intends to address; (2) the methodology by which the expert reaches his conclusions is sufficiently reliable as determined by the sort of inquiry mandated in *Daubert*; and (3) the testimony assists the trier of fact, through the application of scientific, technical, or specialized expertise, to understand the evidence or to determine a fact in issue." *City of Tuscaloosa v. Harcros Chemicals, Inc.*, 158 F.3d 548, 562 – 563 (11th Cir. 1998) (citations omitted). The proponent of the expert testimony bears the burden of proving by a preponderance of the evidence that these three requisites are satisfied. *See Hendrix ex rel. G.P. v. Evenflo Co., Inc.*, 609 F.3d 1183, 1194 (11th Cir. 2010) (citing *Boca Raton Cmty. Hosp., Inc. v. Tenet Health Care*, 582 F.3d 1227, 1232 (11th Cir. 2009)).

In determining the reliability of an expert's testimony, the trial court may consider many factors, including the following: (1) whether the expert's theory or technique can be tested, and if it has been tested; (2) whether the expert's theory or technique has been subjected to peer review and publication; (3) the known or potential error rate of a particular technique, and the existence and maintenance of standards related to the technique; and (4) whether the technique has been generally accepted in a relevant scientific community. *Daubert,* 509 U.S. at 593-94.

The advisory committee notes to Rule 702 provides the following addition list of factors that a court may consider in determining whether expert testimony is sufficiently reliable:

> (1) Whether the expert is proposing to testify about matters growing naturally and directly out of research he has conducted independent of the litigation, or whether he has developed his opinion expressly for purposes of testifying;
>
> (2) Whether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion;
>
> (3) Whether the expert has adequately accounted for obvious alternative explanations;

> (4) Whether the expert is being as careful as he would be in his regular professional work outside his paid litigation consulting;
>
> (5) Whether the field of expertise claimed by the expert is known to reach reliable results for the type opinion the expert would give.

Fed. R. Evid. 702, advisory committee's note (2000 amends.).

In *Whatley v. Merit Distribution Services*, 166 F. Supp. 2d 1350, 1353 (S.D. Ala. 2001), this Court noted its obligation under Rule 702 to "screen expert testimony to ensure it stems from a reliable methodology, sufficient factual basis, and reliable application of the methodology to the facts."

A. THE PROFFERED EXPERT IS NOT QUALIFIED TO TESTIFY COMPETENTLY REGARDING THE MATTERS HE INTENDS TO ADDRESS

Defendant and Counter Plaintiffs, Mr. Charlie Adventures and Kornegay, adopt and incorporate herein the facts and arguments set forth in Defendant and Counter Plaintiffs' Motion to Exclude the Testimony of Plaintiff's Expert Gary Jones, and Defendant and Counter Plaintiffs' Motion for Summary Judgment on breach of contract and bad faith claims against ASIC, filed contemporaneously herewith.

Plaisance does not have the experience, education, or training necessary to offer an opinion on the cause or origin of fires. Defendants assert, therefore, that Plaisance is not qualified to offer any opinions regarding the cause and/or origin of any fire related to this case.

An expert may be qualified "by knowledge, skill, experience, training, or education." Fed. R. Evid. 702. In *Talking Walls, Inc. v. Hartford Cas. Ins. Co.*, No. 1:02-cv-0041-MP-AK, 2005 WL 6011243 (N.D. Fla. July 5, 2005), the court excluded an expert's testimony regarding the cause and origin of a fire because the witness did not have the requisite training or experience to qualify as an expert in the investigation of fire cause and origin. The purported expert had received certification as a firefighter, a fire inspector, and a fire instructor. He had not, however, received any certifications with regard to determining the cause and origin of fires. Despite having some limited experience in cause and origin investigations, the expert would rely on others when investigating fire cause and origin. The court explained that a "witness is not an expert merely because he claims to be." *Id.* at *2; *see also Am. Family Ins. Group v. JVC Americas Corp.*, No. 00-27 DSD/JMM, 2001 WL 1618454 (D. Minn. April 30, 2001) (excluding purported expert from testifying as to the cause and origin of a fire because he was not a certified fire investigator and had no formal training in fire cause and origin analysis).

In this case, Plaisance is a marine surveyor by trade. He received an eleventh grade education before withdrawing from high school, and later obtained a high school equivalency diploma. Plaisance concedes that he has no formal training as a fire investigator. (Exhibit 1, at 19). Plaisance's experience in fire investigations is limited to on the job experience working as a marine surveyor. He estimates that he has participated in approximately 20 to 25 fire investigations as a marine surveyor. (Exhibit 1, at 75).

Nothing in Plaisance's curriculum vitae indicates that he has the experience, education, or training necessary to offer an opinion as to the cause or origin of fires. (Exhibit 7, Plaisance CV). Plaisance's curriculum vitae cites membership in the National Association of Fire Investigators, but he has not attended any seminars or meetings sponsored by this organization. (Exhibit 1, at 118 – 120). Plaisance cites attending one eight-hour seminar that was related to fire investigation. He cannot recall, however, any specific information that was taught during the seminar. (Exhibit 1, at 56 – 57).

In addition, Plaisance has never investigated a fire that was a result of an exhaust tube failure, as he alleges to have happened in this case. (Exhibit 1, at 75). His experience with the type of engines in question is limited to his role as a marine surveyor. He is not a certified technician for the engines in questions and has never worked on such engines. (Exhibit 1, at 20 - 22).

As this Court stated in *Kerns v. Sealy*, No. 06-0431-WS-B, 2007 WL 2012867, *3 (S.D. Ala. July, 2007):

> A metallurgist is not rendered an expert in accident reconstruction simply because both drivers were behind the wheel of automobiles, which are made of metal. A beekeeper is not rendered an expert in the health and nutritional effects of honey on small children simply because he breeds insects that produce honey. A recording studio engineer does not become an expert in the treatment and prevention of tinnitus simply because his field of expertise involves sound waves, which also cause tinnitus.

Accordingly, Plaisance, as a marine surveyor, is not rendered a fire cause and origin expert simply because the fire was aboard a marine vessel.

Furthermore, Plaisance recognized the need to retain a fire cause and origin expert in order to determine the cause and origin of the fire in this case. In *Cook v. Sunbeam Products, Inc.*, 365 F. Supp. 2d 1189 (N.D. Ala. 2005), the court excluded an expert from testifying as to the cause and origin of a fire, in part, because he conceded that he had no formal training is this area and admitted that he was unqualified to give an expert opinion on the cause and origin of fires. The court noted this was an obvious flaw in respect to the purported expert's opinion testimony. *Id*. at 1192 (N.D. Ala. 2005); *see also Gideone Mutual Insurance Co. v. Rock*, No. 1:06-cv-218-SA-JAD, 2009 WL 2252206 (N.D. Miss. July 28, 2009) (excluding purported experts testimony as to the ultimate cause and origin of the fire because the court recognized that the expert did not have any scientific or technical education; he did not have any certifications in the determination of fire cause and origin; he had never conducted an investigation into the cause and origin of a fire; he did not hold himself out as an expert in determining the cause and origin of fires; he did not have any formal training in fire dynamics; and he admitted that he was not an expert in cause and origin investigations).

Upon being assigned the case, Plaisance acknowledged that he would only take the investigation as far as he could on his own, and he would use an additional expert if it became necessary. He admits that a cause and origin expert was needed and he recommended that such an expert be retained for this case in order to determine cause and origin. (Exhibit 1, at 156 – 159). As a result, Gary Jones was retained on March, 19, 2013, to conduct the fire cause and origin investigation into the vessel Mr. Charlie.

By his own testimony, and inferred through the necessity to retain an actual fire cause and origin expert, Plaisance does not have the experience, education, or training necessary to offer an opinion on the cause or origin of fires. Therefore, Plaisance should be excluded from offering testimony as to the cause and origin of the fire aboard the vessel Mr. Charlie.

B. THE METHODOLOGY BY WHICH THE EXPERT REACHES HIS CONCLUSIONS IS NOT SUFFICIENTLY RELIABLE AS DETERMINED BY THE SORT OF INQUIRY MANDATED IN *DAUBERT*.

Defendant and Counter Plaintiffs, Mr. Charlie Adventures and Kornegay, adopt and incorporate herein the facts and arguments set forth in Defendant and Counter Plaintiffs' Motion to Exclude the Testimony of Plaintiff's Expert Gary Jones, and Defendant and Counter Plaintiffs' Motion for Summary Judgment on breach of contract and bad faith claims against ASIC, filed contemporaneously herewith.

Plaisance provided a signed expert report dated April 13, 2014, regarding his investigation into this loss. He summarized his findings as follows:

> Considering the theoretical and physical evidences consisting of the excessively fouled seawater scoop intake screen, the main engine pump performance curve/flow rate specification and calculations performed, gear (transmission) oil cooler found fouled with obvious marine growth present and visible, starboard FRP

> exhaust tube burnt ends remaining, and combined with the area of origin and burn pattern found. All of this evidence collectively, depicts that there was clearly insufficient seawater cooling flowing through the starboard main engine to cool the non-metallic exhaust system components, causing extreme catastrophic failure of those exhaust components; i.e., the melting and burning of the rubber boot hose connections to the FRP exhaust tube.

(Exhibit 3, at 9).

Based on Plaisance's expert report dated April 13, 2014, he relied on the following in reaching his opinion as to the cause of the fire to the Mr. Charlie: (1) excessively fouled seawater scoop intake screen; (2) the main engine pump performance curve/flow rate specification and calculations performed; (3) gear (transmission) oil cooler found fouled with obvious marine growth present and visible; (4) starboard FRP exhaust tube burnt ends remaining; and (5) the area of origin and burn pattern found. Each one of these factors listed by Plaisance fails to meet the *Daubert* standards of reliability, and therefore his opinion as to the cause of the fire should be excluded as unreliable.

1. Plaisance's opinion on what he determined to be an "excessively fouled seawater scoop intake screen" and its relation to the cause of the fire aboard the Mr. Charlie fails to meet the *Daubert* standards of reliability.

Plaisance's opinion on what he determined to be an "excessively fouled seawater scoop intake screen and its relation to the cause of the fire aboard the Mr. Charlie fails to meet the *Daubert* standards of reliability, and should be excluded accordingly, because (1) the opinion is not based on sufficient facts or data, (2) the testimony is not the product of reliable principles and methods, and (3) the expert has not reliably applied the principles and methods to the facts of the case.

(a) Plaisance's opinion on what he determined to be an "excessively fouled seawater scoop intake screen" and its relation to the cause of the fire aboard the Mr. Charlie is not based on sufficient facts or data.

Plaisance's opinion on the starboard intake screen being excessively fouled is not based on sufficient facts or data, and therefore is unreliable under *Daubert*, because he did not use the correct data in making his opinion. Plaisance relied on Dr. Kendall Clarke, a metallurgist, to determine the amount of occlusion to the starboard and port engine intake screens on the Mr. Charlie. (Exhibit 2, at 17). The starboard intake screen provides the seawater intake for cooling the starboard engine, and the port intake screen provides the seawater intake used for cooling the port engine.

Dr. Clarke performed an analysis on both the starboard intake screen and the port intake screen, respectively. He found the starboard screen had an open area of 3.85 in. sq., and the port screen was more occluded, with an open area of only 3.55 in. sq. This evidence shows that the starboard screen had a larger opening than the port screen for providing seawater used to cool the respective engine. (Exhibit 9, at 2).

In Plaisance's report of September 9, 2013, he states, however, that the starboard screen only had an opening of 3.55 square inches, and the port screen was 3.85 square inches. (Exhibit 2, at 17). Plaisance incorrectly relied on the port screen data in making his conclusions as to the starboard screen. (Exhibit 1, at 448) Plaisance testified, however, that the *port engine did not catch fire because the port engine was getting adequate water flow through the port intake screens*, as opposed to the starboard engine. (Exhibit 1, at 449). Applying Plaisance's opinion with the correct data that the starboard was in fact more open than the port, it is only logical that his opinion would be that the starboard engine *should not* have caught fire because it would have been provided adequate water flow through the starboard intake screens.

Plaisance's opinion based on the screen being excessively fouled is not based on sufficient facts or data, and therefore is unreliable under *Daubert*, because he used incorrect data in forming his opinion, relying on the starboard screen being more occluded than the port screen, when in fact the starboard screen, according to his retained expert, was more open than the port screen.

(b) Plaisance's opinion on what he determined to be an "excessively fouled seawater scoop intake screen" and its relation to the cause of the fire aboard the Mr. Charlie is not the product of reliable principles and methods.

Plaisance's opinion based on the intake screen, or the amount of water flow through the screen, is not the product of reliable principles and methods, and therefore is unreliable under *Daubert*, because he erroneously formed his conclusions and attempted to find a basis for support after the fact. In addition, and by his own testimony, he does not find the amount of screen occlusion to be a determinative factor in forming his opinion, and he failed to address why the port engine did not suffer the same result as the starboard, given the fact that the port intake screen was more occluded and restrictive than the starboard intake screen.

It is improper, and violates the scientific method, to form a conclusion first and then attempt to find support for that conclusion after it was already pre-determined. *See Perry v. United States*, 755 F.2d 888, 892 (11th Cir. 1985) (noting that a scientist who forms an opinion before beginning his research lacks the objectivity needed to produce reliable scientific results).

In this case, Plaisance testified that on March 29, 2013, after initially visually inspecting the intake screens, he formulated his hypothesis that the screens were too occluded to allow enough water to enter the cooling system, which resulted in the engine severely overheating and the resulting failure of the exhaust tube. (Exhibit 1, at 296 – 297). Plaisance, in error, worked backwards and performed his investigation in an effort to prove his predetermined opinion.

Plaisance further contradicts himself and implies that the amount of the screen occlusion is not a determinative factor in forming his opinion as to the cause of the fire. He testifies that regardless of the amount of screen occlusion, he is certain that the cause of the fire is from insufficient water. (Exhibit 1, at 501 – 504). The very premise of his opinion is that the intake screen was too occluded to flow enough water to cool the engine and exhaust. If the amount of screen occlusion is not determinative, Plaisance is apparently in disagreement with his own opinion.

It is clear and obvious that Plaisance did not adhere to a valid and scientific methodology in forming his opinion regarding the cause of this fire. Therefore, Plaisance's opinion based on the intake screen, or the amount of water flow through the screen, should be excluded under *Daubert*, because his opinion is not a product of reliable principles and methods.

(c) Plaisance did not reliably apply the principles and methods to the facts of this case in reaching his opinion on the "excessively fouled seawater scoop intake screen" and its relation to the cause of the fire aboard the Mr. Charlie.

Plaisance did not reliably apply the principles and methods to the facts of this case in reaching his opinion based on the screen being excessively fouled, and therefore any opinion based on the intake screen, or the amount of water flow through the screen, is unreliable under *Daubert*, because Plaisance did not conduct any testing to verify his opinion.

Plaisance never conducted any testing as to whether the screens were too occluded for the water pump to draw enough water to cool the engine. There was no testing conducted to determine the volume of water that was capable of being pumped through the screens. There was no testing to determine how much water the pumps on this particular engine could have pumped through the screens. In affirming the district court's exclusion of expert testimony, the Tenth Circuit explained the error of improperly premature conclusions:

> Under *Daubert*, the subject of an expert's testimony must be scientific… knowledge. The adjective scientific implies a grounding in the methods and procedures of science. Scientific method today is based on generating hypothesis and testing them to see if they can be falsified. The district court found that [the experts] reached their ultimate conclusions before studying the available literature. This type of action turns scientific analysis on its head. Instead of reasoning known facts to reach a conclusion, the experts here reasoned from an end in order to hypothesize what needed to be known but what was not. Scientists whose conviction about the ultimate conclusion of their research is so firm that they are willing to aver under oath that it is correct prior to performing the necessary validating tests may properly be viewed by the district court as lacking the objectivity that is the hallmark of the scientific method.

Mitchell v. Gencorp, Inc., 165 F.3d 778, 783 (10th Cir. 1999) (internal citations omitted).

Again, after initially visually inspecting the intake screens, Plaisance formulated his opinion on March 29, 2013, that the screens were too occluded to allow enough water to enter the cooling system, which resulted in the engine severely overheating and the resulting failure of the exhaust tube. (Exhibit 1, at 296 – 298). Plaisance then continued to investigate the loss in an effort to prove this opinion. The first step was to disassemble the starboard engine, which Plaisance expected to show the severe overheating that would have occurred to the engine. The next step was to disassemble the port engine, which presumably would not show any damage from overheating, and compare the two engines. (Exhibit 1, at 230). The starboard engine was subsequently disassembled and inspected, but showed *no evidence of any overheating*. (Exhibit 1, at 210 – 212).

Plaisance sent an inquiry to Tom Elliot, Ralph Hollowell, and Gary Jones, with a copy of the email to Rita Boggan, and asked if it was possible for the exhaust tube to fail, without the engine overheating. Plaisance considered this a "primary" question to be answered. He never received an answer to that "primary" question, yet continued to investigate the cause of the fire in an attempt to prove his initial opinion. (Exhibit 1, at 238 – 246).

Gary Jones, ASIC's fire cause and origin expert retained on the recommendation of Plaisance, testified that "[w]hat you have to do when you're following a scientific method is if the hypothesis that you had formed changes in any way, you go back and re-evaluate all the other evidence." (Exhibit 8, at 28). The evidence disproved Plaisance's hypothesis that the occluded screens would lead to an excessive overheating of the engines and ultimately cause a fire, yet he pushed forward with his investigation to find any other evidence that would fit his opinion. He decided not to move forward with disassembling the port engine, and ignored the contrary evidence. (Exhibit 1, at 182 – 183).

Plaisance's opinion on the intake screens is speculative, contradictory, and unreliable. Therefore, Plaisance's opinion as to cause and origin of the fire should be excluded because it fails to meet the *Daubert* standards of reliability.

Conclusion

Based on the foregoing, Plaisance's opinion on what he determined to be an "excessively fouled seawater scoop intake screen and its relation to the cause of the fire aboard the Mr. Charlie fails to meet the *Daubert* standards of reliability, and should be excluded accordingly, because (1) the opinion is not based on sufficient facts or data, (2) the testimony is not the product of reliable principles and methods, and (3) the expert has not reliably applied the principles and methods to the facts of the case.

2. Plaisance's opinion on the main engine pump performance curve/flow rate specification, and any calculation made in reliance thereof, and its relation to the cause of the fire aboard the Mr. Charlie fails to meet the *Daubert* standards of reliability.

Plaisance's opinion on the main engine pump performance curve/flow rate specification, and any calculation made in reliance thereof, and its relation to the cause of the fire aboard the Mr. Charlie fails to meet the *Daubert* standards of reliability, and should be excluded accordingly, because (1) the opinion is not based on sufficient facts or data, (2) the testimony is not the product of reliable principles and methods, and (3) the expert has not reliably applied the principles and methods to the facts of the case.

(a) Plaisance's opinion on the main engine pump performance curve/flow rate specification, and any calculation made in reliance thereof, and its relation to the cause of the fire aboard the Mr. Charlie is not based on sufficient facts or data.

Plaisance's opinion on the pump curve/flow rate specification, and/or calculations thereof, is not based on sufficient facts or data, and therefore is unreliable under *Daubert*, because the incorrect pump curve/flow rate specification was used in making the calculations.

Plaisance relied on John Moran, an employee of Hendrick, which is a company that manufactures the intake screens used on the Mr. Charlie, to do a calculation on whether the pump would flow enough water based on the percentage the intake screens may have been occluded. (Exhibit 2, at 17). Plaisance does not know John Moran's qualifications to make such determinations and stated that he did not need to know Mr. Moran's background. Plaisance stated that it was sufficient that Mr. Moran was employed by the manufacturer, and his employment status alone made him qualified to make such a determination. (Exhibit 1, at 317 – 319).

In addition, Plaisance sent Mr. Moran a data sheet on the pump curve in order to do his calculations, but Plaisance sent him the data sheet for a different engine than the engines made subject of this case. (Exhibit 1, at 250 – 252). Mr. Moran acknowledged the pump curves were for the wrong engine, but made a calculation with the information he had, albeit incorrect information. Mr. Moran advised Plaisance that having the correct curve in necessary to know if the pump would fail with the clogged screens. (Exhibit 1, at 253, with attached exhibit 28 to Plaisance depo.). Plaisance, however, never asked Moran to conduct a new calculation with the correct information and relied on the otherwise admittedly unreliable information. (Exhibit 1, at 524).

Therefore, Plaisance's opinion based on the pump curve/flow rate specification, and/or calculations thereof, is not based on sufficient facts or data, and therefore is unreliable under *Daubert*, because the incorrect pump curve/flow rate specification was used in making the calculations.

(b) Plaisance's opinion on the main engine pump performance curve/flow rate specification, and any calculation made in reliance thereof, and its relation to the cause of the fire aboard the Mr. Charlie is not the product of reliable principles and methods.

Plaisance's opinion based on the pump curve/flow rate specification, and/or calculations thereof, is not the product of reliable principles and methods, and therefore is unreliable under *Daubert*, because he knowingly relied on assumptions to form his opinion.

"An expert opinion is inadmissible when the only connection between the conclusion and the existing data is the expert's own assertions…" *McDowell v. Brown*, 392 F.3d 1283, 1299 (11th Cir. 2004). Plaisance knew that Mr. Moran made his calculations with the wrong data, yet never asked him to make any calculations using the correct data. (Exhibit 1, at 521 – 522). Nevertheless, Plaisance relied on Mr. Moran's assumptions of what the calculations *may* show, knowing the assumption was based on incorrect data and that no calculations were performed with the correct data, and made the conclusion that the water pump would not have been able to draw enough water to cool the engine. Plaisance admits that all he needed from Moran was a "probably" in order to form his opinion on whether the water pump would be able to pull a sufficient amount of water through the starboard intake screen. (Exhibit 1, 255 – 256).

Plaisance's opinion based on the pump curve/flow rate specification, and/or calculation thereof, is not the product of reliable principles and methods, and therefore is unreliable under *Daubert*, because he knowingly relied on assumptions to form his opinion.

(c) Plaisance's did not reliably apply the principles and methods to the facts of this case in reaching his opinion on the main engine pump performance curve/flow rate specification, and any calculation made in reliance thereof, and its relation to the cause of the fire aboard the Mr. Charlie.

Plaisance did not reliably apply the principles and methods to the facts of this case in reaching his opinion on the pump curve/flow rates and therefore any opinion based on the pump curve/flow rate specification, and/or calculation thereof, is unreliable under *Daubert*, because Plaisance did not conduct any testing to verify his opinion.

Mr. Moran advised Plaisance that he would need to know if the drive ratio was correct, if the engine was running at full speed, and how the pump would react if the engine was not running at the rated speed, in order to determine whether the water pump could have pulled an adequate amount of water through the starboard intake screen. (Exhibit 1, at 253, with attached exhibit 28 to Plaisance depo.). Simply put, Mr. Moran needed addition information because the amount of water pumped through the screens correlates directly to the engine RPMs. The higher the engine's RPM, the more water needed and pumped, and the lower the engine's RPM, the less water is required.

Mr. Moran went so far as to provide Plaisance with his prior experience dealing with an insufficient water intake scenario. Moran advised that if the screens were in fact too clogged to provide enough water, he "would guess that the impeller was all chewed up from cavitation created by the restriction." (Exhibit 1, at 253, with attached exhibit 28 to Plaisance depo.). To the contrary, Plaisance testified that the starboard water pump reflected damage from fire, not from insufficient water flow through the starboard intake screen. (Exhibit 1, at 488 – 489).

In addition, Plaisance acknowledged that the water intake flow correlated to the engine's RPM level, but he testified that it was *not important* for him to know at what RPM's the engines exceeded or maintained prior to the fire. (Exhibit 1, at 385 – 386, 514-515). He acknowledged that it is important to know the "particulars" to determine if the water flow was adequate to cool the engine, but admits he does *not* know the "particulars" in this case. (Exhibit 1, at 326 – 327).

Throughout this investigation, Plaisance's actions exemplify a willful and reckless disregard for conducting a proper and thorough investigation. Again, Plaisance never conducted any testing as to whether the screens were too occluded for the water pump to draw enough water to cool the engine. There was no testing conducted to determine the volume of water that was capable of being pumped through the screens. There was no testing to determine how much water the pumps on this particular engine could have pumped through the screens. Lastly, the visual evidence of the water pump impeller condition demonstrates that there was more than likely sufficient water flow through the intake screen.

Based on the foregoing, Plaisance's opinion on the water pump and its relation to the cause of the fire should be excluded because it is speculative and conjectured, and therefore fails to meet the *Daubert* standards of reliability.

Conclusion

Based on the foregoing, Plaisance's opinion on the main engine pump performance curve/flow rate specification, and any calculation made in reliance thereof, and its relation to the cause of the fire aboard the Mr. Charlie fails to meet the *Daubert* standards of reliability, and should be excluded accordingly, because (1) the opinion is not based on sufficient facts or data, (2) the testimony is not the product of reliable principles and methods, and (3) the expert has not reliably applied the principles and methods to the facts of the case.

3. Plaisance's opinion on what he determined to be a "gear (transmission) oil cooler found fouled with obvious marine growth" and its relation to the cause of the fire aboard the Mr. Charlie fails to meet the *Daubert* standards of reliability.

Plaisance did not reliably apply the principles and methods to the facts of this case in reaching his opinion that the gear oil cooler was fouled with obvious marine growth, and the opinion is not the product of reliable principles and methods, because Plaisance did not conduct any testing to verify his opinion. Therefore, any opinion based on such information, and its relation to the cause of the fire, is unreliable under *Daubert*.

Plaisance maintained that the gear oil cooler was fouled. He did not state the significance of the gear oil cooler being fouled or how that related the cause of the fire aboard the Mr. Charlie. The gear oil cooler was removed from the Mr. Charlie and sent to Dr. Kendall Clarke's office, in order to be inspected and tested. (Exhibit 2, at 17). Dr. Clarke recommended the gear oil cooler be tested and drafted a protocol for conducting the test. The gear oil cooler, however, was never tested. (Exhibit 1, at 530 – 534).

Plaisance never conducted any testing to determine if the gear oil cooler was fouled, or to what extent it was fouled. He did not conduct any tests to determine what effect any fouling may have to the engine, or how it would relate to this fire. Plaisance's opinion as to what effect the gear oil cooler had in relation to the cause of the fire is mere speculation and unknown. Therefore, Plaisance's opinion on the gear oil cooler and its relation to the cause of the fire should be excluded because it fails to meet the *Daubert* standards of reliability.

4. Plaisance's opinion on the "starboard FRP exhaust tube burnt ends remaining" and the "area of origin and burn pattern," and its relation to the cause of the fire aboard the Mr. Charlie fails to meet the *Daubert* standards of reliability

Plaisance's opinion on the "starboard FRP exhaust tube burnt ends remaining" and the "area of origin and burn pattern," and its relation to the cause of the fire aboard the Mr. Charlie fails to meet the *Daubert* standards of reliability, and should be excluded accordingly, because (1) the opinion is not based on sufficient facts or data, (2) the testimony is not the product of reliable principles and methods, and (3) the expert has not reliably applied the principles and methods to the facts of the case.

(a) Plaisance's opinion on the starboard exhaust tube, and its relation to the cause of the fire aboard the Mr. Charlie is not based on sufficient facts or data.

Plaisance maintains that the lack of remains of the starboard exhaust tube evidence the origin of the fire, and that the tube was burned from the inside. Plaisance's opinion on the starboard exhaust tube is not based on sufficient facts or data, and therefore is unreliable under *Daubert*, because he does not know at what temperature the exhaust tube was exposed to or for how long; he does not know the temperature of the water exiting the engines; and he does not know how long it would take the exhaust tube to fail and burn through.

"Personal observation is not a substitute for scientific methodology and is insufficient to satisfy *Daubert's* most significant guidepost." *Chapman v. Maytag Corp.*, 297 F.3d 682, 688 (7th Cir. 2002). Plaisance testified that he does not know the temperature of the cooling water exiting the engines. He testified that he does not know at what temperature the exhaust tube was exposed or for that matter how long it was exposed to the unknown temperatures. Oddly, he went so far as to testify that it was *not necessary* to know what the temperature would have been in the exhaust tube, referring to the very exhaust tube that he claims failed from high temperatures. (Exhibit 1, at 303 – 304, 343 – 344).

Again, Plaisance's actions demonstrate a shocking disregard for any scientific principles or methods. Based on the foregoing, Plaisance's opinion on the starboard exhaust tube should be exclude because is not based on sufficient facts or data, is limited to his personal observation, and therefore is unreliable under *Daubert*.

(b) Plaisance did not reliably apply the principles and methods to the facts of this case in reaching his opinion on the starboard exhaust tube and its relation to the cause of the fire aboard the Mr. Charlie, and the opinion is not the product of reliable principles and methods.

Plaisance did not reliably apply the principles and methods to the facts of this case in reaching his opinion on the starboard exhaust tube, and the opinion is not the product of reliable principles and methods, because his own testimony directly contradicts his opinions, and he did not conduct any testing to verify his opinion. Therefore any opinion based on such information is unreliable under *Daubert*.

Plaisance testified that he estimated the Mr. Charlie's voyage that day to be approximately two hours long. (Exhibit 1, at 382 – 383). According to his report of September 9, 2013, the manufacturer of the exhaust tube, Marine Exhaust Systems, had previously conducted test experiments of the nonmetal components of the exhaust system. Plaisance states the tests revealed "complete failure of those non-metal components was achieved at approximately 350° F within minutes." Plaisance testified that given the alleged lack of cooling water, the exhaust tube would have failed within minutes of running the engines. (Exhibit 1, at 511).

Plaisance fails to explain how the engine could be operational for approximately two hours without causing a fire, if the exhaust tube would have been compromised within minutes. According to Plaisance, and his understanding of the manufacturer's test results, the exhaust tubes should have failed within minutes of the engines running if there was insufficient water to cool the exhaust. Plaisance ignores this inconsistency and was actually so brazen as to claim that he did not need to know the details of the manufacturer's testing of the exhaust tubes. (Exhibit 1, at 351 – 352). The remains of the exhaust tube were sent to Dr. Kendall Clarke's office in order to determine whether the tube was burned from the inside, but no testing was conducted. (Exhibit 1, at 427).

In addition, Plaisance failed to take certain evidence into consideration. First, he failed to address or explain how the fire could have occurred from a lack of cooling water without activating the engine alarm systems. (Exhibit 1, at 377 – 378). Second, he failed to take into consideration the physical damage to the evidence from the resulting fire. (Exhibit 1, at 431 – 433). Last, he failed to even interview important witnesses such as the first responder on the scene, a marine police officer. (Exhibit 1, at 287 – 288).

Plaisance did not reliably apply the principles and methods to the facts of this case in reaching his opinion on the starboard exhaust tube, and the opinion is not the product of reliable principles and methods, because his own testimony directly contradicts his opinion, and he did not conduct any testing to verify his opinion. Therefore any opinion based on such information should be excluded as unreliable under *Daubert*.

(c) Plaisance did not reliably apply the principles and methods to the facts of this case in reaching his opinion on the origin of the fire aboard the Mr. Charlie, and the opinion is not the product of reliable principles and methods.

Plaisance's opinion on the origin of the fire is unreliable under *Daubert* because he did not reliably apply the principles and methods to the facts of this case in reaching his opinion on origin of the fire, and the opinion is not the product of reliable principles and methods.

Plaisance testified that the origin of the fire was determined to be at the starboard exhaust tube because of the amount of damage in that area, and lack of remains of the starboard exhaust tube compared to the port exhaust tube. He admits, however, that the largest single mass of loss was forward of the starboard engine, not in the location of the exhaust tube. (Exhibit 1, at 437 – 438). He admits that the starboard exhaust tube was exposed to trauma other than the fire itself. (Exhibit 1, at 431 - 433). He admits that the fuel from the generator could have contributed to the starboard exhaust tubes degradation. (Exhibit 1, at 464). In addition, he admits that the exhaust tube could have suffered degradation due to the external fire and that he does not know how much it would have contributed. (Exhibit 1, at 431 – 433).

Plaisance did not reliably apply the principles and methods to the facts of this case in reaching his opinion on origin of the fire, and the opinion is not the product of reliable principles and methods, and therefore should be excluded as unreliable, because in forming his opinion he failed to account for all the contributing factors related to the damage of the exhaust tube, and admits he does not know to the extent these factors contributed. Therefore, Plaisance's opinion on the origin of the fire is unreliable under *Daubert.*

Conclusion

Plaisance's opinion on the "starboard FRP exhaust tube burnt ends remaining" and the "area of origin and burn pattern," and its relation to the cause of the fire aboard the Mr. Charlie fails to meet the *Daubert* standards of reliability, and should be excluded accordingly, because (1) the opinion is not based on sufficient facts or data, (2) the testimony is not the product of reliable principles and methods, and (3) the expert has not reliably applied the principles and methods to the facts of the case.

Plaisance relied on the following factors in reaching his opinion as to the cause of the fire to the Mr. Charlie: (1) excessively fouled seawater scoop intake screen; (2) the main engine pump performance curve/flow rate specification and calculations performed; (3) gear (transmission) oil cooler found fouled with obvious marine growth present and visible; (4) starboard FRP exhaust tube burnt ends remaining; and (5) the area of origin and burn pattern found. Each one of these factors listed by Plaisance fails to meet the *Daubert* standards of reliability, and therefore his opinion as to the cause of the fire should be excluded as unreliable.

C. THE TESTIMONY WILL NOT ASSIST THE TRIER OF FACT, THROUGH THE APPLICATION OF SCIENTIFIC, TECHNICAL, OR SPECIALIZED EXPERTISE, TO UNDERSTAND THE EVIDENCE OR TO DETERMINE A FACT IN ISSUE.

Defendant and Counter Plaintiffs, Mr. Charlie Adventures and Kornegay, adopt and incorporate herein the facts and arguments set forth in Defendant and Counter Plaintiffs' Motion to Exclude the Testimony of Plaintiff's Expert Gary Jones, and Defendant and Counter Plaintiffs' Motion for Summary Judgment on breach of contract and bad faith claims against ASIC, filed contemporaneously herewith.

Plaisance's testimony should be excluded as cumulative under Rule 403 of the Federal Rules of Civil Procedure. Expert testimony must also satisfy other applicable rules of evidence. *Allison v. McGhan Medical Corp.*, 184 F.3d 1300, 1309 (11th Cir. 1999). As previously noted, ASIC has retained Gary Jones to provide testimony as to the cause and origin of the fire. Any opinion that Plaisance may provide as to cause and origin would be unnecessarily cumulative to Jones' opinion, and therefore should be excluded.

In *Crouch v. Teledyne Continental Motors, Inc.*, No. 10-00072-KD-N, 2011 WL 2600450 (S.D. Ala. June 29, 2011), this Court excluded two proffered experts from testifying as to the source or origin of an engine fire. This Court noted that both experts submitted almost identical reports, which summarized and "summarily put a stamp of approval" on the evidence. This Court found that one of the experts could be a qualified expert on the issue of causation, but he relied primarily on the investigation of other experts and simply put his approval on their findings. This Court did not find that his opinion would be helpful to the jury, and to the extent that his opinion was independent of the other experts, his testimony would be cumulative. *Id*. at *7-8.

In this case, ASIC has retained Gary Jones to provide testimony as to the cause and origin of the fire. Accordingly, any opinion that Plaisance may provide as to cause and origin would be unnecessarily cumulative to Jones' opinion and therefore unhelpful to the tier of fact. Based on the foregoing, Plaisance's testimony as to cause and origin should be excluded.

CONCLUSION

As demonstrated, Guy Plaisance is not qualified to offer testimony as to the cause or origin of this fire; his opinion as to cause and origin of the fire is not reliable as set forth in *Daubert*; and his opinion would be unnecessarily cumulative to Gary Jones' opinion, who is also expected to testify on the cause and origin of the fire.

WHEREFORE, based on the foregoing, Mr. Charlie Adventures and Kornegay respectfully request that Guy Plaisance's opinion as to the cause and origin of the fire aboard the vessel Mr. Charlie be excluded on the grounds that the proffered expert is not qualified to offer an opinion as to the cause and origin of the fire, his opinion fails to meet the *Daubert* standards of reliability, his opinion would be unnecessarily cumulative.

Respectfully submitted,

s/John D. Richardson
JOHN D. RICHARDSON (RICHJ4111)
AARON M. WILEY (WILEA4457)
Attorneys for Defendants/
Counter Plaintiffs

OF COUNSEL:

RICHARDSON LAW FIRM, LLC
P.O. BOX 81227
Mobile, AL 36689
Phone: 251.338.1695
Fax: 251.338.1698
Email: john@jdrlawfirm.com
Email: aaron@jdrlawfirm.com

CERTIFICATE OF SERVICE

I certify that I have on this the 15th day of July, 2014, electronically filed the foregoing with the Clerk of the court using the CM/ECF system and request the Court to serve the same electronically on the following:

Allen E. Graham
William E. Shreve, Jr.
Phelps Dunbar, LLP
P.O. Box 2727
Mobile, Alabama 36652

s/John D. Richardson
JOHN D. RICHARDSON

EXHIBIT 1

EXCERPTS FROM GUY PLAISANCE'S DEPOSITION

IN THE UNITED STATES DISTRICT COURT

FOR THE SOUTHERN DISTRICT OF ALABAMA

SOUTHERN DIVISION

CIVIL ACTION NO: CV-13-458

ATLANTIC SPECIALTY INSURANCE COMPANY,

Plaintiff,

vs.

MR. CHARLIE ADVENTURES, L.L.C. and KIM P. KORNEGAY,

Defendants.

DEPOSITION TESTIMONY OF:
GUY P. PLAISANCE
VOLUME I

ORIGINAL

DATE: April 22, 2014

TIME: 9:05 a.m.

REPORTED BY: Daphne M. Cotten, CSR

DAPHNE M. COTTEN, CSR
POST OFFICE BOX 2701
MOBILE, ALABAMA 36652
(251)379-0880

Q. Any records of your investigation into the fire on the MR. CHARLIE that you have withheld?

A. No, sir.

Q. So you either have delivered them to me or your lawyers for the insurance company.

A. Yes, sir, as far as I know I've delivered everything.

Q. Now, I ask you again about your qualification or documents reflecting training for marine fire investigation. Let me ask it another way. Is it in your resume?

A. Yes, it is.

Q. And that's reflected on this report?

A. Well, I sent separate documents in my file that showed the fire cases I worked on. I've not had any formal training as a fire investigator.

Q. Okay. Qualifications. By that, I assumed that you would defer to Gary Jones on all opinions regarding your fire investigation?

MR. SHREVE: Object to the form.

A. No, I wouldn't.

Q. So you haven't had any training, but you still want to offer opinions. Is that what you're saying?

MR. SHREVE: Object to the form.

A. Yes, sir.

Q. That's what I thought. Just wanted to make sure I understood you.

A. Okay.

Q. Qualifications and/or documents reflecting training for the MAN diesel engine and component parts. Have you supplied me those qualifications?

A. I'm not a MAN certified technician.

Q. You don't know anything about MAN diesel engines before you had this fire, do you?

A. Sure I have.

Q. What do you know about it?

A. That it's a diesel engine like the rest of diesel engines.
Q. Is that all you know, is it's a diesel engine?
A. I've surveyed many vessels in the past.
Q. With MAN diesels.
A. Many with MANS, and other engines.
Q. Have you ever worked on a MAN diesel engine?
A. Never worked on a MAN engine.
Q. Have you ever surveyed any with these 800 horsepower diesels that were in this particular boat?
A. I don't know for certain if I have or I haven't.
Q. But you're pretty certain about what you've done before. The fact is, you've never surveyed these type engines before that were involved in the MR. CHARLIE investigation.
A. I'm not sure how you know that.
Q. Well, you don't know. So how

would I know?

A. I know that I've surveyed many motor yachts over the last 14 years.

Q. My question is have you --

MR. SHREVE: Let him answer the question.

MR. RICHARDSON: He's answered it. Go ahead. Do the best you can.

A. To tell you -- I can't -- I don't keep track of what engines I survey. I've surveyed thousands of engines.

Q. Have you surveyed the type engine, the 800 horsepower MAN engine, that was in the MR. CHARLIE?

A. I don't recall.

Q. Okay. I asked you also for documentation reflecting your experience or prior investigations of diesel engines, fires on vessels.

A. Yes, sir.

Q. Have you supplied me with that?

A. Yes, sir.

Q. Did you have to have the guidelines, or did you have to look up anything?

A. No, I didn't, not on the guidelines.

Q. This one you were clear as a bell on.

A. Not clear as a bell, but it was fairly clear.

Q. Fairly clear.

A. Didn't take long.

Q. How long did it take for you to determine what caused this fire?

A. Exactly?

Q. First day?

A. No.

Q. Second day.

A. No.

Q. Third day.

A. No, sir.

Q. When did you come up with your opinion as to what caused the fire, how long after?

A. After we hired Gary Jones to help do the fire investigation.

Q. But you couldn't do it on your own, could you?

A. I'm not saying I couldn't do it on my own.

Q. You weren't qualified, were you?

A. I thought it was prudent to hire a fire investigator in this case.

Q. You weren't qualified to do it on your own, were you?

MR. SHREVE: Object to the form.

A. That's not the case.

Q. It just calls for a yes or no answer.

MR. SHREVE: He answered it.

MR. RICHARDSON: No, he didn't.

A. I believe I could have determined the cause of this fire, but I felt it was prudent to hire a fire investigator.

Q. And how did you go about selecting Gary Jones?

A. I knew Gary Jones from other

there?

A. They teach a little bit of everything on investigations, on marine investigations.

Q. Give me an example of what they teach.

A. Theft. Piracy. One of the courses that I attended in Baton Rouge pertained to fire investigations.

Q. How many hours was that related to fire investigation?

A. I think it was an eight-hour course. One day.

Q. One day. All right. What did you learn there in that eight hours?

A. All types of stuff about fires.

Q. Did you learn in your training there in that first eight-hour course that some fires can be undetermined, or did you learn that there's always an answer for every fire and that you can determine it?

A. I don't believe that topic was ever discussed.

Q. Did they ever tell you not to offer opinions on fire investigation in that course when you had insufficient evidence to produce that opinion?

A. I don't believe that was ever taught.

Q. Do you think that's important?

A. Do I think -- I'm sorry.

Q. Do you think it important not to produce an opinion on the cause of fire if there's insufficient evidence?

A. Yes, I do.

Q. Why?

A. Because you'd be wrong.

Q. Okay. Now, I'm trying to look through jobs here with your training. Let's see here. Let's get back here to July -- go back to June 2001 to 2005, marine surveyor, provided professional service including marine inspection, investigations, legal assistance, and project management to maritime companies, insurance companies, law firms, financial. Is that when you formed training.

Q. You call that training, where you just simply go out and try to determine what caused a fire on your own.

A. I've trained as a marine surveyor for the last --

Q. I understand that. You keep throwing that marine surveyor in there, and I'm asking you what formal training have you had as a fire investigator.

A. As a marine surveyor.

Q. And that's all.

A. Yes, sir.

Q. And it's on-the-job training.

A. Most of it is on-the-job training.

Q. You've never been to any school.

A. Not -- no, not what would be considered formal school for marine fire investigator.

Q. Okay. So you just go out. And who's training you, this guy that you work with, Jules?

A. Partially with Jules.

Q. And who else?
A. With other marine surveyors.
Q. Give me their names.
A. On the jobs that I attended, the fire investigation jobs. It's training when you go out and you learn how these fires start.
Q. Okay. How many fires have you investigated on the job?
A. For certain, I don't know, but somewhere 20, 25 probably.
Q. How many fires have you ever investigated on a yacht involving MAN diesels?
A. Never with a MAN.
Q. Okay. How many fires have you ever investigated that involve fires on yachts that were a result of an exhaust tube burning in two?
A. Never one before.
Q. This is your first rodeo.
A. Rodeo?
Q. Well, bad choice of words. This

Q. And who else?
A. With other marine surveyors.
Q. Give me their names.
A. On the jobs that I attended, the fire investigation jobs. It's training when you go out and you learn how these fires start.
Q. Okay. How many fires have you investigated on the job?
A. For certain, I don't know, but somewhere 20, 25 probably.
Q. How many fires have you ever investigated on a yacht involving MAN diesels?
A. Never with a MAN.
Q. Okay. How many fires have you ever investigated that involve fires on yachts that were a result of an exhaust tube burning in two?
A. Never one before.
Q. This is your first rodeo.
A. Rodeo?
Q. Well, bad choice of words. This

rules and regulations for building boats and how they're to be designed.

Q. American Society of Naval Engineers. What is that, another organization?

A. Yes, sir.

Q. Pay your dues?

A. Yes, sir.

Q. What do they send you?

A. You're entitled -- you can go online. They have all types of -- well, you can attend their training seminars. And they have --

Q. Have you ever done that?

A. No, I haven't.

Q. Okay.

A. I use their online webinars they have, they call them.

Q. National Association of Fire Investigators, are you a member of that?

A. Yes, sir.

Q. Have you been to their seminars?

A. No, I have not formally attended

any of their seminars.

Q. Now, Gary Jones down here is a member of that organization; is he not?

A. Oh, I don't know.

Q. But you've never been to one meeting of the National Association of Fire Investigators.

A. Not that I recall.

Q. You've never taken one of their seminars.

A. Nothing -- no.

Q. You consider them an accredited organization?

A. Yes.

Q. Do you consider them the leader in fire investigation techniques in this country?

A. They're probably one of the leaders.

Q. But you never found it necessary to go to one of their training seminars?

A. I haven't had an opportunity to personally.

Q. They ask you to?
A. I've been invited to, sure.
Q. But you turned them down?
A. I've not had an opportunity to go.
Q. All right, your certification. You're an accredited marine surveyor, right?
A. Yes, sir.
Q. And we've already been over that. You're accredited through SAMS, right?
A. Yes, sir.
Q. And you're certified by the International Association of Marine Investigators (former Director of MS). What does that mean?
A. I was -- for the International Association of Marine Investigators, I was formerly the Director for the state of Mississippi.
Q. Vessel security officer. We already know about that, right?
A. Yes, sir.
Q. You're a good radar observer, right? It says unlimited, so I guess you're

Q. When were you first assigned to this case?

A. I think it was March 4th, 2013.

Q. And what were you asked to do?

A. To investigate this loss.

Q. Were you asked to determine the cause and origin? Asked to determine the amount of damage? I'm trying to determine what your role was by this insurance company, what they asked you to do in this loss.

A. To investigate the loss.

Q. To determine what?

A. Initially, the cause and origin.

Q. Okay.

A. And the cost -- if it was repairable, to find out how much it was going to cost to fix it.

Q. So you were assigned by the insurance company in this case to determine the cause and origin of the fire.

A. Yes, sir.

Q. And did you tell them that you did

not have any training in determining cause and origin of fires?

A. I didn't have to.

Q. What do you mean by that?

A. Because I've done numerous jobs for this company, they know my expertise.

Q. So when they assigned you the case, they were fully cognizant of your qualifications to determine the cause and origin of this fire.

MR. SHREVE: Object to the form.

A. They knew that I would take it as far as I could, and if it became necessary we would hire the next proper people to work with us.

Q. In fact, you did hire an additional person.

A. Correct.

Q. And who was that person?

A. It was Gary Jones.

Q. And when did you make that determination, that it was beyond your expertise?

MR. SHREVE: Object to the form.
A. I don't know if it was the first week, within a few days. I don't recall.
Q. But you determined at some point that this fire and the cause was beyond your expertise and you needed help.
A. I felt it was due diligent to bring in a fire expert in this case.
Q. My question was did you feel that it was beyond your expertise?
A. No.
Q. So all along, you felt it was within your expertise but you still wanted Gary Jones to back you up. Is that what you're telling me?
A. No.
Q. I can't understand why you hired, or asked this insurance company to hire, Gary Jones if you were qualified.
A. Because when you're dealing with this amount of a claim and you want to make certain that you're not making a mistake, then you hire other experts to make certain.

Q. Whose idea was it to hire another expert, was it yours or was it the insurance company's?

A. It was mine.

Q. Okay. Now, in doing investigation, you are conscious of the need to avoid despoliation of evidence; are you not?

A. Yes.

Q. And you've known that for a long time, haven't you?

A. Yes.

Q. Why is it necessary to avoid despoliation of evidence?

A. So it can be examined at a later date.

Q. By who?

A. By any parties that are involved that need to investigate.

Q. So the idea of despoliation of evidence is to put the opposing party on equal footing with you so they'll have an ample opportunity to examine the evidence.

engine as a result of it being run hot after it was removed, did you?

A. We didn't find any catastrophic failure in that engine, that's correct, from running hot.

Q. Did you find any evidence that that engine had run hot?

A. No. The engine was burned. There was no catastrophic damage to that engine.

Q. Not catastrophic. Did you find internally any evidence that that engine had run hot?

A. It wasn't possible to determine if it had run hot or not by the disassembly that we took.

Q. Okay. And that's what your testimony is here today.

A. Based on the evidence of what we exposed inside that engine, there was no catastrophic failure from overheating of that engine from lack of cooling water.

Q. Now, did you disassemble the port engine?

A. No, we did not.
Q. Why not?
A. Because it became not necessary.
Q. Why?
A. Because we determined that there was no overheating of the starboard, so it was not necessary to go to that extreme on the port.
Q. Okay. So you ruled out the port engine as being a significant, or any, cause of the fire --
A. Absolutely.
Q. So that was ruled out on what date?
A. I believe it was ruled out the date that Gary and I attended, on the 28th.
Q. March 28th.
A. Right.
Q. Now, you had already observed the marine growth by the 14th that was on the strainers?
A. I observed the marine growth on the 8th of March during my initial

Q. You read it?
A. Yes, sir.
Q. Let me ask you some questions, if I could, please. It says here, and this is on March -- this is an email you sent to Rita Boggan with a copy to Gary Jones, right?
A. Yes, sir.
Q. It says, "We are narrowing in on the origin of the fire and found new evidence which is pointing us more towards the likelihood of a severe overheating on the starboard main engine as previously suspected."
Now, what evidence did you find that indicated that you had a severe overheating in the starboard main engine?
A. Well, that phrase actually should have continued and not just limited. It was unknown for certain if it was starboard main engine or just the exhaust system of the starboard main engine.
Q. So that mistake -- you made a

mistake there, right?
A. Yeah. We all make mistakes.
Q. Yeah, I know. But you really made a mistake in putting that one down, though, didn't you?
A. No, I don't believe I did.
Q. But the sentence should have extended out, right?
A. It should have included the exhaust system, which doesn't take long to clear that up.
Q. Yeah. Okay. The fact is, you had formed an opinion that that starboard engine had overheated and caused that exhaust tube to burn out; had you not?
A. It was my -- based on the current information that I had at the time --
Q. Which was March 29th.
A. The day after my second inspection out there with Gary Jones, I did believe that it was possible that the engine had overheated. But it was -- I did believe that the exhaust had overheated.

Q. In fact, sir, you thought that starboard engine was going to wrap the case up for you, didn't you?

A. Not necessarily.

Q. And you told this insurance company that -- you didn't just say overheating, you said severe overheating.

A. Okay.

Q. The fact is, when you broke the engine down, it didn't have any severe overheating, did it?

A. Correct.

Q. So now you kind of have an engine with no overheating and you've got what you opine to be the cause of the fire, which is that starboard exhaust you say burned in two or through and it let hot gases get out, didn't you?

A. That's correct.

Q. But now you've got to find a way out. Because you found out the engine had been broken down and it didn't overheat, hadn't you?

(WHEREUPON, DEFENDANTS' EXHIBIT NUMBER 25 WAS MARKED FOR IDENTIFICATION)

Q. Let me show you, on March -- read that, Exhibit 25.

MR. SHREVE: Tell him who it's from and to.

Q. Can you identify that?

A. Well, it appears to be an email from me to Rita Boggan. I didn't catch the date at the bottom where she said she agreed or noted.

Q. On Wednesday, March 27th, at 5 o'clock, she wrote you -- in any event, you sent this to Rita, right? It says, "Once the starboard engine is tore down and inspected and if resulting evidence concludes that an overheating condition occurred, it may serve us well to duplicate this process on the port main engine for confirmation and comparison of the overheating condition." Is that what you told her?

A. Apparently.

have to accept those numbers.

A. Right. And they're numbered correctly. I addressed this question to these three people in this entire email.

Q. I'm not trying to trick you, I'm just trying --

A. I'm just trying to be clear that we've got all the documents.

Q. I'm just trying to be clear of what we're doing here, you know. 2271 and 2272 go together.

A. Yes, sir.

Q. I gotcha.

A. And that's cover page.

Q. All right. So we're going to call all this -- I'll just write 27-1 and 2.

Looking at Exhibit 27 here, this is from you and it's going to Jones, Elliott, Holloway, and a copy to Boggan, right?

A. Yes, sir.

Q. It's a report, isn't it? It says --

A. I don't know if you'd consider it a report. I'm not sure if it's a report.

Q. Well, I don't know. You tell me. You describe it. I don't want to describe your work, or how you describe it. I mean, it's an email, it's some kind of report or document. You can call it what you want.

A. Well, it's more of sending them some information that I've determined already based on what I knew asking them some specific questions.

Q. Okay.

A. And then at the end I asked them if there's any way we can resolve this matter and pin-point a reasonable, logical cause for the fire.

Q. Okay.

A. Based on the information that I sent them, and other information they already had.

Q. Okay. And it's dated 4/20. So you've been on the case about six, seven weeks, right?

A. Yes, sir.

Q. And you haven't been able to document the cause of the fire.

A. Well, we had narrowed down what we already believed was the source of the fire based on Gary Jones and I's, you know. But we didn't want to jump the gun and miss anything, so we were trying to be very thorough about this.

Q. Okay. You talk about PDF files for some of the MAN engine exhaust hose and glass pipe. Then you say if exhaust temperature goes up around 1000, 1100, and the hose and pipe after the risers are rated for 257-300 F, it does not seem that it would take much of a loss of seawater cooling flow into the exhaust in order to get the temperatures climbing fast. You've got a question mark. Is that a question you're stating, or you want them to comment on?

A. I'm expecting a comment.

Q. Did they comment?

A. I don't recall.
Q. They didn't comment, did they?
A. Maybe not in writing. We may have had phone conversation about it.
Q. So you just chatted about it, right?
A. Maybe so.
Q. Now, who did the chatting?
A. All of us. We all talked occasionally.
Q. What did they tell you?
A. Honestly, it's all in my report. It's all in my reports. You've received my survey report and you've received my expert report. And everything that we alluded to is in my report.
Q. So the report is the Bible.
A. It is my opinions as to what the evidence presented.
Q. Okay. My primary question, primary -- what do you understand primary to be?
A. Number 1?

Q. Yeah. Let's read it. "Would it be possible for the exhaust temperature to get above 257 degrees Farenheit with limited seawater flow through the engine and the engine not drastically overheat to a point of failure, yet the hot exhaust gas start burning the hose and gas pipe?"

Now, isn't that what I asked you a while ago, whether after you had found out the engine did not overheat, did you then search for another reason why that exhaust tube you thought could be burned without the engine overheating?

A. I'm not sure I understand that question.

Q. You didn't understand it a while ago when I asked, huh?

A. Well, I'm -- you know, you've asked me a lot of questions. If you want to refer back to that question and me revisit it --

Q. The record will show what I asked you.

A. Okay.
Q. Did you ever get an answer to this primary question?
A. I don't know if I did. I don't know if I did in writing.
Q. Well, did you get one orally?
A. I possibly did.
Q. Who would have given that oral --
A. Could have been any one of the three of them. Or it could have been all of them. I don't know the answer to that.
Q. So you can't name any one of the three that orally told you that can happen, that you could burn through that exhaust tube without having an overheating --
A. It would not have been Gary Jones.
Q. Okay. So it was Jones.
A. I say it would not have been Gary Jones.
Q. So who could it have been, Elliott or who, Holloway?
A. It would have been more likely Tom Elliott.

Q. And Tom Elliott told you that.
A. He did not tell me -- you're trying to put words in my mouth.
Q. I'm trying to ask you who told -- you asked -- that was your primary question.
A. Correct, it was a question.
Q. And I want to know who answered it.
A. I'm not telling you anybody answered it, I'm telling you I don't know if anybody answered it.
Q. Okay. Based on weather history, ambient temperature late that afternoon would have been around 45 degrees Farenheit and water temperature around 55 degrees Farenheit estimated. Now, you gave them that information, right?
A. That's correct.
Q. You gave them all the information you could.
A. At the time.
Q. At the time. But you can't sit here today and give me -- tell me that Tom

Elliott or Ralph Holloway told you that that exhaust tube could burn a hole through it without overheating that engine.

A. I can't tell you whether they did or they didn't.

Q. Even though that's your primary question. You said primary. It was significant.

A. I wouldn't have pursued it further had I got no answer from anybody. I'm sure somebody concurred, and I would assume that it was Tom Elliott. I don't know for certain. But Tom and I had lots --

Q. And you didn't write it down?

A. He may have sent me an email and responded back. I don't know.

Q. Have you produced that email?

A. If I did, it's in the file.

Q. And if there's not one in the file, then he never sent it, right?

A. He may not have sent an email response. He may have said verbally, over the phone, to me.

Q. If I go down there and take Tom Elliott's deposition, put him under oath, he's going to tell me that he answered that question that you asked him here?

A. Possibly. And maybe very possible. Tom's not gonna lie about it.

Q. The engine was shutting down for a reason, and we need to get to the bottom of why, if possible, by coming up with a reasonable scenario that would match up with what we know and what the owner has stated. Did you ever come up with a reasonable scenario?

A. Yes.

Q. And what was that?

A. What's in my report.

Q. And refresh my memory. What was your reasonable scenario? I don't want to get your report out now, we're going to get to that later. What was your scenario? You said --

A. Lack of seawater cooling burnt the exhaust out.

Q. Did you do the calculations?
A. No, I did not, I relied on experts to do the calculations.
Q. Who did the calculations?
A. John Moran.
Q. Is that the guy you called on the telephone?
A. John Moran who said -- submitted emails. I submitted what I had to him. They're the manufacturer of the screen. He supplied me the calculations.
Q. Okay. But didn't Mister -- we'll cover this later -- but didn't you spend a bunch of time sending him stuff, and it was on the wrong engine?
A. On the wrong engine?
Q. The wrong engine? The wrong calculations?
A. We sent him some preliminary data that was for a MAN pump that was not the pump for this engine. Preliminary data. Then we sent him --
Q. Go ahead.

A. Then we sent him the correct data.
Q. Why did you send him the wrong data, trying to --
A. Because it was all that we had initially.
Q. So all you had initially, it was wrong, and you sent that to the engineer even though it was wrong? And you just --
A. We didn't know that it was wrong at the time.
Q. How did the light bulb go off in your head that you had sent him the wrong information?
A. The light bulb stays on in this head.
Q. Does it?
A. Yes, it does.
Q. Well, maybe you've got electrical problems.
A. Now, you want to repeat what your question is? I'll be happy to answer it.
Q. Yeah. Why question is this. Why did you send that engineer that you got on

the phone -- have you ever met John Moran?
A. Only on the telephone.
Q. Oh, you just called this guy up on the telephone, right?
A. No, I was referred to him through the manufacturer's representative over the telephone.
Q. You call this guy up on the telephone and you send him wrong information.
A. In your opinion.
Q. Well, didn't you tell me you sent him wrong information?
A. Sent him preliminary data that we had that we believed was the correct pump curve for that engine, which turned out it was not and we later sent him the correct pump curve.
Q. Who had to call your attention to the fact that you sent him wrong information?
A. Nobody. I called it on myself. I found, and I kept digging until I found, for

(WHEREUPON, DEFENDANTS' EXHIBIT NUMBER 25 WAS MARKED FOR IDENTIFICATION)

Q. Let me show you, on March -- read that, Exhibit 25.

MR. SHREVE: Tell him who it's from and to.

Q. Can you identify that?

A. Well, it appears to be an email from me to Rita Boggan. I didn't catch the date at the bottom where she said she agreed or noted.

Q. On Wednesday, March 27th, at 5 o'clock, she wrote you -- in any event, you sent this to Rita, right? It says, "Once the starboard engine is tore down and inspected and if resulting evidence concludes that an overheating condition occurred, it may serve us well to duplicate this process on the port main engine for confirmation and comparison of the overheating condition." Is that what you told her?

A. Apparently.

Q. Did you do the calculations?
A. No, I did not, I relied on experts to do the calculations.
Q. Who did the calculations?
A. John Moran.
Q. Is that the guy you called on the telephone?
A. John Moran who said -- submitted emails. I submitted what I had to him. They're the manufacturer of the screen. He supplied me the calculations.
Q. Okay. But didn't Mister -- we'll cover this later -- but didn't you spend a bunch of time sending him stuff, and it was on the wrong engine?
A. On the wrong engine?
Q. The wrong engine? The wrong calculations?
A. We sent him some preliminary data that was for a MAN pump that was not the pump for this engine. Preliminary data. Then we sent him --
Q. Go ahead.

A. Then we sent him the correct data.
Q. Why did you send him the wrong data, trying to --
A. Because it was all that we had initially.
Q. So all you had initially, it was wrong, and you sent that to the engineer even though it was wrong? And you just --
A. We didn't know that it was wrong at the time.
Q. How did the light bulb go off in your head that you had sent him the wrong information?
A. The light bulb stays on in this head.
Q. Does it?
A. Yes, it does.
Q. Well, maybe you've got electrical problems.
A. Now, you want to repeat what your question is? I'll be happy to answer it.
Q. Yeah. Why question is this. Why did you send that engineer that you got on

the phone -- have you ever met John Moran?
A. Only on the telephone.
Q. Oh, you just called this guy up on the telephone, right?
A. No, I was referred to him through the manufacturer's representative over the telephone.
Q. You call this guy up on the telephone and you send him wrong information.
A. In your opinion.
Q. Well, didn't you tell me you sent him wrong information?
A. Sent him preliminary data that we had that we believed was the correct pump curve for that engine, which turned out it was not and we later sent him the correct pump curve.
Q. Who had to call your attention to the fact that you sent him wrong information?
A. Nobody. I called it on myself. I found, and I kept digging until I found, for

certain whether that was the correct. Because I had not a piece of paper in my file that proved that that pump data was the correct data for that engine. So I made MAN continue to source out and get me the correct data. Yes, sir.

Q. See if you recognize those emails.

MR. SHREVE: Who produced those? Where did they come from?

MR. RICHARDSON: I don't know. Let's look on them. It says to Guy Plaisance.

(WHEREUPON, DEFENDANTS' EXHIBIT NUMBER 28 WAS MARKED FOR IDENTIFICATION)

Q. Look at Exhibit 28. On September 3rd, 2013, Mr. Moran says, "Guy, after looking at the information you just sent, I don't believe we have the correct pump information yet. For the blank engine you highlighted, the water flow requirement is 240 liters a minute, but the 3 pump curves shown appear to be for the larger engines."

GUY PLAISANCE

From: John Moran [john.moran@hendrickmfg.com]
Sent: Friday, September 06, 2013 12:14 PM
To: Guy Plaisance
Subject: RE: Hendrick Perforated Screen

Guy,

After reading through this spec sheet, which isn't related to any of the information from the other sheets, I think the same basic problem exists. The screen was too clogged to flow the required amount of water (400 l/min or 450 l/min). The pressure loss was too great for the pump to overcome. Unless the pump is made to operate at a higher vacuum it probably wouldn't flow enough water.

John

EXHIBIT 28 Plaisance

From: Guy Plaisance [mailto:captguy@cableone.net]
Sent: Thursday, September 05, 2013 7:01 PM
To: John Moran
Subject: Re: Hendrick Perforated Screen

John,

Please see the attached pump parts sheet and engine data sheets.

I am waiting on MAN to send me the actual pump curve for this pump and the flow rates for this pump.

400 liter a minute is minimum for this engine/pump.

Best regards,

On Tue, Sep 3, 2013 at 3:44 PM, John Moran <john.moran@hendrickmfg.com> wrote:

Guy,

After looking at the information you just sent, I don't believe we have the correct pump information yet. For the D2866LE engine you highlighted, the water flow requirement is 240 liters/min; but the (3) pump curves shown appear to be for the larger engines. The original 450 liter/min curve you sent is for a D28 V series engine, but the engine you have highlighted is the D2866LE engine which doesn't appear on any of the charts.

The lower flow requirement will change the calculations, but having the correct curve is necessary to know if the pump would fail with the clogged screens. I also noticed that the pumps are rated at the optimum engine speed and drive ratio. We would need to know if the drive ratio was correct, the engine was running at full speed, and the how the pump would react if the engine wasn't running at the rated speed.

Hope this helps.

John

From: Guy Plaisance [mailto:captguy@cableone.net]
Sent: Tuesday, September 03, 2013 3:10 PM

To: John Moran
Subject: Re: Hendrick Perforated Screen

John,

I spoke with Dr. Kendall Clarke who is working for us as an expert on this matter and he mentioned that he had spoken with you.

I did manage to get this Eng/pump data from the engineers at MAN Eng Co. last Friday.

I would be interested in knowing if any of this new data changes or affects what you last sent me below?

Best regards,

On Wed, Aug 21, 2013 at 3:08 PM, Guy Plaisance <captguy@cableone.net> wrote:
Got it John and thank you very much for your support and getting back so quickly.

Best regards,

On Wed, Aug 21, 2013 at 2:36 PM, John Moran <john.moran@hendrickmfg.com> wrote:
Guy,
That open area raises the required velocity to over 640 ft/min which is off the chart for pressure loss calculations – there is a formula but I would have to find it, but I do know that the flow resistance roughly increases exponentially with velocity.

Knowing that we were estimating 40" H20 vacuum before – the new vacuum on the pump inlet side would be off the chart for pump operation (more than 55" of H20 vacuum).
The pump would not have been able to flow 450 liters/min of water no matter how low the head pressure was.

From a similar experience with a pump in a spray wash treatment system, I would guess that the impeller was all chewed up from cavitation created by the restriction.

John

From: Guy Plaisance [mailto:captguy@cableone.net]
Sent: Wednesday, August 21, 2013 2:58 PM
To: John Moran
Subject: Re: Hendrick Perforated Screen

Hey John, thank you much for the reply and that new information.

We have analyzed the starboard screen that was fouled with the marine growth using a digital photographic software program and have determined that it only had 3.55 sq. in of open area or 1/5 (20%), of the designed flow as compared with a new clean screen.

Can you tell me what that would do to the same pump based on the curve?
Best regards,

On Wed, Aug 21, 2013 at 1:11 PM, John Moran <john.moran@hendrickmfg.com> wrote:
Guy,
Attached is a revised flow calculation based on the open area you provided. To summarize what I calculated last time and this time:

1. With a vacuum of 20" H20 from the screen, the pump should flow the 450 liters/min that it was rated for with a head pressure of approximately 23 psi. The head pressure would come from the intercooler, engine passages, and nozzles into the exhaust. If the head pressure was lower than 23 psi the pump would not have to work very hard to flow 450 l/min.

2. In the corroded state the vacuum would have been raised to 41" H20, reducing the head pressure allowed for flowing 450 liters/min to approximately 11 psi. If the pressure from the components upstream of the pump was greater than 11 psi the pump would not flow the required amount of water. If the head pressure was 11 psi, the pump would be working at it's maximum capacity.

Hope this helps, if you need anything else just let me know.

John Moran
Engineering Manager
570-267-1924 direct

From: Guy Plaisance [mailto:captguy@cableone.net]
Sent: Tuesday, August 20, 2013 7:45 PM
To: John Moran
Subject: Hendrick Perforated Screen

John,

You may recall that I was working on a project that involved using a Hendrick perforated stainless steel screen with .0125 dia holes.

This screen is used on a Groco item # APHS-3000-2 bronze sea strainer which has a flange around the perimeter of the unit in which the screen fits into and mid section cross bar brace down the length to keep the screen from collapsing inward. (See Groco Screen part #93-3000-2 PDF)

We have calculated the total open area of that screen to be 17.6 in^2, after making a deduction for the lost open screen area taking into account the perimeter mounting flange and mid bar cross brace of the strainer as designed by Groco.

You may recall our pump requires a minimum flow of 450 Litres per minute. (See your attached calculation sheet)

Also attached is the pump curve, Groco Thru-hull and screen curve, all 3 are pdf files.

Would it be possible for you to run a new flow calculation of that screen using this new information open area?

Any help you could provide on this John would be greatly appreciated.

Best regards,

--

Capt. Guy P. Plaisance, AMS #942

Atlantic, Gulf & Pacific
Marine Surveyors and Consultants, Inc.
(228) 222-1275
captguy@cableone.net
agpmarine@live.com

--

Capt. Guy P. Plaisance, AMS #942

Atlantic, Gulf & Pacific
Marine Surveyors and Consultants, Inc.
(228) 222-1275
captguy@cableone.net
agpmarine@live.com

--

Capt. Guy P. Plaisance, AMS #942

Atlantic, Gulf & Pacific
Marine Surveyors and Consultants, Inc.
(228) 222-1275
captguy@cableone.net
agpmarine@live.com

--

Capt. Guy P. Plaisance, AMS #942

Atlantic, Gulf & Pacific
Marine Surveyors and Consultants, Inc.
(228) 222-1275
captguy@cableone.net
agpmarine@live.com

--

Capt. Guy P. Plaisance, AMS #942

Atlantic, Gulf & Pacific
Marine Surveyors and Consultants, Inc.
(228) 222-1275
captguy@cableone.net
agpmarine@live.com

A. Right.
Q. Do you understand what 400-liter a minute means to a pump manufacturer?
A. It means 400 liters a minute.
Q. What does that mean that it can do, that pump can do?
A. 400 liters a minute.
Q. That's the max it can do.
A. Right.
Q. Or is it the minimum it can do?
A. Well, it depends on what it says. They specify. It specifies maximum or minimum. And for you to ask me that, I'd have to see all the documents.
Q. Well, let's go on up here.
A. I'm not going to make that mistake.
Q. John Moran said then on September 6th, a day later, "Guy, after reading through this spec sheet, which isn't related to any of the information from the other sheets, I think the same basic problems exists. The screen was too clogged

to flow the required amount of water, 400 minimum, or 450 minimum. The pressure loss was too great for the pump to overcome. Unless the pump is made to operate at a higher vacuum, it probably wouldn't flow enough water."

A. Right.

Q. He says I think.

A. He deals with pump curves every day of his life.

Q. I understand.

A. He's already done the pre-calculations on the other one. And he's now saying based on that date he already has formed his opinion.

Q. No, he says I think.

A. Okay. So you call it think. I take that as that's his opinion. He's a professional.

Q. Because you left off when you quoted in your report the words I think. You left out that. You left out that entire sentence, I think the same basic problem

A. I think that's very debatable.

Q. Oh. Well, why wouldn't you think that the Coast Guard and/or the marine police would be important investigating a fire on the water?

A. Because unless there's some loss of life or personal injury and an upfront reason of criminal activity, meaning that there's no doubt that somebody -- there's nobody on this boat and this boat burned, then they might investigate more so than on an incident where an owner is running a boat and can give an upfront verbal accounting of what happened.

Q. Well, wouldn't it be of interest to you to talk with the marine police officer? You never did, did you?

A. No. I received a report.

Q. But did you ever call him up on the phone and talk with him?

A. I don't recall.

Q. If he says you did not, would you dispute that?

A. No.

Q. But you don't think it important to call the police officer that first got to the scene to get his account of what he saw?

A. Sometimes it is.

Q. You didn't think it important in this case?

A. I did not.

Q. And did you think it important to determine whether he thought there was any suspicious activity regarding the fire?

A. I believe that would have been in his report.

Q. Well, I've got the report right here. Let's talk about it. But I don't understand why you don't think that the first officer on the scene should be interviewed and his findings discussed. Can you explain that a little more to me?

A. I got an account from the owner of what he said happened.

Q. But you don't believe him.

A. I didn't have a report.

Q. Do you recognize that, sir?

A. Yes, sir.

Q. Exhibit Number 34?

A. Yes, sir.

Q. All right. A few questions. I think we may have covered some of it.

One of the paragraphs down at the bottom says, "Based on what the assured has reported concerning engine dying three times and being restarted each time until smoke appeared coming from the machinery space, it is our current view that the starboard main engine was very possibly being forced to remain running by the assured to the point of a severe overheating condition as a result of low flow rate of raw water cooling to the engines.

This is a result of raw water inlet strainer on the bottom being heavily impacted with marine growth." And that was on March 29th.

A. Okay.

Q. And then you go on to say, "This

overheating condition on the starboard engine could have created an intense exhaust heating in as much as 1300 degrees Farenheit (hot exhaust gas) which would have melted the neoprene rubber hose "boots" connecting the fiberglass exhaust tube to the riser and discharge tube.

There is evidence of severe heat, intense burning on the inside of the remnants of the starboard fiberglass exhaust tube which indicates such a condition occurred.

Based on the current evidence, it appears that this starboard exhaust is where the fire began." It was your opinion then and that remains your opinion now, doesn't it?

A. It's fairly close to that, that's correct.

Q. We now know that the starboard engine didn't overheat, though.

A. Correct. Only the exhaust system.

Q. Now, what testing have you done to

determine how the exhaust system tube, as you call it, will fail? By that I mean -- how does it fail? I mean, when you say the word fail, a lot of things come to my mind. What's your -- what are you saying here as to how it failed? Give me your scenario.

A. Lack of consistent flow of cooling water being injected into the riser that would be cooling the main engine exhaust.

Q. And that was what -- what is commonly known as a showerhead.

A. Correct.

Q. The showerhead is basically just like a shower in my house, it's got the circular spray, a lot of holes. Some are designed to spray at the top of the tube as opposed to the bottom of the tube.

A. Correct.

Q. For a purpose. And what purpose is that?

A. The purpose of more holes at the top than less?

Q. Than the bottom.

Q. Now, when that little bit of water enters that exhaust tube, at what temperature would that water be?
A. It depends.
Q. Well, just -- would it have heated from a different temperature than it was when it left the ocean up into the engine when it exited? Now, it's made the rounds, it's made --
A. Well, of course --
Q. Listen to what I'm saying. It's come up into the engine, it's made its round, done its job, whatever amount it was, and it's going back into that tube, right?
A. Correct.
Q. Okay. Now, my question is, what is the temperature of that water on its exit into that tube?
A. We don't know that.
Q. Okay. Let's just say that the pumps were working a hundred percent. I want you to assume that. The engines were heated up, warmed up. Would a person be

able to take his hand and go to the back of the exhaust and put it under the water coming out of the exhaust and not be burned?

A. Theoretically, yes.

Q. So if it only had some water going out, which we've agreed, how much water would have to exit that exhaust to keep your hand from being burned?

MR. SHREVE: Object to the form.

A. We have no way of knowing that.

Q. Would any water exiting that engine into that exhaust tube have cooled in any form or fashion the air that was in that exhaust tube?

A. Possibly.

Q. Okay. So now we have reduced the temperature in that exhaust tube by whatever amount of water, but the fact it's got some water in it, it has reduced the ambient temperature in that exhaust tube, hasn't it?

A. I disagree with that.

Q. What temperature is the exhaust gases, assuming it has no water, that exits

that it started creating a negative vacuum. I can't tell you that. Can a pump curve expert possibly tell us that? Possibly. John Moran already gave us his synopsis.
Q. He says I think. And you don't even know this John Moran. What is his background?
A. I know he's an engineer that works for the screen manufacturer that manufactures the screen on his boat.
Q. An engineer. I mean, what kind of engineer is he? Did you ever ask him?
A. I don't need to know what type of engineer.
Q. Wait a minute. You've got in your hands an $800,000 claim, and you're calling up some guy on the phone you've never met and he tells you he's an engineer, right?
A. Yes, sir.
Q. What type of engineer was he?
A. He's a mechanical engineer.
Q. Okay. And you know -- how do you know? Did you look him up?

A. We talked about it. We discussed it.

Q. Where did he say he went to school?

A. I didn't ask him where he went to school.

Q. Well, he didn't go to Covington High, did he?

A. It wasn't important.

Q. So he said he's a mechanical engineer. How did you know he was capable of giving you the answers you wanted?

A. Because he represents -- he is a major manufacture engineer for the corporation. And I don't believe that this corporation would hire a man that is not qualified to be the engineer that represents them.

Q. What corporation are you talking about?

A. The screen manufacturer.

Q. Okay. Let's talk about that a minute. Those particular screens are sold

A. Well, if the screen was -- well, no. With the same exact scenario with the screen as it is, no. With the exhaust burnt, everything exactly the same? No, at this point --

Q. Let's just say --

MR. SHREVE: Wait a minute.

MR. RICHARDSON: I'm sorry. I thought he was through.

MR. SHREVE: Let him finish.

BY THE WITNESS:

A. If you're asking me if all that changed is the flow rate on that screen, the evidence would still point to the exhaust tube burning out.

Q. Suppose it was 80 percent open and only 20 percent clogged. It would still point to the exhaust tube, wouldn't it?

A. It wasn't 80 percent. You're asking me -- it's not a viable --

Q. I want to know at what point that screen is open enough to accommodate the water flow through that engine and out that exhaust to prevent this so called burn-thru opinion of yours.

A. At what point?

Q. Yeah. How much opening would have to be open?

A. According to the exhaust manufacturer's recommendations, as soon as you start to lose flow, you have compromised that exhaust system.

Q. That's the question I'm asking you, at what point would the screen have to be clogged to cause you to lose flow.

A. That's a loaded question.

Q. I know it is. I meant it to be.

A. Because you have to know what RPM you're running, you have to know all the particulars.

Q. We know 1600 RPMs, in fact, here. So my question is if you've got a screen here, this screen here, and this is the screen, how much of it would have to be clogged before you would start having the --

Q. When would you have hauled it?
A. I would have hauled it a minimum of a year, and I would have had somebody checking it in between.
Q. And if he was checking it in between, wouldn't that be sufficient? He's a diver.
A. Not based on what I saw.
Q. So you're saying he didn't do a good job when he tried to clean it, right?
A. Yes.
Q. Okay. Now, never did finish up with my question concerning the flow of water out those exhaust tubes. Would the fact that it had seawater going through that exhaust tube that had circulated through that heat exchanger and out that end, would that have cooled the -- whatever amount of water it was, would it have cooled the temperatures in the exhaust tube?
MR. SHREVE: Object to the form.
A. I think there's a point when if a trickle of water is going in that tube, it

ain't gonna make a difference.

Q. Well, we know it was more than a trickle, because it never overheated the engine, right?

A. It never -- according to the doctor, it never overheated to the point of an alarming.

Q. Okay. But you've done no calculations or not inquired at the time the company denied this loss as to what the temperature would have been in that exhaust tube with any amount of water running through it, right?

A. It wasn't necessary.

Q. Who was the manufacturer of this exhaust tube?

A. Marine Exhaust Systems, to my knowledge.

Q. What do you mean to your knowledge? I don't understand what you mean when you say to my knowledge. Do you base that on looking something up on the internet, or did they tell you that?

of the tube, at 350.

Q. Degradation. It sounds to me like we're cooking now, we're baking.

A. At 350 degrees, you're starting to have failure.

Q. And so how thick is this tube?

A. Oh, I don't know what its exact thickness is.

Q. So when does it allow the exhaust gases to get into the engine compartment?

A. However long it takes 600 to 1150 or 1200 degrees to burn through that exhaust tube, that fiberglass tube. I don't know how long it takes.

Q. And what testing did they say they had done to prove such a thing?

A. They've actually conducted a live sea trial to demonstrate the destructive mode of that pipe.

Q. And what engines did they use?

A. He didn't tell me. It didn't matter what engines.

Q. Okay. So they took it out. Did

they burn the boat up?

A. No, they took it out and they burnt an exhaust tube out.

Q. And then they shut the engine down before it caught everything on fire?

A. I didn't ask him all the details. I didn't need to.

Q. That wasn't important to you?

A. It wasn't important.

Q. Well, did you ask them for a video of it?

A. No, I did not.

Q. But they said that they had done that, right?

A. That's correct.

Q. Did you acquire any literature on this exhaust tube?

A. Yes, I did.

Q. Where is it?

A. It's in the file.

Q. And you've produced that to me?

A. Yes, sir.

Q. Okay. So when the exhaust gases

Do you have an opinion as to the quality of this navigation system?

A. Based on my finding, it looks pretty high tech.

Q. And then you list all the other equipment down there; do you not?

A. Yes, sir, I do. In general, yes.

Q. Then the next page is a copy of the bridge, right?

A. Yes, sir.

Q. Now, you have on the second page what's marked Bates 2879, page 2 of 23 here, a picture of the exhaust and engine room temperature warning alarms, and you have arrows pointing to it. Do you see that?

A. Yes, sir, I do.

Q. What happens when there's an overheating situation on the engine, what happens with those alarms?

A. Well, that's questionable. And the reason why I say that is because these are monitoring the temperature of the engine room and the exhaust cooling water, not the engines themselves.

Q. What happens when there's no exhaust cooling water?

A. Temperature rises, and that alarm should go off.

Q. How should it sound?

A. Well, I don't know how it sounds. But it's going to have an audible alarm and a light.

Q. So what's the purpose of that exhaust temperature?

A. To warn that there's lack of cooling water, that you have a problem.

Q. And if it doesn't go off, what does that suggest to you?

A. If it doesn't go off, then it's either malfunctioning or there's no reason to suspect there's a condition for alarming.

Q. Okay. Then you go into Barber Marina is located south of Elberta. Have you ever been to Barber Marina?

A. Yes, sir.

Q. Had you ever been there prior to

weather reports, I should say.

Q. Then you have a narrative there of how long it took him to get there.

How long did this voyage last all total before the fire erupted and he had to beach that boat?

A. Well, if his testimony, what he stated, was correct about leaving at 14:30, which is 2:30 in the afternoon -- I'm going to say, until I can find it exactly, that it was about a couple of hours.

Q. Two hours?

A. Roughly. Because it was before dark. And we know it gets dark at that time of year --

Q. If he said he left at 2:30 and the distress call came in, they'll have a record of that, right?

A. Yes, sir. And it's probably in the marine patrol report. And I probably mentioned it, but I don't see it in my report. I haven't found it, let's put it that way. Not saying I didn't mention it.

Q. Okay.

A. But roughly I recall it being a couple hours.

Q. Is it your opinion that you could set up a detailed course plan in all this navigation equipment Dr. Kornegay had on his boat and be comfortable in navigating in going to that marina? Preplan it. Program it into the GPS computers. Auto pilot.

A. Well, certainly.

Q. And you wouldn't have to worry about hitting a sandbar or anything, it would do it all for you?

A. I'm not saying that you would rely on that as your sole means of getting from point "A" to point "B" without having a problem.

Q. What kind of problem?

A. Could be any problem.

Q. How about running aground?

A. Not likely in a marked channel that's maintained by the U.S. Army Corps of Engineers.

sometimes and knock them out. Things change. Boats sink and end up in the middle of the channel sometimes. And they have to warn people of those things. Because there are mariners that come in the area that have never been there before.

Q. So wouldn't it be prudent for someone to take a voyage down there like Dr. Kornegay to make sure none of those things is happening and he's comfortable, and he gets ready to deliver the boat at a specified time that he's telling the marina he will be there?

A. I'm not saying he couldn't do that. It's his choice. But was it necessary in my opinion, no.

Q. Okay. Let's go to page 5. It says according to the assured, not long after he got underway, brought the vessel up to speed around 20 to 22 knots, and everything was running fine. At what RPM would that boat be going to get up to 20, 22 knots?

A. He would have to be the one to tell me that.

Q. You haven't investigated to determine at what speed --

A. It's irrelevant to me.

Q. Okay. It's not relevant to you to understand what RPMs those engines were running at in your investigation?

A. They were running at various RPMs throughout the entire trip.

Q. What's the maximum RPM?

A. It doesn't matter to me.

Q. That's all I wanted to hear. Thank you.

You mentioned in here, page 5 of 23, reportedly he could see Barber Marina in the distance, but proceeded slowly because he was uncertain of the water depth and knew where the GPS showed him to be; however, stated, "you can't trust that GPS", and so he idled up to the Barber Marina. Do you agree or disagree with that?

A. I'm not agreeing or disagreeing.

exhaust tube -- what do you call it, exhaust tube?

A. Fiberglass exhaust tube. I'm sorry. I want to make sure I'm clear on the question. What --

(WHEREUPON, THE LAST QUESTION WAS READ BACK BY THE COURT REPORTER)

Q. Exhaust tube.

A. I've never asked him.

Q. Would it be important if you go over there to this metallurgist and after he's examined it to ask him do you agree with my opinion that this tube here exhibits fire from within that released hot gases that caused this fire?

A. It was discussed, and he has not ever gotten the assignment to go forward with those exhaust tube remains.

Q. Okay.

A. Not to my knowledge. Not from me.

Q. Did you see any evidence in the exhaust tube that indicated to you that the radius of that fire, where the fire was burning in relation to the tube.

Q. I'm talking about -- well, let me ask a different way. Would the tube have suffered any damage from the outside fire that was occurring in the compartment of the boat?

MR. SHREVE: Object to the form.

A. Certainly.

Q. What damage would have resulted?

A. It depends on what it was experiencing.

Q. What would have been the flame temperature on the outside that was in the compartment of that boat?

A. I'm sorry, I'm not understanding.

Q. How hot would those flames have been in the compartment of that boat that would have possibly impinged on that exhaust tube?

MR. SHREVE: Object to the form.

A. I'm not sure I can answer that in the sense that I believe that it was intense exhaust temperature coming out, flames, that destroyed that tube.

Q. I know what you think. I'm asking what your opinion is.

A. That is my opinion.

Q. But I'm asking you to assume that --

A. I'm not going to make the assumption.

Q. Because you don't want to make the assumption, do you?

A. Because it would be not proper to make that assumption.

Q. So you can't tell me here today what would happen if hot flame from the compartment on that boat impinged on the outside of that exhaust tube what would happen to the material?

A. The resins on the outside would start to burn at some point.

Q. Would it burn the tube completely up?

A. Again, that's a question that --

the timeframe, how long are we talking about. All the rest of the fiberglass around the deck and the structure burnt. So would it burn eventually, sure it would.

Q. And it would disintegrate after burning through that fire, wouldn't it, sir?

MR. SHREVE: Object to the form.

A. The location of that tube, I don't agree that it would have been catastrophically destroyed like it was from that fire.

Q. Do you have an opinion as to whether the fire in that compartment destroyed any part of the exhaust tube, or was it all attributable to the so called hot gases, hot exhaust that you say came through with that water?

A. Well, certainly the fire around it contributed.

Q. To what extent?

A. That's unknown.

Q. Do these pictures on page 7 of the report fairly and accurately depict the boat the engine.

Q. But what's different between the two?

A. One is seawater cooled and one is totally freshwater cooled.

Q. With a heat exchanger.

A. Right.

Q. Those are complete two separate cooling systems, aren't they, sir?

A. Yes.

Q. The entire vessel was generally consumed by fire -- we've covered that. Starboard main engine suffered the most extensive heat/fire damage of the two main engines with aluminum. What emphasis did you give to the fact that the expansion tank was completely melted away on the front of the engine?

A. Excuse me?

Q. What consideration did you give to the fact that the expansion tank was completely melted away on the starboard engine? On the front of the engine, not the aft.

A. The heat from the cabin burning.

Q. That was the largest amount of metal mass burned in this fire, wasn't it, sir?

A. The largest amount? Well, there was never any documentation --

Q. Of the two engines, the largest mass of metal that burned and was destroyed was on the front of the starboard engine. Am I right or wrong?

A. The largest single mass?

Q. Yes.

A. Probably so.

Q. What do you attribute that to?

A. The intense heat coming from the cabin burning.

Q. Did it burn the same on the port expansion tank?

A. No.

Q. So the fire just picked on the starboard -- front of the starboard engine?

A. No, you had intense heat on the

neither had any heating issues?
A. Are you asking -- I'm not sure I understand your question.
Q. Well, my question is, you don't seem to complain about the port engine or the generator having any significant issues due to marine growth on the bottom of the boat. What do you attribute that to?
A. I can sit here and tell you right now that they were all contributing and they were all creating heat to those engines, however not to the point that the port or starboard engine was being contributed. Because it had the most restriction.
Q. So now you're saying the generator was involved, too.
A. What I am saying is that optimally for cooling systems, clean is what's required.
Q. How much clean? You couldn't answer that yesterday. You thought about it overnight?
A. The answer to that is to make the

minimum requirement flow to the engine pump.

Q. Well, is the generator and the port engine getting the minimum flow required to avoid any overheating?

A. Apparently. They didn't catch on fire.

Q. So if they hadn't been getting it, they would have caught on fire, too. Is that what you're saying?

A. Yes, sir, that's what I'm telling you.

Q. Okay. Port main engine raw water intake stainless steel screen on the hull bottom was significantly covered in marine growth with approximately 30 percent of the hole pattern left open. You don't say anything about the generator, how much it was covered, do you?

A. No, I didn't.

Q. Do you know?

A. There was never a measurement taken.

Q. Why?

A. I'm sorry. Found what destroyed?
Q. What are you telling me here, that the fuel coming from the generator -- Racor bowl was right there in the area where --
A. Yes, sir, where the fire we believe originated.
Q. So it had -- the burn that you found would have been assisted by that fuel leaking from that Racor bowl.
A. Yes, sir.
Q. Do you attribute any of that to the fact that the exhaust tube was burned through greater than the port side, if the generator fuel was being dumped on it?
MR. SHREVE: Object to the form.
A. It's possible it may have contributed.
Q. Did you know that Dr. Kornegay had had problems in the past with the fuel line on that generator?
A. Yes.
Q. Has that particular fuel line on that -- I believe it was a Westerbeke,

what you said was missing?

MR. SHREVE: Object to the form.

A. I've never had a mechanic other than one ever find an impeller that spun.

Q. So your only experience is with one pump?

A. One pump failure of the impeller spinning on the hub.

Q. Okay. All right. How about on the port main engine seawater pump, what did you find there regarding the blades?

A. Generally intact. There were no large pieces missing like the starboard pump.

Q. So the only thing missing or the difference between the port pump and the starboard pump were those two pieces?

A. You can see there's cavities on the front of this starboard pump, there are some large areas with pieces of rubber missing. So those areas, that's the difference.

Q. Other than that, any differences?

A. Nothing that could be really identified without pulling those impellers out of those pumps. And we did not do that.

Q. What do you attribute the missing pieces in the starboard seawater pump to?

A. I think those -- the appearance, to me, looks more like it sustained heat/fire damage.

Q. Okay.

A. I mean, they both had the appearance of fire damage, but obviously it just displayed it as melting and distortion.

Q. Okay. Where are these pumps located on the engines?

A. On the --

Q. When I ask you that, forward or aft.

A. A little forward. More forward than aft of center.

Q. Okay. May 1, 2013, the undersigned attended the MR. CHARLIE at Barber Marina to conduct further investigation of the engine space with the

A. Possibly.
Q. Why would you not change it?
A. Because of the remains of the exhaust tube and the burn pattern.
Q. So it doesn't matter whether the screens are 100 percent open, 75 percent open, 70 percent, you're hanging your hat on that exhaust tube.
MR. SHREVE: Object to the form.
A. It's the combination.
Q. But if you take one part out of the equation --
A. That doesn't make sense to me. I'm sorry.
Q. So if it's 100 percent open screen, you're still going to say that it was insufficient water that burned the exhaust tube and allowed hot gases to get into that engine compartment to cause this fire.
A. Based on the evidence that we've obtained.
Q. Doesn't matter whether the screens

are open or shut, does it, in your opinion?

MR. SHREVE: Object to the form.

A. It does matter.

Q. Well, I'm trying to find out why it matters.

A. Something else would have caused that water not to get to that exhaust.

Q. But it wouldn't have been marine life, though, would it?

A. Correct.

Q. What other things would prevent water from getting --

A. Any obstruction through the sea scoop. A plastic bag being sucked up over it.

Q. Okay. What else?

A. There's a wide variety of things. He could have put the boat aground and sucked up -- plugged it up temporarily, long enough to ground the boat. Block the cooling water off. Minutes, you would have had a fire started. And then all of a sudden, he's off ground and doesn't realize he's burnt the exhaust. Now you got hot exhaust escaping. Theoretically, that could have occurred.

Q. That plastic bag that you just mentioned, it's not a real far fetched theory, is it? That plastic bag has caused many a problem on a vessel; has it not?

A. Have there been blockages and loss of engines? Certainly there have.

Q. There's something about those plastic bags on that suction that's attracted to those intakes, isn't it, sir?

A. You're assuming there were plastic bags. I'm not assuming there were any plastic bags.

Q. I'm just trying to determine what else -- if the engine screens under any scenario were supplying enough water to those engines, what could have caused a lack of water flow into that exhaust tube -- assuming you're correct, you see.

I want you to assume that you're correct and it started there. What else could have prevented water flow getting in there other than what you've outline here?

A. We know the screen's restricted with whatever water was going through it. A rag could suck it up. Grass. There's a number of things.

Q. Anything else on the engine that could have caused that?

A. Anything could have sucked up on that sea strainer theoretically.

Q. Okay.

A. Or that impeller could have spun on that shaft theoretically.

Q. And the pieces gotten down and blocked the water flow?

A. No, I'm saying the shaft spin on the impeller to where the shaft is spinning but the impeller is not spinning. Theoretically, that could have happened.

Q. MAN's had a problem with those impellers and those pumps on their engines, haven't they?

MR. SHREVE: Object to the form.

complete total failure and the starting --

Q. I want to understand. The exhaust gases, do they act like a blowtorch on the inside of the tube?

A. Absolutely.

Q. Okay. And then after they act like a blowtorch, then how long does it take for the material to separate so that there's an opening so hot gas can get in the compartment?

A. Depending on the RPM. But at higher RPMs, it could be within minutes or less.

Q. What about 1600 RPMs?

A. Could be minutes.

Q. Or 10 or 1000 RPMs?

A. Still, it could be --

Q. Have you done any studies on that to find out?

A. There are no studies that I'm aware of.

Q. Well, it seems to me like that would be a real risky proposition owning a and getting hot and just accumulating.

Q. It says, "According to MAN technical data, exhaust gas temperature of the main engine of the main engines on the MR. CHARLIE at 2300 RPMs is 1112 degrees Farenheit."

Do you have any information that Dr. Kornegay ever ran the boat at 2300 RPMs that day?

A. No.

Q. "The engine seawater pump minimum delivery requirement is 107 gallons per minute." What does that compute into liters?

A. 400.

Q. And that's a minimum delivery. But that is at max RPM on the engine, isn't it? When you spec out the engine, it's got to produce that much to cool that engine, hasn't it?

A. That's correct.

Q. And we know from our prior discussion that if you run it at a lower

RPM, then the pump doesn't turn as fast, doesn't produce so much water.

A. Correct.

Q. They've got this engineering figured to how many gallons you need at a certain RPM to cool that MAN engine; have they not?

A. Correct.

Q. All right. Let's flip on over to this diagram you've got in the front here, page 17. At the top of the page there, it says -- what is all this? Did you copy this out of their book?

A. Copy all what?

Q. This diagram at the top of page 17.

A. That came out of this MAN engine manual.

Q. Okay. And it says Delivery Quantity. Is that 400 like we were talking about before?

A. Yes, sir.

Q. Okay. And then you say, first

area raises the required velocity to over --
where did he state that?

A. In his email.

Q. Which is off the chart for pressure loss calculation. There is a formula, but I have to find it. Did he ever find it?

A. No. He wasn't asked to.

Q. Did you ever ask him to find the formula that he's using?

A. That's not the -- he's not referring to the formula he used, he's referring to the formula he would use based on this other curve.

Q. But we all know that he had to point out that you were supplying him incorrect information to start with before he got it right. Didn't we cover that yesterday?

MR. SHREVE: Object to the form.

A. He was sent the 450-liter hour curve, not the 400-liter an hour curve.

Q. Why did you send him that instead

of the correct one?

A. Because it was the preliminary information. It was all I had on the pump at the time. We were trying to move this case along.

Q. Knowing that we were estimating 40" H20 vacuum before -- the new vacuum on the pump inlet side would be off the chart. What does off the chart mean?

A. Wouldn't have been on the graph.

Q. More than 55" of H20 vacuum. The pump would not have been able to flow 450 liters/min of water no matter how low the head pressure was. Did I read that right?

A. Yes, sir.

Q. And that's what he told you, right?

A. Right.

Q. Well, if I look up at that chart, it says 400.

A. Yes.

Q. Well, you've got 450 here. You've got 400 up here.

Q. Well, didn't -- he said it probably wouldn't. Did you go back and say I don't want it to be probably, I want to know?

A. No, we didn't hire John Moran. John Moran was working as a request. So, no, I did not go back to John Moran and ask him to re-evaluate this at 400.

Q. Did you ever at any time have anybody after you spoke with Mr. Moran do any evaluation?

A. Yes. I'm sorry, but you're not reading onto my next paragraph far enough in my report. Because I think it clears up.

Q. Several various photos of the sea scoops and screens were sent off by the undersigned to Dauphin Island. This was done in order to have the lab identify the marine -- am I reading this right?

A. No, I'm talking about -- I'm sorry. It's the third from the bottom paragraph on page 17.

MR. SHREVE: How does it begin?

Q. So what are you saying, that the marine growth got up into the heat exchange, too?

A. I believe it was throughout the entire portion of the cooling system on that engine.

Q. But you never looked inside of it, did you, to see?

A. There's no way to look inside without dissecting, cutting it. And we were working towards that when we got stopped.

Q. Who stopped you?

A. I believe your client.

Q. What did he tell you?

A. You were representing him. You should know.

Q. Did you ever ask to dissect the coolers? Don't be looking at the lawyer. You answer the question, sir.

A. We submitted to do the more result testing on those coolers and never got an acceptance back to move forward.

Q. Well, who did you ask that?

A. I didn't ask it. Kendall Clarke prepared a draft of his proposal to do the work. And it was declined, to my understanding.

Q. Who declined --

MR. SHREVE: Don't speculate. Just tell him.

Q. Who declined?

A. That's all I can tell you.

Q. You don't know, do you? You don't know if it was ever submitted, do you?

A. Well, no, I don't.

Q. And did Clarke ever ask that you do something extra?

A. Do something extra?

Q. Like investigate further.

A. Did he ask -- I'm sorry, I don't understand the question.

Q. Did he ever ask you to dissect any part of the cooling compartment, cooling arrangement on that starboard engine, to determine whether it was clogged or needed further investigation to be done?

A. He made it clear that it should be done.

Q. Should be done. Okay. And do you know whether or not the insurance company authorized you to do it?

A. I was not authorized.

Q. Did you ever mention that in any email to the insurance company that it should be done?

A. It's possible.

Q. Where is the email, sir? Can you produce that email?

A. It would be in my file.

Q. So if there's no email in the file, and it hasn't been produced, then it never happened, right?

MR. SHREVE: Object to the form.

A. No, I'm not going to say that. Because it could have been verbally communicated.

Q. Verbally communicated to who?

A. It would have been to the claims office.

Q. Okay. If they -- if the claims office says that you never communicated verbally asking that the heat exchangers be dissected and looked into, would they be right or wrong?

MR. SHREVE: Object to the form.

A. What I believe needs to be clarified at this point that this matter has already become legal, and now we're dealing with attorneys on both sides. And I could not push for anything to happen at that point, because it was going between you guys and Phelps Dunbar.

Q. Do you know whether any lawyer or anybody has ever asked for the heat exchangers to be dissected?

A. I don't know that they have or they haven't.

Q. You certainly have not asked for it, have you?

A. I have asked for it to happen.

Q. And it has not happened.

A. And that's correct, it has not

happened.

Q. And what would you expect to find if it had been done?

A. Corrosion and marine growth within the coolers.

Q. And that would have done what?

A. It would have showed that there was lack of maintenance being performed on this vessel per the engine manufacturers.

Q. And would that have caused the fire?

A. It would have contributed to the fire, just like everything else that contributed.

Q. If it's dissected and you don't find that marine growth that you expect to find in there, what does that do to your opinion?

A. You would find it, because it was on the ends, you could see it from the external ends.

Q. So what would that do to your opinion?

EXHIBIT 2

GUY PLAISANCE'S REPORT OF SEPTEMBER 9, 2013

Atlantic, Gulf & Pacific
Marine Surveyors and Consultants, Inc.

7946 Hapuna Place
Diamondhead, Mississippi 39525
Email 1: captguy@cableone.net

Fax/Phone: (228) 255-6024
Mobile: (228) 222-1275
Email 2: agpmarine@live.com

To: International Marine Underwriters
1100 Poydras Street, Suite 1220
New Orleans, LA 70163-1220

Report as of September 9, 2013

Attn: Ms. Rita Boggan

Claim #	0AB 014998	Date Assigned:	3-4-13
Policy #	B5JF02529	Survey Location:	Barber Marina Elberta, AL
Date of Loss:	3-3-13 reported 3-4-13	Allegation:	Fire
Our File No.:	13-IMU-0176	Date Surveyed:	3-8 and 3-28, 2013
Assureds Name:	Kim Kornegay	Vessel Surveyed:	2006 Cabo 40 Flybridge
Vessel Name:	MR. CHARLIE	Owner of Vessel:	Mr. Charles Adventures, LLC

This is to certify that the undersigned Marine Surveyor did, at the request of Ms. Rita Boggan, One Beacon Insurance Group, and whom it may concern; conduct an inspection of the subject vessel as it lay hauled at Barber Marina Elberta, AL.

VESSEL PARTICULARS:

Subject vessel MR. CHARLIE, is an all molded fiberglass model 40 Flybridge Sportfish built by Cabo Yachts, Inc. during 2006, powered by twin MAN Diesel model R6-800 CRM (D2876 LE 423) 800-hp turbocharged in-line 6-cylinder diesel engines, bearing HIN# CHXJ0040J506 and Official # 1188936. Vessel helm station was outfitted with MAN engine panels for each main engine with digital visual display and audible alarms monitoring rpm, oil temperature, oil pressure, coolant temperature, gear oil pressure, battery voltage and hours. Also were separate port and starboard visual/audible alarms monitoring engine room temperature and exhaust temperature on the steering console. The vessel was also outfitted with a fire alarm and engine room automated fire suppression system with visual/audible alarm panel with manual override control at the helm station.

The vessel was reportedly also outfitted with the following Navigation equipment;

Big Bay Navigation Computer - 3 monitors, 2-up at the bridge helm station and 1-down at and 17" monitor in salon, RF keyboard and mouse, 120 GB hard drive and Coastal Explorer navigation software. Mariner Pro Upgrade including Coastal Explorer Navigation Chart Program.

Furuno Nav-Net 64 mile Radar Chart Plotter black box connected to 2nd 15" Big Bay display.

Furuno GPS

Simrad AP-25 Autopilot with rudder angle indicator.

Furuno FCV 1100 Fishfinder/fathometer w/12.1" screen and bronze thru-hull transducer.

Furuno RD-30 Tri-Data multifunction display.

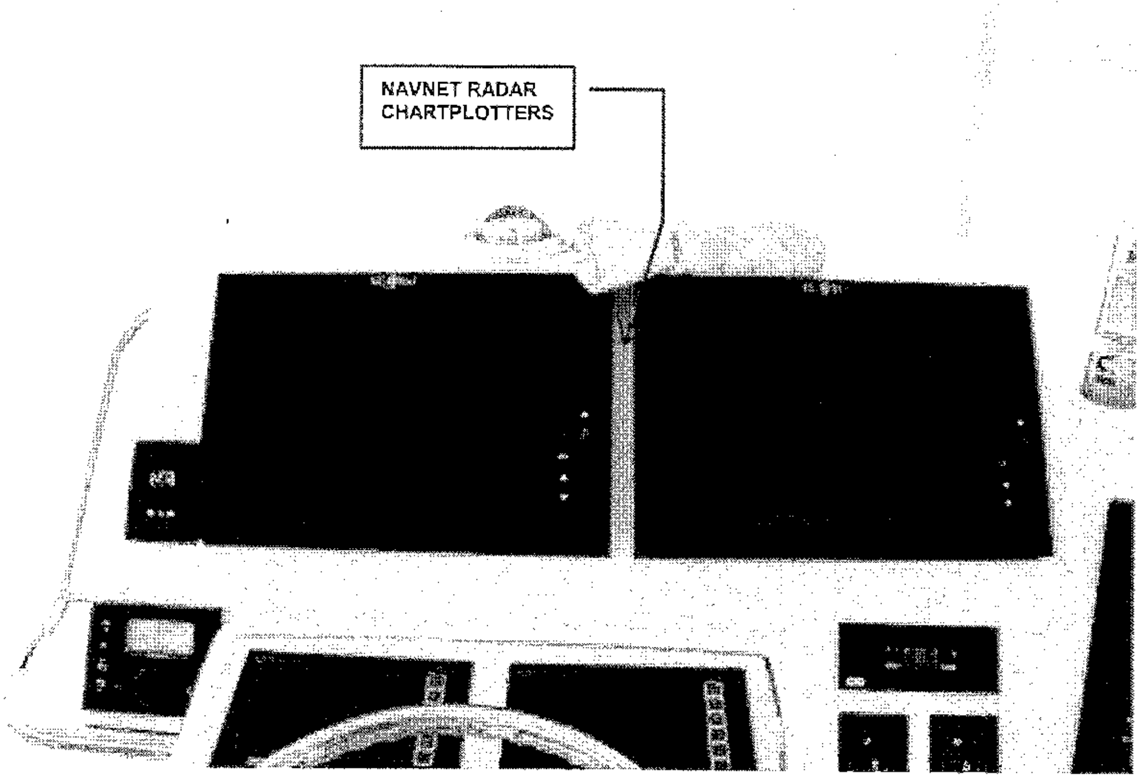
ICOM VHF with 17' antenna.

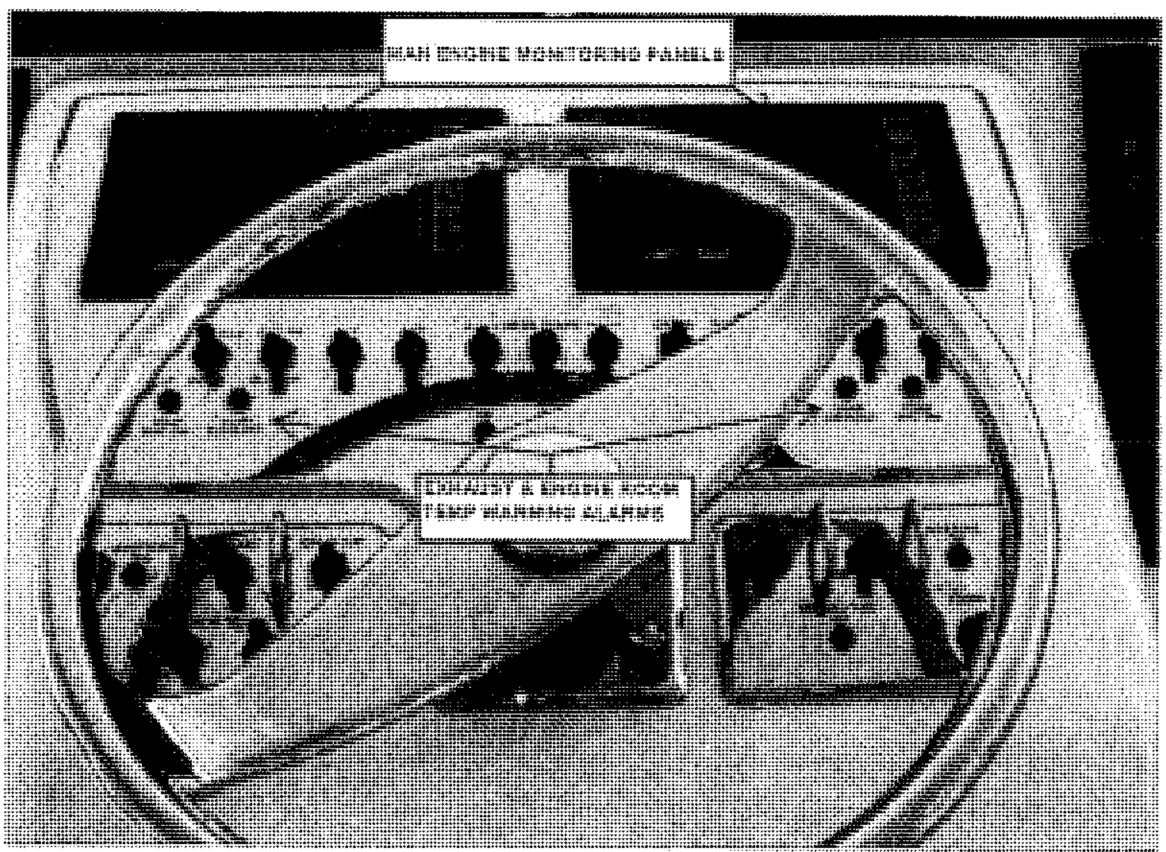
Cellular phone 17' antenna with signal booster.

Ritchie magnetic compass.

(See attached 2006 Cabo 40 SF layout compiled with notes)

EXHIBIT
2


NAVNET RADAR
CHARTPLOTTERS



Barber Marina is located south of Elberta, Alabama approximately 8.2 nautical miles from the assureds' home at 32718 River Rd Ono Island and is approximately .5 miles to the north side of Intra-coastal Waterway Marker "74" Latitude N 30º 18' 47" Longitude W 87º 34' 10" and by highway is located at 26986 Fish Trap Road Elberta, Al 36530.

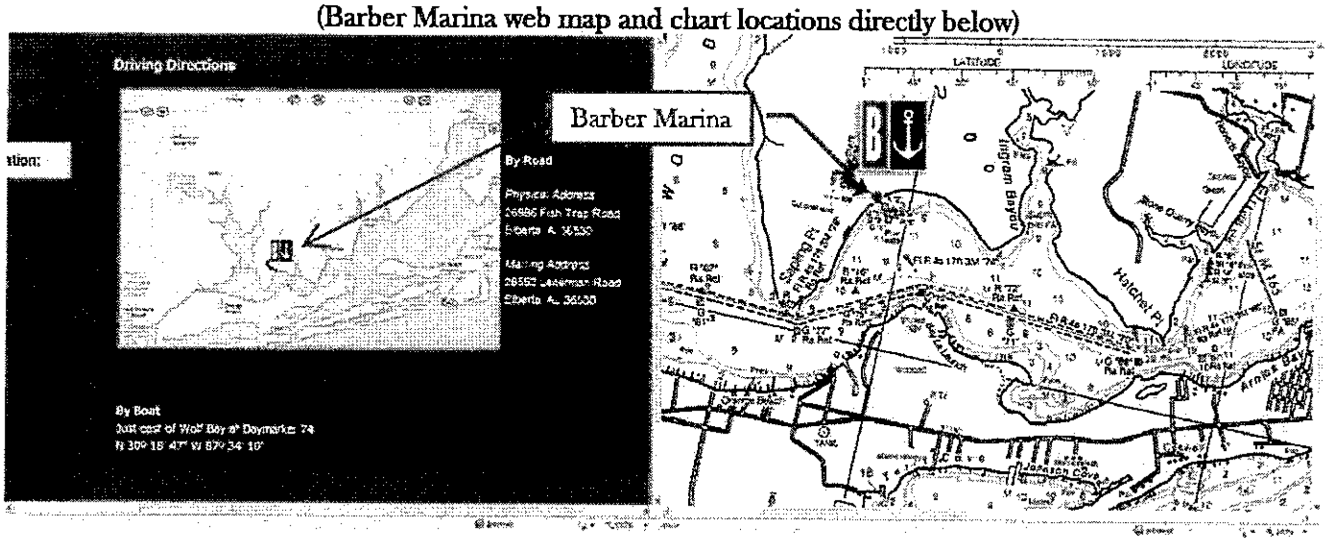
This location is easily found with the navigation chart and directions via the web links found at Barber Marina's web site and on Google maps.

http://www.barbermarina.com/Portals/barbermarina/barber_map_large.jpg

http://www.barbermarina.com/Location.aspx

https://maps.google.com/maps?oe=UTF-8&ie=UTF-8&q=barber+marina+alabama&fb=1&gl=us&hq=barber+marina&hnear=0x88867f341f4bfe75:0x5e55343553c8cce9,Alabama&cid=0,0,5057001753965447370&ei=t5EmUs68INa2sAT51IGwCg&ved=0CHsQ_BIwCg

(Barber Marina web map and chart locations directly below)



March 3, 2013 weather data archive at 1435-hours in Orange Beach, Alabama, was clear with 10-mile visibility, ambient temperature was 50°F/10°C; wind was WNW at 10.4-mph gusting to 17.3-mph and seawater surface temperature was approximately 55°F/12.77°C. http://www.nodc.noaa.gov/dsdt/cwtg/all_meanT.html

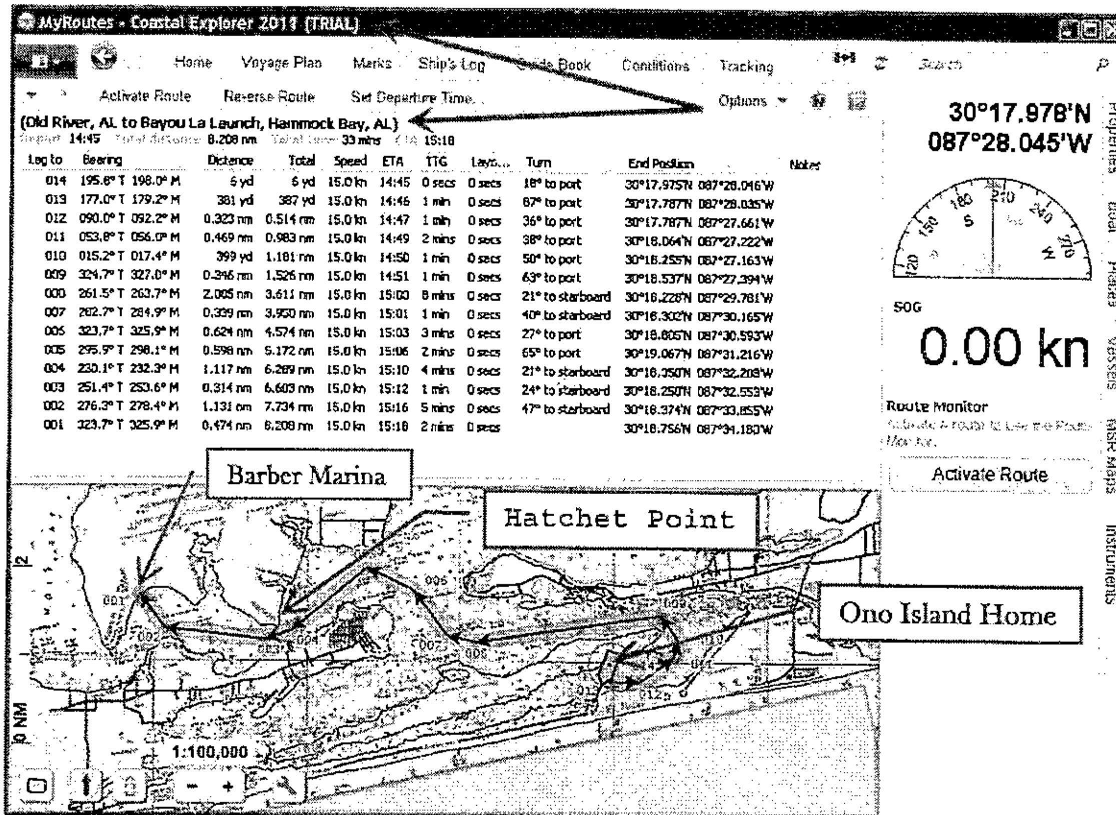
http://www.wunderground.com/history/airport/KJKA/2013/3/3/DailyHistory.html?req_city=Orange+Beach&req_state=AL&req_statename=Alabama

NARRATIVE:

Reportedly, on March 3, 2013, according to the assured's statement, at approximately 1430-hours (CST) after making pre-checks on the vessel, got underway from his house located on the south east end of Ono Island, Alabama, reportedly to take a ride to find Barber Marina, ***"to be sure I knew how to get over there from my house on Ono Island",*** who reportedly planned to haul the vessel over the next couple of weeks to repaint the bottom, and so the assured wanted to save his route waypoints so he could later return to Barber Marina without making wrong turns.

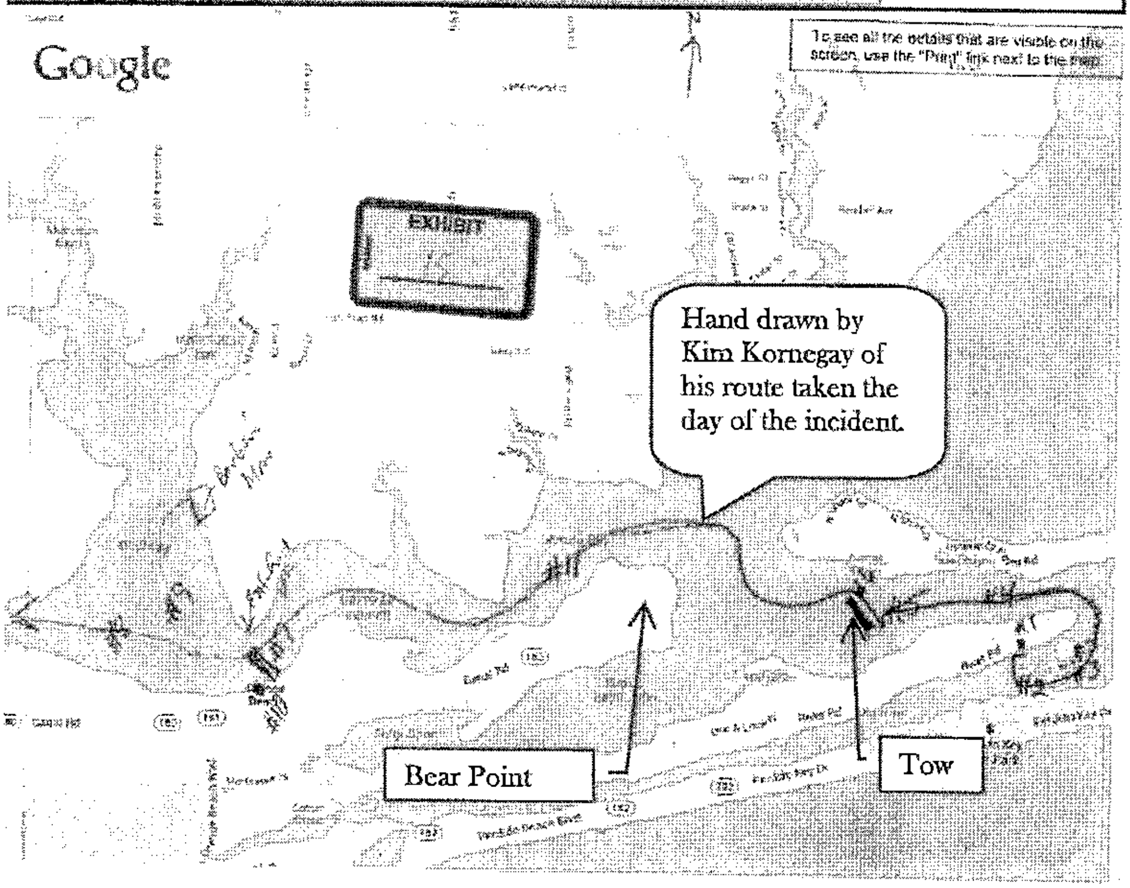
According to the assured, ***"the plan was to haul the boat out in the next couple of weeks when the rain started to subside to repaint the bottom. It had been over a year since I was over that way and I wanted to be sure I had waypoints to get back there without wrong turns."***

(Below is an example of the Coastal Explorer Navigation Chart Program. It takes only minutes to set up a detailed route plan which gives you an automatic longitude and latitude of each waypoint for each turn including compass heading, bearings, distance, speed, time to go to each point and estimated time of arrival. The program will also give you off course audible and visual warnings and give spoken detailed route information. It should also be noted that these types of nautical chart programs give very detailed accurate information including weather conditions, water depth and other local warnings.)



(Old River, AL to Bayou La Launch, Hammock Bay, AL)
14:45 8.208 nm 33 mins 15:18

Leg to	Bearing	Distance	Total	Speed	ETA	TTG	Layo...	Turn	End Position	Notes
014	195.6° T 198.0° M	6 yd	6 yd	15.0 kn	14:45	0 secs	0 secs	18° to port	30°17.975'N 087°28.046'W	
013	177.0° T 179.2° M	381 yd	387 yd	15.0 kn	14:46	1 min	0 secs	67° to port	30°17.787'N 087°28.035'W	
012	090.0° T 092.2° M	0.323 nm	0.514 nm	15.0 kn	14:47	1 min	0 secs	36° to port	30°17.787'N 087°27.661'W	
011	053.8° T 056.0° M	0.469 nm	0.983 nm	15.0 kn	14:49	2 mins	0 secs	38° to port	30°18.064'N 087°27.222'W	
010	015.2° T 017.4° M	399 yd	1.181 nm	15.0 kn	14:50	1 min	0 secs	50° to port	30°18.255'N 087°27.163'W	
009	324.7° T 327.0° M	0.346 nm	1.526 nm	15.0 kn	14:51	1 min	0 secs	63° to port	30°18.537'N 087°27.394'W	
008	261.5° T 263.7° M	2.085 nm	3.611 nm	15.0 kn	15:00	8 mins	0 secs	21° to starboard	30°18.228'N 087°29.781'W	
007	282.7° T 284.9° M	0.339 nm	3.950 nm	15.0 kn	15:01	1 min	0 secs	40° to starboard	30°18.302'N 087°30.165'W	
006	323.7° T 325.9° M	0.624 nm	4.574 nm	15.0 kn	15:03	3 mins	0 secs	27° to port	30°18.805'N 087°30.593'W	
005	295.9° T 298.1° M	0.598 nm	5.172 nm	15.0 kn	15:06	2 mins	0 secs	65° to port	30°19.067'N 087°31.216'W	
004	230.1° T 232.3° M	1.117 nm	6.289 nm	15.0 kn	15:10	4 mins	0 secs	21° to starboard	30°18.350'N 087°32.208'W	
003	251.4° T 253.6° M	0.314 nm	6.603 nm	15.0 kn	15:12	1 min	0 secs	24° to starboard	30°18.250'N 087°32.553'W	
002	276.3° T 278.4° M	1.131 nm	7.734 nm	15.0 kn	15:16	5 mins	0 secs	47° to starboard	30°18.374'N 087°33.855'W	
001	323.7° T 325.9° M	0.474 nm	8.208 nm	15.0 kn	15:18	2 mins	0 secs		30°18.756'N 087°34.180'W	



According to the assured, not long after he got underway he brought the vessel up to speed around 20 to 22 knots and everything was running fine; however, he encountered a westbound tow in the Intra-coastal Waterway which he then slowed down and overtook the tow and then continued westerly on the MR. CHARLIE towards Barber Marina.

The assured stated that after overtaking the tow, he came to Bear Point, but was unsure of exactly which way to go and made a wrong turn in the channel; however, soon realized this and then backtracked and made it to Hatchet Point. Reportedly he could see Barber Marina in the distance, but proceeded slowly because he was uncertain of the water depth and knew where the GPS showed him to be; however, stated ***"you can't trust that GPS"***, and so he idled up to the Barber Marina.

Once at the marina, the assured reportedly turned the MR. CHARLIE around and headed back slowly in the same direction he came from and about that time, he spotted the same tow he had overtaken earlier. So the assured decided to wait it out and would give way to the tow which reportedly was occupying most of the channel as it came through Hatchet Point. And while sitting back with the MR. CHARLIE at idle, began practice maneuvering in approximately 9' of water, waiting on the tow to pass.

After the tow was clear, the assured decided it was time to head home and upon putting the engines ahead and while coming up in rpm onto plane, reportedly the starboard main engine shut down. The assured stated that he thought that was strange, so he put the port engine in neutral, reset and restarted the starboard engine and then synchronized both engines and brought them up to planing speed and the starboard engine shut down again. Once again, the assured thought to himself, this strange and he reset the starboard engine and restarted it again, synchronized both engines and brought them up to planing speed and the starboard engine shut down again for a third time.

It was about this time, the assured realized that something was wrong and with the port engine running and in neutral, with the MR. CHARLIE drifting just to the north side of the channel, left the helm and went downstairs to the salon to check the breaker panel. The assured stated he could hear the generator running, so he went back outside to the cockpit deck and he opened the engine room hatch. When he did that, the assured stated that smoke hit him in the face and startled him and so he ran straight up to the helm and began making "Mayday" distress calls on the VHF radio to the USCG, reporting the MR. CHARLIE was on fire, leaving the engine room hatch open.

Reportedly, USCG station Mobile replied back to the assured and took some information as to the location, type and name of the vessel he was on and who was aboard, but the assured was panic stricken at this point and not able to remain steady on the radio with USCG. During his radio communications with the USCG, the assured stated that he managed to get his liferaft out from storage on the flybridge and down to the cockpit deck ready to deploy, then ran back up to the helm, reset the starboard engine and restarted it again, put both engine throttles to near full ahead to planing speed.

According to the assured, the starboard engine ran this time long enough for the MR. CHARLIE to cross from the north side of the channel, over the Intra-coastal Waterway, to the south side of the channel and up into shallow water along a deserted beach area where he planned to beach the vessel so he could evacuate into his liferaft. As he approached the beach, the assured throttled back and ran down to the cockpit with the engine room hatch remaining open and flames reportedly coming out of that hatch, deployed his liferaft and then abandoned ship from the MR. CHARLIE into the water to get into the liferaft with engines and generator still running.

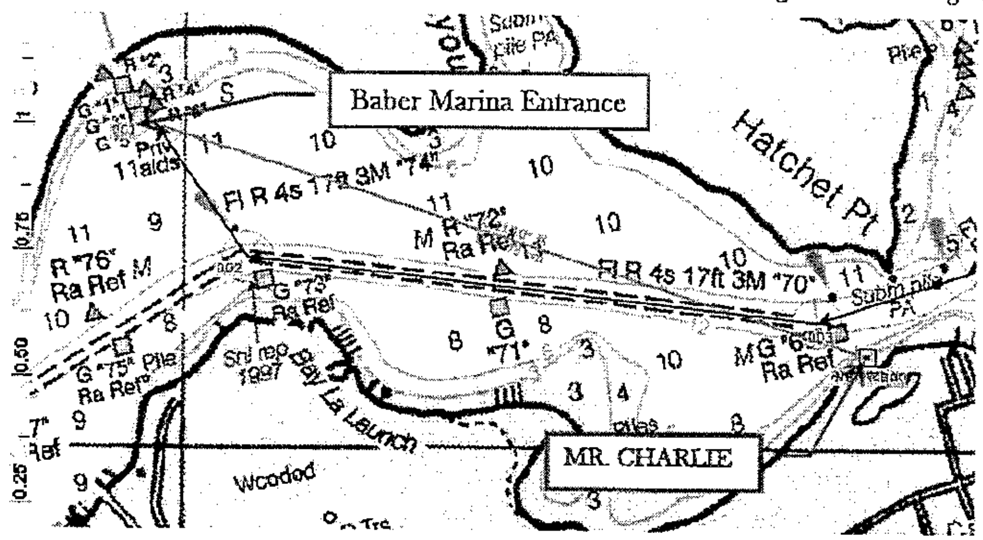
About that time, the assured stated that he saw smoke and flames and he heard a siren type alarm on the MR. CHARLIE and all engines quit running. Then he spotted the Marine Police approaching from the east that came up between the liferaft and the burning vessel and the assured said he heard alarms going off after all the engines had stopped running. Not long after this, the assured left his liferaft to go ashore to the beach where he reportedly made a 911 call from his cell phone to report his location and afterwards the Alabama Marine Police officer Alford came back and picked him up. Shortly after, the USCG arrived on the scene with the MR. CHARLIE engulfed in flames.

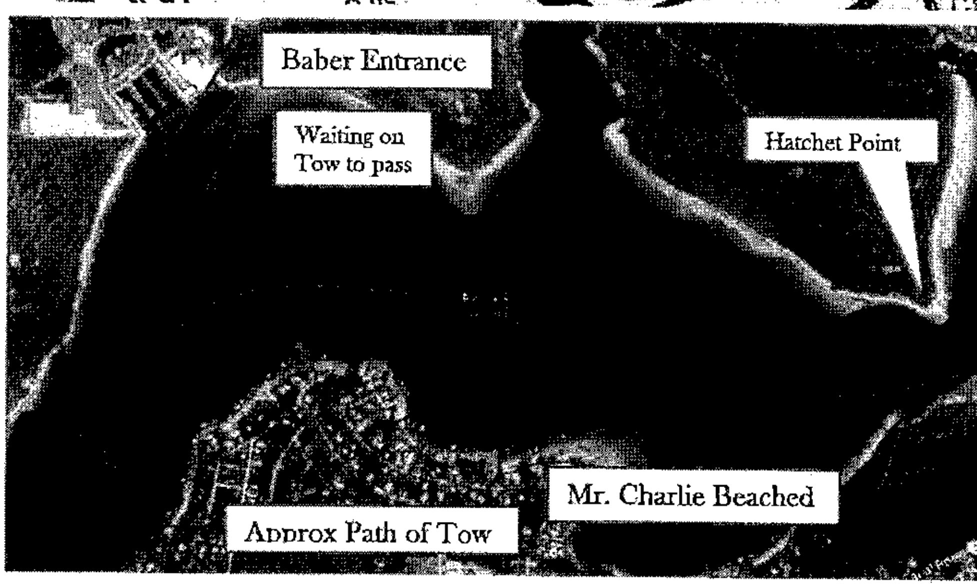
CIRCUMSTANCES:

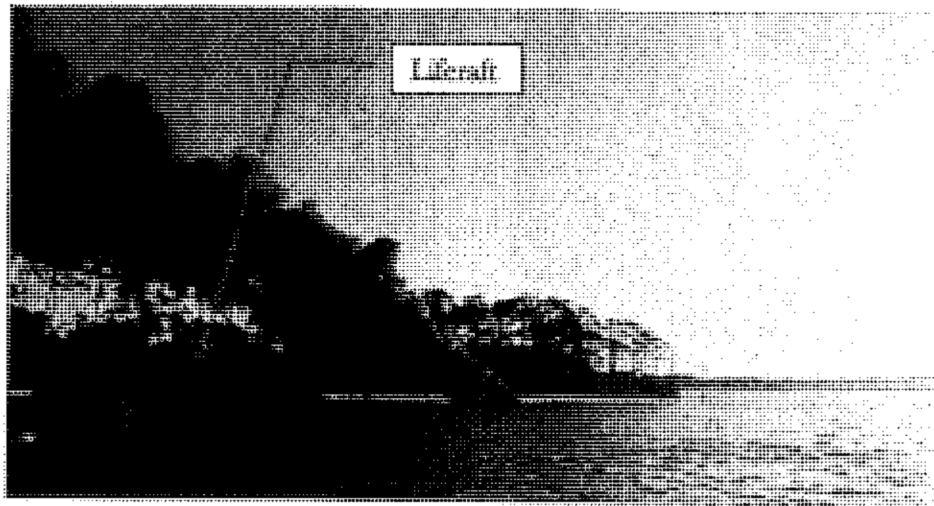
According to the Department of Conservation & Natural Resources Boating Accident Investigation Report Case # 20130303AL189-1, at approximately 1600-hrs the location of the MR. CHARLIE was reported at just slightly to the southwest of Hatchet Point on the south side of the Intra-coastal Waterway near marker "69" near Latitude: 30 deg 18 min 23.000 sec North and Longitude: 87 deg 32 min 43.000 sec West. (See Attached Report)

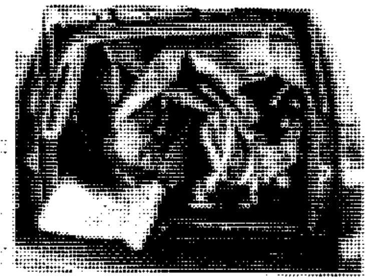
Inconsistencies were noted within the Accident Investigation Report which states that the vessel was reportedly valued in access of $800,000, which is inaccurate. The report also states that there was only one (1) fire extinguisher aboard which contradicts what the assured stated that there was at least four (4) aboard, 2-inside and 2-atop at the flybridge deck. The Accident Investigation Report also indicates that the engine room hatch was closed as apposed to what the assured stated, it was left open. The Accident Investigation Report further indicated that there was a Halon Fire Suppression System aboard; however, during our investigations, no Fire Suppression System bottle was found aboard, as will later be seen.

The charted location of where the MR. CHARLIE was beached and burned was approximately 1.48 nautical miles from the entrance of Barber Marina and on a course of 110° magnetic. These same location coordinates was given to the undersigned by Capt Mac McLean of TowBoat US, who was also called to the scene to assist; however, reported that when he arrived the vessel was engulfed in flames. It should be noted that the shore side area where the MR. CHARLIE was beached was wooded and secluded without road access, having a 1/5 mile long pond adjacent preventing Emergency and Firefighting vehicles from attending to the burning vessel.

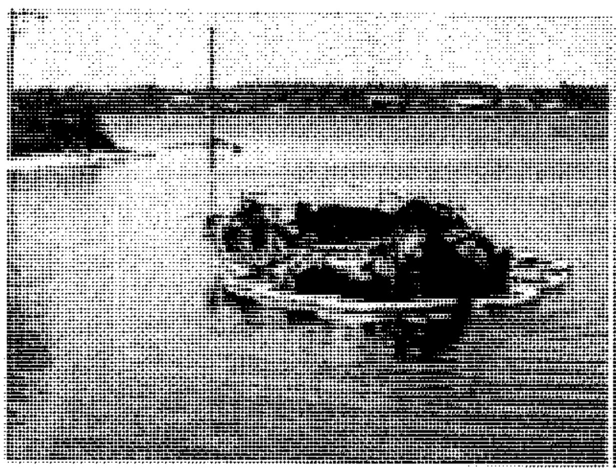


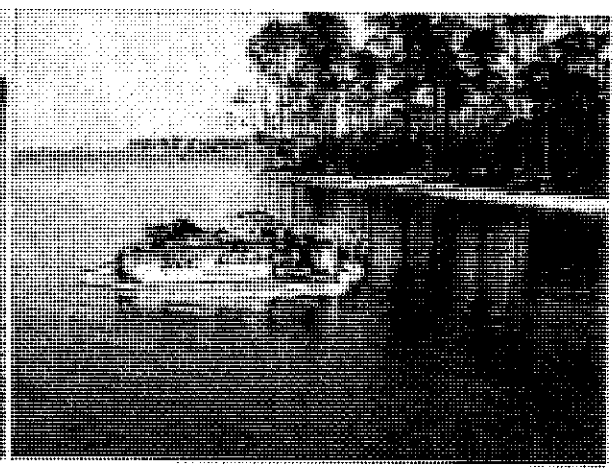


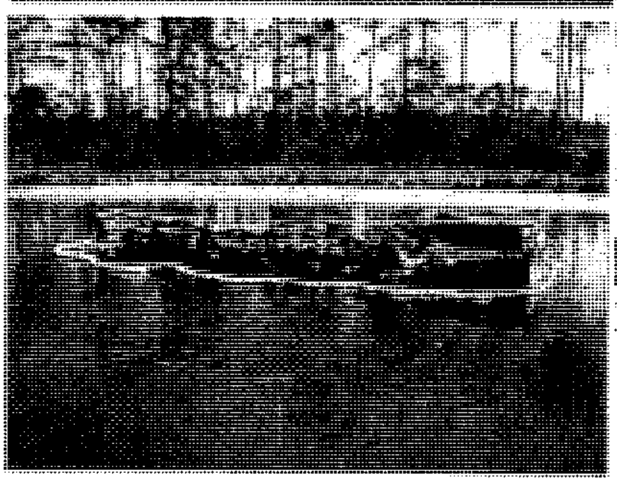




Prevailing frontal weather approaching the following day delayed salvage/towing of the MR. CHARLIE and on March 7, 2013, Capt Mac McLean and crew of TowBoat US, towed the vessel to Barber Marina to be hauled and blocked.







MARCH 8, 2013 ATTENDANCE:

The undersigned conducted a preliminary inspection as the vessel lay hauled and blocked at Barber Marina, Elberta, AL with the following was observed and noted;

During a short part of this preliminary inspection, the assured was noted in attendance and did have with him in his SUV, the liferaft which he had deployed during the incident. We did discuss briefly the events leading up to the time of the fire.

Two (2) main engines are MAN R6-800CRM diesel 800-hp, turbo charged after cooled and according to the assured, the engines had approximately 350 hours each.

The entire vessel was generally consumed by fire from just above the waterline and up, leaving the vessel a complete loss.

Starboard main engine suffered the most extensive heat/fire damage of the two main engines with aluminum the cooling water expansion tank completely melted, thermostat housing completely melted, inner cooler forward housing completely melted, forward end of the oil cooler housing melted.

Starboard main engine turbo charger appears to be a potential area of origin on the inlet side which was completely destroyed and no fragments found. The fuel service centre near the turbo was significantly melted and Racor dual filter housing located just inboard was completely destroyed with minor fragments found.

Starboard main engine #6 valve cover exhibited unusual distortion (dished inward). All of the other five (5) valve covers appeared normal.

Starboard main engine raw water intake stainless steel screen on the hull bottom was significantly covered in marine growth with approximately 20% or less of the hole pattern left open, un-restricted.

Port main engine turbo charger inlet was distorted. The fuel service centre near the turbo was significantly melted and Racor dual filter housing located just inboard was completely destroyed with minor fragments found.

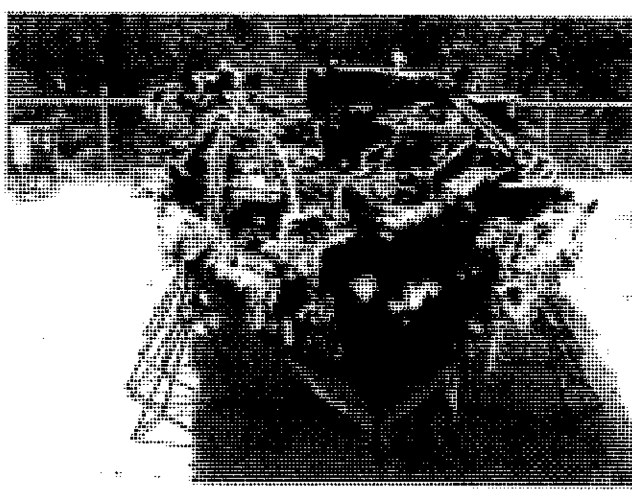
Port main engine suffered extensive heat/fire damage with the cooling water expansion tank partially melted at the ends and the aft end of the oil cooler housing melted on the inboard side. All six (6) of the port main engine valve covers appeared normal.

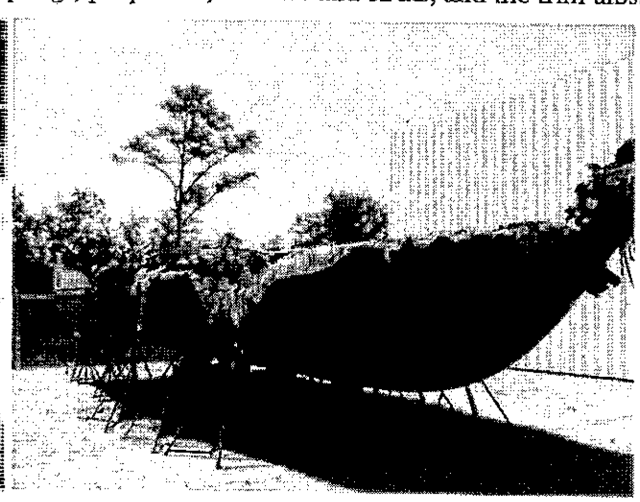
Port main engine raw water intake stainless steel screen on the hull bottom was significantly covered in marine growth with approximately 30% or less of the hole pattern left open, un-restricted.

Heavy marine growth was noted on all of the underwater appendages and running gear.

The generator and the reduction gears were not visible as they were buried in debris leaving the full extent of damage unknown at this time. The extent of damage is a total catastrophic loss with no evidence of fire fighting efforts present or reported.

Salvage items: Underwater running gear, shafts, shaft couplings, propellers, rudders and struts, and the trim tabs.

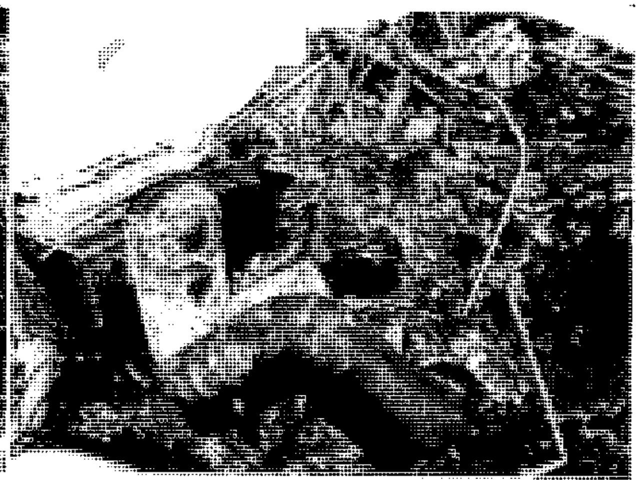




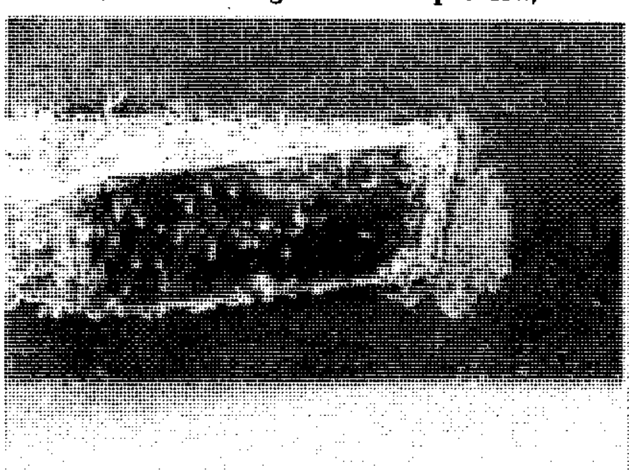
(Stbd Main Engine Below)

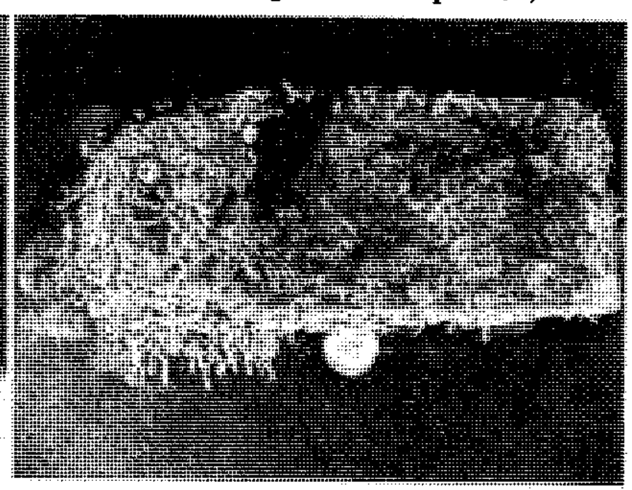
(Port Main Engine Below)

(Stbd Main Engine Sea Scoop Below)



(Port Main Engine Sea Scoop Below)



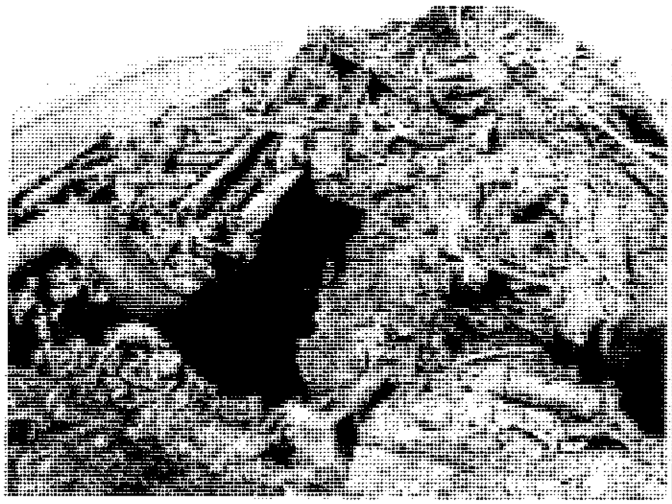


MARCH 28, 2013 ATTENDANCE:

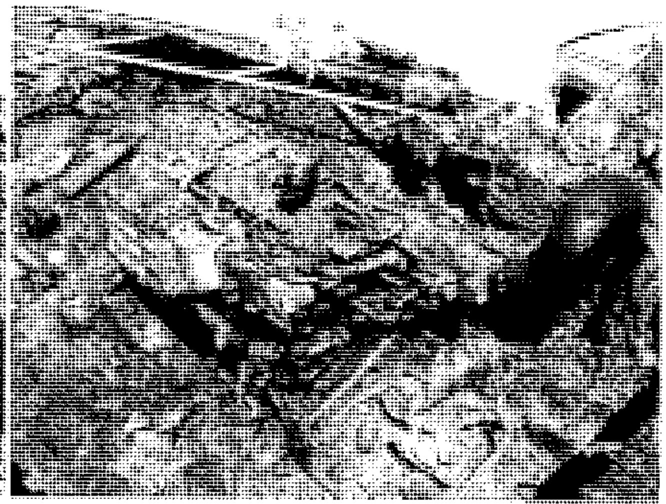
The undersigned conducted a joint fire investigation with Mr. Gary Jones of EFI Global and with Mr. Ralph Holloway of Middleton Marine who was present in part to assist with engine technical questions, as the vessel lay hauled and blocked at Barber Marina, Elberta, AL with the following was observed and noted;

Debris removal began in the starboard aft engine compartment were the lowest and most intense area of burn pattern was observed. Inconsistent melting and thermal distortion to the starboard engine metal components as compared to the port engine metal components was a key factor during our assessment process.

(Port & Stbd Main Engine Below)



(Stbd Main Engine Below)



Significant melting of engine compartment aluminum components with isolated melting of copper indicative of ambient temperatures in the range of 1200°F to 1980°F, approximately. These temperature readings were one of the indicators we relied upon in formulating the initial origin area theory which also included a near total destruction of the starboard main engine fiberglass exhaust tube found in the starboard aft bilge, while the port main engine fiberglass exhaust tube was intact and whole, found aft of the port engine. (Ref: G. Jones, EFI Global June 28, 2013 Report)

(Stbd Main Engine Exhaust Tube Below)

(Port Main Engine Exhaust Tube Below)

Interior damage pattern indicates that the heaviest material loss from fire consumption was most concentrated at the starboard aft engine compartment of the vessel. Fire delineation patterns were most prominent along the starboard aft bulkhead where the generator Racor fuel filter housing was uncovered and mounting location determined by the attached bracket. The Racor plastic bowl was destroyed and the metal housing was heavily distorted with top cover dislodged by fire involvement. Diesel fuel released from the unit and lines apparently accelerated the fire in that area. The close proximity of this equipment to the starboard exhaust is the most probable explanation for the low level damage. The generator was noted located aft and on center of the port and starboard main engines.

(Generator Below)

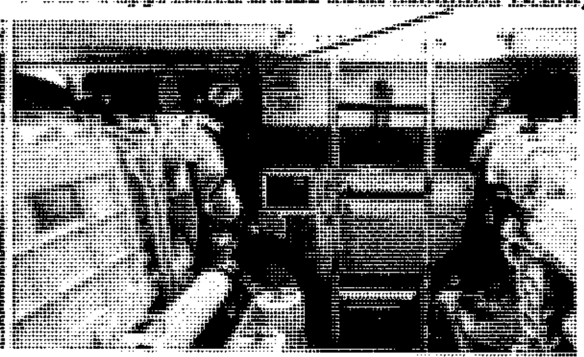
(Generator Racor Fuel Filter Housing Below)

Engine compartment electrical system arc map analysis revealed adverse activity at the starboard aft section only. Evidence of arcing and beading of the copper conductors at the starboard aft side versus the port aft side was apparent. This activity was consistent with that of wiring being energized, subjected to heat/flame contact with mid line melting, indicative of resulting fire damage, not the cause of the fire. This fact is consistent with the report by the assured who stated that the machinery was still in operation and running when the vessel was on fire and until he abandoned it.

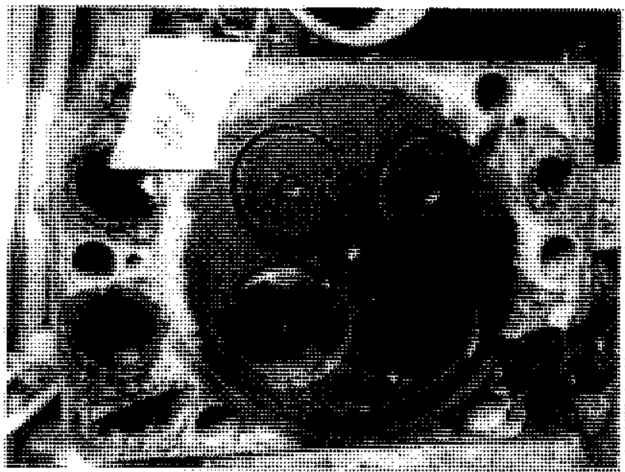
Uncovered in the debris aft of the starboard reduction gear in the bilge was found a steel mounting bracket with two stainless steel hose clamps remaining attached. This bracket was for mounting the engine room fire suppression system bottle; however, the steel bottle was missing. Mounting location for the bracket at the starboard aft upper engine room bulkhead was completely consumed.

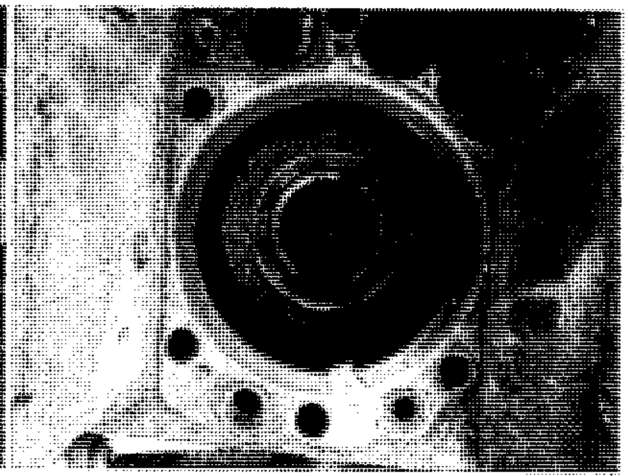
(Fire Suppression Bottle Bracket Below)

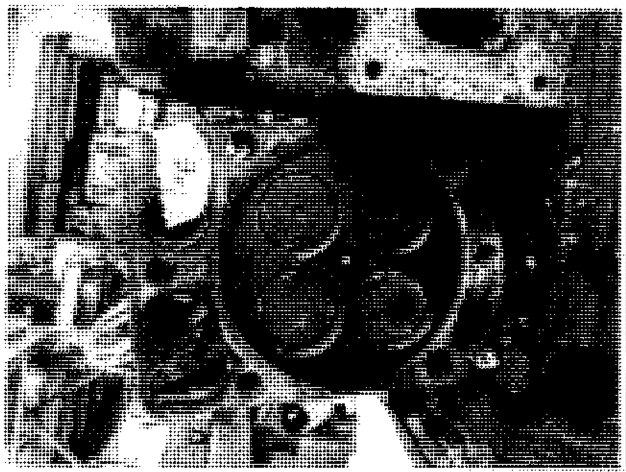
(2006 CABO Fire Suppression Bottle Seen Mounted Below)

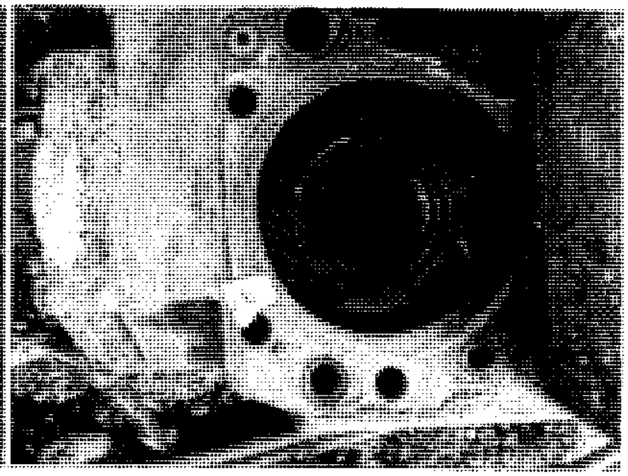


Investigations as to the cause and origin of the fire continued with the removal of the starboard main engine from the vessel which was performed by Baber Marina and then transported to Middleton Marine shop located in Orange Beach, AL for partial disassemblies on 4/18/13. Removal of cylinder heads 1-3-6, revealed no internal damage to cylinders or pistons as a result of engine overheating. (See photos below)



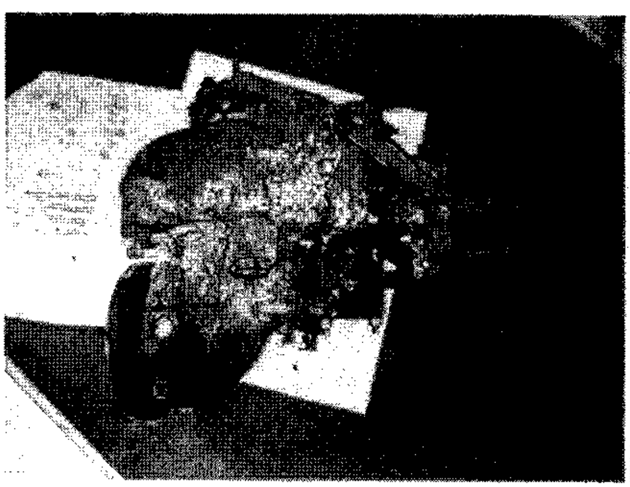


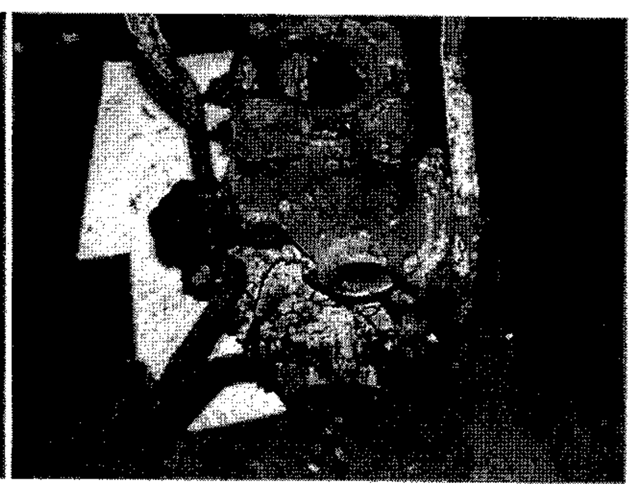




MAY 1, 2013 ATTENDANCE:
Removal of the port main engine seawater pump from the vessel was performed by Baber Marina and then transported to Middleton Marine shop located in Orange Beach, AL for inspection. Turbocharger was removed from the starboard main engine and was inspected with no evidence of failure present.

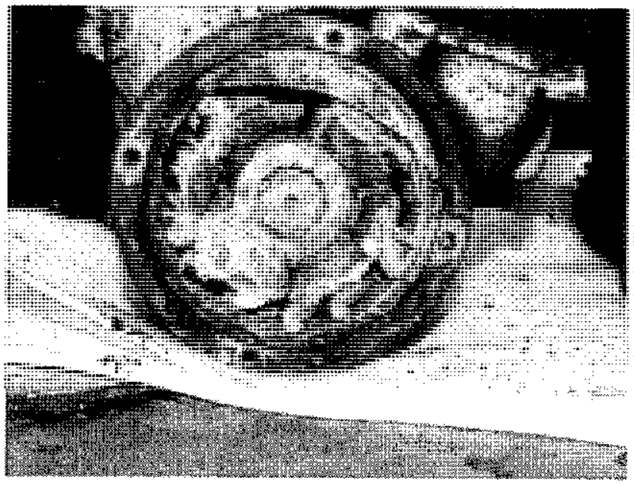
(Starboard Turbocharger Below)



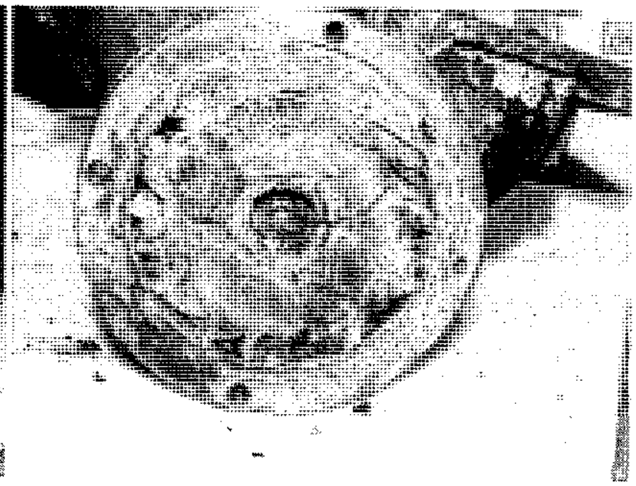


Port and Starboard main engine seawater cooling pumps were removed from the engines and with cover plates removed. Starboard pump revealed neoprene impeller blades were variously bulged and having large pieces of blades at the outer face missing and center hub face almost fully exposed with the neoprene separated from the center hub. The Port pump neoprene impeller blades were somewhat uniform with only minor pieces of a few blades missing and center hub barely visible with the neoprene remaining attached to the center hub. Both pumps input shafts with gears were without notable wear or play. Both pumps were retained by the undersigned as evidence, boxed and labeled for transport back

(Stbd Main Engine Seawater Pump Below)



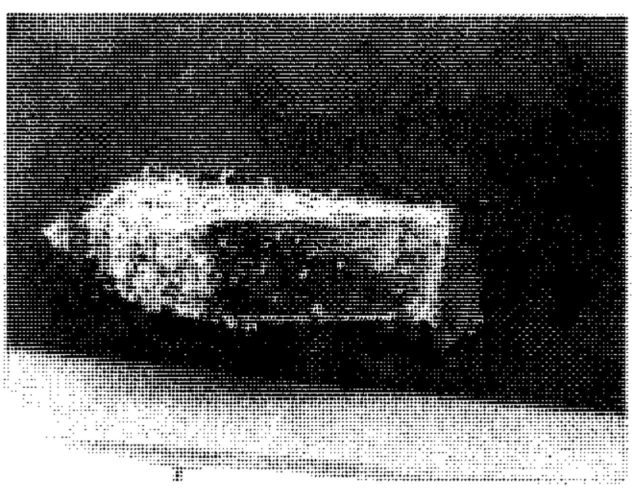
(Port Main Engine Seawater Pump Below)



On May 1, 2013, the undersigned attended the MR. CHARLIE at Barber Marina to conduct further investigation of the engine space with the starboard main engine removed and of both main engine sea scoops in which both port and starboard scoop screens were removed for a closer inspection behind the screens and to preserved the screens as evidence. Baber Marina supplied tools and labor to effect the removal of the two sea scoop screens.

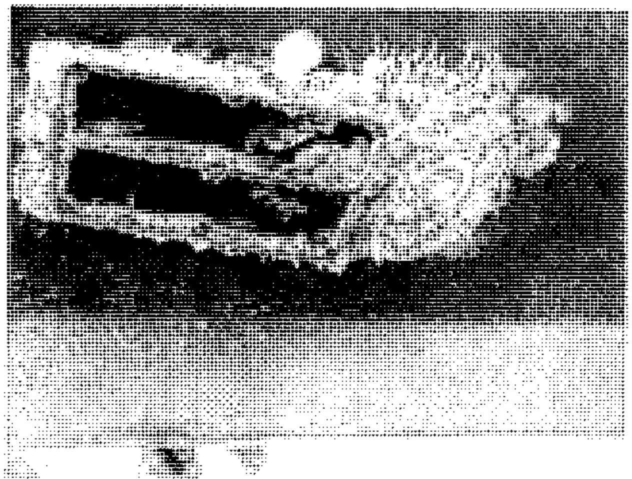
The starboard sea scoop screen was removed and found impacted with loose silt/mud and charred fire debris which had apparently drained back down from inside the vessel through the seawater pump intake hose that was burnt off just past the sea valve inside the engine room bilge. This allowed water and debris to flow back out and down to the top of the starboard screen. Once the screen was off, intentions were to rinse the screen with freshwater by Barber yard manager to remove the loose silt and debris from the screen; however, instead a garden hose with city pressure was used, which inadvertently knocked off a large portion of the soft marine growth from the starboard intake screen. This was clearly a mistake made by the manager and realized afterwards by the undersigned. No photo was taken of the screen after it was first removed or before it was washed off.

(Starboard Sea Scoop)

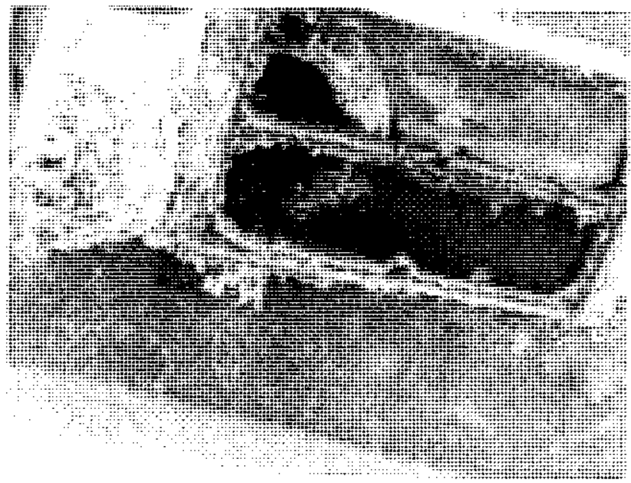


(Starboard Sea Scoop Being Removed)

(Port Sea Scoop with Screen Removed)

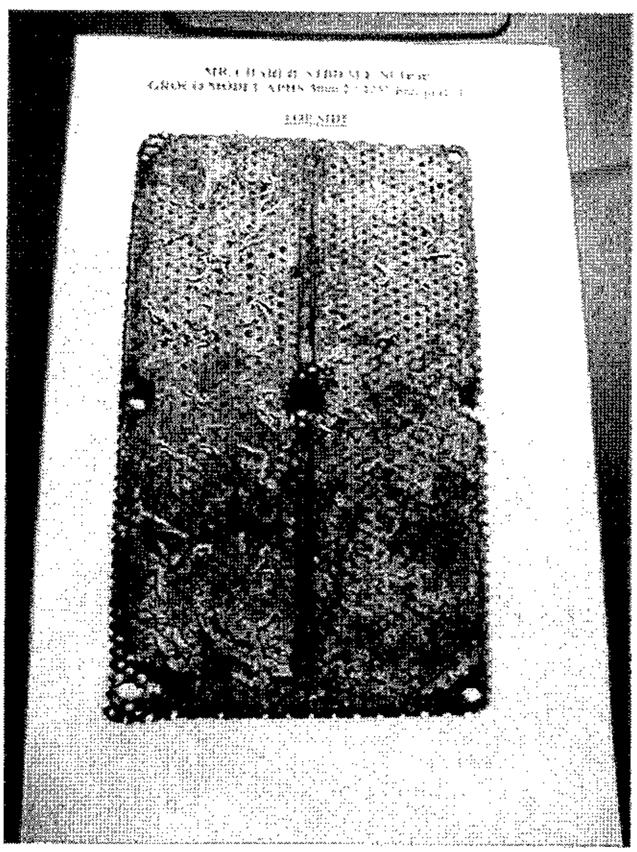


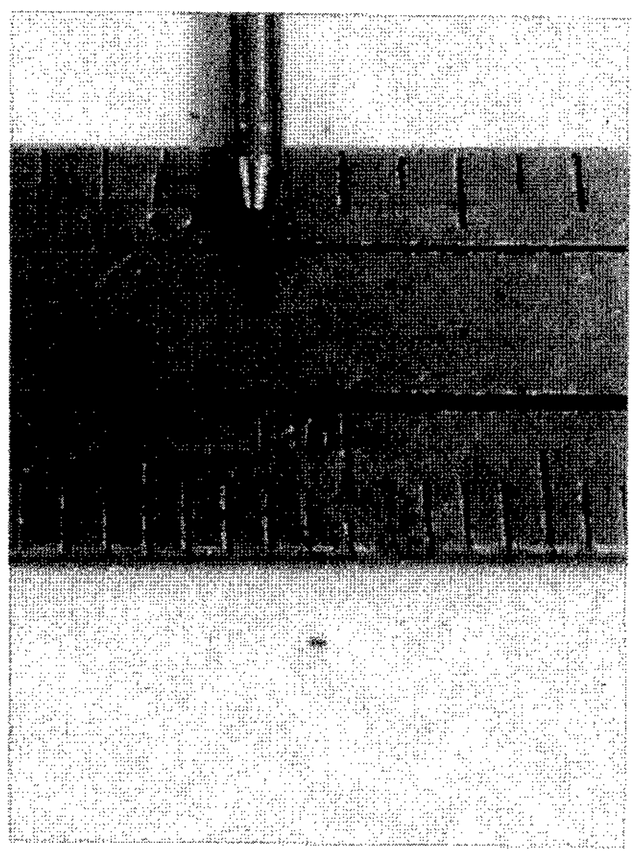
(Starboard Sea Scoop with Screen Removed)

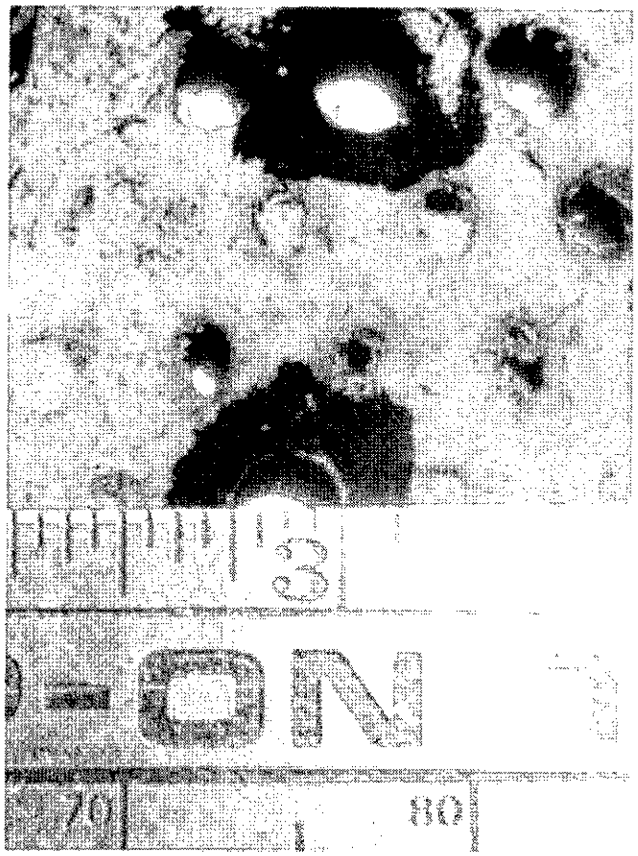


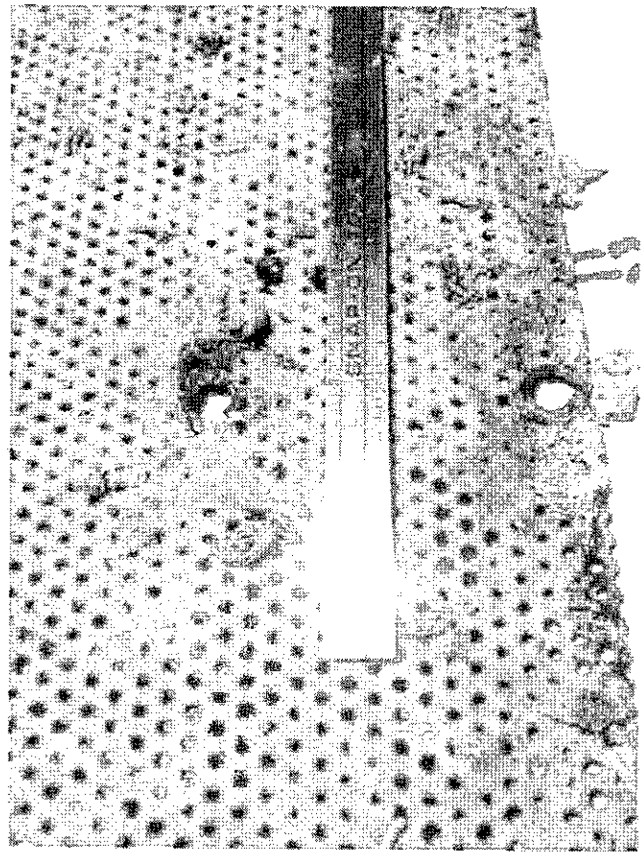
After both sea scoop screens were removed, the undersigned bagged and labeled the screens accordingly as retained evidence. During this same attendance, the undersigned did also gather the two fragmented remains of the starboard fiberglass exhaust tube from the vessel to also retain as evidence which were placed inside of plastic storage bins with covers and labeled accordingly.

On May 7, 2013, the undersigned did conduct a close examination of both port and starboard sea scoop screens in an office environment. Both screens were photographed using various methods and angles to document the screen conditions, hole size and pattern and to illustrate the marine growth present on each.









It was determined by the undersigned that there were three (3) holes on the starboard screen which were 100% open and two (2) holes on the port screen 100% open. The sea scoops were indentified as Groco part # APHS-3000-2 bronze sea strainers. The screens were found to be manufactured by Hendrick Corporation having a Groco part #93-3000-2, stainless steel, having .125 diameter perforated holes. Both screens were found to be significantly fouled with marine growth and paint.

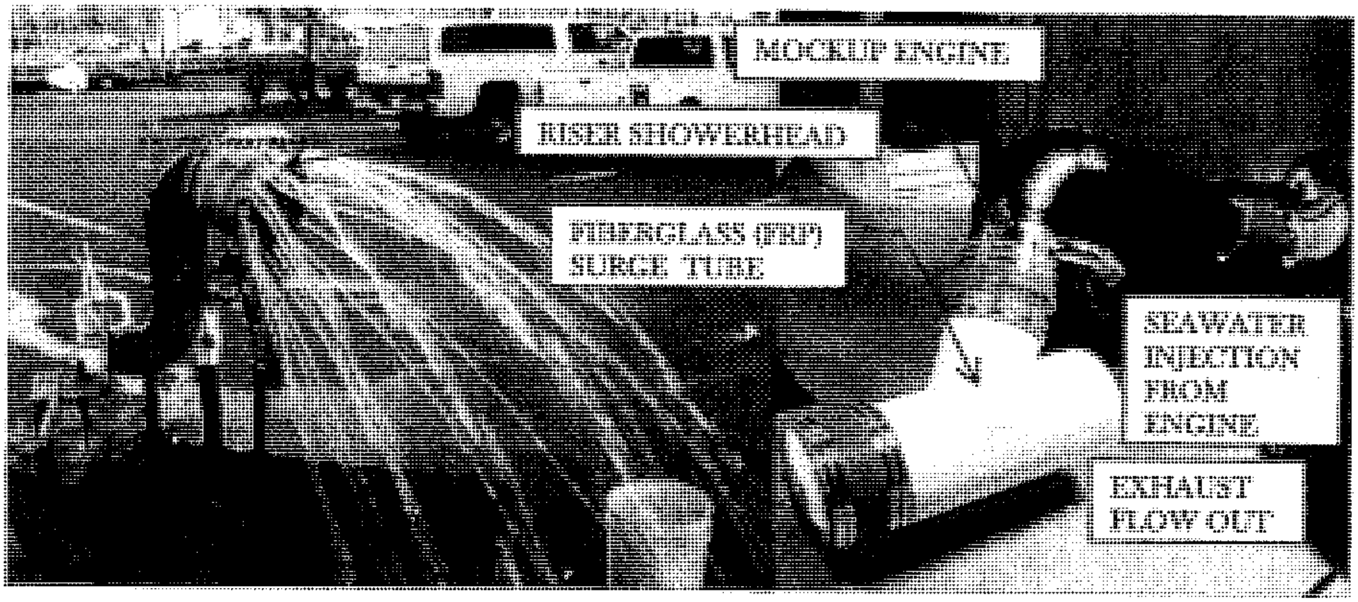
The undersigned made phone contact with Marine Exhaust Systems technical support who is the manufacturer and supplier of the Cabo vessel MR. CHARLIE exhaust components; i.e. the stainless steel exhaust riser, fiberglass exhaust surge tube with connecting rubber boots and hose clamps. Discussions concerning seawater cooling requirements for the non-metal exhaust components determined that the design of the stainless steel exhaust riser is based upon the engine manufacturers minimum output flow rate. Marine Exhaust Systems components are designed and built to meet USCG and ABS specifications. The non-metal components, i.e. the fiberglass exhaust surge tube with connecting rubber boots are fire rated withstand temperatures of up to 259°F and beyond that will begin to fail as they are designed to operate under normal temperatures of 120°F to 150°F, approximately. The undersigned did also confirm this information with two other marine exhaust design persons from other companies who fully agreed that good water flow is imperative and if not, failure is certain of the non-metal exhaust system components.

According to Marine Exhaust Systems technical support, test experiments of the non-metal components have been conducted in the past have revealed that complete failure of those non-metal components was achieved at approximately 350°F within minutes. The stainless steel exhaust riser is designed and built in the principal of a "showerhead" having a series of round holes at the discharge end of the riser pipe spraying a large volume of seawater over the hot exhaust gas before it exits the riser and dumps into the non-metal components.

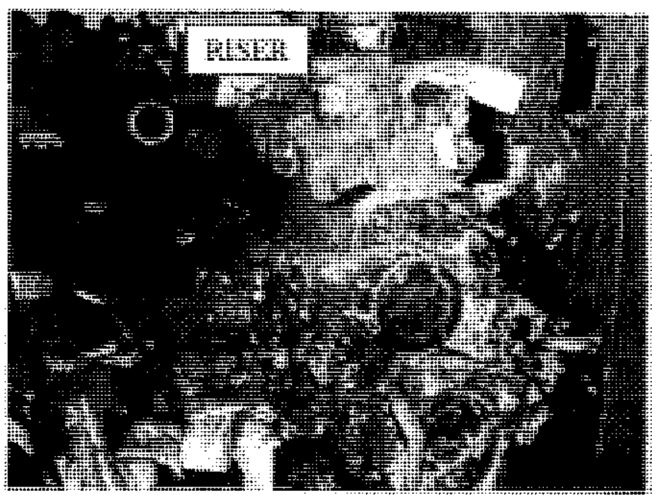
It should be noted that the Marine Exhaust Systems stainless steel exhaust riser is designed and built with a spray pattern of the "showerhead" having more holes closer together around the upper half of the can then the lower half. This done so that most of the water when injected at the designed flow rate comes out of the upper half of the "showerhead" and falls over the exhaust pipe opening in order to provide an optimum cooling affect over the hot gases.

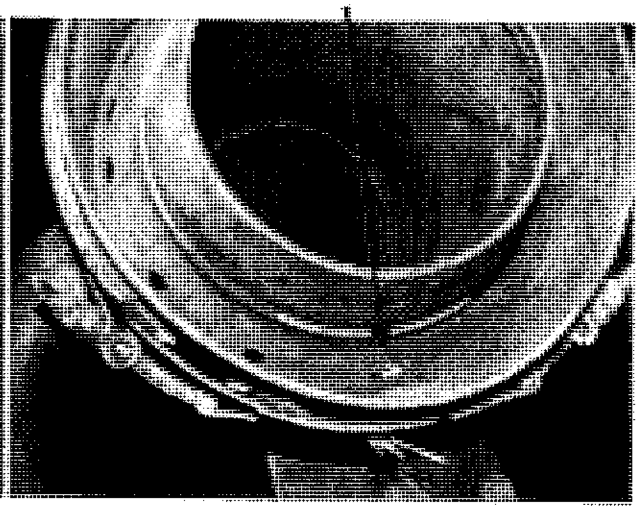
When water flow volume and or pressure is restricted or reduced to the riser "showerhead", gravity begins to take takes affect on the water that is flowing and as a result the water naturally drops to the lower half of the "showerhead". This affect can be compare with a household showerhead, when you have good water pressure the flow pattern is relatively even, but as you turn the pressure down by closing the valve, the water begins to drop to the lower half of the showerhead and will eventually turn into a steady stream of water at the lower half of the showerhead as the valve is closed even more. This same principal is true with a marine exhaust riser which looses water flow or pressure.

The illustration below are photos of a test stand demonstration of a stainless steel exhaust riser with water injection being applying showing how the "showerhead" on the left works and in the right photo, Marine Exhaust Systems components very similar to those installed on the MR. CHARLIE are shown with labels applied for reference.



At the time of the starboard engine inspection at Middleton Marine shop located in Orange Beach, AL, the exhaust riser remained attached with both openings exposed at each end of the riser pipe once the turbocharger was removed. It was noted that one of the "showerhead" holes located at the bottom center of the ring, was plugged up with hard deposits.





According to the MAN technical engine data, exhaust gas temperature of the main engines on the MR. CHARLIE, at 2300-rpm is 1112°F. The engine seawater pump minimum delivery requirement is 107-gallons per minute at 0 bar inlet pressure. Having sufficient seawater passage through the main engine to the exhaust riser is critical in order to cool the hot exhaust gas before reaching the non-metallic components making up the remainder of the exhaust system.

Exhaust gas volume flow [m³/h]	6840
Exhaust gas mass flow [kg/h]	2730
Exhaust back pressure [mbar]	80
Exhaust gas temperature [°C]	600

Sea water pump - standard

Pump model	Impellerpumpe
Delivery quantity [l/min] at 0 bar inlet and 0.6 bar back pressure	400
Power input [kW]	2,0

Without proper cooling water flow and or adequate water pressure to the exhaust riser with the engine running, is certain cause for a fire to start in the down line non-metal components. The physical evidence remaining of the destroyed starboard fiberglass exhaust tube, points towards an exhaust system cooling water failure.

The pieces of physical evidence collected along with all pertinent design data collected by the undersigned concerning the MAN engine and seawater pump, Marine Exhaust Systems design, Groco sea strainer design and the Groco/Hendrick screen design data, was all turned over to Dr. Kendall Clarke, who was hired to assist underwriters in this matter as a metallurgical consultant.

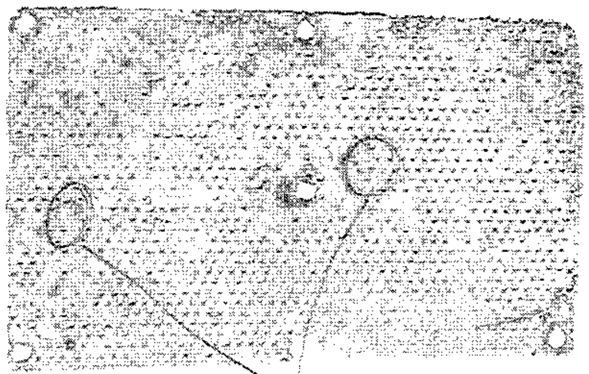
Dr. Clarke did perform digital photo analysis of both the port and starboard sea scoops screens in order to determine the total open area remaining on each of the fouled screens. This was done by comparison using a new sea scoop screen purchased from Groco by the undersigned and provided to Dr. Clarke for this purpose. It was determined by Dr. Clarke that the total open area of a new screen, after deductions were made for the framework of the scoop body, that total open of the new screen as installed, is 17.6 square inches. Dr. Clarke determined that the starboard sea scoop screen has an open area of 3.55 square inches or 1/5 (20%) of the designed as compared with a new clean screen. The port sea scoop screen was determined by Dr. Clarke to have an open area of 3.85 square inches or approximately 1/4 (26%) compared with a new screen.

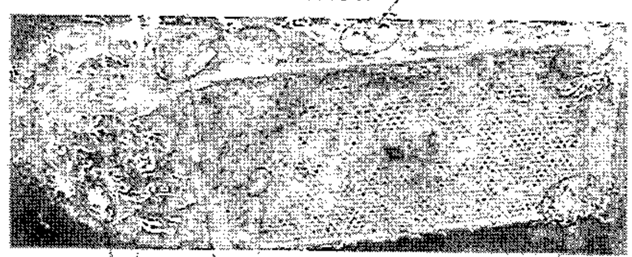
Inquiry by the undersigned was made to the sea scoop screen manufacturer, Hendrick Corporation, to design engineer Mr. John Moran, with regard to flow rate calculations based on preliminary data on the MAN main engine seawater pump with regards to minimum flow rate requirements using 450 liters per minute. Using that data as a starting point to determine screen flow rate, he stated, "***that open area raises the required velocity to over 640 ft/min which is off the chart for pressure loss calculations – there is a formula but I would have to find it, but I do know that the flow resistance roughly increases exponentially with velocity. Knowing that we were estimating 40" H20 vacuum before – the new vacuum on the pump inlet side would be off the chart for pump operation (more than 55" of H20 vacuum). The pump would not have been able to flow 450 liters/min of water no matter how low the head pressure was.***"

After the initial communications with John Moran, Dr. Clarke had conduct his photo analysis of the starboard scoop screen and this information along with the updated MAN pump data received was provided to John Moran. According to Mr. Moran, "***the screen was too clogged to flow the required amount of water (400 l/min or 450 l/min) required for the engine. The pressure loss would be too great for the pump to overcome. Unless the pump is made to operate at a higher vacuum, it probably wouldn't flow enough water.***"

Discussions with Dr. Clarke concerning the starboard main engine oil coolers and heat exchanger, the undersigned has raised the question as to the conditions of those components which are highly susceptible to fouling and corrosion from which seawater passes. A previous visual inspection by the undersigned of the main engine heat exchanger and gear oil cooler, which were both loose from the engine, revealed evidence of fouling and corrosion; however, at that particular time the undersigned was not able to determine the full extent of the fouling and or corrosion. It has not been determined if further inspection of those coolers will be performed; however, we reserve the right to attend such an inspection, should that occur. Fouling in marine seawater coolers applications is inevitable and routine maintenance is often required in order to reduce or avoid potential problems with the machinery in which the coolers are involved.

Several various photos of the sea scoops and screens were sent off by the undersigned to Dauphin Island Sea Lab in a non-formal manner via email, without the lab being made privy to the circumstances involving the MR. CHARLIE. This was done in order to have the lab indentify some of the marine growth present on the sea scoops and screens. The results came back in a non-formal manor via email reporting that various types of marine growth was present on all photos sent to the lab. Handwritten labels were used in doing so. (See the photos below)





The undersigned did also obtain from Middleton Marine the MAN engine Maintenance Plan which gives a comprehensive outline of what is required by the engine maker on a yearly, 2-year and 4-year basis.
(See attached MAN Maintenance Plan)

<u>Every Year</u>
M1 Checking
Engine exterior for loss of oil and coolant
Coolant lever
Concentration of antifreeze anti-corrosion agents
Engine oil level - gearbox oil level
Engine alarms
Functioning of instruments
Coolant hoses for leaks
Fuel lines for leaks
V-belt tension, retightening if necessary V-belt(s)
<u>Condition of impeller</u>
Water hose clamps, pipe connections and bolts for security, retightening if necessary
Alignment of the shaft system-In the event of abnormal vibrations, since the elastic engine mounts may have settled.

<u>Every 2 Years</u>
A1 Cleaning
Intercooler / charge-air pipes / turbocharger
Heat exchanger (pipe cluster)

<u>Every 4 Years</u>
A2 Changing
Coolant
All hoses (e.g. fuel supply and return lines, gearbox oil cooler)

Once the respective number of operating hours has been clocked up (see page 10), the aforementioned maintenance work M1 to M6 is to be carried out by an MAN-authorized workshop.
Jobs A1 and A2 due every year or every other year must be performed irrespective of the number of operating hours clocked up at the respective time.

It should be noted that based upon the service reports obtained from the assureds repairers over the last 4 years, that none of the items listed in the MAN engine Maintenance Plan were performed. According to the assured, he has never changed the impellers on the engine pumps and he further stated that everything was working correctly on the vessel on the day of the incident when he left the dock.

Below are parts taken from Examination under Oath of Dr. Kim Kornegay with referenced page numbers where these can be found.

Pg 202
Q. And if you prohibit the intake of water to the engines enough, either by paint or by growth, then you can damage the engines. Yeah?
A. Not necessarily.

Q. No? You don't agree with that?
A. I don't agree with that.

Pg 220
Q. Have you ever changed the impellers out on either of the main engines?
Pg 221
A. No

Q. Sounds like you're pretty meticulous about the boat in terms of the maintenance. If they did it, you'd know about it.
A. Yes.

Q. What do you know about exhaust censors versus water cooling censors on your display? Are they different? Are they the same?
Pg 222
A. I don't know.

Q. Are there any exhaust heat censors and/or alarms on your main engines?
A. To my recollection, I've had – I've had some faults and some alarms go off in the past that have been repaired. And to my recollection, one of them was an exhaust censor that was bad.

Q. When was that?
A. I don't recall. Ralph replaced it. It was a – he told me it was a bad sensor. There was nothing wrong with – it was exhaust – if I remember correctly, it was exhaust gas temperature.

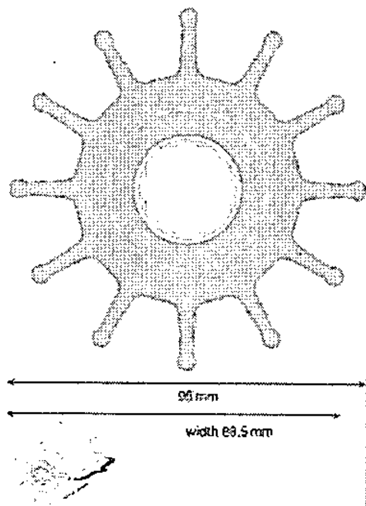
Pg 224
Q. Were they working correctly at the time you set out of Ono in March on your trip?
A. Everything was working correctly.

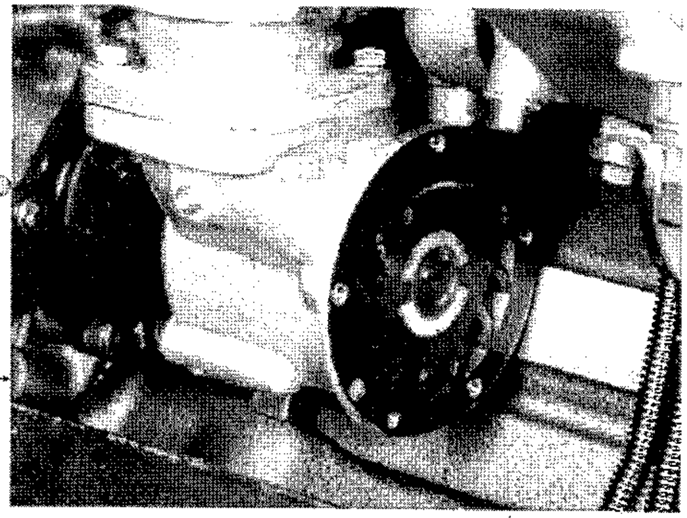
Pg 233
I knew what my GPS showed me. But you can't trust that GPS.

It is commonly known in the marine industry that worn or damaged impellers can cause system failure or engine breakdowns. Directly below is from Johnson Pumps which is the impeller used by MAN Diesel along with a photo of the MAN seawater pump installed on the engine with a new impeller installed and pump cover removed.

Impeller number
09-814B

- Neoprene (for cooling)
- replaces Jabsco 21676-0001
- Europe & 17936-0001 USA





Below are the trouble shooting steps from Johnson Pump concerning neoprene impellers.

Troubleshooting Your Flexible Impeller Pump
Low flow:
Reduced flow will occur when the impeller is damaged.
Bowed, missing, worn or ripped blades (see picture) will reduce flow.
A worn cam, wearplate or cover plate will also reduce flow.
The replacement of these parts, when worn, normally cures the problem.
Another cause of low flow is an air leak. This can occur anywhere along the suction line, within the sea strainer, or within the pump.
Check all hoses, hose clamps, fittings, gaskets and the pump water seal.

Not priming: *All of the causes of low flow described above can also prevent the pump from priming.*

How to prevent impeller failure:
The main causes of premature impeller failure involve running the pump dry, with a restricted suction or with a blocked discharge.
Confirm your inlet seacock is in the open position before engine start. You would be surprised how often this simple step is forgotten.
<u>Regularly clean your suction strainer and confirm all old impeller blades are removed when replacing your impeller.</u>
These steps will reduce the majority of system flow restrictions.

COST:

As previously mentioned in this report, the Accident Investigation Report states that the vessel was valued in access of $800,000.

According to the assured in his sworn statement, he believed the vessel was worth $1,000,000.00.

The undersigned noted that the MR. CHARLIE was found on these Yacht Brokerage websites apparently listed for sale;

Oodle Marketplace - $499,900.00 Frank Gordan - $499,900.00 Boat Trader - $699,990.00

The undersigned has conducted a search and found that there are other similar 40 CABO Sportfish vessels listed for sale in close price range as the MR. CHARLIE was listed.

Estimated Market Value at the time of the incident: $525,000.00

Amount of Hull Insurance: $800,000.00 Deductible: $16,000.00 **(less depreciation)**

SURVEYORS NOTES:

The undersigned has noted a number of circumstances involving this incident which are inconsistent and have raised suspect to this matter.

One being that the value stated by the assured of what the vessel was worth and the amount stated on the police report, both being highly over inflated compared to the vessel market value.

Also, the fact that the location in which the assured decided to beach the vessel was remotely secluded away from any direct shore side access. Furthermore, in of lieu of turning the vessel around and going back to Barber Marina when the engine started presenting a problem or by simply stopping and checking the engine to see what was happening, instead the assured kept pushing the engine, restarting it for a fourth time and running it hard, after the fire was discovered.

Why was the engine room hatch left open once smoke and fire was discovered and no attempt made at discharging a fire extinguisher into the space with four (4) reportedly aboard or not setting off the manual override on the Halon system, if it were installed. All peculiar when the assured was so adamant about doing the maintenance; conducting his "pre-flight checks" and that "everything worked" when he left the dock on a cool Sunday afternoon by himself.

And why was it necessary to go find Barber Marina when doing could so easily be done with the nicely outfitted navigation systems installed aboard to rely on, tied to the dock from at home.

We reserve the right to supplement and or amend this report should new or additional information be made available.

Survey made, signed and submitted without prejudice to rights and/or interests of whom it may concern.

Respectfully Submitted
Atlantic, Gulf & Pacific
Marine Surveyors and Consultants, Inc.

Guy P. Plaisance

Guy P. Plaisance, Surveyor

Society of Accredited
Marine Surveyors, Inc.®

ATTACHMENTS:

1.) Digital Photos within report
2.) 2006 Cabo 40 SF compiled with notes
3.) Service Reports from MR. CHARLIE past maintenance
4.) Groco Sea Scoop and Screen data sheets
5.) MAN Engine Repair Manual
6.) MAN Engine Maintenance Plan
7.) MAN Engine Technical Data sheet
8.) G. Jones, EFI Global June 28, 2013 Report
9.) Dr. Kendal Clarke Screen Analysis – 3 emails
10.) Hendrick -John Moran Screen calculations – 3 emails
11.) Hendrick Calculator http://www.hendrickarchproducts.com/technical-info/autocad-drawing-tools/open-area-calculator/
12.) Marine Exhaust Systems http://www.marine-exhaust.com/
13.) Dauphin Island Sea Lab Analysis – 1 email
14.) Big Bay Navigation Invoice
15.) Examination Under Oath Of Dr. Kim Kornegay with Exhibits
16.) Natural Resources Boating Accident Investigation Report
17.) 3 Yacht Brokerage listings of the MR. CHARLIE

OPINION:

It is the opinion of the undersigned that the damage sighted was recent in nature, of common cause and could reasonably be attributed to a fire on or about March 3, 2013 at 1600-hours, as alleged.

It is the further the opinion of the undersigned that the fire resulted due to the lack of required maintenance on the starboard main engine per the manufacturer's recommendations and by the excessive amount of marine growth on the starboard sea strainer screen.

EXHIBIT 3

GUY PLAISANCES REPORT OF APRIL 13, 2014

Atlantic, Gulf & Pacific
Marine Surveyors and Consultants, Inc.

7946 Hapuna Place
Diamondhead, Mississippi 39525
Email 1: captguy@cableone.net

Fax/Phone: (228) 255-6024
Mobile: (228) 222-1275
Email 2: agpmarine@live.com

April 13, 2014

Allen E. Graham
William E. Shreve, Jr.
Phelps Dunbar, LLP
P.O. Box 2727
Mobile, Alabama 36652

Our Job File #13-IMU-0176 ER

Re: Atlantic Specialty Insurance Company, Plaintiff,
Vs.
Mr. Charlie Adventures, LLC, and Kim P. Kornegay, Defendants.
Civil Action No. CV-13-458-CG-N

Dear Sir,

Pursuant to the requests of Phelps Dunbar, LLP, counsel representing the claimants, Atlantic Specialty Insurance Company, Underwriters at Interest; to provide my opinions as to the cause of loss and my opinions for which the prevailing circumstances involving such matter exist, please consider the following:

The undersigned marine surveyor is a licensed master mariner with over 34 years of combined experience in vessel navigation, management, operations, new construction, repair and inspection within the Maritime and Shipbuilding Industry, of commercial vessels, military vessels and yachts, having much recent experience as marine surveyor involved with claims on like vessels for which this complaint is made.

Furthermore, the undersigned has worked in the capacity of both a yacht captain and a shipyard project manager, during which I did oversee the operations, management, and the construction of yachts, from 1984 until 1994, and over the last thirteen years, have performed many various types of marine surveys on multiple vessels; i.e., including numerous yachts with like equipment installed on the subject vessel, "MR. CHARLIE", with several of which cases involved yacht fires and other cases involving commercial vessel fires.

From June, 2001 to the present, the undersigned has been gainfully employed as a marine surveyor providing professional services to the maritime industry. Attached are Exhibits A and B which are true and correct copies of my curriculum vitae and my fee rates with terms.

The undersigned did originally receive this assignment on March 4, 2013, and in preparation of this report the undersigned did review, all of the documents, photos, manuals, specifications, data, as listed below, including but not limited to, all of the documents previously provided regarding my reporting of this matter found in the AGP Marine File 13-IMU-0176;

1.) AGP Marine Survey File 13-IMU-0176 (Previously provided items 1 thru 18 listed below)
2.) 2006 Cabo 40 SF compiled with notes
3.) Service Reports from MR. CHARLIE past maintenance
4.) Groco Sea Scoop and Screen data sheets
5.) MAN Engine Repair Manual
6.) MAN Engine Maintenance Plan
7.) MAN Engine Technical Data sheet
8.) G. Jones, EFI Global June 28, 2013 Report
9.) Dr. Kendal Clarke Screen Analysis – 3 emails
10.) Hendrick –John Moran Screen calculations – 3 emails
11.) Hendrick Calculator http://www.hendrickarchproducts.com/technical-info/autocad-drawing-tools/open-area-calculator/
12.) Marine Exhaust Systems http://www.marine-exhaust.com/

Member: S.A.M.S - A.B.Y.C - N.A.F.I - I.A.M.I - A.S.N.E

EXHIBIT
3

13.) Dauphin Island Sea Lab Analysis – 1 email
14.) Big Bay Navigation Invoice
15.) Examination Under Oath Of Dr. Kim Kornegay with Exhibits
16.) Natural Resources Boating Accident Investigation Report
17.) 3 Yacht Brokerage listings of the MR. CHARLIE
18.) Barber Marina nine (9) storage invoices and two (2) estimates
19.) Digital Photos within this report
20.) MAN Engine Layout (found in MAN Engine Repair Manual pgs 18-19)
21.) MAN Engine Schematic diagram of cooling system (found in MAN Engine Repair Manual pg 21)
22.) MAN Fault Table (found in MAN Engine Repair Manual pgs 13-14)
23.) AGP-Cabo 40 Man Fuel System Layout PDF file
24.) AGP-Stbd Gear Oil Cooler - Stbd Screen PDF file
25.) AGP-Stbd Gear Oil Cooler PDF file
26.) Smithsonian Marine Station http://www.sms.si.edu/irlspec/Hydroides_elegans.htm
27.) AGP-Port Screen PDF file
28.) AGP-Stbd Screen PDF file
29.) Gulf Coast Hatteras, LLC Invoice No 360 Date 7/15/11
30.) Boat Test-Cabo 40
31.) MotorBoating-New Cabo 40
32.) International Yachtsman - Moving On Up

DESCRIPTION OF M/Y "MR. CHARLIE":

Subject vessel is an all molded fiberglass and composite model 40 Flybridge Sportfish, powered by twin MAN Diesel model R6-800 CRM (D2876 LE 423) 800-hp turbocharged in-line 6-cylinder diesel engines having the following particulars:

Vessel Name:	"MR. CHARLIE"
HIN:	CHXJ0040J506
Flag:	United States
Official Number:	1188936
Length:	40.2 ft
Breadth:	15.5 ft
Depth:	7.4 ft
Year Built:	2006
Place Built:	Cabo Yachts, Inc, Adelanto, CA
Hull Designer:	Michael Peters
Gross / Net Tonnage:	30 / 24
Hailing Port:	Perdidio Key, FL
Owners / Operators:	Mr. Charlie Adventures, LLC

Vessel helm station was outfitted with MAN engine panels for each main engine with digital visual display and audible alarms monitoring rpm, oil temperature, oil pressure, fuel pressure, coolant temperature, gear oil pressure, battery voltage and hours. Also were separate port and starboard visual/audible alarms monitoring engine room temperature and exhaust temperature on the steering console. The vessel was also outfitted with a fire alarm and engine room automated fire suppression system with visual/audible alarm panel with manual override control at the helm station.

The vessel was reportedly also outfitted with the following Navigation equipment;

Big Bay Navigation Computer - 3 monitors, 2-up at the bridge helm station and 1-down at and 17" monitor in salon, RF keyboard and mouse, 120 GB hard drive and Coastal Explorer navigation software. Mariner Pro Upgrade including Coastal Explorer Navigation Chart Program.

Furuno Nav-Net 64 mile Radar Chart Plotter black box connected to 2nd 15" Big Bay display.

Furuno GPS

Simrad AP-25 Autopilot with rudder angle indicator.

Furuno FCV 1100 Fishfinder/fathometer w/12.1" screen and bronze thru-hull transducer.

Furuno RD-30 Tri-Data multifunction display.

ICOM VHF with 17' antenna.

Cellular phone 17' antenna with signal booster.

Ritchie magnetic compass.

(Reference 2006 Cabo 40 SF layout compiled with notes, Boat Test-Cabo 40 file, MotorBoating-New Cabo 40 file, and International Yachtsman - Moving On Up file; for complete vessel design and features details)

CIRCUMSTANCES:

Reportedly, on March 3, 2013, according to the owners statement, at approximately 1430-hours (CST) after making pre-checks on the vessel, got underway from his house located on Ono Island, Alabama. Reportedly this trip was to take a ride to find Barber Marina, and during the trip and while en-route back home, not far from Barber Marina, encountered starboard engine problems resulting in the engine stalling three (3) consecutive times, reportedly without any engine warnings, indications or other or alarms sounding, when the vessel caught fire and burned significantly, consuming the vessel to just above the waterline throughout. (See AGP Marine Survey Report 13-IMU-0176, dated September 9, 2013, for specific details.)

According to the Department of Conservation & Natural Resources Boating Accident Investigation Report Case # 20130303AL189-1, at approximately 1600-hrs the location of the MR. CHARLIE was reported at just slightly to the southwest of Hatchet Point on the south side of the Intra-coastal Waterway near marker "69" near Latitude: 30 deg 18 min 23.000 sec North and Longitude: 87 deg 32 min 43.000 sec West. This particular location chosen by the owner to beach the vessel during this fire incident was remotely secluded away from any direct shore side access. (See Attached Accident Investigation Report # 20130303AL189-1)

Inconsistencies within the Accident Investigation Report, states that the vessel was reportedly valued in access of $800,000; however, according to the owner in his sworn statement, he believed the vessel was worth $1,000,000.00.

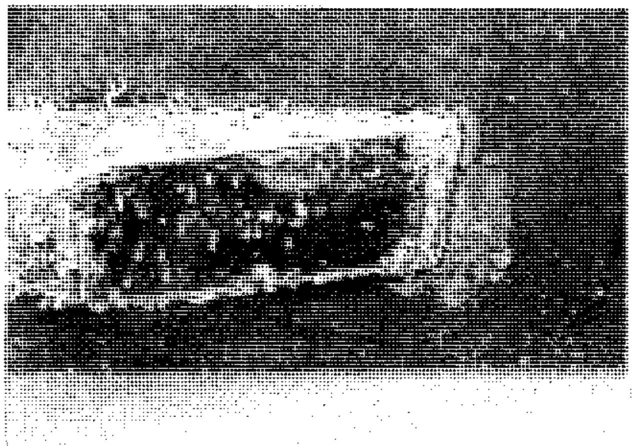
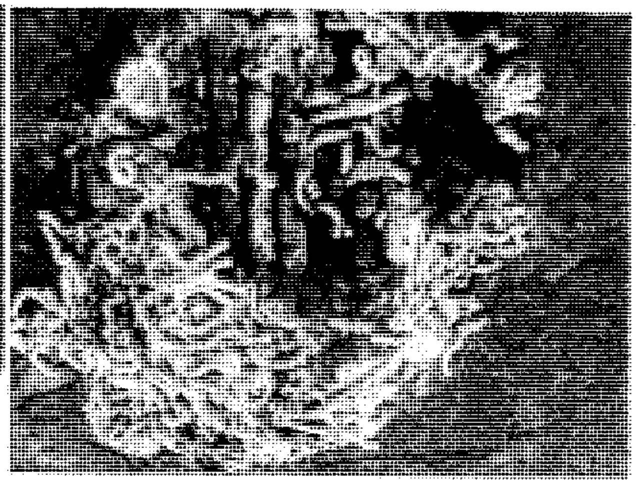
During my investigation, it was noted that the MR. CHARLIE was found on three (3) Yacht Brokerage websites listed for sale as follows; Oodle Marketplace - $499,900.00, Frank Gordan - $499,900.00 and Boat Trader - $699,990.00.

Also noted within the Accident Investigation Report, it states that there was only one (1) fire extinguisher aboard which contradicts what the assured stated that there was at least four (4) aboard, 2-inside and 2-atop at the flybridge deck. The Accident Investigation Report also indicates that the engine room hatch was closed as apposed to what the owner stating, it was left open. The Accident Investigation Report further indicated that there was a Halon Fire Suppression System aboard; however, during our investigations, no Fire Suppression System bottle was found aboard.

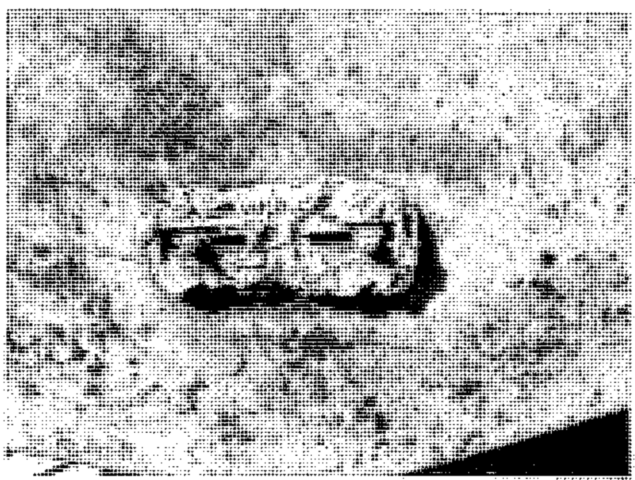
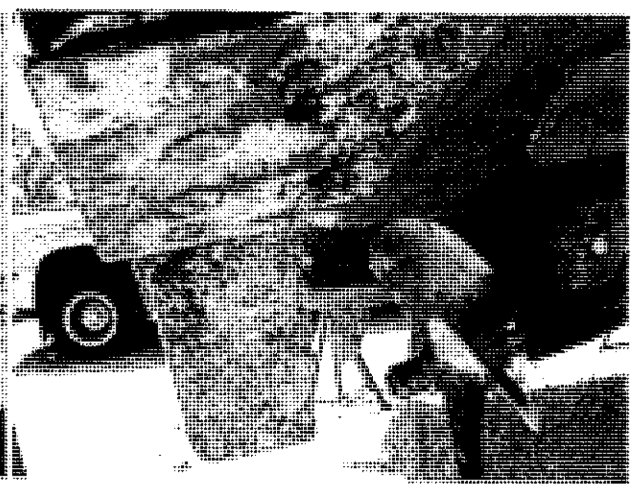
Furthermore and according to statement given by the owner, there were flames reportedly coming out of the open engine hatch when he deployed his liferaft and abandoned ship from the MR. CHARLIE, with engines and generator, reportedly all still running.

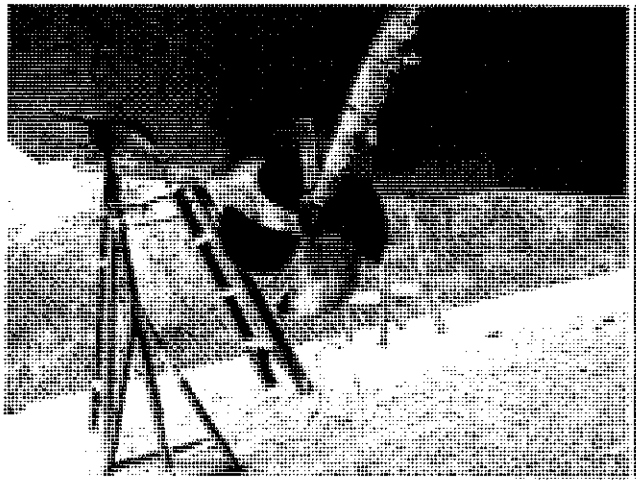
REMARKS:

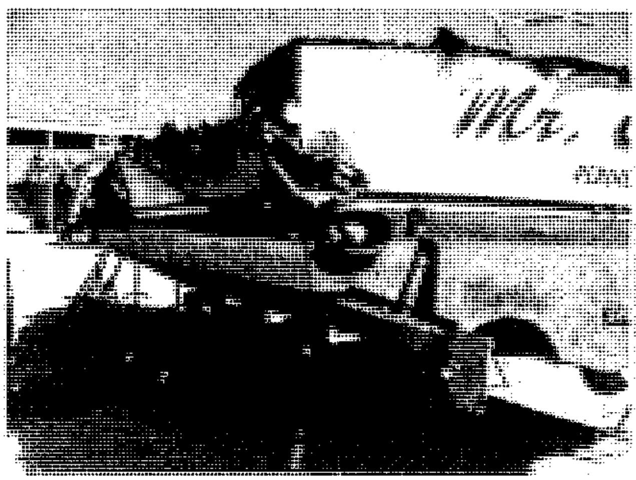
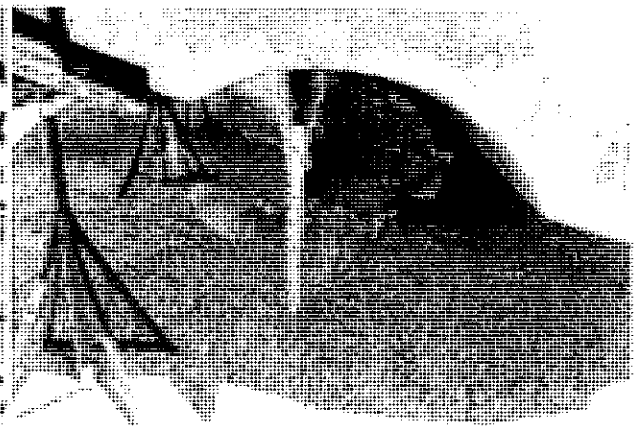
During the undersign's investigation attendances on the subject vessel beginning back on March 8, 2013, an inspection was made on all of the hull bottom and there was heavy accumulations of marine growth present with no evidence of any recent scraping on the vessel underwater running gear and or on the underwater appendages, particularly none on the main engine sea water intakes. What was obvious to me was long term marine growth that had apparently been growing since the last reported dry-docking in July 2011. (See AGP photos, Stbd Screen PDF file, Port Screen PDF file and Gulf Coast Hatteras, LLC Invoice No 360 Date 7/15/11)

It should be noted that the propellers and lower portions of the struts were relatively clean of marine growth which is consistent with the reported 'bagging" of those items performed by the owner to prevent growth from occurring. It was also noted that the anodes were mostly eaten away, deteriorated and on the rudders and propeller shafting, anodes were completely eaten away and missing.



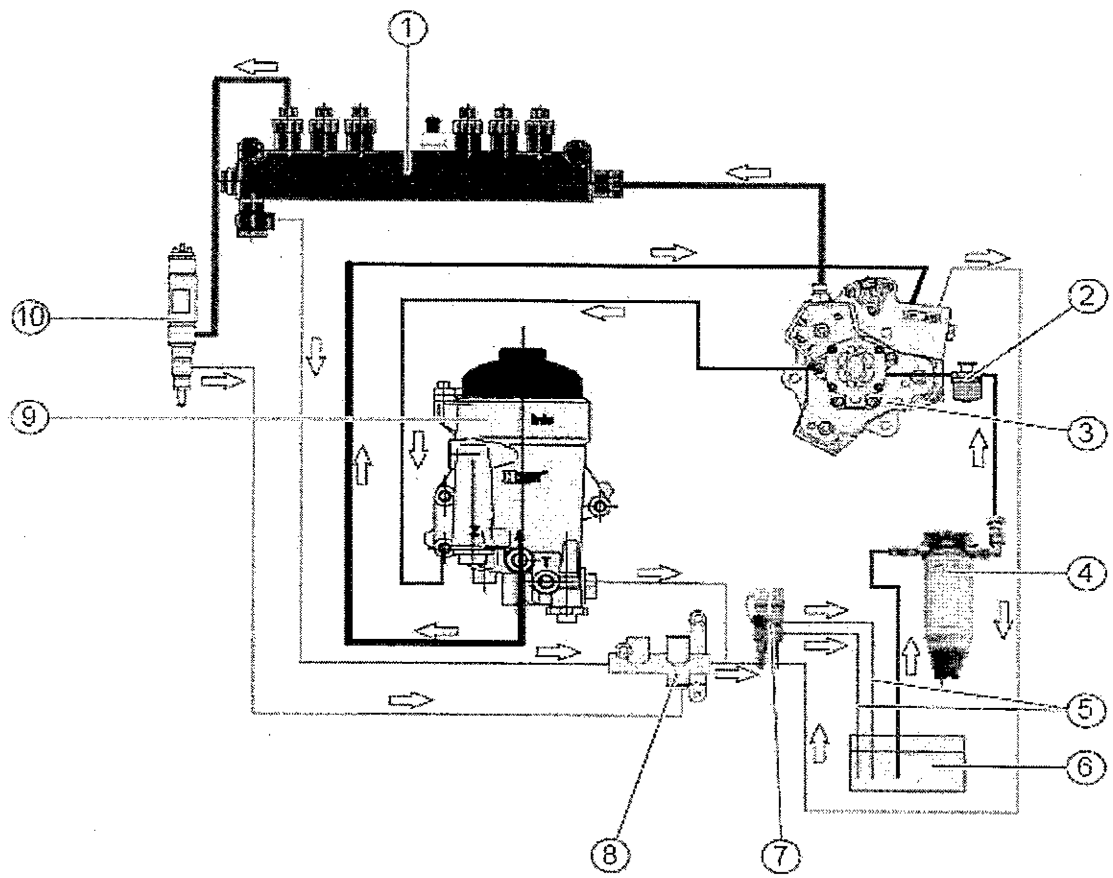
Furthermore, during my investigation attendance on the subject vessel and or of the starboard main engine after removed, no evidence was found on the starboard main engine fuel system components concerning any failures and or leaks. All fuel components were inspected, examined to the extent possible without removals and or disassemblies of the components.

There was no evidence found that indicated any fuel leaks existed or were present on the main engine or generator at the time of the fire, particularly fuel leaks that would have contributed to the fire origin, initially. Or in simpler terms, no associated fuel leaking on the starboard main engine before the fire started. (Refer to attached PDF file Cabo 40 Man Fuel System Layout)

Additionally, all of the starboard main engine fuel components as they are arranged and installed are located on the port inboard side of the engine with the exception of the fuel rail, injectors and connecting steel fuel lines, which are located in the valley on top of the engine more towards the inboard port side. (Right half side looking from forward to aft)

There is no fuel components located close to, or around the turbocharger area on these engines, and the turbocharger, is located at the opposing starboard aft outboard side at the rear of the engine. The turbocharger is closer to the exhaust riser and FRP exhaust tube. (Left side rear looking forward to aft)

Schematic diagram of fuel system

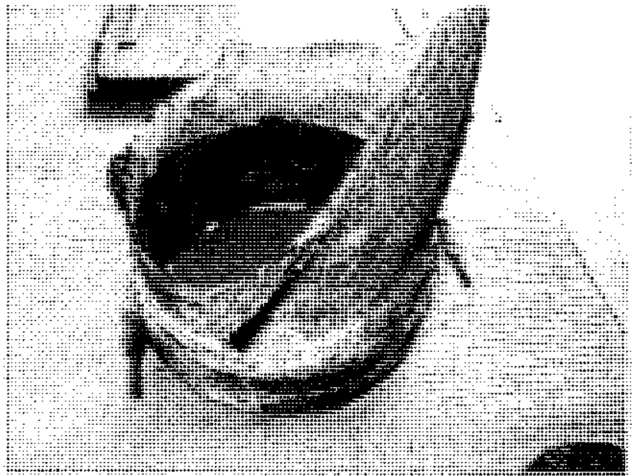


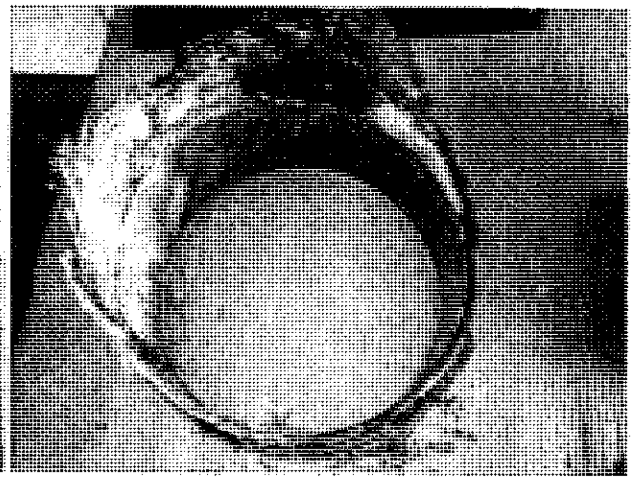
① Rail
② Hand pump
③ High-pressure pump
④ Fuel prefilter with water separator
⑤ Fuel return
⑥ Tank
⑦ Fuel distributor
⑧ Fuel distributor
⑨ Fuel Service Centre (FSC)
⑩ Injector

Fire consumption was most concentrated at the starboard aft engine compartment of the vessel with heaviest material loss from. Fire delineation patterns were most prominent along the starboard aft bulkhead where the generator Racor fuel filter housing was uncovered and mounting location determined by the attached bracket. The Racor plastic bowl was destroyed and the metal housing was heavily distorted with top cover dislodged by fire involvement. Diesel fuel released from the unit and lines apparently accelerated the fire in that area. The close proximity of this equipment to the starboard exhaust is the most probable explanation for the low level damage.

Engine compartment electrical system arc map analysis revealed adverse activity at the starboard aft section only. Evidence of arcing and beading of the copper conductors at the starboard aft side versus the port aft side was apparent. This activity was consistent with that of wiring being energized, subjected to heat/flame contact with mid line melting, indicative of resulting fire damage, not the cause of the fire.

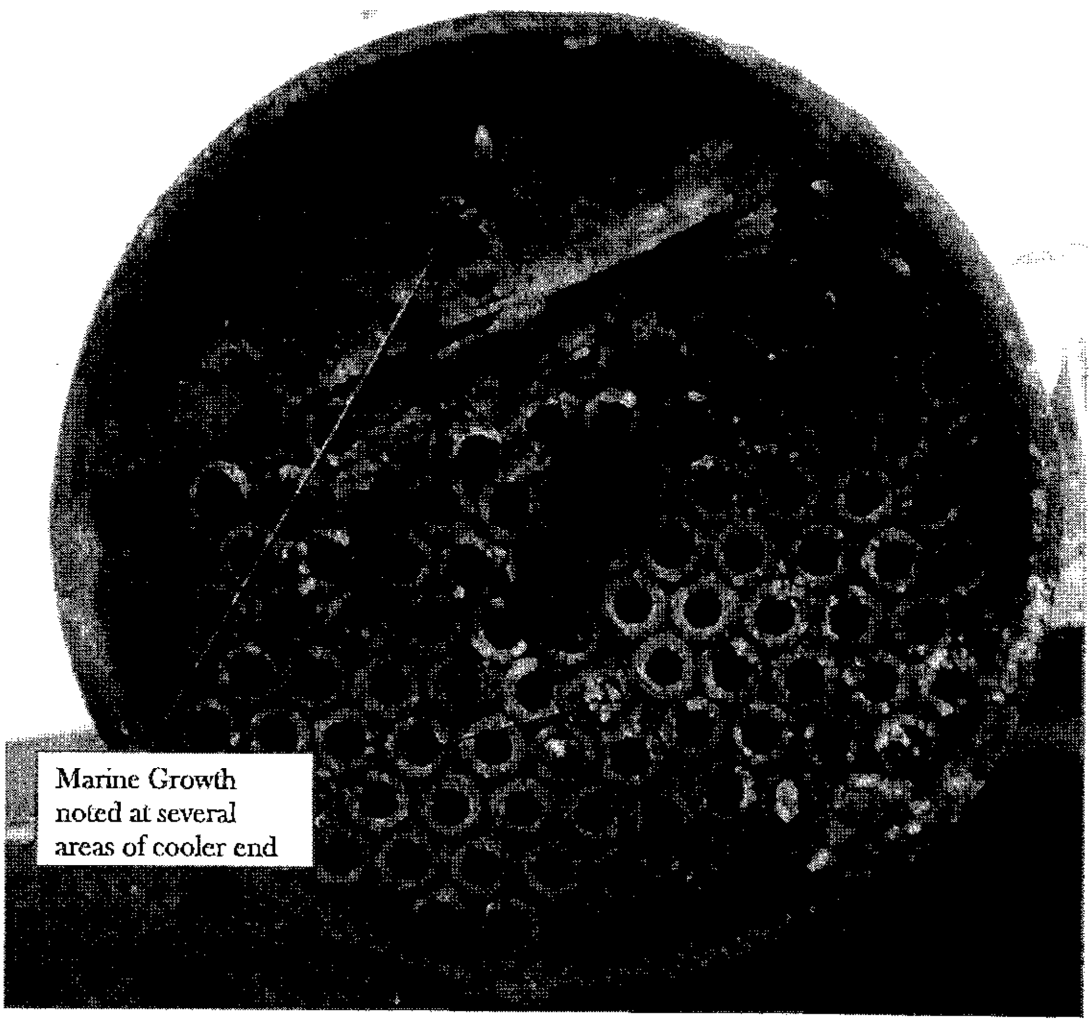
The port and starboard FRP exhaust tubes were recovered from the fire debris by the undersigned and were retained as evidence. The port FRP exhaust tube was found completely intact with some negligible burning exhibited on the outer fiberglass which is associated with the resulting surrounding fire (flames). The starboard FRP exhaust tube was found almost completely destroyed with evidence it remaining which consisted of the opposing ends of the tube (the inlet and outlet connections) for the exhaust. There was extreme consumption of the fiberglass tube, evidence a catastrophic failure of the starboard exhaust tube as a result of localized intense heat and burning (flames), and tube appeared burnt from the inside out. (Refer to AGP exhaust tube photos)





Considering the theoretical and physical evidences consisting of the excessively fouled seawater scoop intake screen, the main engine pump performance curve/flow rate specifications and calculations performed, gear (transmission) oil cooler found fouled with obvious marine growth present and visible, starboard FRP exhaust tube burnt ends remaining, and combined with the area of origin burn pattern found. All of this evidence collectively, depicts that there was clearly insufficient seawater cooling flowing through the starboard main engine to cool the non-metallic exhaust system components, causing exreme catastrophic failure of those exhaust components; i.e., the melting and burning of the rubber boot hose connections to the FRP exhaust tube.

<u>Stbd Gear Oil Cooler</u>



It is conceivable how this fire could have easily spread so rapidly considering reports by the owner, that when he stopped the vessel and opened the engine hatch he saw smoke. He then left the hatch open and returned back up to the flybridge to speed up the engines and headed the vessel towards the shoreline where he finally ended up.

The action of opening and leaving the hatch open, would constitute substantial increased airflow into the already burning engine room and by increasing engine speed after, significantly increased the level of exhaust heat and escaping exhaust hot gases into the starboard aft area of the engine room. Basically fanning and fueling the fire into a rage so that when the vessel grounded a few minutes later with engines still running and after owner abandoned ship, shortly thereafter was engulfed in flames. This is evident by the reporting of the vessel owner and the photos and video taken by Capt Mac McLean when he first arrived onto the scene.

What is not conceivable, is how it is possible that the starboard engine was exhibiting some sort of problem such that it was stalling, shutting down, yet there was reportedly no problems showing on the engine panel, no fault indications, no warnings and no alarms, according to the owner. However; after he abandoned ship, he heard engines shut down and then alarms sounding. (Refer to MAN Fault Troubleshooting Table for more details)

CONCLUSIONS and OPINIONS:

Through careful consideration and further evaluation by the undersigned of all of the evidence on file; I submit the following conclusions and opinions as to the cause and origin of the fire aboard the MR. CHARLIE on March 3, 2013.

1) No evidence was observed or discovered that would indicate the source or main cause of the fire was electrical in nature.

2) No evidence was observed or discovered that would indicate the source or main cause of the fire was from any pre-existing fuel leak.

3) Insufficient seawater flow through the starboard main engine cooling system resulted in the excessive rise in exhaust temperature, causing the hot exhaust gas to burn and ignite into a fire, beginning with non-metallic exhaust system components. This fire was greatly exacerbated by the starboard main engine continuing to run, expelling 900° F to 1100° F exhaust heat and gases into the local surrounding area of the starboard aft engine room, quickly melting the closely mounted generator diesel fuel filter Racor plastic bowel, thus providing a substantial amount of accelerant, diesel fuel onto the already burning hot exhaust fire.

4) No scraping of marine growth had occurred within months, and possibly not since the previous dry-docking of the vessel, evident by the amount, uniformity and types of marine growth found; i.e., barnacles, calcareous tube worm, oysters, red algae and encrusting bryozoans (moss), all of these named marine growth as determined by Dauphin Island Sea Lab, were present on all of the underwater hull appendages, and were growing on the outside and inside of the engine seawater scoops and screens and inside through the rest of the engine seawater cooling system. (Refer to AGP Stbd Gear Oil Cooler - Stbd Screen)

5) Little to no maintenance was performed by the owner or by outside mechanics on the MR. CHARLIE main engines, evident by the statement given by the owner as to what he has or has not had performed on the engines, the service maintenance records made available and what is recommended in the MAN Maintenance Plan; i.e., with specific reference to engine alarms, cooling water pump, fuel system and cleaning and servicing heat exchangers and oil coolers. These are all contributing factors to excessive heat build up over a short period of time running from his Ono Island home to Barber Marina and are the cause of the sole cause of fire. (Refer to MAN Engine Maintenance Plan)

The undersigned reserves the right to amend and/or supplement this report, should additional information be made available.

Respectfully Submitted,

Atlantic, Gulf & Pacific Marine
Surveyors and Consultants, Inc.

Guy P. Plaisance

Capt. Guy P. Plaisance, AMS #942

EXHIBIT 4

GARY JONES' REPORT OF JUNE 28, 2013

EFI Global
Complex Issues • Solid Solutions

3010 Lakeland Cove
Suite E
Flowood, MS 39232
TF: 800-809-0701
Tel: 601-956-1590
Fax: 601-956-7410
www.efiglobal.com

FIRE INVESTIGATION
Report One

INSURED:	**Dr. Kim Kornegay**
LOSS LOCATION:	**Intracoastal Waterway Orange Beach, AL**
DATE OF LOSS:	**March 13, 2012**
CLAIM NUMBER:	**OAB014998**
EFI FILE NO:	**94201-05906**

Report Date:	**June 28, 2013**
Prepared For:	**International Marine Underwriters 1100 Poydras Street, Suite 1220 New Orleans, LA 70163**
Attention:	**Rita Boggan**

EXHIBIT
4

ASSIGNMENT

The assignment to conduct an origin and cause investigation of a 2006 Cabo 40 pleasure boat was received on March 19, 2013. The physical examination commenced on March 28, 2013 and was completed on that date. However, continued research and consultations with other experts continued throughout the investigation.

ENCLOSURES

1. 36 Photographs with description
2. Boating Accident Investigation Report-Dept. of Conservation & Natural Resources
3. Cabo 40 product literature
4. Gulf Coast Hatteras service records
5. Middleton Marine service records
6. Boat Trader ad for Mr. Charlie Adventures
7. Groto strainer scoop

FIRE SCENE EXAMINATION

A systematic scene examination utilizing a method consistent with the guidelines of NFPA 921 was conducted. The fire scene examination was performed on March 28, 2013. The inspection was conducted at Barber Marina in Elberta, Alabama. The boat was moved to this location following the fire event.

The burned boat was photographed and a field diagram was prepared at that time. Access to the property was provided by representatives of Gulf Coast Hatteras, the custodian of the premises. Admittance to the grounds and premises was through the monitored gates. Present and participating in the investigation was Marine Surveyor Captain Guy Plaisance and Ralph Holloway of Middleton Marine. A safety survey uncovered no hazardous conditions that precluded the examination process from occurring. Initial reports indicate there were no injuries or fatalities involved in this loss.

There were no specific or appreciable alterations to the vessel following its extinguishment and movement to this dry dock facility. However, the fire did cause significant damage to the entire boat and for this reason, background information about the loss and events leading up to the fire was essential to the investigation. In addition, significant research regarding the engine/exhaust operating system was important to this effort as well. The eyewitness to the event is the insured and he did provide the following detailed information about the loss.

"On Sunday, March 3, 2013 I had planned to take my Cabo over to Barber Marina to be sure I knew how to get over there from my house on Ono Island. The plan was to haul the boat out in the next couple of weeks when the rain started to subside to repaint the bottom. It had been over a year since I was over that way and I wanted to be sure I had waypoints to get back there without wrong turns. Plus, the boat needed to be run as it had not been out of the slip over the winter. Early Sunday morning, the wind was blowing hard out of the north. The tide was low which makes it tough to get over to the channel. The forecast was for the sky to clear and the wind to subside in the early afternoon. So I decided to do all the house chores in the morning and take the boat out in the afternoon, if the forecast was right.

Around 2:00 PM the conditions looked good. The tide was up and the wind was down. So just before 2:30 PM and after all my preflight checks were done I started the engines. Both engines started right up. As they warmed up I did notice that the starboard engine was idling about 15 RPMs slower than the port engine. I did not think much about that, as both engines were running smooth. However, in hindsight I had never experienced either engine running at different RPMs at idle. Typically, both engines would turn 599 RPMs at idle.

No problem out of the slip, very routine, I headed toward Barber Marina. When I got to the Intercostal, I synced the engines and throttled up. Nothing unusual, however there was some vibration, which I attributed to growth on the running gear. I kept the RPMs down to avoid unnecessary vibration and was running about 22 knots. I did make a wrong turn, but corrected and marked my waypoints. I got to Barbers and turned around to go back home. As I headed back towards home and looked ahead I saw a barge and tug coming through Hatcher Point. The wind was from the north and he was crabbing into the winds. I was in no hurry, so I just sat there in the shallow flats and watched him move through. I don't know what time it was or how long it took him to get clear. I was just thinking that I wanted to allow him plenty of room and waited until he went on by.

When he was clear, I synced the engines and throttled up. As I came up on plane, the starboard engine quit. I thought that was odd. I put the port engine in neutral, reset the starboard engine and started it back up. It started up; I synced again and throttled up. The starboard engine died again. I thought this is really strange. I went back to idle on the port engine, reset the starboard engine and started it back up. It started; I synced again and throttled up. As I started to come up on plane, the starboard engine quit for the third time. Now I knew something was not right. I put the port engine back to idle and went down to see what was going on. I got down to the cockpit and thought I would check the breaker panel. So I opened the salon door and looked at the breakers. Everything looked OK. I checked all the breakers. Nothing looked unusual on the panel. I closed the salon door. I then thought I would check the engine room. I turned and opened the engine room hatch cover. When I did smoke hit me in the face. Obviously, it startled me and I ran up the steps back to the fly bridge and sent out a May Day on channel 16. The Coast Guard answered and I told them I had an emergency and needed help. I don't remember what was said but I do remember telling them that I was going to try to beach the boat.

I stopped transmitting and I reset the starboard engine, restarted it and pointed the boat to the south side of Hatcher Point. When I throttled back, things were happening fast at this time. I remember pointing the boat toward the beach but not too fast. I ran down the stairs to the cockpit and a lot of smoke was coming out of the engine room. The life raft started to inflate and I looked over my shoulder and that is when I first saw flames coming through the engine room hatch. I pushed the life raft overboard and jumped on top of it and heard a siren going off and the engines stopped. I heard no engine sounds as I drifted toward shore."

It was documented the distress call was placed at 4:00 PM on March 3, 2013 and responding was the Alabama Marine Patrol, U.S.Coast Guard and Tow Boat U.S. The location in question is depicted in photograph 1 which was reportedly taken from a cell phone. It depicts open flames with major destruction having already occurred when the picture was taken. The location appears to be a somewhat remote setting along the

Intracoastal Waterway with the banks in sight. The fire had burned unimpeded with no evidence of successful fire suppression and it was moved to Barber Marina by Tow Boat U.S.

The property affected by fire is a 2006 Cabo 40 fly bridge sport fishing boat with **Hull Identification Number US-CHXJ0040J506-Z3347**. According to Boat Trader, it is a premium midsize convertible with only 350 hours. Principle features include upscale two stateroom interior, roomy cockpit with large capacity live well, rigging center, in deck fish/storage boxes, engine room access door and twin MAN diesel R6-800 CRM marine engines. The modified V-hull is 42'10" in length and 15'9" beam with a fuel capacity of 550 gallons. A copy of the Boat Trader ad is enclosed.

This owner-utilized boat is moored at the insured's local residence on Ono Island while he reportedly maintains a second home and professional business in Prattville, Alabama. The exact distance he had traveled when the fire occurred has been difficult to measure with estimate ranges of eight to ten miles noted with a time estimate of 60-90 minutes.

The boat had burned to a height just above the water line effectively destroying the main cabin, galley, stateroom and head. Exterior examination revealed the raw water intake strainers on the port and starboard sides of the hull were covered with marine growth. The growth on the starboard intake was significant and could have inhibited the water inlet flow to adequately cool the engine. Material loss indicates the fire was most concentrated to the mid (engine compartment) portion of the boat. This finding is consistent with the observations of the insured. With the engine hatch cover left open following the fire's discovery, this provided an unobstructed avenue of fire travel beyond this location.

Interior damage pattern analysis indicated the fire had originated within the engine compartment. Advancing from the area of least damage to the area of greatest fire involvement revealed the fire was concentrated at the aft end of the starboard Man diesel engine. The flames breached the upper section of the compartment while the floor system was stable enough to walk on. Fire patterns increased toward the starboard turbocharger intake side, fiberglass exhaust tube and #6 valve cover. The smoke did spread throughout and the generation was consistent with the type and volume of the available fuel load.

Fire demarcation patterns were most prominent along the starboard aft bulkhead where the generator Racor fuel canister was affixed by mounting brackets. The bowl was destroyed and the metal canister was melted and was dislodged by fire involvement. The release of fuel from the bowl and lines did accelerate the fire growth. The close proximity of this equipment to the starboard exhaust is the most probable explanation for the low level damage. The generator is located aft and center to the starboard and port engines. Damage to equipment is a result of exposure by the oncoming flames.

Systematic debris removal began in the engine compartment where the lowest and most intense area of burn was noted in the aft starboard section. The disproportionate melting and thermal stress to the starboard exhaust and engine components, as compared to those on the port engine, were a factor in the assessment process. Temperature gradients decreased as distance away from the area of origin increased. Uniform melting in the engine compartment of aluminum metals places the ambient temperatures in the range of 1180 degrees Fahrenheit with isolated melting to copper raising it to 1980 degrees. These temperature readings were one of the indicators relied upon in formulating the origin area theory and included the destruction to the starboard exhaust tube, while that for the port engine was found somewhat intact in the aft bilge.

Arc map analysis of the engine compartment's electrical system disclosed adverse activity at the starboard section only. Evidence of arcing and beading to the copper conductors at the starboard versus the port engine was evident. This activity is consistent with the wiring being in an energized state when subjected to external flame contact. The mid line melting is indicative of it being damaged as a result of and not a cause for the fire.

As viewed from the overhead, the valve covers do show a directional burn pattern that emanates from the aft end of the starboard engine as compared to the port. The overall evaluation of the physical evidence does correspond with the testimonial evidence presented by the insured regarding the events leading up to the loss.

Following the formation of an opinion as to the fire origin area, efforts were then directed towards identifying the ignition or heat source for the loss. The most probable ignition theory has been identified as a release of hot gases from the starboard exhaust tube. According to Boat Owners Association of the United States, 24% of boat fires were started by propulsion systems overheating. The most frequent factor involved an intake or exhaust cooling water passage obstruction.

Insufficient water flow through the engine to the exhaust riser from a clogged strainer could result in an exhaust tube failure. The engine cooling water is supposed to lower the internal exhaust gases (900-1100 F) to an acceptable level for the exhaust elbows and tube. Exhaust risers are a maintenance item that will only last for so long because of their extreme exposure to corrosive water and extreme temperatures. If the coolant flow is low and your raw water temperature exceeds 130 degrees F, you can get trace amounts of salt in the water, which transfers to solids and a buildup on the riser spray head, which could get clogged. An exhaust tube failure could result from the hot gases not getting completely cooled where there are voids in the spray pattern of the riser. In this particular case, Middleton Marine did remove the exhaust riser and one opening in the shower nozzle was found clogged. This single obstruction should not have significantly affected the cooling process by itself. However, the marine growth on the external hull intake strainers and running gear were evident and are indicative of delayed maintenance and coincides with the upcoming plans to have the boat brought in for cleaning and painting. With growth on the running gear one might experience vibration when the boat is in gear, loss of RPMs, black smoke coming from the exhaust, lack of ability to draw water through the intakes, increased fuel consumption and if these symptoms are ignored, it could lead to an overheated engine. Several of these indicators were reported by the insured at the time of loss.

Evidence indicates disproportionate marine growth on the seawater intake scoop screens for the starboard strainer. The hull strainer with access door is manufactured by Groco and is a model APHS with perforated series strainer. According to Groco, the scoops are to be mounted with the thru-hull fitting at the extreme aft end where the hinged clean-out access door is located, not forward of the door as in this installation. It was also noted that at some point in time, the screens were painted, which could have reduced the inlet flow combined with the marine growth. These two issues must be clarified by the insured to determine potential responsibility for each.

Captain Plaisance did remove both strainers and in the process of doing so, some of the soft growth/debris was dislodged. He also noted the over spray of the anti-fouling paint at that time and did take photographs of it. The question at hand is whether CABO caused the overspray and strainer installation during its construction or was this done during its last haul out and cleaning.

Inspection of the seawater pumps revealed the impeller in the starboard side was disproportionately damaged as compared to the port one. Visual inspection of the two impellers disclosed greater material loss and fragmentation to the starboard impeller.

A side by side comparison of the port and starboard FRP exhaust tubes disclosed an obvious distinction in damage to each. The port tube is generally intact with the shape and contour of the tube retaining its original design. However, there is a significant loss of product at the starboard tube with it severed and crumbly to the touch. The distinction in damage to the impellers, exhaust tubes, valve covers and wiring provide the basis for the origin area hypothesis.

To quantify the amount of seawater restriction, the strainers were delivered to Dr. Kendall Clark, a metallurgist in Mobile, Alabama. Dr. Clark was also provided the water pumps with impellers in place and the exhaust tubes for the port and starboard engines. The materials testing by Dr. Clark will provide the scientific basis for the ultimate fire cause determination. Until that testing is complete, the investigation remains active and continued contact with Captain Plaisance and Kendall Clark will be maintained to expedite the completion of the testing.

DETERMINATION OF ORIGIN AND CAUSE

Fire pattern analysis coupled with witness information indicates the fire originated in the engine compartment in the vicinity of the aft end of the starboard engine. The preliminary evidence indicates a significant restriction in the seawater flow to the starboard engine cooling pump. That water is required to lower the internal hot exhaust gases (900-1100 degrees F) in the FRP exhaust tube to a normal operating level (190 degrees F). The fiberglass tube is rated at 259 F and is connected to the exhaust riser and FRP tube with rubber boots. The weak point in this system is at the connector and a release of these hot gases is capable of igniting nearby combustibles common to the origin location.

The most probable ignition theory involves the release of these searing gases as a result of a restriction of the cool water flow due to the marine growth. Under this theory, circumstances bringing ignition and fuel together would have resulted from a delayed maintenance issue. Until the scientific materials testing has been completed by Dr. Clark, the cause for this fire is being classified as undetermined.

COMMENTS

The investigation remains active and continued contact with Captain Plaisance and Dr. Clark will be maintained to complete any remaining tasks in an expedited manner.

The conclusions drawn in this report are based on a total analysis of the information collected during the investigation. Information or data that becomes available at a later date may justify the modification of the results and/or conclusions previously provided.

If I can be of further assistance, or if additional information is required, please do not hesitate in contacting me.

Gary W. Jones
Gary W. Jones, C.F.I., CFEI
Senior Fire Investigator
(228) 219-9346

File Status: Active

Peer review by:

Dave Berry, Jr.
Dave Berry, Jr. CFI, CFEI
District Manager
Jackson, MS
(800) 809-0701

EXHIBIT 5

GARY JONES' REPORT OF SEPTEMBER 9, 2013

EFI Global
Complex Issues • Solid Solutions

3010 Lakeland Cove
Suite E
Flowood, MS 39232
TF: 800-809-0701
Tel: 601-956-1590
Fax: 601-956-7410
www.efiglobal.com

FIRE INVESTIGATION
Report Two and Final

INSURED:	**Dr. Kim Kornegay**
LOSS LOCATION:	**Intracoastal Waterway** **Orange Beach, AL**
DATE OF LOSS:	**March 13, 2012**
CLAIM NUMBER:	**OAB014998**
EFI FILE NO:	**94201-05906**

Report Date:	**September 9, 2013**
Prepared For:	**International Marine Underwriters** **1100 Poydras Street, Suite 1220** **New Orleans, LA 70163**
Attention:	**Rita Boggan**

EXHIBIT
5

ASSIGNMENT

The assignment to conduct a fire origin and cause investigation was received on March 19, 2013. The physical examination of the fire damaged 2006 Cabo 40 commenced on March 28, 2013. It was conducted in accordance to the recommendations of NFPA 921. Following that examination, continued research into the loss has occurred with close consultations with Captain Guy Plaisance, metallurgist Kendall Clark and other functional area experts.

INVESTIGATION

On June 28, 2013 a first preliminary report was issued based on information currently available and analyzed at that time. The subsequent investigation followed the systematic approach that is based on the scientific method which forms the basis for legitimate scientific and engineering processes including fire incident investigations.

Based on an overall evaluation of the physical and testimonial evidence, it was concluded the fire had originated in the engine compartment. The origin area was further refined to the aft starboard section. Temperature gradients decreased as distance away from this location increased. A comparative damage analysis disclosed disproportionate melting and thermal stress to the starboard exhaust FRP tube and engine components as compared to those of the port engine/exhaust. In addition, Dr. Kornegay reported the first visual signs of smoke were emanating from the engine compartment.

At the time of the issuance of the first report, a hypothesis was developed through the process of inductive reasoning. The ignition theory involves an insufficient water flow through the engine to the exhaust riser from a clogged screen/strainer. The engine cooling water is supposed to lower the internal exhaust gases (900-1100 F) to an acceptable level for the exhaust elbows and tube. Exhaust risers are a replaceable maintenance item that will last for so long because of their extreme exposure to corrosive water and extreme temperatures. If the coolant flow is low and your raw water temperature exceeds 130 degrees F you can get salt in the water transfer to solids and a buildup on the riser spray head could get clogged. An exhaust tube failure could result from the hot gases not getting completely cooled where there are voids in the spray pattern of the riser. In this particular case, Middleton Marine did remove the exhaust riser and one opening in the shower nozzle was found clogged. This single obstruction should not have significantly affected the cooling process by itself. However, the marine growth on the external hull intake Hendrick screen, Groco strainer and running gear were evident and are indicative of delayed maintenance and coincided with the upcoming plans to have the boat brought in for cleaning and painting. With growth on the running gear one might experience vibration when the boat is in gear, loss of RPMs, black smoke coming from the exhaust, lack of ability to draw water through the intakes, increased fuel consumption and if these symptoms are ignored, it could lead to an overheated engine. Several of these indicators were reported by the insured at the time of loss.

Evidence indicated disproportionate marine growth on the seawater intake scoop/screens for the starboard strainer. The hull strainer with access door is manufactured by Groco and is a model APHS with a perforated series strainer. According to Groco, the scoops are to be mounted with the thru-hull fitting at the extreme aft end where the hinged clean out access door is located, not forward of the door as in this installation. It was also noted that at some point in time, the Hendrick perforated screen was painted, which could have reduced the inlet flow combined with the marine growth. Through a review of Dr. Kornegay's examination under oath (EUO) it was learned that he and his son were the last persons to have removed and/or painted the strainers/screens.

Barber Marine employees did remove both strainers and in the process of doing so, some of the soft growth/debris was dislodged from the screen. Also noted was the presence of over spray of anti-fouling paint at this time. Even with dislodging of some of the soft growth, the screen was substantially covered with marine growth which was later calculated by Dr. Clark as to the actual coverage by it. The Marine growth was further categorized by its type by Dottie Byron, M.S. of the Dauphin Island Sea Lab.

Inspection of the seawater pumps also revealed the impeller in the starboard side was disproportionately damaged as compared to the port impeller. Visual inspection of the two impellers disclosed greater material loss and fragmentation to the starboard impeller.

A side by side comparison of the port and starboard FRP exhaust tubes disclosed an obvious distinction in damage to each. The port tube is generally intact with the shape and contour of the tube retaining its original design. However, there is a significant loss of product at the starboard tube with it severed and crumbly to the touch. The distinction in damage to the impellers, exhaust tubes, valve covers, wiring and engine components provide the basis for the origin area and initial cause hypothesis.

The scientific method requires that all data collected be analyzed and if the investigator lacks the expertise to precisely attribute meaning to that data, outside assistance should be sought. In this case, the testing of the hypothesis through deductive reasoning was coordinated and accomplished through Captain Guy Plaisance. Functional area experts including Tom Elliot and Ralph Holloway of Middleton Marine, metallurgist Dr. Kendall Clark, John Moran of Hendrick Manufacturing, Dottie Byron of the Dauphin Island Sea Lab and other individuals consulted by Captain Plaisance, all provided technical assistance to avoid expectation bias. A hypothesis can be tested either physically by conducting experiments or analytically by applying scientific principles in "thought experiments." In this case, analytical evaluation by the experts using industry standards and like materials used on the Mr. Charlie provided scientific data to substantiate the theory that insufficient intake water flow due to the clogged strainer/screen led to the fire's inception. Captain Plaisance will address the findings of each expert in his report to you.

DETERMINATION OF ORIGIN AND CAUSE

Damage pattern analysis indicates the fire originated in the engine compartment in the vicinity of the aft end of the starboard engine at the FRP exhaust tube. The evidence demonstrated a significant restriction in the seawater flow. Sufficient flow is required to lower the internal hot exhaust gases in the FRP exhaust tube to a safe operating level. The fiberglass tube is rated at approximately 259 degrees F and is connected to the riser and tube with rubber boots. The weak point in this system is at the connector and the release of hot gases here was adequate to ignite available combustibles in the compartment. The calculated restriction in the cool water intake flow was attributed to the substantial marine growth on the strainer/screen and was a contributing factor to the fire's inception.

COMMENTS

The instructions in this assignment have been completed. No further activities are anticipated and the file is being closed.

The conclusions drawn in this report are based on a total analysis of the information collected during the investigation. Information or data that becomes available at a later date may justify the modification of the results and/or conclusions previously provided.

If I can be of further assistance, or if additional information is required, please do not hesitate in contacting me.

Gary W. Jones
Gary W. Jones, CFI, CFEI
Senior Fire Investigator
(228) 219-9346

File Status: Closed

Peer review by:

Dave Berry, Jr.
Dave Berry, Jr. CFI, CFEI
District Manager
Flowood, MS

EXHIBIT 6

GARY JONES' REPORT OF APRIL 13, 2014

DEFENDANT'S EXHIBIT 1 Jones PENGAD 800-631-6989

Case Number: CV-13-458-CG-N

REPORT OF GARY W JONES, CFI, CFEI

I. INTRODUCTION

I have been retained by International Marine Underwriters to provide expert testimony in the referenced case relating to the origin and cause of the fire. The purpose of this report is to disclose my professional background and experience, the materials subject to my review and my expert opinion in accordance with Fed. R. Civ. P. 26(a)(2)(B). This report and enclosures summarizes my opinions given the information available to me at this time. If I receive additional relevant information, I reserve the right to prepare a supplemental report incorporating this new information.

II. OPINIONS

A complete statement of my opinions and the basis and reasons for those opinions are set forth in the June 28, 2013 and September 9, 2013 EFI Global Fire Investigation Reports, a true and correct copy of which is enclosed herewith as Exhibit A. *Additionally, a synapsis of those opinions expressed, includes but are not limited to the overall evaluation of the physical and testimonial evidence as well as consultations with functional area experts. It was concluded the fire had originated in the engine compartment at the aft starboard section at the exhaust tube/elbow. This opinion is based in part on damage pattern temperature gradients decreasing as distance away from this location increased. Additionally, a comparative damage analysis disclosed disproportionate burning and thermal stress to the starboard exhaust FRP tube, valve cover, impeller and adjacent engine components as compared to those of the port engine and exhaust. Arc map analysis of the engine compartments, electrical system also revealed adverse electrical activity at the aft starboard section.*

The cause for the fire is a result of insufficient intake seawater flow that is necessary to lower the internal hot exhaust gases in the exhaust FRP tube ond elbow to a safe and acceptable operating level. The fiberglass tube is rated at approximately 259 degrees F and is connected to the riser and tube with rubber boots. The weak point in this system is at the connector and the release of hot gases here represents a significant hazard.

It was concluded the lack of required maintenance and the marine growth on the external hull intake strainer/screen contributed to the reduced intake water flow that resulted in the failure of the exhaust tube. The escaping gases then ignited nearby combustibles that eventually involved the entire boat. The basis for this ignition theory is the exclusion of

EXHIBIT 6

other ignition theories, physical damage patterns on the boat, photographic documentation and the analytical evaluation and interpretation of the *evidence by industry experts Dr. Kendall Clark, John Moran of Hendrick Manufacturing, biologist Dottie Byron, Certified Marine surveyor Guy Plaisance and Marine technicians Tom Elliot and Ralph Holloway*

III. DATA CONSIDERED

The facts and data considered in the formation of my opinions are set forth in the EFI Global Fire Investigation Reports dated June 28, 2013 and September 9, 2013 and their enclosures. In addition, the independent research and consultations with and by Guy Plaisance, Dr. Kendall Clark, Tom Elliot, Ralph Holloway, Dottie Byron and John Moran were considered.

IV. EXHIBITS USED TO SUMMARIZE OR SUPPORT OPINIONS

The exhibits that will be used to summarize or support my opinions are the enclosures to the EFI Global Fire Investigation Reports of June 28, 2013 and September 9, 2013 and the enclosures depicted in Guy Plaisance reports and investigative materials.

V. QUALIFICATIONS/PUBLICATIONS

My qualifications can be found in my Curriculum Vitae enclosed herewith as an exhibit.

VI. PRIOR EXPERT TESTIMONY

1. Deposition; Rufus Allen-Alfa Mutual Insurance v. Camping World. CV 2009-000542.00 Circuit Court of Houston County, AL

2. Deposition: Fire Insurance Exchange/Kelley v. Presley Electric Service. CV 10-1506 Circuit Court of Mobile County, AL

3. Deposition; Allstate Insurance/ Menendez v. Oasis Water & Kentwood Water. US District Court, Gulfport MS

4. Deposition; American Wholesale Furniture v. Hartford Insurance. CV 561833 19th JDC East Baton Rouge Parish, LA.

5. Deposition; Robert Breazeale v Travelers Insurance (Kitchen & Bath). Circuit Court of Baldwin County, AL

6. Deposition; David Mincin v. United National Insurance 19th JDC Est Baton Rouge Parish, LA

VII. COMPENSATION

My hourly rate for deposition/trial testimony is $175.00 per hour regardless of the outcome of this matter.

Gary W. Jones [signature] 04/11/14

Gary W. Jones, CFI, CFEI Date

EXHIBIT 7

GUY PLAISANCE'S CURRICULUM VITAE

January 2, 2014

CURRICULUM VITAE

Guy Pierre Plaisance
7946 Hapuna Place
Diamondhead, Mississippi 39525

Date of Birth: February 20, 1958

Education - Training: 1976 – Graduate, Covington High School, Covington, Louisiana.

1979 - Houston Marine Training Services, Kenner, Louisiana.
Course - 100-ton passenger vessel operator and un-inspected towing vessels, radio and radio telephone operator.

1983 - Houston Marine Training Services, Kenner, Louisiana.
Course - Master 1000-ton towing vessels near coastal.

1985 - Houston Marine Training Services, Kenner, Louisiana.
Course - Master 1600-ton near coastal, radar plotting and navigation.

1986 - Boyle & Boyle Agency, New Orleans, Louisiana.
Course - Louisiana Life and Health Insurance Laws

1991 - Louisiana Marine & Petroleum Institute, Houma, Louisiana.
Course - Advanced radar plotting, firefighting, lifesaving and bridge electronic navigation.

1993-1994 - LA Tech College/Young Memorial, Morgan City, Louisiana.
Course - Master Oceans Celestial Navigation.

3/2007 - International Association of Marine Investigators, Panama City, FL.
Course - Marine Investigator training.

2/2008 - International Association of Marine Investigators, Baton Rouge, LA.
Course - Marine Investigator training.

8/2008 – Maritime Defense Strategy, LLC, Baton Rouge, LA.
Course - Vessel Security Officer training.

10/2009 – Society of Accredited Marine Surveyors, Houston, TX.
Course - Marine Surveyor training seminar.

8/2010 – Martin International, Inc., Laplace, Louisiana.
Course – Radar Observer Unlimited.

9/2010 - Houston Marine Training Services, Kenner, Louisiana.
Course - GMDSS and radio telephone operator.

10/2010 – Society of Accredited Marine Surveyors, Ft. Lauderdale, FL.
Course - Marine Surveyor training.

Safety Training: Vessel Security Officer, First Aid, Lifesaving, CPR and Firefighting.

Electronics Training: Radar, Sonar, Loran, Global Positioning System, Dynamic Positioning System, VHF Radio, Single Side Band Radio, GMDSS and ROV.

Continued Education: Over the last 5 years I have earned a total of 135 continuing education credits.

EXHIBIT
1

January 2, 2014

Experience: 9/05 to Present - Atlantic Gulf & Pacific Marine Surveyors and Consultants, Inc., Diamondhead, Mississippi; President of Marine Surveying and Consulting company providing professional services including marine transportation, inspections, investigations, legal assistance, and project management, to maritime companies, insurance companies, law firms, financial institutions and private individuals.

6/10 to 1/11 – E.N. Bisso & Son, Inc., Metairie, Louisiana; Master aboard a 4000-Hp towing vessel conducting ship docking on the Mississippi River and towing of offshore barges, foreign and domestic.

7/08 to 2/10 - Belle of Baton Rouge Casino, Baton Rouge, Louisiana; Master aboard a 1500 passenger paddlewheel casino vessel operating on the Mississippi River.

6/01 to 8/29/05 - Rivers and Gulf Marine Surveyors, Inc., Harvey, Louisiana; Marine Surveyor providing professional services including marine inspections, investigations, legal assistance, and project management to maritime companies, insurance companies, law firms, financial institutions and private individuals.

3/95 to 5/01 - Friede Goldman Halter, Inc., Gulfport, Mississippi; Project Manager on a variety of vessel new design projects, new vessel and drilling rig construction projects, including service repairs and modifications.

8/90 to 3/95 - Swiftships, Inc., Morgan City, Louisiana; Project Manager on yacht and military new construction projects. Sea Trial Training officer on Coastal Mine Hunter program.

10/87 to 8/90 - Viva, Inc., Bridgeport, Connecticut; Shipyard Manager at a new construction facility fabricating custom aluminum yachts including service repairs and modifications to vessels. Yacht Project Manager for the construction of custom aluminum ABS Certified high speed sport yachts.

5/86 to 9/87 - Burrus Investment Group, New Orleans, Louisiana; Yacht Captain on a privately owned motor yacht used for entertaining clients and guests including vessel management.

4/85 to 5/86 - Calstar Marine, San Francisco, California; Master aboard a 93 foot, 3300 horsepower tractor tug with a Z-drive propulsion system conducting towing of offshore drilling rigs and ship docking, foreign and domestic.

4/84 to 4/85 - New Orleans Paddlewheels, New Orleans, Louisiana; Captain/Chief Mate aboard a 1000 passenger paddlewheel vessel operating on the Mississippi River during the 1984 World's Fair.

2/80 to 3/84 - Halter Marine Group, Inc., New Orleans, Louisiana; Managing Yacht Captain/Sales Representative of custom-built aluminum sport fishing yachts, including marketing, advertising, operations, vessel maintenance and repair, entertaining customers and corporate executives.

3/77 to 1/80 - Petrol Marine/Penrod Drilling Co., Houma, Louisiana; Master/Mate aboard anchor handling, supply vessels and crewboats servicing the offshore oil industry in the Gulf of Mexico.

10/74 to 3/77 - Cheramie Bros Boltruc Co., Golden Meadow, Louisiana; Deckhand / Engineer/Mate on various offshore supply vessels in the Gulf of Mexico.

January 2, 2014

Memberships:
Society of Accredited Marine Surveyors (SAMS)
International Association of Marine Investigators (IAMI)
American Boat and Yacht Council (ABYC)
American Society of Naval Engineers (ASNE)
National Association of Fire Investigators (NAFI)

Certifications:
Accredited Marine Surveyor (SAMS)
International Association of Marine Investigators (former Director of MS)
Vessel Security Officer
Unlimited Radar Observer
STCW-95 Endorsement
GMDSS Radio Operator

Safety Training: Vessel Security Officer, First Aid, Lifesaving, CPR and Firefighting.

Electronics Training: Radar, Sonar, Loran, Global Positioning System, Dynamic Positioning System, VHF Radio, Single Side Band Radio, GMDSS and ROV.

Current Licenses: U.S. Merchant Marine Officer as Master of Steam or Motor Vessels of 1600-gross/3000-ITC tons Upon Oceans (5th Issue) in continuity.

Unlimited Deck Rating, Able Bodied Seaman including Oilier/Wiper/Lifeboat.

Former Licenses: U.S. Merchant Marine Officer as Master of Freight & Towing Vessels of 1000-gross tons Upon Oceans 200 miles.

U.S. Merchant Marine Officers as Master of Steam or Motor Vessels of 500-gross tons Upon Oceans 200 miles.

Operator of Passenger Vessels of 100-gross tons upon Inland and Coastal Waters, not more that 100 miles offshore.

Operator of Un-inspected Towing Vessels upon the Great Lakes & Inland Waters of the U.S.

Life and Health Insurance Agent in the State of Louisiana.

Expert Work: Performed consulting services on numerous legal cases over the last twelve (12) years pertaining to; personal injury, loss of life, mechanical failure, fire, collision, sinking and striking incidents, many of which cases have settled; however certain cases remaining active and pending.

Expert Testimony: In the last 5 years I have testified as an expert witness in court or by deposition in the following cases:

DATE	CASE	DESCRIPTION
8/09/09	Saunders Yachts Vs. Great American Ins.	Issued expert report, testified by deposition US District Court Baldwin County, AL

January 2, 2014

DATE	CASE	DESCRIPTION
9/22/11	Coastal Drilling Co. Vs. St. Mary Parish	Issued expert report, testified by deposition 16th Judicial District Court St. Mary Parish, Louisiana
10/21/11	J. Merrick/G. Vaughn Vs. Denet Towing	Issued expert report, testified by deposition United States District Court Eastern District, Louisiana

Over the last thirteen (13) years as a marine surveyor, I have conducted hundreds of marine survey inspections and investigations, including preparing many expert reports and have been qualified by the courts as an expert on yachts, diesel engines and navigation and I have also testified in state and federal court on several other expert cases not listed above.

Publications: None at this time.

(End CV)

EXHIBIT 8

EXCERPTS FROM GARY JONES' DEPOSITION

IN THE UNITED STATES DISTRICT COURT

FOR THE SOUTHERN DISTRICT OF ALABAMA

SOUTHERN DIVISION

CIVIL ACTION NO: CV-13-458

ATLANTIC SPECIALTY INSURANCE COMPANY,

Plaintiff,

vs.

MR. CHARLIE ADVENTURES, L.L.C. and KIM P. KORNEGAY,

Defendants.

DEPOSITION TESTIMONY OF:
GARY W. JONES

ORIGINAL

DATE: May 28, 2014

TIME: 9:10 a.m.

REPORTED BY: Daphne M. Cotten, CSR

Q. So if their subsequent calculations or subsequent evidence is incorrect, then you would have to revert back to your original opinion as the fire being undetermined, as you stated in your June 28th report, would you, sir?

MR. SHREVE: Object to the form.

A. What you have to do when you're following a scientific method is if the hypothesis that you had formed changes in any way, you go back and re-evaluate all the other evidence.

Q. But you had delayed your opinion from undetermined until you could rest on Dr. Clarke's further investigation and your consultation with Guy Plaisance.

My question to you is if they're wrong, then you have to go back to your undetermined status, don't you, sir?

A. Yes.

Q. Okay. Let's go on to Determination of Origin and Cause. "Sufficient flow is required to lower the

EXHIBIT 9

DR. KENDALL CLARKE'S REPORT OF APRIL 9, 2014

METALLURGICAL CONSULTING
1146 Leroy Stevens Rd., Suite A
Mobile, AL 36695
Phone: (251) 639-3433
Fax: (251) 639-3105
email: kclarke@metalconsult.com

Metallurgical Analysis
Corrosion
Welding
SEM
Failure Analysis
Fracture Mechanics

EVALUATION OF FOULING ON SEA WATER INTAKE SCREENS

Project 13-106

Report Prepared by C. Kendall Clarke, Ph.D., P.E.

Date: April 9, 2014

1.0 Background

A 40 foot Cabo sport fisher, M/V Mr. Charlie, burned to the water line. We were asked to measure the percent reduction in flow area on port and starboard sea water intake screens. Sea water is pumped into the vessel for engine heat exchangers and to cool the exhaust on Mann diesel engines used to power the vessel. This effort also included visual inspection of the sea water pumps and starboard engine and associated heat exchangers.

The following materials were provided or reviewed for this report:

a. Port and starboard sea water intake screens
b. Port and starboard sea water pumps
c. Port and starboard sections of exhaust
d. Pictures taken by Capt. Plaissance

EXHIBIT 9

e. Inspection of starboard engine on 8/16/13

2.0 Results

The starboard and port sea water intake screens are shown as received in Figures 1-4. Considerable marine fouling including oyster shells was observed on both screens. Each screen was photographed digitally with back lighting and photographically enhanced to increase contrast between open holes and screen material. The images were the analyzed in an image analysis system (Able Image Analyser) to calculate the percentage open area. A new, unused screen was used as a base line. The basic input images are shown in Figures 5 and 6. A steel scale used to calibrate image size can just be seen in Figure 6.

The new, unused screen had an open area of 17.6 in^2. The port screen had an as received open area of 3.55 in^2 for a reduction in open area of 80%. The starboard screen open area was 3.85 in^2 for a 78% reduction in area. These reduction numbers are probably low for conditions before the fire because the fouling has reduced its volume as a result of drying out.

3.0 Opinions

The following opinions were based upon observation and measurement of the screens, inspection on the starboard engine, and over thirty years of experience with corrosion and fouling in heat exchangers in fresh and salt water systems.

a. The intake screens had a measured, dry condition, reduction in available intake area of 80 and 78%. The actual reduction in flow area was most probably greater in service because much of the fouling is gelatinous in nature.

b. Local back bay waters are notorious for fouling heat exchangers tubing. Stagnant conditions are the worst case for fouling growth. Both observations on the one ¼ inch diameter tube exchanger and other experience with similar exchangers leads me to believe these exchangers were seriously fouled before the fire.

c. The heat exchangers down stream of the intake screens presented their own significant contribution to flow rate of the required sea water for exhaust cooling.

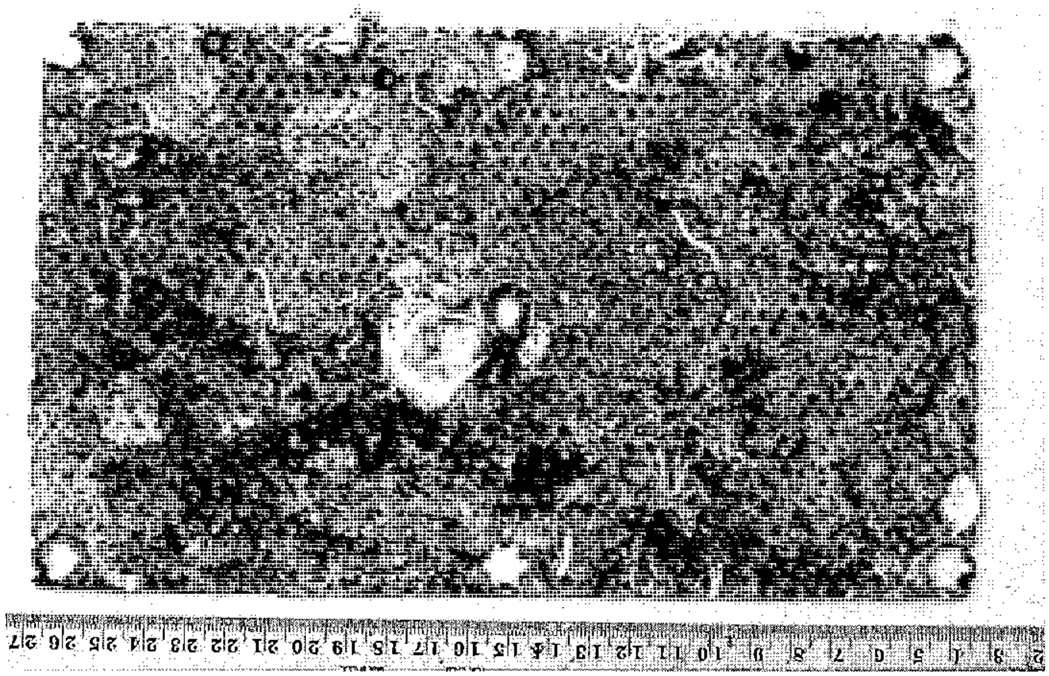
4.0 Compensation

Fees for Kendall Clarke are $350/hour and Don Halimunanda $200/hour.

ALABAMA
REGISTERED
NO. 15088
PROFESSIONAL
ENGINEER
DR. C. KENDALL CLARKE

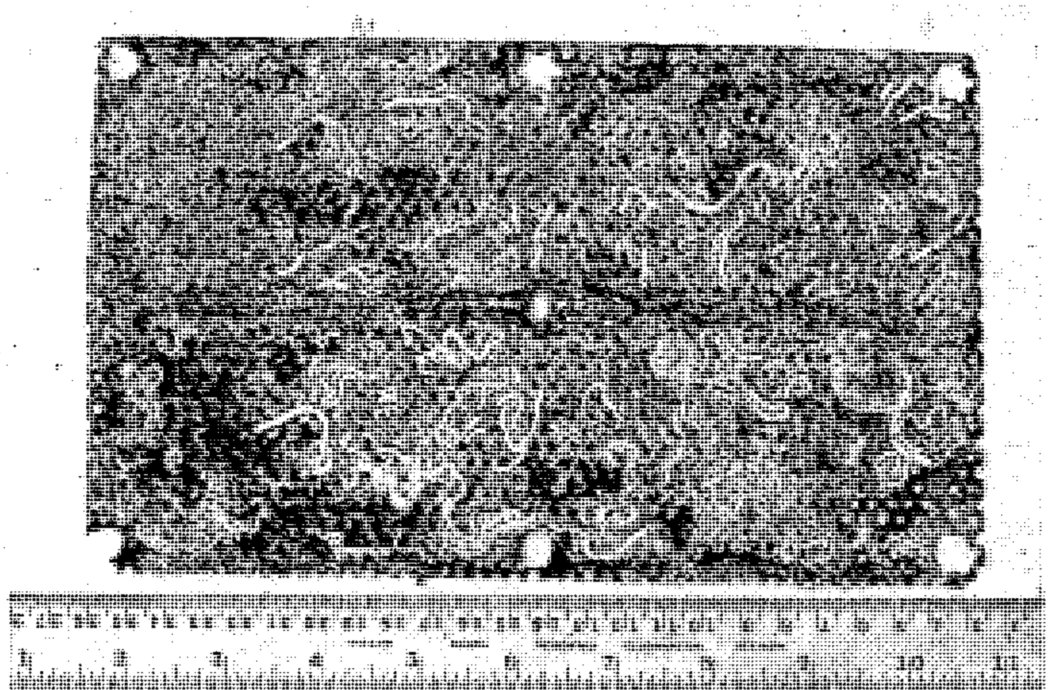
C Kendall Clarke

C. Kendall Clarke, Ph.D., P.E.



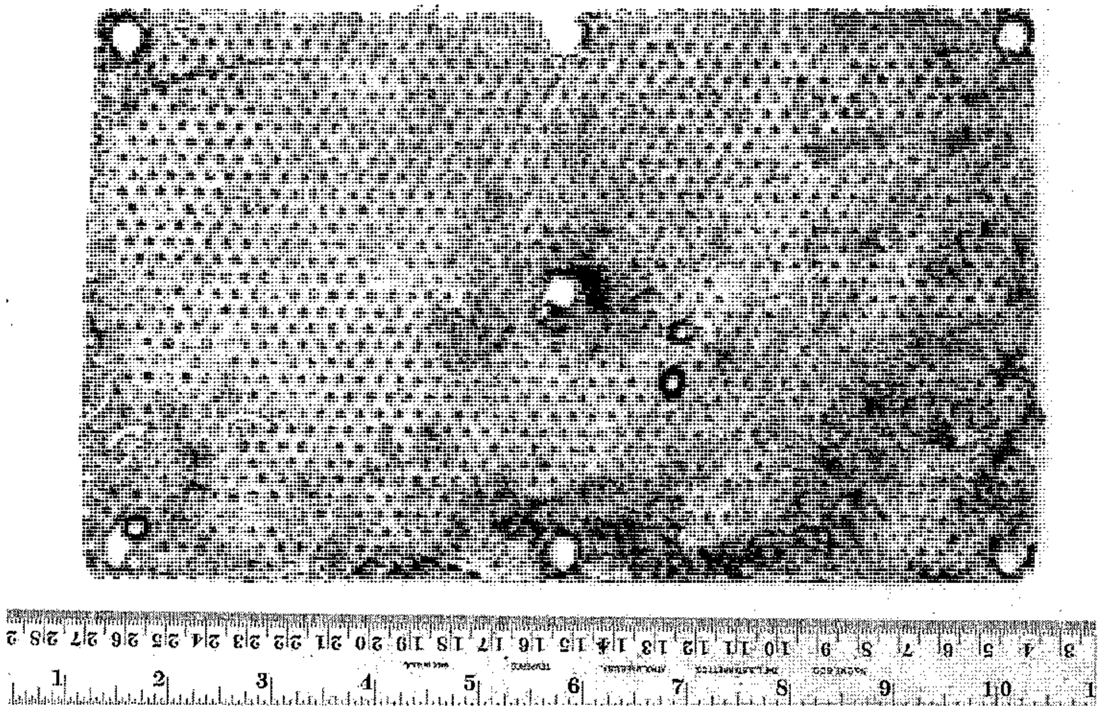
8796

Figure 1: The outboard surface of the port screen is shown as received. An oyster shell is growing in the center.



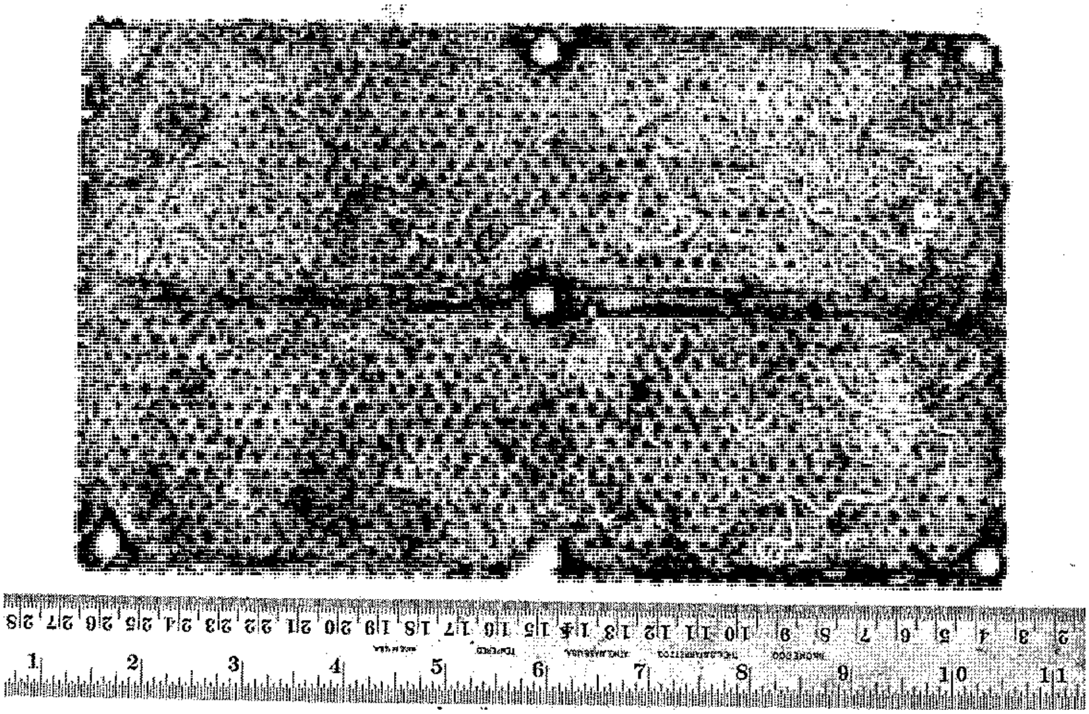
8805

Figure 2: The port inboard side is shown.



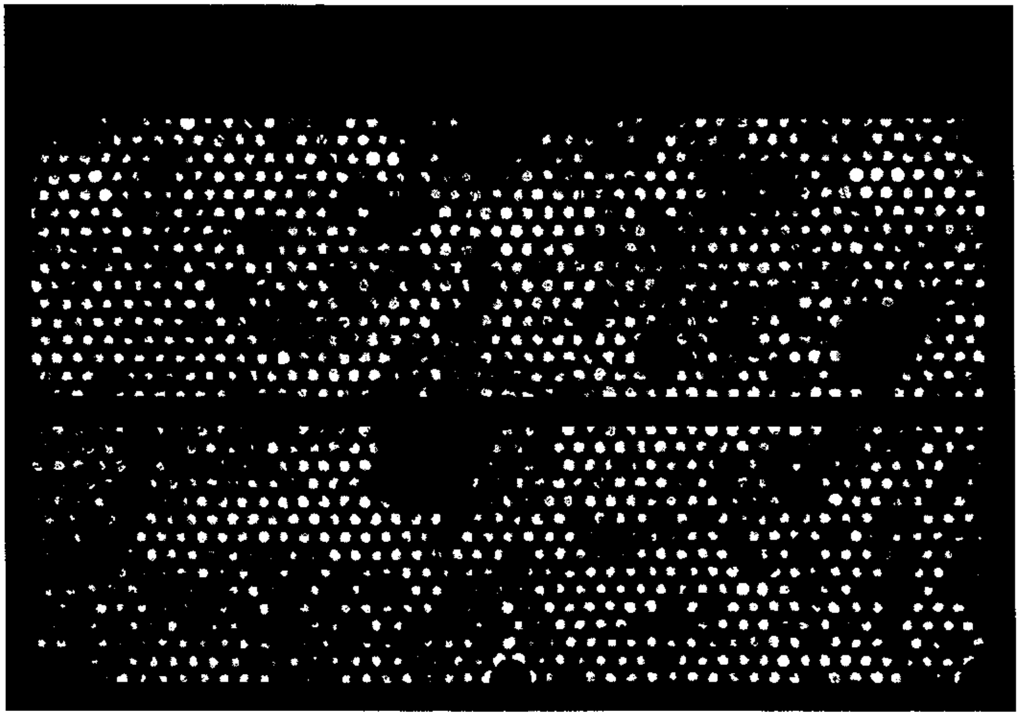
8778

Figure 3: The starboard outboard surface of the sea water intake screen is shown as received.



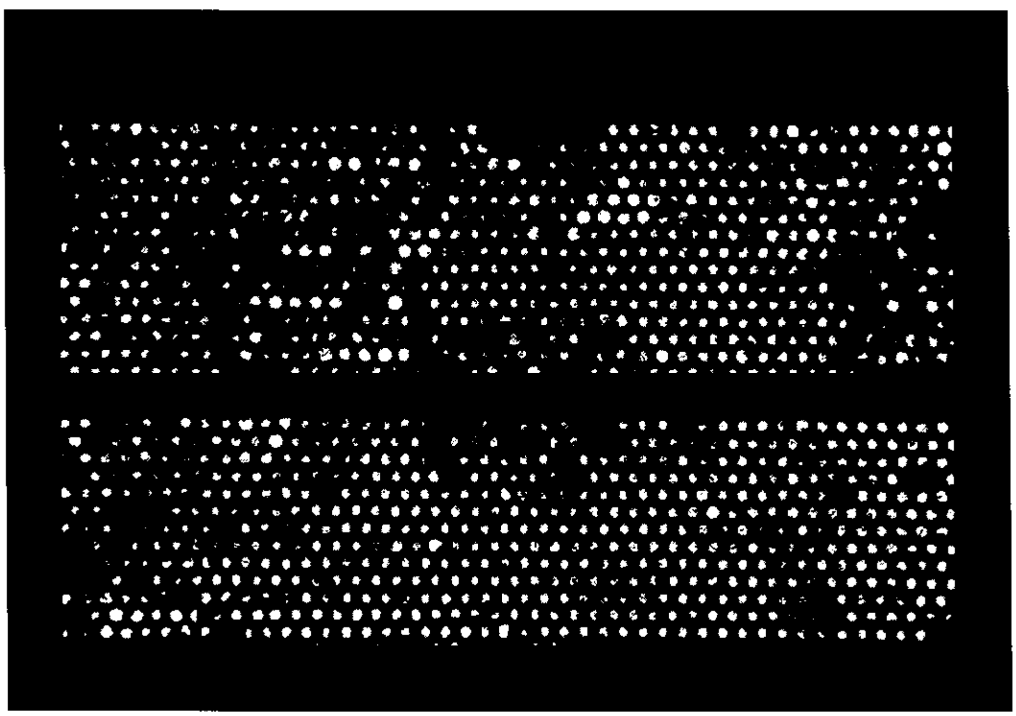
8785

Figure 4: The starboard inboard side is shown.



port side screen

Figure 5: Port screen photo was shot with high contrast for image analysis.



starboard side screen

Figure 6: The starboard side screen was shot with high contrast for image analysis.

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

ATLANTIC SPECIALTY INSURANCE COMPANY,	)	
	)	
Plaintiff,	)	
	)	
VS.	)	CIVIL ACTION NO. CV-13-458
	)	
MR. CHARLIE ANDVENTURES, LLC, and KIM P. KORNEGAY,	)	
	)	
Defendants.	)	

DEFENDANTS' MOTION TO EXCLUDE TESTIMONY FROM PLAINTIFF'S EXPERT GARY JONES

COME NOW, the Defendants, by and through counsel, pursuant to Rule 702 of the Federal Rules of Evidence and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 591 (1993), and move this Court to exclude testimony offered from Plaintiff's expert, Gary Jones, as to cause of the fire, on the grounds that (1) the methodology by which he reaches his conclusions is not sufficiently reliable as determined by the sort of inquiry mandated in *Daubert*, and (2) the testimony will not assist the trier of fact, through the application of scientific, technical, or specialized expertise, to understand the evidence or to determine a fact in issue. In support of this motion, Defendants show the Court as follows:

INTRODUCTION

Gary Jones has been identified by the Plaintiff as an expert witness that they may use to present evidence under Rule 702 of the Federal Rules of Evidence. Jones was retained by Atlantic

Specialty Insurance Company ("ASIC") on March 19, 2013, to investigate the cause and origin of the fire that occurred aboard the vessel Mr. Charlie, which occurred on March 3, 2013. (Exhibit 1, at 18). Prior to retaining Jones, ASIC had also retained Guy Plaisance, a marine surveyor, to investigate the loss. (Exhibit 2, at 156). Plaisance provided a report on September 9, 2013, as to his investigation into the fire that occurred aboard the Mr. Charlie, and his conclusion as to the cause and origin of the fire. (Exhibit 3, at 23).

Plaisance provided a second report dated April 13, 2014, wherein he summarized his conclusion as to the cause of the fire as follows:

> Insufficient seawater flow through the starboard main engine cooling system resulted in the excessive rise in exhaust temperature, causing the hot exhaust gas to burn and ignite into a fire, beginning with non-metallic exhaust system components. This fire was greatly exacerbated by the starboard main engine continuing to run expelling 900° F to 1100° F exhaust heat and gases into the local surrounding area of the starboard aft engine room, quickly melting the closely mounted generator diesel fuel filter Racor plastic bowel, thus providing a substantial amount of accelerant, diesel fuel onto the already burning hot exhaust fire.

(Exhibit 4, at 9).

Gary Jones provided an initial fire investigation report on June 28, 2013, over three months after the fire. At that time, Jones classified the cause of this fire as *undetermined*, pending *further investigation by Guy Plaisance and Dr. Kendall Clarke*. (Exhibit 5, at 6). Jones submitted a second report to ASIC on September 9, 2013, wherein he determined the cause for the fire to be a result of insufficient intake seawater flow due to a clogged intake screen. (Exhibit 6, at 3). He summarized his findings in an April 13, 2014 report as follows:

> It was concluded the lack of required maintenance and the marine growth on the external hull intake strainer/screen contributed to the reduced intake water flow that resulted in the failure of the exhaust tube. The escaping gases then ignited nearby combustibles that eventually involved the entire boat. The basis for this ignition theory is the exclusion of other ignition theories, physical damage patterns on the boat, photographic documentation and the analytical evaluation and interpretation of the evidence by industry experts Dr. Kendall Clark, John Moran of Hendrick

> Manufacturing, biologist Dottie Byron, certified marine surveyor Guy Plaisance and marine technicians Tom Elliot and Ralph Holloway.

(Exhibit 7, at 1 – 2).

ARGUMENT

In *Daubert*, 509 U.S. 579, 597 (1993), the Supreme Court explained that the trial courts are tasked with ensuring that an expert's testimony is relevant and reliable. "This entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." Id. at 592-93. This "gatekeeping" function is to be applied not only when an expert relies on scientific principles, but also when testimony is based on other technical or specialized knowledge. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141 (1999).

The admissibility of expert testimony is governed by Rule 702 of the Federal Rules of Evidence, which provides:

> A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:
>
> (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
>
> (b) the testimony is based on sufficient facts or data;
>
> (c) the testimony is the product of reliable principles and methods; and
>
> (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

"Expert testimony may be admitted into evidence if: (1) the expert is qualified to testify competently regarding the matters he intends to address; (2) the methodology by which the expert reaches his conclusions is sufficiently reliable as determined by the sort of inquiry mandated in

Daubert; and (3) the testimony assists the trier of fact, through the application of scientific, technical, or specialized expertise, to understand the evidence or to determine a fact in issue." *City of Tuscaloosa v. Harcros Chemicals, Inc.*, 158 F.3d 548, 562 – 563 (11th Cir. 1998) (citations omitted). The proponent of the expert testimony bears the burden of proving by a preponderance of the evidence that these three requisites are satisfied. See *Hendrix ex rel. G.P. v. Evenflo Co., Inc.*, 609 F.3d 1183, 1194 (11th Cir. 2010) (citing *Boca Raton Cmty. Hosp., Inc. v. Tenet Health Care*, 582 F.3d 1227, 1232 (11th Cir. 2009)).

In determining the reliability of an expert's testimony, the trial court may consider many factors, including the following: (1) whether the expert's theory or technique can be tested, and if it has been tested; (2) whether the expert's theory or technique has been subjected to peer review and publication; (3) the known or potential error rate of a particular technique, and the existence and maintenance of standards related to the technique; and (4) whether the technique has been generally accepted in a relevant scientific community. *Daubert* 509 U.S. at 593-94.

The advisory committee notes to Rule 702 provides the following addition list of factors that a court may consider in determining whether expert testimony is sufficiently reliable:

> (1) Whether the expert is proposing to testify about matters growing naturally and directly out of research he has conducted independent of the litigation, or whether he has developed his opinion expressly for purposes of testifying;
>
> (2) Whether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion;
>
> (3) Whether the expert has adequately accounted for obvious alternative explanations;
>
> (4) Whether the expert is being as careful as he would be in his regular professional work outside his paid litigation consulting;
>
> (5) Whether the field of expertise claimed by the expert is known to reach reliable results for the type opinion the expert would give.

Fed. R. Evid. 702, advisory committee's note (2000 amends.)

In *Whatley v. Merit Distribution Services*, 166 F. Supp. 2d 1350, 1353 (S.D. Ala. 2001), this Court noted its obligation under Rule 702 to "screen expert testimony to ensure it stems from a reliable methodology, sufficient factual basis, and reliable application of the methodology to the facts."

A. THE METHODOLOGY BY WHICH THE EXPERT REACHES HIS CONCLUSIONS IS *NOT* SUFFICIENTLY RELIABLE AS DETERMINED BY THE SORT OF INQUIRY MANDATED IN *DAUBERT*

Defendant and Counter Plaintiffs, Mr. Charlie Adventures and Kornegay, adopt and incorporate herein the facts and arguments set forth in Defendant and Counter Plaintiffs' Motion to Exclude the Testimony of Plaintiff's Expert Guy Plaisance, and Defendant and Counter Plaintiffs' Motion for Summary Judgment on breach of contract and bad faith claims against ASIC, filed contemporaneously herewith.

1. The testimony is *not* based on sufficient facts or data.

Jones' opinion is not based on sufficient facts or data, and therefore is unreliable under *Daubert*, because Jones' relied on incorrect data, or no data at all, regarding the exhaust tube, and he also relied on experts that used incorrect data in forming opinions, or formed no opinion at all. Jones testified that he specifically relied on Dr. Kendall Clarke, a metallurgist, and Guy Plaisance, a marine surveyor, in forming his opinion as to cause of the fire, and he would have no choice but to classify the fire as undetermined if the calculations or evidence provided by Dr. Clarke or Plaisance was wrong or incorrect. (Exhibit 1, at 28).

(a) Gary Jones' improper reliance on Dr. Kendall Clarke's calculations.

Jones improperly relied upon Dr. Kendall Clarke's data in forming his opinion that evidence indicated disproportionate marine growth on the starboard intake screen. In Jones' reports of June 28, 2013, and September 9, 2013, Jones states that "evidence indicated disproportionate marine growth on the seawater intake scoop/screens for the starboard strainer." (Exhibit 5, at 5, and Exhibit 6, at 2). Dr. Clarke, however, performed an analysis on both the starboard intake screen and the port intake screen, respectively. Dr. Clarke found the starboard screen had an open area of 3.85 in. sq., and the *port screen was more occluded*, with an open area of only 3.55 in. sq. (Exhibit 9, at 2). This evidence shows that the starboard screen had a larger opening than the port screen for providing seawater used to cool the respective engine. (Exhibit 8, at 19). Despite having this contradictory information prior to his September 9, 2013, report, which ASIC relied upon in denying the claim, Jones restated the same opinion that the starboard intake screen evidenced disproportionate marine growth, without regard to Dr. Clarke's own findings.

Furthermore, Dr. Clarke performed *no testing* other than calculating the amount of open area on the starboard and port intake screens, and formed no opinions as to whether the starboard intake screen was too restricted to flow sufficient cooling water to the starboard engine. (Exhibit 8, at 44 – 45). In addition, Dr. Clarke requested further testing and investigation into some of the component parts of the engine, and set forth a protocol for testing the heat exchanger. This testing was not authorized by ASIC, and Jones formed his opinion regardless. (Exhibit 8, at 38).

Jones was provided evidence contrary to his hypothesis, but recklessly formed his opinion regardless of the evidence. Based on the foregoing, Jones' opinion as to the cause of the fire should be excluded as unreliable because he relied on incorrect data or facts in forming his opinion.

(b) Gary Jones' improper reliance on Guy Plaisance's opinion.

In forming his opinion, Jones relied on the "analytical evaluation and interpretation of the evidence" by Plaisance. Defendants assert that Jones improperly relied on Plaisance in forming his opinion. The multitude of errors, contradictions, and overall reckless disregard for the facts throughout Plaisance's investigation are too numerous to recite in this motion, and Defendants will refer this Court to the Motion to Exclude the Testimony of Plaintiff's Expert Guy Plaisance. Based on the forgoing, Jones' opinion as to the cause of the fire should be excluded as unreliable because he relied on incorrect data or facts in forming his opinion.

(c) Gary Jones relied on incorrect data from his own independent investigation.

In addition, Jones' relied on incorrect data in his own investigation into the cause of the fire. In his June 28, 2013, report, Jones states that the exhaust tube is rated at approximately 259 degrees Fahrenheit, yet the exhaust tube on the engine in this case is rated for 350 degrees Fahrenheit. He admits this is in error:

> Q. Okay. Let's go on to Determination of Origin and Cause. "Sufficient flow is required to lower the internal hot exhaust gases in the FRP tube to a safe operating level. The fiberglass tube is rated at approximately 259 degrees Fahrenheit and is connected to the riser and tube with rubber boots." Where did you get those numbers from?
> A. Initially, they came from a Cummins.
> Q. I saw that in your investigation. What does a Cummins - -
> A. Engine.
> Q. - - engine have to do with a MAN diesel engine?
> A. The marine system's tube actually is rated at 350 degrees.
> Q. But you didn't put that in your report, did you?
> A. No. That's an error.

(Exhibit 1, at 28 – 29).

Jones testified that he specifically relied on Dr. Clarke and Guy Plaisance in forming his opinion as to cause of the fire, and he would have no choice but to classify the fire as undetermined if the calculations or evidence provided by Dr. Clarke or Plaisance was wrong or incorrect. Jones' opinion is not based on sufficient facts or data, and therefore should be excluded as unreliable under *Daubert*, because Jones' relied on incorrect data in his own investigation, and he also relied on experts that used incorrect data in forming opinions, or formed no opinion at all.

2. The testimony is *not* the product of reliable principles and methods

Jones' opinion is not the product of reliable principles and methods and therefore should be excluded. Jones did not make any determination as to how much water is actually needed to sufficiently cool the engine, but merely relies on the hypothetical possibility that restricted water flow could cause a fire. Jones requested Plaisance conduct inspection of specific items to provide physical documentation to "*prove or disprove* this theory," but does *not* know if these inspection were ever conducted and nevertheless formed his own conclusions without the benefit of this information.

"An expert opinion is inadmissible when the only connection between the conclusion and the existing data is the expert's own assertions…" *McDowell v. Brown*, 392 F.3d 1283, 1299 (11th Cir. 2004). "A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered." *See Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 147 (1997). Jones did not do any calculations to determine if water flow was restricted through the intake screens. (Exhibit 1, at 31). Jones testified that it is important to know the extent of the decreased water flow as it relates to causing an exhaust tube failure, but he does not know if that important calculation was ever performed. (Exhibit 1, at 68 – 69). Jones formed his opinion that insufficient water cooling water led to the cause of the fire, yet does not have the foundational data or facts to support this opinion:

Q. Show me your investigation, what you found. Because we're going to hear from Mr. Jaeger next week.
A. Right. The guide that we all conduct investigations by, NFPA 921 in the Marine Fire Investigation section, section 28.10.1.1.4, does indicate that the exhaust system should be inspected for evidence of heat failure often due to water starvation which may result in combustion of nearby boat components.
Q. Is that your investigation?
A. The investigation as well as other research on the internet, consultations with the other experts associated in this case that these tubes can fail if insufficient water flow is there to cool the hot exhaust gases.

Q. But what is insufficient water flow?
A. One that will keep the temperature below the point of the tube failing.
Q. But no determination has ever been made of what insufficient water flow was to this engine, has it? Have you ever got anything from Clarke or Plaisance that indicates what the temperature was of the water flow that was going through there?
A. No.

(Exhibit 1, at 74 – 75).

In addition, Jones requested Plaisance conduct inspection of specific items to provide physical documentation to "*prove or disprove* this theory," including inspection of the turbocharger which will address possible issues such as exhaust gas back pressure, insufficient cooling water through the cooler, faults in the engine fuel injection system, misalignment of a bearing, and leakage in exhaust duct. *None* of these inspections were ever completed to Jones' knowledge, yet they were recommended by him in order to "move forward in developing a hypothesis that can be tested and proven to a degree of scientific certainty." (Exhibit 1, at 140 – 144). Despite the necessity to obtain these answers, Jones formed his opinion without them:

Q. Well, did you ever explore the exhaust gas back pressure too high due to carbon deposits and exhaust duct and nozzle ring, did you ever look into that?
A. This was something that the Middleton mechanics would do.
Q. Or supposed to do.
A. Yeah.
Q. Do you know if they ever did it?
A. **I don't.** These were recommendations or items that I had pointed out to Guy. And as it says previously –

(Exhibit 1, at 141 – 142).

Q. Tell me how water going through the charge air cooler would affect this boat.
A. Any part of the water flow through the cooling system. It didn't have to be just at the screens.
Q. Do you know whether or not he looked into that?
A. **I don't.**
Q. Faults in the engine fuel injection system due to incorrect adjustment. Do you know if he ever looked into the fuel injections system?
A. **I don't.**
Q. Misalignment of a bearing.
A. **I don't know** if he looked into it.

Q. Leakage in exhaust duct.
A. **I don't know.**
Q. Suppose he had a leak in the exhaust duct not due to any lack of water, but just say a leak in the exhaust duct, maybe a manufacturing defect. Could that allow these hot gases to escape, too?
A. If the problem persisted long enough, it could.
Q. "The answers to these questions will allow us to move forward in developing a hypothesis that can be tested and proven to a degree of scientific certainty." Of course, they never did any of it. Or you don't know, do you?
A. **I don't know.**
Q. But you asked them to do it?
A. Yes.

(Exhibit 1, at 143 – 144) (emphasis added).

Jones' opinion is not the product of reliable principles and methods and therefore should be excluded as unreliable, because the only connection between Jones' opinion and the existing data is his own assertions.

3. The expert has *not* reliably applied the principles and methods to the facts of the case

Jones' opinion should be excluded because he did not reliably apply the principles and methods to the facts of this case. Jones' states his hypothesis is based on the engines overheating, but admits that it was determined that the engines, in fact, did *not* overheat. Jones disregarded this contradictory information and maintained this opinion despite being disproven, and failed to take certain evidence into consideration.

"Coming to a firm conclusion first and then doing research to support it is the antithesis of [the scientific] method." *Mitchell v. Gencorp, Inc.*, 165 F.3d 778, 783-84 (10th Cir. 1999). Jones testified that expected to see evidence that the engine overheated, but learned that it in fact did not overheat. (Exhibit 1, at 114). Jones further testified that "[w]hat you have to do when you're following a scientific method is if the hypothesis that you had formed changes in any way, you go back and re-evaluate all the other evidence." (Exhibit 1, at 28).

Jones' initial hypothesis on the cause of the fire in this case was disproven upon learning that the engines did not overheat, but Jones did not start over an reevaluate, he continued to attempt to prove the already disproven hypothesis. Jones cites NFPA as the appropriate guidelines for investigating this fire loss, yet Jones failed to reliably apply these standards to the facts of this case. Therefore, Jones opinion should be excluded as unreliable under *Daubert*.

In addition, Jones failed to take certain evidence into consideration. First, he failed to address or explain how the fire could have occurred from a lack of cooling water without activating the engine alarm systems. Second, he failed to take into consideration the physical damage to the evidence from the towing efforts after the fire. Last, he failed to even interview important witnesses such as the first responder on the scene, a marine police officer, and the towing company that boarded the boat prior to any investigation efforts. (Exhibit 1, at 38).

Furthermore, in support of his opinion that there was a lack of sufficient seawater, Jones states, "Inspection of the seawater pumps also revealed the impeller in the starboard side was disproportionately damaged as compared to the port impeller. Visual inspection of the two impellers disclosed greater material loss and fragmentation to the starboard impeller." Plaisance, however, testified that the damage to the water pump was a result of fire damage, *not* from insufficient water flow through the starboard intake screen. (Exhibit 2, at 488 – 489). Again, Jones recklessly mischaracterized the evidence to support his opinion.

Jones' opinion should be excluded because he did not reliably apply the principles and methods to the facts of this case. Jones' states his hypothesis is based on the engines overheating, but admits that it was determined that the engines, in fact, did *not* overheat. Jones disregarded this contradictory information and maintained this opinion despite being disproven, and failed to take certain evidence into consideration.

B. THE EXPERT'S SCIENTIFIC, TECHNICAL, OR OTHER SPECIALIZED KNOWLEDGE WILL *NOT* HELP THE TRIER OF FACT TO UNDERSTAND THE EVIDENCE OR TO DETERMINE A FACT IN ISSUE

Defendant and Counter Plaintiffs, Mr. Charlie Adventures and Kornegay, adopt and incorporate herein the facts and arguments set forth in Defendant and Counter Plaintiffs' Motion to Exclude the Testimony of Plaintiff's Expert Guy Plaisance, and Defendant and Counter Plaintiffs' Motion for Summary Judgment on breach of contract and bad faith claims against ASIC, filed contemporaneously herewith.

Jones' opinion as to cause of the fire should be excluded because it will not help the trier of fact to understand the evidence or to determine a fact in issue. In addition, Jones' opinions should be excluded to the extent that Guy Plaisance's opinions are excluded.

"Experts opinions ordinarily cannot be based upon the opinions of others whether those opinions are in evidence or not." *American Key Corp. v. Cole National Corp.*, 762 F.2d 1569, 1580 (11th Cir. 1985). When an expert opinion is based upon tests conducted, or opinion rendered, by another expert, and is not based upon any technical or specialized knowledge or methodology, the expert opinion does not assist the trier of fact and is therefore inadmissible at trial. *See Eberli v. Cirrus Design Corp.*, 615 F. Supp. 2d 1357, 1365 (S.D. Fla. 2009).

Jones testified that he relied on other experts in forming his opinion as to cause of the fire. (Exhibit 1, at 31). He further testified that he specifically relied on Dr. Clarke and Guy Plaisance in forming his opinion as to cause of the fire. In his initial report dated, June 28, 2013, Jones classifies this fire as *undetermined*, pending scientific materials testing to be performed by Dr. Kendall Clarke, and further investigation by Guy Plaisance. (Exhibit 1, at 26).

In *Crouch v. Teledyne Continental Motors, Inc*. No. 10-00072-KD-N, 2011 WL 2600450 (S.D. Ala. June 29, 2011), this Court excluded two proffered experts from testifying as to the source or origin of an engine fire. This Court noted that both experts submitted almost identical reports, which summarized, and "summarily put a stamp of approval" on, the evidence. This Court found that one of the experts could be a qualified expert on the issue of causation, but he relied primarily on the investigation of other experts and simply put his approval on their findings. This Court did not find that his opinion would be helpful to the jury, and to the extent that his opinion was independent of the other experts, his testimony would be cumulative. *Id*. at *7-8.

This case shares essentially the same facts as in *Crouch*. In this case, Jones and Plaisance submitted almost identical reports. Although Jones' may be qualified as an expert on fire cause and origin, he limited his role in this investigation to merely providing a "stamp of approval" on Plaisance's opinion, and relying primarily on the inadequate investigation of others.

Accordingly, Jones' opinion as to cause of the fire should be excluded because it is based on the opinion of others, which will not help the trier of fact to understand the evidence or to determine a fact in issue.

CONCLUSION

As demonstrated, the methodology by which Jones reaches his conclusion in not sufficiently reliable as determined by the sort of inquiry mandated in *Daubert*, and Jones' opinion will not help the trier of fact to understand the evidence or to determine a fact in issue.

WHEREFORE, based on the foregoing, Mr. Charlie Adventures and Kornegay respectfully request that Gary Jones' opinion as to the cause and origin of the fire aboard the vessel Mr. Charlie be excluded on the grounds that the proffered expert's opinion fails to meet the standards of reliability as set forth in *Daubert* and will not help the trier of fact to understand the evidence or to determine a fact in issue.

Respectfully submitted,

s/John D. Richardson
JOHN D. RICHARDSON (RICHJ4111)
AARON M. WILEY (WILEA4457)
Attorneys for Defendants/
Counter Plaintiffs

OF COUNSEL:

RICHARDSON LAW FIRM, LLC
P.O. BOX 81227
Mobile, AL 36689
Phone: 251.338.1695
Fax: 251.338.1698
Email: john@jdrlawfirm.com
Email: aaron@jdrlawfirm.com

CERTIFICATE OF SERVICE

I certify that I have on this the 15th day of July, 2014, electronically filed the foregoing with the Clerk of the court using the CM/ECF system and request the Court to serve the same electronically on the following:

Allen E. Graham
William E. Shreve, Jr.
Phelps Dunbar, LLP
P.O. Box 2727
Mobile, Alabama 36652

s/John D. Richardson
JOHN D. RICHARDSON

EXHIBIT 1

EXCERPTS FROM GARY JONES' DEPOSTION

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

CIVIL ACTION NO: CV-13-458

ATLANTIC SPECIALTY INSURANCE COMPANY,

Plaintiff,

vs.

MR. CHARLIE ADVENTURES, L.L.C. and KIM P. KORNEGAY,

Defendants.

DEPOSITION TESTIMONY OF:
GARY W. JONES

ORIGINAL

DATE: May 28, 2014

TIME: 9:10 a.m.

REPORTED BY: Daphne M. Cotten, CSR

A. March 3rd. Yes, you're correct.
Q. And you started investigating the fire on what date?
A. I actually received the assignment on the 19th itself.
Q. March 19th. So it had been roughly two, two and-a-half weeks after the fire occurred?
A. Yes, sir.
Q. And you made your final report on September 28th; did you not?
MR. SHREVE: September 9th.
MR. RICHARDSON: I stand corrected.
Q. And the reason I think I'm wrong is because you've got one date on your reports, and I look down at the bottom and it's got different dates. I don't care, September. I'll go with Counsel here.
A. Bear with me just a second. September 9th, 2013.
Q. That was your final report, right, where you determined origin and cause,

caused this fire.

A. At this point we had a probable theory.

Q. A theory.

A. Yes, sir.

Q. But you put your expert opinion down as undetermined, though.

A. I did pending additional work.

Q. And whose additional work was that before you could move it from the undetermined to your opinion as to cause, what are you relying on? It says Dr. Clarke.

A. Well, Dr. Clarke. And Mr. Plaisance was also consulting with other experts as well.

Q. So you on June 28th could not classify this fire except as undetermined until you had other evidence from Dr. Clarke and Guy Plaisance. Is that what you're telling me?

A. Yes, sir, until the investigation was completed. At that point. Anytime that

Q. So if their subsequent calculations or subsequent evidence is incorrect, then you would have to revert back to your original opinion as the fire being undetermined, as you stated in your June 28th report, would you, sir?

MR. SHREVE: Object to the form.

A. What you have to do when you're following a scientific method is if the hypothesis that you had formed changes in any way, you go back and re-evaluate all the other evidence.

Q. But you had delayed your opinion from undetermined until you could rest on Dr. Clarke's further investigation and your consultation with Guy Plaisance.

My question to you is if they're wrong, then you have to go back to your undetermined status, don't you, sir?

A. Yes.

Q. Okay. Let's go on to Determination of Origin and Cause. "Sufficient flow is required to lower the internal hot exhaust gases in the FRP tube to a safe operating level. The fiberglass tube is rated at approximately 259 degrees Farenheit and is connected to the riser and tube with rubber boots."

Where did you get those numbers from?

A. Initially, they came from a Cummins.

Q. I saw that in your investigation. What does a Cummins --

A. Engine.

Q. -- engine have to do with a MAN diesel engine?

A. The marine system's tube actually is rated at 350 degrees.

Q. But you didn't put that in your report, did you?

A. No. That's an error.

Q. No, it's a big error. Because it's almost a hundred degrees difference, isn't it, sir?

MR. SHREVE: Object to the form.

Q. "The weak point in this system is at the connector and the release of hot gases here was adequate to ignite available combustibles." What available combustibles?

A. In this location here, we had PVC. We had the insulation on the wiring. We had the underside of the decking. A number of combustible items, all of which is capable of igniting and starting a fire.

Q. Let's go up here to page 4, "The calculated restriction in the cool water intake flow was attributed to the substantial marine growth on the strainer/screen and was a contributing factor to the fire's inception." You didn't do any calculations, did you?

A. No, sir, I didn't.

Q. You had to rely on who?

A. Other experts.

Q. So if they're wrong, you're wrong.

MR. SHREVE: Object to the form.

A. I would have to go back and re-evaluate, yes.

to get it over there to that marina.

My question to you is did you ever go talk with the towing people to see what they had done to the boat?

MR. SHREVE: Object to the form.

A. I did not talk with them. I looked at the photographs of the boat while it was being moved.

Q. Did you look at the boat before they enabled the boat to be moved? Or do you know if there's any photographs existing?

A. I can't answer a question about what exists or doesn't exist in the way of photographs.

Q. Well, wouldn't it have benefitted you as a fire investigator to have gone and talked with the first people that put their boots on that boat to see what they disturbed or what they moved?

A. If it appeared that there was significant movement, alterations that warranted such an effort, I would have done

Q. Do you have an opinion as to whether any water was going into that exhaust tube at the time of this fire?

A. In order for the failure to have occurred in the tube, we had to have an insufficient flow to lower the temperature. How much, I don't know.

Q. If Plaisance agreed with me that there was some water flowing through that tube, wouldn't it be important to calculate how much water at different levels to determine what it did to the exhaust going through the tube?

MR. SHREVE: Object to the form.

Q. Let me ask you another way. If you've got a water hose squirting water through it as opposed to an increased amount of water above a water hose flow, wouldn't it be important to know how much water was going through there to see what it did to the exhaust gases that were going through there?

MR. SHREVE: Object to the form.

A. Insufficient water flow will cause these hot gases to cause a failure in the tube. To what extent, the decreased water flow is important.

Q. For what reason?

A. To determine --

Q. How much it lowered the temperature?

A. How much it lowered the temperature, yeah.

Q. Do you know if that calculation was ever done?

A. I did not do it.

Q. Do you know if that calculation was ever done?

A. I don't know.

Q. Now, you know, if you read Dr. Kornegay's statement, or his deposition, or exam under oath, that he determined that sufficient water was flowing from the exhaust before he left the dock that day, he didn't see anything unusual about the water flow -- I want you to assume that.

MR. SHREVE: Object to the form.
A. I did the investigation. And what he found was basically what I found, too.
Q. Well, show me what you found.
A. These tubes can fail. If they're not properly cooled to a sufficient temperature, you can have a failure in it. And if the hot gases extend from it, it can ignite available combustibles --
Q. Show me your investigation, what you found. Because we're going to hear from Mr. Jaeger next week.
A. Right. The guide that we all conduct investigations by, NFPA 921 in the Marine Fire Investigation section, section 28.10.1.1.4, does indicate that the exhaust system should be inspected for evidence of heat failure often due to water starvation which may result in combustion of nearby boat components.
(WHEREUPON, DEFENDANTS' EXHIBIT NUMBER 9 WAS MARKED FOR IDENTIFICATION)
Q. Is that your investigation?

A. The investigation as well as other research on the internet, consultations with the other experts associated in this case that these tubes can fail if insufficient water flow is there to cool the hot exhaust gases.

Q. But what is insufficient water flow?

A. One that will keep the temperature below the point of the tube failing.

Q. But no determination has ever been made of what insufficient water flow was to this engine, has it? Have you got anything from Clarke or Plaisance that indicates what the temperature was of the water flow that was going through there?

A. No.

Q. "Exhaust tube failure could result from the hot gases not getting completely cooled where there are voids in the spray pattern of the riser. In this particular case, Middleton Marine did remove the exhaust riser, and one opening in the shower

Q. And you say if these -- let me read it to you. "With growth on the running gear one might experience vibration when the boat is in gear, loss of RPMs, black smoke coming from the exhaust, lack of ability to draw water through the intakes, increased fuel consumption, and if these symptoms are ignored, it could lead to an overheated engine."

Well, we know the engine didn't overheat, though, don't we?

A. Right.

Q. "Several of these indicators were reported by the insured at the time of loss." If it didn't overheat, why even mention it here? You've had the mechanics tear it apart, and they tell you it didn't overheat. Why even put it here? Why did you want to state that?

A. These were some of the conditions he still reported, evidence of vibration, loss of RPMs --

Q. He never reported any overheated

of these -- vibration, loss of RPMs, black smoke, that's three. Four, lack of ability to draw water through the intakes. Increased fuel consumption, five.

"Dr. Kornegay reported most of these symptoms while underway." That's not true, is it?

A. No, not most. Some.

Q. "The requested inspection will provide physical documentation to prove or disprove this theory."

And then you say, "The final inspection of the turbocharger will address possible issues such as exhaust gas, back pressure, insufficient cooling water through the cooler, faults in the engine fuel injection system due to incorrect adjustment."

Why would the turbocharger -- the final inspection of the turbocharger will address possible issues such as exhaust, back pressure too high due to carbon deposits in exhaust duct and in nozzle ring.

How would the turbo charger reveal those issues?

A. Insufficient cooling water.

Q. No, no, no. Exhaust gas back pressure too high due to carbon deposits in the exhaust duct and nozzle ring. Tell me about that.

A. I don't recall right off where that information came from. These were -- this was research that was being done.

Q. So you just copied it out of a book that you researched.

A. Yes, information that we could explore to see.

Q. Well, did you ever explore the exhaust gas back pressure too high due to carbon deposits and exhaust duct and nozzle ring, did you ever look into that?

A. This was something that the Middleton mechanics would do.

Q. Or supposed to do.

A. Yeah.

Q. Do you know if they ever did it?

A. I don't. These were recommendations or items that I had pointed out to Guy. And as it says previously --

Q. How are you able to recommend this being done by mechanics to MAN or to Guy when you have no experience with these MAN diesel engines?

A. That's why you bring in somebody that does.

Q. But you looked up something in a book and told them they need to look into this.

A. I didn't tell them to do this. We were just looking at ideas or theories as to what may have taken place. At this point, anything was on the table as far as a possible cause.

Q. The only thing I know that Holloway did down at Middleton was break down the engine and look inside. Do you know of anything else he did?

A. I didn't communicate with him. That was Guy Plaisance.

Q. Insufficient cooling water through the "egarge" air cooler. What is an "egarge" air cooler?
A. Charge air cooler.
Q. Oh, that's spelled wrong.
A. That's spelled wrong.
Q. Tell me how water going through the charge air cooler would affect this boat.
A. Any part of the water flow through the cooling system. It didn't have to be just at the screens.
Q. Do you know whether or not he looked into that?
A. I don't.
Q. Faults in engine fuel injection system due to incorrect adjustment. Do you know if he ever looked into the fuel injection system?
A. I don't.
Q. Misalignment of a bearing.
A. I don't know if he looked into it.
Q. Leakage in exhaust duct.

A. I don't know that.

Q. Suppose he had a leak in the exhaust duct not due to any lack of water, but just say a leak in the exhaust duct, maybe a manufacturing defect. Could that allow these hot gases to escape, too?

A. If the problem persisted long enough, it could.

Q. "The answers to these questions will allow us to move forward in developing a hypothesis that can be tested and proven to a degree of scientific certainty." Of course, they never did any of it. Or you don't know, do you?

A. I don't know.

Q. But you asked them to do it, didn't you?

A. Yes.

(WHEREUPON, DEFENDANTS' EXHIBIT NUMBER 25 WAS MARKED FOR IDENTIFICATION)

Q. And then finally -- next page, 25, look at that. That might be a repeat of what we've covered.

EXHIBIT 2

EXCERPTS FROM GUY PLAISANCE'S DEPOSITION

IN THE UNITED STATES DISTRICT COURT

FOR THE SOUTHERN DISTRICT OF ALABAMA

SOUTHERN DIVISION

CIVIL ACTION NO: CV-13-458

ATLANTIC SPECIALTY INSURANCE COMPANY,

Plaintiff,

vs.

MR. CHARLIE ADVENTURES, L.L.C. and KIM P. KORNEGAY,

Defendants.

DEPOSITION TESTIMONY OF:
GUY P. PLAISANCE
VOLUME I

ORIGINAL

DATE: April 22, 2014

TIME: 9:05 a.m.

REPORTED BY: Daphne M. Cotten, CSR

DAPHNE M. COTTEN, CSR
POST OFFICE BOX 2701
MOBILE, ALABAMA 36652
(251)379-0880

Q. When were you first assigned to this case?
A. I think it was March 4th, 2013.
Q. And what were you asked to do?
A. To investigate this loss.
Q. Were you asked to determine the cause and origin? Asked to determine the amount of damage? I'm trying to determine what your role was by this insurance company, what they asked you to do in this loss.
A. To investigate the loss.
Q. To determine what?
A. Initially, the cause and origin.
Q. Okay.
A. And the cost -- if it was repairable, to find out how much it was going to cost to fix it.
Q. So you were assigned by the insurance company in this case to determine the cause and origin of the fire.
A. Yes, sir.
Q. And did you tell them that you did

what you said was missing?

MR. SHREVE: Object to the form.

A. I've never had a mechanic other than one ever find an impeller that spun.

Q. So your only experience is with one pump?

A. One pump failure of the impeller spinning on the hub.

Q. Okay. All right. How about on the port main engine seawater pump, what did you find there regarding the blades?

A. Generally intact. There were no large pieces missing like the starboard pump.

Q. So the only thing missing or the difference between the port pump and the starboard pump were those two pieces?

A. You can see there's cavities on the front of this starboard pump, there are some large areas with pieces of rubber missing. So those areas, that's the difference.

Q. Other than that, any differences?

A. Nothing that could be really identified without pulling those impellers out of those pumps. And we did not do that.

Q. What do you attribute the missing pieces in the starboard seawater pump to?

A. I think those -- the appearance, to me, looks more like it sustained heat/fire damage.

Q. Okay.

A. I mean, they both had the appearance of fire damage, but obviously it just displayed it as melting and distortion.

Q. Okay. Where are these pumps located on the engines?

A. On the --

Q. When I ask you that, forward or aft.

A. A little forward. More forward than aft of center.

Q. Okay. May 1, 2013, the undersigned attended the MR. CHARLIE at Barber Marina to conduct further investigation of the engine space with the

EXHIBIT 3

GUY PLAISANCE'S REPORT OF SEPTEMBER 9, 2013

Atlantic, Gulf & Pacific
Marine Surveyors and Consultants, Inc.

7946 Hapuna Place
Diamondhead, Mississippi 39525
Email 1: captguy@cableone.net

Fax/Phone: (228) 255-6024
Mobile: (228) 222-1275
Email 2: agpmarine@live.com

To: International Marine Underwriters
1100 Poydras Street, Suite 1220
New Orleans, LA 70163-1220

Report as of September 9, 2013

Attn: Ms. Rita Boggan

Claim #	0AB 014998	Date Assigned:	3-4-13
Policy #	B5JF02529	Survey Location:	Barber Marina Elberta, AL
Date of Loss:	3-3-13 reported 3-4-13	Allegation:	Fire
Our File No.:	13-IMU-0176	Date Surveyed:	3-8 and 3-28, 2013
Assureds Name:	Kim Kornegay	Vessel Surveyed:	2006 Cabo 40 Flybridge
Vessel Name:	MR. CHARLIE	Owner of Vessel:	Mr. Charles Adventures, LLC

This is to certify that the undersigned Marine Surveyor did, at the request of Ms. Rita Boggan, One Beacon Insurance Group, and whom it may concern; conduct an inspection of the subject vessel as it lay hauled at Barber Marina Elberta, AL.

VESSEL PARTICULARS:

Subject vessel MR. CHARLIE, is an all molded fiberglass model 40 Flybridge Sportfish built by Cabo Yachts, Inc. during 2006, powered by twin MAN Diesel model R6-800 CRM (D2876 LE 423) 800-hp turbocharged in-line 6-cylinder diesel engines, bearing HIN# CHXJ0040J506 and Official # 1188936. Vessel helm station was outfitted with MAN engine panels for each main engine with digital visual display and audible alarms monitoring rpm, oil temperature, oil pressure, coolant temperature, gear oil pressure, battery voltage and hours. Also were separate port and starboard visual/audible alarms monitoring engine room temperature and exhaust temperature on the steering console. The vessel was also outfitted with a fire alarm and engine room automated fire suppression system with visual/audible alarm panel with manual override control at the helm station.

The vessel was reportedly also outfitted with the following Navigation equipment;

Big Bay Navigation Computer - 3 monitors, 2-up at the bridge helm station and 1-down at and 17" monitor in salon, RF keyboard and mouse, 120 GB hard drive and Coastal Explorer navigation software. Mariner Pro Upgrade including Coastal Explorer Navigation Chart Program.

Furuno Nav-Net 64 mile Radar Chart Plotter black box connected to 2nd 15" Big Bay display.

Furuno GPS

Simrad AP-25 Autopilot with rudder angle indicator.

Furuno FCV 1100 Fishfinder/fathometer w/12.1" screen and bronze thru-hull transducer.

Furuno RD-30 Tri-Data multifunction display.

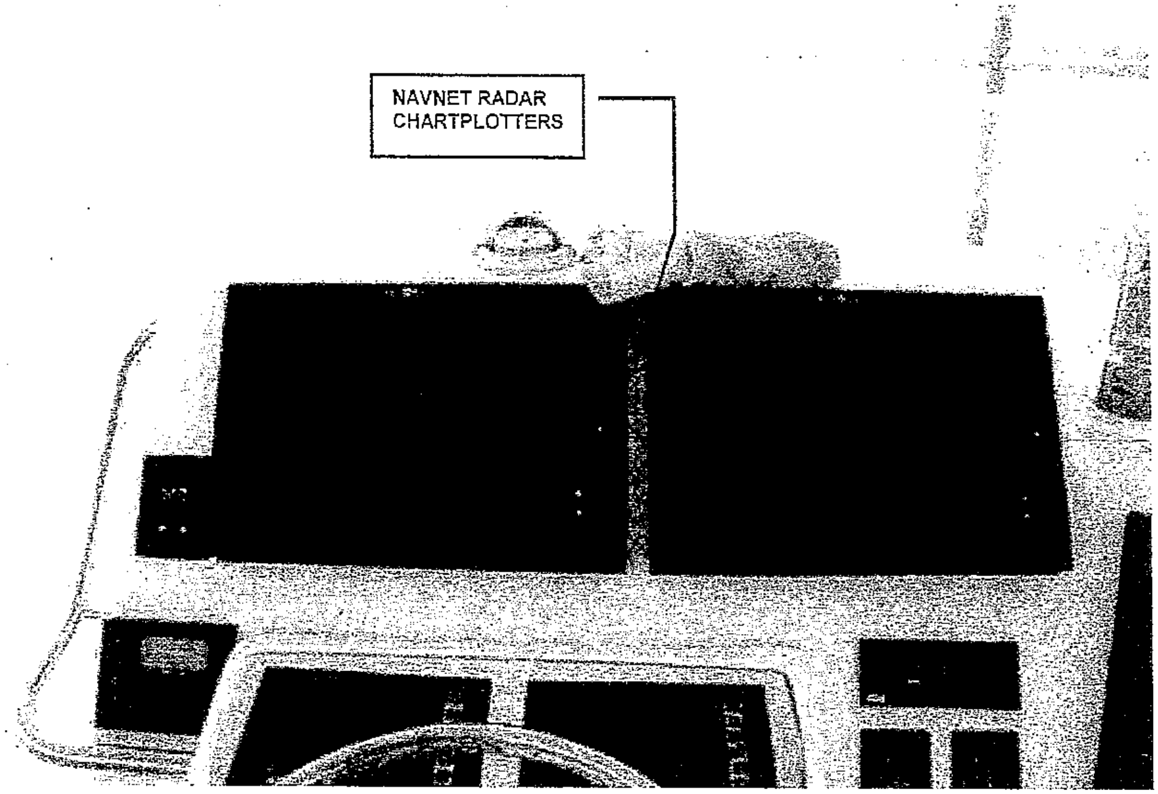
ICOM VHF with 17' antenna.

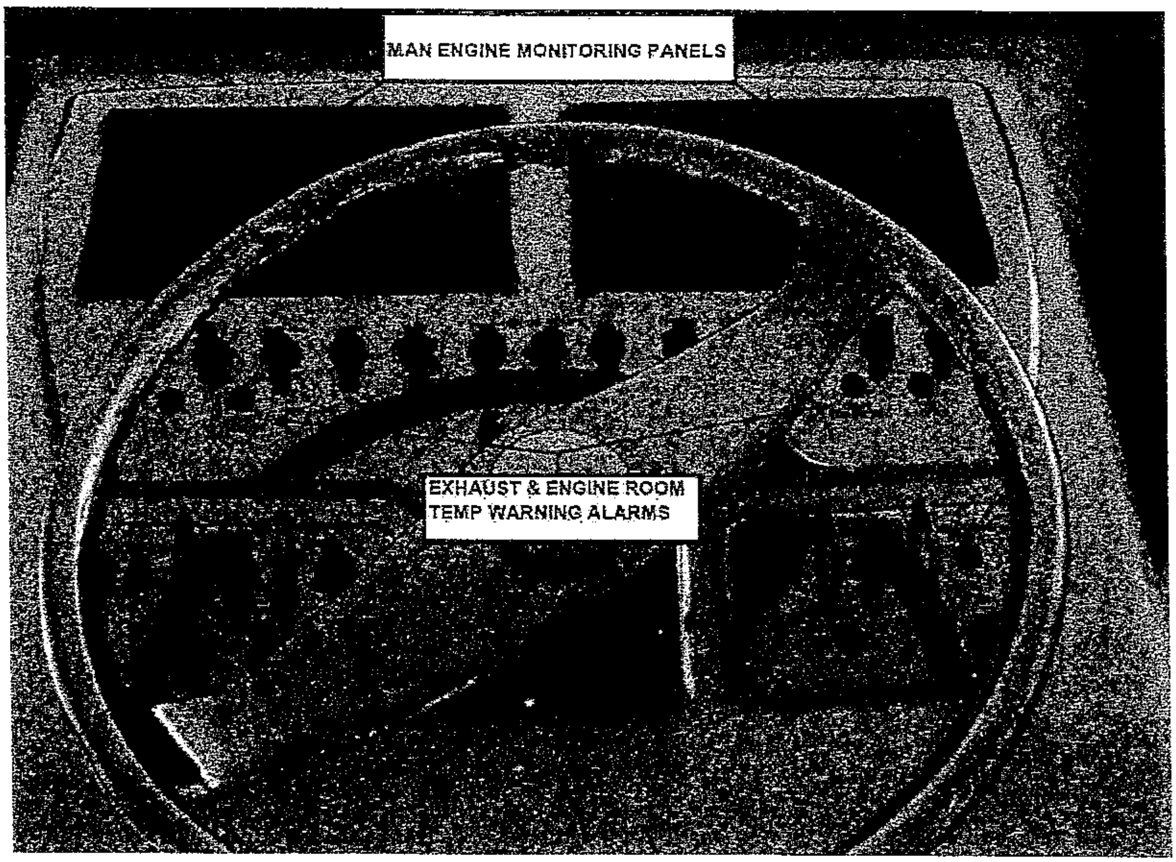
Cellular phone 17' antenna with signal booster.

Ritchie magnetic compass.

(See attached 2006 Cabo 40 SF layout compiled with notes)

EXHIBIT 3


NAVNET RADAR
CHARTPLOTTERS


MAN ENGINE MONITORING PANELS
EXHAUST & ENGINE ROOM
TEMP WARNING ALARMS

Barber Marina is located south of Elberta, Alabama approximately 8.2 nautical miles from the assureds' home at 32718 River Rd Ono Island and is approximately .5 miles to the north side of Intra-coastal Waterway Marker "74" Latitude N 30º 18' 47" Longitude W 87º 34' 10" and by highway is located at 26986 Fish Trap Road Elberta, Al 36530.

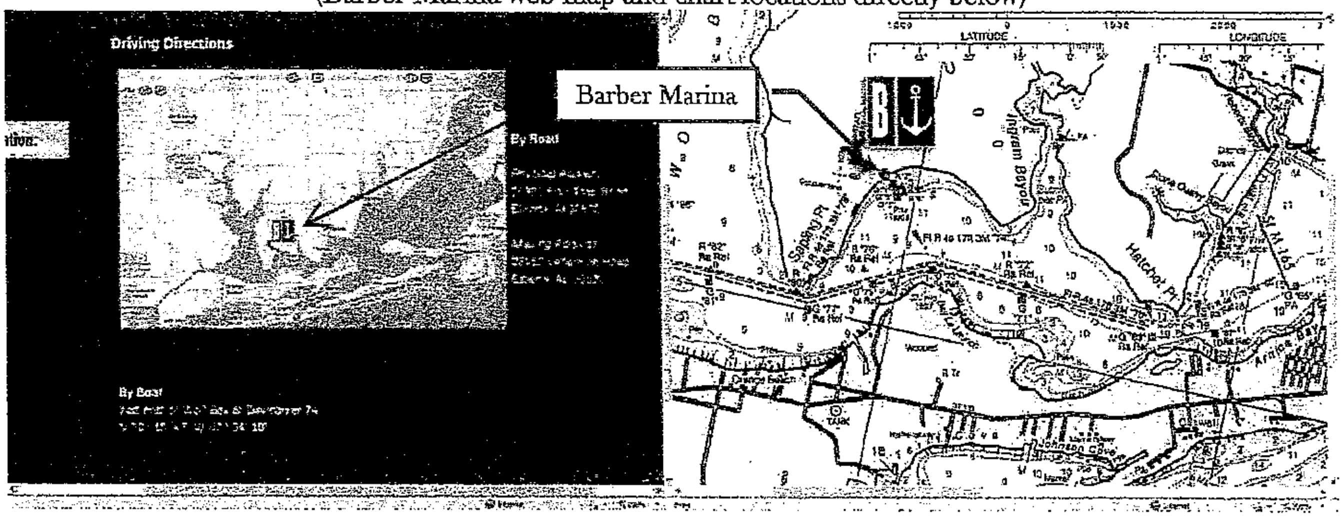
This location is easily found with the navigation chart and directions via the web links found at Barber Marina's web site and on Google maps.

http://www.barbermarina.com/Portals/barbermarina/barber_map_large.jpg

http://www.barbermarina.com/Location.aspx

https://maps.google.com/maps?oe=UTF-8&ie=UTF-8&q=barber+marina+alabama&fb=1&gl=us&hq=barber+marina&hnear=0x88867f341f4bfc75:0x5e55343553c8ccc9,Alabama&cid=0,0,5057001753965447370&ei=t5EmUs68INa2sAT51IGwCg&ved=0CHsQ_BIwCg

(Barber Marina web map and chart locations directly below)



March 3, 2013 weather data archive at 1435-hours in Orange Beach, Alabama, was clear with 10-mile visibility, ambient temperature was 50°F/10°C; wind was WNW at 10.4-mph gusting to 17.3-mph and seawater surface temperature was approximately 55°F/12.77°C. http://www.nodc.noaa.gov/dsdt/cwtg/all_meanT.html

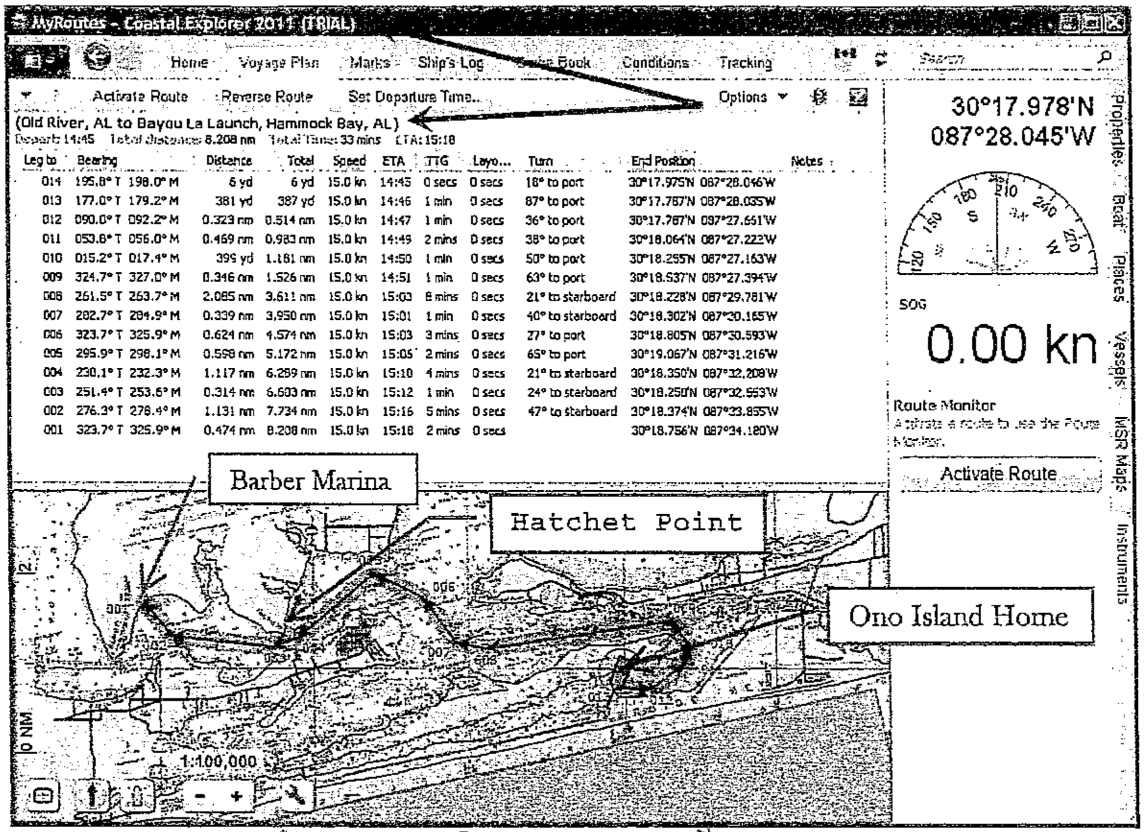
http://www.wunderground.com/history/airport/KJKA/2013/3/3/DailyHistory.html?req_city=Orange+Beach&req_state=AL&req_statename=Alabama

NARRATIVE:

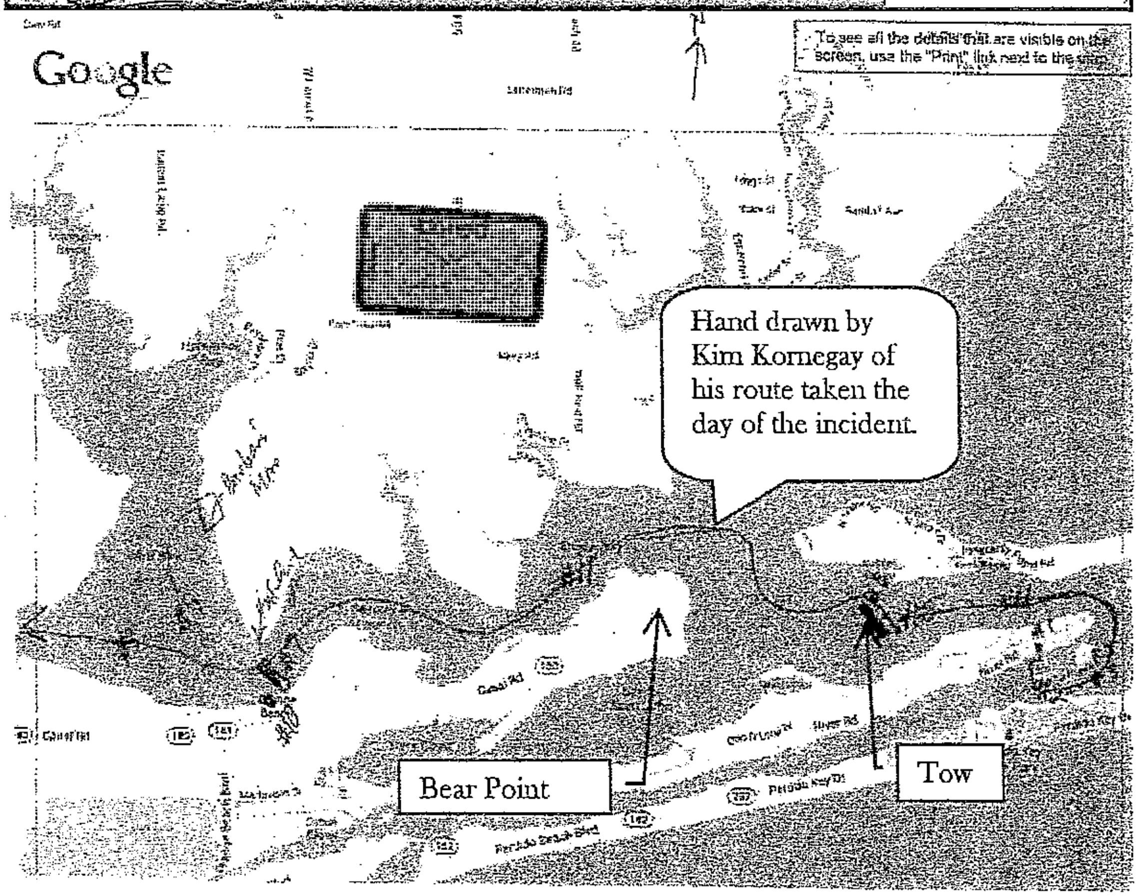
Reportedly, on March 3, 2013, according to the assured's statement, at approximately 1430-hours (CST) after making pre-checks on the vessel, got underway from his house located on the south east end of Ono Island, Alabama, reportedly to take a ride to find Barber Marina, *"to be sure I knew how to get over there from my house on Ono Island",* who reportedly planned to haul the vessel over the next couple of weeks to repaint the bottom, and so the assured wanted to save his route waypoints so he could later return to Barber Marina without making wrong turns.

According to the assured, *"the plan was to haul the boat out in the next couple of weeks when the rain started to subside to repaint the bottom. It had been over a year since I was over that way and I wanted to be sure I had waypoints to get back there without wrong turns."*

(Below is an example of the Coastal Explorer Navigation Chart Program. It takes only minutes to set up a detailed route plan which gives you an automatic longitude and latitude of each waypoint for each turn including compass heading, bearings, distance, speed, time to go to each point and estimated time of arrival. The program will also give you off course audible and visual warnings and give spoken detailed route information. It should also be noted that these types of nautical chart programs give very detailed accurate information including weather conditions, water depth and other local warnings.)



Leg to	Bearing	Distance	Total	Speed	ETA	TTG	Layo...	Turn	End Position	Notes
014	195.8° T 198.0° M	6 yd	6 yd	15.0 kn	14:45	0 secs	0 secs	18° to port	30°17.975'N 087°28.046'W	
013	177.0° T 179.2° M	381 yd	387 yd	15.0 kn	14:46	1 min	0 secs	87° to port	30°17.787'N 087°28.035'W	
012	090.0° T 092.2° M	0.323 nm	0.514 nm	15.0 kn	14:47	1 min	0 secs	36° to port	30°17.787'N 087°27.651'W	
011	053.8° T 056.0° M	0.469 nm	0.983 nm	15.0 kn	14:49	2 mins	0 secs	38° to port	30°18.064'N 087°27.222'W	
010	015.2° T 017.4° M	399 yd	1.181 nm	15.0 kn	14:50	1 min	0 secs	50° to port	30°18.255'N 087°27.163'W	
009	324.7° T 327.0° M	0.346 nm	1.526 nm	15.0 kn	14:51	1 min	0 secs	63° to port	30°18.537'N 087°27.394'W	
008	261.5° T 263.7° M	2.085 nm	3.611 nm	15.0 kn	15:00	8 mins	0 secs	21° to starboard	30°18.228'N 087°29.781'W	
007	282.7° T 284.9° M	0.339 nm	3.950 nm	15.0 kn	15:01	1 min	0 secs	40° to starboard	30°18.302'N 087°30.165'W	
006	323.7° T 325.9° M	0.624 nm	4.574 nm	15.0 kn	15:03	3 mins	0 secs	27° to port	30°18.805'N 087°30.593'W	
005	295.9° T 298.1° M	0.598 nm	5.172 nm	15.0 kn	15:05	2 mins	0 secs	65° to port	30°19.067'N 087°31.216'W	
004	230.1° T 232.3° M	1.117 nm	6.289 nm	15.0 kn	15:10	4 mins	0 secs	21° to starboard	30°18.350'N 087°32.208'W	
003	251.4° T 253.6° M	0.314 nm	6.603 nm	15.0 kn	15:12	1 min	0 secs	24° to starboard	30°18.250'N 087°32.553'W	
002	276.3° T 278.4° M	1.131 nm	7.734 nm	15.0 kn	15:16	5 mins	0 secs	47° to starboard	30°18.374'N 087°33.855'W	
001	323.7° T 325.9° M	0.474 nm	8.208 nm	15.0 kn	15:18	2 mins	0 secs		30°18.756'N 087°34.180'W	



According to the assured, not long after he got underway he brought the vessel up to speed around 20 to 22 knots and everything was running fine; however, he encountered a westbound tow in the Intra-coastal Waterway which he then slowed down and overtook the tow and then continued westerly on the MR. CHARLIE towards Barber Marina.

The assured stated that after overtaking the tow, he came to Bear Point, but was unsure of exactly which way to go and made a wrong turn in the channel; however, soon realized this and then backtracked and made it to Hatchet Point. Reportedly he could see Barber Marina in the distance, but proceeded slowly because he was uncertain of the water depth and knew where the GPS showed him to be; however, stated *"you can't trust that GPS"*, and so he idled up to the Barber Marina.

Once at the marina, the assured reportedly turned the MR. CHARLIE around and headed back slowly in the same direction he came from and about that time, he spotted the same tow he had overtaken earlier. So the assured decided to wait it out and would give way to the tow which reportedly was occupying most of the channel as it came through Hatchet Point. And while sitting back with the MR. CHARLIE at idle, began practice maneuvering in approximately 9' of water, waiting on the tow to pass.

After the tow was clear, the assured decided it was time to head home and upon putting the engines ahead and while coming up in rpm onto plane, reportedly the starboard main engine shut down. The assured stated that he thought that was strange, so he put the port engine in neutral, reset and restarted the starboard engine and then synchronized both engines and brought them up to planing speed and the starboard engine shut down again. Once again, the assured thought to himself, this strange and he reset the starboard engine and restarted it again, synchronized both engines and brought them up to planing speed and the starboard engine shut down again for a third time.

It was about this time, the assured realized that something was wrong and with the port engine running and in neutral, with the MR. CHARLIE drifting just to the north side of the channel, left the helm and went downstairs to the salon to check the breaker panel. The assured stated he could hear the generator running, so he went back outside to the cockpit deck and he opened the engine room hatch. When he did that, the assured stated that smoke hit him in the face and startled him and so he ran straight up to the helm and began making "Mayday" distress calls on the VHF radio to the USCG, reporting the MR. CHARLIE was on fire, leaving the engine room hatch open.

Reportedly, USCG station Mobile replied back to the assured and took some information as to the location, type and name of the vessel he was on and who was aboard, but the assured was panic stricken at this point and not able to remain steady on the radio with USCG. During his radio communications with the USCG, the assured stated that he managed to get his liferaft out from storage on the flybridge and down to the cockpit deck ready to deploy, then ran back up to the helm, reset the starboard engine and restarted it again, put both engine throttles to near full ahead to planing speed.

According to the assured, the starboard engine ran this time long enough for the MR. CHARLIE to cross from the north side of the channel, over the Intra-coastal Waterway, to the south side of the channel and up into shallow water along a deserted beach area where he planned to beach the vessel so he could evacuate into his liferaft. As he approached the beach, the assured throttled back and ran down to the cockpit with the engine room hatch remaining open and flames reportedly coming out of that hatch, deployed his liferaft and then abandoned ship from the MR. CHARLIE into the water to get into the liferaft with engines and generator still running.

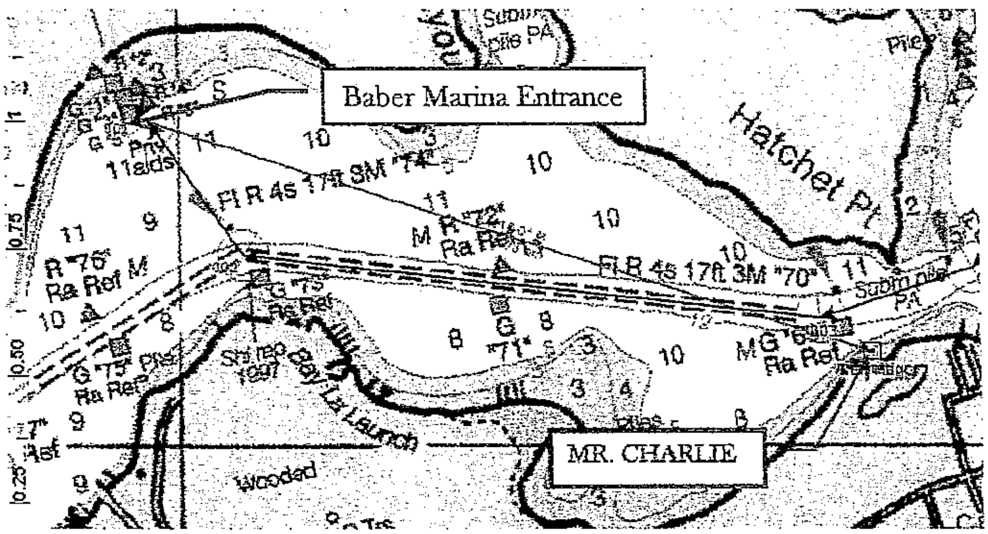
About that time, the assured stated that he saw smoke and flames and he heard a siren type alarm on the MR. CHARLIE and all engines quit running. Then he spotted the Marine Police approaching from the east that came up between the liferaft and the burning vessel and the assured said he heard alarms going off after all the engines had stopped running. Not long after this, the assured left his liferaft to go ashore to the beach where he reportedly made a 911 call from his cell phone to report his location and afterwards the Alabama Marine Police officer Alford came back and picked him up. Shortly after, the USCG arrived on the scene with the MR. CHARLIE engulfed in flames.

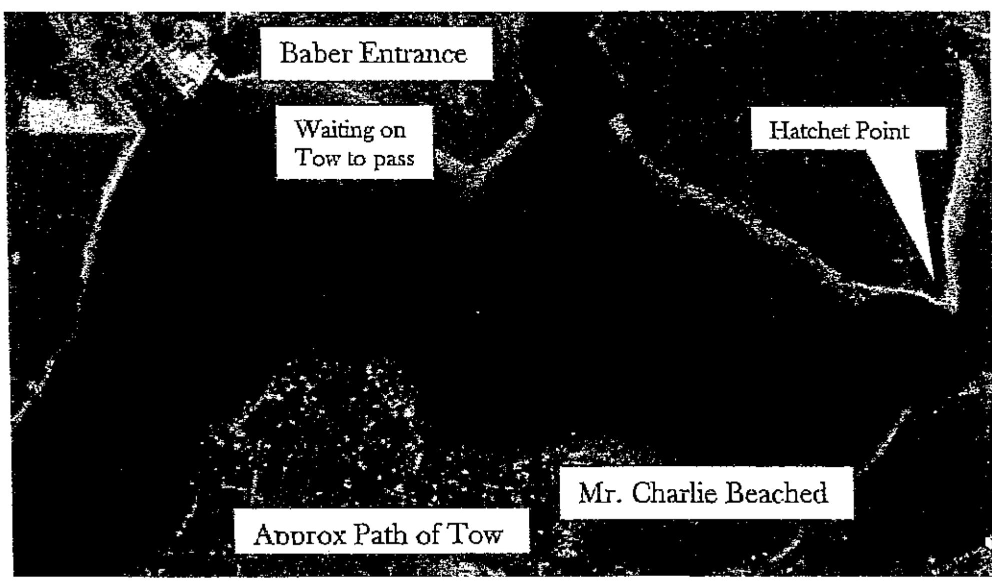
CIRCUMSTANCES:

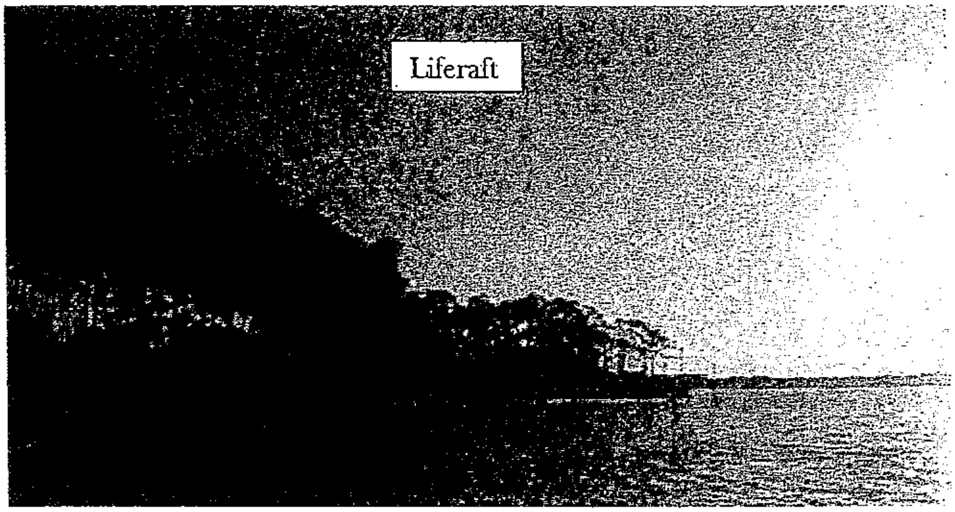
According to the Department of Conservation & Natural Resources Boating Accident Investigation Report Case # 20130303AL189-1, at approximately 1600-hrs the location of the MR. CHARLIE was reported at just slightly to the southwest of Hatchet Point on the south side of the Intra-coastal Waterway near marker "69" near Latitude: 30 deg 18 min 23.000 sec North and Longitude: 87 deg 32 min 43.000 sec West. (See Attached Report)

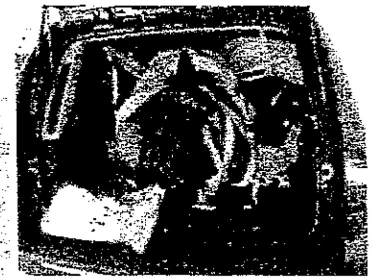
Inconsistencies were noted within the Accident Investigation Report which states that the vessel was reportedly valued in access of $800,000, which is inaccurate. The report also states that there was only one (1) fire extinguisher aboard which contradicts what the assured stated that there was at least four (4) aboard, 2-inside and 2-atop at the flybridge deck. The Accident Investigation Report also indicates that the engine room hatch was closed as apposed to what the assured stated, it was left open. The Accident Investigation Report further indicated that there was a Halon Fire Suppression System aboard; however, during our investigations, no Fire Suppression System bottle was found aboard, as will later be seen.

The charted location of where the MR. CHARLIE was beached and burned was approximately 1.48 nautical miles from the entrance of Barber Marina and on a course of 110° magnetic. These same location coordinates was given to the undersigned by Capt Mac McLean of TowBoat US, who was also called to the scene to assist; however, reported that when he arrived the vessel was engulfed in flames. It should be noted that the shore side area where the MR. CHARLIE was beached was wooded and secluded without road access, having a 1/5 mile long pond adjacent preventing Emergency and Firefighting vehicles from attending to the burning vessel.

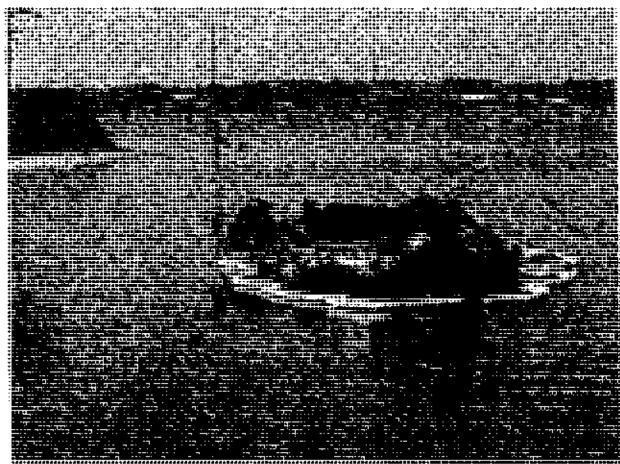


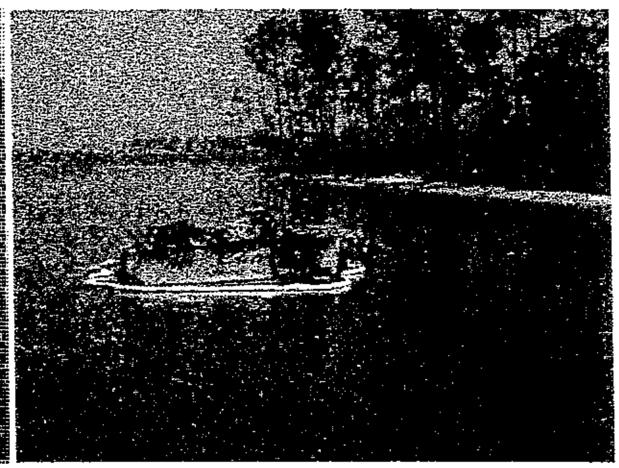


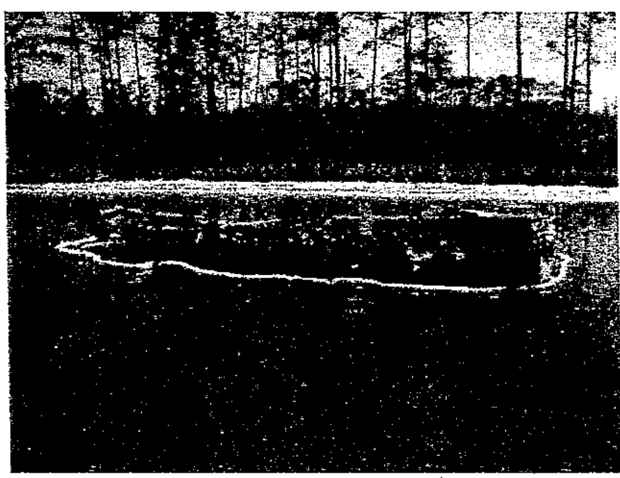


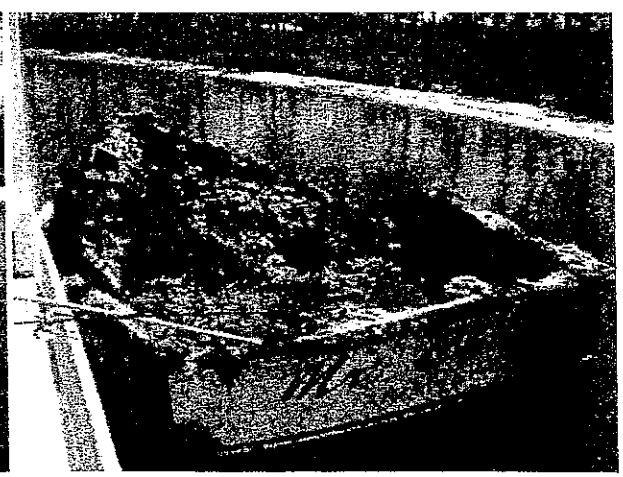


Prevailing frontal weather approaching the following day delayed salvage/towing of the MR. CHARLIE and on March 7, 2013, Capt Mac McLean and crew of TowBoat US, towed the vessel to Barber Marina to be hauled and blocked.









MARCH 8, 2013 ATTENDANCE:

The undersigned conducted a preliminary inspection as the vessel lay hauled and blocked at Barber Marina, Elberta, AL with the following was observed and noted;

During a short part of this preliminary inspection, the assured was noted in attendance and did have with him in his SUV, the liferaft which he had deployed during the incident. We did discuss briefly the events leading up to the time of the fire.

Two (2) main engines are MAN R6-800CRM diesel 800-hp, turbo charged after cooled and according to the assured, the engines had approximately 350 hours each.

The entire vessel was generally consumed by fire from just above the waterline and up, leaving the vessel a complete loss.

Starboard main engine suffered the most extensive heat/fire damage of the two main engines with aluminum the cooling water expansion tank completely melted, thermostat housing completely melted, inner cooler forward housing completely melted, forward end of the oil cooler housing melted.

Starboard main engine turbo charger appears to be a potential area of origin on the inlet side which was completely destroyed and no fragments found. The fuel service centre near the turbo was significantly melted and Racor dual filter housing located just inboard was completely destroyed with minor fragments found.

Starboard main engine #6 valve cover exhibited unusual distortion (dished inward). All of the other five (5) valve covers appeared normal.

Starboard main engine raw water intake stainless steel screen on the hull bottom was significantly covered in marine growth with approximately 20% or less of the hole pattern left open, un-restricted.

Port main engine turbo charger inlet was distorted. The fuel service centre near the turbo was significantly melted and Racor dual filter housing located just inboard was completely destroyed with minor fragments found.

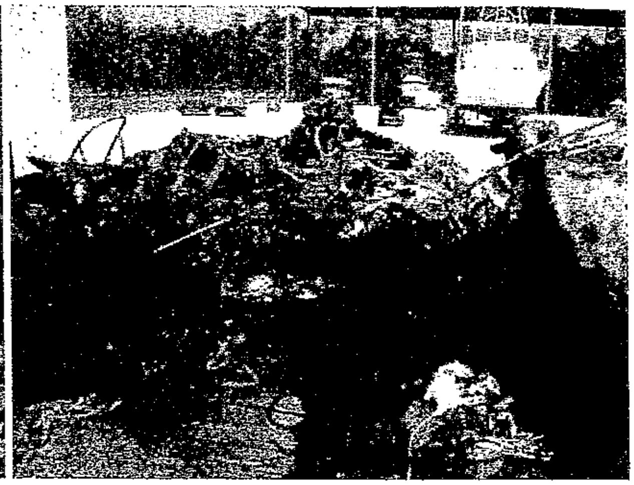
Port main engine suffered extensive heat/fire damage with the cooling water expansion tank partially melted at the ends and the aft end of the oil cooler housing melted on the inboard side. All six (6) of the port main engine valve covers appeared normal.

Port main engine raw water intake stainless steel screen on the hull bottom was significantly covered in marine growth with approximately 30% or less of the hole pattern left open, un-restricted.

Heavy marine growth was noted on all of the underwater appendages and running gear.

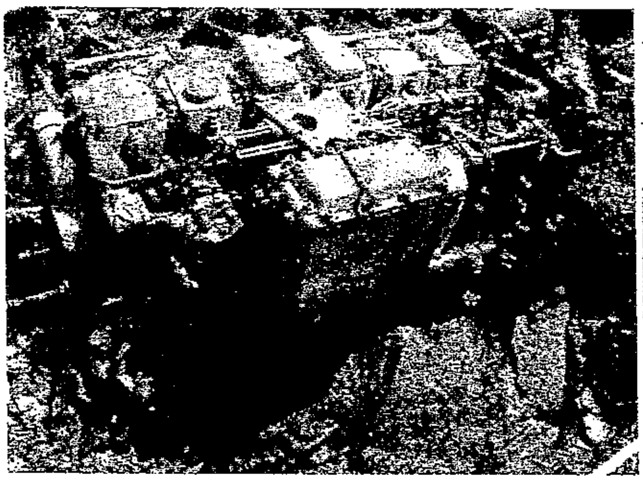
The generator and the reduction gears were not visible as they were buried in debris leaving the full extent of damage unknown at this time. The extent of damage is a total catastrophic loss with no evidence of fire fighting efforts present or reported.

Salvage items: Underwater running gear, shafts, shaft couplings, propellers, rudders and struts, and the trim tabs.



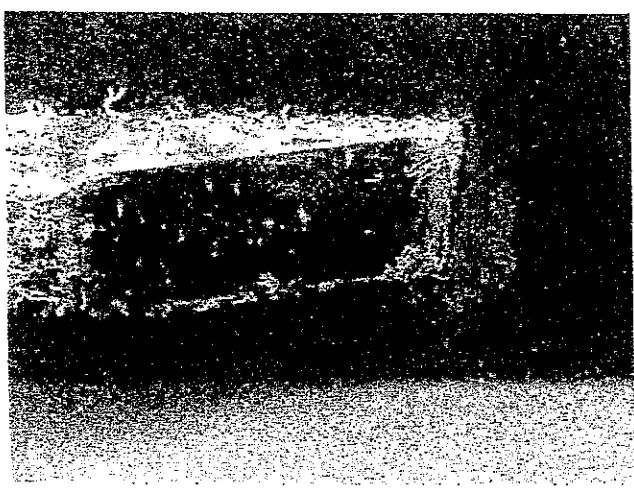
(Stbd Main Engine Below)

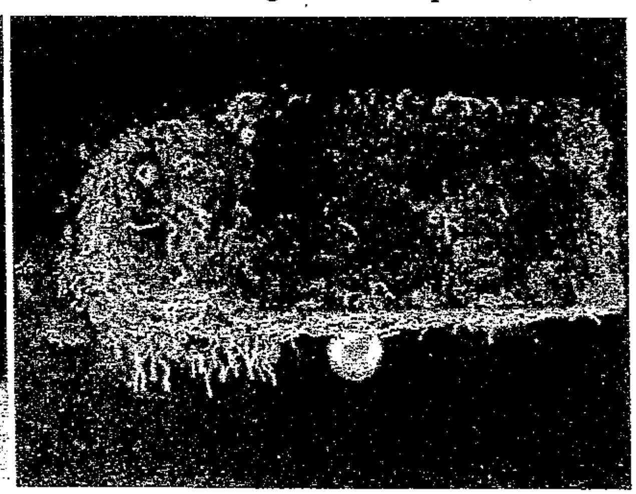
(Port Main Engine Below)



(Stbd Main Engine Sea Scoop Below)

(Port Main Engine Sea Scoop Below)



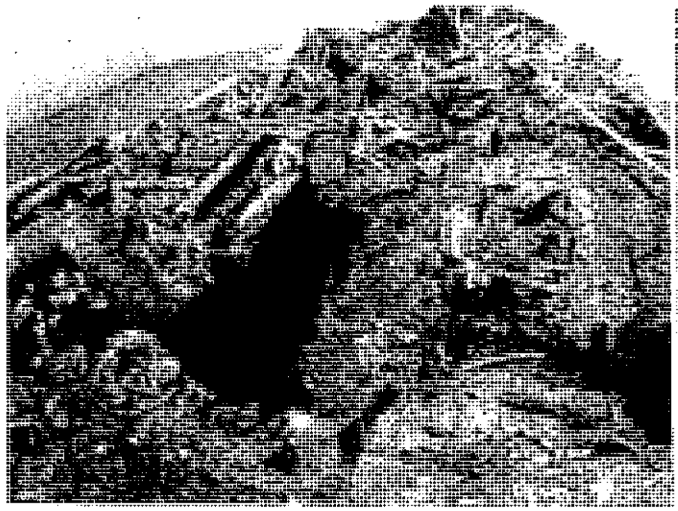


MARCH 28, 2013 ATTENDANCE:

The undersigned conducted a joint fire investigation with Mr. Gary Jones of EFI Global and with Mr. Ralph Holloway of Middleton Marine who was present in part to assist with engine technical questions, as the vessel lay hauled and blocked at Barber Marina, Elberta, AL with the following was observed and noted;

Debris removal began in the starboard aft engine compartment were the lowest and most intense area of burn pattern was observed. Inconsistent melting and thermal distortion to the starboard engine metal components as compared to the port engine metal components was a key factor during our assessment process.

(Port & Stbd Main Engine Below)



(Stbd Main Engine Below)

Significant melting of engine compartment aluminum components with isolated melting of copper indicative of ambient temperatures in the range of 1200°F to 1980°F, approximately. These temperature readings were one of the indicators we relied upon in formulating the initial origin area theory which also included a near total destruction of the starboard main engine fiberglass exhaust tube found in the starboard aft bilge, while the port main engine fiberglass exhaust tube was intact and whole, found aft of the port engine. (Ref: G. Jones, EFI Global June 28, 2013 Report)

(Stbd Main Engine Exhaust Tube Below)

(Port Main Engine Exhaust Tube Below)

Interior damage pattern indicates that the heaviest material loss from fire consumption was most concentrated at the starboard aft engine compartment of the vessel. Fire delineation patterns were most prominent along the starboard aft bulkhead where the generator Racor fuel filter housing was uncovered and mounting location determined by the attached bracket. The Racor plastic bowl was destroyed and the metal housing was heavily distorted with top cover dislodged by fire involvement. Diesel fuel released from the unit and lines apparently accelerated the fire in that area. The close proximity of this equipment to the starboard exhaust is the most probable explanation for the low level damage. The generator was noted located aft and on center of the port and starboard main engines.

(Generator Below)

(Generator Racor Fuel Filter Housing Below)

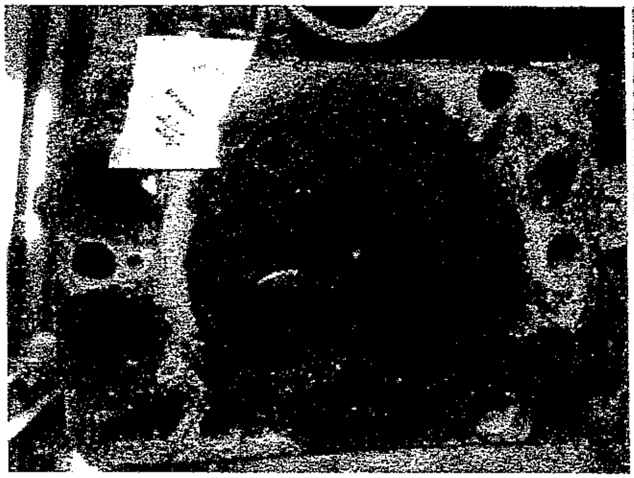
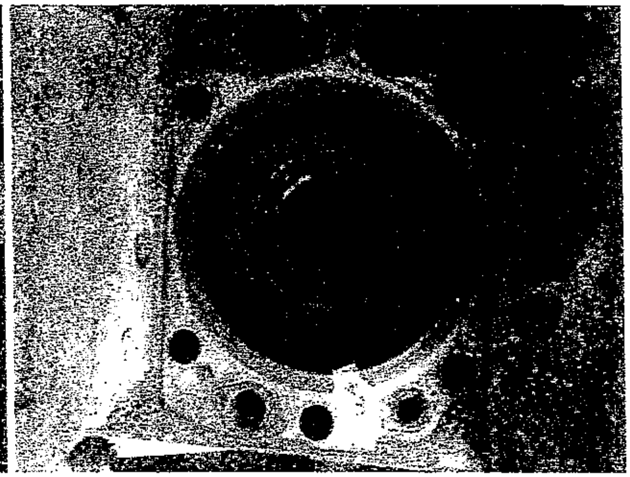
Engine compartment electrical system arc map analysis revealed adverse activity at the starboard aft section only. Evidence of arcing and beading of the copper conductors at the starboard aft side versus the port aft side was apparent. This activity was consistent with that of wiring being energized, subjected to heat/flame contact with mid line melting, indicative of resulting fire damage, not the cause of the fire. This fact is consistent with the report by the assured who stated that the machinery was still in operation and running when the vessel was on fire and until he abandoned it.

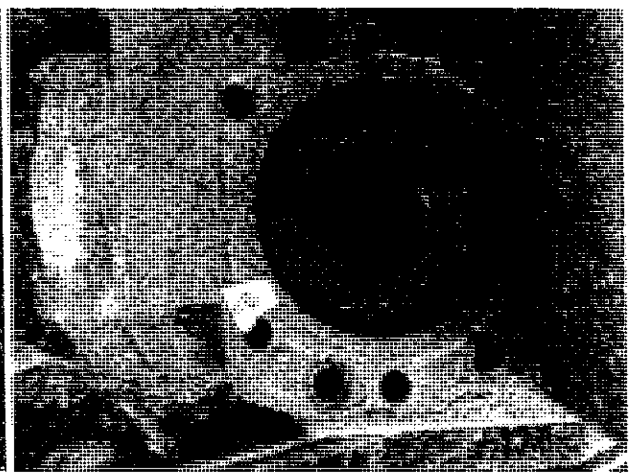
Uncovered in the debris aft of the starboard reduction gear in the bilge was found a steel mounting bracket with two stainless steel hose clamps remaining attached. This bracket was for mounting the engine room fire suppression system bottle; however, the steel bottle was missing. Mounting location for the bracket at the starboard aft upper engine room bulkhead was completely consumed.

(Fire Suppression Bottle Bracket Below)

(2006 CABO Fire Suppression Bottle Seen Mounted Below)

Investigations as to the cause and origin of the fire continued with the removal of the starboard main engine from the vessel which was performed by Baber Marina and then transported to Middleton Marine shop located in Orange Beach, AL for partial disassemblies on 4/18/13. Removal of cylinder heads 1-3-6, revealed no internal damage to cylinders or pistons as a result of engine overheating. (See photos below)



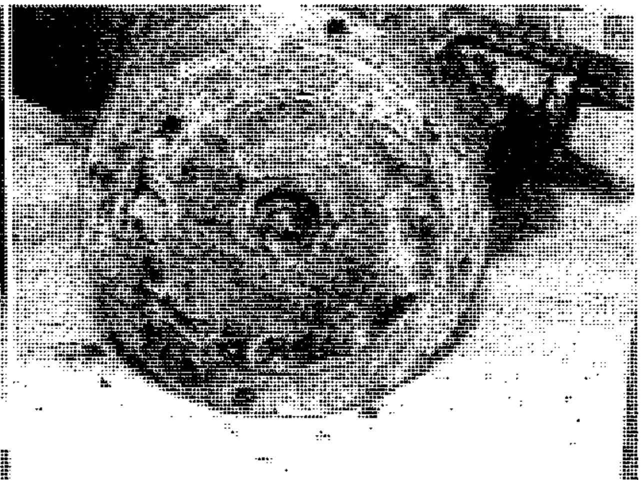
MAY 1, 2013 ATTENDANCE:
Removal of the port main engine seawater pump from the vessel was performed by Baber Marina and then transported to Middleton Marine shop located in Orange Beach, AL for inspection. Turbocharger was removed from the starboard main engine and was inspected with no evidence of failure present.

(Starboard Turbocharger Below)


Port and Starboard main engine seawater cooling pumps were removed from the engines and with cover plates removed. Starboard pump revealed neoprene impeller blades were variously bulged and having large pieces of blades at the outer face missing and center hub face almost fully exposed with the neoprene separated from the center hub. The Port pump neoprene impeller blades were somewhat uniform with only minor pieces of a few blades missing and center hub barely visible with the neoprene remaining attached to the center hub. Both pumps input shafts with gears were without notable wear or play. Both pumps were retained by the undersigned as evidence, boxed and labeled for transport back

(Stbd Main Engine Seawater Pump Below)

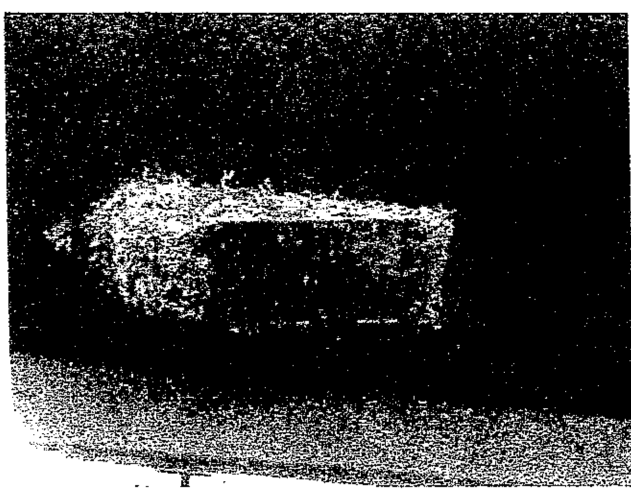
(Port Main Engine Seawater Pump Below)



On May 1, 2013, the undersigned attended the MR. CHARLIE at Barber Marina to conduct further investigation of the engine space with the starboard main engine removed and of both main engine sea scoops in which both port and starboard scoop screens were removed for a closer inspection behind the screens and to preserved the screens as evidence. Baber Marina supplied tools and labor to effect the removal of the two sea scoop screens.

The starboard sea scoop screen was removed and found impacted with loose silt/mud and charred fire debris which had apparently drained back down from inside the vessel through the seawater pump intake hose that was burnt off just past the sea valve inside the engine room bilge. This allowed water and debris to flow back out and down to the top of the starboard screen. Once the screen was off, intentions were to rinse the screen with freshwater by Barber yard manager to remove the loose silt and debris from the screen; however, instead a garden hose with city pressure was used, which inadvertently knocked off a large portion of the soft marine growth from the starboard intake screen. This was clearly a mistake made by the manager and realized afterwards by the undersigned. No photo was taken of the screen after it was first removed or before it was washed off.

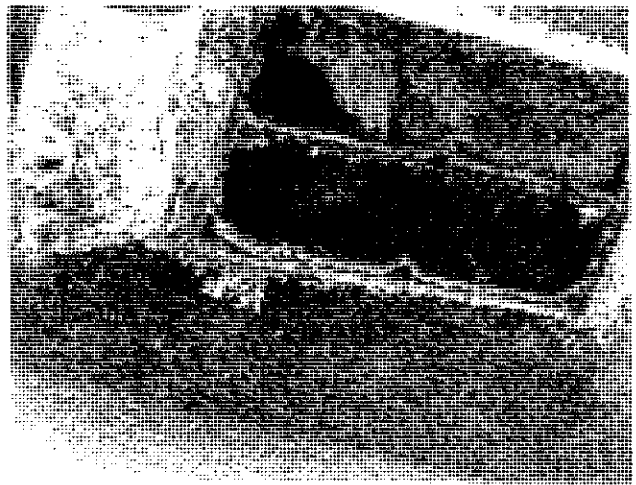
(Starboard Sea Scoop)



(Starboard Sea Scoop Being Removed)

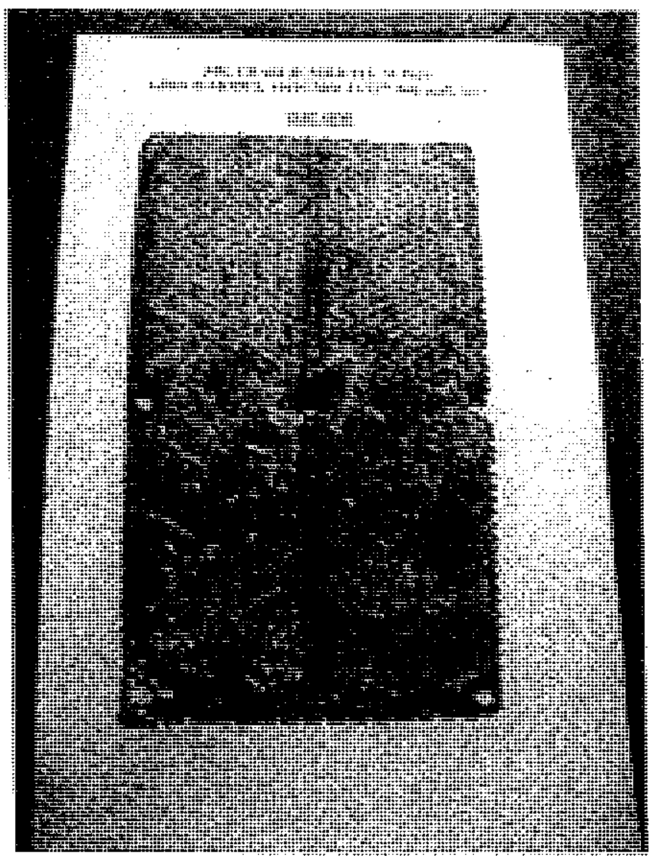
(Port Sea Scoop with Screen Removed)

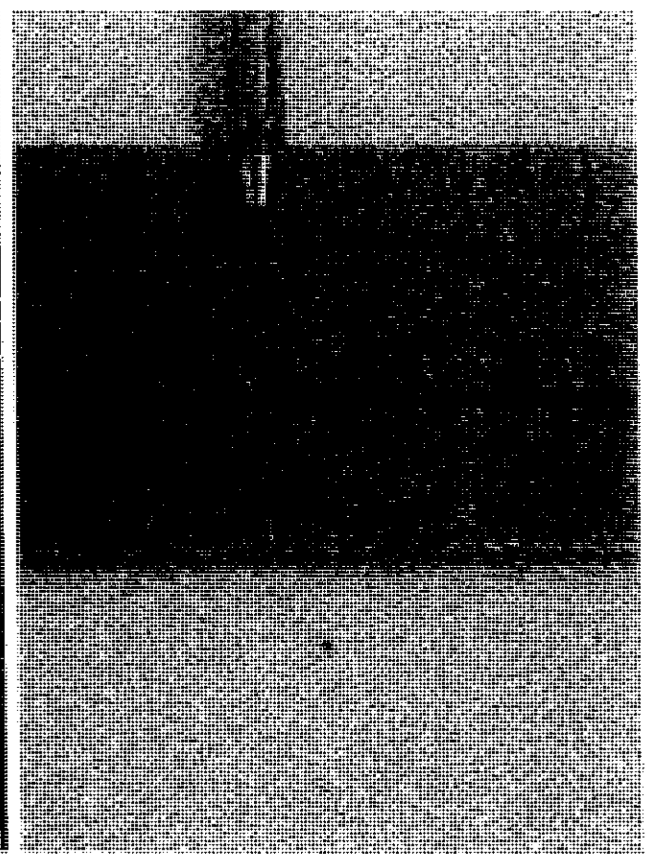
(Starboard Sea Scoop with Screen Removed)

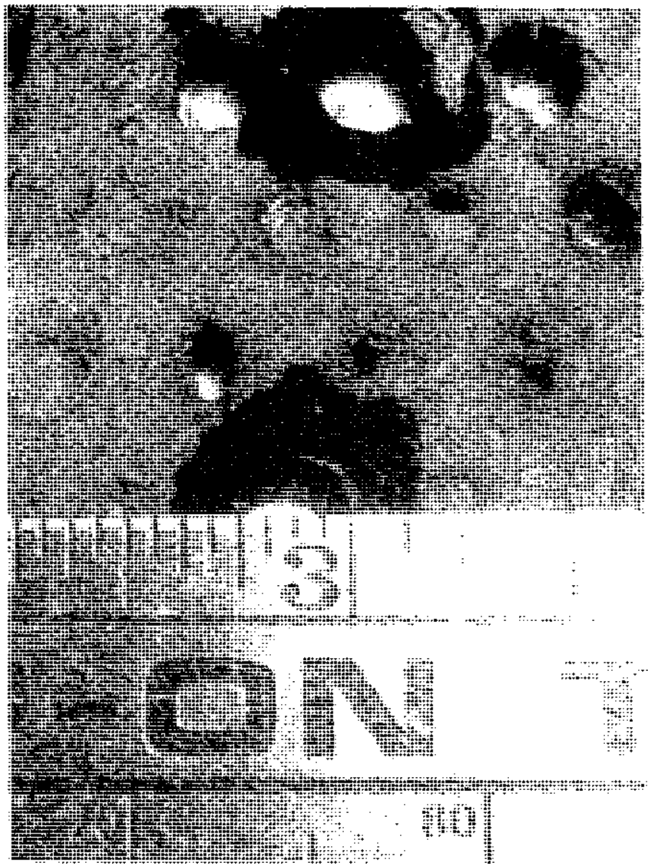


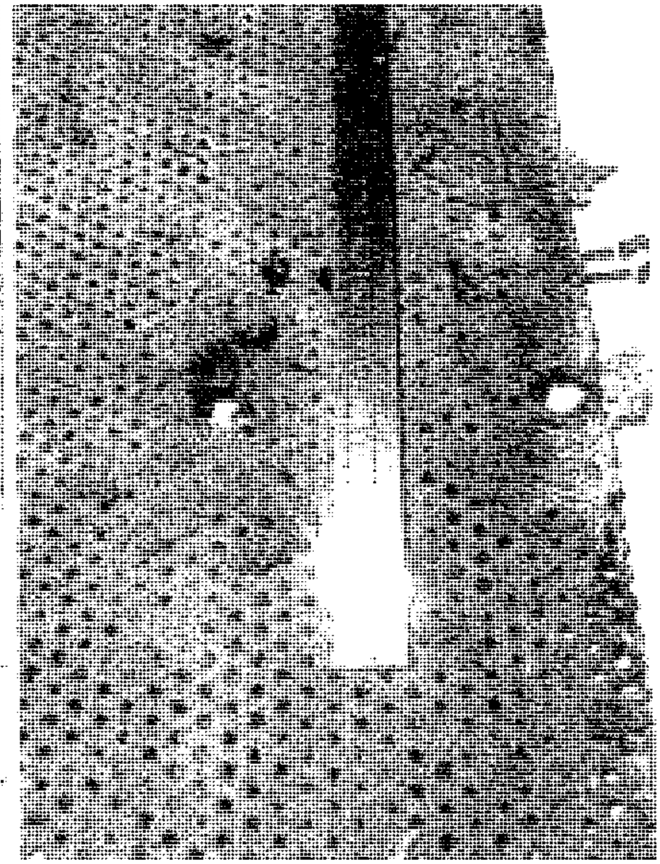
After both sea scoop screens were removed, the undersigned bagged and labeled the screens accordingly as retained evidence. During this same attendance, the undersigned did also gather the two fragmented remains of the starboard fiberglass exhaust tube from the vessel to also retain as evidence which were placed inside of plastic storage bins with covers and labeled accordingly.

On May 7, 2013, the undersigned did conduct a close examination of both port and starboard sea scoop screens in an office environment. Both screens were photographed using various methods and angles to document the screen conditions, hole size and pattern and to illustrate the marine growth present on each.









It was determined by the undersigned that there were three (3) holes on the starboard screen which were 100% open and two (2) holes on the port screen 100% open. The sea scoops were indentified as Groco part # APHS-3000-2 bronze sea strainers. The screens were found to be manufactured by Hendrick Corporation having a Groco part #93-3000-2, stainless steel, having .125 diameter perforated holes. Both screens were found to be significantly fouled with marine growth and paint.

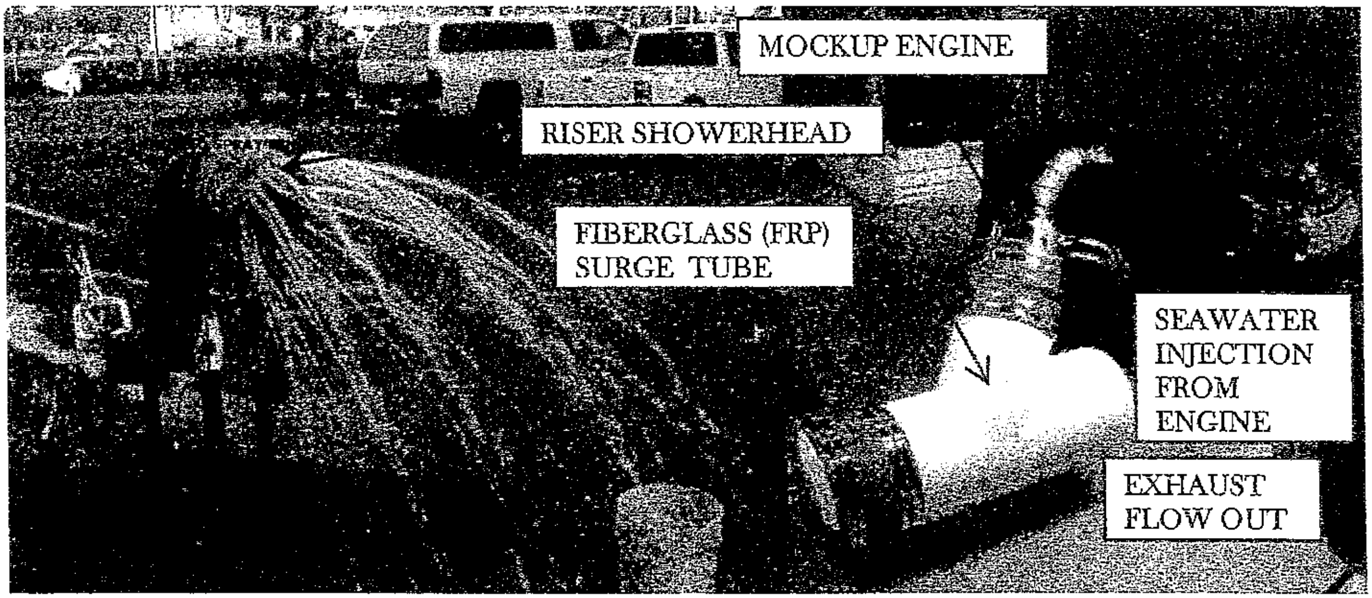
The undersigned made phone contact with Marine Exhaust Systems technical support who is the manufacturer and supplier of the Cabo vessel MR. CHARLIE exhaust components; i.e. the stainless steel exhaust riser, fiberglass exhaust surge tube with connecting rubber boots and hose clamps. Discussions concerning seawater cooling requirements for the non-metal exhaust components determined that the design of the stainless steel exhaust riser is based upon the engine manufacturers minimum output flow rate. Marine Exhaust Systems components are designed and built to meet USCG and ABS specifications. The non-metal components, i.e. the fiberglass exhaust surge tube with connecting rubber boots are fire rated withstand temperatures of up to 259°F and beyond that will begin to fail as they are designed to operate under normal temperatures of 120°F to 150°F, approximately. The undersigned did also confirm this information with two other marine exhaust design persons from other companies who fully agreed that good water flow is imperative and if not, failure is certain of the non-metal exhaust system components.

According to Marine Exhaust Systems technical support, test experiments of the non-metal components have been conducted in the past have revealed that complete failure of those non-metal components was achieved at approximately 350°F within minutes. The stainless steel exhaust riser is designed and built in the principal of a "showerhead" having a series of round holes at the discharge end of the riser pipe spraying a large volume of seawater over the hot exhaust gas before it exits the riser and dumps into the non-metal components.

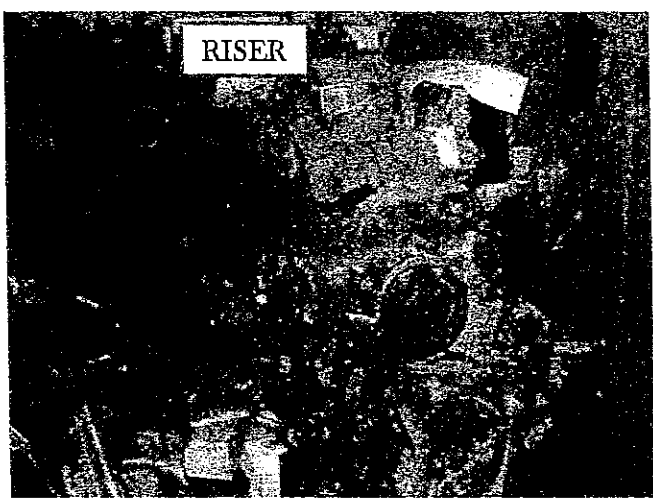
It should be noted that the Marine Exhaust Systems stainless steel exhaust riser is designed and built with a spray pattern of the "showerhead" having more holes closer together around the upper half of the can then the lower half. This done so that most of the water when injected at the designed flow rate comes out of the upper half of the "showerhead" and falls over the exhaust pipe opening in order to provide an optimum cooling affect over the hot gases.

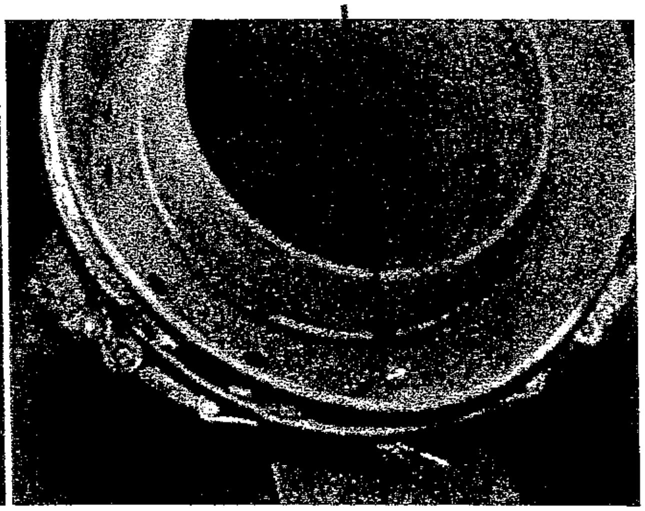
When water flow volume and or pressure is restricted or reduced to the riser "showerhead", gravity begins to take takes affect on the water that is flowing and as a result the water naturally drops to the lower half of the "showerhead". This affect can be compare with a household showerhead, when you have good water pressure the flow pattern is relatively even, but as you turn the pressure down by closing the valve, the water begins to drop to the lower half of the showerhead and will eventually turn into a steady stream of water at the lower half of the showerhead as the valve is closed even more. This same principal is true with a marine exhaust riser which looses water flow or pressure.

The illustration below are photos of a test stand demonstration of a stainless steel exhaust riser with water injection being applying showing how the "showerhead" on the left works and in the right photo, Marine Exhaust Systems components very similar to those installed on the MR. CHARLIE are shown with labels applied for reference.



At the time of the starboard engine inspection at Middleton Marine shop located in Orange Beach, AL, the exhaust riser remained attached with both openings exposed at each end of the riser pipe once the turbocharger was removed. It was noted that one of the "showerhead" holes located at the bottom center of the ring, was plugged up with hard deposits.





According to the MAN technical engine data, exhaust gas temperature of the main engines on the MR. CHARLIE, at 2300-rpm is 1112°F. The engine seawater pump minimum delivery requirement is 107-gallons per minute at 0 bar inlet pressure. Having sufficient seawater passage through the main engine to the exhaust riser is critical in order to cool the hot exhaust gas before reaching the non-metallic components making up the remainder of the exhaust system.

Exhaust gas volume flow [m³/h]	6840
Exhaust gas mass flow [kg/h]	2730
Exhaust back pressure [mbar]	80
Exhaust gas temperature [°C]	600

Sea water pump - standard

Pump model	Impellerpumpe
Delivery quantity [l/min] at 0 bar inlet and 0.5 bar back pressure	400
Power input [kW]	2.0

Without proper cooling water flow and or adequate water pressure to the exhaust riser with the engine running, is certain cause for a fire to start in the down line non-metal components. The physical evidence remaining of the destroyed starboard fiberglass exhaust tube, points towards an exhaust system cooling water failure.

The pieces of physical evidence collected along with all pertinent design data collected by the undersigned concerning the MAN engine and seawater pump, Marine Exhaust Systems design, Groco sea strainer design and the Groco/Hendrick screen design data, was all turned over to Dr. Kendall Clarke, who was hired to assist underwriters in this matter as a metallurgical consultant.

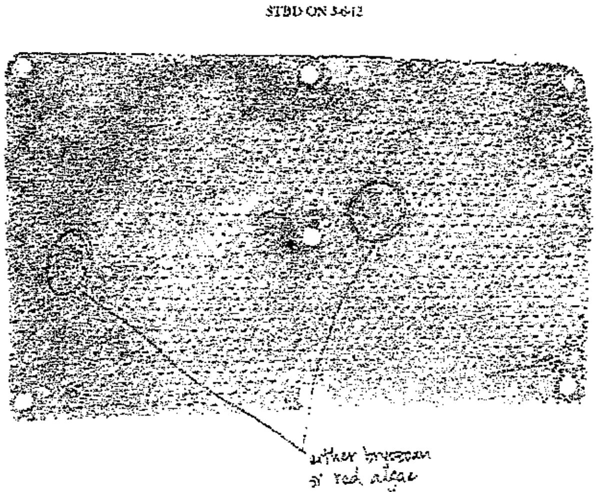
Dr. Clarke did perform digital photo analysis of both the port and starboard sea scoops screens in order to determine the total open area remaining on each of the fouled screens. This was done by comparison using a new sea scoop screen purchased from Groco by the undersigned and provided to Dr. Clarke for this purpose. It was determined by Dr. Clarke that the total open area of a new screen, after deductions were made for the framework of the scoop body, that total open of the new screen as installed, is 17.6 square inches. Dr. Clarke determined that the starboard sea scoop screen has an open area of 3.55 square inches or 1/5 (20%) of the designed as compared with a new clean screen. The port sea scoop screen was determined by Dr. Clarke to have an open area of 3.85 square inches or approximately 1/4 (26%) compared with a new screen.

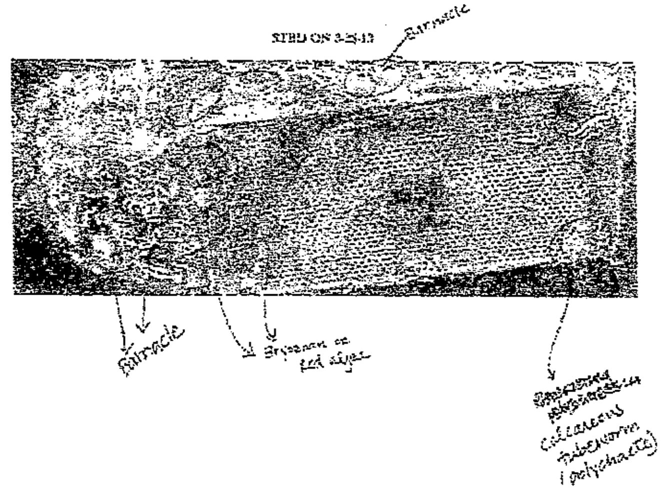
Inquiry by the undersigned was made to the sea scoop screen manufacturer, Hendrick Corporation, to design engineer Mr. John Moran, with regard to flow rate calculations based on preliminary data on the MAN main engine seawater pump with regards to minimum flow rate requirements using 450 liters per minute. Using that data as a starting point to determine screen flow rate, he stated, "*that open area raises the required velocity to over 640 ft/min which is off the chart for pressure loss calculations – there is a formula but I would have to find it, but I do know that the flow resistance roughly increases exponentially with velocity. Knowing that we were estimating 40" H20 vacuum before – the new vacuum on the pump inlet side would be off the chart for pump operation (more than 55" of H20 vacuum). The pump would not have been able to flow 450 liters/min of water no matter how low the head pressure was.*"

After the initial communications with John Moran, Dr. Clarke had conduct his photo analysis of the starboard scoop screen and this information along with the updated MAN pump data received was provided to John Moran. According to Mr. Moran, "*the screen was too clogged to flow the required amount of water (400 l/min or 450 l/min) required for the engine. The pressure loss would be too great for the pump to overcome. Unless the pump is made to operate at a higher vacuum, it probably wouldn't flow enough water.*"

Discussions with Dr. Clarke concerning the starboard main engine oil coolers and heat exchanger, the undersigned has raised the question as to the conditions of those components which are highly susceptible to fouling and corrosion from which seawater passes. A previous visual inspection by the undersigned of the main engine heat exchanger and gear oil cooler, which were both loose from the engine, revealed evidence of fouling and corrosion; however, at that particular time the undersigned was not able to determine the full extent of the fouling and or corrosion. It has not been determined if further inspection of those coolers will be performed; however, we reserve the right to attend such an inspection, should that occur. Fouling in marine seawater coolers applications is inevitable and routine maintenance is often required in order to reduce or avoid potential problems with the machinery in which the coolers are involved.

Several various photos of the sea scoops and screens were sent off by the undersigned to Dauphin Island Sea Lab in a non-formal manner via email, without the lab being made privy to the circumstances involving the MR. CHARLIE. This was done in order to have the lab indentify some of the marine growth present on the sea scoops and screens. The results came back in a non-formal manor via email reporting that various types of marine growth was present on all photos sent to the lab. Handwritten labels were used in doing so. (See the photos below)





The undersigned did also obtain from Middleton Marine the MAN engine Maintenance Plan which gives a comprehensive outline of what is required by the engine maker on a yearly, 2-year and 4-year basis. (See attached MAN Maintenance Plan)

<u>Every Year</u>
M1 Checking
Engine exterior for loss of oil and coolant
Coolant lever
Concentration of antifreeze anti-corrosion agents
Engine oil level - gearbox oil level
Engine alarms
Functioning of instruments
Coolant hoses for leaks
Fuel lines for leaks
V-belt tension, retightening if necessary V-belt(s)
<u>Condition of impeller</u>
Water hose clamps, pipe connections and bolts for security, retightening if necessary
Alignment of the shaft system-In the event of abnormal vibrations, since the elastic engine mounts may have settled.

<u>Every 2 Years</u>
A1 Cleaning
Intercooler / charge-air pipes / turbocharger
Heat exchanger (pipe cluster)

<u>Every 4 Years</u>
A2 Changing
Coolant
All hoses (e.g. fuel supply and return lines, gearbox oil cooler)

Once the respective number of operating hours has been clocked up (see page 10), the aforementioned maintenance work M1 to M6 is to be carried out by an MAN-authorized workshop.
Jobs A1 and A2 due every year or every other year must be performed irrespective of the number of operating hours clocked up at the respective time.

It should be noted that based upon the service reports obtained from the assureds repairers over the last 4 years, that none of the items listed in the MAN engine Maintenance Plan were performed. According to the assured, he has never changed the impellers on the engine pumps and he further stated that everything was working correctly on the vessel on the day of the incident when he left the dock.

Below are parts taken from Examination under Oath of Dr. Kim Kornegay with referenced page numbers where these can be found.

Pg 202
Q. And if you prohibit the intake of water to the engines enough, either by paint or by growth, then you can damage the engines. Yeah?
A. Not necessarily.

Q. No? You don't agree with that?
A. I don't agree with that.

Pg 220
Q. Have you ever changed the impellers out on either of the main engines?
Pg 221
A. No

Q. Sounds like you're pretty meticulous about the boat in terms of the maintenance. If they did it, you'd know about it.
A. Yes.

Q. What do you know about exhaust censors versus water cooling censors on your display? Are they different? Are they the same?
Pg 222
A. I don't know.

Q. Are there any exhaust heat censors and/or alarms on your main engines?
A. To my recollection, I've had – I've had some faults and some alarms go off in the past that have been repaired. And to my recollection, one of them was an exhaust censor that was bad.

Q. When was that?
A. I don't recall. Ralph replaced it. It was a – he told me it was a bad sensor. There was nothing wrong with – it was exhaust – if I remember correctly, it was exhaust gas temperature.

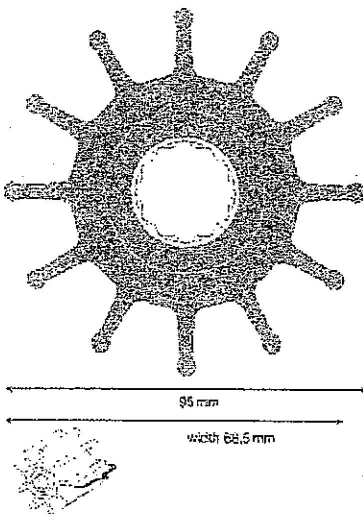
Pg 224
Q. Were they working correctly at the time you set out of Ono in March on your trip?
A. Everything was working correctly.

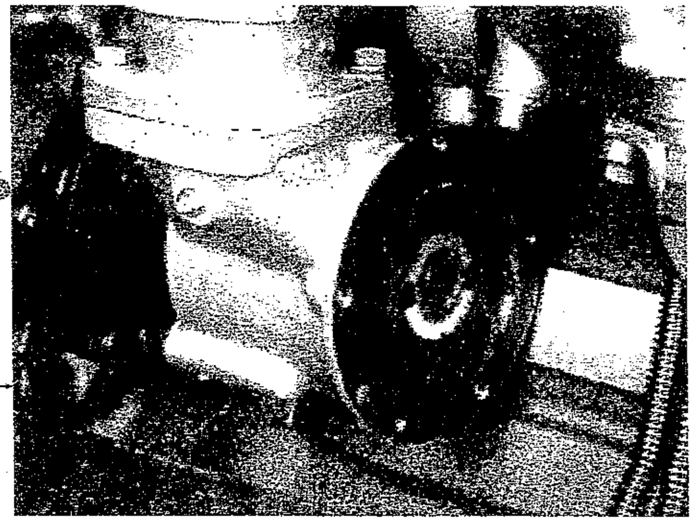
Pg 233
I knew what my GPS showed me. But you can't trust that GPS.

It is commonly known in the marine industry that worn or damaged impellers can cause system failure or engine breakdowns. Directly below is from Johnson Pumps which is the impeller used by MAN Diesel along with a photo of the MAN seawater pump installed on the engine with a new impeller installed and pump cover removed.

Impeller number
09-814B

- Neoprene (for cooling)
- replaces Jabsco 21676-0001
- Europe & 17936-0001 USA





Below are the trouble shooting steps from Johnson Pump concerning neoprene impellers.

Troubleshooting Your Flexible Impeller Pump
Low flow:
Reduced flow will occur when the impeller is damaged.
Bowed, missing, worn or ripped blades (see picture) will reduce flow.
A worn cam, wearplate or cover plate will also reduce flow.
The replacement of these parts, when worn, normally cures the problem.
Another cause of low flow is an air leak. This can occur anywhere along the suction line, within the sea strainer, or within the pump.
Check all hoses, hose clamps, fittings, gaskets and the pump water seal.

Not priming: *All of the causes of low flow described above can also prevent the pump from priming.*

How to prevent impeller failure:
The main causes of premature impeller failure involve running the pump dry, with a restricted suction or with a blocked discharge.
Confirm your inlet seacock is in the open position before engine start. You would be surprised how often this simple step is forgotten.
<u>Regularly clean your suction strainer and confirm all old impeller blades are removed when replacing your impeller.</u>
These steps will reduce the majority of system flow restrictions.

COST:

As previously mentioned in this report, the Accident Investigation Report states that the vessel was valued in access of $800,000.

According to the assured in his sworn statement, he believed the vessel was worth $1,000,000.00.

The undersigned noted that the MR. CHARLIE was found on these Yacht Brokerage websites apparently listed for sale;

Oodle Marketplace - $499,900.00 Frank Gordan - $499,900.00 Boat Trader - $699,990.00

The undersigned has conducted a search and found that there are other similar 40 CABO Sportfish vessels listed for sale in close price range as the MR. CHARLIE was listed.

Estimated Market Value at the time of the incident: $525,000.00

Amount of Hull Insurance: $800,000.00 Deductible: $16,000.00 (less depreciation)

SURVEYORS NOTES:

The undersigned has noted a number of circumstances involving this incident which are inconsistent and have raised suspect to this matter.

One being that the value stated by the assured of what the vessel was worth and the amount stated on the police report, both being highly over inflated compared to the vessel market value.

Also, the fact that the location in which the assured decided to beach the vessel was remotely secluded away from any direct shore side access. Furthermore, in of lieu of turning the vessel around and going back to Barber Marina when the engine started presenting a problem or by simply stopping and checking the engine to see what was happening, instead the assured kept pushing the engine, restarting it for a fourth time and running it hard, after the fire was discovered.

Why was the engine room hatch left open once smoke and fire was discovered and no attempt made at discharging a fire extinguisher into the space with four (4) reportedly aboard or not setting off the manual override on the Halon system, if it were installed. All peculiar when the assured was so adamant about doing the maintenance; conducting his "pre-flight checks" and that "everything worked" when he left the dock on a cool Sunday afternoon by himself.

And why was it necessary to go find Barber Marina when doing could so easily be done with the nicely outfitted navigation systems installed aboard to rely on, tied to the dock from at home.

We reserve the right to supplement and or amend this report should new or additional information be made available.

Survey made, signed and submitted without prejudice to rights and/or interests of whom it may concern.

Respectfully Submitted
Atlantic, Gulf & Pacific
Marine Surveyors and Consultants, Inc.

Guy P. Plaisance

Guy P. Plaisance, Surveyor

Society of Accredited
Marine Surveyors, Inc.®

ATTACHMENTS:

1.) Digital Photos within report
2.) 2006 Cabo 40 SF compiled with notes
3.) Service Reports from MR. CHARLIE past maintenance
4.) Groco Sea Scoop and Screen data sheets
5.) MAN Engine Repair Manual
6.) MAN Engine Maintenance Plan
7.) MAN Engine Technical Data sheet
8.) G. Jones, EFI Global June 28, 2013 Report
9.) Dr. Kendal Clarke Screen Analysis - 3 emails
10.) Hendrick -John Moran Screen calculations - 3 emails
11.) Hendrick Calculator http://www.hendrickarchproducts.com/technical-info/autocad-drawing-tools/open-area-calculator/
12.) Marine Exhaust Systems http://www.marine-exhaust.com/ - LINK Reference
13.) Dauphin Island Sea Lab Analysis - 1 email
14.) Big Bay Navigation Invoice
15.) Examination Under Oath Of Dr. Kim Kornegay with Exhibits
16.) Natural Resources Boating Accident Investigation Report
17.) 3 Yacht Brokerage listings of the MR. CHARLIE

OPINION:

It is the opinion of the undersigned that the damage sighted was recent in nature, of common cause and could reasonably be attributed to a fire on or about March 3, 2013 at 1600-hours, as alleged.

It is the further the opinion of the undersigned that the fire resulted due to the lack of required maintenance on the starboard main engine per the manufacturer's recommendations and by the excessive amount of marine growth on the starboard sea strainer screen.

EXHIBIT 4

GUY PLAISANCES REPORT OF APRIL 13, 2014

Atlantic, Gulf & Pacific
Marine Surveyors and Consultants, Inc.

7946 Hapuna Place
Diamondhead, Mississippi 39525
Email 1: captguy@cableone.net

Fax/Phone: (228) 255-6024
Mobile: (228) 222-1275
Email 2: agpmarine@live.com

April 13, 2014

Allen E. Graham
William E. Shreve, Jr.
Phelps Dunbar, LLP
P.O. Box 2727
Mobile, Alabama 36652

Our Job File #13-IMU-0176 ER

Re: Atlantic Specialty Insurance Company, Plaintiff,
Vs.
Mr. Charlie Adventures, LLC, and Kim P. Kornegay, Defendants.
Civil Action No. CY-13-458-CG-N

Dear Sir,

Pursuant to the requests of Phelps Dunbar, LLP, counsel representing the claimants, Atlantic Specialty Insurance Company, Underwriters at Interest; to provide my opinions as to the cause of loss and my opinions for which the prevailing circumstances involving such matter exist, please consider the following:

The undersigned marine surveyor is a licensed master mariner with over 34 years of combined experience in vessel navigation, management, operations, new construction, repair and inspection within the Maritime and Shipbuilding Industry, of commercial vessels, military vessels and yachts, having much recent experience as marine surveyor involved with claims on like vessels for which this complaint is made.

Furthermore, the undersigned has worked in the capacity of both a yacht captain and a shipyard project manager, during which I did oversee the operations, management, and the construction of yachts, from 1984 until 1994, and over the last thirteen years, have performed many various types of marine surveys on multiple vessels; i.e., including numerous yachts with like equipment installed on the subject vessel, "MR. CHARLIE", with several of which cases involved yacht fires and other cases involving commercial vessel fires.

From June, 2001 to the present, the undersigned has been gainfully employed as a marine surveyor providing professional services to the maritime industry. Attached are Exhibits A and B which are true and correct copies of my curriculum vitae and my fee rates with terms.

The undersigned did originally receive this assignment on March 4, 2013, and in preparation of this report the undersigned did review, all of the documents, photos, manuals, specifications, data, as listed below, including but not limited to, all of the documents previously provided regarding my reporting of this matter found in the AGP Marine File 13-IMU-0176;

1.) AGP Marine Survey File 13-IMU-0176 (Previously provided items 1 thru 18 listed below)
2.) 2006 Cabo 40 SF compiled with notes
3.) Service Reports from MR. CHARLIE past maintenance
4.) Groco Sea Scoop and Screen data sheets
5.) MAN Engine Repair Manual
6.) MAN Engine Maintenance Plan
7.) MAN Engine Technical Data sheet
8.) G. Jones, EFI Global June 28, 2013 Report
9.) Dr. Kendal Clarke Screen Analysis – 3 emails
10.) Hendrick -John Moran Screen calculations – 3 emails
11.) Hendrick Calculator http://www.hendrickarchproducts.com/technical-info/autocad-drawing-tools/open-area-calculator/
12.) Marine Exhaust Systems http://www.marine-exhaust.com/

EXHIBIT
4

13.) Dauphin Island Sea Lab Analysis – 1 email
14.) Big Bay Navigation Invoice
15.) Examination Under Oath Of Dr. Kim Kornegay with Exhibits
16.) Natural Resources Boating Accident Investigation Report
17.) 3 Yacht Brokerage listings of the MR. CHARLIE
18.) Barber Marina nine (9) storage invoices and two (2) estimates
19.) Digital Photos within this report
20.) MAN Engine Layout (found in MAN Engine Repair Manual pgs 18-19)
21.) MAN Engine Schematic diagram of cooling system (found in MAN Engine Repair Manual pg 21)
22.) MAN Fault Table (found in MAN Engine Repair Manual pgs 13-14)
23.) AGP-Cabo 40 Man Fuel System Layout PDF file
24.) AGP-Stbd Gear Oil Cooler - Stbd Screen PDF file
25.) AGP-Stbd Gear Oil Cooler PDF file
26.) Smithsonian Marine Station http://www.sms.si.edu/irlspec/Hydroides_elegans.htm
27.) AGP-Port Screen PDF file
28.) AGP-Stbd Screen PDF file
29.) Gulf Coast Hatteras, LLC Invoice No 360 Date 7/15/11
30.) Boat Test-Cabo 40
31.) MotorBoating-New Cabo 40
32.) International Yachtsman - Moving On Up

DESCRIPTION OF M/Y "MR. CHARLIE":

Subject vessel is an all molded fiberglass and composite model 40 Flybridge Sportfish, powered by twin MAN Diesel model R6-800 CRM (D2876 LE 423) 800-hp turbocharged in-line 6-cylinder diesel engines having the following particulars:

Vessel Name:	"MR. CHARLIE"
HIN:	CHXJ0040J506
Flag:	United States
Official Number:	1188936
Length:	40.2 ft
Breadth:	15.5 ft
Depth:	7.4 ft
Year Built:	2006
Place Built:	Cabo Yachts, Inc, Adelanto, CA
Hull Designer:	Michael Peters
Gross / Net Tonnage:	30 / 24
Hailing Port:	Perdidio Key, FL
Owners / Operators:	Mr. Charlie Adventures, LLC

Vessel helm station was outfitted with MAN engine panels for each main engine with digital visual display and audible alarms monitoring rpm, oil temperature, oil pressure, fuel pressure, coolant temperature, gear oil pressure, battery voltage and hours. Also were separate port and starboard visual/audible alarms monitoring engine room temperature and exhaust temperature on the steering console. The vessel was also outfitted with a fire alarm and engine room automated fire suppression system with visual/audible alarm panel with manual override control at the helm station.

The vessel was reportedly also outfitted with the following Navigation equipment;

Big Bay Navigation Computer - 3 monitors, 2-up at the bridge helm station and 1-down at and 17" monitor in salon, RF keyboard and mouse, 120 GB hard drive and Coastal Explorer navigation software. Mariner Pro Upgrade including Coastal Explorer Navigation Chart Program.

Furuno Nav-Net 64 mile Radar Chart Plotter black box connected to 2nd 15" Big Bay display.

Furuno GPS

Simrad AP-25 Autopilot with rudder angle indicator.

Furuno FCV 1100 Fishfinder/fathometer w/12.1" screen and bronze thru-hull transducer.

Furuno RD-30 Tri-Data multifunction display.

ICOM VHF with 17' antenna.

Cellular phone 17' antenna with signal booster.

Ritchie magnetic compass.

(Reference 2006 Cabo 40 SF layout compiled with notes, Boat Test-Cabo 40 file, MotorBoating-New Cabo 40 file, and International Yachtsman - Moving On Up file; for complete vessel design and features details)

CIRCUMSTANCES:

Reportedly, on March 3, 2013, according to the owners statement, at approximately 1430-hours (CST) after making pre-checks on the vessel, got underway from his house located on Ono Island, Alabama. Reportedly this trip was to take a ride to find Barber Marina, and during the trip and while en-route back home, not far from Barber Marina, encountered starboard engine problems resulting in the engine stalling three (3) consecutive times, reportedly without any engine warnings, indications or other or alarms sounding, when the vessel caught fire and burned significantly, consuming the vessel to just above the waterline throughout. (See AGP Marine Survey Report 13-IMU-0176, dated September 9, 2013, for specific details.)

According to the Department of Conservation & Natural Resources Boating Accident Investigation Report Case # 20130303AL189-1, at approximately 1600-hrs the location of the MR. CHARLIE was reported at just slightly to the southwest of Hatchet Point on the south side of the Intra-coastal Waterway near marker "69" near Latitude: 30 deg 18 min 23.000 sec North and Longitude: 87 deg 32 min 43.000 sec West. This particular location chosen by the owner to beach the vessel during this fire incident was remotely secluded away from any direct shore side access. (See Attached Accident Investigation Report # 20130303AL189-1)

Inconsistencies within the Accident Investigation Report, states that the vessel was reportedly valued in access of $800,000; however, according to the owner in his sworn statement, he believed the vessel was worth $1,000,000.00.

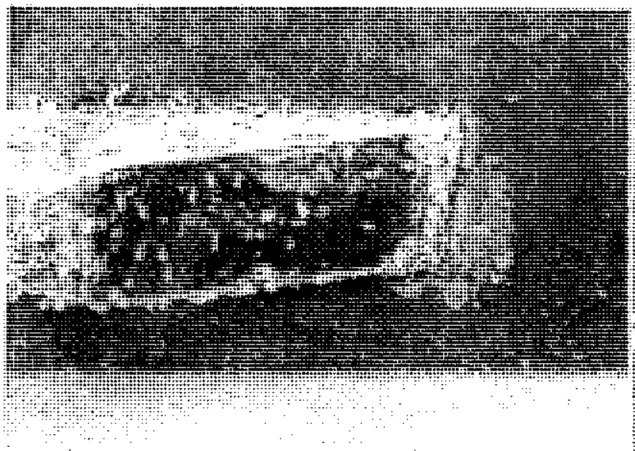
During my investigation, it was noted that the MR. CHARLIE was found on three (3) Yacht Brokerage websites listed for sale as follows; Oodle Marketplace - $499,900.00, Frank Gordan - $499,900.00 and Boat Trader - $699,990.00.

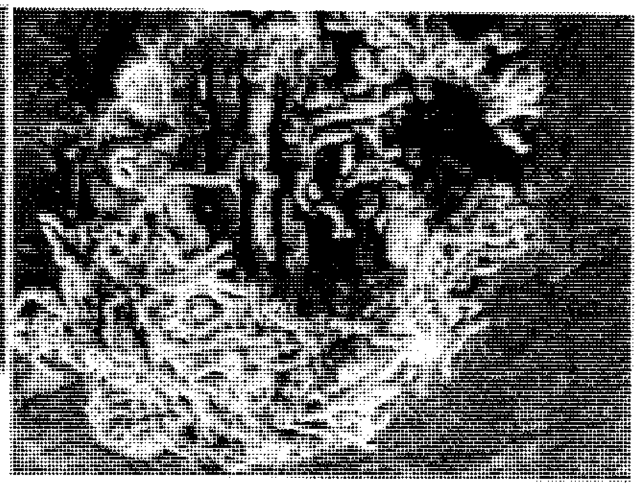
Also noted within the Accident Investigation Report, it states that there was only one (1) fire extinguisher aboard which contradicts what the assured stated that there was at least four (4) aboard, 2-inside and 2-atop at the flybridge deck. The Accident Investigation Report also indicates that the engine room hatch was closed as apposed to what the owner stating, it was left open. The Accident Investigation Report further indicated that there was a Halon Fire Suppression System aboard; however, during our investigations, no Fire Suppression System bottle was found aboard.

Furthermore and according to statement given by the owner, there were flames reportedly coming out of the open engine hatch when he deployed his liferaft and abandoned ship from the MR. CHARLIE, with engines and generator, reportedly all still running.

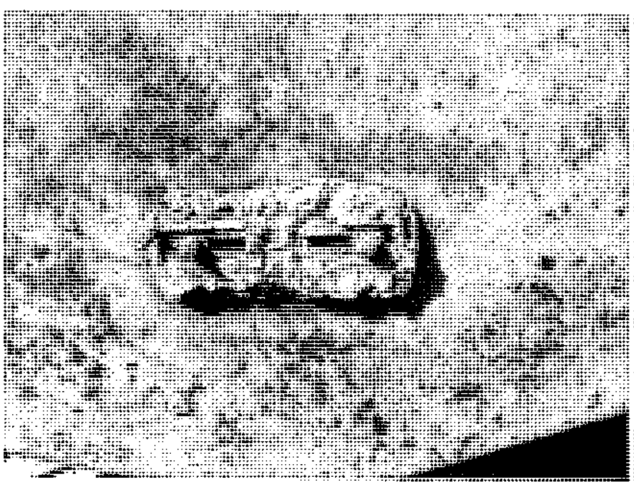
REMARKS:

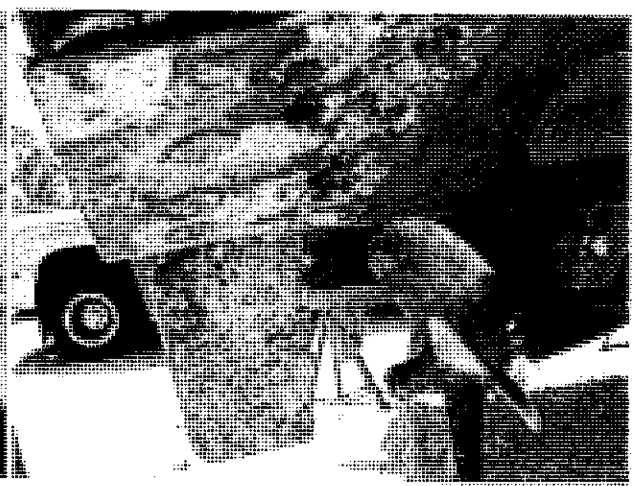
During the undersign's investigation attendances on the subject vessel beginning back on March 8, 2013, an inspection was made on all of the hull bottom and there was heavy accumulations of marine growth present with no evidence of any recent scraping on the vessel underwater running gear and or on the underwater appendages, particularly none on the main engine sea water intakes. What was obvious to me was long term marine growth that had apparently been growing since the last reported dry-docking in July 2011. (See AGP photos, Stbd Screen PDF file, Port Screen PDF file and Gulf Coast Hatteras, LLC Invoice No 360 Date 7/15/11)

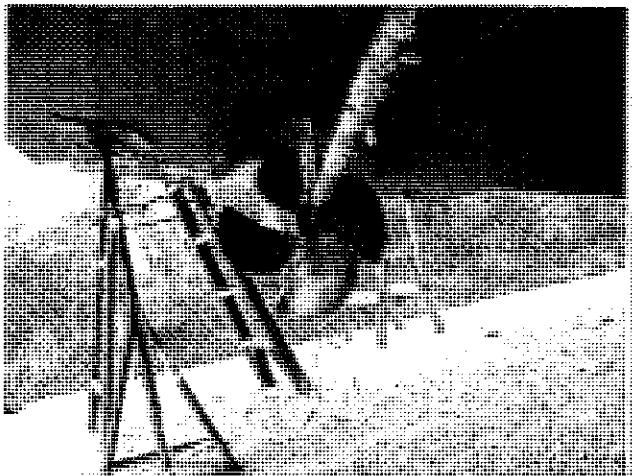


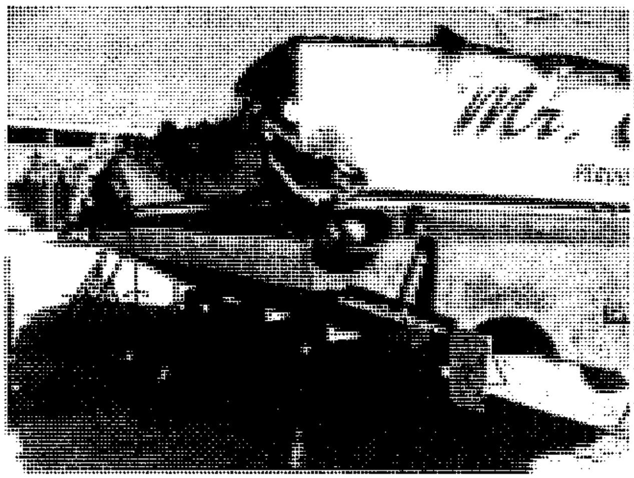


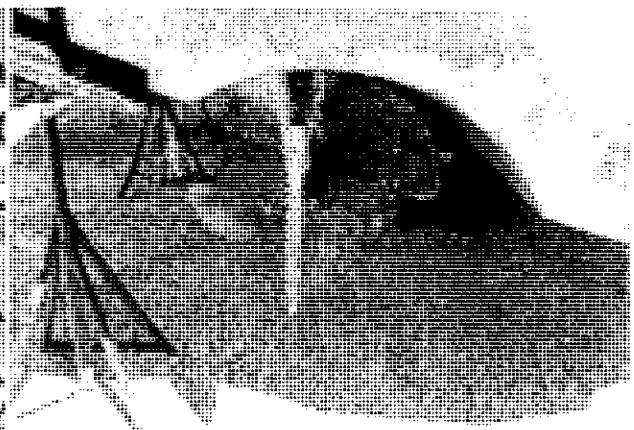
It should be noted that the propellers and lower portions of the struts were relatively clean of marine growth which is consistent with the reported 'bagging" of those items performed by the owner to prevent growth from occurring. It was also noted that the anodes were mostly eaten away, deteriorated and on the rudders and propeller shafting, anodes were completely eaten away and missing.











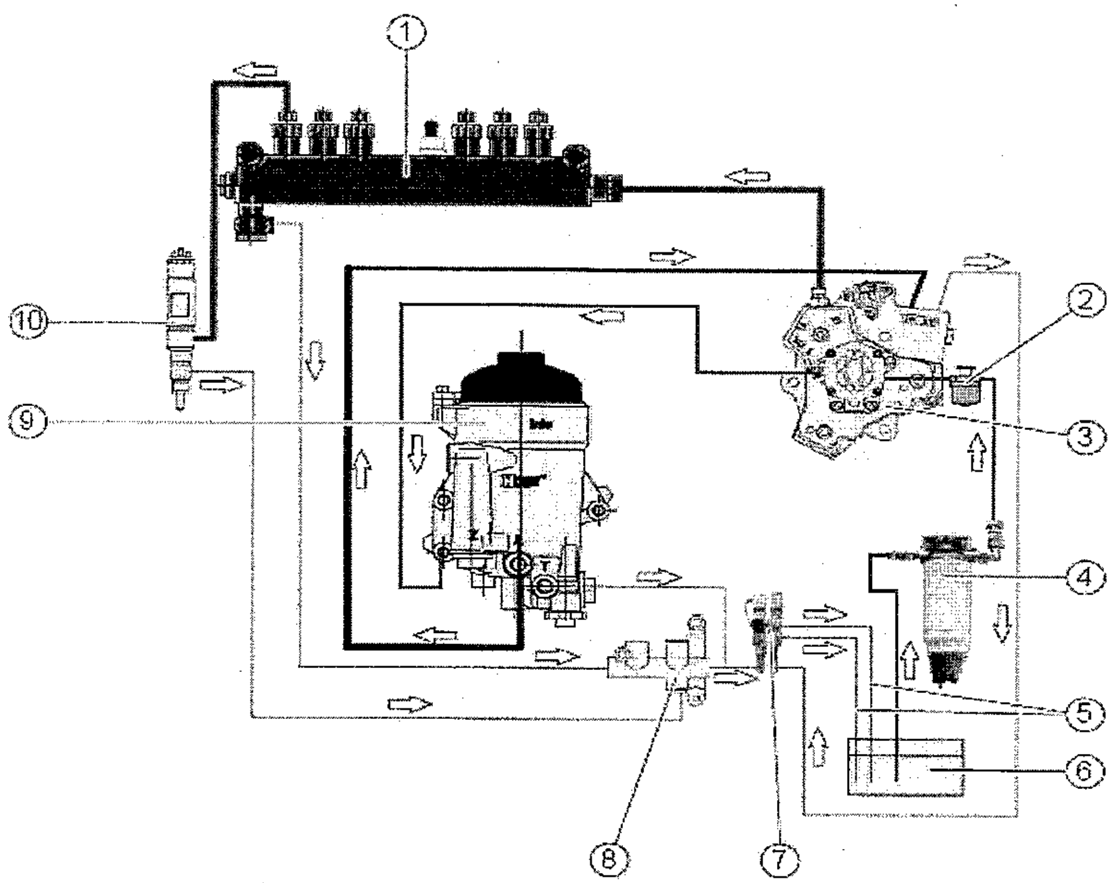
Furthermore, during my investigation attendance on the subject vessel and or of the starboard main engine after removed, no evidence was found on the starboard main engine fuel system components concerning any failures and or leaks. All fuel components were inspected, examined to the extent possible without removals and or disassemblies of the components.

There was no evidence found that indicated any fuel leaks existed or were present on the main engine or generator at the time of the fire, particularly fuel leaks that would have contributed to the fire origin, initially. Or in simpler terms, no associated fuel leaking on the starboard main engine before the fire started. (Refer to attached PDF file Cabo 40 Man Fuel System Layout)

Additionally, all of the starboard main engine fuel components as they are arranged and installed are located on the port inboard side of the engine with the exception of the fuel rail, injectors and connecting steel fuel lines, which are located in the valley on top of the engine more towards the inboard port side. (Right half side looking from forward to aft)

There is no fuel components located close to, or around the turbocharger area on these engines, and the turbocharger, is located at the opposing starboard aft outboard side at the rear of the engine. The turbocharger is closer to the exhaust riser and FRP exhaust tube. (Left side rear looking forward to aft)

Schematic diagram of fuel system

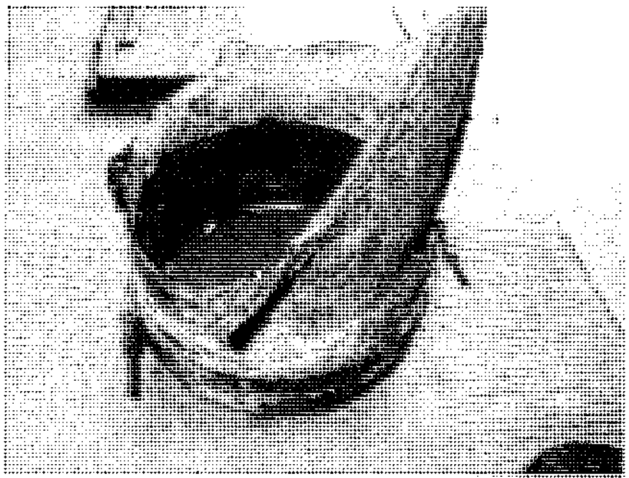


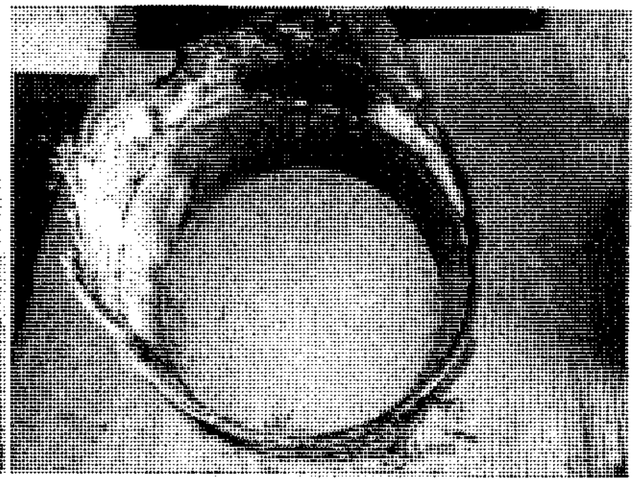
① Rail
② Hand pump
③ High-pressure pump
④ Fuel prefilter with water separator
⑤ Fuel return
⑥ Tank
⑦ Fuel distributor
⑧ Fuel distributor
⑨ Fuel Service Centre (FSC)
⑩ Injector

Fire consumption was most concentrated at the starboard aft engine compartment of the vessel with heaviest material loss from. Fire delineation patterns were most prominent along the starboard aft bulkhead where the generator Racor fuel filter housing was uncovered and mounting location determined by the attached bracket. The Racor plastic bowl was destroyed and the metal housing was heavily distorted with top cover dislodged by fire involvement. Diesel fuel released from the unit and lines apparently accelerated the fire in that area. The close proximity of this equipment to the starboard exhaust is the most probable explanation for the low level damage.

Engine compartment electrical system arc map analysis revealed adverse activity at the starboard aft section only. Evidence of arcing and beading of the copper conductors at the starboard aft side versus the port aft side was apparent. This activity was consistent with that of wiring being energized, subjected to heat/flame contact with mid line melting, indicative of resulting fire damage, not the cause of the fire.

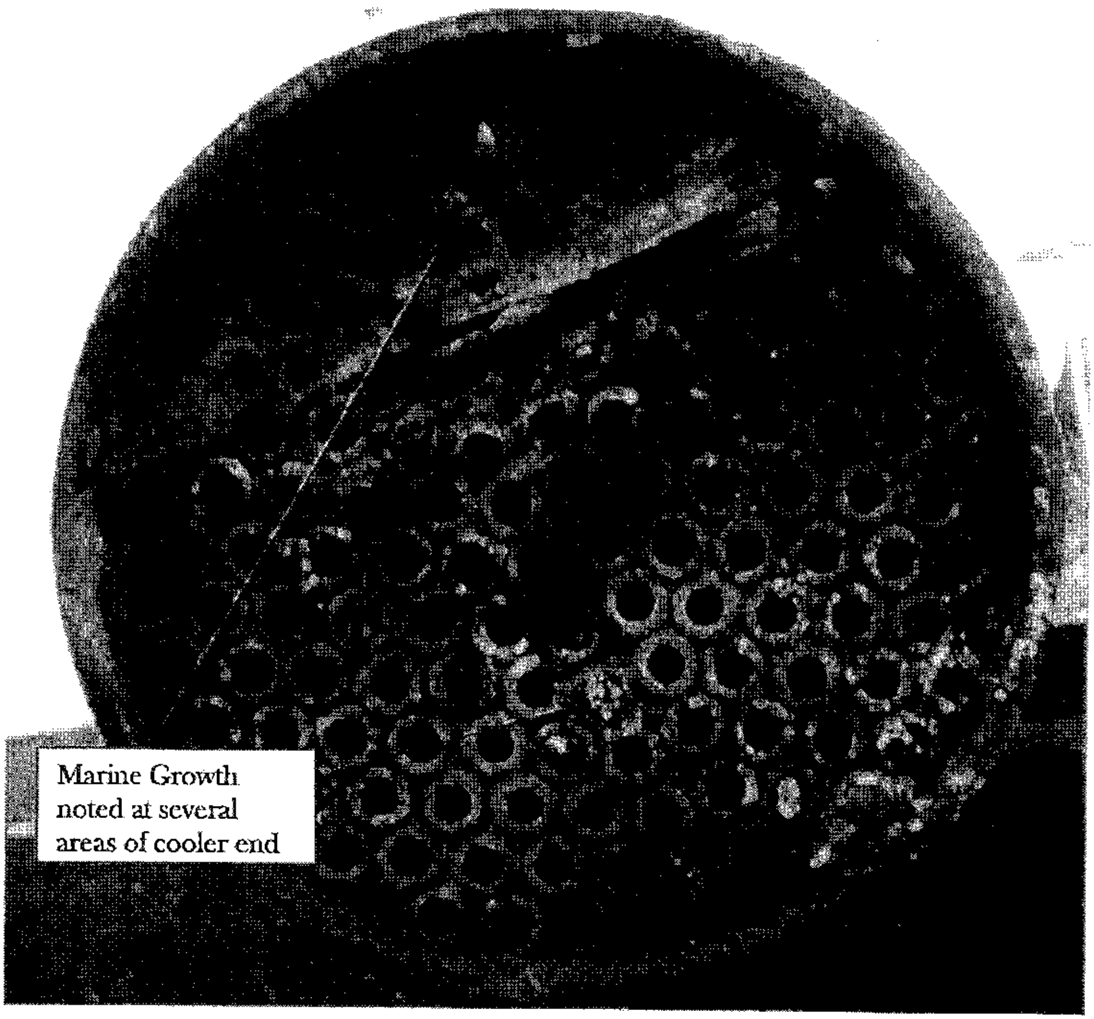
The port and starboard FRP exhaust tubes were recovered from the fire debris by the undersigned and were retained as evidence. The port FRP exhaust tube was found completely intact with some negligible burning exhibited on the outer fiberglass which is associated with the resulting surrounding fire (flames). The starboard FRP exhaust tube was found almost completely destroyed with evidence it remaining which consisted of the opposing ends of the tube (the inlet and outlet connections) for the exhaust. There was extreme consumption of the fiberglass tube, evidence a catastrophic failure of the starboard exhaust tube as a result of localized intense heat and burning (flames), and tube appeared burnt from the inside out. (Refer to AGP exhaust tube photos)





Considering the theoretical and physical evidences consisting of the excessively fouled seawater scoop intake screen, the main engine pump performance curve/flow rate specifications and calculations performed, gear (transmission) oil cooler found fouled with obvious marine growth present and visible, starboard FRP exhaust tube burnt ends remaining, and combined with the area of origin burn pattern found. All of this evidence collectively, depicts that there was clearly insufficient seawater cooling flowing through the starboard main engine to cool the non-metallic exhaust system components, causing extreme catastrophic failure of those exhaust components; i.e., the melting and burning of the rubber boot hose connections to the FRP exhaust tube.

<u>Stbd Gear Oil Cooler</u>



It is conceivable how this fire could have easily spread so rapidly considering reports by the owner, that when he stopped the vessel and opened the engine hatch he saw smoke. He then left the hatch open and returned back up to the flybridge to speed up the engines and headed the vessel towards the shoreline where he finally ended up.

The action of opening and leaving the hatch open, would constitute substantial increased airflow into the already burning engine room and by increasing engine speed after, significantly increased the level of exhaust heat and escaping exhaust hot gases into the starboard aft area of the engine room. Basically fanning and fueling the fire into a rage so that when the vessel grounded a few minutes later with engines still running and after owner abandoned ship, shortly thereafter was engulfed in flames. This is evident by the reporting of the vessel owner and the photos and video taken by Capt Mac McLean when he first arrived onto the scene.

What is not conceivable, is how it is possible that the starboard engine was exhibiting some sort of problem such that it was stalling, shutting down, yet there was reportedly no problems showing on the engine panel, no fault indications, no warnings and no alarms, according to the owner. However; after he abandoned ship, he heard engines shut down and then alarms sounding. (Refer to MAN Fault Troubleshooting Table for more details)

CONCLUSIONS and OPINIONS:

Through careful consideration and further evaluation by the undersigned of all of the evidence on file; I submit the following conclusions and opinions as to the cause and origin of the fire aboard the MR. CHARLIE on March 3, 2013.

1) No evidence was observed or discovered that would indicate the source or main cause of the fire was electrical in nature.

2) No evidence was observed or discovered that would indicate the source or main cause of the fire was from any pre-existing fuel leak.

3) Insufficient seawater flow through the starboard main engine cooling system resulted in the excessive rise in exhaust temperature, causing the hot exhaust gas to burn and ignite into a fire, beginning with non-metallic exhaust system components. This fire was greatly exacerbated by the starboard main engine continuing to run, expelling 900° F to 1100° F exhaust heat and gases into the local surrounding area of the starboard aft engine room, quickly melting the closely mounted generator diesel fuel filter Racor plastic bowel, thus providing a substantial amount of accelerant, diesel fuel onto the already burning hot exhaust fire.

4) No scraping of marine growth had occurred within months, and possibly not since the previous dry-docking of the vessel, evident by the amount, uniformity and types of marine growth found; i.e., barnacles, calcareous tube worm, oysters, red algae and encrusting bryozoans (moss), all of these named marine growth as determined by Dauphin Island Sea Lab, were present on all of the underwater hull appendages, and were growing on the outside and inside of the engine seawater scoops and screens and inside through the rest of the engine seawater cooling system. (Refer to AGP Stbd Gear Oil Cooler - Stbd Screen)

5) Little to no maintenance was performed by the owner or by outside mechanics on the MR. CHARLIE main engines, evident by the statement given by the owner as to what he has or has not had performed on the engines, the service maintenance records made available and what is recommended in the MAN Maintenance Plan; i.e., with specific reference to engine alarms, cooling water pump, fuel system and cleaning and servicing heat exchangers and oil coolers. These are all contributing factors to excessive heat build up over a short period of time running from his Ono Island home to Barber Marina and are the cause of the sole cause of fire. (Refer to MAN Engine Maintenance Plan)

The undersigned reserves the right to amend and/or supplement this report, should additional information be made available.

Respectfully Submitted,

Atlantic, Gulf & Pacific Marine
Surveyors and Consultants, Inc.

Guy P. Plaisance

Capt. Guy P. Plaisance, AMS #942

EXHIBIT 5

GARY JONES' REPORT OF JUNE 28, 2013

EFI Global
Complex Issues • Solid Solutions

3010 Lakeland Cove
Suite E
Flowood, MS 39232
TF: 800-809-0701
Tel: 601-956-1590
Fax: 601-956-7410
www.efiglobal.com

FIRE INVESTIGATION
Report One

INSURED:	**Dr. Kim Kornegay**
LOSS LOCATION:	**Intracoastal Waterway Orange Beach, AL**
DATE OF LOSS:	**March 13, 2012**
CLAIM NUMBER:	**OAB014998**
EFI FILE NO:	**94201-05906**

PENGAD 800-631-6989 DEFENDANT'S EXHIBIT 2 Jones

Report Date:	**June 28, 2013**
Prepared For:	**International Marine Underwriters 1100 Poydras Street, Suite 1220 New Orleans, LA 70163**
Attention:	**Rita Boggan**

EXHIBIT 5

ASSIGNMENT

The assignment to conduct an origin and cause investigation of a 2006 Cabo 40 pleasure boat was received on March 19, 2013. The physical examination commenced on March 28, 2013 and was completed on that date. However, continued research and consultations with other experts continued throughout the investigation.

ENCLOSURES

1. 36 Photographs with description
2. Boating Accident Investigation Report-Dept. of Conservation & Natural Resources
3. Cabo 40 product literature
4. Gulf Coast Hatteras service records
5. Middleton Marine service records
6. Boat Trader ad for Mr. Charlie Adventures
7. Groto strainer scoop

FIRE SCENE EXAMINATION

A systematic scene examination utilizing a method consistent with the guidelines of NFPA 921 was conducted. The fire scene examination was performed on March 28, 2013. The inspection was conducted at Barber Marina in Elberta, Alabama. The boat was moved to this location following the fire event.

The burned boat was photographed and a field diagram was prepared at that time. Access to the property was provided by representatives of Gulf Coast Hatteras, the custodian of the premises. Admittance to the grounds and premises was through the monitored gates. Present and participating in the investigation was Marine Surveyor Captain Guy Plaisance and Ralph Holloway of Middleton Marine. A safety survey uncovered no hazardous conditions that precluded the examination process from occurring. Initial reports indicate there were no injuries or fatalities involved in this loss.

There were no specific or appreciable alterations to the vessel following its extinguishment and movement to this dry dock facility. However, the fire did cause significant damage to the entire boat and for this reason, background information about the loss and events leading up to the fire was essential to the investigation. In addition, significant research regarding the engine/exhaust operating system was important to this effort as well. The eyewitness to the event is the insured and he did provide the following detailed information about the loss.

"On Sunday, March 3, 2013 I had planned to take my Cabo over to Barber Marina to be sure I knew how to get over there from my house on Ono Island. The plan was to haul the boat out in the next couple of weeks when the rain started to subside to repaint the bottom. It had been over a year since I was over that way and I wanted to be sure I had waypoints to get back there without wrong turns. Plus, the boat needed to be run as it had not been out of the slip over the winter. Early Sunday morning, the wind was blowing hard out of the north. The tide was low which makes it tough to get over to the channel. The forecast was for the sky to clear and the wind to subside in the early afternoon. So I decided to do all the house chores in the morning and take the boat out in the afternoon, if the forecast was right.

Around 2:00 PM the conditions looked good. The tide was up and the wind was down. So just before 2:30 PM and after all my preflight checks were done I started the engines. Both engines started right up. As they warmed up I did notice that the starboard engine was idling about 15 RPMs slower than the port engine. I did not think much about that, as both engines were running smooth. However, in hindsight I had never experienced either engine running at different RPMs at idle. Typically, both engines would turn 599 RPMs at idle.

No problem out of the slip, very routine, I headed toward Barber Marina. When I got to the Intercostal, I synced the engines and throttled up. Nothing unusual, however there was some vibration, which I attributed to growth on the running gear. I kept the RPMs down to avoid unnecessary vibration and was running about 22 knots. I did make a wrong turn, but corrected and marked my waypoints. I got to Barbers and turned around to go back home. As I headed back towards home and looked ahead I saw a barge and tug coming through Hatcher Point. The wind was from the north and he was crabbing into the winds. I was in no hurry, so I just sat there in the shallow flats and watched him move through. I don't know what time it was or how long it took him to get clear. I was just thinking that I wanted to allow him plenty of room and waited until he went on by.

When he was clear, I synced the engines and throttled up. As I came up on plane, the starboard engine quit. I thought that was odd. I put the port engine in neutral, reset the starboard engine and started it back up. It started up; I synced again and throttled up. The starboard engine died again. I thought this is really strange. I went back to idle on the port engine, reset the starboard engine and started it back up. It started; I synced again and throttled up. As I started to come up on plane, the starboard engine quit for the third time. Now I knew something was not right. I put the port engine back to idle and went down to see what was going on. I got down to the cockpit and thought I would check the breaker panel. So I opened the salon door and looked at the breakers. Everything looked OK. I checked all the breakers. Nothing looked unusual on the panel. I closed the salon door. I then thought I would check the engine room. I turned and opened the engine room hatch cover. When I did smoke hit me in the face. Obviously, it startled me and I ran up the steps back to the fly bridge and sent out a May Day on channel 16. The Coast Guard answered and I told them I had an emergency and needed help. I don't remember what was said but I do remember telling them that I was going to try to beach the boat.

I stopped transmitting and I reset the starboard engine, restarted it and pointed the boat to the south side of Hatcher Point. When I throttled back, things were happening fast at this time. I remember pointing the boat toward the beach but not too fast. I ran down the stairs to the cockpit and a lot of smoke was coming out of the engine room. The life raft started to inflate and I looked over my shoulder and that is when I first saw flames coming through the engine room hatch. I pushed the life raft overboard and jumped on top of it and heard a siren going off and the engines stopped. I heard no engine sounds as I drifted toward shore."

It was documented the distress call was placed at 4:00 PM on March 3, 2013 and responding was the Alabama Marine Patrol, U.S.Coast Guard and Tow Boat U.S. The location in question is depicted in photograph 1 which was reportedly taken from a cell phone. It depicts open flames with major destruction having already occurred when the picture was taken. The location appears to be a somewhat remote setting along the

Intracoastal Waterway with the banks in sight. The fire had burned unimpeded with no evidence of successful fire suppression and it was moved to Barber Marina by Tow Boat U.S.

The property affected by fire is a 2006 Cabo 40 fly bridge sport fishing boat with **Hull Identification Number US-CHXJ0040J506-Z3347.** According to Boat Trader, it is a premium midsize convertible with only 350 hours. Principle features include upscale two stateroom interior, roomy cockpit with large capacity live well, rigging center, in deck fish/storage boxes, engine room access door and twin MAN diesel R6-800 CRM marine engines. The modified V-hull is 42'10" in length and 15'9" beam with a fuel capacity of 550 gallons. A copy of the Boat Trader ad is enclosed.

This owner-utilized boat is moored at the insured's local residence on Ono Island while he reportedly maintains a second home and professional business in Prattville, Alabama. The exact distance he had traveled when the fire occurred has been difficult to measure with estimate ranges of eight to ten miles noted with a time estimate of 60-90 minutes.

The boat had burned to a height just above the water line effectively destroying the main cabin, galley, stateroom and head. Exterior examination revealed the raw water intake strainers on the port and starboard sides of the hull were covered with marine growth. The growth on the starboard intake was significant and could have inhibited the water inlet flow to adequately cool the engine. Material loss indicates the fire was most concentrated to the mid (engine compartment) portion of the boat. This finding is consistent with the observations of the insured. With the engine hatch cover left open following the fire's discovery, this provided an unobstructed avenue of fire travel beyond this location.

Interior damage pattern analysis indicated the fire had originated within the engine compartment. Advancing from the area of least damage to the area of greatest fire involvement revealed the fire was concentrated at the aft end of the starboard Man diesel engine. The flames breached the upper section of the compartment while the floor system was stable enough to walk on. Fire patterns increased toward the starboard turbocharger intake side, fiberglass exhaust tube and #6 valve cover. The smoke did spread throughout and the generation was consistent with the type and volume of the available fuel load.

Fire demarcation patterns were most prominent along the starboard aft bulkhead where the generator Racor fuel canister was affixed by mounting brackets. The bowl was destroyed and the metal canister was melted and was dislodged by fire involvement. The release of fuel from the bowl and lines did accelerate the fire growth. The close proximity of this equipment to the starboard exhaust is the most probable explanation for the low level damage. The generator is located aft and center to the starboard and port engines. Damage to equipment is a result of exposure by the oncoming flames.

Systematic debris removal began in the engine compartment where the lowest and most intense area of burn was noted in the aft starboard section. The disproportionate melting and thermal stress to the starboard exhaust and engine components, as compared to those on the port engine, were a factor in the assessment process. Temperature gradients decreased as distance away from the area of origin increased. Uniform melting in the engine compartment of aluminum metals places the ambient temperatures in the range of 1180 degrees Fahrenheit with isolated melting to copper raising it to 1980 degrees. These temperature readings were one of the indicators relied upon in formulating the origin area theory and included the destruction to the starboard exhaust tube, while that for the port engine was found somewhat intact in the aft bilge.

Arc map analysis of the engine compartment's electrical system disclosed adverse activity at the starboard section only. Evidence of arcing and beading to the copper conductors at the starboard versus the port engine was evident. This activity is consistent with the wiring being in an energized state when subjected to external flame contact. The mid line melting is indicative of it being damaged as a result of and not a cause for the fire.

As viewed from the overhead, the valve covers do show a directional burn pattern that emanates from the aft end of the starboard engine as compared to the port. The overall evaluation of the physical evidence does correspond with the testimonial evidence presented by the insured regarding the events leading up to the loss.

Following the formation of an opinion as to the fire origin area, efforts were then directed towards identifying the ignition or heat source for the loss. The most probable ignition theory has been identified as a release of hot gases from the starboard exhaust tube. According to Boat Owners Association of the United States, 24% of boat fires were started by propulsion systems overheating. The most frequent factor involved an intake or exhaust cooling water passage obstruction.

Insufficient water flow through the engine to the exhaust riser from a clogged strainer could result in an exhaust tube failure. The engine cooling water is supposed to lower the internal exhaust gases (900-1100 F) to an acceptable level for the exhaust elbows and tube. Exhaust risers are a maintenance item that will only last for so long because of their extreme exposure to corrosive water and extreme temperatures. If the coolant flow is low and your raw water temperature exceeds 130 degrees F, you can get trace amounts of salt in the water, which transfers to solids and a buildup on the riser spray head, which could get clogged. An exhaust tube failure could result from the hot gases not getting completely cooled where there are voids in the spray pattern of the riser. In this particular case, Middleton Marine did remove the exhaust riser and one opening in the shower nozzle was found clogged. This single obstruction should not have significantly affected the cooling process by itself. However, the marine growth on the external hull intake strainers and running gear were evident and are indicative of delayed maintenance and coincides with the upcoming plans to have the boat brought in for cleaning and painting. With growth on the running gear one might experience vibration when the boat is in gear, loss of RPMs, black smoke coming from the exhaust, lack of ability to draw water through the intakes, increased fuel consumption and if these symptoms are ignored, it could lead to an overheated engine. Several of these indicators were reported by the insured at the time of loss.

Evidence indicates disproportionate marine growth on the seawater intake scoop screens for the starboard strainer. The hull strainer with access door is manufactured by Groco and is a model APHS with perforated series strainer. According to Groco, the scoops are to be mounted with the thru-hull fitting at the extreme aft end where the hinged clean-out access door is located, not forward of the door as in this installation. It was also noted that at some point in time, the screens were painted, which could have reduced the inlet flow combined with the marine growth. These two issues must be clarified by the insured to determine potential responsibility for each.

Captain Plaisance did remove both strainers and in the process of doing so, some of the soft growth/debris was dislodged. He also noted the over spray of the anti-fouling paint at that time and did take photographs of it. The question at hand is whether CABO caused the overspray and strainer installation during its construction or was this done during its last haul out and cleaning.

Inspection of the seawater pumps revealed the impeller in the starboard side was disproportionately damaged as compared to the port one. Visual inspection of the two impellers disclosed greater material loss and fragmentation to the starboard impeller.

A side by side comparison of the port and starboard FRP exhaust tubes disclosed an obvious distinction in damage to each. The port tube is generally intact with the shape and contour of the tube retaining its original design. However, there is a significant loss of product at the starboard tube with it severed and crumbly to the touch. The distinction in damage to the impellers, exhaust tubes, valve covers and wiring provide the basis for the origin area hypothesis.

To quantify the amount of seawater restriction, the strainers were delivered to Dr. Kendall Clark, a metallurgist in Mobile, Alabama. Dr. Clark was also provided the water pumps with impellers in place and the exhaust tubes for the port and starboard engines. The materials testing by Dr. Clark will provide the scientific basis for the ultimate fire cause determination. Until that testing is complete, the investigation remains active and continued contact with Captain Plaisance and Kendall Clark will be maintained to expedite the completion of the testing.

DETERMINATION OF ORIGIN AND CAUSE

Fire pattern analysis coupled with witness information indicates the fire originated in the engine compartment in the vicinity of the aft end of the starboard engine. The preliminary evidence indicates a significant restriction in the seawater flow to the starboard engine cooling pump. That water is required to lower the internal hot exhaust gases (900-1100 degrees F) in the FRP exhaust tube to a normal operating level (190 degrees F). The fiberglass tube is rated at 259 F and is connected to the exhaust riser and FRP tube with rubber boots. The weak point in this system is at the connector and a release of these hot gases is capable of igniting nearby combustibles common to the origin location.

The most probable ignition theory involves the release of these searing gases as a result of a restriction of the cool water flow due to the marine growth. Under this theory, circumstances bringing ignition and fuel together would have resulted from a delayed maintenance issue. Until the scientific materials testing has been completed by Dr. Clark, the cause for this fire is being classified as undetermined.

COMMENTS

The investigation remains active and continued contact with Captain Plaisance and Dr. Clark will be maintained to complete any remaining tasks in an expedited manner.

The conclusions drawn in this report are based on a total analysis of the information collected during the investigation. Information or data that becomes available at a later date may justify the modification of the results and/or conclusions previously provided.

If I can be of further assistance, or if additional information is required, please do not hesitate in contacting me.

Gary W. Jones
Gary W. Jones, C.F.I., CFEI
Senior Fire Investigator
(228) 219-9346

File Status: Active

Peer review by:

Dave Berry, Jr.
Dave Berry, Jr. CFI, CFEI
District Manager
Jackson, MS
(800) 809-0701

EXHIBIT 6

GARY JONES' REPORT OF SEPTEMBER 9, 2013

EFI Global
Complex Issues • Solid Solutions

3010 Lakeland Cove
Suite E
Flowood, MS 39232
TF: 800-809-0701
Tel: 601-956-1590
Fax: 601-956-7410
www.efiglobal.com

FIRE INVESTIGATION

Report Two and Final

INSURED:	**Dr. Kim Kornegay**
LOSS LOCATION:	**Intracoastal Waterway Orange Beach, AL**
DATE OF LOSS:	**March 13, 2012**
CLAIM NUMBER:	**OAB014998**
EFI FILE NO:	**94201-05906**

Report Date:	**September 9, 2013**
Prepared For:	**International Marine Underwriters 1100 Poydras Street, Suite 1220 New Orleans, LA 70163**
Attention:	**Rita Boggan**

EXHIBIT
6

ASSIGNMENT

The assignment to conduct a fire origin and cause investigation was received on March 19, 2013. The physical examination of the fire damaged 2006 Cabo 40 commenced on March 28, 2013. It was conducted in accordance to the recommendations of NFPA 921. Following that examination, continued research into the loss has occurred with close consultations with Captain Guy Plaisance, metallurgist Kendall Clark and other functional area experts.

INVESTIGATION

On June 28, 2013 a first preliminary report was issued based on information currently available and analyzed at that time. The subsequent investigation followed the systematic approach that is based on the scientific method which forms the basis for legitimate scientific and engineering processes including fire incident investigations.

Based on an overall evaluation of the physical and testimonial evidence, it was concluded the fire had originated in the engine compartment. The origin area was further refined to the aft starboard section. Temperature gradients decreased as distance away from this location increased. A comparative damage analysis disclosed disproportionate melting and thermal stress to the starboard exhaust FRP tube and engine components as compared to those of the port engine/exhaust. In addition, Dr. Kornegay reported the first visual signs of smoke were emanating from the engine compartment.

At the time of the issuance of the first report, a hypothesis was developed through the process of inductive reasoning. The ignition theory involves an insufficient water flow through the engine to the exhaust riser from a clogged screen/strainer. The engine cooling water is supposed to lower the internal exhaust gases (900-1100 F) to an acceptable level for the exhaust elbows and tube. Exhaust risers are a replaceable maintenance item that will last for so long because of their extreme exposure to corrosive water and extreme temperatures. If the coolant flow is low and your raw water temperature exceeds 130 degrees F you can get salt in the water transfer to solids and a buildup on the riser spray head could get clogged. An exhaust tube failure could result from the hot gases not getting completely cooled where there are voids in the spray pattern of the riser. In this particular case, Middleton Marine did remove the exhaust riser and one opening in the shower nozzle was found clogged. This single obstruction should not have significantly affected the cooling process by itself. However, the marine growth on the external hull intake Hendrick screen, Groco strainer and running gear were evident and are indicative of delayed maintenance and coincided with the upcoming plans to have the boat brought in for cleaning and painting. With growth on the running gear one might experience vibration when the boat is in gear, loss of RPMs, black smoke coming from the exhaust, lack of ability to draw water through the intakes, increased fuel consumption and if these symptoms are ignored, it could lead to an overheated engine. Several of these indicators were reported by the insured at the time of loss.

Evidence indicated disproportionate marine growth on the seawater intake scoop/screens for the starboard strainer. The hull strainer with access door is manufactured by Groco and is a model APHS with a perforated series strainer. According to Groco, the scoops are to be mounted with the thru-hull fitting at the extreme aft end where the hinged clean out access door is located, not forward of the door as in this installation. It was also noted that at some point in time, the Hendrick perforated screen was painted, which could have reduced the inlet flow combined with the marine growth. Through a review of Dr. Kornegay's examination under oath (EUO) it was learned that he and his son were the last persons to have removed and/or painted the strainers/screens.

Barber Marine employees did remove both strainers and in the process of doing so, some of the soft growth/debris was dislodged from the screen. Also noted was the presence of over spray of anti-fouling paint at this time. Even with dislodging of some of the soft growth, the screen was substantially covered with marine growth which was later calculated by Dr. Clark as to the actual coverage by it. The Marine growth was further categorized by its type by Dottie Byron, M.S. of the Dauphin Island Sea Lab.

Inspection of the seawater pumps also revealed the impeller in the starboard side was disproportionately damaged as compared to the port impeller. Visual inspection of the two impellers disclosed greater material loss and fragmentation to the starboard impeller.

A side by side comparison of the port and starboard FRP exhaust tubes disclosed an obvious distinction in damage to each. The port tube is generally intact with the shape and contour of the tube retaining its original design. However, there is a significant loss of product at the starboard tube with it severed and crumbly to the touch. The distinction in damage to the impellers, exhaust tubes, valve covers, wiring and engine components provide the basis for the origin area and initial cause hypothesis.

The scientific method requires that all data collected be analyzed and if the investigator lacks the expertise to precisely attribute meaning to that data, outside assistance should be sought. In this case, the testing of the hypothesis through deductive reasoning was coordinated and accomplished through Captain Guy Plaisance. Functional area experts including Tom Elliot and Ralph Holloway of Middleton Marine, metallurgist Dr. Kendall Clark, John Moran of Hendrick Manufacturing, Dottie Byron of the Dauphin Island Sea Lab and other individuals consulted by Captain Plaisance, all provided technical assistance to avoid expectation bias. A hypothesis can be tested either physically by conducting experiments or analytically by applying scientific principles in "thought experiments." In this case, analytical evaluation by the experts using industry standards and like materials used on the Mr. Charlie provided scientific data to substantiate the theory that insufficient intake water flow due to the clogged strainer/screen led to the fire's inception. Captain Plaisance will address the findings of each expert in his report to you.

DETERMINATION OF ORIGIN AND CAUSE

Damage pattern analysis indicates the fire originated in the engine compartment in the vicinity of the aft end of the starboard engine at the FRP exhaust tube. The evidence demonstrated a significant restriction in the seawater flow. Sufficient flow is required to lower the internal hot exhaust gases in the FRP exhaust tube to a safe operating level. The fiberglass tube is rated at approximately 259 degrees F and is connected to the riser and tube with rubber boots. The weak point in this system is at the connector and the release of hot gases here was adequate to ignite available combustibles in the compartment. The calculated restriction in the cool water intake flow was attributed to the substantial marine growth on the strainer/screen and was a contributing factor to the fire's inception.

COMMENTS

The instructions in this assignment have been completed. No further activities are anticipated and the file is being closed.

The conclusions drawn in this report are based on a total analysis of the information collected during the investigation. Information or data that becomes available at a later date may justify the modification of the results and/or conclusions previously provided.

If I can be of further assistance, or if additional information is required, please do not hesitate in contacting me.

Gary W. Jones
Gary W. Jones, CFI, CFEI
Senior Fire Investigator
(228) 219-9346

File Status: Closed

Peer review by:

Dave Berry, Jr.
Dave Berry, Jr. CFI, CFEI
District Manager
Flowood, MS

EXHIBIT 7

GARY JONES' REPORT OF APRIL 13, 2014

DEFENDANT'S EXHIBIT 1 Jones

PENGAD 800-631-6989

Case Number: CV-13-458-CG-N

REPORT OF GARY W JONES, CFI, CFEI

I. INTRODUCTION

I have been retained by International Marine Underwriters to provide expert testimony in the referenced case relating to the origin and cause of the fire. The purpose of this report is to disclose my professional background and experience, the materials subject to my review and my expert opinion in accordance with Fed. R. Civ. P. 26(a)(2)(B). This report and enclosures summarizes my opinions given the information available to me at this time. If I receive additional relevant information, I reserve the right to prepare a supplemental report incorporating this new information.

II. OPINIONS

A complete statement of my opinions and the basis and reasons for those opinions are set forth in the June 28, 2013 and September 9, 2013 EFI Global Fire Investigation Reports, a true and correct copy of which is enclosed herewith as Exhibit A. *Additionally, a synopsis of those opinions expressed, includes but are not limited to the overall evaluation of the physical and testimonial evidence as well as consultations with functional area experts. It was concluded the fire had originated in the engine compartment at the aft starboard section at the exhaust tube/elbow. This opinion is based in part on damage pattern temperature gradients decreasing as distance away from this location increased. Additionally, a comparative damage analysis disclosed disproportionate burning and thermal stress to the starboard exhaust FRP tube, valve cover, impeller and adjacent engine components as compared to those of the port engine and exhaust. Arc map analysis of the engine compartments, electrical system also revealed adverse electrical activity at the aft starboard section.*

The cause for the fire is a result of insufficient intake seawater flow that is necessary to lower the internal hot exhaust gases in the exhaust FRP tube and elbow to a safe and acceptable operating level. The fiberglass tube is rated at approximately 259 degrees F and is connected to the riser and tube with rubber boots. The weak point in this system is at the connector and the release of hot gases here represents a significant hazard.

It was concluded the lack of required maintenance and the marine growth on the external hull intake strainer/screen contributed to the reduced intake water flow that resulted in the failure of the exhoust tube. The escaping gases then ignited nearby cambustibles that eventually involved the entire boat. The basis for this ignition theory is the exclusion of

EXHIBIT 7

other ignition theories, physical damage patterns on the boat, photographic documentation and the analytical evaluation and interpretation of the *evidence by industry experts Dr. Kendall Clark, John Moran of Hendrick Manufacturing, biologist Dottie Byron, Certified Marine surveyor Guy Plaisance and Marine technicians Tom Elliot and Ralph Holloway*

III. DATA CONSIDERED

The facts and data considered in the formation of my opinions are set forth in the EFI Global Fire Investigation Reports dated June 28, 2013 and September 9, 2013 and their enclosures. In addition, the independent research and consultations with and by Guy Plaisance, Dr. Kendall Clark, Tom Elliot, Ralph Holloway, Dottie Byron and John Moran were considered.

IV. EXHIBITS USED TO SUMMARIZE OR SUPPORT OPINIONS

The exhibits that will be used to summarize or support my opinions are the enclosures to the EFI Global Fire Investigation Reports of June 28, 2013 and September 9, 2013 and the enclosures depicted in Guy Plaisance reports and investigative materials.

V. QUALIFICATIONS/PUBLICATIONS

My qualifications can be found in my Curriculum Vitae enclosed herewith as an exhibit.

VI. PRIOR EXPERT TESTIMONY

1. Deposition; Rufus Allen-Alfa Mutual Insurance v. Camping World. CV 2009-000542.00 Circuit Court of Houston County, AL
2. Deposition: Fire Insurance Exchange/Kelley v. Presley Electric Service. CV 10-1506 Circuit Court of Mobile County, AL
3. Deposition; Allstate Insurance/ Menendez v. Oasis Water & Kentwood Water. US District Court, Gulfport MS
4. Deposition; American Wholesale Furniture v. Hartford Insurance. CV 561833 19th JDC East Baton Rouge Parish, LA.
5. Deposition; Robert Breazeale v Travelers Insurance (Kitchen & Bath). Circuit Court of Baldwin County, AL
6. Deposition; David Mincin v. United National Insurance 19th JDC Est Baton Rouge Parish, LA

VII. COMPENSATION

My hourly rate for deposition/trial testimony is $175.00 per hour regardless of the outcome of this matter.

Gary W. Jones 04/11/14

Gary W. Jones, CFI, CFEI Date

EXHIBIT 8

EXCERPTS FROM DR. KENDALL CLARKE'S DEPOSITION

IN THE UNITED STATES DISTRICT COURT

FOR THE SOUTHERN DISTRICT OF ALABAMA

SOUTHERN DIVISION

CIVIL ACTION NO: CV-13-458

ATLANTIC SPECIALTY INSURANCE COMPANY,

Plaintiff,

vs.

MR. CHARLIE ADVENTURES, L.L.C. and KIM P. KORNEGAY,

Defendants.

DEPOSITION TESTIMONY OF:
C. KENDALL CLARKE

ORIGINAL

DATE: May 30, 2014

TIME: 9:05 a.m.

REPORTED BY: Daphne M. Cotten, CSR

got a flat image. And, of course, we used a macro lens, which is adjusted for flat field. That was the best image that you can get. And those are not cheap, those systems, either. So it was taken perpendicular.

Q. And you came up with an 80 and a 78 percent figure; did you not?

A. Yes, sir.

Q. Which one applied to starboard and which one applied to the port?

A. My recollection is it was -- port was 80 percent. The port had just a little bit more blockage.

Q. Than the starboard.

A. Starboard 78 percent. I've got the actual data here.

Q. Okay.

A. Well, I've got the picture. The actual data is a pretty large spreadsheet.

Q. Apparently, the port was two percent blocked more than the starboard.

A. Yeah, it was just slightly more

cut these exchangers. I thought you said that when you were talking about when you get those heat exchangers in, you cut them and look inside of them.

A. That's my normal procedure, yes.

Q. Did you request that these heat exchangers be cut by Plaisance?

A. Not that I -- I produced a protocol for me to cut them.

Q. And you never cut them, did you?

A. I never was given authority.

Q. Did you ever ask why you weren't given authority to cut them and examine them?

A. I just was never given authority.

Q. And that would be -- well, is there any other way you could have checked them?

A. I have to call the attorney. If the attorney says do it and I've got -- and I would also ask if the other side has agreed. You can't touch that without having all parties present.

Q. So you've not furnished any opinion to the insurance carrier, its lawyers, or Guy Plaisance or any of its representatives as to any reduction in flow rate, have you?

A. I have not calculated that.

Q. And what have you expressed, that there could be a reduction in it?

A. Yes. That's really it, that, yeah, there's got to be a reduction in the flow.

Q. Is it abnormal for a boat that's been in saltwater and used for a period of three or four years to have some reduction in saltwater?

A. Absolutely.

Q. I mean, just generally any boat owner around here with walking around sense, boating around sense, knows that if you put something in saltwater you can expect some reduction over the years in use. Do you not agree?

A. That's really out of my field in

terms of whether they've got walking around sense and what their experience is.

Q. Well, I said boating around. But that's fair. It wasn't a very good question.

You never rendered any opinion to the insurance carrier, its lawyers, or it's representatives that any reduction in any water flow caused this fire, did you?

A. That's correct.

Q. You don't know, do you?

A. I do not know.

Q. It looks to me like, based on what I see here, the only calculations or anything that you've done has been in regard to the screens.

A. You're quite correct.

Q. But you feel confident in your calculations, right?

A. Yes.

Q. You did the best you could, right?

A. Well, I'm not sure I'd characterize it that way. We did it very

EXHIBIT 9

DR. KENDALL CLARKE'S REPORT OF APRIL 9, 2014

METALLURGICAL CONSULTING
1146 Leroy Stevens Rd., Suite A
Mobile, AL 36695
Phone: (251) 639-3433
Fax: (251) 639-3105
email: kclarke@metalconsult.com

Metallurgical Analysis
Corrosion
Welding
SEM
Failure Analysis
Fracture Mechanics

EVALUATION OF FOULING ON SEA WATER INTAKE SCREENS

Project 13-106

Report Prepared by C. Kendall Clarke, Ph.D., P.E.

Date: April 9, 2014

1.0 Background

A 40 foot Cabo sport fisher, M/V Mr. Charlie, burned to the water line. We were asked to measure the percent reduction in flow area on port and starboard sea water intake screens. Sea water is pumped into the vessel for engine heat exchangers and to cool the exhaust on Mann diesel engines used to power the vessel. This effort also included visual inspection of the sea water pumps and starboard engine and associated heat exchangers.

The following materials were provided or reviewed for this report:

a. Port and starboard sea water intake screens
b. Port and starboard sea water pumps
c. Port and starboard sections of exhaust
d. Pictures taken by Capt. Plaissance

e. Inspection of starboard engine on 8/16/13

2.0 Results

The starboard and port sea water intake screens are shown as received in Figures 1-4. Considerable marine fouling including oyster shells was observed on both screens. Each screen was photographed digitally with back lighting and photographically enhanced to increase contrast between open holes and screen material. The images were the analyzed in an image analysis system (Able Image Analyser) to calculate the percentage open area. A new, unused screen was used as a base line. The basic input images are shown in Figures 5 and 6. A steel scale used to calibrate image size can just be seen in Figure 6.

The new, unused screen had an open area of 17.6 in^2. The port screen had an as received open area of 3.55 in^2 for a reduction in open area of 80%. The starboard screen open area was 3.85 in^2 for a 78% reduction in area. These reduction numbers are probably low for conditions before the fire because the fouling has reduced its volume as a result of drying out.

3.0 Opinions

The following opinions were based upon observation and measurement of the screens, inspection on the starboard engine, and over thirty years of experience with corrosion and fouling in heat exchangers in fresh and salt water systems.

a. The intake screens had a measured, dry condition, reduction in available intake area of 80 and 78%. The actual reduction in flow area was most probably greater in service because much of the fouling is gelatinous in nature.
b. Local back bay waters are notorious for fouling heat exchangers tubing. Stagnant conditions are the worst case for fouling growth. Both observations on the one ¼ inch diameter tube exchanger and other experience with similar exchangers leads me to believe these exchangers were seriously fouled before the fire.

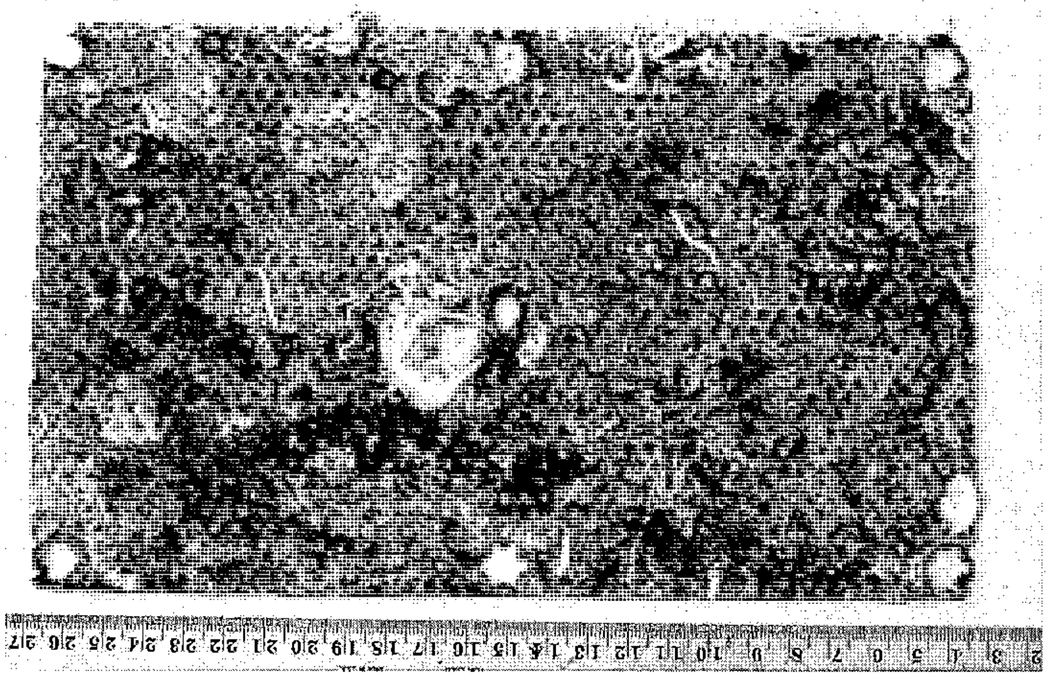
c. The heat exchangers down stream of the intake screens presented their own significant contribution to flow rate of the required sea water for exhaust cooling.

4.0 Compensation

Fees for Kendall Clarke are $350/hour and Don Halimunanda $200/hour.

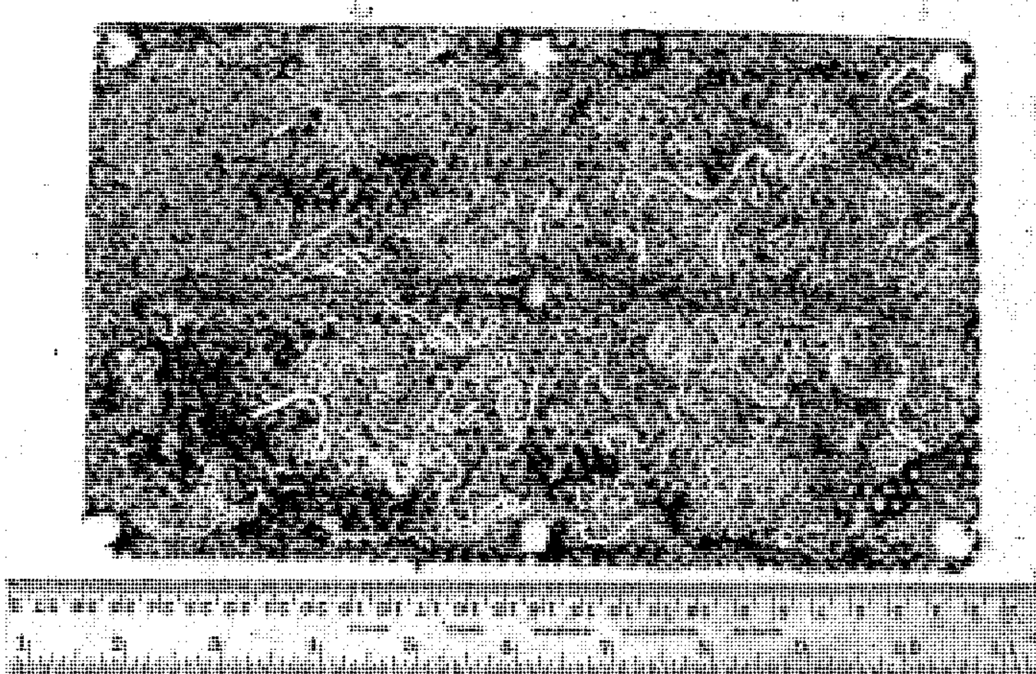
ALABAMA REGISTERED NO. 15088 PROFESSIONAL ENGINEER DR. C. KENDALL CLARKE

C. Kendall Clarke, Ph.D., P.E.



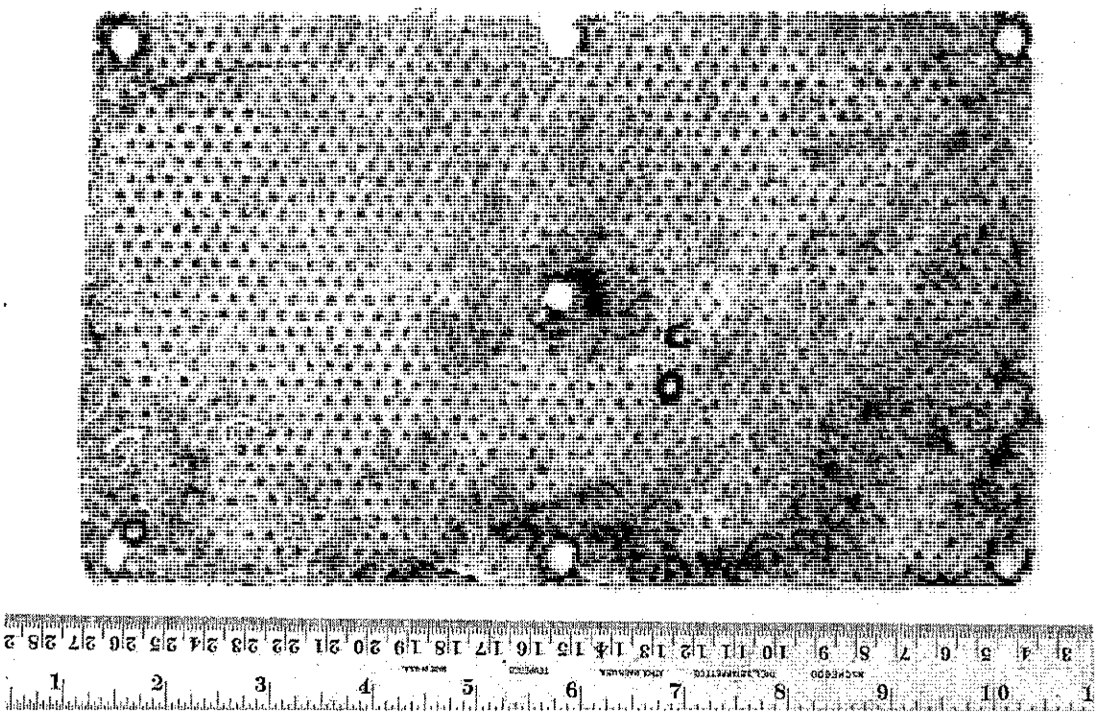
8796

Figure 1: The outboard surface of the port screen is shown as received. An oyster shell is growing in the center.



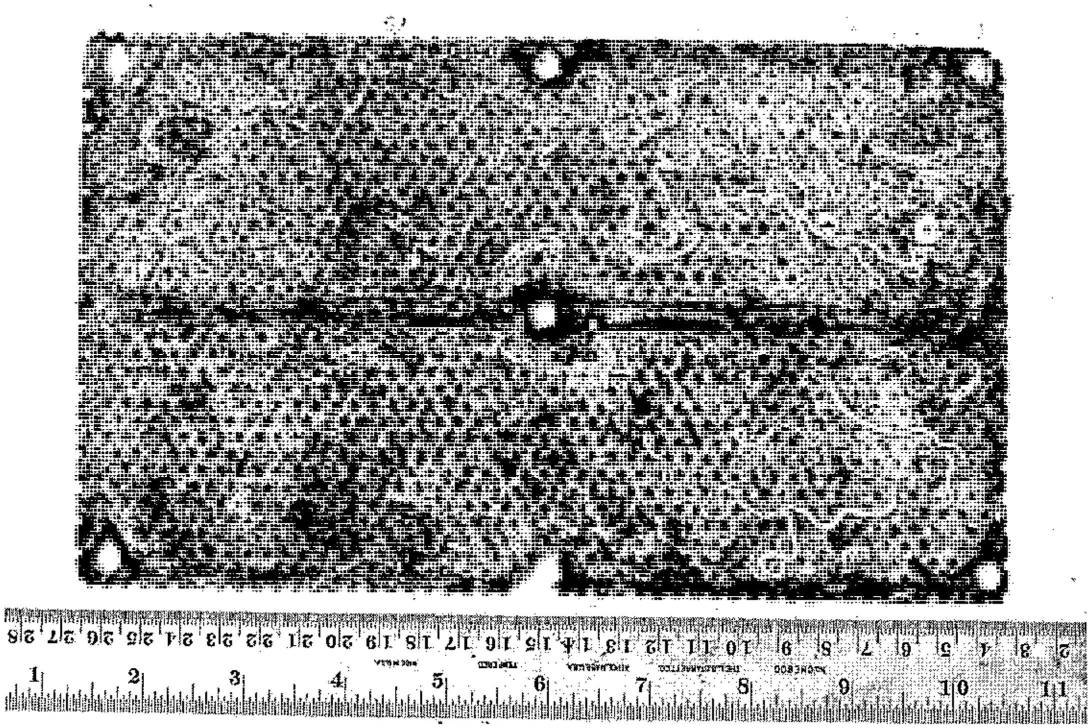
8805

Figure 2: The port inboard side is shown.



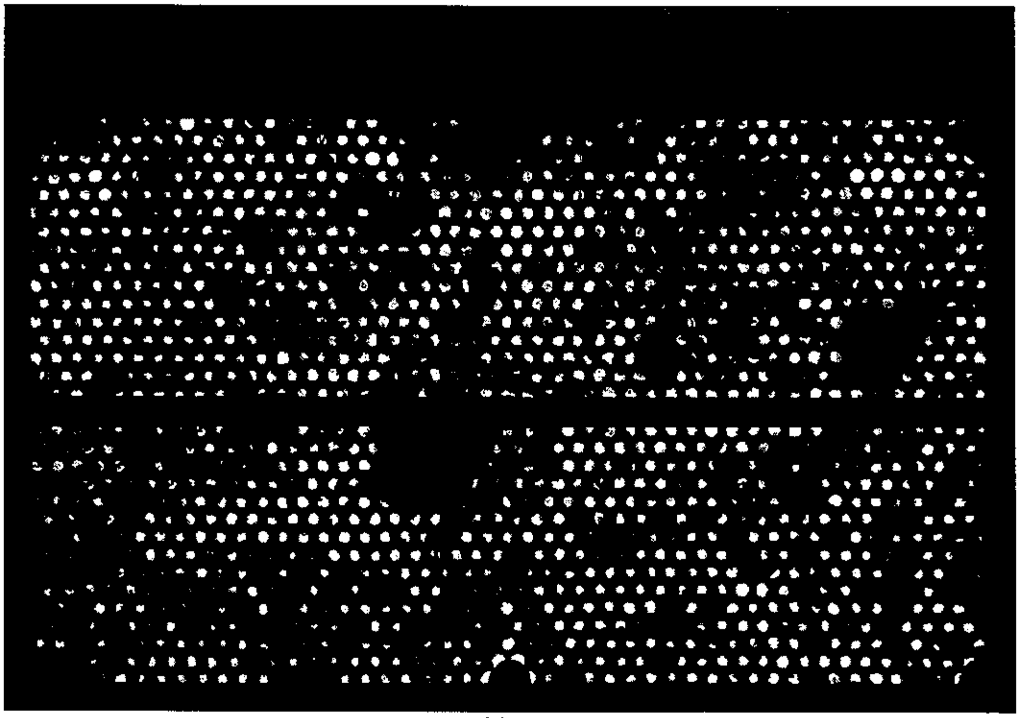
8778

Figure 3: The starboard outboard surface of the sea water intake screen is shown as received.



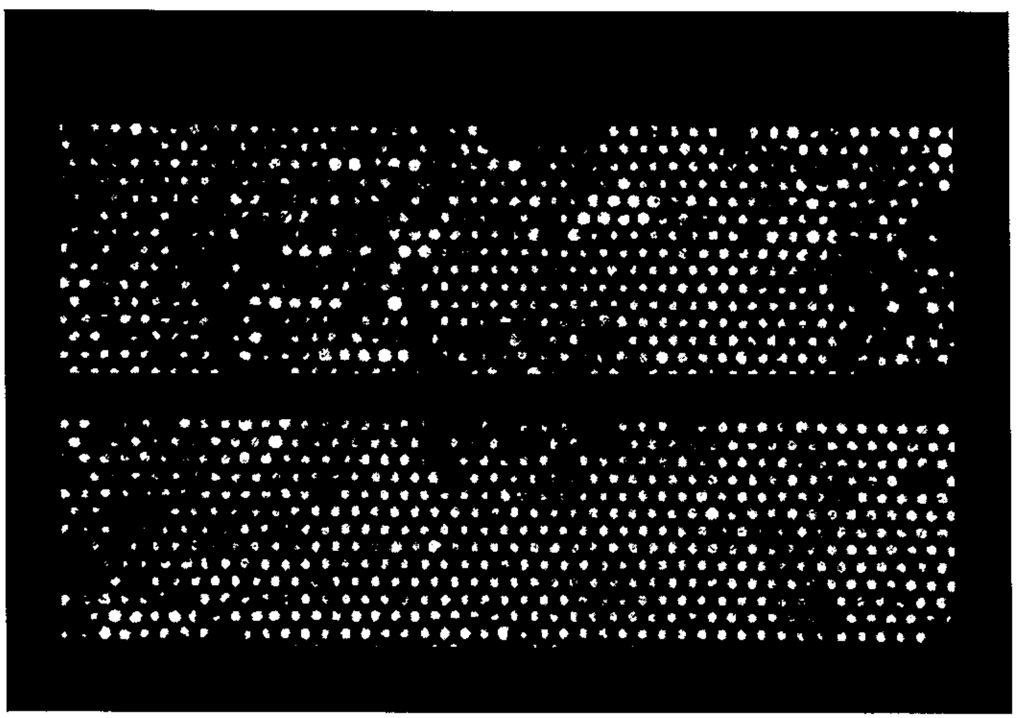
8785

Figure 4: The starboard inboard side is shown.



port side screen

Figure 5: Port screen photo was shot with high contrast for image analysis.



starboard side screen

Figure 6: The starboard side screen was shot with high contrast for image analysis.

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

ATLANTIC SPECIALTY INSURANCE COMPANY,	*	
	*	
Plaintiff,	*	CIVIL ACTION NO. CV-13-458
v.	*	
MR. CHARLIE ADVENTURES, LLC, and KIM P. KORNEGAY,	*	
Defendants.	*	

PLAINTIFF'S BRIEF IN OPPOSITION TO DEFENDANTS' MOTION
TO EXCLUDE THE TESTIMONY OF PLAINTIFF'S EXPERTS
GARY JONES AND GUY PLAISANCE

The Court should deny Defendants' motions (docs. 34 & 35) to exclude the testimony of Plaintiff Atlantic's experts, Gary Jones and Guy Plaisance. Jones and Plaisance are qualified to offer the opinions they have rendered regarding the origin and cause of the fire on the Defendants' vessel; their methodology is reliable; and their opinions would be helpful to the trier of fact. Jones and Plaisance's testimony is therefore admissible under Fed. R. Evid. 702.

I.

STANDARDS FOR ADMISSION OF EXPERT TESTIMONY

Rule 702 governs admission of expert testimony. It states:

> A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:
>
> (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
>
> (b) the testimony is based on sufficient facts or data;
>
> (c) the testimony is the product of reliable principles and methods; and

(d) the expert has reliably applied the principles and methods to the facts of the case.

Accordingly, the Eleventh Circuit has stated that expert testimony is admissible if (1) "the expert is qualified to testify competently regarding the matters he intends to address," (2) "the methodology by which the expert reaches his conclusions is sufficiently reliable as determined by the sort of inquiry mandated in Daubert [v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993)]," and (3) "the testimony assists the trier of fact, through the application of scientific, technical, or specialized expertise, to understand the evidence or to determine a fact in issue." City of Tuscaloosa v. Harcross Chem., Inc., 158 F.3d 548, 562 (11th Cir. 1998), cert. denied, 528 U.S. 812 (1999).

Rule 702 "has a 'liberal thrust' and general approach of relaxing the traditional barriers to expert testimony." Hunt v. 21st Mortg. Corp., 2014 WL 1664288, *3 (N.D. Ala. April 25, 2014). Regarding reliability under Daubert and Rule 702, the Advisory Committee's Notes to the 2000 amendment to Rule 702 state:

> A review of the case law after Daubert shows that the rejection of expert testimony is the exception rather than the rule. Daubert did not work a "seachange over federal evidence law," and "the trial court's role as gatekeeper is not intended to serve as a replacement for the adversary system…". "Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence."

(Emphasis added). See In re Atlantic Marine Property Holding Co., 570 F. Supp. 2d 1363, 1367 (S.D. Ala. 2008) (Granade, J.) (quoting the above). District courts have "broad discretion" in deciding whether expert testimony meets the standards of Daubert and Rule 702. Alvarez v. General Wire Spring Co., 2009 WL 248264, *6 (M.D. Fla. Feb. 1, 2009).

II.

GARY JONES'S TESTIMONY IS ADMISSIBLE

A. JONES IS QUALIFIED AS AN EXPERT.

Jones is a fire-cause-and-origin expert with years of experience. The Defendants (hereafter "Kornegay") do not dispute Jones's qualifications.

B. JONES'S METHODOLOGY IS RELIABLE.

The "proponent of [expert] testimony does not have the burden of proving that it is scientifically correct"; he need only show, "by a preponderance of the evidence, [that] it is reliable." Allison v McGhan Medical Corp., 184 F.3d 1300, 1312 11th Cir. 1999). And in deciding reliability, courts are to focus "solely on principles and methodology, not on the conclusions that they generate." Daubert, 509 U.S. at 295. As discussed below, the principles and methodology Jones utilized are reliable.

1. Jones's investigation, reasoning, and conclusions.

The two reports that Jones submitted to Atlantic – an interim report dated June 28, 2013 (doc. 32-3) and a final report dated September 9, 2013 (doc. 3204) – set forth Jones's investigative activities, reasoning, and opinions. Jones conducted "[a] systematic scene examination [of the vessel at Barber Marina] utilizing a method consistent with the guidelines of NFPA 921" (doc. 32-3 at 2), promulgated by the National Fire Protection Association as a guide or recommendation, but not a standard, for conducting fire investigations (Jones dep. [doc. 53-5] at 33-34). Jones also reviewed Kornegay's account of the events leading up to the incident; photographs of the vessel during and after the fire; the marine police report; product literature concerning the vessel; the vessel's service records; and information concerning the seawater intake screens (doc. 32-3 at 2-3). His examination of the vessel included "[a]rc map analysis of

PD.11987343.1

the engine compartment's electrical system" (doc. 32-3 at 5). As a court has recognized, "[a]n analysis [like Jones's] that includes a physical examination of the scene, interviews, photographs of the scene, an examination of the evidence at the scene, wires, and an on-site visit is consistent with the scientific methods underlying fire incident investigation as set forth in NFPA 921." Argonaut Ins. Co. v. Samsung Heavy Indus. Co., 929 F. Supp. 2d 159, 166 (N.D.N.Y. 2013).

NFPA 921 "states that '[w]ith few exceptions, the proper methodology for a fire or explosion [investigation] is to first determine and establish the origin(s), then investigate the cause, circumstances, conditions, or agencies that brought the ignition source, fuel, and oxidant together.'" Nationwide Mut. Ins. Co. v. National RV Holdings, Inc., 2007 WL 954258, *5 (M.D. Pa. March 28, 2007). This is what Jones did.

Jones's reports explain that to determine the area of origin, he used "damage pattern analysis" and observations of "fire patterns" (doc. 32-3 at 4-5; doc. 32-4 at 2-3). "Analysis of burn patterns...is a reliable method used by fire analysts in determining the origin of a fire." Hartford Ins. Co. v. Broan-Nutone, LLC, 2004 WL 842516, *2 (N.D. Ill. April 19, 2004). Jones noted that "[a]dvancing from the area of least damage to the area of greatest fire involvement revealed the fire was concentrated at the aft end of the starboard Man diesel engine"; that "[f]ire patterns increased toward the starboard turbocharger intake side, fiberglass exhaust tube and #6 valve cover"; that "[f]ire demarcation patterns were most prominent along the starboard aft bulkhead"; that "the lowest and most intense area of burn was noted in the aft starboard section"; that "the valve covers…show a directional burn pattern that emanates from the aft end of the starboard engine as compared to the port"; and that "the starboard exhaust tube [was destroyed], while that for the port engine was found somewhat intact" (doc. 32-3 at 4-5). Jones concluded that "[d]amage pattern analysis indicates the fire originated in the engine compartment in the vicinity of the aft end of the starboard engine at the FRP exhaust tube" (doc. 32-4 at 3).

Having determined the area of origin, Jones's "efforts were then directed towards identifying the ignition or heat source for the loss" (doc. 32-3 at 5). Under the NFPA, this involves subjecting "the empirical data collected...to an analysis premised on inductive reasoning." <u>Allstate Ins. Co. v. Gonyo</u>, 2009 WL 1212481, *6 (N.D.N.Y. April 30, 2009). Jones observed that "the raw water intake strainers on the port and starboard sides of the hull were covered with marine growth" and that "[t]he growth on the starboard intake was significant and could have inhibited the water inlet flow" (doc. 32-3 at 4). Jones noted that the engine produced exhaust gases ranging in temperature from 900-1100º F; that the exhaust tube was rated at 259º F (which Jones later admitted was actually 350º F); that the intake of seawater was supposed to cool the exhaust gases "to an acceptable level for the exhaust elbows and tube"; and that "[a]n exhaust tube failure could result from the hot gases not getting completely cooled" (doc. 32-3 at 5-6). Accordingly, Jones developed "a hypothesis...through the process of inductive reasoning," that is, that "insufficient water flow...to the exhaust riser from a clogged screen/strainer" caused the fire (doc. 32-4 at 2).

The NFPA contemplates testing the hypothesized cause, but provides that "'[a] hypothesis can be tested either physically or by conducting experiments <u>or analytically by applying scientific principles in thought experiments.</u>'" <u>Severn Peanut Co. v. Industrial Fumigant Co.</u>, 2014 WL 1056991, *203 (E.D.N.C. March 17, 2014) (emphasis added). Jones, assisted by Plaisance and metallurgist Kendall Clarke, Ph.D., used the latter method (doc. 32-4 at 3). Dr. Clarke advised Plaisance that about 80% of the starboard intake screen's area that would normally be open was obstructed by marine growth (Atl. claim file pt. 1 [doc. 32-11] at 000883, 000885). Plaisance, through research or discussions with the exhaust manufacturer, learned that the fiberglass exhaust tube and rubber connectors would fail if subjected to temperatures greater than what they were rated for, that the engine generated exhaust gases with temperatures well in excess of such rating, and that experiments had shown that the non-metal components of the exhaust would indeed fail under excessive temperature (Plaisance 9/9/13 rpt. [doc. 32-5] at 15-17). Plaisance also, through consultation with the screen manufacturer's engineer, determined that the obstruction of the screen reported by Clarke probably would prevent the intake of enough seawater to cool the exhaust, leading to an exhaust tube failure and ignition of combustibles (Plaisance 9/9/13 rpt. [doc. 32-5] at 17). Coupled with Jones's determination of the fire's point of origin aft of starboard engine in the vicinity of the exhaust tube, this evidence allowed Jones to conclude that "the release of hot gases [as a result of the exhaust-tube failure] was adequate to ignite available combustibles in the [engine] compartment" and that the "restriction in the cool water intake flow was attributed to the substantial marine growth on the strainer/screen and was a contributing factor to the fire's inception" (doc. 32-4 at 3-4).

Thus, Jones followed a recognized and reliable methodology in determining the fire's origin and cause. Kornegay's challenges to Jones's testimony, addressed below, should be rejected.

2. Kornegay's contentions are either unsupported or go to the weight and credibility of Jones's testimony, not its admissibility.

Kornegay argues that Jones "relied on incorrect data" in that while Jones's report states that the exhaust tube is rated at 259° F, "the exhaust tube on the engine in this case is [actually] rated for 350 degrees Fahrenheit" (doc. 35 at 7). This was a mistake in Jones's report, but it makes no difference. Jones's report states that the uncooled exhaust gases ranged from 900-1100° F (doc. 32-3 at 5). Thus, the gases' temperature far exceeded the tube's rating, whether

259° F or 350° F. Jones testified that while the 350° F rating is correct, this "doesn't affect my opinion" (Jones dep. [doc. 53-5] at 30). Kornegay can point out Jones's mistake on cross-examination, but it does not impact the reliability or admissibility of Jones's opinions. See Quiet Tech. DC-8, Inc. v. Huriel-Dubois UK Ltd., 326 F.3d 1333, 1345 (11th Cir. 2003) (party argued that "the specific numbers that [expert] used [for calculation] were wrong"; court stated these "alleged flaws in [expert's] analysis are of a character that impugn the accuracy of his results, not the general scientific validity of his methods," and that "[t]he identification of such flaws in generally reliable scientific evidence is precisely the role of cross-examination").

Kornegay claims that Jones "requested that Plaisance conduct inspection of specific items to provide physical documentation to 'prove or disprove this theory,' but does not know if these inspection[s] were ever conducted and nevertheless formed his own conclusions without the benefit of this information" (doc. 35 at 8). The "specific items" that Jones proposed inspecting were the "exhaust riser, turbocharger[,] and sea strainer up to the sea cock valve" inside the hull (Atl. claim file pt. 2 [doc. 33-1] at 002239). The exhaust riser and turbocharger were inspected, and Jones was notified of same and the results thereof by email (Atl. claim file pt. 2 [doc. 33-1] at 002129-30, 002228, 002262; Plaisance 9/9/13 rpt. [doc. 32-5] at 12, 16). Jones's report actually mentions the results of inspection of the exhaust riser (doc. 32-3 at 5). The "sea strainer," that is, the intake screen, was also removed from the vessel hull and the interior side of the screen inspected, and the hull opening ordinarily covered by the screen was also inspected and photographed (Plaisance 9/9/13 rpt. [doc. 32-5] at 13-14).

Kornegay maintains that Jones "states his hypothesis is based on the engines overheating" (doc. 35 at 10). Jones's first report mentions the possibility that seawater intake may have been insufficient "to adequately cool the engine" (doc. 32-3), but it also states that the water was "supposed to lower the internal exhaust gases (900-1100 F) to an acceptable level," and that "[i]nsufficient water flow through the engine to the exhaust riser from a clogged strainer could result in an exhaust tube failure" (doc. 32-3) (emphasis added). Jones's conclusion that there was insufficient water intake to cool the exhaust gases (doc. 32-4 at 3-4) is not dependent on the engine overheating, so the fact that the engine did not overheat has no bearing on his opinion. Kornegay contends otherwise and can cross-examine Jones accordingly.

Kornegay says that Jones failed to "interview important witnesses such as the first responder on the scene, a marine police officer, and the towing company that boarded the boat prior to any investigation efforts" (doc. 35 at 11). Kornegay's own fire investigator, Cranford, also did not interview the marine police officer (see doc. 32-10 at 12); Cranford concluded that the officer's written report contains "no information that is material to the origin and cause of this fire" (doc. 32-10 at 12; Cranford dep. [doc. 32-9] at 179-80); and no information contradicting Jones's opinions was elicited from this officer when he was deposed (Alford dep. [doc. 53-6]). And while Jones did not interview the tow captain, Plaisance did speak with the captain about the fire and what the captain observed and did (Atl. claim file pt. 2 [doc. 33-1] at 002697, 002836, 002895, 002900, 002913). Cranford also spoke with the tow captain, and while the captain described tow-preparation activities that reportedly disturbed some of the debris (see doc. 32-10 at 12), there is no evidence the captain had any information concerning the origin or cause of the fire, or which contradicted Jones's opinions. Thus, Jones's not interviewing the tow captain is irrelevant.

Kornegay contends that Jones stated that "evidence indicated disproportionate marine growth on the seawater intake scoop/screens for the starboard strainer," when the port screen was actually "more occluded" than the starboard screen (doc. 35 at 6). But in using the term "disproportionate," Jones's report does not say he was comparing starboard to port, as he expressly did elsewhere when using "disproportionate" to describe damage to the port and starboard engines, exhaust tubes, and seawater pumps (doc. 32-3 at 4, 6). Jones likely used "disproportionate," in describing the marine growth on the starboard screen, as a synonym for "excessive" or "inordinate." In any event, this is another ground for cross-examination but not exclusion of Jones's testimony.

Kornegay argues that Jones "failed to address or explain how the fire could have occurred from a lack of cooling water without activating the engine alarm systems" (doc. 35 at 11). The only evidence that no alarm went off is Kornegay's say-so. Jones was aware of the boat's sophisticated alarm system, considered this during his investigation, and testified that he was "amazed that Kornegay doesn't hear anything," that Kornegay was "either…incorrect or there's a complete foul-up of" the alarm system, and that "what [Kornegay is] saying doesn't make sense" (Jones dep. [doc. 53-5] at 115-16). This is more material for cross-examination but does not affect the reliability of Jones's methodology.

Kornegay claims that Jones relied in part on metallurgist Dr. Clarke's work but that Clarke "performed no testing other than calculating the amount of open area on the starboard and port intake screens" (doc. 35 at 6). Once again, this is a basis for cross-examination but not exclusion. See State Nat'l Ins. Co. v. Anzhela Explorer LLC, 2009 WL 3335422, *4 (S.D. Fla. Jan. 13, 2009) (expert opined that hole in exhaust tube allowed water in vessel, resulting in vessel's sinking, but expert did not "test and determine whether the size of the hole in the exhaust system was of such a diameter that would allow sufficient influx of water to cause [vessel] to sink" and "did not perform almost any independent tests in order to support and strengthen his theory"; court held that expert's testimony was sufficiently reliable and that "the flaws in [expert's] report are more properly the subject of cross-examination at trial, and do not support the wholesale exclusion of this evidence"); Martinez v. Altec Indus., Inc., 2005 WL 1862677, *10 (M.D. Fla. Aug. 3, 2005) ("[W]hile defendants' contention that [expert] failed to perform adequate testing to support his conclusions certainly can be explored on cross-examination, it is not a basis to find his testimony unreliable.").

Kornegay maintains that Jones "failed to reliably apply [the NFPA] standards to the facts of this case" (doc. 35 at 11). As set forth in his reports, Jones did follow the NFPA guidelines. Regardless, mere deviation from NFPA recommendations does not mean a fire investigator's testimony is automatically excluded. See Allstate Ins. Co. v. Gonyo, 2009 WL 1212481, *6 (N.D.N.Y. April 30, 2009) ("Although [expert] may not have ardently and strictly followed every step of NFPA, these shortcomings will not be fatal to him testifying before the jury…. He used an individually tailored investigative process which was basically consistent with NFPA."). NFPA is a guideline or recommendation but not a standard.

Any remaining contentions in Kornegay's motion fall within the realm of cross-examination that might affect the weight and credibility, but not admissibility, of Jones's testimony. As the Eleventh Circuit has stated, "in most cases, objections to the inadequacies of a study are more appropriately considered an objection going to the weight of the evidence rather than its admissibility." Quiet Tech., 326 F.3d at 1345 (internal quotation marks omitted). See also In re TMI Litig., 193 F.3d 613, 692 (3rd Cir. 1999) ("[s]o long as the expert's testimony rests upon 'good grounds,' it should be tested by the adversary process – competing expert testimony and active cross-examination – rather than excluded from jurors['] scrutiny"), cert. denied, 530 U.S. 1225 (2000). None of Kornegay's assertions warrant excluding Jones's testimony.

C. Jones's testimony would help the trier of fact.

"The final requirement for admissibility of expert testimony under Rule 702 is that it assist the trier of fact. By this requirement, expert testimony is admissible if it concerns matters that are beyond the understanding of the average lay person." United States v. Frazier, 387 F.3d 1244, 1262 (11th Cir. 2004), cert. denied, 544 U.S. 1063 (2005). Jones's testimony certainly meets this requirement. Average laymen are not familiar with determining the origin and cause of fires. Whether the fire resulted from marine growth on the screen – a cause excluded under Atlantic's policy – is the central issue in the case, so Jones's testimony is relevant and would assist the jury to "determine a fact in issue" as contemplated by Rule 702(a).

Kornegay contends Jones's testimony would not be helpful because Jones relied in part "on other experts in forming his opinion as to the cause of the fire" (doc. 35 at 12). "An expert witness's testimony may be formulated by using facts, data and conclusions of other experts so long as the testifying expert is presenting some independent findings." Begualg Inv. Mgmt., Inc. v. Four Seasons Hotel Ltd., 2013 WL 836807, *4 (S.D. Fla. March 6, 2013). Jones certainly performed much of his own work and made independent findings (see docs. 32-3 & 32-4). His use of facts, data, or conclusions reached by Plaisance or Clarke therefore does not affect admissibility of his testimony.

Kornegay also says that "Jones and Plaisance submitted almost identical reports" and that Jones's testimony would not be helpful because he is "merely providing a 'stamp of approval' on Plaisance's opinion" (doc. 35 at 13). The reports that Jones and Plaisance submitted to Atlantic, and which set forth their opinions, are certainly not "almost identical" (see docs. 32-3, 32-4, & 32-5). While Jones and Plaisance hold the same opinions, their reports are substantially different in wording, content, appearance, and organization (id.). Jones performed his own investigation, and while relying in part on Plaisance's work or opinions, also reached his own opinion. Jones is not merely "stamping his approval" on Plaisance's opinion.

In conclusion, because Jones is qualified, used a reliable methodology, and will proffer testimony helpful to the trier of fact, the Court should deny Kornegay's motion to exclude Jones's testimony.

III.

GUY PLAISANCE'S TESTIMONY IS ADMISSIBLE.

A. PLAISANCE IS QUALIFIED.

Rule 702 "takes a liberal approach to expert witness qualification." Leathers v. Pfizer, Inc., 233 F.R.D. 687, 692 (N.D. Ga. 2006) (internal quotation marks omitted). "Generally, if there is some reasonable indication of qualifications, the court may admit the expert's testimony, and then the expert's qualifications become an issue for the trier of fact." Cashman Equip. Corp. v. Rozel Operating Co., 2012 WL 2519970, *6 (M.D. La. June 28, 2012). A district court has "broad discretion" in deciding whether an expert is qualified. United States v. Bender, 290 F.3d 1279, 1283 (11th Cir. 2002), cert. denied, 537 U.S. 1037 (2002).

Kornegay argues that Plaisance, a marine surveyor, is not qualified to offer opinions as to the origin or cause of the fire because he has "no formal training as a fire investigator" and is "not a certified technician for the engines in question and has never worked on such engines" (doc. 34 at 6, 7). However, Rule 702 provides that an expert may be qualified by "knowledge, skill, experience, training, **or** education" (emphasis added). Thus, "experience alone can provide a sufficient foundation for expert testimony." Arthrex, Inc. v. Parcus Medical, LLC, 2014 WL 3747598, *2 (M.D. Fla. July 29, 2014). Furthermore, "[a] witness qualified as an expert is not strictly confined to his area or practice, but may testify regarding related applications, rather a lack of specialization does not affect the admissibility of the opinion, but only its weight." Cashman Equip., 2012 WL 2519970, *6.

Plaisance is qualified by experience to the render the opinions proffered. He has years of experience conducting surveys relating to ship casualties, including vessel fires (Plaisance dep. [doc. 53-4] at 70-71). He received on-the-job training as a fire investigator and estimates he has conducted or participated in 20-25 vessel-fire investigations (Plaisance dep. [doc. 53-4] at 72-76). In 2008, he attended a three-day comprehensive course on boat-fire investigations, sponsored by the International Association of Marine Investigators (Plaisance aff. [doc. 55] at ¶ 21 & Ex. A). In addition, he has spent virtually his entire career in the marine industry and has extensive experience with marine engines including diesel engines (Plaisance aff. [doc. 55 at 3]). Plaisance has described his experience in part as follows:

> 2. I am engaged full-time as a marine surveyor and hold a Master Mariners license with over 34 years of combined experience in vessel management, operations, new construction, repairs and inspection within the maritime and shipbuilding industry, of military, commercial vessels, and yachts, and have served as master on similar type vessels as the MR. CHARLIE….
>
> 3. From 1974 to 1977, I was employed by Cheramie Bros. Botruc Co., Golden Meadow, Louisiana, and served in the capacities of deckhand, engineer, and mate on various offshore supply vessels outfitted with large horsepower diesel engines. During the earlier period of my employ, I also served as an oiler on large offshore vessels….
>
> ***
>
> 5. From 1977 to 1980, I was employed by Petrol Marine/Penrod Drilling Co., Houma, Louisiana, and served in the capacities of master and mate aboard supply vessels and crewboats servicing the offshore oil industry in the Gulf of Mexico. In 1979, I received my 1st United States Coast Guard Captains License as a Passenger Vessel Operator on vessels of not more than 100 gross tons upon the Gulf of Mexico, not more than 100 miles offshore.
>
> 6. From 1980 to 1984, I served as master of two custom-built aluminum sport fishing yachts (60' and 65') for Halter Marine Group, Inc., responsible for the vessel operations, maintenance, and repairs, with both vessels having twin Detroit Diesel 12-V-71 TI, total 1100-horsepower diesel engines outfitted with

stainless steel water cooled exhaust risers with fiberglass exhaust mufflers, a similar exhaust system design as the MR. CHARLIE.

7. In 1982, I received my 1st United States Coast Guard Masters License of Steam and Motor Vessels of not more than 500 gross tons upon oceans, not more than 200 miles offshore with three license endorsements as follows: In 1982, I received a United States Coast Guard license endorsement as Mate of Freight and Towing Vessels of not more than 500 gross tons upon oceans, not more than 200 miles offshore. In 1983, I received a United States Coast Guard license endorsement as Operator of Uninspected Towing Vessels upon oceans, not more than 200 miles offshore. In 1985, I received a United States Coast Guard license endorsement as Master of Freight and Towing Vessels of not more than 1,000 gross tons upon inland waters of the United States.

8. In 1985, I did serve as master for Calstar Marine, San Francisco, California, aboard the “ZP MONTALI” and the “ZP CAMUS”, both 93 foot vessels, each having 2 MAN Burmeister & Wain x 2300-horsepower each diesel engines capable of burning heavy diesel fuel, A.B.S.+ A1 Towing Service, ACCU + AMS tractor tugs with a Z-drive propulsion system used in towing offshore drilling rigs.

9. From 1974 until 1987, I spent a countless number of hours working in engine rooms of the vessels of which I was employed and not only maintained and/or assisted in the engine departments, but on occasion, repaired the machinery of same….

10. In 1987, I did receive a 2nd issue United States Coast Guard Masters License of Near Coastal Steam and Motor Vessels of not more than 1,600 gross tons, with endorsements as Operator of Uninspected Towing Vessels upon the Great Lakes and Inland Waters of the United States.

11. From 1987 until 1990, I was employed by Viva, Inc., where I worked as project manager on the design and construction of a custom built aluminum high-speed Express Yacht Cruiser with 2 x MTU 12-V-183 TE 92, 1000-Hp each diesel engines outfitted with stainless steel water cooled exhaust risers with fiberglass exhaust mufflers, a similar exhaust system design as the MR. CHARLIE.

12. In 1992, I received a 3rd issue United States Coast Guard Masters License of Near Coastal Steam and Motor Vessels of not more than 1,600 gross tons, with endorsements as Operator of Un-inspected Towing Vessels upon the Great Lakes and Inland Waters of the United States.

13. From 1990 to 1995, I was employed at Swiftships, Inc., Morgan City, Louisiana, and served as project manager and captain on new construction yachts and military projects. One of those vessels on which I worked as Project Manager

> was a 180’ x 30’ x 8’ aluminum mega-yacht, “TACANUYA” built in 1992, ABS +A1 Yachting Service, AMS, with 2 x Caterpillar 3516 DITA 2800-Horsepower each, diesel engines.
>
> ***
>
> 15. During the period 1995 to 2001, while employed at Friede Goldman Halter, Inc., Gulfport, Mississippi, I served as a project manager and was occasionally assigned to the engineering department to assist the engineering group during new project design phases. Furthermore, I did work at several of the different shipyards for Halter Marine as a project manager on a number of different types of new vessels and drilling-rig construction projects including service repairs to drilling rigs far more technically advanced than the MR CHARLIE.…
>
> 16. During the period 2001 to 2005, while employed at Rivers and Gulf Marine Surveyors, Inc., Harvey, Louisiana, I served as a marine surveyor and consultant providing professional services to insurance companies, maritime companies, law firms, financial institutions and private individuals. During such period of employment, I personally conducted surveys on vessels like the MR. CHARLIE as well as hundreds of surveys on all types of vessels.
>
> ***
>
> 18. In 2005, I started my own company, Atlantic Gulf & Pacific Marine Surveyors and Consultants, Inc., Diamondhead, Mississippi, providing professional services to maritime companies, insurance companies, law firms, financial institutions, and private individuals in the field of marine surveying and consulting.
>
> 19. In 2007, while employed at Atlantic Gulf & Pacific Marine Surveyors and Consultants, Inc., I became an Accredited Marine Surveyor of the Society of Accredited Marine Surveyors in the Specialized field of Yachts, Small Craft (Y, SC). This required me to have at least five years of surveying experience on yachts and/or small commercial vessels up to 200 gross domestic registered tons (500 ITC), accumulated within the field of expertise which accreditation is requested, and to pass a written examination in the selected field of accreditation. Continuing education is required to maintain an active member status on a five year basis, which requires a minimum of sixty credit hours and attending two Society of Accredited Marine Surveyors annual International Meetings.

(Plaisance aff. [doc. 55 at 3).

Plaisance’s fire-investigation and vessel-and-marine-engine experience, augmented with his three-day fire-investigation course attendance, render him qualified to testify as to the origin and cause of the fire on the Mr. Charlie. In <u>State National Insurance Co. v. Anzhela Explorer</u>

LLC, 2009 WL 3335422 (S.D. Fla. Jan. 13, 2009), a party proffered an expert to testify "that an engine overheat caused the starboard exhaust hose to rupture," which "allowed water to enter the vessel" and sunk it. Id. at *1. The court described the expert's experience as follows:

> Mr. Schoenwald has over twenty years of experience in the United States Coast Guard, where he attained the rank of Chief Warrant Officer. While on active duty, he served as a maritime security inspector, control verification examiner, foreign vessel examiner, and a deck watch officer. Additionally, Mr. Schoenwald participated in numerous search and rescue and recovery missions. Mr. Schoenwald also inspected and supervised major vessel conversions and new boat constructions during his service with the Coast Guard.

Id. at *2. The opposing party argued the expert was "not qualified…due to his lack of education, training and experience in investigating causes of marine accidents," emphasizing that the expert "has limited knowledge of diesel mechanics or vessel construction and possesses no engineering qualifications." Id. The court disagreed and held that the expert's experience qualified him to testify as to the cause of the vessel's sinking. Id. See also Kansas City Fire & Marine Ins. Co. v. Long Island Power Auth., 2007 WL 7034284, *7-8 (E.D.N.Y. Nov. 23, 2007) (finding mechanical engineer "qualified to testify…as to the causation of the fire" at a residence, stating that "[a]lthough [engineer] has no formal training in cause and origin of fires, he has had experience participating in investigations with cause and origin personnel and had done some cause and origin investigations for insurance carriers").

Kornegay says that Plaisance "has never investigated a fire that was a result of an exhaust tube failure, as he alleges to have happened in this case" (doc. 34 at 6). The law is not that exacting in what it requires for qualification. "[A]n expert's training and experience need not be narrowly tailored to match the exact point of dispute in a case." United States ex rel. Duncan Pipeline, Inc. v. Walbridge Aldinger Co., 2013 WL 1338392, *5 (S.D. Ga. March 29, 2013).

Kornegay also contends that Plaisance is not qualified because he "recognized the need to retain a fire cause and origin expert [Jones] in order to determine the cause of the fire" (doc. 34 at 7). However, Plaisance did not recommend that Atlantic hire Jones because Plaisance felt that he personally lacked sufficient expertise (Plaisance dep. [doc. 53-4] at 158). Rather, Plaisance suggested hiring Jones because he felt it was part of "due diligen[ce]," that "when you're dealing with this amount of a claim[,]…you want to make certain that you're not making a mistake," and that "you hire other experts to make certain" (Plaisance dep. [doc. 53-4] at 158). Consistent with Plaisance's testimony, a March 13, 2013 email from Atlantic's claims representative, Rita Boggan, to her supervisor, Joe Gallagher, states that Boggan told Plaisance that "two professional opinions are better than one" (Atl. claim file pt. 2 [doc. 33-1] at 002801).

Plaisance's lack of extensive formal training as a fire investigator, his not being a "certified technician for the engines in question," and whatever inference might be drawn from his recommending that Atlantic also hire Jones, are matters going to the weight of Plaisance's testimony. See Leathers v. Pfizer, Inc., 233 F.R.D. 687, 692 (N.D. Ga. 2006) ("Gaps in an expert witness's qualifications or knowledge generally go to the weight of the witness's testimony[,] not its admissibility.") (internal quotation marks omitted). They do not, however, render him unqualified under Rule 702's "liberal approach to expert witness qualification." Id.

B. PLAISANCE'S METHODOLOGY IS RELIABLE.

1. Plaisance's investigation, reasoning, and conclusions.

Plaisance's investigation was similar to Jones's. He inspected the vessel remains at Barber Marina, considered Kornegay's account of the accident, reviewed photographs and took photographs himself, and looked at wiring on the vessel with Jones (Plaisance 9/9/13 rpt. [doc. 32-5] at 3-15). "An analysis that includes a physical examination of the scene, interviews, photographs of the scene, an examination of the evidence at the scene, wires, and an on-site visit is consistent with the scientific methods underlying fire incident investigation as set forth in NFPA 921." Argonaut Ins. Co. v. Samsung Heavy Indus. Co., 929 F. Supp. 2d 159, 166 (N.D.N.Y. 2013). Plaisance looked at burn/damage patterns to conclude that the area of origin was aft of the starboard engine, which is where the exhaust tube was located (Plaisance 9/9/13 rpt. [doc. 32-5] at 8, 10-11). "Analysis of burn patterns...is a reliable method used by fire analysts in determining the origin of a fire." Hartford Ins. Co. v. Broan-Nutone, LLC, 2004 WL 842516, *2 (N.D. Ill. April 19, 2004). Plaisance observed the heavy marine growth on the intake screens, noted the severe damage to the starboard exhaust tube as compared to the port tube, and postulated that burning-hot exhaust gases generated by the engine, which were not sufficiently cooled because the marine growth on the starboard screen prevented adequate water intake, caused a failure of the exhaust tube and ignited a fire. See Allstate Ins. Co. v. Gonyo, 2009 WL 1212481, *6 (N.D.N.Y. April 30, 2009) (cause determination involves subjecting "the empirical data collected...to an analysis premised on inductive reasoning").

Plaisance then tested his hypothesis "analytically by applying scientific principles in thought experiments.'" Severn Peanut Co. v. Industrial Fumigant Co., 2014 WL 1056991, *203 (E.D.N.C. March 17, 2014). The metallurgist, Dr. Clarke, advised Plaisance that about 80% of the starboard intake screen's area that would normally be open was obstructed by marine growth (Atl. claim file pt. 1 [doc. 32-11] at 000883, 000885). Plaisance, through research or discussions with the exhaust manufacturer, learned that the fiberglass exhaust tube and rubber connectors would fail if subjected to temperatures greater than what they were rated for, that the engine generated exhaust gases with temperatures well in excess of such rating, and that experiments had shown that the non-metal components of the exhaust would indeed fail under excessive temperature (Plaisance 9/9/13 rpt. [doc. 32-5] at 15-17). Plaisance also, through consultation with the screen manufacturer's engineer, determined that the obstruction of the screen reported by Clarke probably would prevent the intake of enough seawater to cool the exhaust, leading to an exhaust tube failure and ignition of combustibles (Plaisance 9/9/13 rpt. [doc. 32-5] at 17). Plaisance thus concluded that "[w]ithout proper cooling water flow and or adequate water pressure to the exhaust riser…is certain cause for a fire to start in the down line non-metal components" and that the fire was caused by "the excessive amount of marine growth on the starboard sea strainer screen" (doc. 32-5 at 17, 23).

Plaisance's methodology, like Jones's, is reliable.

2. Kornegay's contentions are either unsupported or go to the weight and credibility of Plaisance's testimony, not its admissibility.

Kornegay argues that Plaisance "never conducted any testing as to whether the screens were too occluded for the water pump to draw enough water to cool the engine," that there was "no testing conducted to determine the volume of water that was capable of being pumped through the screens," and that there was "no testing to determine how much water the pumps on this particular engine could have pumped through the screens" (dco. 34 at 12). Kornegay does not suggest how such testing would or feasibly could have been conducted. In any event, this lack of physical testing – something the NFPA does not require, incidentally – is not cause for exclusion.

In State National Insurance Co. v. Anzhela Explorer LLC, 2009 WL 3335422 (S.D. Fla. Jan. 13, 2009), a party proffered an expert to testify that an engine overheat caused the starboard exhaust hose to rupture, allowing water to enter the vessel and sinking it. The court explained the expert's methodology, which was not unlike Plaisance's, as follows:

> During the course of investigation, [the expert] personally inspected the wreck of [the vessel] and examined its port and starboard side engine rooms. [The expert] also reviewed transcripts of [a] deposition and…crew members' statements.

PD.11987343.1

> When examining the ship's engine rooms, [the expert] noticed severe signs of heat damage on the starboard side of the vessel. Based on this finding, [the expert] concluded that the overheating of the starboard engine caused the starboard flexible exhaust hose to rupture. According to [the expert], the rupture allowed for water to enter the hull and eventually cause the sinking.

Id. at *3. The opposing party argued that the expert's testimony should be excluded because he "failed to test and determine whether the size of the hole in the exhaust system was of such a diameter that would allow sufficient influx of water to cause the [vessel] to sink" and "did not perform almost any independent tests in order to support and strengthen his theory." Id. at *4. The court disagreed, stating that "[t]here is nothing per se unscientific about the reasoning and analysis adopted by [the expert]" and that "the flaws in [the expert's] report are more properly the subject of cross-examination at trial, and do not support the wholesale exclusion of this evidence." Id. See also Martinez v. Altec Indus., Inc., 2005 WL 1862677, *10 (M.D. Fla. Aug. 3, 2005) ("[W]hile defendants' contention that [expert] failed to perform adequate testing to support his conclusions certainly can be explored on cross-examination, it is not a basis to find his testimony unreliable.").

Kornegay contends that Plaisance does not know whether John Moran, the employee of the screen manufacturer who provided assistance, was qualified to perform the calculations or provide the opinions he did concerning whether the obstructed screen would permit sufficient water intake for the water pump to cool the exhaust (doc. 34 at 15). Plaisance testified that Moran is a mechanical or design engineer, and that Plaisance believed it appropriate to rely on information provided by a professional employed by the manufacturer (Plaisance dep. [doc. 53-4] at 255-56, 318-20, 520). This was permissible under Fed. R. Evid. 703, which states that "[a]n expert may base an opinion on facts or data in the case that the expert has been made aware of" and that "if experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject, they need not be admissible for the opinion to be admitted."

Kornegay also says that Plaisance gave Moran the "pump curve" for a "different engine than the engines" on the Mr. Charlie (doc. 34 at 15). Plaisance originally sent Moran the other engine's pump curve; Moran performed calculations based thereon indicating the water flow would not be sufficient; Plaisance then sent Moran the pump curve for the correct engine; and Moran, without performing new calculations, advised Plaisance that "I think the same basic problem exists," that "[t]he screen was too clogged to flow the required amount of water," and that "[u]nless the pump is made to operate at a higher vacuum, it probably wouldn't flow enough water" (Plaisance dep. [doc. 53-4] at 250-60). Plaisance considered this to be reliable information coming from a professional employed by the screen manufacturer (Plaisance dep. [doc. 53-4] at 252, 256, 318-20). Again, this is permissible under Rule 703. While Kornegay maintains that Plaisance "relied on Mr. Moran's assumptions of what the calculations [based on the pump curve for the MAN diesel engine] may show," this is subject matter for cross-examination and does not render Plaisance's methodology unreliable or his testimony inadmissible. See Stecyk v. Bell Helicopter Textron, Inc., 295 F.3d 408, 414 (3rd Cir . 2002) ("A party confronted with an adverse expert witness who has sufficient, though perhaps not overwhelming, facts and assumptions as the basis for his opinion can highlight those assumptions for effective cross-examination."); United States v. 14.38 Acres of Land, 80 F.3d 1074, 1077 (5th Cir. 1996) ("As a general rule, questions relating to the bases and sources of an expert's opinion affect the weight to be assigned that opinion rather than its admissibility and should be left for the jury's consideration.") (internal quotation marks omitted).

Kornegay contends that Dr. Clarke determined that 3.55 sq. in. of the port screen (about 20%) and 3.85 sq. in. (about 22%) of the starboard screen was open (unobstructed by marine growth), but that Plaisance "did not use the correct data" because his report has these reversed, stating that 3.55 sq. in. of the starboard screen and 3.85 sq. in. of the port screen was open (doc. 34 at 10; Plaisance 9/9/13 rpt. [doc. 32-5] at 17). But Clarke sent Plaisance emails containing the information Plaisance included in his report, that is, that that 3.55 sq. in. of the starboard screen and 3.85 sq. in. of the port screen was open (Atl. claim file pt. 1 [doc. 32-11] at 000883, 000885). Thus, Plaisance used the information just as Dr. Clarke provided it.

Kornegay maintains that Plaisance "does not know the temperature of the cooling water exiting the engines" (doc. 34 at 20). Kornegay fails to explain how the temperature of whatever cooling water may have been exiting the engines has any relevance, or how Plaisance could possibly have known such temperature since he was not there on the day of the fire with thermometer in hand to determine such water's temperature. Kornegay also says that Plaisance "does not know at what temperature the exhaust tube was exposed or for that matter how long it was exposed to the unknown temperatures" (doc. 35 at 20). Again, Kornegay does not explain how Plaisance could have determined this. In any event, Plaisance knew the temperature range of uncooled exhaust gases generated by the engine (Plaisance dep. [doc. 53-4] at 306; doc. 32-5 at 16-17), he just did not know exactly what temperature these gases would have been "with any amount of water running through" the exhaust tube (Plaisance dep. [doc. 53-4] at 344). He testified that "there's a point when if a trickle of water is going in that tube, it ain't gonna make a difference" (Plaisance dep. [doc. 53-4] at 343-44). Kornegay can cross-examine Plaisance concerning is alleged lack of knowledge.

Kornegay complains that Plaisance, like Jones, "failed to interview…the first responder on the scene, a marine police officer" (doc. 35 at 22). As previously explained in connection with Jones's testimony, Kornegay's fire investigator also did not interview the officer, that investigator concluded that the officer's report contained no information material to cause or origin, and the officer provided no such information when deposed. Plaisance did review the officer's report (Plaisance 9/9/13 rpt. [doc. 32-5] at 6). That he did not interview the officer makes no difference.

C. PLAISANCE'S TESTIMONY WOULD HELP THE TRIER OF FACT.

Plaisance testimony would help the jury because average laymen are not familiar with determining the origin and cause of fires. Whether the fire resulted from marine growth on the screen – a cause excluded under Atlantic's policy – is the central issue in the case, so Plaisance's testimony is relevant and would assist the jury to "determine a fact in issue" as contemplated by Rule 702(a).

Kornegay argues that Plaisance's testimony would be "cumulative to Jones's" and should therefore be excluded (doc. 34 at 24) – even though Kornegay is also attempting to exclude Jones's testimony. Fed. R. Evid. 403 permits a court to exclude relevant evidence "if its probative value is substantially outweighed by a danger of…needlessly presenting cumulative evidence." Permitting both Jones and Plaisance to testify would not be "needlessly cumulative." As a court rejecting a similar "cumulative" argument stated, "This evidence may be cumulative,…[but] defendants have not shown [it] to be a 'needless presentation of cumulative evidence.'… Defendants have not stipulated to the experts' conclusions. Their testimony is not about an ancillary matter. Their testimony pertains to the underlying issues before this court and is therefore not 'needless.'" Kay v. Lamar Advertising of S.D., Inc., 2009 WL 2525204, *2

(D.S.D. Aug. 17, 2009). The same is true here. Nor is Plaisance's testimony a mere "stamp of approval" of Jones's, or vice versa. The relevance and probative value of each of these witnesses' testimony outweighs any alleged "cumulativeness."

CONCLUSION

The Court should deny Kornegay's motion to exclude Jones and Plaisance's testimony.

s/William E. Shreve, Jr.
ALLEN E. GRAHAM
WILLIAM E. SHREVE, JR.
Attorneys for Plaintiff

OF COUNSEL:

PHELPS DUNBAR, LLP
P.O. Box 2727
Mobile, AL 36652
(251) 432-4481
Teeto.Graham@Phelps.com
William.Shreve@Phelps.com

CERTIFICATE OF SERVICE

I do hereby certify that I have on August 7, 2014, electronically filed the foregoing with the Clerk of Court using the CM/ECF filing system, which will serve electronic notifications of such filing to the following and/or that I have mailed a copy of the foregoing to the following:

John D. Richardson, Esquire
Aaron M. Wiley, Esquire
RICHARDSON LAW FIRM, LLC
Post Office Box 81227
Mobile, Alabama 36689

s/William E. Shreve, Jr.
WILLIAM E. SHREVE, JR.

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

ATLANTIC SPECIALTY INSURANCE COMPANY,	*	
	*	
Plaintiff,	*	CIVIL ACTION NO. CV-13-458
v.	*	
MR. CHARLIE ADVENTURES, LLC, and KIM P. KORNEGAY,	*	
Defendants.	*	

COMPLAINT FOR DECLARATORY JUDGMENT

Plaintiff Atlantic Specialty Insurance Company ("Atlantic Specialty") alleges as follows:

1. Plaintiff Atlantic Specialty is a New York corporation with its principal place of business in Minnetonka, Minnesota.

2. Defendant Mr. Charlie Adventures, LLC is a limited-liability company whose sole member, Kim P. Kornegay, is a citizen of Alabama. Therefore, Mr. Charlie Adventures is a citizen of Alabama.

3. Defendant Kim P. Kornegay is a citizen of Alabama.

4. The amount in controversy exceeds $75,000, excluding interest and costs.

5. The Court has jurisdiction under 28 U.S.C. § 1332, based on diversity of citizenship and the amount in controversy. The Court also has admiralty or maritime jurisdiction under 28 U.S.C. § 1333(1).

6. Venue is proper in this district under 28 U.S.C. § 1391(b)(2), because a substantial part of the events or omissions giving rise to the claim occurred in this district, or because a substantial part of property that is the subject of the action is situated in this district.

7. Atlantic Specialty issued a Yacht Policy to Mr. Charlie Adventures (policy no. JF02529), effective June 15, 2012 through June 15, 2013. The policy states that Kim P. Kornegay is an "additional 'Insured Person.'"

8. The Yacht Policy described the "Yacht Insured" as the M/V "Mr. Charlie," a 40-foot Cabo fiberglass cruiser with two inboard engines. The policy listed the "Amt. of Insurance" as $800,000, and $5,000 for "Personal Effects."

9. The Mr. Charlie was moored in or near Orange Beach, Baldwin County, Alabama.

10. On March 3, 2013, while Kornegay was operating the Mr. Charlie in navigable waters in Baldwin County, a fire started on the vessel. The fire spread and destroyed most of the vessel and its contents.

11. Atlantic Specialty's policy states:

LOSSES NOT COVERED (EXCLUSIONS)

***We** will not pay any loss, damage or expense caused by or resulting from:*

1. …marine life…

*2. **Your** failure to maintain the covered yacht in good condition and repair.*

12. The fire that damaged the Mr. Charlie was caused by or resulted from marine life growing on or in the vessel, which restricted the intake or flow of water to cool the engine and exhaust system, and by Mr. Charlie Adventures and Kornegay's failure to maintain the vessel in good condition and repair.

13. Mr. Charlie Adventures and Kornegay have made a claim under Atlantic Specialty's policy for the damage to the Mr. Charlie and its contents, and demanded that Atlantic

Specialty pay for the damage. Based on the above exclusions, however, Atlantic Specialty does not owe coverage.

14. This is a case of actual, justiciable controversy concerning insurance coverage, within the Court's jurisdiction.

PRAYER FOR RELIEF

Based on the above, Atlantic Specialty prays that the Court will order, adjudge, and declare that Atlantic Specialty does not owe coverage for the fire damage to the M/V Mr. Charlie and its contents. Atlantic Specialty further prays that the Court will grant such other, further, and different relief as may be warranted, the premises considered.

s/William E. Shreve, Jr. ___________________
ALLEN E. GRAHAM
WILLIAM E. SHREVE, JR.
Attorneys for Plaintiff

OF COUNSEL:

PHELPS DUNBAR, LLP
P.O. Box 2727
Mobile, AL 36652
(251) 432-4481

PLEASE SERVE THE DEFENDANTS BY CERTIFIED MAIL AS FOLLOWS:

Mr. Charlie Adventures, LLC
c/o Kim P. Kornegay
237 Deerwood Drive
Prattville, Alabama 36067

Kim P. Kornegay
237 Deerwood Drive
Prattville, Alabama 36067