

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF FLORIDA**

CASE No. 18-cv-80332-BLOOM/Reinhart

NATIONAL UNION FIRE INSURANCE
COMPANY OF PITTSBURGH PA,
as subrogee,

Plaintiff,

v.

SPX FLOW US, LLC,

Defendant.

ORDER

THIS CAUSE is before the Court upon Plaintiff National Union Fire Insurance Company of Pittsburgh PA's ("Plaintiff") Motion to Exclude the Testimony of Expert Witnesses, ECF No. [53] ("*Daubert* Motion"). The Court has reviewed the *Daubert* Motion, and the exhibits attached thereto, the supporting and opposing submissions, the record, the applicable law, and is otherwise fully advised. For the reasons set forth below, the *Daubert* Motion is denied.

I. BACKGROUND

On March 4, 2018, Plaintiff insurance company brought this action against SPX Flow US, LLC ("Defendant"), manufacturer of marine impeller pumps, for damage to Plaintiff's subrogor's motor yacht *Belissimo* (the "Vessel"). *See* ECF No. [1]. Plaintiff insured for property damage the Vessel owned by Lena Aquilla. In April 2015 a new raw water impeller pump manufactured and sold by Defendant was installed on the Vessel's engine. On July 28, 2016, the Vessel suffered an overheat that resulted in a fire and damage to the Vessel's engine room. The parties agree that the impeller pump failed but disagree as what caused the failure. Plaintiff maintains that a

manufacturing defect caused the impeller pump hub's blades to brake. Defendant argues that there is no evidence of a manufacturing defect in the subject impeller pump, but rather, the impeller "ran dry," meaning that the pump was deprived of the water that it needed to function. The parties agree that to prevail on its claim Plaintiff must either demonstrate a manufacturing defect in the subject impeller pump or eliminate all reasonable explanations for the impeller pump's failure other than a manufacturing defect.

Plaintiff seeks to exclude or limit the expert testimony of Dr. David Pope ("Dr. Pope"), a materials science professor, and Mr. Ron Parsons ("Parsons"), a master mechanic and certified fire investigator, regarding their findings about the cause of the incident. Plaintiff argues that Dr. Pope's opinion that the impeller pump failed due to a lack of sufficient water in the pump is excludable for failure to utilize a reliable methodology or to properly apply a reliable methodology. As to Parsons, Plaintiff argues that: (1) the opinion that an obstruction prevented water from entering the pump is not helpful and is without foundational support; (2) the opinion that vacuum kept the alleged obstruction in place is not connected to the data; (3) the opinion that the alleged obstruction caused the raw water impeller pump to run dry and fail is unreliable because Parsons did not calculate the amount of time it would take for a pump failure to occur and because the opinion is duplicative of Dr. Pope's opinion; (4) the opinion that the boat manufacturer failed to connect the raw water alarm and a low coolant temperature alarm is not relevant because the boat manufacturer is not a party to this litigation and because the American Boating and Yacht Council standards are silent as to whether to connect the alarms; (5) the opinion that Tom Aquilla, the Vessel operator and husband of the owner of the Vessel, failed to test the alarms is not relevant because he is not the Vessel owner and is not a party to the litigation; and (6) the opinion that

functioning alarms would have prevented the overheating and subsequent fire is not connected to the data.

Defendant responds that Dr. Pope's opinion is supported by his evaluation of the evidence. As to Parsons, Defendant argues that Parsons used a reliable method to investigate the possibility that an obstruction prevented water from entering the pump. Additionally, the failure to connect and test the seawater flow alarm are relevant as to the issues of proximate cause and comparative fault.

II. LEGAL STANDARD

Federal Rule of Evidence 702 governs the admissibility of expert testimony. When a party proffers the testimony of an expert under Rule 702 of the Federal Rules of Evidence, the party offering the expert testimony bears the burden of laying the proper foundation, and that party must demonstrate admissibility by a preponderance of the evidence. *See Rink v. Cheminova, Inc.*, 400 F.3d 1286, 1291-92 (11th Cir. 2005); *Allison v. McGhan Med. Corp.*, 184 F.3d 1300, 1306 (11th Cir. 1999). To determine whether expert testimony or any report prepared by an expert may be admitted, the Court engages in a three-part inquiry, which includes whether: (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; 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. *See City of Tuscaloosa v. Harcros Chems., Inc.*, 158 F.3d 548, 562 (11th Cir. 1998) (citing *Daubert*, 509 U.S. at 589). The Eleventh Circuit refers to each of these requirements as the "qualifications," "reliability," and "helpfulness" prongs. *United States v. Frazier*, 387 F.3d 1244, 1260 (11th Cir. 2004). While some overlap exists among these requirements, the court must individually analyze each concept. *See id.*

An expert in this Circuit may be qualified “by knowledge, skill, experience, training, or education.” *J.G. v. Carnival Corp.*, No. 12-21089-CIV, 2013 WL 752697, at *3 (S.D. Fla. Feb. 27, 2013) (citing *Furmanite Am., Inc. v. T.D. Williamson*, 506 F. Supp. 2d 1126, 1129 (M.D. Fla. 2007); Fed. R. Evid. 702). “An expert is not necessarily unqualified simply because [his] experience does not precisely match the matter at hand.” *Id.* (citing *Maiz v. Virani*, 253 F.3d 641, 665 (11th Cir. 2001)). “[S]o long as the expert is minimally qualified, objections to the level of the expert’s expertise go to credibility and weight, not admissibility.” *See Clena Investments, Inc. v. XL Specialty Ins. Co.*, 280 F.R.D. 653, 661 (S.D. Fla. 2012) (citing *Kilpatrick v. Breg, Inc.*, Case No. 08-10052-CIV, 2009 WL 2058384 (S.D. Fla. June 25, 2009)). “After the district court undertakes a review of all of the relevant issues and of an expert’s qualifications, the determination regarding qualification to testify rests within the district court’s discretion.” *J.G.*, 2013 WL 752697, at *3 (citing *Berdeaux v. Gamble Alden Life Ins. Co.*, 528 F.2d 987, 990 (5th Cir. 1976)).¹

When determining whether an expert’s testimony is reliable, “the trial judge must assess whether the reasoning or methodology underlying the testimony is scientifically valid and whether that reasoning or methodology properly can be applied to the facts in issue.” *Frazier*, 387 F.3d at 1261-62 (internal formatting, quotation, and citation omitted). To make this determination, the district court examines: “(1) whether the expert’s theory can be and has been tested; (2) whether the theory has been subjected to peer review and publication; (3) the known or potential rate of error of the particular scientific technique; and (4) whether the technique is generally accepted in the scientific community.” *Id.* (citing *Quiet Tech. DC-8, Inc. v. Hurel-Dubois, UK Ltd.*, 326 F.3d 1333, 1341 (11th Cir. 2003)). “The same criteria that are used to assess the reliability of a scientific

¹ Decisions of the former Fifth Circuit rendered prior to September 30, 1981, are binding decisions in the Eleventh Circuit pursuant to *Bonner v. City of Pritchard*, 661 F.2d 1206, 1209 (11th Cir. 1981) (*en banc*).

opinion may be used to evaluate the reliability of non-scientific, experience-based testimony.” *Id.* at 1262 (citing *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999)). Thus, the aforementioned factors are non-exhaustive, and the Eleventh Circuit has emphasized that alternative questions may be more probative in the context of determining reliability. *See id.* Consequently, trial judges are afforded “considerable leeway” in ascertaining whether a particular expert’s testimony is reliable. *Id.* at 1258 (citing *Kumho*, 526 U.S. at 152)).

The final element, helpfulness, turns on whether the proffered testimony “concern[s] matters that are beyond the understanding of the average lay person.” *Edwards v. Shanley*, 580 F. App’x 816, 823 (11th Cir. 2014) (quoting *Frazier*, 387 F.3d at 1262) (formatting omitted). “[A] trial court may exclude expert testimony that is ‘imprecise and unspecific,’ or whose factual basis is not adequately explained.” *Id.* (quoting *Cook ex rel. Estate of Tessier v. Sheriff of Monroe Cnty., Fla.*, 402 F.3d 1092, 1111 (11th Cir. 2005)). To be appropriate, a “fit” must exist between the offered opinion and the facts of the case. *McDowell v. Brown*, 392 F.3d 1283, 1299 (11th Cir. 2004) (citing *Daubert*, 509 U.S. at 591). “For example, there is no fit where a large analytical leap must be made between the facts and the opinion.” *Id.* (citing *General Electric Co. v. Joiner*, 522 U.S. 136 (1997)).

Under *Daubert*, a district court must take on the role of gatekeeper, but this role “is not intended to supplant the adversary system or the role of the jury.” *Quiet Tech.*, 326 F.3d at 1341 (internal quotation marks and citations omitted). Consistent with this function, the district court must “ensure that speculative, unreliable expert testimony does not reach the jury.” *McCorvey v. Baxter Healthcare Corp.*, 298 F.3d 1253, 1256 (11th Cir. 2002). “[I]t is not the role of the district court to make ultimate conclusions as to the persuasiveness of the proffered evidence.” *Quiet Tech.*, 326 F.3d at 1341 (internal quotation marks and citations omitted). Thus, the district court

cannot exclude an expert based on a belief that the expert lacks personal credibility. *Rink*, 400 F.3d at 1293, n. 7. To the contrary, “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.” *Quiet Tech.*, 326 F.3d at 1341 (quoting *Daubert*, 509 U.S. at 596). “Thus, ‘[o]n cross-examination, the opposing counsel is given the opportunity to ferret out the opinion’s weaknesses to ensure the jury properly evaluates the testimony’s weight and credibility.’” *Vision I Homeowners Ass’n, Inc. v. Aspen Specialty Ins. Co.*, 674 F. Supp. 2d 1321, 1325 (S.D. Fla. 2009) (quoting *Jones v. Otis Elevator Co.*, 861 F.2d 655, 662 (11th Cir. 1988)). Ultimately, as noted, “a district court enjoys ‘considerable leeway’ in making” evidentiary determinations such as these. *Cook*, 402 F.3d at 1103 (quoting *Frazier*, 387 F.3d at 1258).

Federal district courts are “required to rely only on admissible and reliable expert testimony, even while conducting a bench trial.”² *Gonzales v. National Bd. of Med. Exam'rs*, 225 F.3d 620, 635 (6th Cir. 2000) (Gilman, J., dissenting). However, “district courts conducting bench trials have substantial flexibility in admitting proffered expert testimony at the front end, and then deciding for themselves during the course of trial whether the evidence meets the requirements” of Rule 702. *Gonzales*, 225 F.3d at 635. Alternatively, in a bench trial, it has been an acceptable method “to admit evidence of borderline admissibility and give it the (slight) weight to which it is entitled.” See *SmithKline Beecham Corp. v. Apotex*, 247 F. Supp. 2d 1011, 1042 (N.D. Ill. 2003).

III. DISCUSSION

A. Dr. Pope

² This cause is currently set for bench trial during the Court’s two-week calendar beginning on April 1, 2019.

Plaintiff challenges Dr. Pope's opinions only as to the reliability element of *Daubert*. Dr. Pope opined that the impeller pump failed as a result of a "dry run." Dr. Pope's report demonstrates that Dr. Pope examined the subject damaged impeller, an undamaged impeller from the port engine of the Vessel, and an unused exemplar impeller. ECF No. [53-2] at 1 ("Dr. Pope's Report"). According to Dr. Pope's Report, when a pump runs dry the rubber at the end of the vane tips of the pump would be expected to heat up due to rubbing against the pump wall, lose strength due to the temperature increase, become sticky as chains break due to the temperature increase, and increase friction which further increases the temperature. Once the friction is so great the vanes are torn from the hub of the pump. This process can be detected upon inspection of a damaged pump by viewing the wear pattern of the frictionally heated rubber.

Dr. Pope examined fragments of vane tips from the subject pump and found that the surfaces show indications of flow and transport of the rubber across the surface of the tip. The part of the surface that was heated and flowed most is smooth and shiny. In contrast, the surfaces of the vane tips on the impeller pump from the port engine are slightly fuzzy.

Plaintiff argues that Dr. Pope failed to utilize a reliable methodology because he did not follow his own inspection protocol that he prepared in advance of his analysis. But Plaintiff does not explain why the failure to follow any particular step of the inspection protocol would render Dr. Pope's methodology unreliable. The Court does not believe that an expert's opinions are necessarily unreliable because the expert diverged from his or her protocol. Moreover, Dr. Pope explained that he was able to conduct his investigation and analysis without performing several items on his protocol by using work that others had already done. ECF No. [60-2] ¶ 10. For example, Dr. Pope did not need to take photographs in the stereomicroscope because other investigators had already done so and he did not need to perform EDS analysis in the Scanning

Electron Microscope because Plaintiff's expert, Frank Grate, had already performed the analysis and provided the results for those tests. *Id.* ¶¶ 11, 14.

Plaintiff also argues that Dr. Pope did not conduct any tests to determine whether the EPDM rubber that was on the subject impeller pump had in fact heated at all. But according to Dr. Pope, no scientifically accepted test exists to determine whether EPDM rubber has been heated to the point that it begins to soften, flow, and become sticky and its bonds have reconfigured. ECF No. [60-2] ¶ 21. Moreover, Plaintiff's expert did not conduct any such chemical test in an effort to rule out a dry run.

Plaintiff contends that Dr. Pope's testimony must be excluded because he could not rule out the possibility that the flow occurred prior to the date of the incident. Plaintiff relies on *Banta Properties, Inc. v. Arch Specialty Ins. Co.*, No. 10-61485-CIV, 2011 WL 7118542, at *1 (S.D. Fla. Dec. 23, 2011), a case in which plaintiff, a property management company, alleged that defendant insurer failed to pay for damage to plaintiff's property resulting from Hurricane Wilma. *Id.* at *1. Plaintiff's expert opined that Hurricane Wilma damaged windows and doors at Plaintiff's properties and replacement was necessary. *Id.* Defendant moved to exclude the testimony, in part, because Plaintiff did not observe the damage until more than two years after the hurricane struck the property. *Id.* at *3. At her deposition, plaintiff's expert "insisted that she was limiting her opinion to whether there was damage to the windows and doors during the days of the ... inspection, ... explaining that 'I can't do anything else.'" *Id.* The Court excluded the expert testimony for reliability and relevance due to her inability to attribute damage to Hurricane Wilma. *Id.*

Here, however, it is not Defendant's burden to prove that a dry-run caused the impeller pump to fail. The Court agrees with Defendant that Dr. Pope's finding that a dry run occurred,

regardless of when, is relevant to whether Plaintiff eliminated dry run as a cause of the impeller pump failure. Indeed, “a defendant may offer evidence of potential alternative causes of a disease or injury without needing to prove those alternative-cause theories with certainty or probability.” *Woodruff v. R.J. Reynolds Tobacco Co.*, No. 3:09-CV-12594, 2015 WL 506281, at *1 (M.D. Fla. Feb. 6, 2015) (citing *Aycock v. R.J. Reynolds Tobacco Co.*, 769 F.3d 1063, 1069-70 (11th Cir. 2014) (“While the plaintiff bears the burden of proving that the defendant’s negligence more likely than not caused the injury, that burden does not logically compel the conclusion that the defendant is precluded from offering evidence of possible explanations other than his own negligence. . . . The defendant’s ability to present alternate causes is of paramount importance in allowing for an adequate defense.”) (alterations adopted; internal quotation marks omitted)). To the extent that this defense is lacking, cross-examination is the appropriate course. *In re Trasyolol Products Liab. Litig.*, No. 08-CV-80419, 2010 WL 8354662, at *16 (S.D. Fla. Nov. 23, 2010) (finding that party’s criticisms of expert’s theory of alternative causation implicates weight, not admissibility).

Plaintiff levies additional attacks on statements Dr. Pope made in his deposition and on Dr. Pope’s failure to test his hypotheses. *See* ECF No. [53] at 8-10. Specifically, Dr. Pope stated that unreinforced EPDM rubber, or rubber without an inorganic filler, has a maximum service temperature of 150° to 177° Celsius (302° to 350.6° Fahrenheit) and that flow would commence at temperatures above 245° Fahrenheit. Plaintiff argues that Dr. Pope failed to find out if the blades at issue had inorganic filler. Plaintiff further argues that Dr. Pope failed to reconcile how flow could commence at temperatures above 245° Fahrenheit when the maximum service temperature range exceeds 245°. Additionally, Plaintiff contends that Dr. Pope did not conduct any tests to confirm his beliefs that flow would occur where the tip was most compressed against the pump

and that after 45 seconds of the pump running dry the tip would show flow. Similarly, Dr. Pope did not conduct a test to confirm that rubber would not transfer to the bronze surface pump.

The Court's role in ruling on a *Daubert* Motion is only to ensure that speculative, unreliable testimony does not reach the fact finder. Its role is not to draw "ultimate conclusions as to the persuasiveness of the proffered evidence," and, thus, to "supplant the adversary system or the role of the jury." *Quiet Tech.*, 326 F.3d at 1341 (internal quotations and citations omitted). Plaintiff's lines of attack are more appropriately addressed through cross-examination. *See Quiet Tech.*, 326 F.3d at 1341 (quoting *Daubert*, 509 U.S. at 596) ("[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."). At trial, the Court will give Dr. Pope's testimony the weight to which it is entitled.

B. Parsons

1. An Obstruction Prevented Water from Entering the Pump

Parsons opines that the subject pump was deprived of water from a sudden and isolated event. *See* ECF No. [55-2] ("Parsons's Report"). Parsons's opinion is based on the locations within the pump where broken impeller pieces were found and not found. *Id.* at 91. Additionally, Parsons found signs of corrosion/heat on the pump, specifically, melting at the end tips and a transfer of the EPDM rubber to the bore of the pump housing. *Id.* at 21; ECF No. [55-1] at 54:23-55:4.

Plaintiff argues that the proposition that an object covering the raw water intake grill on the hull of a vessel will cause a raw water impeller pump to run dry is not beyond the understanding of an average layperson. As such, no expert testimony to this effect is needed. Plaintiff cites *Hibiscus Assocs. Ltd. v. Bd. of Trustees of Policemen & Firemen Ret. Sys. of City of Detroit*, for

the statement of law that “[e]xpert testimony is properly excluded when it is not needed to clarify facts and issues of common understanding which jurors are able to comprehend for themselves.” 50 F.3d 908, 917 (11th Cir. 1995). In *Hibiscus* the Eleventh Circuit held that it was not abuse of discretion for the district court to refuse to receive expert testimony as to whether an “unconditional certificate of occupancy” had been obtained in a mortgage loan transaction because it was a simple factual matter that could have been established by evoking testimony from one of the participants in the transaction. *Id.* at 918. Here, as opposed to the simple factual matter that could be established by a fact witness in *Hibiscus*, the mechanics of a raw water impeller pump is exactly the type of issue for which an expert opinion is helpful. The Court would not expect an average layperson to understand what causes a raw water impeller pump to malfunction.

Plaintiff also argues that Parsons speculated as to what type of object caused the obstruction, how and why the obstruction was picked up, and how the obstruction was held in place. Defendant responds that during Parsons’s deposition, it was Plaintiff’s counsel who pushed Parsons to speculate regarding the characteristics of the obstructing object. Additionally, Defendant states that Parsons only provided the “how and when details” regarding the obstruction when prompted by Plaintiff’s insinuation through questions that it is not possible for an obstruction to cover the seawater intake grill and cause a dry run. The Court finds that if Plaintiff opens the door to it, as Plaintiff did in deposition, then Parsons may testify as to the type of object that may have caused the obstruction, how and why it may have been picked up, and how the obstruction was held in place.

Plaintiff contends that Parsons’s opinion that an obstruction could have caused the raw water impeller pump to run dry is unreliable because Parsons did not calculate the amount of time

it would take for pump failure to occur assuming an obstruction. But Plaintiff does not explain why such a calculation is necessary. Plaintiff may address this issue through cross-examination.

Plaintiff also argues that Parsons's opinion as to the possibility that an obstruction caused the impeller pump to run dry is duplicative of Dr. Pope's opinion. But neither Dr. Pope's Report nor his deposition testimony contain any opinions regarding an obstruction. Additionally, it appears that the experts will be testifying from "different professional perspectives." *Royal Bahamian Association, Inc., v. QBE Insurance Corp.*, 2007 WL 4225947 (S.D. Fla. Oct. 21, 2007) ("Testimony on the same topic by different experts, however, is not needlessly cumulative where the experts will testify from different professional perspectives."). Further, the experts have different educational and professional backgrounds and experiences. Nevertheless, Defendant is directed to coordinate Dr. Pope and Parsons's testimony to avoid needless duplication and cumulative testimony. Should Plaintiff determine it is appropriate, Plaintiff may assert its objection to the purportedly duplicative nature of Pope and Parsons's testimony during the trial.

2. Failure to Connect and Test the Alarms

Parsons's Report states that when the impeller pump failed, the raw water alarm should have sounded which would have prompted the operator to look at the engine gauges and shut the engine down. ECF No. [55-2] at 16, 138. A low coolant temperature alarm should have sounded as well. *Id.* The alarms did not sound because the motor vessel manufacturer did not connect the alarm wiring. *Id.* Additionally, the operator of the Vessel failed to test the alarms. *Id.* Parsons' Report concludes that there would be no damage whatsoever in the machinery room of the Vessel had the alarms been hooked up and tested by the Vessel owner and operator. *Id.* at 138.

Plaintiff argues that the alleged negligence of the manufacturer, a nonparty, cannot be used for purposes of comparative negligence. Plaintiff cites cases recognizing that federal maritime

law requires courts to apply principles of joint and several liability, pursuant to which fault cannot be allocated to a nonparty. *See, e.g., Farley v. Magnum Marine Corp., N.V.*, No. 89-cv-0725, 1995 WL 795711, at *6 (S.D. Fla. June 9, 1995). However, the manufacturer's alleged failure to install the alarm and Tom Aquilla's alleged failure to test the alarm are relevant to "proximate cause and superseding cause" which "apply in admiralty." *Muhs v. River Rats, Inc.*, 586 F. Supp. 2d 1364, 1373 (S.D. Ga. 2008); *see also Exxon Co., U.S.A. v. Sofec, Inc.*, 517 U.S. 830, 837 (1996) ("There is nothing internally inconsistent in a system that apportions damages based upon comparative fault only among tortfeasors whose actions were proximate causes of an injury. Nor is there any repugnancy between the superseding cause doctrine, which is one facet of the proximate causation requirement, and a comparative fault method of allocating damages.").³

Plaintiff also argues that the Court should exclude Parsons's opinion that the damage would not have occurred had the raw water alarm been hooked up and functioning. This is because Parsons did not calculate the amount of time that would have elapsed between the time that the raw water alarm sounded and when the cooling engine alarm in fact sounded. But Plaintiff does not explain why such a calculation would be necessary for Parsons to reach his conclusion. Plaintiff may address this issue through cross-examination.⁴

IV. Conclusion

For the foregoing reasons, Plaintiff's *Daubert* Motion, **ECF No. [53]**, is **DENIED**.

³ The Court need not determine at this stage whether Tom Aquilla is a co-owner of the Vessel, was acting as an agent for Lena Aquilla, or neither.

⁴ Plaintiff's argument that the American Boating and Yacht Council standards are silent as to whether to connect the alarms is also more appropriately raised on cross-examination.

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DONE AND ORDERED in Chambers at Miami, Florida, on March 14, 2019.

A handwritten signature in black ink, appearing to be 'JB' with a long horizontal stroke extending to the right.

BETH BLOOM
UNITED STATES DISTRICT JUDGE

Copies to:

Counsel of Record