

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF VIRGINIA
ROANOKE DIVISION

KEVIN WILHELM,)	
)	
Plaintiff,)	
)	
v.)	Civil Action No. 7:15-cv-00362
)	
AMERISTEP CORP., <i>et al.</i> ¹)	By: Elizabeth K. Dillon
)	United States District Judge
Defendants.)	

MEMORANDUM OPINION AND ORDER

In this products liability case, plaintiff Kevin Wilhelm alleges that he was injured when he fell from about twenty-five feet up in a tree while installing a tree step. He alleges that he had fully installed the tree step into the tree but that a defect in the step caused it to break into two pieces while he was standing on it. Specifically, he asserts that the tree step broke because of the location and size of an inclusion in its steel material. Defendants, who manufactured and distributed the subject tree step, do not dispute that the tree step broke or that there was an inclusion in it. They argue, however, that the tree step would not have broken if it had been fully installed, pointing to the testimony of their own experts on this point. They also contend that Wilhelm should not have been using the step at all due to his various health conditions and that he was either contributorily negligent or misused the product when he failed to install the tree step fully and failed to utilize his safety harness at all times in order to stay attached to the tree—instead, he detached it from the tree moments before falling.

¹ A number of defendants in the case have been dismissed, including the first-named defendant in the case style, Evolved Ingenuity, LLC. The clerk is directed to change the style accordingly, as set forth above. The remaining defendants are Ameristep Corp. and Dick’s Sporting Goods, both of whom distributed the tree step, and Primal Vantage Company, Inc., the manufacturer.

Ten motions are addressed in this opinion, all of which were briefed and argued before the court: defendants' motion for summary judgment, Wilhelm's motion for partial summary judgment as to a number of affirmative defenses, and eight motions seeking to exclude some of the other side's experts on various grounds. Because the expert motions affect the evidence available to the parties for summary judgment, the court addresses those first. The court's rulings are summarized at the end of this memorandum opinion and set forth in the conclusion as an order.

I. BACKGROUND²

A. The Subject Tree Step

The tree step at issue in this lawsuit is a product bearing the brand name of Ameristep Corp.—a 2011 Ameristep Grizzly model 104. It was manufactured by defendant Primal Vantage Company, Inc., and was purchased by Wilhelm at a Dick's Sporting Goods store. According to Wilhelm, he had purchased or owned between 500 and 1,000 Grizzly model 104 tree steps at the time of the accident. (Wilhelm Dep. 97, Dkt. No. 196-1.)

The tree step looks like a metal pipe that has been formed into a Z-like shape, and it is supposed to be made of 10B21 steel. The user installs the step by screwing the threaded end of the step into a tree until the vertical leg is nearly pushing on the tree. The other end has a slight bend to it. Once installed, the user steps on the tree step, and others, in order to reach a tree stand. As noted, the parties agree that there was an inclusion in the steel material from which the tree step was formed. The inclusion was located about two-thirds of the way down the threaded

² This case has a lengthy procedural history, but the details of that history have no bearing on the motions before the court, and so this opinion does not discuss them at any length. In brief, Wilhelm originally filed suit in state court in late 2014. The case was then removed to the United States District Court for the Eastern District of Virginia, transferred here and assigned to another judge of this court, and eventually reassigned to the undersigned in December 2017. Since its reassignment, the parties requested extensions of time on various deadlines, including the trial date. The trial is now set to begin on December 4, 2018.

portion of the step (from the step end to the tip end), and the subject tree step broke at the place where the inclusion was located. Plaintiff asserts that the inclusion was a manufacturing defect that weakened the step and allowed it to break, while defendants assert that it was not a defect.

B. The Accident

On the day of the accident, Wilhelm was installing the subject tree step and about 24 other tree steps, all of which would be used at a later date to install a treestand. (Wilhelm Dep. 102.) According to his testimony, Wilhelm was using his Hunter Safety System full body safety harness and lineman's belt while he was installing the tree steps. He owned a secondary tree strap, which could also attach to his harness, but did not have it with him up in the tree. At the time of his fall, he had installed about 20 tree steps by hand already. (Wilhelm Dep. 102, 109–10, 114–16, 120.)

Wilhelm was approximately 25 feet up in the tree when he approached a “Y” in the tree. At that point, he unhooked his lineman's belt to ascend above the “Y” in the tree. As noted, he did not have the tree strap (which attaches to the back of the safety harness) with him up in the tree, and he did not intend to use it that day. Wilhelm explained in his deposition that he believed it was safer to not use the secondary tree strap, and so he chose instead to maintain three points of contact (two feet and a hand or two hands and a foot) while transitioning the “Y” until he could reconnect his lineman's belt. (Wilhelm Dep. 118–222, 126–27, 135.)

Moments after disconnecting the lineman's belt—and before he could reconnect it—he fell. According to Wilhelm, he had both hands on steps above him, he had his right foot planted on the subject tree step, and then he moved his left foot to climb up to the next step, shifting his weight to his right foot as he did so. Although he recalled making contact with his left leg on the

next tree step, it was at that time that the subject tree step broke and caused him to fall.

(Wilhelm Dep. 126, 128–33, 135.)

With regard to the use of the safety harness, Wilhelm admitted that, if he had connected the secondary tree strap from the rear of his full body safety harness to the tree before disconnecting the lineman’s belt, he would not have fallen to the ground when the tree step broke. But he testified that he would not have been able to maintain three points of contact while connecting that secondary strap because it would have required both hands to connect. He also testified that he believed that he still would have been injured, even if he had not fallen to the ground. Specifically, he testified that he believed he could have “taken a sustained blow to the head” and suffered what he called “suspension injuries.” He also admitted that if he had kept the lineman’s belt connected, but not used the safety harness, he would not have fallen to the ground. But he testified that he could not have “transitioned the Y” without removing the lineman’s belt. (Wilhelm Dep. 120–28, 134–35.)

Defendants have a different version of how the accident occurred. First of all, they point to certain physical evidence to support their assertion that Wilhelm did not fully insert the tree step. This includes evidence that wood fibers and scratched surface paint were found only around a portion of the threaded portion of the tree step up to the inclusion, rather than the entire length of the threaded portion—as one would expect had the tree step been fully installed. (Defs.’ Resp. to Pl.’s Mot. Partial Summ. J. 3, Dkt. No. 134, at 3.)³ They also point out that Wilhelm testified he would normally not have placed two steps next to each other where he did, but he did so in order to stand on them to transition the “Y.” (*Id.*) From this, they argue that he

³ Wilhelm (through his experts) either disputes these observations about the wood fibers and paint scratches or counters them with explanations—other than an incomplete installation—as to why they might have been only on a portion of the threaded part of the tree step. By reciting these observations, the court is not suggesting that they are undisputed or that defendants’ interpretation of them is correct. It is simply noting that defendants rely on them to support their theory of how the accident occurred.

was using the subject tree step in a “temporary location,” and they rely on all of these facts and expert witness testimony to assert that he likely did not perform a full installation of the subject tree step. (*See id.*)

They also claim that their experts’ testing “is consistent with Plaintiff falling after disconnect[ing] his lineman’s belt and grabbing the subject tree step to attempt to recover from a fall.” (Defs.’ Mem. Supp. Mot. Summ. J. 5, Dkt. No. 130, at 10.) In addition to their experts’ testing, they point to EMS records where Wilhelm reported that he “fell 25 feet putting up [a] treestand, [and] thinks he ripped his right shoulder trying to catch self” (*Id.* (quoting Medical Record, Defs.’ Ex. 11).) They claim that their testing shows that a “dynamic” force must have acted upon the tree step to break it; Wilhelm’s simply stepping on it could not have caused the break. (*Id.*) Their theory of the accident, therefore, appears to be that he did not fully install the step, that something else caused him to slip or fall, and that, as he was falling, he grabbed at the tree step and it broke. (*Id.* at 14–15, Dkt. No. 130, at 19–20) (quoting defense expert Vogler’s conclusion that “for the subject tree step to fracture at the location of the inclusion would require both improper installation and a rapidly applied dynamic load”).)

Wilhelm has claimed that certain injuries resulted from the accident, including a closed head injury that caused a traumatic brain injury, a Lisfranc fracture to his right foot, injuries to his right shoulder, and the exacerbation of some pre-existing injuries, including back problems. But neither causation nor the extent of his medical injuries are at issue with any of the motions addressed herein, and so the court does not address them further.

C. Claims and Defenses

In his most recent complaint, plaintiff asserted a negligent design defect claim and a negligent manufacturing defect claim, as well as a breach of warranty claim. At the summary

judgment stage, he made clear he was no longer pursuing a design defect claim. Then, at the pretrial conference held November 29, 2018, he informed the court that he would no longer be pursuing a negligence claim at all. The dismissal of that claim renders certain defenses inapplicable under Virginia law, as the court discusses below.

Defendants' briefing focused on three affirmative defenses—contributory negligence, misuse, and assumption of the risk.⁴ At the hearing, defense counsel began discussing “misuse” as a separate defense, but later clarified that the failure to install the step properly was part of the contributory negligence defense, not a separate “misuse” defense. Defense counsel also indicated that defendants were not pursuing other affirmative defenses. At the conclusion of the hearing, therefore, the court understood that defendants were pursuing only two affirmative defenses: assumption of the risk and contributory negligence.

Then, in a post-hearing supplemental filing—albeit one that was not authorized by the court—defendants attempted to “clarify” statements that counsel made on the record. (Dkt. No. 203). In contrast to counsel's representations at the summary judgment hearing, defendants now state that they are maintaining both a “misuse” defense and a “failure to mitigate” defense. According to the filing, the misuse defense is based on the same actions by Wilhelm that defendants assert were negligent: using the tree step at all given his medical conditions, failing to fully install the tree step into the tree, and failing to properly use his lineman's belt and

⁴ Although misuse is commonly referred to as a “defense” in products liability actions, neither of the parties' proposed jury instructions contain any instruction indicating that the burden of proof is on defendants. Moreover, they both acknowledge that, to succeed on his breach of warranty claim, plaintiff must prove that the product was unreasonably dangerous either for the use to which it would ordinarily be put or for some other reasonably foreseeable purpose. See *Jeld-Wen, Inc. v. Gamble*, 501 S.E.2d 393 (Va. 1998) (discussing the concept as a component of duty); see also “Misuse—Whether misuse is a “defense””; burden of pleading and proof,” 2 Owen & Davis on Prod. Liab. § 13:23 (4th ed.) (“One reason the doctrine of misuse is difficult to apply is that there is no agreement on just what kind of legal doctrine it really is.”); “Misuse of the Product,” 11 Bus. & Com. Litig. Fed. Cts. § 109:81 (4th ed. 2018 Update) (noting that some jurisdictions treat misuse as an affirmative defense, while others have declared that foreseeable misuse is part of the plaintiff's prima facie proof of defect and causation). The court thus uses the description of misuse as a “defense” only in a loose sense.

secondary tree strap to remain connected to the tree. The failure to mitigate defense, similarly, is premised on Wilhelm's failure to properly use his safety harness. (Dkt. No. 203 at 3–4.) Defendants claim that his injuries would not have been as severe if he had slipped while connected to the tree.

In light of the fact that the only claim plaintiff will be pursuing at trial is his breach of warranty claim, the court concludes that both contributory negligence and assumption of the risk are no longer applicable in this case. *Wood v. Bass Bro Shops*, 462 S.E.2d 101, 103 (Va. 1995). Defendants have cited no authority to the contrary.⁵ Thus, the court's analysis on summary judgment will be limited to defendants' assertions of misuse and failure to mitigate.

II. DISCUSSION

A. Motions to Exclude Experts

As noted, there are eight motions in which the parties seek to exclude part or all of the testimony and/or reports of an opposing expert. The court first addresses defendants' motions and then turns to Wilhelm's. The court notes at the outset, though, that it denies without prejudice all of the motions to the extent that they argue that certain evidence should be excluded as cumulative. Whether or not certain evidence is cumulative depends on the presentation of evidence at the trial. In the absence of more information about which witnesses are being called when, what questions they are being asked, or what their precise testimony is, the court will not exclude evidence on the basis that it is cumulative prior to trial. The parties are free to raise that objection at trial with regard to any evidence, including the evidence discussed in this opinion.

⁵ At the summary judgment stage, instead, defendants argued that the damages from any breach of warranty cannot include consequential damages for personal injuries, and thus any damages on this claim would be limited to the difference between a defective and non-defective step, or about \$2. Wilhelm disputes this proposition and asserts he is entitled to consequential damages on his breach of warranty claim, citing Virginia Code § 8.2-715(2)(b). (Reply 6, Dkt. No. 175.) Neither party has asked for summary judgment on this legal issue concerning damages, however, and it is not before the court at this time.

Additionally, as to all of the parties' experts, the court notes that experts will not be permitted to testify as to opinions not previously and properly disclosed. Likewise, where an expert testified that he had no opinion about a specific subject, he may not offer any opinions on that subject.

With regard to the remaining grounds for the motions to exclude or strike, they are based either on an alleged lack of qualifications of a given expert or on assertions that the testimony is inadmissible under Federal Rule of Evidence 702 and the standards established in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). The court discusses briefly the standards governing each of these potential bases for exclusion of expert testimony.

As to the qualifications of a proposed expert, a witness may qualify as an expert on the basis of "knowledge, skill, experience, training, or education." Fed. R. Evid. 702. Additionally, the expertise must relate to the areas in which the expert is expressing opinions. *See Thomas J. Kline Inc. v. Lorillard, Inc.*, 878 F.2d 791, 800 (4th Cir. 1989). Exclusion should only occur where all bases for expertise are lacking with regard to the issue for which the opinion is offered, and a proffered expert "need not be precisely informed about all details of the issues raised in order to offer an opinion." *Kopf v. Skyrms*, 993 F.2d 374, 377 (4th Cir. 1993) (citing *Thomas J. Kline, Inc.*, 878 F.2d at 799).

But while the test for exclusion may be a "strict one," *Kopf*, 993 F.2d at 377, some type of relevant expertise is nonetheless required. For example, where experience is one of the bases for a witness's expertise, the witness must "explain how [his] experience leads to the conclusion reached, why [his] experience is a sufficient basis for the opinion, and how [his] experience is reliably applied to the facts." *Radiance Found., Inc. v. Nat'l Ass'n for the Advancement of Colored People*, 27 F. Supp. 3d 671, 674 (E.D. Va. 2013) (citations omitted). Additionally, a

witness's expertise must be tailored, to some degree, to the specific opinions offered and the particular facts in the case; general expertise or knowledge on a broad topic or general field may be insufficient, depending on the facts of a case. *Shreve v. Sears, Roebuck & Co.*, 166 F. Supp. 2d 378, 391–92 (D. Md. 2001) (“The fact that a proposed witness is an expert in one area, does not *ipso facto* qualify him to testify as an expert in all related areas.”) (citing *Oglesby v. General Motors Corp.*, 190 F.3d 244, 247 (4th Cir. 1999)). In *Oglesby*, for example, the court held that the testimony of a well-qualified mechanical engineer was properly excluded where he had no specialized experience or expertise in evaluating either automobile manufacturing processes or the strength of plastic automobile component parts, and he failed to test or analyze the relevant part. 190 F.3d at 250–51.

With regard to *Daubert* exclusion, the trial judge must act as a gatekeeper to ensure that any testimony concerning scientific, technical, or other specialized knowledge offered in support of a party's claim is “not only relevant, but reliable.” 509 U.S. at 589; *Kuhmo Tire Co. v. Carmichael*, 526 U.S. 137, 147 (1999) (quoting same). The proponent of the testimony must establish its admissibility, although it need not prove its expert's theory is correct. *Cooper v. Smith & Nephew, Inc.*, 259 F.3d 194, 199 (4th Cir. 2001); *Maryland Cas. Co. v. Therm-O-Disc, Inc.*, 137 F.3d 780, 783 (4th Cir. 1998). Indeed, “[v]igorous cross examination, presentation of contrary evidence and careful instruction on the burden of proof are traditional and appropriate means of attacking shaky but admissible evidence.” *Daubert*, 509 U.S. at 596. Nonetheless, “[t]he main purpose of *Daubert* exclusion is to protect juries from being swayed by dubious scientific testimony.” *Nease v. Ford Motor Co.*, 848 F.3d 219, 2131 (4th Cir. 2017) (citation omitted).

The Fourth Circuit has explained the *Daubert* standard as a “two-step gatekeeping function” required of trial courts. First, the trial court must ask whether proffered scientific evidence is valid and reliable. *United States v. Barnette*, 211 F.3d 803, 815 (4th Cir. 2000). The second question is whether the evidence will help the trier of fact, which is generally a question of relevance, or “fit”: assuming the evidence is reliable, will it “assist the trier of fact to understand or determine a fact in issue.” *Maryland Cas. Co.*, 137 F.3d at 784 (quoting *Daubert*, 509 U.S. at 592).

Although the inquiry is a flexible one, several factors may bear on the determination of admissibility of scientific or other expert evidence:

- (1) whether a theory or technique can be or has been tested;
- (2) whether it has been subjected to peer review and publication;
- (3) whether a technique has a high known or potential rate of error and whether there are standards controlling its operation; and
- (4) whether the theory or technique enjoys general acceptance within a relevant scientific community.

Daubert, 509 U.S. at 594. In short, the requirement is designed to ensure that the expert witness “employs in the courtroom the same level of intellectual vigor that characterizes the practice of an expert in the relevant field.” *Kuhmo Tire Co.*, 526 U.S. at 152. Moreover, “nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert.” *Id.* at 157 (quoting *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997)).

1. Defendants’ motion to exclude plaintiff’s metallurgist R. Craig Jerner, Ph.D.

Defendants move to exclude plaintiff’s proffered expert R. Craig Jerner, a metallurgist. Jerner, who along with defense expert Vogler conducted joint destructive testing of the subject tree step, passed away unexpectedly after he had prepared his report and had been deposed. Thereafter, plaintiff retained Dr. Baron as a substitute metallurgist expert.

Defendants argue that Jerner's opinions should be excluded as hearsay and because they are otherwise inadmissible expert testimony. Defendants focus largely on their contention that expert witness reports are inadmissible hearsay and that the report cannot come in through other experts. In response, Wilhelm notes the importance of Jerner to his case, and he also notes that Jerner's report was relied upon by other experts (and would typically be relied upon by those experts in their fields) and thus that his report and his opinions should be admissible. Wilhelm also argues that Jerner's testimony is not all cumulative with Dr. Baron's despite defendants' arguments to the contrary. Lastly, Wilhelm argues that Jerner's deposition testimony is admissible under Federal Rule of Civil Procedure 32(a)(4)(A).

At the hearing, defendants did not dispute the admissibility of Jerner's deposition testimony, nor could they, as it is clearly allowed under Rule 32(a)(4)(A): "A party may use for any purpose the deposition of a witness, whether or not a party, if the court finds that the witness is dead." Of course, the testimony generally is subject to objections on the same grounds as if Jerner were testifying. Fed. R. Civ. P. 32(b). On that issue, defendants objected on the grounds that Jerner's testimony was cumulative to Baron's. As noted above, the court will not address that prior to hearing the evidence at trial.

Although Wilhelm argued in his written briefing that Dr. Jerner's report itself is admissible, counsel's argument at the hearing left it unclear to the court as to whether Wilhelm still seeks to introduce Dr. Jerner's report itself. To the extent Wilhelm is so arguing, he may assert appropriate grounds for the admissibility of the report at trial.

To the extent Wilhelm's other experts rely on Dr. Jerner's report, however, and to the extent such reliance is consistent with the practice in these experts' respective fields, the court concludes that it is appropriate to allow a discussion of his findings or opinions through those

other experts. Fed. R. Evid. 703 (permitting expert opinion to be based on inadmissible evidence if it is “of a type reasonably relied upon by experts in the particular field in forming opinions of inferences upon the subject”); see *Bouygues Telecom, S.A. v. Tekelec*, 472 F. Supp. 2d 722, 728 (E.D.N.C. 2007) (discussing Rule 703 and explaining that while an expert cannot be “the mouthpiece” for another expert, he is entitled to rely on data provided by another where that data would be relied upon by experts in the relevant area). This is particularly true in this case, given that Dr. Jerner was the only expert of Wilhelm’s who had the opportunity to observe and record observations from the destructive testing of the subject tree step. Thus, to the extent Dr. Baron or other experts are relying on data or other supported opinions from Dr. Jerner’s report (and can testify that doing so is generally accepted in their respective fields), the court will not exclude the testimony simply because it is based on or incorporates portions of Dr. Jerner’s report.

2. Defendants’ motion in limine to exclude or limit Robert West, Jr., Ph.D.

Dr. West is a mechanical engineer and professor at Virginia Tech who testified at length at the hearing. His opinions are based almost entirely on a specific methodology that he used to reach his opinions: finite element analysis. Specifically, he developed a computer model using certain measurements and known information and then ran the model with a number of different scenarios (by using different variables and combinations of variables). From this, the model predicted the circumstances under which the subject tree step might break. Perhaps Dr. West’s most important opinion is that, due to the inclusion and other characteristics of the metal tree step, the tree, and the possible forces acting upon them, it is possible that the tree step could have broken in the location of the inclusion—which is where it did break—even if Wilhelm had fully installed it. Notably, this is an opinion that is directly contradicted by defendants’ expert, George Saunders.

According to Dr. West's report and his testimony at the hearing, finite element analysis is an accepted methodology in the field of mechanical engineering and it is a particularly appropriate approach to a failure problem with a number of unknown variables, such as the problem here. Dr. West explained the methodology in some detail during his testimony.

Defendants raised no real challenge to the use of that method itself, other than to argue that it was not "real-world testing" and that their own experts "proved"—using what they call real-world testing—that the step could not have broken unless it was only partially installed and a dynamic load acted upon it. Based on Dr. West's testimony and the failure of defendants to present information calling into question the appropriateness of the methodology itself, the court finds that the methodology is a generally accepted methodology for addressing the specific problem here and does not find that it should be excluded on the grounds that it is not real-world testing.

Defendants' second challenge to Dr. West's opinions is that his results are based on incorrect data and assumptions. Specifically, while not challenging the specific formulas used in his model, they quote their own expert in saying that the results are only as good as the data plugged into Dr. West's formula, and here, that equates to "garbage in = garbage out." (Defs.' Mem. Supp. Mot. Summ. J. 13, Dkt. No. 130, at 18.) The most notable of these was defendants' assertion that the model created by Dr. West used an incorrect measurement of the diameter of the fracture location. (*Id.* at 13–14, Dkt. No. 130, at 18–19.)

Dr. West insisted, however, that he and Dr. Dowling, a co-author of several expert reports, both independently measured the surface using precise instruments, and he insisted that the diameter used in their model was accurate. When questioned about this at the hearing, Dr. West offered some possibilities as to why the measurement might appear different than what is

shown in the two pictures upon which defendants rely heavily. As to one of the pictures, he noted that his model used the measurement of 7.65 as the load-bearing portion of the fractal surface, what he called the diameter of the thread root. He explained that his analysis used the thread root diameter as opposed to the fracture surface diameter “[b]ecause that is the section of the material that is carrying the load.” (Tr. of Dr. West testimony from *Daubert* hearing 61, Dkt. No. 225.) Put differently, the fracture surface includes a portion of the tree step that is not carrying the load. And he explained that, “[a]s the structure starts to fail . . . it will go in what requires the less expense of energy.” (*Id.* at 62.) With regard to the second picture, Dr. West essentially explained that he believed the picture was taken on an angle and he noted that the picture made it difficult to determine whether a certain area was part of the thread root. (*Id.* at 58.)

In short, he has offered explanations for the differences between the data he used and the pictures relied upon by defendants, and those explanations are not based merely on his say-so. He also notes that Saunders, defendants’ expert, also measured the root diameter of the thread as 7.65 mm. While defendants are free to pursue vigorous cross-examination on this topic, the court cannot say that the analysis is so flawed as to be unreliable and inadmissible, based on the supposed discrepancies.

Defendants also take issue with what they deemed Dr. West’s “inability” to identify the loads and stresses that are placed at various locations along the tree step. But Dr. West offered opinions regarding the likelihood of failure based on a number of different variables, and those were contained in his reports. The court finds these are adequate, under his theory and testing, to allow the jury to hear his opinions.

The court also is not concerned that Dr. West did not test the precise metal from the subject tree step or the exact limb of the tree into which it was inserted. Instead, Dr. West utilized values he obtained through testing or data from others with experience, and he used a range of values in his report based on the information provided to him. Thus, the court does not find that there was a failure to adequately recreate the conditions that existed. As discussed below, Wilhelm directs similar criticisms at Saunders’s testing, arguing that his exemplars could not have perfectly recreated the circumstances that existed. But the finite element analysis was a reasonable—and scientifically valid—approach to trying to recreate those values.

At the hearing, defendants’ counsel also maintained the argument that Dr. West’s lack of experience with the product and “not knowing how it work[s]” rendered him unqualified to offer his opinions.⁶ Defendants made a similar argument in their motion to exclude the testimony and opinions of Dr. Baron. They effectively argue that the experts’ lack of experience in analyzing a tree step (or related or similar products) render them unqualified to offer opinions here. The two cases that the parties focused on for purposes of this issue were *Pugh v. Louisville Ladder, Inc.*, 361 F. App’x 448 (4th Cir. 2010), and *Sittig v. Louisville Ladder Group, LLC*, 136 F. Supp. 2d 610 (W.D. La. 2001), both of which involved ladders. The plaintiff in *Pugh* alleged that he was injured after the ladder he was standing on buckled and caused him to fall. He asserted that the ladder had a manufacturing defect consisting of microscopic cracks, while defendant argued that the cracks were created from plaintiff’s body falling onto the ladder. The Fourth Circuit held that the district court did not abuse its discretion in allowing expert testimony from two mechanical engineers in that case, and it specifically rejected defendants’ argument that the

⁶ Specifically, defendants argue that that Dr. West’s lack of knowledge of the tree step, especially when coupled with the allegedly improper testing and calculations, rendered Dr. West unqualified.

experts' conclusions were unreliable because they failed to perform a number of tests and types of analysis, including computer modeling.

In *Sittig*, on which defendants rely, the district court excluded the testimony of two experts after finding that they lacked sufficient experience with the ladder at issue. Defendants' reliance on *Sittig* is misplaced. There, a district court did not allow proffered experts—with Ph.D.s in mechanical engineering and biomechanical engineering, respectively—to testify in the field of “ladder design.” The court noted that they had not worked for ladder manufacturers, had no experience or specific scholarship related to ladder design, ladder safety, or ladder warnings, had not conducted any research or inquires into the area of ladder warnings, and lacked basic knowledge about the different types of ladders (Type I, II, or III) and which type was involved in the case. 136 F. Supp. 2d at 618–19. Thus, despite their impressive academic credentials, the court found they had no expertise that “fit” the case.

This case, however, is not *Sittig*. First of all, and critically, *Sittig* involved a design defect claim while this case involves a manufacturing defect claim. For a design defect claim, it makes sense that an expert opining on an improper design of a product must know a lot about the product itself and its various designs in order to offer an opinion about whether a particular design was flawed or not. But the experts here are not being asked to evaluate the design of the tree step. Dr. West, a mechanical engineer, is testifying about the circumstances under which the tree step might break, based on a model that takes into account its properties, the properties of the type of tree into which it was inserted, the possible variables of where Wilhelm may have stepped and placed his weight, and other factors that could lead to failure. He also took into account the specific shape, design, and material of the tree step, and thus his analysis is based on the specific product at issue. Moreover, finite element analysis is a type of analysis that he is

undoubtedly qualified to perform, regardless of any specific knowledge or experience with tree steps specifically. So, even if *Sittig* were binding on this court, it does not support exclusion here.

Similarly, Dr. Baron, a metallurgist familiar with steel and various types of steel generally, is offering opinions about a defect in a type of steel that is similar in properties to many other types of steel that he has studied in depth. As he testified, there is nothing unique about this particular type of steel: it falls within a specific group or class of steel that all share certain properties. He is not offering an opinion that requires an in-depth understanding of tree step design, nor any opinion that takes issue with the type of steel used versus some other type, which might suggest a need for specific experience with 10B21 steel.

In short, the court concludes that neither Dr. West nor Dr. Baron should be disqualified from offering their respective opinions due to a lack of experience with tree steps generally. Defendants' arguments to the contrary simply draw the requisite "field of expertise" too narrowly. Instead, under the facts of this case, specific experience with a tree step is not required.⁷

In sum, the court concludes that all of the matters raised by defendants in an attempt to exclude Dr. West's opinions may provide fertile ground for cross-examination, but the court cannot say that the report or opinions of Dr. West are unreliable such that the court could exclude them under *Daubert*. For all of these reasons, defendants' motion to exclude Dr. West will be denied.

3. Defendants' motion to exclude or limit Norman Dowling, Ph.D.

Defendants also ask the court to preclude or limit Dr. Dowling from testifying in this case. Dr. Dowling is a mechanical engineer and colleague of Dr. West's who worked with Dr.

⁷ Defendants' other challenges to Dr. Baron are addressed separately.

West to analyze the tree step from a mechanical engineering standpoint. Drs. West and Dowling prepared several joint reports, in which their opinions were presented jointly, although they did different aspects of the testing and analysis.

According to Wilhelm, Dr. Dowling will offer two primary opinions. First, he will testify that the testing, calculations, and analysis performed by defendants' expert Saunders are not based on sound engineering principles, but instead are based on unreliable calculations and improper techniques, leading to incorrect results about the failure of the subject tree step. (Pl.'s Opp'n to Defs.' Mot. Exclude Norman Dowling 4, Dkt. No. 152.) These opinions are primarily set forth in Dr. Dowling's preliminary report dated September 19, 2017. Second, he will testify that the subject tree step, with the defect, would fail or fracture when it was installed fully with the heel of the step resting against the bark of the tree. (*Id.* (citing the West/Dowling report dated October 30, 2017, as revised on November 7, 2017, and the West/Dowling supplemental report dated May 7, 2018, which responds to Saunders's supplemental report).)

Defendants argue that Dr. Dowling's opinions should be excluded for many of the same reasons that they raised with regard to Dr. West's opinions, *e.g.*, his opinions are based on incorrect and flawed calculations and measurements and he did not perform any real world testing and so his opinions are speculative. They again rely on the *Sittig* case to say he does not have specific, particularized knowledge. And they assert the same "eyeballing" prohibition from the caselaw that they have raised with regard to some of their other *Daubert* motions. They also argue that Dr. Dowling's opinions are completely cumulative to Dr. West's. (*See generally* Defs.' Mem. Support Mot. Exclude Norman Dowling, Dkt. No. 140.)

Most of the arguments on both sides with regard to Dowling are the same arguments raised with regard to Dr. West's opinions. Thus, they are governed by the same analysis set forth

by the court in addressing the motion to exclude Dr. West and will not be repeated here. Also, as already noted, the court will not address at this time whether certain testimony is cumulative.

There is one issue related to Dr. Dowling that has not been addressed elsewhere in this opinion, however: the scope of the opinions Dr. Dowling may offer. There are two facets to this issue. First, defendants' motion points out a number of opinions that Dowling has stated he is not asserting, and they seek to exclude any opinions on those issues. (Dkt. No. 140 at 9–10.) These include: opinions regarding (1) whether there was adhesion of the inclusion and surrounding steel; (2) plaintiff's installation of the subject tree step; (3) the manufacturing process; (4) the material of the inclusion or how it got into the steel; (5) the overall design of the product; (6) the chemistry or hardness of the steel at issue; (7) accident reconstruction; (8) use of the safety harness; (9) warnings; and (10) hunter safety and use of the subject product. Wilhelm's response does not address these ten categories of opinions, and so the court concludes that plaintiff does not dispute that Dowling does not intend to offer opinions on these topics. Thus, the court will grant the motion insofar as it seeks to prevent Dr. Dowling from offering opinions on these topics.

The second facet of the scope of his opinions is a dispute that arose at the hearing. Specifically, the parties dispute whether the opinions in Dr. Dowling's preliminary report are admissible. Both in supplemental filings permitted by the court, and in responding to questions of the court at the pretrial conference, the parties addressed in more detail Dr. Dowling's individual preliminary report. This report offers a response to Saunders's initial testing and contains opinions critical of the opinions of defendants' experts, including Saunders and Dr. Vogler. (Sept. 19, 2017 Dowling Report, Dkt. No. 152-2.) It appears undisputed both that it was produced to defendants (based on it being attached as an exhibit to Dowling's depositions) and

that it was never converted into a final report.

Defendants maintain that any preliminary report or opinions of Dr. Dowling or opinions from it that were not subsequently included in a formal report should be stricken. (Dkt. No. 194.) Wilhelm has also submitted a supplemental filing addressing this issue. He attaches deposition excerpts from two of Dr. Dowling's depositions, and, based on them, he argues that the opinions in the preliminary report should be permitted.

With regard to this issue, the court has carefully reviewed the record, the reports, Dr. Dowling's deposition testimony, and the exchanges between counsel during his depositions, including the supplemental information provided. The court finds significant an exchange from Dr. Dowling's February 28, 2018 deposition in which he states that he has not yet "done a formal report addressing [Saunders's] reports," and plaintiff's counsel says plaintiff intends to have that done. Thereafter, in May 2018, Dowling and West authored a joint report responding to Saunders's contentions. Based on this, it could be that the May 2018 joint report was intended to be a final report incorporating Dowling's prior "preliminary" report (Dkt. No. 194 at 2–3 (quoting February 28, 2018 Dowling Dep. 5–8)), despite the fact that many of the opinions from the preliminary report were not contained therein, or at least "[n]ot in a direct way," as Dr. Dowling explained. (Feb. 28, 2018 Dowling Dep. 69, Dkt. No. 201-1, at 7.) Otherwise, no final report incorporating those opinions was produced.

Particularly in light of the indication that a final report would be forthcoming, it is understandable that defense counsel did not inquire about opinions in the preliminary report and believed they were not going to be offered, at least until incorporated into the forthcoming, promised "formal report." Accordingly, defendants were effectively deprived of the opportunity to examine Dr. Dowling on those issues. For this reason, the court will not permit Dr. Dowling

to testify as to opinions that appear only in his preliminary report.

4. Defendants' motion to exclude or limit Peter Wechgelaer, M.D.

Peter Wechgelaer is a medical doctor by training, although he is not currently a board-certified physician and was never Wilhelm's treating physician. He worked with Wilhelm for approximately three years until his own retirement in 2011, about one year before the accident. His most recent past experience was as an "Aeromedical Analyst," where he analyzed and evaluated personnel medical records to determine if a person's medical condition precluded him or her from working safely in a given position. His last job did not require him to practice medicine or to perform clinical exams; rather, he was tasked with determining whether an individual was able to perform his or her work safely. He testified, though, that he never made such a determination with regard to Wilhelm as part of his job. (Wechgelaer Dep. 26–27, Dkt. No. 167-2.)

As summarized by Wilhelm, Dr. Wechgelaer's opinions are as follows:

- 1) Wilhelm's performance record prior to the accident indicated a high level of functioning, both cognitively (based on writing and presentation skills) and observations showing he was active, athletic, and a talented photographer;
- 2) The finding by the VA that Wilhelm was 100% disabled would not have precluded Wilhelm from employment; indeed, disabled veterans are given certain preferences in hiring. The 100% disability rating determines compensation and benefit eligibility, not an ability to work at all; and
- 3) Wilhelm's condition prior to the fall would not have prevented him from gaining employment. His ability to perform after the fall "clearly diminished his physical abilities as well as his comprehension and communication skills."

(Pl.'s Opp'n to Mot. in Limine to Exclude Wechgelaer 4–5, Dkt. No. 167.)

Defendants claim that Dr. Wechgelaer's opinions are unreliable because he never performed any medical examinations of plaintiff and because his opinions are based on improper methodology and pure speculation. In essence, he evaluated plaintiff by reviewing Wilhelm's medical records and then by socializing with him and observing him over the course of one day, which occurred in 2017, approximately five years after the accident. Defendants also argue that his opinions about the meaning of Wilhelm's 100% disability rating and his opinion that, prior to the accident, Wilhelm would not have been precluded from employment or other physical activity based on that disability rating, are speculative.

As to the first opinion and the first part of the third opinion (which relates to Wilhelm's condition prior to the accident), the court concludes that Dr. Wechgelaer may offer these as expert opinions. First of all, as both a medical doctor and a person who reviewed medical files and evaluated persons to determine their ability to perform certain jobs, and as a work colleague of Wilhelm's with the ability to observe him, the court concludes that he has sufficient experience and knowledge to opine as to Wilhelm's physical and/or mental abilities and how they related to his ability to perform a job, at least up to the time that Dr. Wechgelaer retired.

With regard to the second opinion—which concerns the meaning of Wilhelm's 100% disability rating from the VA, Dr. Wechgelaer's deposition testimony suggests that he is familiar with VA disability ratings primarily as a result of his own disability rating. (Wechgelaer Dep. 31–33, 57–58, Dkt. No. 167-2.) He testified that he never worked for the VA, but that he would perform separation and retirement physicals for Navy personnel and that those results were then sent to the VA and used to determine VA ratings. (*Id.* at 56–57.) That does not constitute “expertise” by training, education, or otherwise, sufficient to qualify him as an expert in the field of interpreting VA disability ratings, and his reports do not identify any expertise in that regard.

Accordingly, the court will not allow Dr. Wechgelaer to offer any opinions regarding the meaning of VA disability ratings.

With regard to the second part of the third opinion (which relates to Wilhelm's ability to perform work or his physical and mental condition after the accident), the court concludes that Dr. Wechgelaer may not offer any expert opinion about this topic. Although he reviewed many of Wilhelm's medical records, he did not have a great familiarity with them during his deposition. Dr. Wechgelaer performed no exams or other medical or occupational evaluations of Wilhelm and has not shown that a mere review of medical records, along with a brief observation during a social visit, is the same type of rigor that would be applied in the field to determine a person's capability to be employed. The mere fact that Dr. Wechgelaer happens to be a physician does not render any medical opinion by him admissible. It still must be based on methodology accepted in the field. Here, any expert opinion by him as to whether Wilhelm was capable of working after his accident would not be based on a sound and reliable methodology.

Dr. Wechgelaer certainly may testify as a fact witness, however, about what he observed during his visit with Wilhelm.

5. Defendants' motion to exclude or limit Richard Baron, Ph.D.

Dr. Baron is a metallurgist who was hired after Dr. Jerner died. His opinions are fairly limited in scope. Specifically, Wilhelm offers him to give four opinions: (1) that the tree step failed from the presence of an internal nonmetallic inclusion; (2) that the nonmetallic inclusion was likely present in the steel casting, or ingot, of the original rod stock used to fabricate the subject tree step; (3) review of Dr. Jerner's file and deposition testimonies revealed no evidence to suggest that the involved tree step was misused during the incident; and (4) the 10B21 alloy material used to fabricate the tree step did not exhibit any bulk chemical composition or

mechanical property deficiencies that contributed to its failure. (Pl.’s Opp’n to Defs.’ Mot. to Exclude Richard Baron 4, Dkt. No. 165 (citing June 29, 2018 Baron report, Dkt. No. 165-1).)

Defendants do not challenge Dr. Baron’s expertise or qualifications to offer opinions regarding metallurgy, which is the bulk of his opinions. The court further concludes that he may rely on Jerner’s opinions and work because he testified such reliance is typical in his profession.

Taking the opinions in reverse order, then, defendants have no specific objection to Dr. Baron’s fourth opinion insofar as the court can tell, and so he will be permitted to offer that opinion. With regard to the third opinion, Dr. Baron has admitted that he has no knowledge or opinion as to whether or not plaintiff fully installed the tree step. So, to the extent that his opinion about “misuse” includes an incomplete installation, he would not be able to testify that there was no misuse. If his opinion is simply meant to be that there is no evidence that Wilhelm *otherwise* misused the tree step, such as by damaging it in some way, then he may offer that opinion, but defendants are free to elicit that he has no knowledge about whether it was properly installed or not, as he has admitted. With that limitation, the court also finds that the third opinion is admissible.

With regard to the second opinion, which concerns when in the manufacturing process the inclusion appeared, the parties agreed at the hearing that the issue had no bearing on any of Wilhelm’s claims. Accordingly, that opinion will be excluded as irrelevant.

Finally, with regard to his first opinion, there are really two parts to which defendants object: (1) that the inclusion was nonmetallic; and (2) that the inclusion was the reason the tree step failed during use. Defendants object to Dr. Baron offering any opinion that the inclusion was nonmetallic, noting that this opinion is significant because a metallic inclusion is likely to have some adherence to other surfaces and thus give additional strength at the inclusion site. By

contrast, a non-metallic inclusion is less likely to adhere to surrounding steel surfaces. But a review of Dr. Baron's report reveals a number of reasons for his conclusion that the inclusion was nonmetallic, and they are based on examinations of the subject tree step and an application of metallurgical principles. Thus, while it is true that Dr. Baron admitted he could not determine the precise material that made up the inclusion, he nonetheless offers specific reasons, backed by data and observations, as to why he believes the inclusion is nonmetallic. Defendants are, of course, free to subject him to vigorous cross-examination as to the grounds for his reasons. But the court finds no basis for exclusion of that portion of his testimony.

With regard to the remainder of his first opinion, which is effectively a causation opinion, defendants correctly note that Dr. Baron never performed any testing or calculations to determine whether the tree step would have broken if fully installed, even with the inclusion. He also is not an engineer, and the support he offers for this proposition is insufficient to render it reliable. In short, the court has reviewed his report and deposition and sees little support for his causation opinion. Accordingly, he will not be permitted to testify that the inclusion was the reason the tree step failed.

6. Plaintiff's motion to strike testimony and reports of George Saunders

Wilhelm's motion with regard to defense expert George Saunders asks the court to strike Saunders's reports *in toto* and to preclude him from testifying. Saunders is a mechanical engineer, and his opinions largely counter the opinions of Drs. West and Dowling. According to defendants, he is also an expert in "treestand hunting accident investigations, treestand warnings and instructions, proper and intended uses of treestands, and treestand hunting accident causation." They note that he has investigated over 200 cases involving treestands and components and has qualified as an expert in federal and state courts many times, including with

regard to warnings and instructions. He established and runs an independent laboratory dedicated to pre-production evaluations of treestands, full body harness fall arrest systems, and other hunting related products such as tree steps.

Unlike Drs. West and Dowling, who relied primarily on finite element analysis, Saunders manufactured “exemplar steps” to test his theories, although plaintiff challenges the accuracy of some of those exemplars, as discussed below. Saunders offers a number of opinions, but consolidating and summarizing the opinions listed, Saunders’s primary opinions are that: (1) Wilhelm did not fully install the tree step and that, if he had, even with the inclusion, it would not have broken; (2) that the tree step was not defective in design and was not unreasonably dangerous had it been properly used and installed; (3) that Wilhelm’s misuse was not foreseeable to the manufacturer; (4) that Wilhelm would not have fallen if he had his full body harness fall arrest system connected to the tree properly and consistently with all the written, video, and on-product warnings and instructions of the fall arrest system; and (5) that Wilhelm failed to care for his own safety and was responsible for his own injuries because he misused his tree step in an unsafe manner.⁸

Wilhelm lists eighteen opinions of Saunders and raises various distinct challenges to them. The court first briefly discusses the categories of challenges and then gives a summary of its rulings as applied to the 18 opinions listed by Wilhelm. The different grounds are addressed separately below.

⁸ The parties have a preliminary dispute about whether Saunders is offering only the 18 opinions stated by Wilhelm in his motion (Dkt. No. 143 at 2-4), or whether he also may offer additional opinions. The court agrees with defendants that Saunders’s reports identify more than 18 opinions. Specifically, in his first report, dated March 9, 2017, he identifies 18 opinions, but his second report, dated November 28, 2017, states that his opinions are encompassed in that report, the March 9 report, and his deposition. So, it appears that he is offering more than 18 opinions.

a. Saunders's methodology and use of exemplars

Wilhelm does not challenge Saunders's qualifications (at least as to his *engineering* opinions) but contends that his opinions do not satisfy *Daubert*. He argues that Saunders's opinions are not based on sufficient facts and data and are not the product of reliable principles and methods. With regard to any opinions based on the exemplar testing contained in his initial report or first supplement, Wilhelm contends that they are not admissible because he admitted that his exemplars did not include a similar inclusion.

Defendants counter that the initial testing, although the exemplars used did not include an inclusion, is nonetheless part of the engineering process of testing. They claim that these tests are relevant to show and compare how an intact tree step would perform versus one with a simulated inclusion. Thus, they argue that his initial testing, which involved more than a single test, is admissible as part of forming the basis for his opinions. It is essentially part of a "bracketing" technique that evaluates a series of exemplar tree steps with varying levels of damage at the same location as the subject tree step.

Wilhelm acknowledges that Saunders later went back and revised his opinions by using exemplars for which he attempted to recreate the inclusion. But Wilhelm argues that Saunders failed to follow proper scientific protocols or standards (including ASTM standards) when formulating his testing methods or the inclusion in the exemplars. Wilhelm criticizes the resulting exemplars on a number of grounds, and relies on the testimony of Drs. West and Dowling to argue that Saunders's methodology in creating the exemplars was incorrect and flawed. In his reply, for example, plaintiff claims that Saunders "did little more than one test, with one loading variable, without recreating the subject inclusion properly, on one type of wood [and] had no standards of control." (Pl.'s Reply Supp. Mot. to Strike Saunders 3, Dkt. No. 174.)

He contends that finite element analysis is the accepted and preferred engineering method in this circumstance because of the numerous tests it can run with many variables.

The court has considered all of Wilhelm's objections to Saunders's methods and testing and concludes that none of them require the exclusion of his opinions. While his approach, methodology, and testing is different than that employed by Dr. West, and while Dr. West and Saunders are critical of the other's methods, the court cannot say that Saunders's method of creating exemplars and testing them is not sufficiently reliable or accepted in the field. As the court views it, Saunders and Dr. West simply have different approaches to trying to address the problem, and there are, perhaps, pros and cons to each approach. Those pros and cons are the types of issues that can be addressed through cross-examination and the presentation of contrary evidence.

b. Saunders' opinions regarding topics other than engineering, including opinions concerning the warnings and instructions associated with the tree step, the tree harness, and the warnings on each

Wilhelm next argues that Saunders is not an expert in the field of accident reconstruction, metallurgy, nor is he a hunter safety expert, and so some of his opinions that touch on these topics should be excluded. Wilhelm notes that, although Saunders claims to be a human factors expert as it pertains to hunting products, he has no specific training and has taken only basic undergraduate level classes in product design. He also asserts that Saunders's lack of training, experience, and education in these areas, combined with a general lack of data, should preclude certain of his opinions. Defendants respond that Saunders relied on other experts from other fields to support his opinions, and that is permissible.

The court agrees that Saunders may not merely parrot the conclusion of another expert, without adding anything from his own field of expertise. But Saunders may rely on defendants'

other expert witnesses, as well as Wilhelm's own testimony concerning what Wilhelm understood about the products or warnings, in order to reach certain of his opinions. *See Fed. R. Evid. 703* (permitting expert opinion to be based on inadmissible evidence if it is "of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject"). Based on the court's review, Saunders' opinions fall in the category of opinions that occasionally rely on, but then add to, other experts' opinions. To the extent his opinions implicate any claim of design defects, however, there is no longer any design defect claim in the case, and so they are inadmissible.

As part of this challenge, Wilhelm argues that all of Saunders's opinions concerning the tree step, the tree harness, and the warnings on them are inadmissible. According to Wilhelm, Saunders offers no scientific foundation for these opinions. He simply opines as to what the instructions were, whether they were clear, and the foreseeability of a reasonable person following the instructions. He includes a string cite to various cases requiring testing by a humans factors expert to offer such opinions. (Dkt. No. 143 at 11.) In his reply, Wilhelm concedes that Saunders is qualified regarding the warning labels of tree stands and harnesses, but those are not the products at hand and thus are irrelevant. He also claims that Saunders is not qualified to opine on the warnings and labels of a tree step and his lack of testing means his opinions on this should be excluded.

Defendants counter that Saunders has testified repeatedly about his analysis concerning warnings and instructions and whether those warnings and instructions were followed. He is a voting member of the Treestand Sub-Committee of ASTM, which is tasked with reviewing treestands and their components, as well as the warnings and instructions that accompany them. They describe plaintiff's argument that he is not qualified to offer such opinions as "absurd."

Given his qualifications and expertise in creating and evaluating warning labels of products including tree steps, and the court's rulings on *in limine* motions allowing evidence of other products used by Wilhelm and allowing evidence regarding Wilhelm's knowledge of products and review of manuals and warnings, the court concludes that opinions on these topics are relevant, and would be helpful to the trier of fact. Although plaintiff challenges that such opinions are not admissible due to a lack of "testing" or a "scientific basis," he has not identified what types of testing should be done and he has not challenged any specific opinion as unreliable.

c. Opinions critiquing finite element analysis

Wilhelm next contends that Saunders should not be able to offer opinions criticizing the finite element analysis performed by plaintiff's experts, because he is not sufficiently familiar with the model used or how the values he criticizes were incorporated into that model. He also contends that Saunders is not an expert on finite element analysis, is not "comfortable enough" to build a model on it, and as such, he should not be permitted to offer opinions on the propriety of the finite element analysis used by Drs. West and Dowling. The court disagrees. Saunders testified that he was not comfortable with using the software package that Dr. West used in the analysis, but he also testified that he understood the type of analysis employed and its purposes. Additionally, his reports offered specific critiques of the model and the data used by Drs. West and Dowling. The court will allow these opinions.

d. Legal conclusions couched as opinions

Wilhelm also argues that many of Saunders's opinions constitute legal conclusions and are inadmissible on that basis. As all the parties here recognize,

expert opinions that merely recite "a legal standard and draw[] a legal conclusion by applying law to the facts is generally

inadmissible.” *United States v. McIver*, 470 F.3d 550, 561–62 (4th Cir. 2006) (citing *United States v. Barile*, 286 F.3d 749, 760 (4th Cir. 2002)). An expert’s testimony is deemed a legal conclusion where “the terms used by the witness have a separate, distinct and specialized meaning in the law different from that in the vernacular.” *Id.* at 562. The district court’s task “is to distinguish [helpful] opinion testimony that embraces an ultimate issue of fact from [unhelpful] opinion testimony that states a legal conclusion.” *Barile*, 286 F.3d at 760.

JFJ Toys, Inc. v. Sears Holdings Corp., 237 F. Supp. 3d 311, 324 (D. Md. 2017).

Wilhelm objects to opinions 8, 10, and 12–18 on this basis, and also references opinion 6 in one part of this argument. Defendants respond that Saunders’s opinions involve him applying his background, training, and expertise to his review of known information, which he is permitted to do. They argue that his opinions “will assist the jury to understand the evidence and determine facts at issue, as expert testimony must.” Furthermore, defendants’ counsel expressed at the hearing that he would not attempt to elicit opinions from any expert that called for a legal conclusion.

Applying the foregoing standards to Saunders’s opinions, the court agrees that some of those opinions track Virginia model jury instructions or use legal terminology in a way that render them inappropriate expert opinions. For example, he may not offer any opinion that Wilhelm’s misuse “was not foreseeable” to defendants, that his misuse or that Wilhelm failed “to use reasonable care to ensure his own safety.”

e. Opinions regarding dynamic loading

Wilhelm also challenges Saunders’s opinions on dynamic loading as “irrelevant, misleading, not based on record evidence, and unreliable.” This is mostly because Saunders performed no testing or calculations to test his theory that a “dynamic load” (*e.g.*, Wilhelm falling) must have operated on the subject tree step for it to break. In response, defendants state

that any additional testing regarding a dynamic load was unnecessary. Instead, they contend that there are only two loading possibilities: static loading and dynamic loading. Because Saunders “fully evaluated the static realm of loading and determine that it will not result in separation of the tree step[,] [t]he only other possibility would be dynamic loading.” (Defs.’ Opp’n to Pl.’s Mot. to Strike Saunders 19, Dkt. No. 157.)

The court agrees with defendants’ reasoning and so concludes that Saunders may offer an opinion concerning dynamic loading. His opinion that the subject tree step, if fully installed, could only have broken had a dynamic force acted upon it is simply the logical corollary to his opinion that the tree step would not have and could not have broken if fully installed by any amount of static force. Put differently, his opinion about dynamic loading is the result of a process of elimination of the possibility of a static load, causing the failure. Thus, the fact that Saunders did not conduct testing of dynamic loads specifically does not render the opinion inadmissible.

f. Opinions within the common knowledge of jurors

Lastly, Wilhelm claims that certain of Saunders’s opinions are within common knowledge of the jurors and thus not proper subjects of expert testimony. According to Wilhelm, that includes the opinions Wilhelm identifies as 1–7 and 9. Defendants respond that Saunders’s decades of experience with engineering, as well as his vast experience with hunting, treestands, and treestand component products, will assist the triers of fact, many of whom will not be familiar with engineering or hunting or the components used.

The court concludes that most of the opinions identified by plaintiff are not within the common knowledge of jurors and that expert testimony would be helpful to the trier of fact.

Given Saunders' vast experience with hunting products and their safe use, warnings associated with such products, and his accident reconstruction experience, he may offer such opinions.

g. Specific rulings as to 18 listed opinions

Consistent with the reasoning above, the court will allow the following opinions, as numbered by Wilhelm: 1–7, 9, the first part of 10, 11, 14, 17.

Opinions 8, 13, 15, 16, and 18 will be excluded because they are legal conclusions. The second part of 10 may be excluded depending on the wording. In particular, Saunders may not offer a causation opinion using legal terminology. Opinion 12 is now irrelevant, based on the dismissal of a design defect claim, and so that will also be excluded.

7. Plaintiff's motion to exclude Michelle Vogler

Michelle Vogler, Ph.D., is a metallurgist and she (along with Jerner, plaintiff's now-deceased metallurgist) engaged in destructive testing of the subject tree step. Although plaintiff's motion seeks to strike her report and her testimony *in toto*, his motion challenges only four specific opinions of Vogler, as numbered by plaintiff.⁹ At the outset, moreover, the court notes that Vogler is clearly an expert in the field of metallurgy, and plaintiff does not argue to the contrary. Notably, moreover, her opinions are based almost entirely on data she gathered from the destructive testing that she and Dr. Jerner jointly performed and her observations and reports from that testing. Wilhelm does not challenge her methodology nor her observations directly.

a. Opinions within common knowledge of jurors

First, Wilhelm challenges what he identifies as opinion 3, in which Dr. Vogler opines that evidence of tree material embedded in the subject tree step indicates that the tree step was only inserted into the tree at the time of the accident up to the location of the fracture, which

⁹ There is, again, a preliminary issue that seems needlessly confusing concerning what opinions each side contends Vogler is offering. But in any event, the only opinions Wilhelm challenges are the four discussed herein.

installation was improper and contrary to the product instructions/warnings. Wilhelm claims that the existence of tree material is obvious from the pictures and is a matter within common knowledge of juries. He also points to her testimony in which she agreed that a person who is not a metallurgist or material scientist could look at a picture and know with some degree of certainty that the fibers were part of a tree and that it would not require an expert opinion to know that. He makes the same argument with regard to her opinion about “visual paint smears” being only on the portion of the step that goes out to the inclusion. She admits she did not do any testing and did not include an opinion about the paint smears in her report.

As to plaintiff’s argument that the tree fibers and smeared surfaces are within the jury’s common knowledge, defendants cite at length to Vogler’s deposition testimony concerning both. Her explanation of it contains more scientific reasons regarding why the wood and paint smears would be there and discusses what causes the paint smears (a specific type of force on the threads as they come into contact with the tree). She observed the paint smears and the wood fibers and drew upon her background experience and expertise to arrive at the opinion that the tree step had not been completely installed. She is permitted to use her own observations to reach such conclusions, without doing any independent “testing.” Her opinions also assist the jury because they provide the conclusions to be drawn from the observable evidence, which may not be within the common knowledge of jurors. Put differently, the existence of the wood fibers and paint smears might be plain to most jurors, but the significance of them may not be. Her testimony will assist jurors in understanding the significance.

b. Opinions that rely on Saunders’s data or conclusions

Second, Wilhelm challenges Vogler’s opinions that rely on Saunders’s tests results (identified by Wilhelm as Vogler Opinions 3, 5, 12, and 13). He claims that she does not relate

any of those opinions to her own expertise, or any analysis of the record evidence or independently gathered data. He then argues that she may not just parrot another expert's opinions. Wilhelm also argues that those opinions are inadmissible in any event for the same reasons set forth in its motion in limine to exclude Saunders.

Defendants note that reliance on other experts' opinions is permissible, and they claim that she used his testing and opinions to support her own opinions as an expert metallurgist. They claim that Dr. Vogler's opinions build upon Saunders's testing and opinions and connect them specifically to the field of metallurgy.

Defendants have the stronger argument on this issue. To the extent Dr. Vogler will testify that it is common for metallurgists to rely on the type of information being conveyed by Saunders, then it is appropriate for her to rely on that information and to connect it to her own expertise. The court will not exclude these opinions.

8. Plaintiff's motion to exclude Lorne Smith

Lorne Smith is offered by defendants as a treestand and hunting investigator. According to defendants, Smith is "the most recognized treestand hunting investigator and reconstructionist in the United States, and likely the world." He's investigated and reconstructed approximately 500 treestand hunting accident cases over thirty years, and often examined and investigated the treestand components such as tree steps and safety harnesses.

He holds a number of opinions, most of which pertain to Wilhelm's failure to properly use the safety harness and to properly install the tree step, as well as his failure to heed the warnings and properly follow the instructions given with each. He also testifies that Wilhelm should not have been installing tree steps or using a treestand because of his medical issues.

Plaintiff's motion challenges Smith's qualifications and criticizes him repeatedly for not

undertaking any studies or empirical testing, and for never testing or examining Wilhelm's ability to interact with a given piece of equipment. Plaintiff also challenges Smith's opinions on the grounds that they relate to products other than the tree stand (most notably the safety harness) and that defendants cannot rely on the warnings of another product to overcome the defect in their own. This argument relates to opinions 1–6 and 8–11.

Plaintiff also asserts that Smith's opinions are within the common knowledge of jurors and that they are not based on any studies, data, or testing, and so the jurors' own guesses about what would have happened are as good as Smith's. Lastly, plaintiff argues that Smith's opinion 15 is a legal conclusion and should be stricken.

Defendants respond with a lengthy section detailing Smith's qualifications and experience. They also claim that he is entitled to rely on the opinions of other experts (including medical doctors) to form his own opinions about whether Wilhelm could safely be using a tree step. Finally, they claim that his opinions are not within the "common knowledge" of jurors and that opinion number 15 is not an impermissible legal conclusion. The mere fact that he includes the language that all of his opinions are given within "a reasonable degree of certainty" does not make that opinion a legal conclusion.

The court agrees with defendants that Smith's expertise in treestand and other hunting accident investigations qualifies him to offer many of the opinions that he proffers. The court also finds that his explanations as to the use of the various products will be helpful to jurors, especially any that are unfamiliar with the products or with hunting in general.

There are certain opinions, however, that the court does not believe he is qualified to offer. In particular, the court will not allow him to testify that Wilhelm's medical conditions prevented him from using these products. He is not a medical doctor, and he performed no

evaluation or examination of Wilhelm that would allow him to opine on Wilhelm's physical condition at the time of the accident.

Moreover, while he may testify about the warnings that accompany the products that Wilhelm was using (or he believes that Wilhelm should have been using), he may only testify about how Wilhelm understood the warnings to the extent he is relying on Wilhelm's own testimony. Additionally, the court will not permit Smith to offer any opinions that are merely legal conclusions. Again, though, counsel has assured the court that he will not ask for questions that call for legal conclusions. Aside from those limitations, Smith's opinions will not be excluded on the other grounds raised in this motion.

B. Cross-Motions for Summary Judgment

1. Standard of review

Summary judgment may be granted if the moving party "shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). "When faced with cross-motions for summary judgment, the court must review each motion separately on its own merits . . . [and] 'resolve all factual disputes and any competing, rational inferences in the light most favorable' to the party opposing that motion." *Rossignol v. Voorhaar*, 316 F.3d 516, 523 (4th Cir. 2003) (quoting *Wightman v. Springfield Terminal Ry. Co.*, 100 F.3d 228, 230 (1st Cir. 1996)). The party opposing the motion, however, "may not rest upon the mere allegations or denials of [his] pleadings,' but rather must 'set forth specific facts'" showing a triable issue. *Bouchat v. Balt. Ravens Football Club, Inc.*, 346 F.3d 514, 522 (4th Cir. 2003) (quoting Fed. R. Civ. P. 56(e)). Parties may point to such facts by "citing to particular parts of materials in the record . . . or . . . showing that the materials cited do not establish the absence or presence of a genuine dispute." Fed. R. Civ. P. 56(c)(1). "If the

evidence is merely colorable, or is not significantly probative, summary judgment may be granted.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 249–50 (1986) (citations omitted).

2. Wilhelm’s motion for partial summary judgment

Wilhelm’s motion asks for summary judgment in his favor as to a number of affirmative defenses raised by defendants in their answer. Although defendants’ response seemed to indicate they were maintaining all of the defenses pleaded in their answer, defendants’ counsel has since narrowed the list considerably. Based on counsel’s clarification and concessions, and in light of plaintiff’s representation that he is now pursuing only a breach of warranty claim, the only remaining affirmative defenses on which Wilhelm could be seeking summary judgment are misuse and a failure to mitigate. The court addresses each of these in turn.

a. Misuse

In order to prevail on a breach of warranty claim, one of the elements that Wilhelm must establish is that the tree step “was unreasonably dangerous either for the use to which it would ordinarily be put or for some other reasonably foreseeable purpose.” *Evans v. Nacco Materials Handling Group, Inc.*, 810 S.E.2d 462, 246 (Va. 2018). Thus, if a plaintiff is using the product in a manner that is not reasonably foreseeable, he cannot prevail.

As another judge of this court has explained,

[u]nder Virginia law, misuse of a product bars claims of breach of warranty. *Besser Co. v. Hansen*, 243 Va. 267, 415 S.E.2d 138, 144 (1992). Misusing a product means using it in a manner which the seller could not have reasonably foreseen. *Higgins v. E.I. DuPont de Nemours & Co.*, 863 F.2d 1162, 1167 (4th Cir.1988). A court may appropriately grant the defendant summary judgment if the plaintiff clearly misused a product, and that misuse was the sole proximate cause of damage or the intervening or superseding cause of damage. *Id.*

Fournier Furniture, Inc. v. Waltz-Holst Blow Pipe Co., 980 F. Supp. 187, 190 (W.D. Va. 1997).

As noted, defendants' misuse defense is based on three basic assertions: (1) Wilhelm should not have been using the tree step because of his medical conditions; (2) Wilhelm failed to screw the tree step fully into the tree; and (3) Wilhelm failed to use his safety harness in the required manner, despite knowing the probable consequences of that failure. At the pretrial conference, the court ruled that the record was devoid of any evidence that any of Wilhelm's medical conditions caused his fall. Because of the lack of any evidence of causation, the court will not allow evidence about whether or not Wilhelm should have been using the tree step in light of his medical conditions.

There is certainly some evidence to support that Wilhelm failed to screw the tree step fully into the tree. This comes from the testimony of defendants' experts and from the physical evidence (the wood chips and paint smears only up to the break). Wilhelm has testified to the contrary, of course, and his experts (Drs. West and Dowling) will opine that, even with a fully installed tree step, this particular tree step with this particular inclusion could have broken. So, there is a dispute of fact as to this issue.

There is also ample evidence that Wilhelm failed to use his safety harness, despite knowing the consequences of that failure. Indeed, Wilhelm testified that he knew that he should be utilizing a safety harness while installing the tree steps, and he testified that he would not have fallen to the ground had he connected a secondary strap before disconnecting his lineman's belt.

But Wilhelm also has offered an explanation for why he did not use the secondary strap while working around the Y in the tree, *i.e.*, he was instead maintaining "three points of contact" between his body and the tree. He also testified that he was concerned about a "suspension injury" from the secondary strap, which attaches from the back of the harness, rather than around the waist. This, too, creates a dispute of fact as to whether there was a misuse of the tree step (by

Wilhelm's using it in a way not reasonably foreseeable to defendants). Accordingly, regardless of whether the facts are viewed in the light most favorable to defendants (to rule on plaintiff's motion) or for plaintiff (to rule on defendants' motion), the court concludes that there are disputes of fact that preclude summary judgment as to the applicability of the misuse defense.

Plaintiff argues, however, that even if these factual predicates were established, both of these uses were reasonably foreseeable to defendants and thus cannot support a misuse defense. The court disagrees, based primarily on the Supreme Court of Virginia's decision in *Wood*, 462 S.E.2d 101. As described by the *Wood* court, the plaintiff there "presented evidence at trial that the tree stand collapsed because the stand was defectively designed and manufactured. The defendant presented evidence that the tree stand was not defective and that Wood's injuries were caused because, *inter alia*, he had failed to wear a safety belt when preparing to descend from the tree stand." 462 S.E.2d at 102-03.

In that case, the court first noted the unavailability of an assumption of the risk claim to respond to the breach of warranty claim, but it went on to note that misuse was a defense available to respond to a breach of implied warranty claim. It then specifically noted that evidence showing that the plaintiff knew it was dangerous to use a tree stand without wearing a safety belt, but nonetheless did so, could support a defense that a plaintiff misused the product (the tree stand). *Id.* at 103. Based on *Wood*, as well as the court's consideration of other cases concerning whether a misuse is foreseeable or not, the court concludes that there is a dispute of fact on this issue that the jury must resolve. *See, e.g., Tunnell v. Ford Motor Co.*, 330 F. Supp. 2d 748, 757 (W.D. Va. 2004) (reasoning that where a plaintiff claimed an automobile had a defect that caused it to catch fire after an accident, evidence showing that the driver had been drinking and the speed of the vehicle were all relevant, and concluding that whether the

operation of the car “amounted to misuse, whether that misuse was foreseeable or not by [the manufacturer], and whether, if unforeseeable, that misuse was a proximate cause of the accident are all issues for the jury”); *Fournier Furniture, Inc. v. Waltz-Holst Blow Pipe Co.*, 980 F. Supp. 187, 190–91 (W.D. Va. 1997) (“Whether the product was misused, whether such misuse was foreseeable, and whether such misuse caused the product’s failings are questions best answered by a jury that has had the opportunity to hear the parties’ fully developed evidence.”).

b. Failure to mitigate

For like reasons, the court also concludes that there are disputes of fact regarding defendants’ affirmative defense of failing to mitigate, which is based on Wilhelm’s failure to use a safety harness.

3. Defendants’ motion for summary judgment

Defendants move for summary judgment in their favor, as well, on the same affirmative defenses. For the same reasons discussed above with regard to plaintiff’s motion for partial summary judgment, the court cannot rule in defendants’ favor as to their affirmative defenses at this time. Most of the remainder of defendants’ motion relates to claims that the plaintiff has since withdrawn. For example, defendants also move for summary judgment against Wilhelm’s failure-to-warn claim, but it is the court’s understanding that plaintiff is no longer pursuing such a claim. Accordingly, the court does not address it further.

Lastly, defendants also seek summary judgment on the ground that plaintiff cannot establish a prima facie case of breach of warranty, but again, that argument depends on the a finding that there was an “unforeseen misuse” of the product. Because the court concludes there are disputes of fact as to whether there was unforeseen use and, if so, whether that use was a proximate cause of the accident, summary judgment on this claim will be denied.

III. CONCLUSION

Consistent with the reasoning set forth above, the court hereby ORDERS as follows:

1. Any motion seeking to exclude expert testimony on the grounds that it is cumulative is denied without prejudice as to that ground and may be raised again at trial.
2. Experts will not be permitted to offer opinions not previously disclosed, nor may they offer opinions on any subject if an expert testified he had no opinion about that subject.
3. Defendants' motion to exclude plaintiff's expert metallurgist R. Craig Jerner, Ph.D. (Dkt. No. 131) is DENIED.
4. Defendants' motion to exclude or limit Robert West, Jr., Ph.D. (Dkt. No. 133) is DENIED.
5. Defendants' motion to exclude or limit Norman Dowling Ph.D. (Dkt. No. 139) is GRANTED IN PART and DENIED IN PART.
6. Defendants' motion to exclude or limit Peter Wechgelaer, M.D. (Dkt. 135) is GRANTED IN PART and DENIED IN PART.
7. Defendants' motion to exclude or limit Richard Baron, Ph.D. (Dkt. No. 137) is GRANTED IN PART and DENIED IN PART.
8. Plaintiff's motion to exclude George Saunders (Dkt. No. 142) is GRANTED IN PART and DENIED IN PART.
9. Plaintiff's motion to exclude Michelle Vogler (Dkt. No. 144) is DENIED.
10. Plaintiff's motion to exclude Lorne Smith (Dkt. No. 146) is GRANTED IN PART and DENIED IN PART.

11. Plaintiff's motion for partial summary judgment (Dkt. No. 148) is GRANTED IN PART and DENIED IN PART. It is granted as to all affirmative defenses except misuse and failure to mitigate, insofar as those defenses are based on plaintiff's failure to properly use the safety harness (including the lineman's belt and secondary tree strap) and his alleged failure to fully install the tree step.

12. Defendants' motion for summary judgment (Dkt. No. 129) is DENIED AS MOOT IN PART and DENIED IN PART. It is denied as moot as to plaintiff's failure-to-warn claim, because plaintiff is no longer asserting such a claim. It is otherwise denied.

The clerk is directed to provide a copy of this memorandum opinion and order to all counsel of record.

Entered: November 30, 2018

/s/ Elizabeth K. Dillon
Elizabeth K. Dillon
United States District Judge