STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

PROVIDENCE, SC. **SUPERIOR COURT**

(Filed: September 19, 2012)

ELLEN MARTEL,	:	
JOSEPH MARTEL,	:	
JOSEPH MARTEL, IV and	:	
JOAN MARTEL	:	
	:	
v.	:	**C.A. No. PC 07-3947**
	:	
	:	
ARCTIC CAT SALES, INC.,	:	
ARCTIC CAT, INC., and	:	
WHEELS OF FREEDOM, INC.	:	

DECISION

MCGUIRL, J. Before this Court is Plaintiffs' Ellen Martel, Joseph Martel, Joseph Martel, IV and Joan Martel (collectively, "Plaintiffs") Motion for a New Trial pursuant to Super. R. Civ. P. 59. The action involves Plaintiffs' product liability claim against Defendants Arctic Cat Sales, Inc., Arctic Cat, Inc. ("Defendant AC"), and Wheels of Freedom, Inc. ("Defendant WOF") (collectively, "Defendants"). The case was tried before a jury, and a verdict was entered in favor of the Defendants. Plaintiffs timely challenged the jury's findings. Defendants have objected to the Plaintiffs' Motion.

I

FACTS AND TRAVEL

Although the details of this trial need not be extensively reiterated, some, of course, are pertinent with respect to the within motion. The facts, as presented by the Plaintiffs, follow.

On or about November 25, 2003, Joseph Martel ("Joe"), purchased a 2004 Arctic Cat All-Terrain vehicle ("ATV") sold by Defendant WOF and manufactured by Defendant AC. On August 14, 2004, Plaintiff Ellen Martel ("Mrs. Martel") was operating the ATV. She allegedly drove on fairly flat, hard packed dirt with minor rocks at approximately 10 to 15 miles per hour. Mrs. Martel completed one counterclockwise circle of approximately 300 to 400 feet in diameter, and she was starting her second circle when the "handlebars jerked to the left," the front end went down, and she and the ATV flipped diagonally forward, causing Mrs. Martel injuries. After the accident, the ATV lay upside down, and Mrs. Martel lay on her back nearby.

When the Plaintiffs purchased the ATV, it had thirteen miles on the odometer. At the time of the August 14, 2004 accident (hereinafter "accident"), the odometer read 134 miles. The Plaintiffs explained that from November 20, 2003 to February 2004, Plaintiff Joseph Martel operated the ATV only once. From February 2004 through August 14, 2004, he operated the ATV frequently in the field across the street, from where the accident occurred. He also had driven the ATV in his backyard, on trails in the woods, and around a mud pond behind his backyard. The Plaintiffs further alleged that Joe's brother, Jeff Martel ("Jeff"), operated the ATV once or twice in the field across the street, as well as in Joe's backyard. Furthermore, Mrs. Martel drove the ATV on two occasions: the morning of the accident in the Plaintiffs' front yard and in the field across the street at the time of the accident.

The Plaintiffs alleged that the ATV has never been in an accident from the date of the purchase to the date of the accident. The Plaintiffs also maintain that the ATV has never been repaired nor had maintenance performed on it prior to the accident. The Plaintiffs further contend that at no time on the day of the accident or prior thereto did either of them experience any difficulties, whatsoever, with the operation or the steering of the ATV. The Plaintiffs

explained that the ATV has never been brought back to Defendant WOF for service, repairs, maintenance, etc. The Plaintiffs claim that the only modifications made to the ATV were on November 25, 2003, when they purchased a safety flag, hand protectors, and a winch.

The Plaintiffs presented Dr. Marc Richman ("Dr. Richman"), who gave expert testimony regarding the issue of liability. According to Dr. Richman, the robotic welding procedure used by Defendant AC to weld the suspension arm was defective because it was done in ninety degree quadrants, which resulted in two "stop/start" positions at each quadrant. Dr. Richman opined that repetitive heating resulted in the softening or weakening of the left lower support arm, and the weakening resulted in the support arm failing in a ductile manner. The failure of the support arm subsequently caused the left front wheel to turn outward at such an angle that the wheel acted as a pivot, causing the RTV to flip, throwing Mrs. Martel to the ground. Furthermore, Dr. Richman explained that according to AC's own welding procedure, as set forth in the information provided in discovery, in the event that the robotic weld failed, it was then hand welded. The Plaintiffs alleged that evidence of hand-welding was apparent on the micrograph section of the lower arm, which showed three weld passes.

In contrast, Defendants' expert, Herman "Bud" Christopherson ("Mr. Christopherson")—the leader of Defendant AC's ATV development team, and an expert in design, safety, and accident reconstruction—opined that a prior accident caused a substantial modification of the strength of the suspension and the steerability. He concluded that the ATV was not defectively designed or manufactured and was not the cause of the accident. Mr. Christopherson further opined that an improper repair and improper use of the ATV were the cause of the accident.

In December 2010, by agreement of the parties, additional testing was performed on the support bracket. A micrograph section was obtained from the section of the support bracket that

Defendant AC claims has been heated with a blow torch. Microscopic examination of that section revealed no "grain growth" existence. According to Dr. Richman, in order for the bracket to be "straightened," as Defendant AC suggested, it would have to have been heated sufficiently—for approximately an hour—in order for the metal to have been weakened, causing "grain growth" to occur. However, there was no "grain growth" present. Thus, Dr. Richman concluded that there was no heating of the bracket, and therefore, there could not have been a straightening.

Mr. Christopherson examined, modified, and tested an exemplar ATV. He also examined the accident site, the Martels' ATV, and the damaged parts. In an expert report from July 22, 2009, Mr. Christopherson explained that the visible damage was mainly in the steering bar area, the seat back area, the right rear rack and fender area, and in the left front wheel suspension and steering area. He further explained that the lower left A-arm was broken in two places and buckled near the outer wheel hub area, and that the ball joint was pushed rearwards by approximately three inches. Furthermore, he noted that the left front wheel was dented on the tire contact area. The welded frame upper A-arm left bracket, according to Mr. Christopherson, was rusted, distorted, twisted, and cracked.

Mr. Christopherson opined that damage had occurred prior to the accident of August 14, 2004. He based his opinion on the fact that the upper left side A-arm was distorted, bent, and cracked. It was discolored, in his opinion, due to being heated in order to be straightened or in an attempt to relocate the mountain hole. Moreover, the paint was burned off the bracket, and the bushing for the A-arm pivot bolt was partly melted. Mr. Christopherson further noted that the front tube of the lower A-arm was damaged near the outer end. The rear tube of the lower A-arm was buckled and broken. He also opined that in order for the bracket to be damaged as it

was, the A-arm suspension would also have to be damaged. He explained that the damage to the bracket was such that it could not have happened during the August 14, 2004 accident.

Mr. Christopherson clarified that "[t]he modification to the suspension and steering geometry would effect [sic] the combination of toe-in, camber and caster so that the handling and control would act unpredictable and cause a sudden turn and loss of stability." (Expert Report, Christopherson, July 22, 2009 at 3.) Mr. Christopherson explained that

> "[t]he A-arm bracket on the subject [ATV] can withstand a horizontal frontal load at the wheel of more than 4400 pounds of force. A force of this magnitude is over 6G and is beyond what a human rider driver can sustain. The lower A-arm can withstand a horizontal frontal load at the wheel of more than 15000 pounds. . . ." Id. at 4.

Furthermore, he stated that the bracket and the lower A-arm can be damaged if the A-arm strikes a rigid object. He continued that the force required to deform the welded bracket is less than the force required to damage or deform the lower A-arm if they each are deformed independently; however, here the application of force cannot be applied to the bracket alone but must be applied from the loading of the A-arm. According to Mr. Christopherson, for the bracket to deform, the A-arm must be loaded to exceed the A-arm strength and yield to the damaged position, and then the bracket will deform. The yielding of the A-arm will move the caster from positive to negative.

Another expert for the Defendants, Dr. Simon Bellemare ("Bellemare"), similarly opined that the Plaintiffs' ATV was in an accident prior to the one of August 14, 2004, and that an attempt to repair it caused the accident of August 14, 2004. He explained that the blistered paint and deteriorated bushing evidenced some application of heat, which was evidence of a prior attempt to repair. Dr. Bellemare has a Bachelor's and Master's degree in Metallurgy. He was retained to review the design process for the ATV and perform an analysis of the strength and the

load applied on the frame during service. He testified generally as to the concept of "heat affected zone" and of Microhardness tests. Furthermore, Dr. Bellemare clarified that Microhardness testing was done at Thielsch Engineering Lab where Dr. Richman, Dr. Eagar, Dr. Bellemare, and the attorneys for both sides were present. The result of the Microhardness test is a hardness reading which is directly related to the strength of the tube. The result is transformed into numbers called Vickers. Tests were done on the Martels' actual ATV and compared to tests performed on an exemplar. Dr. Bellemare explained that the metal in the heat affected zone was lower in hardness than it was in the weld metal itself. However, the results show that the lowest point of hardness of the metal of the heat affected zone, either in the exemplar or in the actual ATV, was still higher than the minimum required by AC and manufactured in this process. Dr. Bellemare concluded that the heat affected zone had nothing to do with the cause of the breaking of the front lower A-arm front tube of the ATV, and that the steel used in the ATV conformed to Defendant AC's purchase order.

Dr. Bellemare also described his observations of the Martels' ATV. He testified that the upper bracket was bent and rusted. He explained that from a closer look of the upper bracket, he was able to see with a naked eye that the paint was blistering and the bushing was melted. Dr. Bellemare further pointed out that there were wrinkles on the flanges which were indicative of the upper bracket being bent. Both flanges were not straight; they were bowed. Dr. Bellemare concluded that the shrinkage in the diameter of the bushing next to the upper bracket is evidence of an application of external heat to the bracket. His conclusion was further supported by the melting and shrinkage of the bracket and the blistering of the paint. By comparing the measures of the bushings from both sides, he established that there was significant reduction in the diameter.

Dr. Bellemare also testified that the Martels' ATV did not display any signs of grain growth. Consistent with Dr. Richman's testimony, Dr. Bellemare explained that in order to exhibit grain growth, the metal has to be heated by a blowtorch for a considerable amount of time (about an hour). However, he also testified that grain growth does not always occur when heat is applied. The Plaintiffs' attorney objected to Dr. Bellemare's testimony because Dr. Bellemare never indicated in his report his opinion regarding grain growth.

II

STANDARD OF REVIEW

The role of a trial justice in deciding whether to grant a motion for a new trial is well settled in Rhode Island. When ruling on a motion for a new trial, "a trial justice sits as the super [] juror and is required to independently weigh, evaluate, and assess the credibility of the trial witnesses and evidence." Marocco v. Piccardi, 713 A.2d 250, 253 (R.I. 1998). "[T]he trial justice must (1) consider the evidence in light of the jury charge, (2) independently assess the credibility of the witnesses and the weight of the evidence, and then (3) determine whether he or she would have reached a result different from that reached by the jury." State v. Ferreira, 21 A.3d 355, 364 (R.I. 2011) (citing State v. Prout, 996 A.2d 641, 645 (R.I. 2010) (citation omitted)).

The burden of proving the grounds for a new trial is always upon the applicant. See United States v. Reese, 561 F.2d 894, 902 (D.C. Cir. 1977). In conducting his or her independent analysis of the evidence, the judge may accept some or all of the evidence and may reject testimony if it is impeached or contradicted by other testimony or circumstantial evidence, or if the judge finds it is inherently improbable or inconsonant with undisputed physical facts or laws. Barbato v. Epstein, 97 R.I. 191, 193, 196 A.2d 836, 837 (1964). In addition, the trial

judge may add to the evidence by drawing proper and consistent inferences. Id. at 193-194, 196 A.2d at 837. "[T]he trial justice need not perform an exhaustive analysis of the evidence[.]" Reccko v. Criss Cadillac Co., Inc., 610 A.2d 542, 545 (R.I. 1992) (citing Zarrella v. Robinson, 460 A.2d 415, 418 (R.I. 1983)). He or she, however, "should refer with some specificity to the facts which prompted him or her to make the decision so that the reviewing court can determine whether error was committed." Id.

The trial justice must deny the motion for a new trial "[i]f 'the trial justice agrees with the jury's verdict or if the evidence is such that reasonable minds could differ as to the outcome.'" Ferreira, 21 A.3d at 364-65. However, if the trial justice does not agree with the jury's verdict, he or she must "embark on a fourth analytical step." Id. at 365 (citing State v. Guerra, 12 A.3d 759, 765 (R.I. 2011)). This step requires the trial justice to "determine whether the verdict is against the fair preponderance of the evidence and fails to do substantial justice." Id. at 364 (citing Guerra, 12 A.3d at 765–66) (citation omitted)). "If the verdict meets this standard, then a new trial may be granted." Id.

"If the trial justice has carried out the duties required by Rule 59 of the Superior Court Rules of Civil Procedure and [the Supreme Court's] decided cases, his or her decision is accorded great weight by [the Supreme] Court and will not be disturbed unless the plaintiff 'can show that the trial justice overlooked or misconceived material and relevant evidence or was otherwise clearly wrong.'" Botelho v. Caster's, Inc., 970 A.2d 541, 546 (R.I. 2009) (quoting Int'l Depository, Inc. v. State, 603 A.2d 1119, 1123 (R.I. 1992)).

III

ANALYSIS

The jury returned a verdict in favor of the Defendants and determined that the Defendants did not cause the accident and the injuries to Plaintiff Ellen Martel. Consequently, the Plaintiffs aver that the jury verdict rendered in this case was contrary to the great weight of the evidence and fails to do justice between the parties, warranting a new trial. Plaintiffs also assert that the verdict is impermissibly predicated upon a "pyramiding" of inferences upon which the jury reached its ultimate conclusion that the Plaintiffs' ATV support bracket was substantially damaged in a prior "event,"[1] and not the accident of August 14, 2004. Moreover, the Plaintiffs maintain that the trial judge erred in allowing the Defendants' expert, Dr. Bellemare, to testify with regard to the issue of "grain growth," claiming that the testimony was beyond the scope of any prior disclosed opinions. Plaintiffs further maintain that the trial judge also erred in allowing Dr. Bellemare's testimony regarding the extrapolation of Vickers hardness testing results beyond the area of actual testing.

A

Credibility of Witnesses and Weight of the Evidence

After a careful review of all of the evidence and after weighing the credibility of the witnesses as a "super juror," this Court does not find that the jury's verdict is against the greater weight of the evidence. In the instant matter, the jury's verdict is well supported by the evidence. This Court is cognizant that the matter before it rests largely upon circumstantial evidence. Although there was no direct evidence presented as to what exactly caused the accident, both sides presented their theories, supported by witness testimony.

[1] Prior to trial, this Court granted Plaintiffs' Motion in Limine, preventing Defendants' experts from testifying that the ATV had been in an accident prior to the one on August 14, 2004.

Evaluating the credibility of witnesses is quintessentially a task for the jury. See State v. Pelliccia, 573 A.2d 682, 687 (R.I. 1990). Moreover, inconsistencies, if any, in a witness' statement do not preclude a factfinder from accepting the testimony as credible. See Madeira v. Pawtucket Housing Authority, 105 R.I. 511, 515, 253 A.2d 237, 239 (1969). "Since credibility is purely a factual issue, the trier of fact can pick and choose from the witness' entire testimony that portion which he [or she] finds worthy of belief or reject all of his [or her] testimony as incredible." Madeira, 105 R.I. at 515, 253 A.2d at 239 (citation omitted). In other words, it is within the factfinder's discretion to accept some, all, or none of the testimony in reaching its conclusion as to causation. "It is well settled that where the testimony of two witnesses is conflicting and the trier of fact expressly accepts the testimony of one of the witnesses, he [or she] implicitly rejects that of the other." Turgeon v. Davis, 120 R.I. 586, 592, 388 A.2d, 1172, 1175 (1978).

This Court finds credible Defendant AC's expert testimony presented by Mr. Christopherson and Dr. Bellemare, concluding that the Martels' ATV did not leave Arctic's manufacturing facility in a defective condition and that a post-manufacturing event resulted in the August 14, 2004. Dr. Bellemare was retained by Defendant AC to review the design process for the ATV and later performed his own analysis of the strength and the load applied on the frame during service. (Tr. at 4.) Dr. Bellemare, an expert in Metallurgy and metal testing, has a Bachelor's degree in Material Engineering and Master's degree in Metallurgy. Id. at 2. Dr. Bellemare's Ph.D. study was on the effect of grain size in a variety of metals and specifically making indents, looking at the strength of different metals. Id. at 3. Dr. Bellemare explained that the placement of the weld may affect the properties of the adjacent metal, because "you heat

it, you melt it, and there'll be some changes." Id. at 9. Therefore, he performed a Microhardness test to determine the strength locally in the heat affected zone. Id. at 10.

The test indicated slightly lower hardness of the metal in the heat affected zone than in the weld metal itself. Id. at 21. The results are based on data from an exemplar piece, not belonging to the Martels' ATV, and data from the left wheel side of the Martels' ATV. Id. at 20. However, Dr. Bellemare explained that the results of the heat affected zone on the metal in their lowest point, either on the exemplar or on the actual Martels' ATV, are still higher than the minimum required by Defendant AC and manufactured in this process. Id. at 22-23. Dr. Bellemare explained that the metal used to manufacture Martels' ATV meets the standards as specified by Defendant AC. Id. at 28. Thus, Dr. Bellemare concluded, to a reasonable degree of engineering certainty, that the heat affected zone did not cause in any way the breaking of the front lower A-arm front tube of the Martels' ATV. Id. at 23.

Dr. Bellemare further explained that he first observed the upper left bracket of Martels' ATV at Martels' home. (Tr. at 29.) Comparison of the bushing from the both sides of Martels' ATV confirmed a significant reduction in the diameter of the bushing closest to the bracket. Id. at 33. Dr. Bellemare explained that the fact that there were wrinkles on the flanges and the flanges were not straight but bowed confirmed that the bracket was bent. Id. at 30.

Consistent with Dr. Richman's testimony, Dr. Bellemare testified that grain growth was not evident on the Martels' ATV. Id. at 45. He further explained that in order for grain growth to occur, the metal has to be heated at high temperature for an extended period of time (approximately one hour). Id. at 35. However, Dr. Bellemare also explained that grain growth does not always occur when heat is applied. Id. at 36. Dr. Bellemare opined that if the metal is heated for 30-60 seconds, it is enough for it to become red hot and allegedly tampered with, but

not enough for grain growth to be observed. (Tr. at 46.) Thus, there was enough physical evidence and reasonable basis for the jury to conclude that the metal could have been heated in an attempt to repair.

This Court also finds the testimony presented by Defendant AC's second expert witness, Mr. Christopherson, to be credible. Mr. Christopherson is an expert in design, safety, and accident reconstruction. He has examined, modified and tested an exemplar ATV. He has also examined the accident site, the Martels' ATV, and the damaged parts. Mr. Christopherson credibly concluded that the Plaintiffs' ATV exhibited damage consistent with damage caused by an event prior to the accident of August 14, 2004. Mr. Christopherson based his opinion on his observation that the upper left side A-arm was distorted—due to being heated—bent, and cracked, and the bushing for the A-arm pivot bolt was partly melted. (Expert Report, Christopherson, July 22, 2009 at 3.) Mr. Christopherson explained that in order for the bracket to be damaged, as it was, the A-arm suspension would also have to be damaged. Id. Moreover, Mr. Christopherson presented uncontradicted expert opinion that "the modification to the suspension and steering geometry would effect the combination of toe-in, camber and caster so that the handling and control would act unpredictable and cause a sudden turn and loss of stability." (Expert Report, Christopherson, July 22, 2009 at 3.) Mr. Christopherson clarified that the damage to the bracket was such that it could not have happened during the August 14, 2004 accident.

Mr. Christopherson testified in his opinion that the only way the bracket and the lower A-arm could have been damaged, the way it had been, was if the A-arm had struck a rigid object. There was no direct evidence that on the day of the accident, Mrs. Martel hit a rigid object. Id. at 4. On the contrary, there was evidence that the surface was fairly flat, hard and covered with

some loose dirt or sand and numerous small (i.e., 1 to 3 inch) rocks. Id. at 2. Mr. Christopherson stated that "[a]n Arctic Cat ATV will not turn unexpectedly and flip over for the conditions as described if it is in the condition that it was when it left the factory." Id. at 2.

The Plaintiffs presented a single expert witness, Dr. Richman, who opined that the ATV was defective when sold. This Court finds that Dr. Richman's credibility was somewhat undermined by his own admission that his initial conclusion—which he had certified as valid to a reasonable degree of engineering certainty—was erroneous. Dr. Richman initially concluded that the weld itself had failed; however, he later concluded that the lower A-arm had been weakened by the application of multiple welds, which caused the lower A-arm to break off during normal operation. Dr. Richman, however, agreed that the bushing of the upper A-arm bracket was melted and such melting could have been the result of direct application of heat. Furthermore, Dr. Richman presented no opinion or analysis with regard to Mr. Christopherson's testimony pertaining to the caster, camber, and geometry of the steering assembly. Moreover, the results from the test performed at the Thielsch Laboratories—a facility recommended by Dr. Richman—did not support the Plaintiffs' theory. According to Dr. Richman, the metal strength of the affected area had been weakened during manufacturing. However, the actual test showed this area to be of proper metal strength. Thus, the jury was confronted with "a classic battle of the experts, a battle in which the jury must decide the victor." Ferebee v. Chevron Chemical Co., 736 F.2d 1529, 1535 (D.C. Cir. 1984), cert. denied, 469 U.S. 1062, 105 S. Ct. 545, 83 L. Ed. 2d 432 (1984).

The jury and this Court also heard testimony from only two witnesses—the Plaintiffs themselves—as to prior use of the ATV, as well as of the events leading to the accident of August, 14, 2004. Though Joe's brother, Jeff, did not appear before this Court, Jeff did testify in

a deposition, later read at trial, that his uncle and he actually drove the ATV back to the Martels' home after the accident. Initially, Joe testified at a deposition that after the accident, he was the one who drove the ATV back to his house in reverse. However, at trial he testified that his brother and his uncle drove the ATV back to his home. Although Jeff and Joe were generally believable, Joe's credibility, as to his presentation of prior use, was undermined when he changed his testimony at trial in conformity with his brother's deposition testimony.

Significantly lacking in credibility was Mrs. Martel's testimony that she did not have prior back, neck, and hip pain. Her testimony was contradicted by the medical records presented by Dr. Desmaris and the Landmark Medical Center, showing that Mrs. Martel has been seen seven times, in total, for back, neck and/or hip pain, and that she obtained a work release for those complaints during the period between March 21, 2003 and January 1, 2004. This Court finds it hard to believe that Mrs. Martel would easily forget such a significant fact as being out of work for approximately nine months. Mindful of the inconsistencies in the testimony, this Court finds the fact witnesses' testimony and their presentation of the prior use less than credible.

B

Pyramiding of Inferences

As to their first contention, that the verdict is impermissibly predicated upon a "pyramiding" of inferences, the Plaintiffs argue that Defendant AC did not offer any direct or circumstantial evidence that the damage observed to the support bracket was caused by an "event" occurring prior to August 14, 2004. Specifically, Plaintiffs agree that the appearance of the bushing of the upper A-arm bracket evidenced exposure to a heat source. However, Plaintiffs maintain that there is no evidence as to who, what, where, when, and why the heat was applied. Furthermore, Plaintiffs dispute Defendant AC's inference that the heat source applied to

the ATV's support bracket was a blow torch and that it was applied by the Plaintiffs, or someone on their behalf, in an attempt to repair/straighten the support bracket. Plaintiffs further argue that it would be an improper inference to conclude that the support bracket was damaged by a frontal impact to the left front wheel of the Plaintiffs' ATV and that an improper repair of that impact was the cause of the August 14, 2004 accident. Plaintiffs assert that it is pure speculation that the observable support bracket damage was caused by anything other than the August 14, 2004 accident.

Defendant AC argues that the physical and circumstantial evidence amply established that a post-manufacturing material modification caused the August 14, 2004 accident. Thus, Defendant AC maintains that the jury reasonably concluded that the ATV did not leave Arctic Sale's manufacturing facility in a defective way. Defendant AC alleges that the direct evidence of subsequent modification led its two experts to conclude that a modification had, in fact, occurred, and that the result of such modification weakened the ATV in such a manner that it caused the accident of August 14, 2004. Specifically, Defendant AC stresses that the upper A-arm bracket had been deformed, bent, and cracked in a manner consistent with an accident preceding the one of August 14, 2004. Defendant AC further maintains that an application of heat by a blow torch, in an attempt to fix the bracket, was evidenced by removed paint and by various bubbling in the remaining paint bordering the area of alleged heat application. Additionally, the heat application was further confirmed by a significantly melted plastic bushing next to the damaged bracket.

"It is well established that '[i]nferences and presumptions are a staple of our adversary system of factfinding.'" State v. Stone, 924 A.2d 773, 783 (R.I. 2007) (quoting State v. Ventre, 910 A.2d 190, 198 (R.I. 2006)). To be credible and reliable, evidence need not necessarily be

direct. Michalic v. Cleveland Tankers, Inc., 364 U.S. 325, 330 (1960) ("[c]ircumstantial evidence is not only sufficient, but may also be more certain, satisfying and persuasive than direct evidence"). Our Supreme Court has stated that a plaintiff's burden in a civil case may be supported by circumstantial evidence when no direct evidence on a particular issue is available. See Narragansett Elec. Co. v. Carbone, 898 A.2d 87, 99-100 (R.I. 2006) (citing Harriss v. Orr, 65 R.I. 369, 379-80, 14 A.2d 674, 679 (1940)). "It is well settled in Rhode Island that there is no difference in the probative value of direct evidence and circumstantial evidence." State v. Hornoff, 760 A.2d 927, 931 (R.I. 2000) (citing State v. Simpson, 611 A.2d 1390 (R.I 1992)); see State v. Caruolo, 524 A.2d 575, 582 (R.I. 1987) (noting that circumstantial and direct evidence are equally probative). Our Supreme Court has established that "a reasonable inference from established facts is evidence and that such an inference should be considered and given effect by the trier of fact." Oury v. Greany, 107 R.I. 427, 431, 267 A.2d 700, 702 (1970). Furthermore, "[an] inference drawn from another inference is rejected as being without probative force." Waldman v. Shipyard Marina, Inc., 102 R.I. 366, 371, 230 A.2d 841, 844 (1967). Our Supreme Court has explained that "the reason for the rule is to protect litigants against verdicts predicated upon speculation or remote possibility." Id. "[C]ircumstantial evidence, if it meets all the other criteria of admissibility, is just as appropriate as direct evidence and is entitled to be given whatever weight the [factfinder] deems it should be given under the circumstances." S.E.C. v. Sargent, 229 F.3d 68, 75 (1st Cir. 2000) (quoting United States v. Gamache, 156 F.3d 1, 8 (1st Cir. 1998)).

After reviewing all the evidence presented, this Court does not agree with Plaintiffs' contention that the jury verdict was impermissibly predicated upon "pyramiding" of inferences. Our Supreme Court has determined that a "pyramiding of inferences" takes place when an

inference is drawn from the underlying facts and a second inference is then drawn from that primary inference and "a pyramid of inferences must be rejected when 'the facts from which [the primary inference] is drawn are susceptible of another reasonable inference.'" Mead v. Papa Razzi, 899 A.2d 437, 441, n.3 (R.I. 2006) (quoting Waldman, 102 R.I. at 374, 230 A.2d at 845).

In Waldman, our Supreme Court determined that:

> "When an inference is such as to exclude any other reasonable inference being drawn from the basic fact, such an inference partakes of the nature of a fact to which probative force must be attributed. Obviously a court should never draw an inference from an inference that is itself speculative or of remote possibility." 102 R.I. at 373, 230 A.2d at 845.

Here, the Defendants presented direct evidence, showing that the ATV had been substantially modified after manufacturing and that said modification weakened the ATV in such a manner as to cause the accident from August 14, 2004. Specifically, this Court was presented with direct evidence establishing the modification, including but not limited to the evidence that the left upper A-arm bracket had been deformed, bent, and cracked; paint had been removed from the damaged bracket, and the remaining paint evidenced various bubbling, consistent with application of heat. Furthermore, the application of heat also was evidenced by the significantly melted plastic bushing next to the damaged bracket. This Court finds that all of this evidence is consistent with post-manufacturing modification of the ATV, inconsistent with the manufacturing process presented to this Court, and inconsistent with the facts surrounding the accident. See Redding v. Picard Motor Sales, Inc., 102 R.I. 239, 249, 229 A.2d 762, 768 (1967) (explaining that trial justice is free to draw from the evidence any reasonable inferences in which probability inheres).

Furthermore, it is axiomatic that the party moving for a new trial has the burden to prove his/her allegations by a preponderance of the evidence. See Tucker v. State, 481 S.W.2d 10, 15

(Mo. 1972) (burden is always upon the new trial movant to prove his allegations); Ducharme v. Champagne, 110 R.I. 270, 292 A.2d 224, 226 (R.I. 1972) ("[T]he long-standing rule in this state [is] that the burden of proof is on [the party] who asserts a claim, whether in law or equity.") (citing Donnelly v. Donnelly Bros., Inc., 96 R.I. 255, 191 A.2d 143, 147 (1963)); see also Narragansett Elec. Co. v. Carbone, 898 A.2d 87, 99 (R.I. 2006) ("[I]n most civil cases, plaintiff bears the burden to prove each element by a preponderance of the evidence . . . ."). Most importantly, "[a] defendant is under no obligation to disprove that which the plaintiffs . . . assert or claim; rather the plaintiffs must prove that which they assert or claim." Woodward v. United Transit Co., 94 R.I. 446, 450, 181 A.2d 622, 624 (1962).

Thus, after careful consideration of all the facts and evidence presented by both parties in the instant matter, this Court finds that there is sufficient evidence to support the jury verdict. This Court also finds that the jury verdict is not against the law or the fair preponderance of the evidence. Furthermore, there is enough direct and circumstantial evidence to infer that a modification to the Plaintiffs' ATV had, in fact, occurred after its manufacture and prior to the accident of August 14, 2004. Thus, the Plaintiffs did not satisfy their burden of proving that the accident was caused by a defect during manufacturing.

Accordingly, this Court finds that the jury verdict was predicated on a reasonable inference from established circumstantial evidence, duly given effect by the jury. Thus, from all the evidence and the reasonable inferences therefrom, this Court is persuaded that the Plaintiffs' allegation that the verdict is impermissibly predicated upon "pyramiding" of inferences is without merit.

C

Grain Growth

Plaintiffs argue that this Court erred in allowing the Defendants' expert, Dr. Bellemare, to testify regarding the issue of grain growth in the metallographic samples, as beyond the scope of any prior disclosed opinions; specifically, Plaintiffs contend Dr. Bellemare's opinion was not stated in his supplemental report. The Plaintiffs specifically challenge the admission of Dr. Bellemare's explanation that in order for the metal to exhibit grain growth, it would have to be heated "red hot" for approximately one hour and that the application of heat alone does not automatically cause grain growth. Plaintiffs agree that Dr. Richman found that the left side support bracket, as compared to the right side support bracket, did not exhibit any grain growth. However, Plaintiffs maintain that Dr. Bellemare's testimony was extremely prejudicial to them and it rendered the additional testing of December 2010 "virtually worthless." Alternatively, the Plaintiffs argued that the absence of grain growth on the bracket was evidence that the bracket was not heated, and thus it was not tampered with and therefore, not the cause of the accident.

Defendant AC contends that this Court did not abuse its discretion in allowing the testimony regarding grain growth since the Court specifically found that there was no prejudice to either party because both experts essentially agreed as to the issue. Precisely, Defendant AC pointed out that the December 2010 testing on the bracket was performed at Thielsch Laboratories upon Plaintiffs' request. Moreover, Defendant AC received the Plaintiffs' supplemental expert report concerning the December testing, allegedly just fourteen days before trial, and was unable to supplement its report to reflect Dr. Bellemare's own opinion that the bracket did not exhibit grain growth. In support of the admissibility of Dr. Bellemare's grain

growth testimony, Defendant AC notes that the testimony was subject to cross-examination by Plaintiffs' counsel, as well as to rebuttal testimony presented by Dr. Richman.

Like all other testimony, "[t]he purpose of expert testimony is to aid in the search for the truth." Morra v. Harrop, 791 A.2d 472, 477 (R.I. 2002). As such, testimony "need not be conclusive and has no special status in the evidentiary framework of a trial[,] . . . a jury is free to accept or to reject expert testimony in whole or in part or to accord it what probative value the jury deems appropriate." Id. Rule 702 of the Rhode Island Rules of Evidence regulates the admission of expert testimony. The rule provides that "[i]f scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of fact or opinion." R.I. R. Evid. 702. "[O]nce an expert has shown that the methodology or principle underlying his or her testimony is scientifically valid and that it 'fits' an issue in the case, the expert's testimony should be put to the trier of fact to determine how much weight to accord the evidence." DiPetrillo v. Dow Chemical Co., 729 A.2d 677, 689-90 (R.I. 1999) (citing Ambrosini v. Labarraque, 101 F.3d 129, 134 (D.C. Cir. 1996), cert. denied, 520 U.S. 1205, 117 S. Ct. 1572, 137 L. Ed. 2d 716 (1997)).

The decision to admit expert testimony "rests in the sound discretion of the trial justice and will not be disturbed absent a showing of an abuse of that discretion." Harvard Pilgrim Health Care of New England, Inc. v. Rossi, 847 A.2d 286, 293 (R.I. 2004) (quoting Graff v. Motta, 748 A.2d 249, 252 (R.I. 2000)). Furthermore, "the court's abuse of discretion must have 'resulted in prejudice to the complaining party.'" Curet–Velázquez v. ACEMLA de Puerto Rico, Inc., 656 F.3d 47, 56 (1st Cir. 2011) (quoting Licciardi v. TIG Ins. Grp., 140 F.3d 357, 362–63 (1st Cir. 1998)). Superior Court Rule of Civil Procedure 26(e)(2)(B) requires a party to

supplement the response when "the party knows that the response though correct when made is no longer true or complete and the circumstances are such that a failure to amend the response is in substance a knowing concealment." One of the purposes of this rule is "to avoid surprises and ambush" at trial. 1 Robert B. Kent et al., Rhode Island Civil and Appellate Procedure § 26:10 (West 2006); see also Curet–Velázquez, 656 F.3d at 56. Furthermore, "'[s]urprise and prejudice are important integers' in determining whether the . . . court abused its discretion." Curet–Velázquez, 656 F.3d at 56 (quotation omitted).

In the instant matter, this Court did not abuse its discretion in allowing Dr. Bellemare's testimony regarding the issue of grain growth. Here, during direct examination, the attorney for the Plaintiffs objected to Dr. Bellemare testifying regarding the issue of grain growth as beyond the scope of any previously disclosed testimony. (Tr. at 36-37.) This Court allowed Dr. Bellemare's testimony despite Plaintiffs' objection, explaining that the Plaintiffs were not prejudiced by it because Dr. Bellemare's testimony did not essentially differ from Dr. Richman's opinion presented in his supplemental report. Furthermore, the testimony is general in nature, and directly addresses an issue of this case—specifically, Defendant AC's contention that there was alteration done to the Martels' ATV sometime between manufacturing and the accident of August 14, 2004, which essentially caused said accident. Thus, such testimony does not change any theory of the case. See Lipsett v. Univ. of Puerto Rico, 759 F. Supp. 40, 47–48 (D.P.R. 1991) (new trial not warranted where surprise testimony, not provided in pre-trial discovery, did not have effect of raising new allegations but rather, was cumulative evidence of plaintiff's theory). Cf. Twigg v. Norton Co., 894 F.2d 672, 675 (4th Cir. 1990) (change in theory of liability from deposition to trial testimony during cross-examination was prejudicial and warranted new trial since defendant was not given opportunity to satisfactorily prepare rebuttal

of new theory of liability); Conway v. Chemical Leaman Tank Lines, Inc., 687 F.2d 108, 112 (5th Cir. 1982) (surprise testimony introducing new theory of case was unfair and prejudicial and warranted granting of new trial). Thus, this Court is satisfied that it was not an abuse of discretion to let the testimony in to assist the jury in determining an essential issue of this case.

Moreover, this Court did not abuse its discretion in allowing Dr. Bellemare's testimony as to the explanation that a metal does not exhibit grain growth every time heat is applied, since the Plaintiffs had an ample opportunity to cross-examine the expert and present rebuttal testimony by Dr. Richman. See generally Narragansett Elec. Co. v. Carbone, 898 A.2d 87, 95 (R.I. 2006) (where our Supreme Court in the context of violation of Super. R. Civ. P. 33(c) concluded that plaintiff's calculation of unbilled electrical service did not come as a surprise to the defendants and therefore did not result in prejudice; the defendants were on notice of the dollar amounts claimed for unmetered electricity from the bills that plaintiffs had submitted to defendants long before the trial); see also Betts v. Crawford, 965 P.2d 680, 685 (Wyo. 1998) (the court properly admitted testimony, because the testimony did not introduce a new theory of recovery and the opposing party had not been prevented from effectively cross-examining the witness by using his previous deposition testimony).

Importantly, after the issue of grain growth was raised, a testing of the ATV's bracket in question was conducted at the Thielsch Laboratory in the presence of the two experts and the parties' attorneys. Essentially, the testing was done under the Plaintiffs' recommendation, and the results as to the presence of grain growth were presented in Dr. Richman's supplemental report. Therefore, the Plaintiffs expected some explanation regarding grain growth, even general in character, during trial. Thus, this Court is satisfied that the introduction of said testimony did not result in surprise or unfair prejudice to the Plaintiffs, requiring a new trial. Bushong v. Park,

837 A.2d 49, 54 (D.C. 2003) ("Regardless of what the pretrial statement might or might not say about the expected testimony of an expert witness . . . the witness' testimony is properly admitted, notwithstanding any failure to mention certain words in the pretrial documents, if the actual testimony does not surprise the opposing party."); cf. Fortino v. Quasar Co., 950 F.2d 389, 396-97 (7th Cir. 1991) (finding trial court's admission of testimony erroneous and prejudicial where plaintiff violated Rule 26 by failing to supplement answers to interrogatories with the new testimony, where that testimony was "critical" to the case and completely unexpected from defendant's point of view).

Lastly, as this Court already noted in open Court, Plaintiffs would not be prejudiced by Dr. Bellemare's testimony regarding the absence of grain growth on the bracket tested at Thielsch Laboratory, because the two experts, Dr. Bellemare and Dr. Richman, were present at the laboratory while the testing of the bracket was performed. (Tr. at 40.); see also Tr. at 37; 45. Furthermore, Dr. Bellemare's testimony—that there was no grain growth—would support Dr. Richman's opinion presented in his report of February 10, 2011, that no grain growth was present. Id. Accordingly, this Court reiterates its finding during the hearing that the Plaintiffs would not suffer actual prejudice from the admission of Dr. Bellemare's testimony regarding grain growth, especially because Dr. Bellemare and Dr. Richman essentially agreed that there was no grain growth present. See Neri v. Nationwide Mutual Fire Insurance Co., 719 A.2d 1150, 1153 (R.I. 1998) (where the court allowed testimony by plaintiff who was not qualified as an expert and our Supreme Court concluded that had the opinion rendered by the defendant's expert been similar to the one by the plaintiff, the admission by the plaintiff's testimony might have been harmless); see generally State v. Gamester, 821 A.2d 1076, 1080 (N.H. 2003) (in the context of a discovery violation, the New Hampshire Supreme Court has decided that a

defendant suffered no actual prejudice from admission of an expert opinion because the defendant's own expert gave a similar opinion); see also Curet–Velázquez, 656 F.3d at 56 (finding no prejudice to defendants when expert's testimony briefly referenced new documents, which defendants themselves drafted and had delayed in disclosing, and where expert's testimony did not express different conclusion or opinion from that expressed in his report).

Consequently, for the foregoing reasons, this Court finds that the admission of Dr. Bellemare's testimony did not result in undue prejudice or surprise to the Plaintiffs. Thus, this Court did not abuse its discretion in allowing Dr. Bellemare's testimony on the grain growth issue.

D

Extrapolation

Plaintiffs also challenge this Court's ruling allowing Dr. Bellemare to testify regarding extrapolation of the Vickers hardness testing results beyond the areas of actual testing. Specifically, the Plaintiffs argue that Dr. Bellemare's opinion was in direct conflict with Dr. Bellemare's deposition testimony and beyond the scope of any opinions provided in discovery.

Conversely, Defendant AC argues that this Court did not err in allowing Dr. Bellemare's redirect testimony because it was in direct response to Plaintiffs' cross-examination. Furthermore, Defendant AC alleges that Dr. Richman was available to be called by Plaintiffs on rebuttal to attempt to counter any of Dr. Bellemare's courtroom testimony. Moreover, Defendant AC contends that Dr. Bellemare never testified as to what extrapolation would show, but merely that it was an acceptable practice to use extrapolation in examining metal weakness in areas not tested. Defendant AC also points out that the Vickers hardness test was performed at the

Thielsch Lab in December 2010, and the results were summarized in a chart contained in Dr. Bellemare's supplemental report.

Our Supreme Court has clearly articulated that "when counsel goes fishing on cross-examination, he [or she] cannot assume that in playing with fire, he will not get burned." State v. Ferrara, 571 A.2d 16, 19 (R.I. 1990) (citing State v. Edwards, 478 A.2d 972, 975 (R.I. 1984)). Here, it is clear from the transcript that it was Plaintiffs' counsel, who inquired during cross-examination, about the issue of extrapolation of the results from one area to another not tested. (Tr. at 59-60.) Thus, Plaintiffs' counsel "opened the door" for Dr. Bellemare's further clarification during redirect examination regarding the Vickers test and the possibility of extrapolation. (Tr. at 67.); see generally State v. Early, 118 R.I. 205, 212, 373 A.2d 162, 166 (R.I. 1977) (where the court explained that when a defendant in his direct testimony gave his present address as the state prison, the defendant opened the door for the State to make it clear why the defendant was living at the Adult Correctional Institutions).

Notably, Dr. Bellemare's testimony pertained only to the actual method of testing, as normally conducted in the field of Metallurgy. (Tr. at 67, lines 10-17); see Narragansett Elec. Co., 898 A.2d at 95 (Expert testimony is "mechanical, scientific, professional or [of] like nature, none of which is within the understanding of laymen of ordinary intelligence, and where the witness seeking to testify possesses special knowledge, skill or information about the subject matter acquired by study, observation, practice or experience.") (quoting Morgan v. Washington Trust Co., 105 R.I. 13, 17-18, 249 A.2d 48, 51 (1969)). Thus, this Court concludes that it was not error to admit Dr. Bellemare's testimony with regard to the extrapolation testing.

Accordingly, based on the foregoing, this Court finds its allowance of Dr. Bellemare's testimony regarding extrapolation of the Vickers test results beyond the area tested did not

constitute an abuse of discretion. Such evidence was invited in response to Plaintiffs' counsel's inquiry during cross-examination about the issue of extrapolation of the results from one area to another area not tested, and was helpful to the jury in its assessment of the evidence before it.

IV

CONCLUSION

Having carefully reviewed the entire record, the evidence before it and the arguments of counsel, this Court agrees with the jury's verdict, finding it was not against the law or the great weight of the evidence. Accordingly, this Court must allow the jury's verdict to stand. The Plaintiffs' Motion for New Trial is denied. Counsel shall submit an appropriate Judgment for entry.