

**UNITED STATES DISTRICT COURT**  
**MIDDLE DISTRICT OF LOUISIANA**

MARY SANDIFER, ET AL.

CIVIL ACTION NO.

VERSUS

12-322-SDD-RLB

HOYT ARCHERY, INC., ET AL.

**RULING**

Before the Court are several pretrial motions in limine filed by the parties. The parties have briefed the motions extensively and supported their positions with citations to legal authorities and record evidence. The Court has carefully considered the arguments of counsel, the law, and the evidence submitted and the Court does not find that oral argument will aid the Court. The parties' motions will be addressed seriatim.

**I. FACTUAL BACKGROUND**

On August 23, 2011, Dr. Alan Sandifer was killed when a component part, specifically the metal cable guard, of a Hoyt Compound Bow penetrated his left temple and became imbedded in his brain. The Plaintiffs, Mary Sandifer, wife of Dr. Alan Sandifer; Amanda Sandifer, daughter of Dr. Alan Sandifer; and Ryan Sandifer, son of Dr. Alan Sandifer,<sup>1</sup> contend that the Hoyt compound bow (2007 Hoyt Vulcan XT 500) was defective in its design, rendering the product unreasonably dangerous giving rise to liability under the Louisiana Products Liability Act ("LPLA").<sup>2</sup> Defendant, Hoyt Archery Inc., contends that the subject compound bow was safe when used normally and as reasonably anticipated. The events which led to the impalement of the guard rod in the

---

<sup>1</sup> Rec. Doc. 1-1.

<sup>2</sup> Claims related to any theory of recovery under the Louisiana Products Liability Act, except for defective design, were dismissed with prejudice. Rec. Doc. 92.

decedent's left temple are unknown because the incident was unwitnessed, and the decedent never regained consciousness before succumbing to his injuries. Hence, the various experts engaged by both parties have necessarily relied on differing factual assumptions in order to develop hypotheses as to how the accident happened and its cause.

**II. DEFENDANT'S MOTION IN LIMINE TO EXCLUDE EVIDENCE OF ANY ALLEGED PRIOR SIMILAR INCIDENTS<sup>3</sup>**

Defendant moves the Court to exclude evidence of a fatal accident involving a similar bow manufactured by the Defendant. On June 9, 2008, Mr. Fedderson was killed in his home when the cable guard of his Hoyt compound bow became unexplainably embedded in the left temple of his skull. ("Fedderson Incident") Defendant moves to exclude all evidence of the Fedderson Incident, including testimony by experts, law enforcement reports, and reports and correspondence from the Consumer Product Safety Commission.

Defendant argues that permitting evidence of the Fedderson Incident would improperly introduce negligence principles into what the Defendant terms a strict liability action.<sup>4</sup> Defendant argues that, because this is a strict liability case, the manufacturer's knowledge or notice of other incidents is irrelevant. Defendant argues that, even if knowledge is germane to the jury's determination of fault under the LPLA, the Fedderson Incident is still irrelevant because it occurred after the Plaintiff purchased the subject bow. Since the Fedderson Incident had not occurred at the time the subject bow left the manufacturer's control, Hoyt argues evidence of the Fedderson Incident is

---

<sup>3</sup> Rec. Doc. 104.

<sup>4</sup> Defendant cites pre-LPLA jurisprudence as support for its argument that a manufacturer is strictly liable for its product "even though it exercised all possible care in the preparation and sale of its product." Citing, *Toups v Sears Roebuck & Co.*, 507 So. 2d 809, 815 (La. 1987). Rec. Doc. 104-1, p. 8.

not probative of the manufacturer's knowledge at the time of manufacture and is, therefore, inadmissible.

The Defendant is correct that the manufacturer's actual or constructive knowledge is not a required element in an LPLA design defect case. In that way, an LPLA design defect cause of action resembles strict liability "in the sense that the owner's duty to protect against injurious consequences resulting from the risk does not depend on actual or constructive knowledge of the risk, the factor which usually gives rise to a duty under negligence concepts."<sup>5</sup>

If the only probative value of the Fedderson Incident is to demonstrate actual or constructive knowledge of Hoyt, then the Defendant's argument would have legs. However, the Fedderson Incident is equally probative of defective design. The LPLA provides that "The characteristic of the product that renders it unreasonably dangerous [owing to a design defect] must exist at the time the product left the control of the manufacturer". La. R.S. 9:2800.56. The Plaintiff maintains that, at the time the subject bow left Hoyt's control, the design and placement of the cable guard system was defective. If the Fedderson Incident involved a substantially similar cable guard system in a substantially similar configuration and placement, then the Fedderson Incident is probative of the existence of a defective design. When making a LPLA claim premised on defective design, the plaintiff has the burden of proving "both that the likelihood that the product's design would cause the claimant's damage and that the gravity of the damage outweighed the burden on the manufacturer of adopting an alternative

---

<sup>5</sup> *Watts v. Georgia-Pac. Corp.*, 2012-0620 (La. App. 1 Cir. 9/16/13); 135 So.3d 53, 60 (writ denied, 2013-2442 (La. 1/27/14)); 131 So.3d 59.

design”.<sup>6</sup> If shown to be substantially similar, the Fedderson Incident may be probative of the likelihood of the harm and the gravity of the harm.<sup>7</sup> This probative value is unchanged by the fact that the subject bow was purchased (i.e. left the manufacturer’s control) before the Fedderson Incident occurred.

It is undisputed that both the Fedderson and the Sandifer compound bows were manufactured by Hoyt, but they were different models. However, the Plaintiff has offered evidence that the cable guard rod on the Sandifer and Fedderson bows were the same design and placed in the same position on the two bows.<sup>8</sup> It is the design and placement of the cable guard which Plaintiff alleges was defective at the time of manufacture. The cable guard was the mechanism or instrumentality of both the Fedderson and Sandifer injuries. The manner of injury to Sandifer and Fedderson is the same. Both were impaled in the left temple by the cable guard. The Court finds that the Fedderson Incident is substantially similar such that its admission is warranted under the facts and circumstances of this case.

Defendant challenges the admissibility of law enforcement reports, and reports and correspondence from the Consumer Product Safety Commission (“CPSC”) regarding the Fedderson Incident, on the grounds of hearsay. Citing FRE 703, Plaintiff responds that experts may rely upon evidence which is otherwise inadmissible hearsay in the formulation of their opinions. An expert can discuss, as the basis for his/her opinion, facts or data which is otherwise inadmissible “if it is of a type reasonably relied

---

<sup>6</sup> *Thompson v. Nissan North America, Inc.*, 429 F.Supp.2d 759, 764 (E.D. La. 2006).

<sup>7</sup> *Jackson v Firestone Tire & Rubber Co.*, 788 F.2d 1070, 1082 (5th Cir. 1986). (“Evidence of similar accidents occurring under substantially similar circumstances and involving substantially similar components may be probative of defective design.”); *Brazos River Authority v G.E. Ionics, Inc.* 469 F.3d 416, 426 (5th Cir. 2006).

<sup>8</sup> Rec. Doc. 123-3.

upon by experts in the particular field and if the probative value in helping the jury evaluate the opinion substantially outweighs their prejudicial effect.”<sup>9</sup> The determination of whether the law enforcement reports and the CPSC documents at issue are of the “type reasonably relied upon by experts in the particular field” and whether the probative value outweighs the prejudicial effect will be determined at the time of trial. Likewise, should Plaintiff seek to offer the law enforcement reports and the CPSC documents as substantive evidence at trial, the Defendant’s hearsay objections are reserved and will be decided at the time of trial.

The Defendant’s *Motion in Limine to Exclude Evidence of Any Alleged Prior Similar Incidents*<sup>10</sup> is DENIED. Objections to the admissibility of evidence of the law enforcement and CPSC reports of the Fedderson Incident are reserved to trial.

### **III. PLAINTIFF’S MOTION IN LIMINE TO EXCLUDE TESTIMONY OF MARK L. EDWARDS PH.D.<sup>11</sup>**

On the one hand, Plaintiff seeks to offer evidence of a similar incident as evidence that there is something amiss with the design of the compound bow which is the subject of Plaintiff’s product liability suit. On the other hand, Defendant seeks to introduce statistical evidence to rebut Plaintiff’s claim that the product is unreasonably dangerous. What’s good for the goose is good for the gander. Where, as here, the Plaintiff offers evidence of a substantially similar incident, fairness dictates that the Defendant be permitted to rebut the inference that the product is unreasonably dangerous with evidence showing a statistically low injury rate associated with the product.

---

<sup>9</sup> FRE 703.

<sup>10</sup> Rec. Doc. 104.

<sup>11</sup> Rec. Doc. 110.

The Court has reviewed the CV and expert report of Mark L. Edwards, Defendant's statistical expert, and finds that he is qualified by virtue of his education and experience<sup>12</sup> to opine about statistical injury rates in the use of archery equipment such as the compound bow at issue. Plaintiff's objections to the basis and assumptions underlying Edwards' opinions can be adequately challenged on cross examination. "As a general rule, questions relating to the bases and sources of an expert's opinion affect the weight to be assigned that opinion rather than its admissibility and should be left for the [trier of fact's] consideration."<sup>13</sup>

The Court does not find that Edwards' methodology is fundamentally flawed or unreliable. As to the relevance of the statistical injury rate, the Plaintiff correctly points out that the likelihood of harm is an element of the required proof.<sup>14</sup> Simply stated, the likelihood of harm is a fundamental component of the risk-utility balance that the jury will be asked to make. Hence, opinion as to statistical rates of injury is relevant.

The Plaintiff's *Motion in Limine to Exclude Testimony of Mark L. Edwards Ph.D.*<sup>15</sup> is DENIED.

#### **IV. Defendant's Motion to Exclude Plaintiffs' Proposed Expert Stephen A. Batzer<sup>16</sup>**

Dr. Stephen A. Batzer is a PhD licensed mechanical engineer whom the Plaintiff intends to call to provide opinion testimony of design defect. Defendant moves to

---

<sup>12</sup> Edwards holds a Ph.D. in Human Factors Engineering and 46 years of experience in the field of development and analysis of accident databases to determine risk, including prior employment as Chief of the Mathematical Analysis Division for the National Highway Traffic Safety Administration. Rec. Doc. 110-3.

<sup>13</sup> *Viterbo v. Dow Chem. Co.*, 826 F.2d 420, 422 (5th Cir.1987).

<sup>14</sup> La. R.S. 9:2800.56.

<sup>15</sup> Rec. Doc. 110.

<sup>16</sup> Rec. Doc. 106.

exclude Batzer, arguing that he is not qualified to render opinions on compound bow design and/or his opinions regarding alternative designs are unreliable.

#### **A. Batzer's Qualifications**

Defendant challenges Batzer's qualifications to provide opinion testimony about compound bow design. Defendant argues that Batzer has never worked for a compound bow manufacturer or designed a compound bow, has not published in the area of compound bow design, has never investigated any other compound bow related incidents or formulated any prior opinions on compound bow design, and has no life experience in archery or the use and operation of compound bows. Relying on a case from the Southern District of Mississippi,<sup>18</sup> Defendant argues that Batzer must be qualified to as an expert in the field of archery and compound bow design. The Defendant oversimplifies the Mississippi Court's ruling and reasons.<sup>19</sup> Specialized knowledge is only one factor which can be considered in determining an expert's qualifications to opine on a given subject. The Defendant does not dispute that Dr. Batzer is qualified by virtue of his education, experience, training and knowledge to give opinion testimony in the field of mechanical engineering. Defendant suggests that Batzer must instead be qualified in the fields of archery and compound bow design. The Court is aware of no such disciplines. The question is whether, by virtue of his education, training, skill and experience in the discipline or field of mechanical engineering, he is qualified to give an opinion regarding the mechanical design of

---

<sup>18</sup> *Gholar v A.O. Safety*, 39 F. Supp. 3d 856 (S.D. Miss. 2014).

<sup>19</sup> In addition to lacking specialized knowledge in the area of safety goggles, the Mississippi District Court was critical of the relevance of the proffered expert's opinions and the reliability of his methodology. *Id.* at 860-61.

products and, in particular, as it relates to this case, whether he is qualified to opine as to the mechanical design and alternative designs of compound bows.

By education, Dr. Stephen Batzer is a mechanical engineer with a PhD. By experience, Dr. Batzer has taught engineering at the university level, including courses in materials, manufacturing, design, and “Professional Engineering Practices”. He has practiced extensively in the field of forensic engineering and boasts 68 refereed publications, including publications in failure analysis, forensic engineering, and “Prevention through Design”. Dr. Batzer has also lectured on numerous topics involving forensic engineering and has been awarded research grants in various areas involving mechanical engineering.<sup>20</sup> The Court is satisfied that Dr. Batzer is well qualified by education, skill, experience, and training to provide opinion testimony in the field of mechanical engineering. Cross examination and objections to Dr. Batzer’s qualifications in the field of tender may be made and will be determined at the trial.

#### **B. Reliability of Dr. Batzer’s Opinions as to Alternative Design**

Defendant cites *Watkins v. Telsmith*, 121 F.3d 984 (5th Cir.1997) for the proposition that for Batzer’s opinions as to alternative designs to be deemed reliable, he must have designed, built and/or tested them. Again, Defendant oversimplifies the rationale of the *Watkins* case. *Watkins* does not establish a bright line requirement that proffered alternative designs must be built and tested in order to satisfy the requirement that an expert’s opinion be reliable. In fact, the *Watkin*’s Court said as much, “this is not to say that alternative product designs must always be tested by plaintiff’s expert.”<sup>21</sup> The expert in *Watkins* simply conceptualized an option without testing it, presenting

---

<sup>20</sup> Rec. Doc. 138-1.

<sup>21</sup> *Id.* at 992. See also, *Guy v. Crown Equipment Corp.*, 394 F. 3d 320, 327 (5th Cir. 2004).



drawings, or citing other examples used by other contemporaneous conveyor manufacturers. The directive to be taken from the Watkin's opinion is that Court's should critically examine alternative design ideas offered by experts to insure that they go beyond "mere conceptualization" and demonstrate feasibility.

In this case, Batzer's principal alternative design, that the cable rod guide be positioned lower on the bow, has already been commercially produced by the Defendant. Feasibility of this alternative design has, thus, been ostensibly established. Batzer also proposed a wheeled roller guard as a design alternative. This alternative was commercially available in 2007 by another manufacturer.<sup>22</sup> Batzer also opines that the placement of rubber bumper or rounded endform on the cable guard is a design alternative that would reduce the risk or severity of injury. Defendant concedes that Dr. Batzer did indeed test this alternative design theory. He placed a store bought bumper on the control guard and shot the bow. Batzer went further, he calculated the force reduction attendant to an increase in surface area. He calculated that a ¾" diameter end bumper ("twice the diameter of the rod") would diminish the stress impact by 25%.<sup>23</sup>

The Defendant may challenge adequacies of Batzer's proposed alternative designs during cross examination. The Court finds that Dr. Stephen Batzer's testimony and expert opinions are admissible in this case. Accordingly, the Defendant's *Motion to Exclude Plaintiffs' Proposed Expert Stephen A. Batzer*<sup>24</sup> is DENIED.

---

<sup>22</sup> Rec. Doc. 138-1, pp. 121-2.

<sup>23</sup> Rec. Doc. 138-1, p. 68.

<sup>24</sup> Rec. Doc. 106.

**V. DEFENDANT'S DAUBERT CHALLENGE AND MOTION TO EXCLUDE PLAINTIFFS' PROPOSED EXPERT GAUTAM RAY<sup>25</sup>**

Defendant moves to exclude Dr. Gautam Ray, Plaintiff's Biomechanical Engineering Expert. Plaintiffs intend to offer Dr. Ray to provide opinion testimony on the Biomechanical causes of the subject fatal injury. Specifically, the effect of mechanical force and energy input causing injury and whether injury severity can be minimized by Mechanical Engineering Design.<sup>26</sup> Defendant moves to exclude Ray, arguing that he is unqualified to give opinions on compound bows and because his methodology is unreliable.

**A. Ray's Qualifications**

Defendant argues that Dr. Ray is unqualified to render causation opinions on compound bows. Defendant argues that Dr. Gautam Ray lacks education, training, and experience regarding the operation of compound bows because this is Dr. Ray's first compound bow case. He has not previously formulated opinions about compound bows. He has not conducted research or authored papers regarding compound bows or compound bow use, and he has no life experience operating compound bows. Dr. Ray is being offered as a Biomechanical Engineer not a compound bow or archery expert. As with Dr. Batzer, the inquiry is whether Dr. Ray's education, experience, or training in Biomechanical Engineering qualifies him to give opinion testimony and whether his opinions are the result of reliable methodology and would be of assistance to the jury.

Dr. Gautam Ray holds Bachelor's and Master's degrees in Mechanical Engineering and a PhD in Engineering Mechanics and Biomechanics from Penn State University. Dr. Ray is a tenured Professor of Engineering at Penn State University

---

<sup>25</sup> Rec. Doc. 108.

<sup>26</sup> Rec. Doc. 108-4.

where he has researched, taught, and supervised undergraduate and graduate students.<sup>27</sup> Dr. Ray teaches at the University level in the subjects of Engineering Mechanics, the use of computer methods to solve engineering problems, including Mechanical Engineering Design, Bio-Mechanics, and Product Design.<sup>28</sup> There is no *ipso facto* rule that requires that an Engineer have manufacturing or design experience, or even life experience, with the particular product at issue.

The Court is satisfied that Dr. Ray is well qualified by education, skill, experience, and training to provide opinion testimony in the field of biomechanical engineering. Cross examination and objections to Dr. Ray's qualifications in the field of tender may be made and will be determined at the trial.

#### **B. Reliability of Methodology**

Defendant argues that Dr. Ray violated fundamental principles of forensic engineering by failing to begin his analysis from "a scientifically neutral place" and that his "inertial force" theory lacks scientific basis. The Defendant's position is not supported by the record. Dr. Ray was asked to address any biomechanical model that would explain an involuntary movement and/or a voluntary or volitional movement that resulted in the decedent's head being situated between the bow string and the cable guard at the moment of impact.<sup>29</sup> Ray concluded that owing to "inertial force", in his opinion, it is "more likely than not, [that the decedent] did not intentionally place his head in between the Bow String of his Hoyt bow and the Bow Handle."<sup>30</sup> The Defendant takes issue with Dr. Ray's seeming dismissal of the theory that the decedent misused the bow

---

<sup>27</sup> Rec. Docs. 108-4 and 140-1, pps. 1-3.

<sup>28</sup> *Id.*

<sup>29</sup> Rec. Doc. 108-4.

<sup>30</sup> *Id.*

by volitionally placing his head between the bow and the bow string. However, the Court's focus is limited to principles and methodology employed and not the expert's conclusions. In this case, Ray reached his conclusion by applying common engineering principals of "inertial force" or "inertial motion". Defendant does not advance any meaningful argument that "inertial force" is not a widely recognized, generally applied scientific principle. Dr. Ray's deposition reveals that the concept of "inertial force" is derived from Newton's Third Law of Gravity.<sup>31</sup> Defendant's argument that Ray's inertial force opinion is "not based on biomechanics" is likewise misplaced. Biomechanics is the scientific study of the "mechanics of biological and especially muscular activity".<sup>32</sup> Nonetheless, the Defendant certainly retains the opportunity to make trial objections to opinions which Defendant considers to be beyond the bounds of the field of tender.

Defendant challenges Ray's assumption that the bow slipped from the decedent's hand as indicative of improper methodology. Unfortunately, the subject accident was unwitnessed. No one knows the events which produced the consequence. One possible explanation is that the decedent lost his grip on the bow which set off a sequence of events and motion that Ray explains by application of the scientific theory of inertial force. The Defendant will offer an opposing expert who makes other assumptions. In this case, as with scores of other unexplained events, assumptions are necessary. The very nature of scientific methodology involves assumptions a/k/a hypotheses,<sup>33</sup> deriving predictions from them as logical consequences. The validity of the assumption can be adequately tested on cross-examination. The Court's role as a

---

<sup>31</sup> Rec. Doc. 108-4, pps. 16-17; Dr. Gautam Ray's Deposition p. 64, ll. 21-25; pps. 66-68.

<sup>32</sup> Meriam Webster Dictionary.

<sup>33</sup> Hypotheses is defined as a "tentative assumption made in order to draw out and test its logical or empirical consequences". Meriam Webster Dictionary.

gatekeeper does not replace the traditional adversary system and the place of the jury within the system.<sup>34</sup> “As a general rule, questions relating to the bases and sources of an expert's opinion affect the weight to be assigned that opinion rather than its admissibility and should be left for the jury's consideration.”<sup>35</sup>

Defendant challenges Ray's qualifications to provide opinion testimony on the “cause of death” and whether the proposed alternative designs<sup>36</sup> would have reduced the severity of the injury encountered. Defendant relies on *Layssard v. United States*<sup>37</sup> for the proposition that a biomechanical engineer cannot alone establish medical causation. The cause of death does not appear to the Court to be the gravamen of the dispute. A component part of the compound penetrated the decedent's skull and lodged itself in the decedent's brain. The question upon which Ray opines is whether proposed alternative designs would have reduced the severity of the injury. The case relied upon by the Defendant is inapposite.

In this case, Ray performed calculations of impact forces and reduction in “Hertz stress” associated with alternative designs. Dr. Ray may opine as to the change in injury which would result if the subject bow had been equipped with proposed alternative designs.<sup>38</sup> The Defendant's *Daubert Challenge and Motion in Limine to Exclude Plaintiffs' Proposed Expert Gautam Ray*<sup>39</sup> is DENIED.

---

<sup>34</sup> *Johnson v. Samsung Electronics Am., Inc.*, 277 F.R.D. 161, 165 (E.D. La. 2011).

<sup>35</sup> *United States v. 14.38 Acres of Land, More or Less Sit. in Leflore County, Miss.*, 80 F.3d 1074, 1077 (5th Cir.1996) (quoting *Viterbo v. Dow Chemical Co.*, 826 F.2d 420, 422 (5th Cir.1987)).

<sup>36</sup> The alternative designs offered by Dr. Stephen Batzer.

<sup>37</sup> *Layssard v. U.S.*, 06-CV-00352, 2007 WL 4144936 \*3 (W.D. La. Nov. 20, 2007).

<sup>38</sup> *Green v. Schutt Sports Mfg. Co.*, 369 F. App'x 630, 639 (5th Cir. 2010). (Three medical doctors and one biomechanical engineer—testified as to the physical effects and biomechanics of the manner in which Green executed the tackle and their opinions regarding design of a helmet to prevent injury in these circumstances).

<sup>39</sup> Rec. Doc. 108.

## VI. PLAINTIFFS' MOTION IN LIMINE TO EXCLUDE TESTIMONY OF GIDEON JOLLEY<sup>40</sup>

Not surprising, Plaintiffs filed *quid pro quo* Motions to exclude the Defendant's experts. The Court starts with the principle that the jury is "the proper arbiter of disputes between conflicting opinions."<sup>41</sup>

Plaintiffs move to limit any proposed opinion testimony by Gideon Jolley in the field of Biomechanics. Plaintiffs argue that Jolley is unqualified to opine as to the cause of the subject accident; the mechanism of injury; opinions that the decedent was multi-tasking which caused or contributed to the accident; or the health or mortality consequences of the Plaintiffs' proposed alternative designs.

Jolley is a mechanical engineer with a B.S. in mechanical engineering from the University of Utah and seven years of post-graduate education. Mr. Jolley is the manager of research and development for Hoyt Archery, Inc. ("Hoyt") and has experience designing compound bows since 1999 as a product engineer and senior product engineer for Hoyt.

Defendant proposes Mr. Jolley as an expert in archery, archery interface with the compound bow, how it's being used, the engineering design and manufacture of archery equipment, and the archery industry in general life.<sup>42</sup>

In his original report<sup>43</sup>, Mr. Jolley opined on seven topics:

1. the condition of the Sandifer bow;

---

<sup>40</sup> Rec. Doc. 112.

<sup>41</sup> *United States v. 14.38 Acres of Land, More or Less Sit. in Leflore County, Miss.*, 80 F.3d 1074, 1077 (5th Cir.1996) (quoting *Viterbo v. Dow Chemical Co.*, 826 F.2d 420, 422 (5th Cir.1987).

<sup>42</sup> Rec. Doc. 136. Plaintiffs do not challenge the fields of tender. Objections to the tender, if any, are reserved to the time of trial.

<sup>43</sup> Rec. Doc. 136-2, pp. 1-16.

2. the feasibility of placing the 2007 Hoyt Vulcan XT500's cable guard rod below the grip;
3. the feasibility of placing a roller guard below the grip;
4. whether the cable guard system was defective and capable of causing the accident during normal use;
5. whether the smooth draw cam on the subject bow is defective;
6. whether, under normal use, an archer's head can or should be positioned in front of the bowstring and behind the bow handle; and
7. the alignment of the cable guard during draw, aim, and let-down.

In a supplemental report<sup>44</sup>, Jolly opined:

1. That the incident was the result of "unforeseeable misuse"
2. That the alternative designs proposed by Plaintiff would not have "altered the fatal result of the Sandifer incident".
3. There was no defect of the subject bow.
4. That Plaintiff's experts, Batzer and Ray made significant "engineering errors".

Plaintiffs do not challenge Mr. Jolley's proposed testimony regarding the condition of the subject bow or the feasibility of the Plaintiffs' proposed alternative designs. With respect to the forces associated with the proposed alternative designs, Plaintiffs argue that Jolley lacks qualification to give opinion testimony. The Court agrees. Defendant concedes that "[t]here are some biomechanical aspects to Mr.

---

<sup>44</sup> Rec. Doc. 136-2, pps. 16-25.

Jolley's expertise."<sup>45</sup> Defendant submits that Jolley's criticism of the Plaintiffs' proposed alternative designs "do not implicate 'overall forces' or 'force diffusions'."<sup>46</sup> The Court finds that Jolley is qualified by virtue of his education, training, experience, and knowledge to provide opinion testimony about the use and operation of compound bows generally and how the proposed alternative designs might affect bow functionality and performance. In short, the Court finds that Jolley is qualified to opine about the feasibility of the alternative designs from the standpoint of manufacturing, functionality, and use. Jolley is not qualified to opine about the energy or forces associated with the bow and/or the proposed alternative designs' effects on the human physiology of the archer or the health or mortality consequences to the archer. Jolley is not qualified to opine that alternative designs proposed by Plaintiffs would not have "altered the fatal result of the Sandifer incident".<sup>47</sup> He may, however, opine as to perceived safety risks associated with bow functionality and performance.

Plaintiffs also object to various factual assumptions made by Mr. Jolley. For reasons previously set forth, the validity and reasonableness of Jolley's assumptions are best addressed on cross examination. Plaintiffs' objections to Jolley's criticisms of Batzer and Ray's engineering analysis and whether they made "engineering errors" is deferred to trial. Finally, Plaintiffs move to exclude opinions beyond those set forth in Mr. Jolley's expert reports. Those objections are reserved to the time of trial.

---

<sup>45</sup> Rec. Doc. 136.

<sup>46</sup> *Id.*

<sup>47</sup> Rec. Doc. 136-2, p. 25.



Gideon Jolley's opinion testimony will be limited as set forth above. In all other respects, the Plaintiffs' *Motion in Limine to Exclude Testimony of Gideon Jolley*<sup>48</sup> is DENIED.

**VII. PLAINTIFFS' MOTION IN LIMINE TO EXCLUDE TESTIMONY FROM ALFRED BOWLES<sup>49</sup>**

Plaintiffs move to exclude testimony from Defendant's Biomechanical expert Dr. Alfred Bowles.<sup>50</sup> Bowles is a Board Certified Surgeon with a B.S. in mechanical engineering from Purdue University and an M.D. from Indiana University. Dr. Bowles is accredited in the field "Traffic Accident Reconstruction" and has published and lectured on various subjects touching upon accident reconstruction, accident investigation, injury causation, and Biomechanics of injuries in low velocity accidents. In addition to working as a retained forensic expert in accidental injury cases, Dr. Bowles also maintains a clinical practice as a general and acute care physician.<sup>51</sup>

In a nutshell, Dr. Bowles will be offered by the Defendant to opine that the fatal injury occurred because the decedent placed his head between the bow riser and the bow strings. More specifically, in his report,<sup>52</sup> Dr. Bowles opines that:

1. The decedent's fatal head injury occurred while the left temple of his head was aligned with the compound bow's plane of mechanical action.
2. The nature of the impalement injury required substantial energy and the subject bow had sufficient energy stored within the mechanical system to cause a penetrating skull injury with an impactor surface area less than 1.0 in.<sup>2</sup>

---

<sup>48</sup> Rec. Doc. 112.

<sup>49</sup> Rec. Doc. 114.

<sup>50</sup> Rec. Doc. 114.

<sup>51</sup> Rec. Doc. 114-2.

<sup>52</sup> Initial Report, 3/20/2014, Rec. Doc. 114-2.

3. The pattern of the penetrating injury indicates that the decedent's head was positioned in the plane of the bowstring, riser and limbs while the compound bow was energized by force full draw upon the bowstring.
4. The pattern of injury is consistent with the decedent volitionally placing his head between the riser and the bowstring and looking down towards the lower portion of the bow.
5. The pattern of injury and the alignment of the compound bow does not support the theory that the decedent was in a shooting posture when the compound bow experienced a "sudden, unexpected release of energy." Had the riser slipped from Dr. Sandifer's left hand, as theorized by Plaintiffs' experts, the riser and cable guard rod would have moved in the direction of the bowstring resulting in the most likely point of contact, if any, on the right side of the face and/or forehead.
6. Owing to the quick release of stored energy by the subject bow, it is unlikely that the decedent would have been able to reflexively move his head to the position necessary to account for the observed pattern of injury.
7. Assuming Dr. Sandifer had fatigued while drawing his compound bow, there would be no reflexive body reaction to cause his head to move in the direction required to account for the observed pattern of injury.

In a supplemental report, Dr. Bowles is critical of the analysis of Plaintiffs' experts, Drs. Batzer and Ray.<sup>53</sup> However, Dr. Bowles' causation opinions remained unchanged. Plaintiffs move to exclude Dr. Bowles arguing that Bowles offers no opinion as to whether the subject bow was unreasonably dangerous and, therefore, Plaintiffs

---

<sup>53</sup> Rec. Doc. 114-3.

argue his opinion is irrelevant and will be of no help to the jury. Plaintiffs argue that, “because he did not provide opinions in his report or in his deposition as to the inquiries of [La. R.S.] 9:2800.56, Dr. Bowles must be precluded from testifying in any manner about whether or not the design of the subject compound bow was unreasonably dangerous.”<sup>54</sup>

The Court finds that Dr. Bowles is qualified by virtue of his education and experience to testify as to the opinions set forth in his expert report. As previously stated, this tragic accident was unwitnessed. In the Court’s view, the jury will be aided by the countervailing opinions and hypotheses of the experts regarding the circumstances and factors that may have caused and/or contributed to fatal accident. Thus, Plaintiffs’ *Motion in Limine to Exclude Testimony From Alfred Bowles*<sup>55</sup> is DENIED.

Accordingly,

**IT IS HEREBY ORDERED** that Defendant’s *Motion in Limine to Exclude Evidence of Any Alleged Prior Similar Incidents*<sup>56</sup> is DENIED.

**IT IS FURTHER ORDERED** that Plaintiffs’ *Motion to Exclude Testimony of Mark L. Edwards Ph.D.*<sup>57</sup> is DENIED.

**IT IS FURTHER ORDERED** that Defendant’s *Daubert Challenge and Motion to Exclude Plaintiffs’ Proposed Expert Stephen A. Batzer*<sup>58</sup> is DENIED.

**IT IS FURTHER ORDERED** that Defendant’s *Daubert Challenge and Motion to Exclude Plaintiffs’ Proposed Expert Gautam Ray*<sup>59</sup> is DENIED.

---

<sup>54</sup> Rec. Doc. 114-1.

<sup>55</sup> Rec. Doc. 114.

<sup>56</sup> Rec. Doc. 104.


<sup>57</sup> Rec. Doc. 110.

<sup>58</sup> Rec. Doc. 106.

**IT IS FURTHER ORDERED** that Plaintiffs' *Motion in Limine to Exclude Testimony of Gideon Jolley*<sup>60</sup> is Granted in part and Denied in part. Jolley will not be permitted to opine about the energy or forces associated with the bow and/or the proposed alternative designs' effects on the human physiology of the archer or the health or mortality consequences to the archer. In all other respects, the Motion is DENIED.

**IT IS FURTHER ORDERED** that Plaintiffs' *Motion in Limine to Exclude Testimony from Alfred Bowles*<sup>61</sup> is DENIED.

Signed in Baton Rouge, Louisiana, on July 20, 2015.

  
\_\_\_\_\_  
**JUDGE SHELLY D. DICK**  
**UNITED STATES DISTRICT COURT**  
**MIDDLE DISTRICT OF LOUISIANA**

---

<sup>59</sup> Rec. Doc. 108.

<sup>60</sup> Rec. Doc. 112.

<sup>61</sup> Rec. Doc. 114.