

(Docket Nos. 178-82). The Court held a *Daubert* hearing on November 2, 2015, at which time both experts provided additional testimony and were subject to cross-examination on issues relevant to these Motions.² (Docket Nos. 219, 233). Thereafter, supplemental briefing ensued. (Docket Nos. 222-23; 231-32). After careful consideration of all of the parties' arguments, the evidence of record and for the following reasons, Olin's Motions [178][180] are DENIED.

II. RELEVANT BACKGROUND³

A. *The Model 94*

Plaintiffs claim that they were injured by a defectively designed Model 94 rifle that was manufactured by Olin around 1968. (Docket No. 1). The Model 94 rifle has been manufactured by Olin and its predecessors for many years, starting in 1894. It is one of the most popular deer hunting rifles that have ever been sold. (*See Hildebrandt Report*, Docket No. 101-1 at 4 (“I have heard and read that more deer have been harvested with a Winchester Model 94 than any other rifle.”)). Relevant here, this lever-action repeating rifle has an exposed hammer, which can be set in three different positions: full down (fired position); half-cock (safety position); and full back (full cock position). (*Powell Report 10/14/13*, Docket No. 191-2 at 7, ¶ 5.14). The full back position is used to cock the rifle, engaging the firing mechanism and enabling a trigger pull to shoot a chambered bullet. (*Id.*). After a shot is fired, the hammer moves to the full down or uncocked position. (*Id.*). The half-cock safety, when properly engaged, prevents an inadvertent trigger pull from discharging the firearm. (*Hildebrandt Report*, Docket No. 101-1 at 4, 15-16). There are no other advertised safety features on the rifle. (*Id.*).

B. *The Incident*

² The Court notes that the scope of the questioning at the *Daubert* hearing was limited to the reliability of the methods employed by the experts. (*See* Docket No. 199).

³ As the parties are well familiar with the facts of this case, the Court limits its discussion to the factual background necessary to resolve the pending motions. For a more robust discussion of same, refer to the Court's earlier decision resolving a discovery related motion for reconsideration. (*See* Docket No. 110).

The subject rifle was purchased by Trask's father in 1990, who then gave it to him as a gift. (*Wayne Trask Depo*, Docket No. 190-8 at 59-60, 62, 89). Trask testified that he is an experienced hunter, had used the rifle many times previously and that it was in good, working condition and fully operable in 2009. (*Id.* at 4-49, 51-7, 63, 81-2, 101-02, 106). Up to the date of the accident, he had never experienced any problems with the half-cock safety on the rifle. (*Id.* at 77-8). On November 29, 2009, Trask fired the rifle 3 or 4 times and sighted it to prepare for a hunting trip he planned to take with his daughter, A.T. (*Id.* at 70-1). The next day, November 30, 2009, he took A.T. to hunt in Coral, Indiana County, Pennsylvania, in a field where he had previously set up an elevated two-person tree stand. (*Id.* at 75, 108-12).

Upon arriving at the site and after putting on their hunting gear, Trask helped A.T. to climb up the ladder to the platform of the tree stand. (*Wayne Trask Depo*, Docket No. 116-17, 120-21). After A.T. was seated, Trask went back down the ladder and retrieved the rifle. (*Id.*). He then returned to the platform of the tree stand, and sat to his daughter's left. (*Id.*). He loaded a live cartridge in the chamber, placed the rifle in the half-cock position, and rested the rifle standing up on the platform, with the lever facing them. (*Id.* at 102, 114-16, 128-29). He also held an umbrella in his right hand. (*Id.* at 117, 144-45). His daughter was resting her left hand on his right knee. (*Id.* at 25). The firearm fell off of its position on the tree stand and discharged. (*Id.* at 126, 144-47, 160-61). The fired bullet traveled through his right leg and knee, A.T.'s left ring finger, his right hand, and the umbrella that he was holding. (*Id.* at 127, 138-39, 161). A.T. lost a part of her finger from the impact of the bullet. (*Id.* at 138-39, 192-93). He has since undergone multiple procedures on his leg and knee and has had resulting complications from an infection that led to part of his leg being amputated. (*Id.* at 161-64, 171-73).

Neither he nor A.T. saw the firearm fall from the tree stand or the position that the rifle was in when it fired. (*Wayne Trask Depo*, Docket No. 190-8 at 133-34, 138, 146, 154, 156, 159-60). There were no other eye witnesses. (*Id.* at 138). Accordingly, the parties dispute how the unintended discharge of the rifle occurred, including, among other things: whether the rifle was in the half-cock position at the time; and if the rifle fired upon contact of the hammer of the rifle with the top rung of the tree stand ladder around 30 inches below the platform or upon contact with the ground several additional feet below. (*See* Docket Nos. 222-23; 231-32).

The parties also contest many of the facts that occurred immediately following the discharge of the firearm. (*Id.*). There appear to be conflicting statements and testimony by witnesses concerning the location where the rifle was found on the ground and the chain of custody of the rifle after the incident, an issue which is hotly contested. (*Wayne Trask Depo*, Docket No. 190-8 at 93-4, 148-51, 157). In this regard, the parties point to conflicts in the evidence about who retrieved the rifle initially; who unloaded the rifle and inspected it at the scene; and the condition of the rifle and its components at the time. (Docket Nos. 222-23; 231-32).

C. Expert Evidence

Naturally, the parties rely on expert witnesses to reconstruct the accident, examine the rifle and its components, test exemplar rifles, inspect and assess the tree stand and ladder components, and to provide their opinions as to whether the Model 94 is defective. (Docket Nos. 178-181; 191-92; 22-23; 231-32). Plaintiffs' experts, Knox and Powell, opine that the Model 94 is defectively designed and that Olin knew about the defect for many years but failed to warn consumers like Trask and A.T. of the problem. (*Knox Reports*, Docket Nos. 181-1; 181-2; 181-3; *Powell Reports*, Docket Nos. 191-2; 191-3; 232-3). Olin's experts, Dr. Robert Block, Tom

Schaefer and Carl Hildebrandt, counter that the rifle's half-cock safety worked as intended and that the discharge of the rifle was not caused by the design of the rifle or lack of a warning. (*See e.g., Hildebrandt Report*, Docket No. 100-1). Plaintiffs have not challenged the admissibility of the opinions of the defense experts under *Daubert*. (*See generally*, Docket Report, Civ. A. No. 12-340). Hence, the Court largely focuses on the opinions of Plaintiffs' experts, starting with Knox.

a. Knox's Qualifications, Methods and Opinions

Knox is a forensic consultant, mechanical engineer, accident and crime scene reconstructionist and law enforcement officer. (*Knox Declaration*, Docket No. 192-5 at 1). He earned an associate's degree in criminal justice technology in 2000 from the Florida Community College at Jacksonville; a bachelor's degree in mechanical engineering from the University of North Florida in 2010; and a master's degree in forensic science from the University of Florida in 2012. (*Id.*). Knox is presently pursuing a doctorate in criminal justice at Nova Southeastern University, having completed his coursework but having not yet completed his dissertation. (*Id.*). His doctoral studies have been research-driven focusing on "applied statistics and probability; research methods; data analysis; qualitative and quantitative measurement and analysis and program evaluation." (*Id.*).

Knox has 15 years of experience as a law enforcement officer, including 7 as a detective and has been the lead investigator in hundreds of shooting incidents. (*Knox Declaration*, Docket No. 192-5 at ¶ 5). He has extensive advanced training in reconstructing shooting incidents and with firearms generally. (*Id.* at ¶ 6). He has achieved numerous certifications, taught firearms safety courses and crime scene reconstruction courses and published several peer-reviewed articles, including an article titled "Forensic Analysis of an Accidental Firearm Discharge Due to

a Blow to an Exposed Hammer Spur,” that he presented at a conference of the American Society of Mechanical Engineers, of which he is a member. (*Id.* at ¶¶ 7-12). Knox has “regularly conduct[ed] mechanical examinations of firearms for functionality and mechanical defect associated with [his] forensic casework.” (*Id.* at ¶ 14). He has consulted with legal teams on product liability cases involving unintentional discharges of several types of firearms, including the Model 94 rifle. (*11/2/15 Hr’g*, Docket No. 233 at 101-02, 105-08). Knox has been accepted as an expert in crime scene and accident reconstruction in state courts in Florida, Georgia, Mississippi, Texas, and Illinois and federal courts in Alabama and Illinois. (*Knox Declaration*, Docket No. 192-5 at ¶15). Knox has not yet been qualified as an expert in the areas of firearm design and/or firearm safety. (*11/2/15 Hr’g*, Docket No. 233 at 89). This case is his first attempt to do so, as other firearms cases in which he was involved have settled. (*Id.*).

To this point in the litigation, Knox has produced three separate expert reports, submitted a declaration, sat for a deposition and testified at the *Daubert* hearing concerning the methods he employed to reach his conclusions. (Docket Nos. 181-1; 181-2; 181-3; 192-5; 219; 233),

Knox’s opinions provided in his first report dated October 15, 2013 are unchallenged. (*Knox Report 10/15/13*, Docket No. 181-1). In it, Knox opines that the rifle was in the half-cock position when it fell from the tree stand, the hammer then contacted the top rung of the ladder, causing the rifle to discharge a single bullet that resulted in the injuries to Trask and his daughter. (*Id.* at 29-30).

Knox’s second report dated February 14, 2014 provides his rebuttal opinions contesting the conclusions reached by the defense experts that the firearm fell from the tree stand and landed on its butt on the ground below, at which point the firearm discharged. (Docket Nos. 181-2; 233 at 100-01). He criticizes the drop testing performed by the defense experts as

unreliable for having too many variances from the conditions of the actual incident and undermines their opinions that the rifle dropped to the ground and discharged by pointing out, among other things, that the trajectory of the bullet could not have followed the path that it did from the position where witnesses testified that the rifle was found. (Docket Nos. 181-2 at 30-31; 233 at 100-01). Knox concludes that the testing methods and data points used by the defense experts are unreliable because the variances that he found in their methods all benefited Olin's position in this case. (*Id.*). He testified that he reached these conclusions applying traditional forensic engineering methods. (*11/2/15 Hr'g*, Docket No. 233 at 97-8, 100-01).

Knox's third report dated June 15, 2015 was produced to supplement the earlier findings in the first two reports with reference to additional discovery materials that were produced by Olin under a Court Order. (Docket Nos. 181-3; 233 at 109-10). These documents included owner's manuals from various years of the Model 94, results of drop testing and other experiments conducted by Olin in past litigation of similar cases involving unintentional discharges of firearms, and Olin's legal positions taken in those cases. (*Id.*). Knox believes that this additional information confirms his earlier conclusions in his first and second reports about how the incident involving the Trasks occurred and the flaws that he identified with the defense expert's conclusions. (*Id.*). He also opines that this collection of subsequently produced evidence demonstrates that Olin was aware of the defect in the Model 94, i.e., that it could unintentionally discharge if it was dropped, bumped or jarred. (*Id.*). Knox adds that given this knowledge, Olin should have issued a warning to consumers and/or recalled the rifle. (*Id.*).

b. Powell's Qualifications, Methods and Opinions

Powell is a registered professional engineer, metallurgist and materials failure analyst, with considerable experience in the design and performance requirements of firearms and

firearms safety systems. (*Powell Report 10/14/13*, Docket No. 191-2 at 33-36). His academic record includes earning a bachelor's degree in metallurgical engineering in 1974, and completing some coursework toward a masters' degree in the same field between 1976 and 1977. (*Id.*). Powell has earned Level III Certification in penetrant testing, magnetic testing and ultrasonic testing from the American Society for Nondestructive Testing. (*Id.*). He has nearly 40 years of professional experience in physical testing and evaluation of materials, quality control and failure analysis of materials, and accident investigations. (*Id.*). Powell teaches and lectures in these areas and served as an instructor at the Federal Aviation Administration Academy. (*Id.*).

Powell has completed many materials failure analysis projects involving the inadvertent discharge and explosion of firearms, and has served as an expert in numerous firearm cases, including five previous cases against Olin alleging defects in its Model 94 rifle. (*11/2/15 Hr'g*, Docket No. 233 at 138, 162). He also has experience in designing firearms as he holds a patent for a cross-bolt safety for muzzleloader firearms. *See* U.S. Patent No. 4,989,357, "Muzzleloader Safety". With this background and experience, Powell has been accepted as a materials engineering expert and as an expert in the analysis and testing of firearms safety designs in multiple federal and state courts.⁴

⁴ The Court notes that Olin cites two instances where trial courts excluded Powell's testimony in non-firearms cases. *See e.g. Bradley v. Ameristep, Inc.*, 2014 WL 2560680, at *5-6 (W.D. Tenn. June 6, 2014); *Freeland v. Ameristep, Inc.*, 2014 WL 1646948, at *3-4 (E.D. Okla. April 24, 2014). But, an appeal is pending in the *Freeland* matter and the decision to exclude his testimony in *Bradley* was reversed by the Sixth Circuit, 800 F.3d 205 (6th Cir. 2015). In reversing the exclusion of his opinions, the Court of Appeals for the Sixth Circuit held that:

Powell's credentials clearly mark him as an expert in materials failure analysis—not merely an "engineer," as the district court described him. Powell has over thirty-five years of experience analyzing the forces and conditions that lead to product failures. He has served as an instructor in materials analysis and microscopic analysis for university students, professional organizations, and state agencies. In the course of his career, Powell has conducted materials failure analysis on "all types of polymer materials," and on five or six occasions he has specifically analyzed failures of polymer straps or webbing in "load-bearing applications." In light of this experience, it was an abuse of discretion for the district court to conclude that Powell's expertise was solely in the area of

At this juncture of the case, Powell has produced several expert reports, sat for a deposition and testified at the *Daubert* hearing. (Docket Nos. 191-2; 191-3; 232-2; 233). In his report dated October 14, 2013,⁵ Powell opines to a reasonable degree of engineering certainty that the Model 94 is defective because “[t]here is no position where this rifle is adequately protected against unintentional discharge as a result of a butt or hammer impact since there is no mechanical barrier between the hammer and the firing mechanism.” (*Powell Report 10/14/2013*, at 8-9). Powell further explains that this design fails to protect from an accidental discharge of the rifle caused by a low energy impact of the hammer spur or butt and that this type of accidental discharge can occur without a trigger pull and when the firearm is in the “half-cock” safety position. (*Id.*). He continues that there were safer design alternatives that were technologically and financially-feasible at the time the Trask rifle was manufactured (1968) and that these known safety mechanisms would have prevented the unintended discharge that occurred in this case. (*Id.*).

In reaching his conclusions, Powell used a series of engineering, and materials failure analysis methods. To this end,

Powell inspected the firearm involved in this case, disassembled and examined exemplar rifles, performed Rockwell hardness determinations on the subject rifle’s hammer and sear, used scanning electron microscopy on the subject hammer spur and ladder rung, used comparison microscopy on several of the rifle components, performed elemental analysis (Energy Dispersive Spectrum or “EDS”) on several locations of the subject hammer spur and ladder rung, and inspected and measured the impact signature on the ladder rung.

metallurgy and then rely on that conclusion to rule that Powell was unqualified to provide expert testimony about the ratchet straps.

Bradley, 800 F.3d at 209.

⁵ Powell produced an earlier report dated May 15, 2013 but the substance of same was largely incorporated into the October 13, 2013 report. (*See* Docket No. 76-2). Thus, it is not discussed separately here.

(Docket Nos. 232 at 9; 191-2 at 4-6; *11/2/15 Hr'g*, Docket No. 233 at 184-85). As part of his assessment, Powell conducted paint testing on the ladder rung, with the results of the test revealing what he described as a “fingerprint” of chemicals matching the makeup of the hammer spur as supportive of his conclusion that the hammer spur had contacted the ladder rung. (*11/2/15 Hr'g*, Docket No. 233 at 203-04). He compared the damage to the hammer spur on the rifle to the “impact signature” on the ladder rung, finding a match. (*11/2/15 Hr'g*, Docket No. 233 at 197). Powell also conducted an extensive examination of the product history of the Model 94, test results and examinations from prior claims against Olin, and industry standards for firearms set forth in patents and trade literature, all of which is listed in his reports. (*See* Docket Nos. 191-2; 191-3; 232-2).

Among the prior cases that Powell considered was *Irons v. Olin*, a 1992 case where he acted as an expert for the plaintiff. (*Powell Report 10/14/13*, Docket No. 191-2 at ¶ 6.11). In *Irons*, Powell drop tested exemplar Model 94 rifles and another Model 94 that he had retrofitted with a cross-bolt safety onto three different surfaces, i.e., pine, polycarbonate, and a tree stand board. (*Id.* at 14-15). This test consisted of Powell dropping the exemplar rifles in the half-cock position causing their hammer spurs to contact these surfaces from various heights ranging from 13 inches to 25 ½ inches. (*Id.*). The exemplar rifles fired on every occasion except the 13 inch drop on the polycarbonate surface. (*Id.*). Also, the retrofitted rifle with the cross-bolt safety did not discharge when dropped on the tree stand board. (*Id.*). Through this testing, Powell observed and recorded damage caused to the internal components of the exemplar rifles. (*Id.*).

Powell applied the results of his *Irons* testing to the accident reconstruction measurements and calculations that were computed in this matter and opines that the Trask rifle discharged when the hammer spur struck the ladder rung. (*11/2/15 Hr'g*, Docket No. 233 at 182,

205). He points to the facts that the drop height was greater than the heights used in his testing and that the ladder rung is made of stronger material than he used during his *Irons* testing, reasoning that the greater force to and impact on the Trask rifle would have led to the same type of unintended discharge. (*Id.*). He adds that the results of the defense experts' drop tests confirm his opinions. (*Id.* at 205).

Powell has also submitted a rebuttal report dated February 14, 2014, criticizing the conclusions reached by defense experts that the hammer spur did not contact the ladder rung, causing the unintended discharge in this case. (*Powell Report 2/14/14*, Docket No. 232-3). He examined the results of defense experts' drop tests, took measurements of the exemplar rifles that were used during the tests, and likewise reviewed and assessed the steel tube that was used by the defense experts to replicate the ladder rung. (*Id.*). Powell opines that the test results generated by the defense experts are unworthy of credence due to dissimilarities between the tests and the actual incident. (*Id.*). Among other things, Powell points out that: the hammer spurs on the exemplar rifles were about twice as thick as the Trask rifle; the angle of the test did not replicate the actual fall of the rifle; the metal wall of the steel tube was around 11-13 percent thinner than the ladder rung; and exaggerated drop heights were used. (*Powell Report 2/14/14* at ¶ 6.13).

Like Knox, Powell also produced a supplemental report dated June 15, 2015 after he reviewed all of the extensive materials that the Court had ordered Olin to produce to Plaintiffs. (*Powell Report 6/15/15*, Docket No. 191-3). He explains that his review of these materials support his theory of the case and that his opinions are consistent with Olin's issuance of a warning in 2014. (*Id.*).

c. Warnings Issued by Olin

It is undisputed that the 1968⁶ version of the owner's manual for the Model 94 did not warn consumers about any hazards pertaining to accidental discharge of the rifle. (*11/2/15 Hr'g*, Docket No. 233 at 112-13). The versions of the owner's manual from 1978 through 1980 contained the following statement:

Warning: As is true with other firearms, the safety mechanism when it is engaged, is designed to prevent the trigger from being pulled. However, the mechanism will not necessarily prevent the accidental discharge of this firearm as a result of jarring or abuse such as occurs when a firearm is dropped.

(Docket No. 191-3, *Powell Report 6/15/15* at ¶ 6.7; *11/2/15 Hr'g*, Docket No. 233 at 113). The post-1980 versions of the manual did not have this type of warning. (*Id.*).

During the course of this lawsuit, two of Olin's experts, Dr. Robert Block and Tom Schaefer, conducted drop tests of the Model 94. (*Mullgardt Depo*, Vol. II, at 11, Docket No. 231-4). Olin admits that the results of the drop testing conducted by Schaefer and Block show that "the force resulting" from a "drop, of about 30 to 32 inches, directly onto the hammer when it is in the half-cocked position can deform or break the half-cocked safety mechanism and result in the rifle firing." (*Id.*). These testing results caused Olin to issue a warning to consumers. (*Id.* at 9-12). To this end, on October 2, 2014, Olin issued a warning on its website about its Model 94 and several other of its firearm models advising consumers that "when there is a live cartridge in the chamber, **dropping, jarring or bumping the firearm may cause accidental discharge...**" See PRODUCT SAFETY NOTICE – WARNING, Winchester 94: Product Safety Notice, WINCESTER® Model 94 Family of Level-Action Rifles, Carbines, and Muskets with Half-Cock Safety, available at: <http://www.winchester.com/library/news/Pages/model-94->

⁶ Pennsylvania law applies. (See Docket Nos. 224, 227). Pennsylvania adopted strict liability in 1965. See e.g., RESTATEMENT (SECOND) OF TORTS § 402A (1965); *Webb v. Zern*, 422 Pa. 424, 220 A.2d 853 (Pa. 1966). Failure to warn is part of same. See *Pavlik v. Lane Ltd./Tobacco Exporters Intern.*, 135 F.3d 876, 881 (3d. Cir. 1998).

[warning.aspx](#) (last visited 3/25/16); (*Powell Report 6/15/15*, Docket No. 191-3 at 13). Olin also published this warning in trade publications, including the December 2014 edition of *American Rifleman* magazine. (*Powell Report 6/15/15* at 2, Figure 1, Docket No. 191-3).

III. RELEVANT PROCEDURAL HISTORY

The litigation of the pending Motions has proceeded pursuant to an identical briefing schedule. Olin filed its *Daubert* Motions, supporting briefs and evidence on August 26, 2015. (Docket Nos. 178, 179, 180, 181). Plaintiffs responded with their opposition briefs and counter-evidence on September 25, 2015. (Docket Nos. 191, 192). A *Daubert* hearing was then held on November 2, 2015, with the official redacted transcript of those proceedings being filed on February 17, 2016. (Docket Nos. 213, 233). The Court directed the parties to submit the full deposition transcripts of the challenged experts and the same were produced subsequent to the hearing. (Docket No. 214). Thereafter, on January 8, 2016, Olin filed its supplemental briefs and additional evidence. (Docket Nos. 222, 223). Finally, Plaintiffs submitted their supplemental response briefs and additional evidence on February 16, 2016. (Docket Nos. 231, 232).

As all briefing has concluded and all evidentiary submissions have been made, the instant Motions are now ripe for disposition.

IV. LEGAL STANDARD

Federal Rule of Evidence 702, which memorializes the Supreme Court's landmark case, *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), provides the basic framework for the admissibility of expert testimony:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

FED. R. EVID. 702. The United States Court of Appeals for the Third Circuit has held that “Rule 702 embodies a trilogy of restrictions on expert testimony: qualification, reliability and fit.” *Schneider ex rel. Estate of Schneider v. Fried*, 320 F.3d 396, 404 (3d Cir. 2003) (citations omitted). “[T]he district court acts as a gatekeeper, preventing opinion testimony that does not meet the requirements of qualification, reliability and fit from reaching the jury.” *Id.* In this role, the district court is not the finder of fact but must focus on the methodology of the expert in order to “satisfy itself that ‘good grounds’ exist for the expert’s opinion.” *United States v. Mitchell*, 365 F.3d 215, 244 (3d Cir. 2004) (citing *Daubert*, 509 U.S. at 590); *see also In re TMI Litigation*, 193 F.3d 613, 713 (3d Cir. 1999) (district court should not conflate “its gatekeeping function with the fact-finders’ function as the assessor of credibility”). “The District Court has broad discretion in determining the admissibility of evidence, and ‘considerable leeway’ in determining the reliability of particular expert testimony under *Daubert*.” *Walker v. Gordon*, 46 F. App’x. 691, 694 (3d Cir. 2002) (citing *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 152-53 (1999)).

“Rule 702, which governs the admissibility of expert testimony, has a liberal policy of admissibility.” *Kannankeril v. Terminix Intern., Inc.*, 128 F.3d 802, 806 (3d Cir. 1997). The party that proffers the expert testimony is not required to prove to the court that the expert’s conclusion is correct. *See Mitchell*, 365 F.3d at 244 (citing *Ruiz–Troche v. Pepsi Cola Bottling Co.*, 161 F.3d

77, 85 (1st Cir. 1998) (citations omitted)). The focus is on the process and methodology employed by the expert. *Id.* In assessing that methodology, the Third Circuit has listed several factors it deems “important” in considering an expert’s methodology:

- (1) whether a method consists of a testable hypothesis;
- (2) whether the method has been subject to peer review;
- (3) the known or potential rate of error;
- (4) the existence and maintenance of standards controlling the technique’s operation;
- (5) whether the method is generally accepted;
- (6) the relationship of the technique to methods which have been established to be reliable;
- (7) the qualifications of the expert witness testifying based on the methodology; and
- (8) the non-judicial uses to which the method has been put.

In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 742 n.8 (3d Cir. 1994).

The party proffering the expert must only demonstrate that the expert arrived at his or her conclusion in a reliable manner. *Id.*; *see also Kannankeril*, 128 F.3d at 809 (“The trial judge must be careful not to mistake credibility questions for admissibility questions.”). Finally, the party asserting the admissibility of the proffered testimony has the burden to demonstrate, by a preponderance of the evidence, that the opinions are based on “good grounds.” *Kannankeril*, 128 F.3d at 807.

V. DISCUSSION

This Court understands its important role as gatekeeper to fully evaluate expert opinions to ensure that each of the three requirements of qualification, reliability and fit are met prior to admitting expert evidence. *See e.g., Pritchard v. Dow Agro Scis.*, 705 F. Supp. 2d 471, 482 (W.D. Pa. 2010) *aff’d*, 430 F. App’x 102 (3d Cir. 2011). Having fully considered Plaintiffs’ proffers of Knox and Powell, the Court finds that their opinions are admissible under *Daubert* and that Olin’s challenges to their respective opinions are best reserved for cross-examination at

trial. *See Daubert*, 509 U.S. at 596. The Court now turns to its evaluation of the parties' arguments, starting with the experts' qualifications.

A. Qualifications

Olin first argues that neither Knox nor Powell possess sufficient qualifications to provide expert opinions that Olin should have issued a warning to consumers about the deficiencies in the Model 94 and its half-cock safety or initiated a recall of the rifle. (Docket Nos. 179; 181; 222-23). Olin also challenges Knox's credentials to testify outside the fields of forensics and accident reconstruction. (Docket Nos. 181; 222). Plaintiffs admit that their proffered witnesses concede that they are not "warnings experts." (Docket Nos. 191-92; 231-32). But, they counter that Knox and Powell have more than sufficient qualifications to provide expert testimony that a warning should have been issued and/or a recall should have been launched to solve the engineering problem with the Model 94. (*Id.*). The Court agrees with Plaintiffs that their experts have sufficient qualifications under *Daubert* and its progeny for the Court to permit their expert opinions as to warnings and the issuance of a recall to be presented to a jury.

It is well settled that "[q]ualification requires 'that the witness possess specialized expertise.'" *Pineda v. Ford Motor Co.*, 520 F.3d 237, 244 (3d Cir. 2008) (quoting *Schneider*, 320 F.3d at 404). There is a liberal policy of admissibility and the Court of Appeals has held that a "broad range of knowledge, skills, and training qualify an expert." *Id.* (quoting *Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 741-42 (3d Cir. 1994)). "This liberal policy of admissibility extends to the substantive as well as the formal qualifications of experts." *Pineda*, 520 F.3d at 244 (citing *Paoli*, 35 F.3d at 741). Further, "it is an abuse of discretion to exclude testimony simply because the trial court does not deem the proposed expert to be the best qualified or because the proposed

expert does not have the specialization that the court considers most appropriate.” *Id.* (quoting *Holbrook v. Lykes Bros. S.S. Co.*, 80 F.3d 777, 782 (3d Cir. 1996)).

In this Court’s estimation, Olin’s challenges to the qualifications of Knox and Powell are precluded by binding Third Circuit precedent. To this end, the Court of Appeals held in *Pineda* that an engineer meeting the threshold qualifications to offer an expert opinion concerning the mechanics and risks of a product is also “substantively qualified” to offer a corollary opinion that a warning should be issued by the manufacturer as a solution to an engineering problem. *See Pineda*, 520 F.3d at 245. The Court of Appeals noted that its decision was limited to a situation where no warning had been issued by the manufacturer and that a true “warnings expert” might be necessary if the plaintiff had challenged an existing warning or instruction. *Pineda*, 520 F.3d at n.12.

Pineda is squarely on all fours with this case. It appears that the evidence is undisputed that Olin did not include a warning advising purchasers that the half-cock safety could not prevent an unintentional discharge of the Model 94 if the rifle was bumped, jarred or dropped in the applicable 1968 version of the owner’s manual. (*11/2/15 Hr’g*, Docket No. 233 at 112-13). It is also uncontested that Olin did not issue a warning advising consumers about the problem until 2014, at a time well after the incident in this case and while this litigation was pending. (*Powell Report 6/15/15* at 2, Figure 1, Docket No. 191-3). Like the expert in *Pineda*, both Knox and Powell have also conceded that they are not “warnings experts,” and disavowed any intent to testify as to the design or sufficiency of any such warning. (*11/2/15 Hr’g*, Docket No. 233 at 123-24, 135-37). But, the facts that neither Knox nor Powell have sufficient backgrounds and experience to be qualified as experts in “warnings,” does not warrant exclusion of their opinions in this matter. *See e.g., Reardon v. Illinois Tool Works, Inc.*, Civ. A. No. 12-2451, 2013 WL

1482709 at *3 (E.D. Pa. Apr. 10, 2013) (“Under the liberal standard set forth in *Pineda*, [the engineer] would appear to qualify even though he is not a ‘warnings expert.’ Engineers who understand the mechanics and risks of the devices at issue can opine that proper warnings are necessary because ‘a proper warning is also a solution to an engineering problem.’”). The experts’ opinions are simply that Olin should have hired such a person to formulate a proper warning given the alleged defect in the Model 94 and that because Olin failed to do so, it should have initiated a recall of the rifle. (*11/2/15 Hr’g*, Docket No. 233 at 121-22). The Court agrees that these suggestions are among the potential solutions to the engineering problem posed by a defective rifle, as would be an alternative design of the rifle and/or safety mechanism.

This Court is likewise unpersuaded that its prior decision in *Vorhes v. Mittal Steel*, Civ. A. No. 06-1130, 2009 WL 959579 (W.D. Pa. Apr. 6, 2009), warrants exclusion of the warning opinions as that matter is both distinguishable and fully consistent with *Pineda*. The accident reconstructionist in *Vorhes* purported to testify concerning whether a property owner should have erected signage on its property to warn trespassing individuals of a blind cliff on its property. *Id.* at *2. The Court excluded the proffered expert in *Vorhes* because he had no background or experience in the duties and responsibilities of landowners, making his opinions in that regard unreliable.⁷ *Id.*

In stark contrast, the proffered experts in this case are sufficiently qualified to render their opinions. Powell’s substantive qualifications are not contested by Olin and the Court agrees that his background and experience exceed the threshold requirements under *Daubert*. As noted above, he is a professional engineer, metallurgist and materials failure analyst, with considerable

⁷ The plaintiff in *Vorhes* also failed to meet the procedural requirements of Rule 26 and the Court’s Pretrial Order through a late designation of this individual as an expert witness. *Vorhes*, 2009 WL 959579, at *3-4. Indeed, the expert had not even submitted a report in the *Vorhes* matter but prepared one for a related case reconstructing a different accident. *Id.* at *2.

experience in the design and performance requirements of firearms and firearms safety systems. (See *Powell Report 10/14/13*, Docket No. 191-2 at 33-36). Indeed, this is Powell's sixth materials failure analysis of the Model 94 rifle as an expert witness/consultant, and he has firearm safety design experience as he holds a patent for a cross-bolt safety mechanism for muzzleloader firearms. (11/2/15 *Hr'g*, Docket No. 233 at 138, 162; U.S. Patent No. 4,989,357). Overall, Powell has the type of specialized expertise in the design of firearms and firearms safety systems that the Court would expect in this type of case.

While it is true that this is Knox's first attempt to be judicially accepted as an expert in these areas, under the liberal standard of admissibility, the Court believes that he has a "broad range of knowledge, skills, and training" in firearms and firearms safety systems. *Pineda*, 520 F.3d at 244. Knox has extensive expertise in accident reconstruction and forensics which Olin does not contest suffices him to be an expert in those areas, as other courts have so held. (*Knox Declaration*, Docket No. 192-5 at ¶15). But, he is also a mechanical engineer and long-time law enforcement officer whose forensic work has required him to "regularly conduct mechanical examinations of firearms for functionality and mechanical defect." (*Id.* at ¶ 14). He has investigated hundreds of shooting incidents, has undergone extensive training with firearms, and has trained others, including teaching firearms safety courses. (*Id.* at ¶¶ 5-12). The mere fact that he does not have the formal qualifications that Olin believes are the most appropriate does not render him unqualified. See *Pritchard*, 705 F. Supp. 2d at 482 ("That Dr. Omalu is also not an oncologist or hemopathologist, appropriate specialties in Defendants' view, and has not previously treated and/or diagnosed patients with NHL, does not preclude him from testifying as an expert in this matter. These factors more properly bear on Dr. Omalu's credibility and the weight of his testimony rather than its admissibility."). Rather, any such alleged deficiencies in

Knox's credentials may be tested on cross-examination as they go to his credibility and the weight of his testimony. *Id.*

In light of this reasoning, Olin's Motions are denied to the extent that they assert that Plaintiffs' experts do not meet the qualifications' prong of the *Daubert* test.

B. Reliability

Olin raises different challenges to the reliability of methods employed by Knox and Powell, each of which Plaintiffs oppose. (Docket Nos. 179, 181, 222-23). As to Powell, Olin claims that all of the following render his opinions unreliable: his utilization of the *Irons* drop testing; his failure to conduct new testing in this case; and his alleged disregard of contrary evidence and witness testimony. (Docket Nos. 179, 222). With respect to Knox, Olin maintains that his opinions are unreliable because: he conducted no testing; his opinions lack scientific theory or methodology and are mere *ipse dixit*;⁸ and he improperly uses discovery materials to reach his opinions. (Docket Nos. 181, 232). After reviewing their respective expert reports, and deposition testimony as well as holding a *Daubert* hearing, it is this Court's opinion that these experts have employed sufficiently reliable methods in reaching their conclusions in this case; hence, each of Olin's objections must be overruled.

It is well settled that the test for reliability is not correctness. *See Mitchell*, 365 F.3d at 244. Further, the *Paoli* factors listed above "are neither exhaustive nor applicable in every case." *Kannankeril*, 128 F.3d at 806-07.

[T]he reliability analysis applies to all aspects of an expert's testimony: the methodology, the facts underlying the expert's opinion, the link between the facts and the conclusion, *et alia*. However, not only must each stage of the expert's testimony be reliable, but each stage must be evaluated practically and flexibly without bright-line exclusionary (or inclusionary) rules.

⁸ *Ipse dixit* is a Latin phrase meaning "he himself said it." *See ipse dixit*, BLACK'S LAW DICTIONARY (10th ed. 2014). The phrase is defined as "[s]omething asserted but not proved." *Id.*

Heller v. Shaw Industries, Inc., 167 F.3d 146, 155 (3d Cir. 1999). Additionally, “in cases involving technical subjects like engineering, trial courts may consider relevant literature, evidence of industry practice, product design and accident history in evaluating reliability.” *Meadows v. Anchor Longwall & Rebuild, Inc.*, 306 F. App’x 781, 788 (3d Cir. 2009) (citing *Milanowicz v. The Raymond Corp.*, 148 F. Supp. 2d 525, 536 (D.N.J. 2001)).

Following this precedent, the Court agrees with Plaintiffs that there are no bright-line rules requiring that an expert undertake a specific type of testing in a particular case. *See Heller*, 167 F.3d at 155. It appears in the firearms industry that drop testing of firearms is an acceptable method to test whether a firearm will discharge upon contact. (*11/2/15 Hr’g*, Docket No. 233 at 100, 110). Indeed, both the defense experts and Powell utilized drop testing. (*Id.* at 100, 110, 118-19). But, the lack of current drop testing by Powell or Knox is not dispositive of the inquiry of the reliability of their respective methods given that both used other reliable methods to arrive at their conclusions.

Olin makes much about the utilization of Powell’s drop testing in *Irons* but again, the results of those tests are not the sole basis of his proffered opinions. (*See* Docket Nos. 179, 222). It should be expected that an expert in a product liability case would test his hypothesis against prior testing that he had completed as to the same product and the failure to do so would seem to undermine the reliability of the methods by ignoring highly relevant testing results. (*See 11/2/15 Hr’g*, Docket No. 233 at 145). In any event, the results of the *Irons* testing that the Model 94 will discharge upon a contact of the hammer at heights of 13 inches to 25 ½ inches have been essentially confirmed by the drop tests that were conducted by the defense experts at greater heights of between 30 to 32 inches. (*Id.* at 185, 205). The fact that Powell’s earlier tests were

conducted two decades ago in 1992 is a basis for cross-examination, not exclusion.⁹ See *Daubert*, 509 U.S. at 596. Similarly, the challenges to the variances between the testing parameters of *Irons* and the actual incident go to the weight, not the admissibility of the evidence. See e.g., *Rapchak v. Haldex Brake Products Corp.*, No. 2:13-CV-1307, 2016 WL 1019534, at *12 (W.D. Pa. Mar. 15, 2016) (quoting *Meadows*, 306 F. App'x at 790 n.3) (“[e]xperimental evidence may be admitted even if conditions do not perfectly correspond to the conditions at issue in litigation; dissimilarities may affect the weight of the evidence, but not its admissibility.”); *McDaniel v. Kidde Residential & Commercial*, 2015 WL 2883724, at*6 (W.D. Pa. Oct. 8, 2015) (denying motion to exclude testimony of expert based on manner in which testing was conducted).

Olin’s next objection to the reliability of Powell’s opinions based on an alleged lack of a factual foundation is likewise without merit. (Docket Nos. 179, 222). There is clearly a disputed factual predicate in this case concerning the chain of custody of the firearm and the observations of the witnesses on the scene as to the condition of the firearm. (See Docket Nos. 222-23; 231-32). To this end, the testimony provided by Wildlife Conservation Officer Jack Lucas and Trask’s uncle Preston Boarts, relied upon by Olin, conflicts in several respects with the testimony of State Troopers Brian Carpenter and David Franks, Wayne and Beth Trask and Rudy Freshwater, cited by Plaintiffs. (*Id.*). Powell’s evaluation¹⁰ of this evidence is not improper as

⁹ The Court notes that one of Olin’s own experts expressly relies upon Powell’s findings from the *Irons* testing, significantly undermining the alleged unreliability of same. (See *Hildebrandt Report* at 5, Docket No. 101-1 (“Tests conducted at Winchester and by Charles Powell affirm that the strength of the Model 94 to be sufficient to resist firing from this height [i.e., 13 inches] without damage.”)). The Court also overrules Olin’s objection to the extent that it complains about the scope of production of Powell’s *Irons* testing, as Olin was a party to that case, and represented by the same defense firm. (See Docket Nos. 191, 232). As such, that testing was very likely explored in detail during discovery in *Irons*. (*Id.*). Olin also has sufficient information to cross-examine Powell on these points as it has his report, deposition, his testimony during the *Daubert* hearing and a videotape of the tests. (*Id.*).

¹⁰ The Court notes that Olin’s experts conduct the same type of evaluation of the disputed factual record, making their opinions open to this exact type of criticism. (See e.g., *Hildebrandt Report* at 13, Docket No. 101-1

“[t]he resolution of factual disputes is [...] within the province of the jury, but ‘[a]n expert is ... permitted to base his opinion on a particular version of the disputed facts and the weight to be accorded to that opinion is for the jury.’” *Jackson v. City of Pittsburgh, Pa.*, No. CIV.A. 07-111, 2010 WL 3222137, at *14 (W.D. Pa. Aug. 13, 2010) (quoting *Walker v. Gordon*, 46 F. App’x 691, 695–96 (3d Cir. 2002) (not precedential)) *see also* FED. R. EVID. 702, 2002 Amendments (“The emphasis in the amendment on ‘sufficient facts or data’ is not intended to authorize a trial court to exclude an expert’s testimony on the ground that the court believes one version of the facts and not the other.”). In addition, it appears that none of those lay witnesses conducted the type of detailed forensic examination of the materials and components of the rifle as Powell did. It simply cannot be said that Powell’s testimony is wholly lacking in factual foundation so as to provide a basis for its exclusion. *See Stecyk v. Bell Helicopter Textron, Inc.*, 295 F.3d 408, 414 (3d Cir. 2002) (“Rule 705, together with Rule 703, places the burden of exploring the facts and assumptions underlying the testimony of an expert witness on opposing counsel during cross-examination.”).

Olin further challenges Knox and Powell for allegedly employing no real methods with respect to their warnings opinions but asserts that they merely reviewed the voluminous discovery materials to reach their conclusions that Olin should have issued a warning. (Docket Nos. 179, 181, 222-223). The Court disagrees. Powell cites to specific engineering methods that were employed in his analysis throughout his reports.¹¹ (*See e.g., 11/2/15 Hr’g*, Docket No. 233

(“In the deposition of Officer Jack Lucas he states that his scene investigation led him to believe the rifle fired when it struck the ground after a fall from the stand.”).

¹¹ Powell specifically cites the American Society for Materials standards:

Make the product safe

If it is impossible to design out all hazards, provide guards that eliminate the danger

If it is impossible to provide proper and complete guarding, provide appropriate directions and warnings.

at 146-50; Powell Report 10/14/13, Docket No. 191-2 at 7, 20). Knox explained his qualitative and forensic methods at the *Daubert* hearing to the Court's satisfaction. (*See 11/2/15 Hr'g*, Docket No. 233 at 58-67, 126). As the Court commented at the hearing, it should be expected that an expert witness would review all of the materials produced in discovery and to be well versed in the facts of the case, which here would include the product history, industry information and the similar claims evidence that these experts considered. (*Id.* at 116-17). The Third Circuit has approved of same in this type of case involving technical engineering concepts. *See Meadows*, 306 F. App'x at 788. On the specific point about Knox's reference to consumer expectations that this firearm would not discharge while in the half-cock safety position, he relies not only on discovery materials, but also his own experience as a law enforcement officer and training others in the safe use of firearms. (*11/2/15 Hr'g*, Docket No. 233 at 119-24). For its part, Olin cites to no authority setting forth a bright-line rule that consumer surveys or similar information would be required.¹² *See Heller*, 167 F.3d at 155. Again, the approach the Court is required to take is a more flexible one and any alleged deficiencies in their consideration of the case can be probed during cross-examination at trial. *Id.*

The Court last addresses Olin's claim that it is improper for the experts to conclude that Trask would have followed a warning if it had been provided because he allegedly admitted during his testimony that he would not have followed a warning and that he was an experienced

(Docket No. 191-2 at 7 (emphasis added)). He also references the Code of Ethics for the National Society of Professional Engineers:

1. Make the product safe (i.e. design all hazards out of the product)
2. If it is impossible to design out all hazards, provide guards that eliminate the danger.
3. **If it is impossible to provider proper and complete guarding, provide appropriate directions and warnings.**

(*Id.* at 20 (emphasis added)).

¹² Olin also complains about the testimony of Plaintiffs' experts concerning foreseeability but once again its own experts provide the same type of opinions. (*See Hildebrandt Report* at 5, Docket No. 101-1 ("An exposed hammer spur has a potential to be struck by an external object and a reasonable design consideration is to prevent firing if the butt slips off of a rest position and falls striking the hammer spur on the rest.")).

firearm user who should have known that the rifle may fire if dropped or misused. (Docket Nos. 179, 181, 222-223). The relied upon exchange follows:

Q. Are you familiar with any particular type of warning, or is there some warning that would have prevented this accident that you're aware of?

A. Not that I'm aware of.

(*Wayne Trask Depo*, Docket No. 190-8 at 157). It appears to this Court that Olin overstates the significance of this passage as Trask's testimony does not constitute a blanket admission that a warning would not have been heeded by him. (*Id.*). He simply said that he was not aware of a warning that would have prevented the accident. (*Id.*). Further, Plaintiffs may also be able to invoke "the benefit of a rebuttable presumption that when no warning (or an inadequate warning) is provided, the user would have read and heeded an adequate warning had one been given by the manufacturer." *Lynn v. Yamaha Golf-Car Co.*, 894 F. Supp. 2d 606, 640, n. 30 (W.D. Pa. Aug. 16, 2012); *see also Pavlik v. Lane Ltd./Tobacco Exporters Intern.*, 135 F.3d 876, 881-83 (3d Cir. 1998). Hence, there is foundational support for the Plaintiffs' experts' opinions in this regard. To the extent Defendant disagrees, as the Court has already stated, challenges to the factual underpinnings of the experts' testimony are matters for cross-examination and not admissibility. *See Stecyk*, 295 F.3d at 414.

Accordingly, Olin's Motions are denied to the extent that they challenge the reliability of the methods employed by Knox and Powell.

C. Fit

Olin's final attempt to exclude certain of Knox and Powell's testimony relates to the experts' alleged improper use of legal conclusions in their reports using terms such as "reckless," "negligence," "gross negligence" and the like. (Docket Nos. 179, 181, 222-23). Olin contends

that this type of expert testimony would be unhelpful to the trier of fact as it would usurp the Court's instructions to the jury. (*Id.*). Plaintiffs counter that this argument is premature and more properly addressed at trial in the context of motions in limine, or objections to proffered testimony. (Docket Nos. 191-92; 231-32). They also put forth testimony of the experts indicating that many of these terms are engineering terms as well as legal ones. (*See e.g., 11/2/15 Hr'g, Powell* at 193-94 (“I’m giving engineering opinions. I’m not a lawyer, sir. I’m an engineer.”)).

The “fit” element “goes primarily to relevance.” *Daubert*, 509 U.S. at 591. To be admissible, the expert testimony must assist the trier of fact. *Id.* Rule 704(a) provides that “[a]n opinion is not objectionable just because it embraces an ultimate issue.” FED. R. EVID. 704(a). However, “an expert witness is prohibited from rendering a legal opinion.” *Berkeley Inv. Grp., Ltd. v. Colkitt*, 455 F.3d 195, 217 (3d Cir. 2006). Further, “the line between admissible and inadmissible expert testimony as to the customs and practices of a particular industry often becomes blurred when the testimony concerns a party’s compliance with customs and practices that implicate legal duties.” *Id.* at 218.

Having considered these issues, the Court agrees with Plaintiffs that this aspect of the motion is premature and can be deferred until closer to trial. At this point, it is still unknown precisely how the witnesses will testify at trial and combing through their expert reports for any quasi-legal phrases that may or may not be uttered in a courtroom is presently unnecessary. It is also clear that this objection may be better evaluated under Rule 403, rather than 702 and *Daubert*. If, for example, Plaintiffs elect for strategic reasons to drop certain claims and streamline their trial presentation, or the challenged phrases are otherwise not part of the Court’s instructions to the jury, then the experts’ usage of these cited phrases could not be deemed as involving a “legal conclusion” in the context of this case.

This Court, as counsel should know, employs detailed pretrial procedures requiring the parties to meet and confer on disputed evidentiary points such as this one prior to filing motions in limine and requiring them to submit joint jury instructions, among other things. *See Practices and Procedures of Judge Nora Barry Fischer*, §§ II.N.; III.E.18, Exhibit “C” (eff. 2/5/13). The Court would hope that the parties will be able to resolve disputes such as this through that process and/or narrow them considerably. Therefore, Olin’s Motions are denied, without prejudice, to Olin challenging specific testimony in accordance with any Pretrial Order that is entered by the Court, and/or by specific objection at trial.

VI. CONCLUSION

Based on the foregoing, the Court has exercised its gatekeeper duties and finds that Plaintiffs’ proffered experts, Michael Knox and Charles Powell, have met each of the *Daubert* requirements such that their opinions will be admitted at trial. The Court believes that the challenges that Olin has raised to the experts’ testimony largely go to the weight rather than the admissibility of same. *See In re TMI Litigation*, 193 F.3d at 713. Alleged deficiencies in their qualifications, methods and the underlying factual foundation for their opinions may be tested via the adversary process through which “vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Daubert*, 509 U.S. at 596.

Accordingly, Olin’s Motions [178][180] seeking to preclude the expert testimony of Michael Knox and Charles Powell are DENIED. An appropriate Order follows.

s/Nora Barry Fischer
Nora Barry Fischer
U.S. District Judge

Dated: March 28, 2016

cc/ecf: All counsel of record.