Pasco County, Morie

IN THE CIRCUIT COURT OF THE SIXTH JUDICIAL CIRCUIT OF THE STATE OF FLORIDA IN AND FOR PASCO COUNTY CRC14-00216CFAES

STATE OF FLORIDA

V.

CURTIS J. REEVES

REEVES STATE'S DAUBERT MOTION TO EXCLUDE THE e conntol TESTIMONY AND EVIDENCE OF DEFENSE EXPERT MICHAELS KNOX

COMES NOW, BERNIE McCABE, State Attorney for the Sixth Judicial Circuit in and for Pasco County, Florida, by and through the undersigned Assistant State Attorney, respectfully request this Honorable Court to enter an order excluding the testimony, evidence and opinions of Mr. Michael Knox (Knox) and as good cause would show:

For the purpose of this motion the State adopts the objections and the legal argument of the State's Motion In Limine To Exclude Evidence Generated by Michael Knox and the State's Second Motion In Limine To Exclude Evidence Generated by Michael Knox.

In addition to the State's initial objections to Mr. Knox's testimony and evidence, the State objects to his testimony, opinions and evidence in the immunity hearing in the abovestyled case. The summary of the State's position regarding her opinion includes the following.

Summary State's Position

• Mr. Knox's testimony and opinions fail to meet the Daubert standard for admissibility.

Daubert v. Merrill Dow Pharmaceuticals, Inc., 509 U.S. 579, 589, 113 S.Ct. 2786 (1993) (The objective of the gatekeeping role is to ensure that expert testimony, in order to be admissible, must not only be relevant, but reliable.)

The trial judge is to consider "whether the reasoning or methodology underlying the testimony is scientifically valid" and "whether that reasoning or methodology properly can be applied to the facts in issue." *Id.* at 592-93.

Kumho Tire Co., Ltd v. Carmichael, 526 U.S. 137, 1195 S. Ct. 1167 (1999) (<u>Daubert's</u> general principles apply to expert testimony based on specialized knowledge, training or experience.)

Rule 90.702 (Requires that the evidence or testimony assist the trier of fact to understand the evidence or to determine a fact in issue.)

[Further argument on this issue is on pages 10-14, below.]

• Mr. Knox's testimony and opinions is based on unreliable reasoning and methodology.

<u>Daubert v. Merrill Dow Pharmaceuticals, Inc.</u>, 509 U.S. 579, 589 113 S.Ct. 2786 (1993) (The objective of the screening is to ensure that testing, in order to be admissible, must not only be relevant, but reliable.)

Rule 90.702 (The testimony is the product of reliable principles and <u>methods</u>; and the witness has <u>applied</u> the principles and methods reliably to the facts of the case.

[Further argument on this issue is on pages 14-22, below.]

• Assuming Mr. Knox is qualified to testify in the area of "shooting reconstruction", he may only testify about matters within the scope of his expertise.

See, City of Tuscaloosa v. Harcros Chems., Inc., 158 F.3d 548, 562 (11th Cir. 1998) (explaining "the expert [must be] qualified to testify competently regarding the matters he intends to address" (alteration added; citations omitted)

[Further argument on this issue is on page 13, below.]

• Mr. Knox's testimony and opinions is only connected to the data he reviewed by the ipse dixit of his own testimony.

Kemp v. State, 280 So.2d 81, 89 (Fla. 4th DCA 2019) (A court

may conclude that there is simple too great an analytical gap between the data and the opinion offered.)

[Further argument on this issue is on pages 14-15, below.]

• Mr. Knox's testimony regarding his interpretation of the content of the surveillance video is not admissible.

Seymour v. State, 187 So.3d 356, 358 (Fla. 4th DCA 2016) (officer's observations were limited to captured on video—the same video that was available for the jury to watch. There was no record evidence that indicated the officer was in a better position than the jury to view the video and determine whether the object was a firearm. The officer was not qualified as a certified forensic technician or a witness that was proficient acquisition, production, and presentation of video evidence in court. He did not testify to any specialized training in video identification. As such, the officer's testimony constituted impermissible lay opinion that invaded the province of the jury to interpret the video.")

[Further argument on this issue is on pages 22-24, below.]

Summary of State's Argument

Re: Interpretation of the Video

The opinion by Knox that he does not see the reflection of pattern on the Defendant's shoe in the video admissible. There is no evidence in the record that indicates Knox was in a better position than the jury to make such a determination. There is not testimony in the record that his "specialized knowledge" includes training as to whether the reflection of an object will emit a reflection in the exact shape of the reflective object or that he has any specialized training to determine the shape or pattern of an object emitting particular reflective shape. As such Knox's regarding his interpretation of the video constitutes impermissible lay opinion that invades the province of the jury. Further, the testimony exceeds the scope of his expertise.

Re: Photographs Depicting the Effect of "Backlighting"

The evidence generated by Knox consisting of photographs taken for the purpose of fairly and accurately depicting the various lighting levels in the theater and the photographs of the mannequins in various positions in the theater taken for the purpose of fairly and accurately depicting the effect of "backlighting" on а human figure is based on unreliable reasoning and methodology. The testimony, though disingenuous at times, clearly indicates the photographs were taken for the purpose of proving a material fact in issue, what the Defendant could see contemporaneous with the shooting.

The "fair and accurate" predicate for the relevancy of the photographs rises or falls on the scientific hypothesis that a camera lens can accurately depict what the human eye can see. The photographic evidence is simply a snapshot in time taken by a 55 mm camera lens that was adjusted manually to a static exposure time in order to capture light¹.

The focus of the human eye is much wider than a 35mm camera with a 55mm lens. The human eye has the ability to capture peripheral ambient light and constantly make adjustments to the available light.

The ability for the camera to accurately capture an image (based on its setting) is not the issue. If the photographs at issue were offered as a demonstrative aid in a photography class they would be an accurate representation of "backlighting". The students would get a clear understanding of the phenomena so it could be avoided in order to capture as much detail as possible or purposely used as an artistic expression. Such photographs are appropriate in a Forensic Photography class to explain the importance of being aware of the back light when photographing evidence or a crime scene. The relevancy of the photographs would be to alert the student forensic technician to the phenomena so it could be avoid.

That is not the case here. The issue here is the combination of science associated with the human eye and the technology and science associated with a 35mm camera being reliable applied to the facts of this case. The photographic evidence is offered as substantive evidence to prove the effect of "backlight" on an object based on the amount of light a human eye can detect. A Daubert inquiry includes a determination of

¹ Nikon D800, 35mm camera, 55mm lens, manual settings: 0.5 sec. exposure time, 2.8 f-stop, 400 ISO, 36.2 field of view, 1/60's shutter speed.

whether the expert witness is reliably applying principles and methods to the facts of the case. Here, the facts of the case that the photographic evidence is being applied is the ability of the Defendant's eyes to capture light in a given situation and based on the amount of light a human eye can capture to what extent does the phenomena of "backlighting" impact the Defendant's ability to "see" details of the object he is focusing on at a given point in time.

Because the photographs are based on unproven, unreliable scientific principles, the photographs depicting lighting conditions inside the theater and the photographs of the mannequins depicting the effect of "backlighting" fail to meet the <u>Daubert</u> standard for admissibility.

A <u>Daubert</u> inquiry includes a determination by the court that the proffered evidence will aid the jury. Because the photographs is offered for a specific purpose, which Knox concedes cannot be duplicated the photographs will only confuse and mislead the jury.

[Further argument on this issue is on pages *****, below.]

Re: Opinion Regarding Path of Bullet .

The opinion by Knox, based on a post-mortem photograph of Oulson's wrist that the path of the bullet was traveling upward at the time it struck Oulson's wrist is outside the scope of his expertise.

Daubert "Gatekeeping" Inquiry

The <u>Daubert</u> "gatekeeping" inquiry requires the court to make the following factual determinations.

- That the expert's opinion will assist the trier of fact through specialized expertise to determine a fact in issue.
- The expert is qualified to testify competently regarding the matters he/she intends to address.
- The expert may only testify about matters within the scope of his/her expertise.

- The opinion is based on sufficient facts and data.
- Whether the reasoning and methodology underlying the testimony is scientifically valid and whether the reasoning or methodology properly can be applied to the facts in issue.
 - o Whether the scientific method can be or has been tested
 - o Whether the theory or technique has been subject to peer review and publication
 - o The known or potential rate of error
 - o General acceptance in the relevant scientific community

It is the proponent of the expert that has the burden to explain how the expert's experience led to the conclusion he/she reached, why that experience was sufficient basis for the particular opinion(s) and just how that experience was reliably applied to the facts of the case. Kemp v. State, 280 So.3d 81, 90 (Fla. 4th DCA 2019)

Factual Summary

This offense occurred on January 13, 2014 inside Theater #10 at the Cobb Grove 16 Movie Theatres, 6333 Wesley Grove Blvd, Wesley Chapel, Pasco, FL.

The Defendant is charged by Information with Murder in the second degree and Aggravated Battery.

The State took the deposition of defense expert Michael Knox on April 7, 2016. In the Matter Of: State of Florida VS Curtis Reeves, Sworn Deposition of Michael Knox, April 7, 2016. (Depo April 7. Pg. _____) and on September 30, 2016. In the Matter Of: State of Florida VS Curtis Reeves, Sworn Deposition of Michael Knox, September 30, 2016. (Depo September 30. Pg. ____)

Prior to the immunity hearing, the State filed its Motion In Limine To Exclude Evidence Generated By Michael Knox and its Second Motion in Limine To Exclude Evidence Generated By Michael Knox. The defense responded to said motions. The Court has not previously ruled on the State's motions. (Pgs. 1410, 1461) The State's initial and second motion to exclude evidence generated by Michael Knox was based on his sworn deposition.

At the Defendant's immunity hearing on February 20, 2017, the Defendant claimed self-defense pursuant to FSS 776.012.

The Defendant called Michael Knox shooting as а reconstruction expert. Defense counsel proffered Knox as "major case crime scene detective who has to know the issues of use of force in an effort to be able to document, in an effort to be able to capture and question proper pieces of evidence in order to determine whether or not the perception of Mr. Reeves at the time of the shooting was reasonable". (Pg. 1420-21) testimony included analysis of the theater police video, interview techniques, evidence collection techniques. He took measurements of the interior of the theater, photographs of the interior of the theater, made muzzle to target distance determinations, opined on the path of bullet through Oulson's wrist, and took photographs depicting the various lighting conditions in the theater and photographs of mannequins at various locations and lighting conditions.

During his testimony the State made various objections to his testimony regarding his interpretation of the video, and to the photographs depicting interior lighting conditions and "backlighting" of the mannequins. Regarding the photographs depicting lighting conditions and "backlight", the Court reserved ruling on the State's motion to exclude and accepted the testimony as a proffer. Pgs. 1410, 1461.

The trial in the above-styled cause is scheduled to begin on October 19, 2020.

The State reasonable anticipates the Defendant will continue to claim self-defense and will call Michael Knox as a shooting reconstruction expert. See, Exhibit 4 (C.V.), attached to the State's previously filed motion in limine to exclude evidence generated by Michael Knox. Michael Knox testified at the immunity hearing. See, Exhibit 1, attached. (Immunity Hearing Transcript, Volume 12, pages 1372-1552, Volume 13, pages 1553-1568) (Pg.(s). _____ Ln. ____)

Based on the facts of the case, the State anticipates that the Court will give the 2014 Standard Jury Instruction on Justified Use of Force, 3.6(f) which will include the following two excerpts.

1. A person is justified in using deadly force if he reasonably believes that such force is necessary to

prevent imminent death or great bodily harm to himself or another.

2. In deciding whether defendant was justified in the use of deadly force, you must judge him by the circumstances by which he was surrounded at the time the force was used. The danger facing the defendant need not be actual; however, to justify the use of deadly force, the appearance of danger must have been so real that a reasonably cautious and prudent person under the same circumstances would have believed that the danger could be avoid only through the use of that force. Based upon appearances, the defendant must have actually believed that the danger was real.

This case will turn entirely on how the jury will evaluate the testimony of the Defendant (post-Miranda statement) and various theater patron eyewitnesses to the shooting.)

The State objects to Knox's testimony and evidence, specifically including the below testimony and evidence offered at the immunity hearing.

Mr. Knox's interpretation/opinion regarding his belief as to the object that is emitting a bright light/reflection in the video.

The State objected to defense counsel's question "[A]nd had you reviewed that video in order to determine not only the -what appeared to be an emanating light from an object as well as the reflective appearance of that shoe as Mr. Reeves -" Counsel agreed to rephrase the question and asked ... "tell me what items you reviewed in the form of video and photographs and the actual shoes prior to going to the Cobb Theater that first time?" Pg. 1452 Ln 3-5.

In response to the above-rephrased question Knox responded [W]ell, I had reviewed the surveillance video, and there was some other information that I'd been provided as $well^2$ as having had the opportunity to actually examine and photograph the shoe. ... "Because in the video, there was a - there are a couple

² The State reasonable assumes the additional information is from defense counsel and a review of enhanced videos produced by Bek-Tek. The State's assumption is supported by the Defendant's multiple motions to dismiss based on statutory immunity and the testimony of Bek-Tek expert Mr. Koenig.

different places were there's some sort of a bright light or reflection of some type that's present during the video, some of which appears to be attributed to the shoe and some of it is in question, whether it's attributable to the shoe or to something else." Pg. 1452 Ln 3-20.

In response to questions regarding his examination of the reflective pattern on the Defendant's shoe he testified <u>no</u> to the question - are you seeing stripped characteristics in the video? Pg. 1459 Ln. 6-25 through Pg. 1460 Ln. 1-3.

Mr. Knox's testimony and evidence regarding the photograph of mannequins to depict the effect of "backlighting" on the human form.

After the parties agreed that the Court is going to reserve ruling on the "lighting" issues raised by the State's motion in limine, testimony ensued from Knox regarding the reasoning, methodology and purpose for taking photographs of mannequins in various lighting situations and locations. The testimony included a 40 slide PowerPoint presentation which contained many of the 88 photos taken of mannequins. (See previously filed, Exhibit #5 of State's Motion In Limine To Exclude Evidence Generated by Michael Knox.) The testimony was accepted by the Court as a proffer. The State objects to the entire line of questioning and exhibits. Pgs. 1502 - 1512.

At the conclusion of the above-described testimony, Knox responded <u>yes</u> to the question "Was this all in an effort <u>to show relevant evidence</u> that would certainly <u>be important in Mr. Reeves' perspective as he sat in that seat on January 13th of 2013 and he had to fire the fatal shot? Pg. 1512 Ln. 20-24.</u>

Mr. Knox testified that in his opinion the bullet was traveling "upward" when it struck Olson's right wrist.

During the course of his testimony Knox was asked by defense counsel to examine a post-mortem photograph of Oulson's right wrist and asked if that particular photo gave him any information as to how the bullet grazed that particular wrist. Pg. 1488 Ln. 12-14.

In response to the above-question Knox responded "... You can see that the bottom of the wound where the bullet first made

contact traveled across in the photograph, and it would be traveling upward in the photograph which would mean that it was traveling toward the anterior side of his wrist." Pg. 1488 Ln. 15-20.

Major Opinions

Opinion #1

He did not see a bright light/reflection in the video that matched the pattern of the reflective material on the Defendant's shoes.

Opinion #2

The photographic evidence of mannequins taken at various locations and under various lighting conditions fairly and accurately depicts what the Defendant could see from his seat at times contemporaneous with the shooting event.

Opinion #3

The path of the bullet was traveling "upward" when it struck Oulson's right wrist.

Argument

Daubert Standard

In July, 2013 the Florida Legislature enacted 90.702, FSS setting forth the <u>Daubert</u> standard to govern the admissibility of both expert scientific testimony and opinions and lay opinions. F.S.A. Section 90.702, Amended by Laws 2013, c. 2013-107, Section 1, eff. July 1, 2013.

Florida Courts have recognized that The Federal Rules of Evidence may provide persuasive authority for interpreting the counterpart provisions of the Florida Evidence Code. See Sikes v. Seaboard Coast Line R.R., 429 So.2d 1216, 1221 (Fla. 1st DCA 1983) (citing Charles W. Ehrhardt, A Look at Florida's Proposed Code of Evidence, 2 Fla. St. U.L.Rev. 681, 682-83 (1974)). Yisrael v. State, 993 So.2d 952, n.7 (Fla. 2008)

The federal courts have long used the <u>Daubert</u> standard to govern the admissibility of scientific testimony and opinions. In federal Court, Federal Rule of Evidence 702 governs the admissibility of exert testimony in federal courts. <u>Daubert v. Merrill Dow Pharmaceuticals</u>, Inc., 509 U.S. 579, 113 S.Ct. 2786

(1993): <u>Kumho Tire Co., Ltd. V. Carmichael,</u> 256 U.S. 137, 119 S.Ct. 1167 (1999). Under <u>Daubert</u>, a federal district court applying Rule 702 is charged with the gate-keeping role of ensuring that scientific evidence is both relevant and reliable. 509 U.S. at 589-95.

Rule 702 further requires that the evidence or testimony assist the trier of fact to understand the evidence or to determine a fact in issue.

Assisting the trier of fact goes primarily to relevance. 509 U.S. at 591. Relevancy is found when the expert's theory is tied sufficiently to the facts of the case and the expert's testimony assists the trier in resolving a factual dispute. 509 U.S. at 591-92.

The helpfulness standard requires a valid scientific connection to the pertinent inquiry as a precondition to admissibility. 509 U.S. at 591-92. Thus if the proposed scientific evidence is not helpful in that the proposed science does not advance the inquiry in question, then the evidence does not meet the helpfulness standard. Réliability, on the other hand is grounded in the methods and procedures of science. 509 U.S. at 590.

The trial judge is to consider "whether the reasoning or methodology underlying the testimony is scientifically valid" and "whether that reasoning or methodology properly can be applied to the facts in issue." Id. at 592-93. In making this determination, the following factors are considered: (1) "whether it can be (and has been) tested," (2) "whether the theory or technique has been subjected to peer review and publication," (3) "the known or potential rate of error," and (4) "general acceptance" in the "relevant scientific community." Id. at 593-94. Although this is a flexible inquiry, the trial judge's focus "must be solely on principles and methodology, not on the conclusions that they generate." Id. at 594-95. When determining the admissibility of expert testimony, "[t]he district court is not obligated to hold a Daubert hearing." Clay v. Ford Motor Co., 215 F.3d 663, 667 (6th Cir.2000).

The Proponent of expert testimony has the burden to prove the foundation by preponderance of the evidence. 509 U.S. at 592, n.10.

The Legislature's adoption of the *Daubert* standard reflected its intent to **prohibit** "pure opinion testimony", as

provided in *Marsh v. Valyou*, 977 So.2d 543 (Fla.2007)[.]" Ch. 13-107, § 1, Laws of Fla; see Charles W. Ehrhardt, 1 Fla. Prac., Evidence § 702.3 (2014 ed.) ("In adopting the amendment to section 90.702, the legislature specifically stated its intent that the Daubert standard was applicable to all expert testimony, including that in the form of pure opinion.") (footnote omitted). Booker v. Sumter County Sheriff's Office/North American Risk Services, 166 So.3d 189, 191 (Fla. 1^{st} DCA 2015) § 90.702, Fla. Stat.

Florida Evidence Code

Rule 402 Relevancy

"To be legally relevant, evidence must pass the tests of materiality (bearing on a fact to be proved), competency (being testified to by one in a position to know), and legal relevancy (having a tendency to make the fact more or less probable) and must not be excluded for other countervailing reasons. Pearson, Ungarbling Relevancy, Fla.Bar J. 45 (1990)." Sims v. Brown, 574 So.2d 131, 134 (Fla. 1991)

Rule 702

90.702. Testimony by experts

If scientific, technical, or other specialized knowledge will assist the trier of fact in understanding the evidence or in determining a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify about it in the form of an opinion or otherwise, if:

- (1) The testimony is based upon sufficient facts or data;
- (2) The testimony is the product of reliable principles and methods; and
- (3) The witness has applied the principles and methods reliably to the facts of the case. \$ 90.702 (2015) Fla. Stat.

In 2019, the Florida Supreme Court adopted Ch. 2013-107, \S 1, Law of Fla. (2013), which amended sections 90.702 (Testimony by experts) and 90.704 (Basis of opinion testimony by experts), Florida Statutes, of the Florida Evidence Code to replace the $Frye^1$ standard for admitting certain expert testimony with the

 $Daubert^2$ standard, the standard for expert testimony found in Federal Rule of Evidence 702. In re Amendments to Florida Evidence Code, 278 So.3d 551, 552 (2019) (footnotes omitted)

As in the federal courts, in fulfilling the gate-keeping function the trial judge must make a factual determination that the expert's opinion will assist the trier of fact in understanding or determining a fact or issue. In addition, the court must find that the opinion is based on sufficient facts and data, the opinion is the product of reliable principles and methods, and the witness is reliably applying those principles and methods to the facts of the case.

Expert testimony is admissible only if the testimony is given by "[a] witness who is qualified as an expert by knowledge, skill, experience, training, or education." Perez v. City of Sweetwater, No. 16-24267-CIV-ATTONAGA/Goodman, 2017 WL 8231079 (USDC S.D. Florida 2017) (Order signed by Cecilia M. Altonaga, US District Judge on 7/14/17) (pg. 2)

"Assuming an expert is qualified to testify, the expert may testify only about matters within the scope of his or her expertise. See City of Tuscaloosa v. Harcros Chems., Inc., 158 F.3d 548, 562 (11th Cir. 1998) (explaining "the expert [must be] qualified to testify competently regarding the matters he intends to address" (alteration added; citations omitted)); Feliciano v. City of Miami Beach, 844 F. Supp. 2d 1258, 1262 (S.D. Fla. 2012) ("Determining whether a witness is qualified to testify as an expert requires the trial court to examine the credentials of the proposed expert in light of the subject matter of the proposed testimony." (internal quotation marks and citations omitted)). The inquiry is not stringent; long as the expert is minimally qualified, objections to the level of the expert's expertise go credibility and weight, not admissibility." Pleasant Valley Biofuels, LLC v. Sanchez-Medina, No. 13-23046-CIV, 2014 WL 2855062, at *2 (S.D. Fla. June 23, 2014) (internal quotation marks and citation omitted). Id. at 2.

Even though an expert witness is qualified under section 90.702 other evidentiary rules are applicable. Unless an expert's testimony is **relevant** to a fact or issue, it is not admissible. Sunbeam Television Corp. v. Mitzel, 83 So.3d 865, 876 (Fla 3d DCA 2012)

The witness must possess **specialized knowledge** concerning the discrete subject related to the expert opinion to be presented. ... The expert must have adequate experience with the subject matter. Chavez v. State, 12 So.3d 199, 205-6 (Fla, 2009)

"The Court of Appeals for the Eleventh Circuit has set forth a three-prong inquiry encompassing the requirements of Daubert and its progeny and Rule 702. Under the three-prong inquiry, a court determining the admissibility of expert testimony must consider whether

(1) the expert is qualified to testify competently regarding the matters he intends to address; (2) the methodology by which the expert reaches his conclusions is sufficiently reliable as determined by the sort of inquiry mandated in <u>Daubert</u>; and (3) the testimony assists the trier of fact, through the application of scientific, technical, or specialized expertise, to understand the evidence or to determine a fact in issue." <u>Frazier</u>, 387 F.3d at 1260 (citations omitted).

"[I]f the witness is relying solely or primarily on experience, then the witness must explain how that experience leads to the conclusion reached, why that experience is a sufficient basis for the opinion, and how that experience is reliably applied to the facts."' Frazier, 387 F.3d at 1261.

"Method" Under <u>Daubert</u> and Rule 90.702

The Court's inquiry under Rule 702 must focus on the methodology, not the conclusions, but the Court is not required to admit opinion testimony only connected to existing data by an expert's unsupported assertion. See Daubert, 509 U.S. at 595.; Gen. Elec. Co. v. Joiner, 522 U.S. 136, 146 118 S.Ct. 512, 139 L.Ed.2d 508 (1997).

"[T]he test under *Daubert* is not the correctness of the expert's conclusions but the soundness of his methodology." *Daubert v. Merrell Dow Pharm., Inc.*, 43 F.3d 1311, 1318 (9th Cir. 1995) ("*Daubert II*"). However, an expert's opinion must be based upon "knowledge," not merely "subjective belief or unsupported speculation." *Daubert*, 509 U.S. at 590, 113 S.Ct.

2786. Nothing in *Daubert* requires a court "to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert," and "[a] court may conclude that there is simply too great an analytical gap between the data and the opinion proffered." *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146, 118 S.Ct. 512, 139 L.Ed.2d 508 (1997). Kemp v. State, 280 So.3d 81, 89(Fla. 4th DCA 2019)

"There are four requirements for deciding the admissibility of expert testimony:

(1) that the opinion evidence be helpful to the trier of fact; (2) that the witness be qualified as an expert; (3) that the opinion evidence can be applied to evidence offered at trial; and (4) that evidence, although technically relevant, must not present a substantial danger of unfair prejudice that outweighs its probative value."

Anderson v. State, 786 So.2d 6, 8 (Fla. 4th DCA 2000) (quoting Holiday Inns, Inc. v. Shelburne, 576 So.2d 322, 335 (Fla. 4th DCA 1991)) (footnote omitted). In order to be helpful to the trier of fact, expert testimony must concern a subject which is beyond the common understanding of the average person. State v. Nieto, 761 So.2d 467, 468 (Fla. 3d DCA 2000). Expert testimony should be excluded where the facts testified to be of such a nature as not to require any special knowledge or experience in order for the jury to form conclusions from the facts. Johnson v. State, 393 So.2d 1069, 1072 (Fla.1980)." Mitchell v. State, 965 So.2d 246, 251 (Fla. 2007) (... the court correctly excluded "expert" testimony that the defendant could have considered himself under attack at the time of the murder, as the subject was not beyond the jury's common experience.)

Here, Knox was qualified as a shooting reconstruction expert and identified by defense counsel as a major case crime scene detective. He was asked to determine, in his opinion, what was the object making the reflections in the video, to proffer evidence consisting of photographs of mannequins in various lighting situations and locations and to opine on the path of the bullet as it struck the right wrist of Oulson. At the immunity hearing and during his deposition he explained the reasoning and method he used to come to his conclusions.

Re: Interpretation of the Video

Here, Knox was qualified as a shooting reconstruction expert. He was asked to determine, if in his opinion, if the reflective pattern on the Defendant's shoes can be seen in the surveillance video. He was also asked if an "object" was emitting a reflection in the video. Knox stated he was provided additional information about an object in the video and determined though his examination of the defendant's shoes there was reflective material on the shoes. (Pgs. 1451-52) Knox testified that he did not see in the video a reflection that was consistent with the pattern of the reflective material on the Defendant's shoes (Pgs. 1459-60)

At the immunity hearing he was not asked nor did he offer the reasoning or the methodology he used to make such a determination. Nor did he ever testify to any specialized knowledge, training, or experience that allowed him to determine if a specific reflective pattern is responsible for a reflection depicted in a video.

At most his method and reasoning is based on the following:

- His determination that there is reflective material in a particular pattern on the Defendant's shoes. Pgs. 1450-52.
- His review of the theater surveillance video. Pg. 1451.

Re: Simulation of "Backlighting" On the Mannequins

Here, Knox was qualified as a shooting reconstruction expert. He testified that he took a course on optics, lighting and visibility where the topic of "backlighting" was addressed. (Pg. 1504 Ln. 1-6) At the immunity hearing he testified as to his reasoning and the method he used to photograph mannequins for the purpose of depicting the effect of "backlighting" on a human figure.

- Had the theater lighting set to the same lighting setting at the time of the shooting, Mid-1. Pg. 1502 Ln 14-25 through Pg. 1503 Ln. 1-11.
- Used mannequins to move them in different position to show and assess the net effect of the lighting conditions when you move the mannequins. Pg. 1503 Ln. 12-19.
- Not trying to portray what the Defendant saw that would be impossible. Pg. 1504 Ln. 20-25

• Not going to be a replication of what the [Defendant] saw, but going to represent the effect of these different variables as you move figures in place as you have different lighting on the screen. Pg. 1505 Ln. 9-12.

During his deposition Knox testified regarding his reasoning and method in taking the photographs of the mannequins. See, Exhibit #2, attached.

- Used a Nikon D800, 35mm camera with a 55mm lens. Depo., April 7, pg. 192.
- The camera settings were manually set as follows: Exposure time 0.5 sec., f-Stop 2.8, Program manual, ISO 400, Exposure 0, Focal Length 55mm, Field of View 36.2, Shutter Speed 1/60's, Flash off. (Meta data for all 88 photographs provided by Knox after his deposition)
- The purpose of the photographs is to give a sense to the viewers what the lighting conditions would appear to the Defendant. Depo., April 7, pg. 204.
- Not pick locations of mannequins based on the facts of the case, not able to do that. Depo., April 7, pg. 207.
- Doing a simulation, not a representation of what [Defendant] saw. Depo., April 7, pg. 207.
- Representing various possibilities and various different configurations to give a sense of what that lighting is like as far as what a person can see. Depo., April 7, pg. 207.
- Get some sense what it would be like what the Defendant would see. Depo., April 7, pg. 207.
- A representation of what it looks like when you'have a person [in that location]. Depo., April 7, pg. 207.
- What the lighting conditions appear like to a person who is sitting in that seat. Depo., April 7, pg. 207.
- Meant to give a sense of what lighting looks like to a person in that position. Depo., April 7, pg. 209.
- Used to demonstrate what the Defendant would be able to see and perceive in this situation. Depo., April 7, pg. 213.
- Represents a fair and accurate representation of what the lighting conditions would appear to be, the silhouetting of a human figure. Depo., April 7, pg. 214.
- Not a representation of what [Defendant] actually saw. But what it looks like when you have a human figure in this location, with this lighting. Depo., April 7, pg. 214.

Re: Path of the Bullet Through Oulson's Wrist

Here, Knox was qualified as a shooting reconstruction expert. There is no evidence that Knox has specialized knowledge, training or experience that allows his to from an opinion as the path of a bullet through human flesh.

"Helpfulness" Under Daubert and Rule 90.702

"Expert testimony is admissible only if "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." FED. R. EVID. 702(a). Expert testimony is helpful if it "concerns matters that are bevond understanding of the average lay person," but expert testimony generally is not helpful "when it offers nothing more than what lawyers for the parties can argue in closing arguments." Frazier, 387 F.3d at 1262-63 (citations omitted). Thus, while "[a]n expert may testify as to his opinion on an ultimate issue of fact[,] ... [a]n expert may not ... merely tell the jury what result to reach." Montgomery v. Aetna Cas. & Sur. Co., 898 F.2d (11th Cir. 1990) 1537, 1541 (alterations added; citations omitted). Similarly, an expert "may not testify to the legal implications of conduct; the court must be the jury's only source of law." Id. (citations omitted).

Expert opinion testimony is admissible under section 90.702 F.S. only when it will assist the trier of fact in understanding the evidence or in determining a fact in issue. Subject matter must be of a nature of which the jury does not have basic knowledge. See, State Farm Mut. Auto Ins. Co. v. Bowling, 81 So.3d 538, 540 (Fla. 2nd DCA 2012)

Knox's opinions are not helpful to the jury because he is not qualified to render an opinion as what object is responsible for a reflection in a video and to opine on the path of a bullet through human flesh. The photographic evidence of the mannequins in various locations and lighting conditions is based on unreliable reasoning and scientific method, therefor not helpful to the jury.

Rule 90.403 Exclusion On Grounds Of Prejudice Or Confusion

As with other evidence, expert testimony is subject to a

section 90.403 balancing. Sunbeam Television Corp. v. Mitzel, 83 So.3d 865, 876 (Fla 3d DCA 2012) (The district court excluded this testimony of industry discrimination as irrelevant and prejudicial stating that "the conclusion by [Plaintiff's expert] of institutionalized discrimination in the United States concert promotion industry is not relevant to the issues in Plaintiff's case and would only serve 'to interject substantial unfair prejudice into the case' and confuse the jury by directing its attention from the issues in this case.")

In addition to determining the reliability of the proposed testimony, <u>Daubert</u> instructs that Rule 702 requires the Court to determine whether the evidence or testimony assists the trier of fact in understanding the evidence or determining a fact in issue. See, <u>Daubert</u> 509 U.S. at 591. This consideration focuses on the relevance of the proffered expert testimony or evidence. The Court explained that to satisfy this relevance requirement, the expert testimony must be "relevant to the task at hand. <u>Daubert</u>, 509 U.S. at 591.

"Despite logically relevant evidence being admissible under Section 90.402, and not being excluded under any of the exclusionary rules in the Code, it is inadmissible under section 90.403 when its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, misleading the jury, or needless presentation of cumulative evidence." Charles W. Ehrhardt, Florida Evidence § 403.1, pg.229 (2019 ed.)

Exclusion of relevant evidence

"[P]roper application of section 90.403 requires a balancing test by the trial judge. Only when the unfair prejudice substantially outweighs the probative value of the evidence must the evidence be excluded." Alston v. State, 723 So.2d 148, 156 (Fla.1998).

"Unfair prejudice" has been described as "an undue tendency to suggest decision on an improper basis, commonly, though not necessarily, an emotional one." Brown v. State, 719 So.2d 882, 885 (Fla.1998) (quoting Old Chief v. United States, 519 U.S. 172, 180, 117 S.Ct. 644, 136 L.Ed.2d 574 (1997)). This rule of exclusion "is directed at evidence which inflames the jury or appeals improperly to the jury's emotions." Steverson v. State, 695 So.2d 687, 688-89 (Fla.1997). In performing the balancing test to determine if the

unfair prejudice outweighs the probative value of the evidence, the trial court should consider the need for the evidence, the tendency of the evidence to suggest an emotional basis for the verdict, the chain of inference from the evidence necessary to establish the material fact, and the effectiveness of a limiting instruction. Taylor v. State, 855 So.2d 1, 22 (Fla.2003). The trial court is obligated to exclude evidence in which unfair prejudice outweighs the probative value in order to avoid the danger that a jury will convict a defendant based upon reasons other than evidence establishing his guilt." McDuffie v. State, 970 So.2d 312, 326-27 (Fla. 2007)

Testimony And Opinion Relating To The Photographic Presentation to Illustrate The Concept of "Backlighting"

Knox's photographic "simulation" requires the same predicate as a video "simulation" The only difference between the two presentations is a video is fluid and a photograph is static.

For a video reenactment to be admitted for demonstrative purposes, the proponent must meet three conditions. First the exhibit needs to be relevant to an issue present in the case. State v. Duncan, 894 So.2d 817, 829 (Fla. 2004) (quoting Brown v. State, 550 So.2d 527 (Fla. 1^{st} DCA 1989)

In $Brown\ v.\ State,\ 550\ So.2d\ 527\ (Fla.\ 1st\ DCA\ 1989),\ the$ First District Court of Appeal held:

Demonstrative exhibits to aid the jury's understanding may be utilized when relevant to the issues in the case, but only if the exhibits constitute an accurate and reasonable reproduction of the object involved. The determination as to whether to allow the use of a demonstrative exhibit is a matter within the trial court's discretion.

Id. at 528 (citations omitted); see also Harris v. State, 843 So.2d 856, 864 (Fla.2003). Second, the reenactment video must be substantially similar to the event it is portraying, meaning it is an accurate and reasonable reproduction of what occurred. Duncan, 894 So.2d at 829. Third, the video also needs to pass of Rule 90.403 balancing test.

In this case, the photographic evidence is <u>not</u> being used as a demonstrative exhibit, but as substantive evidence presented by an expert. This is evident by defense counsel's question - At the conclusion of the above-described testimony, Knox responded <u>yes</u> to the question "Was this all in an effort <u>to show relevant evidence</u> that would certainly <u>be important in Mr. Reeves' perspective as he sat in that seat on January 13th of 2013 and he had to fire the fatal shot? Pg. 1512 Ln. 20-24. It is clear from defense counsels question the defense is offering the photographs as <u>relevant</u> evidence, i.e. to prove a material fact.</u>

The expert is offering scientific testimony, i.e. the scientific principles associated with a camera lens and a human eye. The photographic evidence is being used as substantive evidence to prove a material fact in issue. What could the Defendant see at the time of the shooting. Because Knox's testimony includes scientific testimony the <u>Daubert</u> standards govern the admissibility of the photographic evidence. In addition to the <u>Daubert</u> factors, the photographic evidence must be substantially similar to the original event. Finally, the Court must determine if the probative value is outweighed by the danger of unfair prejudice. The Court is charged with the gate-keeping role of ensuring that scientific evidence is both relevant and reliable. <u>Daubert</u>, 509 U.S. at 589.

Knox's reasoning and method in generating the photographic evidence is not "scientifically valid." Knox admits that a camera cannot duplicate what the human eye can see at any given time. The purpose of the photographic evidence is to resolve a disputed fact, what could the Defendant see at the time of the shooting. Even if the Court should find Knox's reasoning and methodology is reliable, and the photographic evidence is substantially similar, the probative value of the evidence is substantially outweighed by the danger of unfair prejudice, confusion of the issues and misleading the jury. The jury is lead to believe that the images in the photographic evidence are what the Defendant was able to see during the entire event. That simply is not the case.

The photograph is a snap-shot in time, a static representation of a very brief moment in time. The human eye is constantly focusing in different areas and at different differences. The human eye has the ability to gather ambient light through peripheral vision and very quickly make adjustments based on the total available light. "Peripheral

vision is that part of our vision that is outside the center of our gaze, and it is the largest portion of our visual field. normal visual field is approximately 170 degrees around, with 100 degrees comprising the peripheral vision." Dr. William Goldstein, A Guide to Understanding Your Peripheral (2016) (www.eyehealthweb.com/peripheral-vision/) The meta data provided by Knox indicated his camera was manually set at a field of view of 36.2 degrees. If the method of comparing the field of view setting of a camera with the field of view of a human eye is scientifically reliable, and I'm not sure if it is or is not, but if you make that comparison the camera only captured approximately one-half of the field of view of a human eye, minus peripheral vision. If one considers the entire field of view for a human eye, the camera only captured approximately 22% of what the human eye could capture.

Ιf the above-analysis is accepted scientifically as reliable, then the reasoning and method employed by Knox in photographing the mannequins for the purpose of showing what the Defendant could see at the time leading up to the shooting and at the time the shot was fired is unreliable, has not been applied reliably to the facts of the case, is not substantially similar to the event, does not aid the jury in deciding a material fact in issue, i.e. what could the Defendant see at the time of the shooting and it is inadmissible under section 90.403 because its probative value is substantially outweighed by the unfair prejudice, confusion of the issues misleading to the jury.

Clearly, the photographic evidence presentation by defense expert Knox will have an undue tendency to suggest a decision based on an improper basis, i.e. an unreliable application of scientific concepts to a material fact in dispute.

It is the proponent of the evidence to prove Knox's reasoning and method is scientifically reliable, has been applied reliably to the facts of the case, is substantially similar, aids the jury in deciding a material fact and its probative value is <u>not</u> substantially outweighed by the danger of unfair prejudice, confusion of the issues or is misleading to the jury. <u>Daubert</u>, 509 U.S. at 592, n.10.

Interpretation of Video

Knox's interpretations of the content of the surveillance video are not admissible because it will not aid the jury and he

lacks qualification to do so. Any testimony on Knox's observations from the surveillance video would not assist the trier of fact because the jury is competent to view the video and decide what it shows for themselves, and there is nothing about Knox's training or experience that makes him more capable than the jury in viewing the video and deciding what it shows.

Knox's conclusion that the video does not depict the reflection from the Defendant's shoes is nothing more than a general description of what Knox believes he saw on the video.

In <u>Seymour</u>, ... "the State played the surveillance recording for the jury, one of the officers testified that the video showed Appellant "running with a firearm that was being concealed under his shirt." <u>Seymour v. State</u>, 187 So.3d 356, 358 (Fla. 4th DCA 2016)

The Seymour court reasoned

"In this case, it is impossible to definitively identify what Appellant is holding in the video played for the jury. The officer's observations were limited to what was captured on video-the same video that was available for the jury to watch. There was no record evidence that indicated the officer was in a better position than the jury to view the video and determine whether the object was a firearm. The officer was not qualified as a certified forensic technician or a witness that was proficient in the acquisition, production, and presentation of video evidence in court. He did not testify to any specialized training video identification. As such, the officer's testimony constituted impermissible lay opinion that invaded the province of the jury to interpret the video." Id. at 359.

In Lee, ... "Three school surveillance cameras captured parts of the incident. Video from camera 1 shows the bicyclists approach the school, the squad car approaches the bicyclists, and Fong Lee drops his bicycle. Video from camera 2 shows part of the foot chase, with Fong Lee in the lead followed by Andersen and Benz. Video from camera 3 captured the end of the chase, including images of Andersen with his gun drawn, Fong Lee's body, and the squad cars arriving approximately two minutes after the chase ended." Lee v. Anderson, 616 F.3d 803, 807 (8th Cir. 2010)

The $\underline{\text{Lee}}$ court reasoned

"Federal Rule of Evidence 702 permits a qualified expert to give opinion testimony if the expert's specialized knowledge would allow the jury to better understand the evidence or decide a fact in issue. United States v. Arenal, 768 F.2d 263, 269 (8th Cir.1985). "The touchstone for the admissibility of expert testimony is whether it will assist or helpful to the trier of fact." McKnight, 36 F.3d at 1408. Rule 704(a) provides that expert evidence is not inadmissible because it embraces an *809 ultimate issue to be decided by the jury. If the subject matter is within the jury's knowledge or experience, however, the expert testimony remains subject to exclusion "because testimony the does not then meet helpfulness criterion of Rule 702." Arenal, 768 F.2d at 269. Opinions that "merely tell the jury what result to reach" are not admissible. Fed.R.Evid. 704 advisory committee's note." Id. at 808-809.

Conclusion

The court's gatekeeping role ensures the reliability and relevance of the expert's testimony offered into evidence.

- Mr. Knox's testimony and evidence regarding "backlighting" offered for the purpose of proving what the Defendant could see at the time of the shooting is based on unreliable reasoning and scientific method. The testimony cannot reliable be applied to the facts of the case, resulting in the testimony and evidence not being an aid to the jury, but would only create confusion and mislead the jury.
- Mr. Knox's testimony and opinion regarding his interpretation of the content of the video invades the province of the jury and is beyond his expertise.
- Mr. Knox's testimony and opinion regarding the path of the bullet through human flesh is beyond the scope of his expertise.

WHEREFORE, the State of Florida respectfully requests the Court to enter its Order excluding any and all testimony of Mr.

Michael Knox regarding his interpretation of the content of the video, his opinion as to the path of a bullet through human flesh and all testimony and evidence relating to "backlighting" and to instruct the attorney for the Defendant, and any witnesses, not to mention or refer, or interrogate concerning, or attempt to convey to the jury in any manner either direct or indirect, any of the above mentioned facts without first obtaining permission of the Court outside the presence and hearing of the jury.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing State's Daubert Motion To Exclude The Testimony and Evidence of Defense Expert Michael Knox was furnished to Richard Escobar, Esq., Attorney for the Defendant, at 2917 West Kennedy Blvd., Suite 100, Tampa, T. 33609-3163, by U.S. Mail or Personal Service this _____ day of June, 2020.

BERNIE McCABE, State Attorney Sixth Judicial Circuit of Florida

By:

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IN THE CIRCUIT COURT OF THE SIXTH JUDICIAL CIRCUIT OF THE STATE FLORIDA, IN AND FOR PASCO COUNTY CASE NO. CRC14-0216CFAES

STATE OF FLORIDA,

Plaintiff,

vs.

VOLUME XII

CURTIS J. REEVES,

Defendant.

PROCEEDINGS: Stand Your Ground Motion

DATE:

February 27, 2017

BEFORE:

The Honorable Susan Barthle

Circuit Court Judge

PLACE:

Robert D. Sumner Judicial Center

38053 Live Oak Avenue Dade City, Florida 33523

REPORTED BY:

Charlene M. Eannel, RPR

Court Reporter PAGES 1372 - 1552

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| 1 | P-R-O-C-E-E-D-I-N-G-S |
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| 2 | THE COURT: All right. Any matters we need to |
| 3 | address before we get started again? |
| 4 | MR. ESCOBAR: None from Defense, Your Honor. |
| 5 | MR. MARTIN: No. |
| 6 | THE COURT: Okay. Mr. Escobar? |
| 7 | MR. ESCOBAR: Your Honor, Defense would call |
| 8 | Michael Knox. |
| 9 | THE BAILIFF: Step this way, stand right here. |
| 10 | Face the clerk, raise your right hand to be sworn. |
| 11 | (Thereupon, the witness was duly sworn on oath.) |
| 12 | THE BAILIFF: Come have a seat up here. Adjust |
| 13 | the mic. Speak in a loud and clear voice for the |
| 14 | Court. |
| 15 | THE COURT: You may proceed, Counselor. |
| 16 | DIRECT EXAMINATION |
| 17 | BY MR. ESCOBAR: |
| 18 | Q. Good afternoon, Mr. Knox. |
| 19 | A. Good afternoon. |
| 20 | Q. Mr. Knox, would you please state your full name |
| 21 | and spell your last name? |
| 22 | A. My name is Michael Knox, K-N-O-X. |
| 23 | Q. Mr. Knox, were you retained by Escobar & |
| 24 | Associates in order to assist them in the reconstruction |
| 25 | of this shooting incident? |

| 1 | A. Yes. |
|----|-------------------------|
| 2 | Q. Let's go over |
| 3 | Would you ple |
| 4 | about your educational |
| 5 | A. Well, I have |
| 6 | two associates degrees, |
| 7 | criminal justice. Foll |
| 8 | in mechanical engineeri |
| 9 | Florida, and then follo |
| 10 | forensic science from t |
| 11 | Then I comple |
| 12 | work, and I'm currently |
| 13 | Ph.D. in criminal justi |
| 14 | behavioral science from |
| 15 | MR. ESCOBAR: |
| 16 | Honor? |
| 17 | THE COURT: |
| 18 | BY MR. ESCOBAR: |
| 19 | Q. Mr. Knox, I'r |
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- a little bit of your background.
- ase tell the Court a little bit background?
- a -- started off -- I actually got one in just general ed and one in owed that with a bachelor's degree ng from the University of North wed that with a master's degree in the University of Florida.

ted all of the doctorate course y working on my dissertation for a ice with a concentration in n Nova Southeastern University.

May I approach the witness, Your

You may.

- m going to show you what's been marked as Defense Exhibit number 88 and ask you to review that document in its entirety and tell me if, in fact, you recognize that particular document.
 - I do recognize it.
 - Okay. What is that a document of?
 - This is my CV, or this is at least my CV as of

July 23, 2014. 1 Okay. Is it true and accurate? 2 0. 3 A. It is, yes. MR. ESCOBAR: We would move Mr. Knox's CV into 4 5 evidence. MR. MARTIN: No objection. 6 THE COURT: That's Number 36. Thank you. 7 will be admitted as 36. 8 (Whereupon, Defense Exhibit 36 for 9 identification was received in evidence by the 10 11 Court.) MR. ESCOBAR: Thank you, Your Honor. 12 THE COURT: Mr. Escobar, I just noticed 13 Mr. Michaels is not present. Is that okay? 14 MR. ESCOBAR: That's okay, yeah. We talked 15 about it. 16 BY MR. ESCOBAR: 17 Mr. Knox, I'm going to approach you now with 18 Defendant's Exhibit Number 36 that has been introduced 19 into evidence. We're going to talk a little bit about 20 your CV, if you don't mind. 21 22 Α. Okay. Your next area of your CV is your accreditation 23 24 and certification. What is that? Well, I hold a couple of certifications. 25

primarily -- relevant to this, I'm certified as a crime scene reconstructionist by the International Association for Identification, which is a larger forensic body. It started off with people doing fingerprinting, and it grew into an organization that deals with all aspects of forensic science, but they have the only national certification program for crime scene reconstruction.

- Q. And you are also accredited as a traffic accident reconstructionist; is that correct?
- A. I was up until April of last year. In my business, I sort of stopped taking traffic accident cases.

 I've been concentrating more on crime scene stuff.
- Q. You're also certified by Glock Armor; is that right?
 - A. That's right.

- Q. Explain that to the Court a bit.
- A. Well, I've been through the training with Glock, which is the company that manufactured a pretty popular pistol model, but I've also trained as an armor, meaning, that I've been through manufacturer's training to be able to disassemble a pistol, take all the parts out of it, replace the parts, diagnose problems with it, things like that.
- Q. Are you member of some professional associations?

A. Yes.

Q. What are those?

A. Well, most notably, the Association for Crime Scene Reconstruction, which is also known as ACSR, which is the only national organization that deals specifically with crime scene reconstruction.

I'm also a member of the International

Association for Identification, which is the organization
where I have my certification, and I'm member of a couple
of other organizations, the American Society of Mechanical
Engineers and just one or two others.

- Q. Okay. What are the areas of study and research within your profession?
- A. Well, mainly my areas of study and research are in firearm ballistics and shooting incident reconstruction, crime scene reconstruction. More broadly, I tend to focus more on shooting cases, and I've done a good bit of study in the areas of human factors related to shooting incidents as well as my dissertation topic is in crime scene behaviors of school rampage shooters, so kind of a broad aspect of things relating to shooting incidents.
 - Q. Now, have you done anything with photogrammetry?
 - A. Yes.
 - O. What is that?

- A. Photogrammetry is the science of obtaining measurements from photographs, so it's -- you know, whether you take a camera or take photographs and use that to measure, or whether you are take an unknown photograph somewhere taken with an unknown camera and then using control points to be able to measure things within the photographs.
- Q. What about image and video and audio analysis as well as enhancing?
- A. I do quite a bit of that. I mean, obviously when you're dealing with reconstructing crime scenes and shooting incidents, there are a fair number of opportunities, increasingly so, where there's some type of video or audio recording that is related to the -- that event, and so I do a fair bit of work with using the video to be able to get things like timelines and trying to determine what events may have taken place.
- Q. Now, you have a great deal of professional training in these areas. I don't want to go through any of them. I believe you've spoken about the Glock advanced armor course; is that correct?
 - A. That's right.
 - Q. I believe that was back in 2011?
 - A. That's correct, yes.
 - Q. Now, you've also taken a street survival seminar

in Myrtle Beach in 2011 as well?

A. That's correct.

- Q. What was that about?
- A. That's put on a by company called Caliber Press.

 That's a publisher of books for law enforcement. Their primary focus is on tactical things and training police officers how to deal with armed encounters and use-of-force episodes, stuff like this, but they have a seminar where they travel around and present it in different locations.
- Q. Optics, Lighting, Visibility for The Forensic Investigator, that was, I believe, also in 2011?
 - A. That's correct.
- , Q. What was that about?
 - A. That course dealt mainly with photography and documentation of lighting and visibility issues, so where there are issues with regard to what somebody could see. The course basically got into how you would appropriately document that and you would be able to provide some assessment of that.
 - Q. We've talked about Glock. I guess there were two Glocks. One was a professional course, and you took another one. I believe you've already talked about it. That's the one where you were learning the intricacies of actually the makeup up of the gun itself?

A. Right. The first course that I took, which was a Glock armor's course, which is a one-day course, and then the second one was the advanced armor. Advanced armor gets more into diagnosing problems with a pistol.

You do a number of scenarios where they give you pistols that are broken or something's wrong with it and you have to diagnose it.

- Q. Homicide investigation, you've taken a course concerning homicide investigation?
 - A. That's correct.
- Q. Okay. And just to name a few of them, Advanced Blood Stain Pattern Analysis, Crime Scene Reconstruction of Shooting Incidents, Firearm Instructions and Digital Photography For Law Enforcement?
 - A. That's correct.
 - Q. That was all as a basis for your training?
- 17 A. Right. Right.

- Q. Scene Mapping, Using Speed Laser, what is that all about?
- A. That is using laser mapping equipment to obtain measurements. So oftentimes in our scenes, we use laser mapping equipment or a -- what's called total station.

 It's similar to what you'd see a surveyor use on the side of the road. We use that type of equipment to be able to obtain measurements at a scene, and it allows us to get

more detailed measurements and get them more accurately,
more rapidly.

- Q. I see you're taken quite a few courses in traffic accident and traffic accident homicide investigation. Did those courses deal with the human factor as well?
 - A. Yes.

- Q. Explain to the Court how that correlates also within that body of knowledge.
- A. Well, obviously in a traffic accident case, perception, reaction time and visibility and those types of factors are important because you're often assessing issues about whether or not a person, a driver could see something, how quickly they could respond to something and that sort of thing.
 - Q. Dealing with perception?
 - A. That's right.
- Q. Have you authored any peer-reviewed articles and technical papers?
 - A. I have, yes.
- Q. Explain those to the Court, if you can.
- A. Well, I've done actually five different papers that were conference papers presented at the conference for the American Society of Mechanical Engineers. Among those, one was on applying engineering methods in crime

scene reconstruction. One was on the analysis of a firearm discharge due to a blow to the hammer for an accidental discharge.

One was on ejected cartridge case patterns. And one was on reconstructing long-range shootings, and then one was related to traffic accidents.

- Q. And have you written any books or have you contributed to the writing or the publishing of books?
 - A. I have, yes.

- Q. And explain those.
- A. Well, the main one that I was involved with was an associate of mine had written a crime scene processing manual that's intended to be a how-to manual for crime scene investigators. And then in his second edition, we decided to turn it into a multi-media platform, so it's more of you put the disk in the computer and it has texts and videos and a lot of photos, things like that, to sort of guide people through processing crime scenes.

I also wrote a book based upon the evidence from the George Zimmerman, Trayvon Martin case.

- Q. Now, you've also made some presentations and you have some teaching experience as well; is that correct?
 - A. That's right, yes.
- Q. First of all, let's talk about your position with the University of North Florida.

A. Well, I'm an adjunct instructor for the

Institute of Police Technology and Management, which is a

training arm for the University of North Florida.

At IPTM, we train police officers from all over the country, even internationally. We get some from other countries that come in. And my particular role with IPTM is that I'm the lead instructor for all of the shooting incident reconstruction training.

- Q. Okay. Now, in some of your courses and lectures that you have done, some of them have actually been lectures of human factors in crime scene reconstruction, and that was in 2013 in Georgia?
- A. That's right. That was for the Association of Crime Scene Reconstruction at their annual conference.
- Q. And the crime scene reconstruction and shooting incidents, I guess that was in 2012?
- A. Right. That was one of the IPTM courses. I teach that course annually in Jacksonville and then also sometimes on the road in other states.
- Q. Shots Fired, Reconstruction of Police-Involved Shootings in 2012 in Washington, D.C.?
 - A. Right.

- Q. What was that about?
- A. That was a presentation to the International Municipal Lawyers Association, which obviously there

you're getting a lot of attorneys that represent
municipalities and police officers and police agencies
that are involved in litigation arising out of a shooting.

- Q. Crime Scene Reconstruction Evidence Collected Versus Evidence Presented, that was in 2011. Do you remember that one?
 - A. Yes.

- Q. What was that about?
- A. That was a presentation to the Florida

 Association of Public Defenders where I was presented to their investigators about, you know, issues between not just collecting the evidence, but then taking that to trial, being able to interpret it and use it and present what it means.
- Q. Basically, the reconstruction process to present to a court?
 - A. That's right.
- Q. The Evaluating Accuracy, Precision and Uncertainty in Crime Scene Reconstruction, that was in Panama Beach, Florida. Explain that one.
- A. That was for the joint training conference between the Florida Division of the International Association for Identification and the Georgia division, which annually they do a joint training conference, and my particular presentation there was on issues relating to

uncertainty and precision and accuracy, things like that, so how do you determine if you're making accurate measurements or precise measurements, and how do you deal with the inherent uncertainty involved in any type of measurement.

- Q. I see you took a number -- or you taught a number of courses on the fundamentals of crime scene technology and the scenario-based crime scene processing exercise, correct?
 - A. That's right, yes.

- Q. What do those involve?
- A. Well, I've done some training in the fundamentals of crime scene technology, I was doing training for a company called Searching Fingerprint Laboratories, which is a company that manufactured forensic equipment, the type of stuff that the crime scene investigators use. And they sent me to United Arab Emirates in Dubai, and I taught a 40-hour course in Dubai on generally all aspects of crime scene investigation as sort of a broad crime scene course.

Then I also taught the same course twice in Peru to their -- I think it's their interior ministry, which is -- it was teaching prosecutors and medical examiners about crime scene processing.

Q. I'm not going go through the rest of them. I

know there are quite a bit of them, but they're all listed in your CV; are they not?

- A. Yes, they are.
- Q. Now, let's talk a little bit about your employment and how your employment started in the field of law enforcement.
 - A. Okay.

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- Q. Let's take you back to 1994 through 2010. How were you employed?
- A. Well, starting in December of 1994, I went to work for the Jacksonville Sheriff's Office as a police officer. I worked in uniform and patrol and DUI enforcement for about five-and-a-half years, and then in 2000 I transferred to the crime scene unit. I worked as a crime scene investigator for seven years.

While I was there, I was a major case crime scene investigator, meaning that I worked all of the major crimes, homicides, police-involved shootings, things like that. And then also for, I think, about the last four years that I was in the unit, I was the training coordinator for the unit.

Then I spent three years in the traffic homicide unit before I took an early retirement and left the Sheriff's Office.

Q. So did you start your business of Knox &

Associates prior to leaving the Jacksonville Police 1 2 Department? 3 Α. I did, yes. Was that on a part-time basis? 0. 5 Α. Yes. Was that in 2008? Ο. 6 That's correct. Α. 7 Why did you leave the Jacksonville Police 8 Department? 9 I found myself working two full-time jobs. 10 Α. started getting so busy with my consulting work that I was 11 working, you know, five, six, seven hours of that each 12 day, then going to work and working ten-hour shifts, so it 13 kind of became an easy decision to make. I moved on and 14 went into my business full time. 15 What sort of individuals do you work for; 16 Q. defense lawyers, prosecutors? 17 Whomever calls. So basically, you know, I'll 18 Α. get a call and it will be an attorney representing some 19 particular individual. It might be a criminal defense 20 attorney calls me, I get calls from prosecutors. I get a 21 fair number of civil cases as well. 22 You know, what we're doing is mostly physical 23 reconstruction aspects for a case that they may have, 24

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whether it be a criminal case that's involving a shooting

or some type of crime scene, or on the civil side we get a lot of police-involved shooting cases, and I work on both sides, some plaintiff cases, some defense cases.

I also do some product liability cases where a defective firearm issue is brought up and have to do an analysis of that for reverse engineering, things like that.

- Q. Have you been qualified in the past on issues of crime scene reconstruction, shooting incident reconstruction, firearms, ballistics, human factors as an expert in any court?
 - A. Yes.

- Q. And how many times, would you say?
- A. It would be several dozen, probably approaching about a hundred times. I don't have an exact count right now, but it's a considerable number of times.
- Q. Okay. Mr. Knox, what's a shooting incident reconstruction or, for that matter, any reconstruction?
- A. Well, basically when you're reconstructing any type of crime scene, and certainly with shootings, what you're doing is taking the pieces of the puzzle and assembling them such that you can get a picture of what took place.

So you're applying various different items of physical evidence and sometimes testimonial evidence,

sometimes video or audio recordings or various different things, and trying to assemble everything into a cogent representation of what took place as closely as you can, obviously.

I mean, the fact that you're looking back at something that occurred in the past, but you're assembling that to try to create a picture that you can see today that would give you some understanding of what took place.

- Q. Is it important to start off by determining kind of what happened, getting a general feel about what happened?
 - A. Yes.

- Q. How do you go about doing that?
- A. Well, generally the process, the way I teach it and the way I practice it, is that, you know, first you have to start collecting information. You start collecting data about what took place, and then that's going to occur in multiple forms. The crime scene investigator is going to be looking at the physical evidence and figuring out what is there and what is indicated by the physical evidence, what is present.

Then you'll also have a -- typically some detectives that will be doing interviews and talking to people and trying to get information from them about what took place, which will guide the direction that you're

going in terms of how you process the crime scene, how you 1 obtain information, what you are looking for, basically. 2 And so that process sort of builds until you've gathered 3 all of the information that you needed. Then you start analyzing individual pieces of it. 5 Well, let's stop there at the very first start. Q. 6 You come up to a scene and someone has been 7 shot, and some of that basic information that you need to 8 first find out is: Well, we've got someone that shot 9 For example, in this case, we know that 10 someone. Mr. Reeves without question shot Mr. Oulson. 11 Α. Yes. 12 That's not a contested matter in this case, 0. 13 correct? 14 Α. That's correct. 15 Sometimes the issue is who did it, right? 16 Ο. That's correct. Α. 17 Sometimes it's not who did it? Q. 18 That's correct. Α. 19 Is it a homicide or is it Sometimes it's: 20 Ο. self-defense? 21 That's correct. Α. 22 And it's very important, is it not, to initially Ο. 23 at least embark upon that particular issue? 24

That's right.

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Α.

Q. Why?

A. Well, the processing that you go through in a crime scene is very different depending on what the issue is, because in a homicide where you clearly have a homicide that's taken place, the question is: Who did it?

You might find that the case where you have a body that's found, the person obviously has been shot and you don't know who did it. Then a lot of your processing will then focus on that type of evidence that would be associative, that would tend to associate a particular individual to that crime scene in some way.

When you have a case where you have, say, a shooting and you know who was involved, then there is no real need for looking for associative evidence. What you're looking at more there is evidence that's going to tend to show what took place, and that's the important part for reconstructing, when you have an issue of whether or not it's even criminal or whether, you know, it could fall in different categories.

Q. Now, let's talk about this reconstruction process because I don't want to get too far afield.

Is this reconstruction process what you did as the major case crime scene detective with the Jacksonville Sheriff's Office?

A. Yes.

| 1 | Q. Is this what a crime scene detective does? |
|----|--|
| 2 | A. Yes. |
| 3 | Q. And so what you've just told me is that: Hey, |
| 4 | in a case where it's not who did it, it's a case where |
| 5 | MR. MARTIN: Your Honor, I object to the summing |
| 6 | up. It seems to be a style of Mr. Escobar's. I |
| 7 | object to the summing up in the form of the question. |
| 8 | It's not laying predicate or going somewhere else. |
| 9 | He just wants to sum it up. |
| 10 | MR. ESCOBAR: Your Honor, I agree that was a |
| 11 | summing up and I will respectfully move on. |
| 12 | THE COURT: Thank you. Sustained. Thanks. |
| 13 | BY MR. ESCOBAR: |
| 14 | Q. So now when you're dealing with this |
| 15 | self-defense issue, specifically the self-defense because |
| 16 | that's what this case involved, correct? |
| 17 | A. That's right. |
| 18 | Q. How do you go about it in that reconstruction? |
| 19 | What do you do? What are your first steps that you are |
| 20 | going to engage in in order to reconstruct that shooting |
| 21 | incident? |
| 22 | A. Well, you first have to start looking for |
| 23 | evidence that would tend to help indicate what took place. |
| 24 | I mean, that's the real focus, so you'd be looking to |
| 25 | identify in terms of physical evidence what might be |

there.

You would have certain items that might have relevance to the shooting and then give some indication about where people were, what events took place, what things may have happened, and then you want to look also for evidence that might suggest or provide some more information.

Now, in one form, it's going to be interviewing of witnesses because obviously they can provide some information to you, and then also looking for other things. I mean, you know, we're now in an age where video is ubiquitous. It's pretty much everywhere, so the likelihood that you have some type of video recording of an incident is pretty significant, and that's information that will help you to fill in those blanks about what happened.

- Q. Well, let's talk about your -- with your experience in going out to the scene and doing these reconstructions, even as a police officer, major crime scene detective with the Sheriff's Office, when you get to the scene initially, what would you think the most important aspect of your job would be in reference to witnesses?
- A. Well, with witnesses, the biggest thing is that you need to get accurate statements from what they recall.

So probably the first and foremost issue is you've got to make sure that you separate people and that you're able to start at least getting preliminary statements from people individually based on their own recollection.

- Q. So what do you do if you go to a scene and your witnesses are grouped together? You're a major case crime scene detective. You've arrived at the scene and you've got groups of witnesses that are supposed to be eyewitnesses, and now they've been grouped together and they're talking. What do you do as a crime scene detective?
- A. Well, you're typically going to coordinate with the detectives that are responding as well as patrol, depending obviously on how many people you have and what kind of manpower issues, but you need to start separating people because you need to be able to get statements from them that are not influenced by things that they may have heard or communicated with somebody else, with another witness to the incident. So you want to be able to get what each person recalls individually.

So the first thing, you've got to get them separated where they're not communicating with one another, they're not talking to each other, and then begin to get statements from them.

Q. You've heard of the word "contamination,"

witness contamination?

- A. Oh, yes.
- Q. Explain to the Court what that means.
- A. Well, the biggest thing with witness contamination is that you don't want to have witnesses who have parts of an event that they recall who then hear other parts from other witnesses who then -- they start to fill in the blanks in their own mind. Things that they heard start to become things that they remember or that they believe they remember, and so obviously you want to get each person's own recollection without having to filter out what they got from somebody else versus what they actually saw or perceived or experienced in some way.
- Q. Is it even possible after someone has been contaminated by the opinions of other witnesses -- is it even possible to determine what is an independent self-recollection versus a contaminated version by some other witness?
- A. Not if you have no real recording or way of discerning what they heard from other people. So if you just had a group of witnesses that are all grouped together and there was nobody monitoring them and there's nobody that's recorded the conversations, there's no way of knowing specifically what was said from what person to what person, then you pretty much aren't going to have any

way to tell the difference between what they heard versus what they actually recall.

Q. Is what they hear always accurate?

A. Oh, no. No. Definitely not.

Q. Why is that?

A. Well, you know, anybody that's done law enforcement investigations or anything in that field for even a fairly short period of time knows that, you know, you can go to a shooting and you could have five or six different witnesses and you could ask them the same set of questions and you're going to get five or six different answers.

MR. MARTIN: Your Honor, I'm going to object on this line of questioning. This is right along with the eyewitness identification and what they heard, and we know that that's been ruled inadmissible in Court.

There has not been a proper foundation laid and this is nothing but speculation on his part that this occurred, so I'm going to object on those two grounds.

MR. ESCOBAR: Judge, these are tools that he uses as a crime scene investigator that he has to be aware of because if he's not aware of it, if he doesn't use it in the proper manner, then his entire

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reconstruction becomes flawed. And so, no, he's got to be aware of these issues. He's got to be able to deal those particular issues, and he's got to know when to set those issues aside and not consider those issues. So this is very relevant to our shooting incident reconstruction.

MR. MARTIN: Well, it would be relevant if we had some evidence other than the two witness statements that the witnesses didn't come in and explain while the words were exactly right, that we do have, in fact, witness contamination. We haven't had any testimony of that by any of the civilians that have come in and said, "I heard this," or, "I heard that."

Now, what we did hear is people upset, all the afternoon is ruined over popcorn. Well, that's not discussing the case. No one has come in and said, "I discussed with so-and-so and this is -- you know, this is what I heard from it." Nobody.

So I mean, we're just -- it's not only irrelevant because we don't have those facts; he didn't lay a predicate. He didn't put on any witnesses that have come in and said, "I talked to so-and-so. I heard this from so-and-so," or, "I even heard," so I'm going to object to this line of

questioning as being deemed not relevant because it's not pertinent to the facts of this case.

MR. ESCOBAR: Your Honor, he's just testified that's not the way it happens. In fact, witnesses that are contaminated believe that that testimony is coming from themselves. That's what he has to deal with.

This is not something where someone is contaminated. They all come in and say, "I've been contaminated." That doesn't happen this way. He's got these particular tools that he has to deal with in an incident reconstruction, and one of the major dangers, as he's testified, is witness contamination by the mere fact that they're grouped together and they're allowed to converse among each other without any proper supervision, without any proper instructions.

So we've certainly had that sort of testimony, including from one of their own officers, which is a very experienced Deputy Demas, who came in here and testified, if the Court recalls -- that said, "Oh, no, they teach witness contamination from the academy, and once a witness is contaminated, you can't undo it."

And she said that she was very concerned over

the fact that there were groups of individuals that, you know, were grouped together, and she wasn't aware of any officer that came in and told that group, "You're not to talk about your testimony. You're not allowed to converse with anybody else concerning what you saw."

And I beg to differ. I believe that some of the witnesses here, including Mr. Friedhoff's 's girlfriend that indicated, no, her boyfriend was talking about what he had perceived with that particular group, if the Court recalls, or -- the name slips my mind, but it was Mr. Friedhoff's girlfriend who is no longer --

THE COURT: Ex-girlfriend.

MR. ESCOBAR: -- who admitted to that, and I believe we've got a couple more that had testified that indicated that, yes, you know, there are individuals in the concession area and they were talking about the particular happening and what they remember from the particular happening.

So this is a technique. This is something that, you know, experts like Mr. Knox need to have at their disposal so that when they're doing an accident or an incident reconstruction, they're doing it properly.

THE COURT: I'm going to overrule. There has

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been testimony that there's been groups of people talking, and the -- I'm assuming he's just giving his opinion as to how that bears out.

MR. ESCOBAR: He's going to be giving his opinion as to how you work with that in a crime scene of this manner, absolutely.

THE COURT: All right. I will overrule that.

BY MR. ESCOBAR:

- Q. Now, because this is a self-defense case, is the issue of perception at the forefront of your crime scene investigation?
 - A. Yes.
- Q. And would you tell the Court why the issue of perception is at the forefront of a shooting incident reconstruction like this one?
- A. Well, when you have any type of a shooting where there's potentially some type of legal justification and most often, we get this when it's police—involved cases and we're investigating or reconstructing a shooting that officers have been involved in. But in any case where you have any potential for self-defense or something like that, then the issue that you have to really focus on with reconstruction is showing what that person, the person that actually pulled the trigger, perceived.

 Because often, you will get things like witnesses who

might see or not see certain events, but then when you reconstruct, you determine they're in a different position so they have a different line of sight. They have a different viewpoint than what the person that actually fired the shots, you know, had.

Sometimes with video -- also you'll have a video, but the video is recorded from a different location, and there could be various factors why it's not showing the same things that that person that actually fired the shot saw, so you need to document things like where they were located and what they can see and various, you know, distances and measurements of where things are located relative to that person so that you can get a better understanding of what they would actually perceive during the course of this event.

Q. Before I let the video issues go, I might as well tackle it right now because you've mentioned it.

In a theater like this where we have video, is the video important in possibly contributing to the issue of perception?

A. Yes.

Q. Is the video all-inclusive, meaning once you have a video, you don't even have to worry about the perception of the individual and where he was at and what he was confronted with and the decisions that he made?

A. No, no. Not at all. Video inherently can be misleading because it's not from the same perspective.

You're not videotaping what that person saw. The video is from a camera that is located somewhere else.

There are a lot of other factors that affect a video. I mean, the quality of it, the distance, the way that the camera is, you know, if it's a wide-angle lens that's taking in a gross view of everything and not showing the details of what that person could see.

So video helps you to locate where things were, where people were, helps you put a timeline to what took place, but it does not show for you what that person experienced or anything related to what they experienced.

- Q. So you're aware of the video cameras, are you not, that were present in the Cobb Theater on January 13th of 2014?
 - A. Yes.
 - Q. Were you aware of where they were located?
- 19 A. Yes.

- Q. 35 feet up in each side of that theater?
- 21 A. That's right.
 - Q. A video camera that is taping an incident 35 feet away, is that giving you an accurate perception of what the shooter of the incident that is seated in chair number 9 in the Cobb Theater is experiencing?

A. No.

MR. MARTIN: Your Honor, I'm going to object to that question. There hasn't been a predicate laid for him to render such an opinion in this case.

MR. ESCOBAR: I think he just did. I think he just said in his answer --

MR. MARTIN: Well, he may have just --

MR. ESCOBAR: Before. Before.

MR. MARTIN: -- before I could object.

MR. ESCOBAR: No, no. This is before. The answer that he gave before about the fact that video is different because, in fact, it's in a different location and it's not giving you the actual perception because you're not -- you're not putting the video in Mr. Reeves' eyes, and he is actually videotaping what's coming from a different place. It's coming from a different angle. It's coming from a different height.

He gave that whole foundation. In the answer before, that was not objected to.

MR. MARTIN: True, because I was seeing exactly where they were going with it, and they have not laid the predicate for his expertise and training in that particular field.

Now, they've listed some of the things and

courses that he's been to, but that wasn't one.

Videography wasn't one of them. Photogrammetry, he talked about measuring things and photographs or images or even video, but when we're talking about perception and angles and what you can and can't see, then the proper predicate hasn't been laid.

MR. ESCOBAR: Judge, Your Honor, there was two things that he mentioned. One was the image video and audio analysis and enhancement, and there's another one called the mobile videotaping instructor course. We've laid that foundation concerning the video, in particular.

MR. MARTIN: Do we know what that is? He never went into it. That's what I'm saying. You can't rattle off titles --

THE COURT: As far as the predicate of whether or not he's qualified to testify about that particular question, quite frankly, I don't think this is -- you know, that's something that a lay person can determine, in all candor, whether or not a camera that is 35 feet away or 40 feet away and up in the air has got the same view as someone sitting down in the seat. You don't need an expert to tell you that that's going to be different.

So as far as that particular question, I'm going

to overrule, but if we're going to get into more detailed opinions as to that aspect, then I'll-Mr. Martin has objected and you'll need to expound a little bit on that.

MR. ESCOBAR: Judge, let's go ahead and get it over with. There's going to be a lot here, so I might as well put it on.

BY MR. ESCOBAR:

- Q. Mr. Knox, please explain to the Court your experience in video equipment and video recording and the problems with using those particular items solely for examining the perception of one that is in a shooting incident like this.
- A. Well, my -- I guess my first real training and experience with any type of videotaping was back in the '90s -- actually, when I was sent to a mobile video operator's course. And then later on a mobile video instructor course, and for two years when I was assigned to the DUI unit, I had a video camera in my car that videotaped all the encounters that I had.

I've also taken a digital imaging course that's dealing with -- predominantly with still photography and dealing with most of the concepts that apply to video, video being just multiple pictures that are played rapidly enough that appear to be a moving image.

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I've also used video quite extensively throughout the entire time that I've done both private consulting and even prior to that when I did cases for law enforcement, both in -- as a traffic homicide investigator where I've used a lot of videos for reconstruction of traffic accidents, and then also prior to that using video with -- when it was available in crime scene cases.

- Q. And have you been taught concepts concerning the techniques necessary for accuracy, not only in the capturing of the evidence but also in the presentation?
 - A. Yes.
 - Q. Now --

MR. MARTIN: Judge, I'm still going to object.

All he said was, "I've used it."

I have filed a motion, a valid motion, and he used his camera. He used it to capture what he perceived to be the lighting. I have an extensive brief on it, so you can understand my objection when he tells us, a very dogmatic statement, "I've used it, therefore, I know what's going on," but I'm not going to take that for face value. Just saying, "I used it," that doesn't mean anything.

MR. ESCOBAR: Judge, you know, Mr. Martin selects little tiny bits and pieces of testimony in order to make his arguments. He's not -- in other

words, you know, in our area of practice, it's called the doctrine of completeness. He doesn't use the doctrine of completeness.

He testified about the courses that he took, the courses that were taught to him in order to have a solid foundation in the issues -- with the issues of the video, how to make precise video and how to, you know, determine that the video that you're taking is, in fact, of evidentiary value.

For Mr. Martin to say, "Oh, well, he just used video," that's not being genuine. That's just not being genuine. That's not the record here, and I'm going to rely not only on the record but if the Court remembers, we also filed a response to his motion in this particular case, and so we would also rely obviously on our motion and memorandum of law.

THE COURT: All right. And as you both know,

I'm reserving those on the motion and the response,
so shall we consider this as the proffer at this
point?

MR. ESCOBAR: Your Honor, he's going to proffer it on the stand because, yes, in all of our segments we have to have a record.

THE COURT: Right.

MR. ESCOBAR: So we've -- I've got my memo, he's

got his argument and we're ready to move on.

THE COURT: All right. Very good. I'll take --

MR. MARTIN: We agreed that would be the

procedure.

THE COURT: Under advisement, correct.

Go ahead.

BY MR. ESCOBAR:

Q. Now, Mr. Knox, in the reconstruction of a shooting incident process, what does it mean by considering the environment?

A. Well, you have to take into account where a shooting took place to be able to fully reconstruct it. By that, I mean you need to know geometrically what that scene is; so where are things, you know, how are things positioned, what are the distances. You need to understand lighting conditions and visibility, line of sight.

You need to be aware of obstructions or things that would be in the way of how somebody would respond or how physical evidence would be deposited, and you need to have a thorough understanding of basically what all is there at that location that could have an influencing factor on what took place.

Q. When you have a location like a theater and it has seats, are you interested in where the witnesses were

seated?

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- A. Yes.
- Q. Tell the Court how you would go about -- when you would arrive at the scene as a major case crime scene detective, how you would go about in making sure that you identify the witnesses and where they were seated.
- A. Well, typically what I would want to do is whenever you have a witness that you would, you know, probably have a detective interviewing or perhaps a patrol officer -- depending on how involved that witness is, as a crime scene investigator, I'd want to find out from whoever is interviewing these people where they were located.

So I could document that, but you also want to be able to document from their location what they could see and perceive, line of sight, lighting and visibility factors, things like that to be able to show, you know, what would be visible and not visible. Because it's not uncommon with witness testimony that somebody will describe something, but then when you evaluate it from the standpoint of where they were, look at the distances and line-of-sight issues, that some of what's described may not have been visible to them or may not have been visible completely. So, you know, part of gathering the information is to assess, you know, what is there to be

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able to confirm what somebody tells you in terms of their interview.

- So if this witness says, "Okay, I was on the third row. I can't tell you exactly what seat on the third row, but somewhere on the third row," what do you do as an experienced crime scene detective?
- Well, what you typically want to do if the person can't tell you an exact seat -- and most people are not going to be able to tell you, "I was in this many seats over from this aisle," or things like that -- is you bring them back in and have them show you.
 - You bring them back in where? 0.
- Into the theater. You walk them back over and you'd say, "Okay, can you show me the seat that you were sitting at," because hopefully their recollection of the seating and they'll remember, "I think I was right here, right by this seat," or, "I was sitting right here. I remember."

So anything that you could do that would kind of help you -- their memory so they can recall where they were sitting and get you narrowed down as to where they were would be something that you would undertake.

Now, is there some big, huge no-no that under 0. your supervision as a crime scene detective, that you can't bring a witness into the shooting incident scene and walk over to a seat with him?

A. No. Once you've figured out the extent of where your physical evidence is which, you know, in a typical shooting where you don't have people chasing one another around in a movie theater, where it's something like this where it's isolated to a few seats in a couple of rows, that's really the area that you need to be worried about securing. The rest of the theater, you don't need to worry about that there's going to be any evidence that's going to be trampled on or things that are going to be lost or things like that.

So obviously you're not going to bring the person in and have them walk over stuff until you had searched it, processed it and made sure there's not anything there of particular value. But at that point, you can bring them in and have them walk over to a seat and, you know, show in an interview where they were and things like that.

- Q. What happens if you don't do it right then and there at the scene but you wait weeks, months, years?
- A. Well, you know, obviously you want to try to narrow the stuff down as quickly as you can. The longer the time period goes, the greater the chance that people are not going to recall.

I mean, you know, if I had just been in a movie

theater within the last hour or two, I would be a lot more likely to remember the seat than if you asked me six months down the road, "What seat were you sitting in?"

So, you know, it's just sort of a common sense thing; you want to get that information as quickly as you can as close to the time of the incident that you can.

- Q. How does the identification of a particular seat that a witness may be in -- how does that help you in the correlation of other evidence, especially when this scene may be a darkened scene like a movie theater with previews?
- A. Well, what's key to understanding where a person was is understanding what they could see, what kind of line-of-sight they would have because, you know, if you have an incident where a person is doing something, that person might, you know, you -- it could be a variety of particular things in a shooting. It may be a person brandishing a weapon. It might be pulling out an object that was interpreted to be a weapon.

Obviously if a witness is in a location where they have a direct line of sight of what that person was doing, they're going to be able to explain things better than a person who was behind them and doesn't have a direct line of sight. That person's body maybe in the way or something else and then they're not going to be able to

see the same detail.

Sometimes that's important with witnesses to understand not only what they saw but also what they didn't see, so that you understand why somebody did not see something that may be another person saw or that a person involved in the shooting saw or described.

- Q. Does that become even more important when you have a scene that obviously is low lighting and relatively high noise?
 - A. Yes.
 - Q. Why?
- A. Well, you know, obviously it's much more difficult to see things when the lighting is low than it is when you have a nice lighted room. So when you're in a setting like a movie theater where the lights are dimmed, you have lights reflecting from a movie screen that is changing, you know, often quite rapidly and you have a considerable amount of noise going on, which is going to affect what a person can perceive and see and what they can make out in terms of any verbal altercation going on, again, these are all factors that you have to consider.
- Q. Let's talk about some additional environmental factors. We've talked about light. We've talked about noise. We've talked about location, theater, seating. Is it important to measure in a scene like this?

1 A. Yes.

- Q. And tell the Court why it's important to measure.
- A. Well, that's the documentation that you're going to, you know, obtain a number of different types of measurements, geometric measurements in terms of the space involved and also trying to measure things like the light levels, sound levels, things that would affect what's taking place.
- Q. How could you measure, in your forensic world as a major case crime scene detective, light levels?
- A. Using a light meter. You can do it in a number of different ways. I mean, you can even use a camera and use the meter, the light meter that is built into the camera to get a reflection off of a gray card and be able to figure out what the camera settings are, and you can transfer the tables that will translate that to other units of measuring light, but there is just a number of different ways to do that with some type of light meter.
 - O. What about noise meters?
- A. The same thing. There are sound level meters that will measure how loud particular sounds are. I've used them. I used them recently to measure how loud a woman's scream was to compare that with someone who supposedly heard it from another location. So it's just a

matter of having the equipment and taking those measurements.

- Q. So in a case like this where you have the movie theater there and the ability to play those previews, again, is that something that as a crime scene detective you would do?
- A. Yes. I mean, you need to document it in some fashion as far as what all was taking place and what the environment is like, because obviously when you're talking about sound levels, it affects what somebody could hear. So if there's an issue of things being said back and forth to one another, what may have been said, also what other people could have heard, which may explain why maybe people that didn't hear something said and somebody else states was said, you know, things like that.

We deal with that kind of issue in police-involved shootings, when you're dealing with whether or not somebody could have heard commands being given by a police officer. So you test that.

You know, it may be a matter of measuring the sound levels. It may be a matter of testing it in various fashions depending on what the particular circumstances are.

Q. What about the distance between -- we talked about the distance of the items and the chairs and what

| 1 | have you, but what about the distance between the shooter |
|----|---|
| 2 | and the deceased? Is that an important distance to take? |
| 3 | A. Oh, yeah. Absolutely, yes. |
| 4 | Q. So I would imagine you would have to know that |
| 5 | while you were there at the scene, especially if it's not |
| 6 | a whodunit, right? |
| 7 | A. Right. |
| 8 | Q. If it's a self-defense case, you would want to |
| 9 | know where the shooter was seated. |
| 10 | A. Yes. |
| 11 | Q. That's of great importance to you? |
| 12 | A. Yes. |
| 13 | Q. And you would want to know where the decedent |
| 14 | was seated, correct? |
| 15 | MR. MARTIN: Your Honor, I'm going to object. |
| 16 | He's been leading for the last three questions. |
| 17 | BY MR. ESCOBAR: |
| 18 | Q. Would you want to know where the decedent was |
| 19 | seated? |
| 20 | THE COURT: Sustained. |
| 21 | MR. ESCOBAR: That's harmless leading, but I |
| 22 | acknowledge it. |
| 23 | THE WITNESS: Yes, you would. |
| 24 | BY MR. ESCOBAR: |
| 25 | Q. And would you tell the Court why? |

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A. Well, that's the whole issue. When you're talking about reconstructing a shooting for the purpose of figuring out what happened, you need to document the relative positioning between the people that are involved. So between the person firing the shot and the person that was shot, what kind of distance that you're talking about, especially if you're talking about a self-defense issue where the distance can make all the difference between whether it is or is not a legitimate self-defense claim.

- Q. Why can distance make a difference?
- A. Well, if you have, you know, cases where --

MR. MARTIN: Excuse me, Judge. He's been qualified as an reconstruction expert, not use of force. If we want to hear this from Mr. Hayden, then maybe I won't have an objection, but he -- and when I took his depo, Mr. Escobar told me after I finished and I went through all of this with him, that he's not being offered for that.

That's what Hayden's for, so I object to this line of questioning. He's not a use-of-force expert, and that's what distance is all about.

MR. ESCOBAR: No, Judge. That's just the opposite. He is being brought in as a major case crime scene detective who has to know the issues of use of force in an effort to be able to document, in

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an effort to be able to capture and question proper pieces of evidence in order to determine whether or not the perception of Mr. Reeves at the time of the shooting was reasonable.

This is not a go into the crime scene, you see a bunch of things on the floor, you collect them, you put a ruler as to where they were found and you go home and you let somebody else decide that. tell you and he will testify that -- absolutely not. If a crime scene detective comes into that scene and he doesn't have the body of knowledge in a self-defense case, especially in a self-defense case, to have that background, then he needs to go and get someone who does have that background so that that crime scene is properly preserved and properly carried out for the future.

MR. MARTIN: Judge, if that was the case -we've only been around this over and over. New reports, right? I go into a depo with a fishing I am told in I'm bobbing for apples. expedition. the depo he's not being offered as a use-of-force expert. Okay. That may be true.

Now we're in here and we're back-dooring some of the information that I would have gone into at the depo, so I object to it. He's a reconstruction

expert, and I will assure you that if we get to a

point where he attempts to offer an opinion as to

whether or not his perception was reasonable, that is

not what he has been tendered for, so those are the

two issues that are coming up, but --

MR. ESCOBAR: Judge, I'm not going to ask him -MR. MARTIN: I would have gone more and more
into the depo but for the fact that that was the
representation. Mr. Hayden is going to testify to
that.

I'm not going to ask him whether MR. ESCOBAR: Mr. Reeves' perception was reasonable, but I am going to take him through the entire process of what you do even when you have a video and you have certain shots in the video, certain snapshots in the video and those are timed, because you do that as a crime scene detective. You have to look at the video. You have to look at the timing between the sequence of events. You've got to be able to make determinations of when That's all crime someone is pulling a firearm. That's not -- that's not necessarily all scenė. That's a crime scene detective that's Dr. Hayden. doing that with the physical evidence, the video and what he found there at the particular scene.

He went there to the Cobb Theater twice, once to

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try to recreate something that he couldn't recreate because the Cobb Theater had changed their entire surveillance system. It would have been a wonderful experiment that we could have conducted that he wasn't able to do. So, no, that's exactly what a

crime scene detective does.

Now, this crime scene detective from the Pasco County Sheriff's Office may not have done that, but as we know, he had the capability because he testified that every year he gets those use-of-force type of instructions in order to preserve his own life. So for him to say that a crime scene detective shouldn't have that body of knowledge is just not being genuine with the Court.

THE COURT: That's a rather lengthy way to get to a response, but as long as we're not getting into the area that Mr. Martin objected to to a significant degree as an expert in that, then I will overrule. But if that's where you're going, then we're going to move into --

MR. ESCOBAR: Judge, I'm not going to ask him that ultimate question. I am absolutely not going to ask him that ultimate question, but I want the Court to know I'm being honest with the Court, that he will testify that this is what a crime scene detective

does and this is what a crime scene detective should do. If their crime scene detective didn't do that, I understand that, but this is what a crime scene detective does. He teaches that all over the country.

THE COURT: All right.

BY MR. ESCOBAR:

- Q. So early on in the process of crime scene reconstruction, is it necessary to find the location of the individuals that were involved?
 - A. Yes.
 - Q. And how do you go about doing that?
- A. Well, you could do a couple of things.

 Sometimes the physical evidence will tell you. Sometimes you just get that from asking people, you know, in the interviews of people who were involved in finding out where they were seated, you know, so that you know where people were, where they were seated, where it began and where things ended up and how did it take place, in terms of the location and movement of people.
- Q. And so is this a similar project like, "Hey, there's a witness outside that was seated right next to Mr. Reeves. Let's bring that witness in and have that witness point out where Mr. Reeves was seated"?
 - A. Yes. Yes, you could do that, yes.

- Q. Or any other witnesses as well?
- A. That's correct, yes.
- Q. Now, is the size, age, or disability of the parties important in your reconstruction?

MR. MARTIN: Judge, again, I'm going to object.

I know this area. I'm not testifying, but I know everything that they're going through, and this is not shooting reconstruction. I have to know this in order to determine where a chair is, where people are seated, who can see what, what the lighting condition is.

It's not his job to determine whether or not what Mr. Reeves did was reasonable, and that's what we're doing, and I know the areas. I know them like the back of my hand. I'll handle it with Mr. Hayden but not with Mr. Knox. He's here to give us the artifacts of the people that were in there; what could be seen, what couldn't be seen, what were the obstructions, what were the lights, how does that affect the human factors? I let that go, but not this use-of-force. He does not have the background. He wasn't qualified as an expert, and I was totally misled at depo or I would have covered it, and you know that.

MR. ESCOBAR: Judge, he was never misled at

depo, and in fact, if you read the CV, you would have 1 seen that all of that was in there, including the 2 use-of-force. 3 THE COURT: He told me he was not going to be offered for the use of --5 MR. ESCOBAR: Judge, I have never told him that, 6 never told him that. He had -- he had two days of 7 deposing this man. I think it was probably over six 8 hours. 9 THE COURT: I don't care. Where is the 10 relevance? 11 MR. ESCOBAR: It's the relevance of what a 12 homicide -- a major case crime scene detective does. 13 He's got to know the size of the individuals because 14 he is doing measurements, not only with the chair, 15 but he's doing --16 THE COURT: All right. All right. All right. 17 I got the size part. 18 MR. ESCOBAR: Right. 19 THE COURT: What else? 20 MR. ESCOBAR: Age, because he is going to, at 21 some point in time, talk about the relative movement 22 of individuals in reference to other activities, and 23 that is part of his testimony and part of his crime 24 scene because it's human factors. 25

THE COURT: All right. What else? Anything 1 else that's going to --2 MR. ESCOBAR: Disability, again, as a human 3 factor issue. It's a human factor issue. It bears upon how people are going --5 THE COURT: Okay. I get it. I know what 6 disability means. What does -- how does that impact 7 his measurements? 8 MR. ESCOBAR: He is recreating the events. 9 can you recreate the events without having those 10 11 aspects --THE COURT: Okay. 12 MR. ESCOBAR: -- of the parties? 13 THE COURT: So are you talking about someone who 14 is either in a wheelchair or has amputations, or are 15 you talking about him talking to someone and asking 16 him, "How frail are you?" 17 MR. ESCOBAR: Oh, absolutely. 18 THE COURT: Where are you going? 19 MR. ESCOBAR: Oh, absolutely. Part of the 20 process that takes place in an interview is a 21 structured interview of the individual that was 22 involved in the shooting. 23 THE COURT: So it's self-reported. 24 MR. ESCOBAR: Well, part of it is 25

self-reporting, but his part is the corroboration. 1 He's got to get that information and take it back to 2 the crime scene, and then he's got to evaluate it and 3 remember what he said from the very beginning. 4 is a perception case, and so as a crime scene 5 detective, he has got to take those particular 6 puzzles and see what puzzles fit and what puzzles 7 don't fit. 8 I got that in the I know that. 9 beginning. I don't need -- we don't need to go over 10 everything over and over, but I'd like to -- just 11 short, concise answers would be great. 12 All right. So disabilities to the extent that 13 it's self-reported? 14 MR. ESCOBAR: Oh, absolutely, and he's going to 15 look at the relevant -- yeah. 16 THE COURT: Okay. All right. And all of that 17 is relevant to his reconstruction? 18 MR. ESCOBAR: Absolutely, because at the end of 19 the case -- and I'm going to tell the Court what he's 20 going to do. 21 THE COURT: Okay. I get it. I get it. 22 MR. ESCOBAR: Okay. 23 THE COURT: I know you will. I know you will 24

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tell me probably 10 more times, but not right now.

MR. ESCOBAR: Okay.

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THE COURT: Okay. All right. I'm going to

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overrule.

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BY MR. ESCOBAR:

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Size, age, disability of the parties, how does Ο. that work in the process -- in the shooter, as well as in the person that's now deceased?

Well, when you're looking at certain things in relation to, you know, where people are in relation to one another, and then you look at things like wound path evidence and then correlate that back to where a person was seated, you know, to the extent that anything that -about a person affects how they could have been positioned, where they could be seated, how they could be holding a firearm and those sorts of things, then, yes, that's information that is important to know because, you know, you need to know which hand a person held a firearm You need to know, is there something about how they held the firearm that may have been unusual because of some type of disability.

I mean, there are -- I know a police officer who lost his index finger and shoots his gun now using his middle finger to operate it. Well, those are things that you would need to know in order to be able to understand the positioning to reconstruct where they were and what

was taking place.

- Q. Okay. And would you do that through structured interviews as well?
- A. Yes. Typically, what's going to happen with the crime scene stuff is, you know, if I'm the crime scene investigator there and I'm communicating with the detective and, you know, you have a person that's involved in a shooting -- so there's obviously going to be a detective that's going to interview that person and there needs to be communication back and forth, so I can communicate to the detective what I see at the crime scene, and they're going to then interview that person and get certain information.

What would typically be happening is they might, you know, get to a certain point in the interview, stop, come communicate with me. I'm going to say, "Okay, well, I've seen this, this or this. Can you ask him about that?" and then, you know, sharing that information back and forth.

So I'm collecting and focusing on the information at the crime scene. They're focusing on getting the information from the individuals. Then we're bringing that back and forth so that we can start putting everything together.

Q. So you're making a request as well of the

individuals that are interviewing witnesses in a case?

A. Yes.

- Q. Because you're needing to get that information?
- A. Yes, because obviously, you know, physical evidence will give me certain information, but a lot of times in a shooting there is an absence of certain -- of physical evidence.

Where you have a case like this, where you have one shot fired, you have a gunshot wound to an individual, there's nothing in the physical evidence that will answer certain questions like exactly where a person was positioned or where they were seated or what was going on. Because from the physical evidence at a scene like this, I wouldn't know if Curtis Reeves was seated in the seat when he fired, if he stood up and fired, if he got out of his seat, moved somewhere and fired, and that's information that's only going to come from me either through the interview process with him and with the other witnesses or through the use of surveillance video that can help answer those questions.

- Q. Now, I think we've gone through the environment with one exception. You've got video surveillance in this particular theater, which is part of the environment.
- A. Right.
 - Q. What do you do when you see cameras on the

wall --

- A. That's --
- Q. -- as a crime scene detective?

A. That's part of your physical evidence, so it's important, then, to document. First, you need to get ahold of this video and you need to find out what's been recorded on it and be able to get, obviously, an uncorrupted copy of it that you can take into evidence.

It's not uncommon -- you know, I've been to crime scenes where we've actually viewed it in a short time after the crime occurred to see what it showed, and sometimes that helps with your processing. It helps you to know where people may be and where to look for evidence. It helps you to understand what took place. But that is most certainly part of your evidence for the case.

- Q. It being part of your evidence for the case, is that something that you would control yourself?
- A. Yes. You need to, because multiple issues -- I mean, from a crime scene investigator's standpoint, my first thought when I think of video is chain of custody, that I need to get it into law enforcement custody so that we have control and ability to say that this is unadulterated video. Nothing's been done to change it, no tampering or anything has taken place. So that's usually

the first and foremost concern, but also just making sure that you get it and have access to it.

Relying on others to provide it is inherently dangerous. We had a case where I was in Jacksonville where we had a school bus involved in an accident, and the school board didn't want to hand over the video. The investigator trusted that the school board, a government agency, would be willing to give them the video, and we ended up having to fight over it and get a court order and everything else to try to get it.

So, you know, you don't want to go through that situation. You want to be able to obtain that video and get it under law enforcement control as soon as possible.

Q. Is there something special about video surveillance equipment that a law enforcement agency can't properly secure the image and control?

MR. MARTIN: Your Honor, I'm going to object.

There have been no qualifications whatsoever regarding his knowledge, use, systems of CCTV or any type of surveillance system, how the system works, any type of schooling he's gone to. There's absolutely nothing.

He has -- we haven't even laid a predicate about all the different softwares out there, so there's just this big general, you know: Okay, it's out

it. There's no training. There's nothing.

He's not a detective that goes out, like we had with the mass shooting, and goes out and knows all the problems in dealing with all of those systems.

We just don't have that.

He has no experience to come in here and say law enforcement should take that video and go and sit down and manipulate software that they know nothing about, that they don't own. That's not what he's being offered for.

MR. ESCOBAR: Judge, first of all, that's what he's done for all of the years that he's been a law enforcement officer as a major case crime scene detective, and I think he's assuming certain things that haven't been presented yet, and he will be testifying that — obviously if he recognizes that he can do it, he'll do it. If not, there's the Florida Department of Law Enforcement, there's the FBI. There are agencies that are very, very well qualified to go in there and to seize a system and not disturb it and not corrupt it and not tamper with it in any way.

That's part of his work. That's what he does.

That's what crime scene detectives do.

MR. MARTIN: We're talking apples and oranges.

This isn't a dash cam on a bus or cruiser. It's a network of surveillance cameras that is fed out through all of Cobb Theaters all over, wherever they go, to one IT individual, that he has no experience

in that type of system.

So to come in and say, "This is what the police should have done," he does not have the experience so I object to it.

MR. ESCOBAR: Judge, I want -- I've got to respond to this because I will tell you that I will bring John Silis back who's the guy that not only maintained this, but the guy that replaced this that will tell you that that was one of the most basic and uncomplicated systems that he has ever worked on.

This is not a sophisticated -- just because we have Cobb, you can't presume that Cobb was sophisticated in any of their surveillance. In fact, we know just the opposite, because the surveillance equipment was very poor quality.

So this is not a sophisticated statement. He's trying to give you the impression you've got this big, corporate giant out there and they have this incredible surveillance. We would have much better video if that were the case.

MR. MARTIN: Judge, I never said they had an incredible surveillance system. What I said was they don't know how to operate it. It's a GeoVision system. There's a lot of parameters that you go through in order to do things properly so things don't get corrupted, so things are done right.

Mr. Knox cannot come in -- he has no experience whatsoever to say that the law enforcement always has to go out and sit there and manipulate property that doesn't belong to them when they don't know anything about it. He doesn't have that experience.

MR. ESCOBAR: Judge, do you remember who imaged these hard drives? Detective Bossone imaged these hard drives. So if it was so sophisticated that we needed to have someone else image these hard drives, they went to the cyber crimes unit to the detective that was there to begin with that and could have imaged those hard drives that day.

They went to that same detective and said, "Hey, by the way, we've gone to Alabama and now we've gotten the hard drives. Can you come over here and can you image those same hard drives?" That's what they've done.

This is disingenuous for him to tell you that there is something sophisticated about this issue.

It's not.

MR. MARTIN: It is, because you can't just plug the hard drives into a PC computer. It has to go back into the DVR in which it was built, and if you don't do it correctly, you wipe out the whole hard drive. He has no life experience about this.

This is apples and oranges. He cannot explain all of the ramifications and problems with doing what Mr. Knox says. You just don't go in and snap the hard drives.

THE COURT: To the extent that he has an opinion, I'm going to let him testify about that. With those obvious objections in mind, I'm going to overrule for now.

MR. ESCOBAR: Thank you, Your Honor.

BY MR. ESCOBAR:

- Q. Mr. Knox, when you have a video surveillance system in a shooting incident, as a major crime scene detective, what do you do?
- A. Well, I mean, the first thing to do is secure the system in some way and make sure nobody else is able to tamper with it or do anything. But I think where Mr. Martin has gone astray in his argument here is I'm not testifying that I would go into the system and I would start touching stuff and manipulating software. I would

not touch anything that I didn't know how to operate.

But that's not the point. As a crime scene investigator, I'm not expected to know how to do everything and collect every piece of evidence and deal with everything that could come up in a crime scene, but I should have enough knowledge to recognize that something is evidence, that something needs to be secured and that there are people out there available to me who can manage that.

So, you know, that's the issue. It's not that I'm going to go in and do it, but I do need to recognize there is surveillance video there. Number 1, we need to see this video as soon as we can, and number 2, we need to make sure we get the video secured and in law enforcement custody as soon as we can.

That's generally not going to be done by just asking somebody and saying, "Here, can you get me a copy of this?" That generally means you have to call out to the Florida Department of Law Enforcement and have their people come to the movie theater and secure equipment if it means --

MR. MARTIN: Now we're into speculation about what should be done and who should be called and they could be called out. There is no indication that the FDLE is any more competent than even Mr. Knox about

these particular systems.

It's apples and oranges. Are we talking about the hard drives? And that's what Detective Bossone was talking about, was about the hard drives. That's not the case. He doesn't have the life experience to come in and say what they did was wrong.

MR. ESCOBAR: So the FDLE doesn't have the largest cyber crime units in Florida, and the FBI doesn't have a department to deal with cyber crimes? Bossone told you, "Listen, it's easy enough. I'll go to FDLE and they'll come and help me," or, "I'll go to the FBI," which is exactly what Mr. Knox is telling you.

He wants you to disregard his own detectives that have come in here and told you the very same thing that Mr. Knox is telling you.

THE COURT: All right. Overruled.

BY MR. ESCOBAR:

- Q. If you needed to get the FBI, would you get the FBI?
 - A. Absolutely, yes.
 - Q. Is it that important?
- A. It is, because that's -- that video is going to provide you with potentially some of the best evidence that you're going to have of what took place.

Q. Now, we've talked about the environment. Let's jump over now to the segment of your reconstruction which is interviews.

We've talked a little bit about the interview.

Is it important to determine who the person that your interviewing is?

A. Yes.

- Q. And why?
- A. Well, I mean, you need to know and understand what could be influencing their perception. So if you're talking -- for example, if you're interviewing the person that actually fired the shot, you need to understand what they know. What's their knowledge of firearms? What's their experience with firearms? What particular knowledge do they have or what are they going to understand about what took place? What did they not understand? You know, there is -- you want to find out as many factors as you can.

It would be no different than in a traffic accident case. You want to make sure that person you're talking to that's driving a car, they actually know how to drive a car and they have experience on roadways, things like that. It's just a matter of just understanding where that person is coming from and what they would perceive and what could affect their decision-making.

Now, is it also important to determine if, at Q. 1 the time of the incident, they were under any medication? 2 Yes. Α. 3 Or intoxication? 0. Yes. Α. 5 So is that a question that you routinely ask? Q. 6 Α. Yes. 7 Whether or not you perceive any type of loss of Q. 8 faculties? 9 You can ask it just as a routine Right. Α. 10 question to make sure -- you know, not only that, but I 11 mean, you will ask questions like, "Do you know how to 12 read and write? What's your highest education level?" 13 because it goes to what is the person going to understand, 14 you know. 15 So certain background questions like that are 16 commonly asked. Whether there's reason to ask it or not, 17 it's just a standard type of question. 18 Would you ask them about disabilities that they Q. 19 may have? 20 Oh, yes, absolutely. If you're talking, like, 21 about a witness to something, I mean, you need to know 22 what can they actually see. I've had a case where the 23 victim in a crime ID'd somebody while sitting in a police 24 The person is about 10 or 15 feet away, and then

later came to the deposition and said they couldn't see more than six feet away from them. But the question was never asked of him at the time that he's making this identification, so those are questions that you would want to ask.

- Q. I would imagine that includes both vision and hearing?
- A. Absolutely. If there are things that a person heard or may not have heard, then you would want to know whether or not their hearing contributed to whether they could hear it or not hear it as well as vision, whether or not they could see the distances that they need to be able to see to perceive the things that they saw or didn't see.
- Q. What about the disability of the shooter himself? Are those questions that are proper?
 - A. Yes. Absolutely.
- Q. Why would they be proper in reference to the shooter?
- A. Well, the thing is -- again, if you're reconstructing, you're trying to figure out what's taking place, you need to know what limitations that person may have had.

If I'm going to try to document vision, for example, I mean, I need to know something. Does he have impaired night vision? Do they have -- you know, are they

color blind, are there things that could affect what they would perceive because I might have to adjust -- you know, if I take photographs of a scene and I find an individual is color blind, then I probably need to produce some black and white photographs to represent what's there.

You know, I need to find out if they have reduced night vision. They may not be able to see as well as I can see when I'm examining the lighting conditions. Those are obviously all factors that you would need to consider.

- Q. I think we've talked about the individual witnesses' location within the scene. What about their emotion about the happening itself?
- A. I mean, emotion obviously is an important aspect to -- you know, one, you document it because you're looking at the condition that a person is in emotionally and how are they affected by what took place. But also sometimes when it comes to interviewing people, if somebody is in an extremely emotional state, it's much more difficult to interview them than it is perhaps to wait a little while or do something to try to calm that individual before you begin to get into greater detail with them about things so that they can relate it to you better and not be so overwhelmed by the emotions.
 - Q. In these investigations, these crime scene

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investigations, is there any need for speed?

The only time that speed is ever an issue, sometimes when you have an outdoor scene, you know, you have inclement weather that's coming. And a scene like this where you're inside, you secure the scene and you take as long as you need to to process it.

I've done crime scene investigations where we've. held the location for five days, you know, and we're processing in there for the period of that time or even held it longer than that where once we were done with the crime scene processing, we still posted a patrol officer to secure the location for an extended period of time past that to make sure there were no other unanswered questions that we needed to go back and obtain evidence. There's never any hurry with it when you're working a crime scene.

- What is the definition of a witness's contextual 0. versus thematic perception?
- Well, when you're doing reconstruction and you're considering the statements that people give you, obviously you have no way other than the physical evidence that's available to know the accuracy of anything that people are telling you.

Of course, if you have multiple witnesses and they give differing accounts, then you have to come up with some way to figure out what's relevant information

that you can use.

So from a reconstruction standpoint, we look at contextual information that they could provide, which is, you know, filling in the holes to the extent that we can't fill in those holes otherwise.

Like, for example: What seat was each person in? That would be contextual information that they could provide that is likely to be reasonably accurate, and we can probably rely on it, especially if we have multiple people giving us similar accounts, or thematic statements where we have multiple people that are giving the same or very similar accounts of certain things.

You know, shootings, we often get the case that you ask one person, "How many shots did you hear?" and they say, "I heard four or five," and another person says, "I heard five or six." Another person says, "I think I heard five."

Well, then thematically you're looking at a range of four to six shots being reasonable, and you can process your scene and operate on that. But that's how you have to kind of go about interpreting the interview information to apply it to reconstruction.

Q. So what happens if you're getting this thematic perspective but also have evidence of contamination? How do you deal with that?

A. Well, that's the problem. Thematic means that I'm hearing the same thing from multiple people or similar accounts from multiple people. Well, the problem is if there's contamination, then you don't really know whether they're all giving you their own independent recollection of things or whether what you're getting from some, if not all of them, is a recitation of what they've heard.

So that's the problem with the witness contamination, is that you really can't use thematic testimony in a reconstruction if you can't ensure that these people are giving you their own individual recollections of what took place.

- Q. Physical evidence -- okay. So now we're at stage number three, physical evidence there at the scene. How do we deal with the physical evidence at the scene?
- A. Well, the physical evidence, what you want to do -- I mean, obviously you've got to locate what's there and identify that this is, in fact, physical evidence and it is probably relevant to this case.

But you need to also have some understanding of how that physical evidence may have played a role, what it is and what role could it have played, because that's going to affect what type of processing I decide to do with it, whether I'm sampling it for DNA or fingerprints or whether I'm looking at other aspects of a particular

physical evidence.

So I need to know what it is, and I need to have some understanding of how it may have played a role in this particular event.

- Q. Can some evidence be seen with the naked eye and some evidence not be seen with the naked eye?
 - A. Absolutely, yes.
 - Q. How do we deal with that very difficult aspect?
- A. Well, that's part of -- if you understand what you're looking for -- so if you take an object that may have been used in some type of an event and you want to determine whether it came into contact with somebody, then you might be looking at fingerprint evidence. You might be looking at DNA evidence.

Those are things, obviously, that are not going to be visible without having done some type of processing. So you have to then handle the evidence appropriately as to those types of processing.

If I'm going to sample for DNA, then I need to make sure that I handle that object appropriately, that I don't touch it with bare hands, that I don't do anything that would potentially deposit any additional DNA, that I would go through the proper processes to sample that DNA and be able to collect it and submit that.

If I'm going to do fingerprinting, similarly I

need to make sure that I'm appropriately preserving that item and then decide on an appropriate process.

A lot of times, you have to understand the sequence that you want to do things in. If you're going to do DNA and fingerprints, for example, you would want to do the DNA sampling first and then the fingerprint processing afterwards so that you don't contaminate items or inadvertently destroy any DNA that's there.

That's why you need to have some understanding not just that it's there, but what role does it have in this particular case.

- Q. Is your role in doing an incident -- shooting reconstruction any different now after the fact than it would have been for the major case crime scene detectives on the day of the shooting?
- A. It's different in that I'm not the person that comes in and documents and collects the stuff. It's there because I don't have access to the crime scene at the time that the evidence is still in place, and I'm obviously not going to be involved in that process.

So as the crime scene investigator when I worked in law enforcement, I would be the person who would document and collect everything, so I would be starting and collecting all that information myself.

Now what I do coming in after the fact is I'm

relying upon the information that they collected and documented as input information into my reconstruction. Then I can obtain additional information that may be available, and do other things to put that together in reconstruction, but I don't have any way of collecting anything that wasn't already done or handled.

- Q. What if the crime scene detective that worked the case did not do things properly? How does that affect your work?
- A. Well, the old adage of garbage in, garbage out, is what sort of applies to crime scene reconstruction.

 The quality of the crime scene reconstruction on the output end is dependent very largely on input information that comes in.

So if it's properly documented, if evidence is properly collected and processed and all the information is there, then it doesn't have any effect. I can go off of what they gave me.

But to the extent that things are not collected or processed or documented properly, then it's going to reduce the amount of input information that I have to put into a reconstruction to be able to get the end result.

Q. So let's talk about what you did in this case when you began your work.

Tell the Court what it is that we first did in

this case when you began your work.

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A. Well, typically, what we did here is the first thing is to get some of the documentation that was produced, so the crime scene photographs, autopsy report, photographs, you know, crime lab reports that are present, you know, things like that, so that we can review it and get some familiarity with what took place and what evidence is there.

Then shortly after that, we actually traveled, and I went to the Cobb Theater, went inside, examined the theater, obtained some measurements, took different photographs, had the opportunity to have the management there demonstrate different lighting settings and so forth.

Then after that I received some additional documentation. I think I even received some blueprints from the theater and the various things like that, and then eventually went back to the theater with the intent of doing some reconstruction work in the movie theater.

MR. ESCOBAR: May I approach, Your Honor?

THE COURT: You may.

MR. ESCOBAR: May I approach?

THE COURT: Uh-huh.

BY MR. ESCOBAR:

Q. Now, Mr. Knox, an issue came up in this

particular case concerning Mr. Reeves' shoes that he was wearing the day of this incident, correct?

- A. That's correct.
- Q. And one of the issues was the reflective character of some of the areas of Mr. Reeves' shoes; is that correct?
 - A. Yes.
- Q. By the time that we went to the theater with this shoe, I would imagine that you had also reviewed the video that had been produced by the video surveillance system of the Cobb Theater?
 - A. Yes.
- Q. And had you reviewed that video in order to determine not only the -- what appeared to be an emanating light from an object as well as the reflective appearance of that shoe as Mr. Reeves --

MR. MARTIN: Your Honor, I'm going object to that line of questioning because that was very gratuitous on what he perceived. He said "illuminating light" and "reflecting off his shoes." We have no testimony whatsoever. He's just leading this witness down the path that he wants.

THE COURT: Objection to leading or --

MR. MARTIN: Yes, ma'am, based on that question.

MR. ESCOBAR: I'll rephrase.

Rephrase. THE COURT: Thank you. 1 BY MR. ESCOBAR: 2 Mr. Knox, tell me what items you reviewed in the 3 form of video and photographs and the actual shoes prior to going to the Cobb Theater that first time. 5 Well, I had reviewed the surveillance video, and Α. 6 there was some other information that I'd been provided as 7 well as having had the opportunity to actually examine and 8 photograph the shoe. 9 But the particular issue that I was interested 10 in looking at was the reflective characteristic of this 11 shoe and the surveillance video, so the way that the 12 surveillance video would capture reflection from this 13 14 shoe. Because in the video, there was a -- there are a 15 couple different places were there's some sort of a bright 16 light or reflection of some type that's present during the 17 video, some of which appears to be attributable to the 18 shoe and some of it is in question, whether it's 19 attributable to the shoe or to something else.

So that was the idea, to go to the theater with the shoe and test to see if we could make that determination.

Was that on your first or second visit to the theater?

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That was on the second visit to the theater. Α.

And during this second visit to the theater, did

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we have an exact replica of the phone that Mr. Oulson at

the time was possessing in that theater?

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Α.

Okay. And so we went to the theater with those Ο.

items for what purpose?

Yes.

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Because the two possible In order to test.

sources for those areas of light that appear in the video

would be either the shoe or the phone, and so what I

wanted to be able to do was to test that.

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And the way to test it would be to take it back

into the theater and move the different items -- put them 13

in different locations similar to where they would have 14

been in the course of this shooting and in the course of 15

the actual video, and then compare that to the video that 16

we would have created in the movie theater doing the 17

testing, so that we can try to make some determination, if

possible, to distinguish between the two.

So the first time you went to video was just 20

basically measuring, documenting, photographing, that sort

of stuff? 22

That's right.

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In this particular trip, you were going to

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handle this particular experiment? Is that what we should

call it?

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- A. Experiment or testing, yes.
- Q. Okay. And were you also going to be doing some analysis concerning the perspective that Mr. Reeves would have perceived there in the theater during the time of the shooting?
 - A. Yes.
 - Q. And what were you going to be doing that with?
- A. Well, there were two phases to doing that. One was that -- again, we were looking -- hoping to do was to be able to get some -- a much more accurate perspective on where Mr. Reeves was, where he was positioned, where Mr. Oulson was and where he was positioned based on what's shown in the video by duplicating it.

So, in other words, if you're trying to figure out the positioning that somebody may have been in in the actual video, then you would attempt to duplicate that and then compare the two, because clearly we have, you know, surveillance video.

The camera is about almost 35 feet away looking down, so the only real way to do it would be to duplicate it and make comparisons to figure out what matches, but that was the first aspect of it.

Then the second was actually to take photographs from Mr. Reeves' perspective from the seat that he's

sitting in to render images that would reflect how the 1 different lighting factors affect what somebody could see. 2 Okay. So let's take it one step at a time. 3 Q. When you went that second time, were there other experts that came along? 5 Yes. Α. 6 And were those Mr. Koenig and Doug Lacey? Q. 7 Yes, that's correct. 8 Okay. And what aspect of this process were they Q. 9 going to be in control of? 10 They were going to handle the video aspect. Α. 11 what they were going to do was they were going to 12 basically tap into the video system so that they could 13 obtain these recordings, and we were going to get video 1.4 through the system, through the actual cameras, so that we 15 could then compare that video to the actual incident 16 17 video. Then what we would do is reconstruct certain 18 things in the movie theater and then use the video of the 19 reconstruction that surveillance video captured, and then 20 compare that to the actual surveillance video. 21 Were we able -- we did that at what time? 22 middle of the night? 23

Middle of the night, yes.

Were we able to do that?

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A. No.

- Q. And why not?
- A. Well, as it was communicated to me, they were not able to -- there had been changes to the system and they were not able to access the system and rerun the system under the same conditions as it was at the time of the shooting.
- Q. Well, do you need the system in the same condition as it was filming on the day of the incident in order to have any sort of reliable forensic analysis?
- A. Yes, you do. I mean, from the standpoint of recreating the positioning and stuff, you need the camera that you're using to have to be unaltered. It needs to be in the position that it's in, because any changes in that, you're not going to be able to match up the images.

So if I reconstruct something, I position myself or some other person in a location and put, you know, an arm reaching in a particular location or a person seated in a particular position and try to match that to the video. That's not going to match because it's a different camera angle, so you have to be able to reconstruct those camera angles.

In this particular case, the segment of the video where everything is taking place is a very small portion of the actual overall coverage of the camera, so

what that means is that any slight changes in measurement become large in terms of the effect that it has on what you're measuring and what your outcome is going to be.

Because you're basically taking -- if I were to use something small up here as a scale for this whole room, if that scale is slightly off and I want to use it to measure the length of this entire room, then a small change over here becomes a huge change over here.

What you're doing in this surveillance video is reversing that process that the slight change over here, it's going to affect in terms of inches if not even into the feet mark of where you're trying to reconstruct, and that's too large of an uncertainty.

You're trying to put things back within inches, and we need to be able to be that accurate, and you're not going to do that if the camera's been altered.

- Q. Had that camera, that system, not been altered, do you feel like you could have been able to answer that very important question in this case?
- A. Oh, absolutely. If I'd had access to the system in the same condition that it was in on the day of the shooting when the actual surveillance video was done, that you could figure out everything that you see on the video in terms of positioning, you could recreate -- you could figure out what's the actual positioning, because you do

it through what's called reverse projection photogrammetry.

You recreate it and project that onto the actual image, and where they match, then you know that you recreated it, and then you measure the location of the item that you're using to recreate it, and now you know where the item that was recorded in the original surveillance video was located.

- Q. So you could recreate many of the things that we see in the video itself, not just the light?
 - A. That's correct.
- Q. You could recreate, you know, bodies that possibly are moving in the video?
- A. Yes.

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- Q. Is that something that you've actually done before?
- 17 A. Yes.
 - Q. Is that something that you would have wanted to do had you been the major case crime scene detective in this case?
 - A. Yes.
 - Q. Right then and there?
 - A. Yes. I mean, you would -- I would want to maintain control of the video system long enough to be able to accomplish that, so you want to make sure that

nothing got changed, nothing got altered, that you had 1 time to be able to do that. 2 So that aspect of the test did not work, meaning 3 we couldn't even start it? That's right. That's correct. 5 Before we leave that particular item, I want you Q. 6 to show the Court the areas of that shoe that have a 7 reflective characteristic, and if you could just point to 8 the Court, that would be great. 9 Well, mostly in this silver striping in here Α. 10 there are some various places that have some reflective 11 characteristics to them. So there's just various 12 different areas here that would actually reflect 13 something. 14 Now, as we're looking at the video, are you Ο. 15 seeing -- are you seeing striped characteristics in the 16 video? In other words, are you seeing this detail here in 17 the video? 18 Α. No. 19 Well, are you seeing one, two, three, four dots 20 in the video? 21 No. Α. 22 Well, are you seeing a long, slender bar in the Q. 23 back or in the video? 24

Α.

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No.

| Q. What about this nice little logo here that looks |
|---|
| like a Solomon logo? Do you see that in the video? |
| A. No. |
| Q. Well, let's talk about the second process that |
| you did there at the Cobb Theater that day. |
| MR. MARTIN: Excuse me, Judge. If I could, |
| we've been going almost two hours, and I could really |
| use a break |
| THE COURT: Yes, I could, too. I was just |
| thinking the same thing. |
| MR MARTIN: since we're changing topics. |
| THE COURT: Yeah, we're going to go through more |
| exhibits. |
| Let's take about a well, let's be back at |
| 3:00, almost a fifteen-minute break. |
| (Recess taken.) |
| BY MR. ESCOBAR: |
| Q. Mr. Knox, I'm going to show you |
| MR. ESCOBAR: May I approach, Your Honor? |
| THE COURT: You may. |
| BY MR. ESCOBAR: |
| Q. I'm going to show you what's been marked as |
| Defense Exhibit Number 79 and ask you if you are aware of |
| that particular exhibit. |
| A. Yes. |
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- that an exhibit of what?
- s a PowerPoint slide presentation that I
- that of some of the work that you did in this ase?
- re importantly, of the work that you did in order to show the lighting effect within the on January 13th of 2014?
 - s.

. ESCOBAR: Your Honor, at this point in time, d introduce this into evidence. I will tell t the entire presentation, with the exception mannequin photos that are contained within chibit, has been stipulated to.

nere is a memo, I believe, on the mannequin that I know the Court will consider both the ment's motion as well as the Defense's motion, ether you will be using those in your analysis s case.

R. MARTIN: Judge, that's not entirely correct. I also filed a separate Daubert motion regarding the photographs of the general seating area without the mannequin in it dealing with the lighting issue, and that's also on Your Honor's desk, and a copy has been

provided to Mr. Escobar.

MR. ESCOBAR: I'm not sure that these contain those, but I'm sure that counsel will certainly alert the Court if, in fact, some of those photos are contained within his objection to his motion.

MR. MARTIN: The only thing that I would ask is that -- this is where we've agreed that you've got to hear it anyway --

THE COURT: Yes.

MR. MARTIN: -- so I will go ahead and make my motion now regarding the Daubert issue on the lighting conditions that I thoroughly briefed and provided to the Court with attachments.

THE COURT: Uh-huh.

MR. MARTIN: So when we come to the mannequins, if it's all right with the Judge, or with the specific photographs dealing with lighting in the general area, I will just -- if it's all right, I'll just stand and say, "That would reference one of my Daubert motions," and then I'll sit down, and that way you can mark in your notes exactly what we're talking about.

THE COURT: All right. So you're going to reference that specifically when we come to it, right?

I will, so I'm going to object to MR. MARTIN: 1 the introduction of this particular exhibit --2 THE COURT: Okay. 3 MR. MARTIN: -- based on the -- my two Daubert 4 motions. When we come to that point, that will be 5 considered as a proffer, like the Court said, and 6 then you will either accept or reject the proffer and 7 use the information or not. I believe that was our 8 agreement. 9 THE COURT: Very good. So this will be admitted 10 over objection for proffer purposes and perhaps 11 others afterwards. And shall we give it the same 12 numbering, I guess, 37? 13 MR. MARTIN: I would, but may I suggest to the 14 Court that -- that you're going to reserve ruling on 15 the exhibit --16 THE COURT: I am. 17 MR. MARTIN: -- and just leave it at that. 1.8 at that point -- I know the ones that are coming in, 19 all the measurements and everything that are coming 20 in, but I think the record is cleaner that way. 21 You're either to accept it in total or reject it in 22 total. 23 THE COURT: Okay. I'll do that. 24 MR. MARTIN: That way the appellate record is

very clear that I objected to this and you're 1 reserving on the admissibility of that entire thing until the proffer is over and you've had a chance to 3 review the memorandum. 4 THE COURT: All right. So that's 37? 5 THE CLERK: Yes. 6 MR. ESCOBAR: Yes, it's 37. 7 THE COURT: Under those parameters, all right. 8 (Whereupon, Defense Exhibit 37 for 9 identification was received in evidence by the 10 Court.) 11 BY MR. ESCOBAR: 12 Mr. Knox, I'm going to show you what has been 13 marked as, now, Defense Exhibit Number 37, that there has 14 been a reserved ruling by the Court as to certain segments 15 of this particular exhibit. 16 Tell me what that exhibit is. 17 Well, this is a slide presentation that I've Α. 18 19 prepared. Okay. Let's go to the next slide. What is this 20 21 a picture of? This is just a general reference photograph. 22 This is outside of the Cobb Theater showing the front 23 entrance of the theater. 24 Okay. And 4 of 40. I'm going to actually have

Q.

some reference with them, so the easy thing to do, at the very bottom of this photo there's a numerical, 4 of 40.

I'm going to, just for the record, indicate what photo you are now looking at, and that is 4 of 40; is that correct?

- A. That's correct.
- O. What is 4 of 40?
- A. This is an orientation photograph inside just to show where the actual theater was. It's the one with the Number 10, Lone Survivor. You would go in to the left and enter the theater.
- Q. Next one, this is 5 of 40. What is 5 of 40 depicting?

MR. ESCOBAR: And, Mr. Shah, could you please maybe zoom it up a little bit so that we could -- okay. That's good.

THE WITNESS: This photograph is just an overall showing most of the seating, and then it's showing the yellow circle in the middle, pointing out where the actual shooting took place.

BY MR. ESCOBAR:

- Q. And 6 of 40, what is this photo depicting?
- A. This is just a cropped photo, I think, from the earlier one, just a little bit closer view to be able to point out the seats where Curtis Reeves was seated and where Chad Oulson was seated.

| 1 | Q. 7 of 40, what does this photo now depict? |
|----|---|
| 2 | A. This is the photograph that shows the actual |
| 3 | seats. Looking down on the seats, it shows the |
| 4 | positioning of where Curtis Reeves, Vivian Reeves, Chad |
| 5 | Oulson and Nicole Oulson were seated. |
| 6 | MR. ESCOBAR: Mr. Martin, if you at any point in |
| 7 | time if you have an objection over the photo, if |
| 8 | we could put on the record the number of that photo |
| 9 | that you have an objection for so that we have an |
| 10 | accurate record of what photos you object to and what |
| 11 | photos you don't? |
| 12 | MR. MARTIN: I appreciate that. I have reviewed |
| 13 | the presentation prior to coming into the court, and |
| 14 | it's the last section, "Perspective," and I forget |
| 15 | the number of it. |
| 16 | MR. ESCOBAR: When you come to it, if we can do |
| 17 | it |
| 18 | MR. MARTIN: When you get to "Perspective," |
| 19 | that's when I'll have my objection. |
| 20 | THE COURT: Okay. |
| 21 | MR. ESCOBAR: Because these have all been |
| 22 | stipulated to, Judge. |
| 23 | BY MR. ESCOBAR: |
| 24 | Q. The next one oh, let's go back to that last |
| 25 | one. I want to |

MR. MARTIN: Well, excuse me, Mr. Escobar. 1 so the record is clear, the photographs have been 2 stipulated to. I'm not necessarily agreeing with 3 what's been populated in the photograph by Mr. Knox, 4 but what the photograph is, we have stipulated to. 5 THE COURT: Fair enough. Very good. 6 BY MR. ESCOBAR: 7 Do you see the phone in that particular photo? 8 **A**. 9 Does that appear to be one and the same photo as Q. 10 shown on Exhibit Number 33? 11 MR. MARTIN: Judge, we'll stipulate it's in the 12 Just -- we'll stipulate to every item that's 13 in there as -- whatever. 14 Okay. MR. ESCOBAR: 15 BY MR. ESCOBAR: 16 What's the relationship to that photo to the 17 seat that Mr. Reeves was seated in? 18 Well, his seat is the bottom center of the 19 photograph, and then the location of the phone would be on 20 the floor, basically where his feet would be, right at the 21 back of the seat in front, which would be the seat where 22 Nicole Oulson was sitting. 23 MR. ESCOBAR: Next photo. 24

BY MR. ESCOBAR:

- Q. What does 8 of 40 reflect?
- A. Showing measurement from -- if you measure from the armrest between the seats and then measure to the back of the seat in front of it, this is what the seats in their resting position -- meaning nobody's seated in it, it's just the way it would rest if nobody was actually sitting in the seat -- and that measurement is one foot, seven inches between the cup holder and the back of the seats.

MR. ESCOBAR: Okay. Next photo.

12 BY MR. ESCOBAR:

- O. What is that measurement?
- A. This is showing with the seat, if you press it all the way back so that the seat back reclines to a certain extent. So what we've done here is pressed the seat back as far as back as it will go and took the same measurements between the cup holder and the back of the seat, and it reduces the measurement to one foot, three inches.
 - O. Okay. 10 of 40?
- A. This is showing a measurement from the top of the seat, which would be the seat that Curtis Reeves was sitting in, to the top back of the seat in front of it measured on a diagonal, and that total distance is three

1 feet, eight inches.

- Q. Now, the ruler that you are showing there appears to be a, what we call a common tape-type ruler?
 - A. Right.
- Q. Would you please tell the Court what exercise you went through in order to determine that that tape ruler was, in fact, accurate?
- A. Well, what I did was any measuring device that I would use, I have reference standards. I've got some pretty accurate woodworking rulers that are graded to a very fine grade and, you know, made to pretty high accuracy.

So I always check my measuring devices against them to make sure it's within a reasonable tolerance, and that's usually -- within 5 percent of the measurements would be considered acceptable, and that's how I would test the tape to make sure it's useable.

- Q. Are these forensic rulers that you have that you compare these rulers against?
- A. Right. Right. What I actually use, it's like an engineering-grade type ruler where you have very fine and accurate, you know, divisions on them, so they're divided up into 64ths of an inch. And then I'm able to compare whatever tape measure or other measuring device and I can use those as a reference standpoint.

Q. Do you do that for a reason?

A. Well, just to ensure that I'm getting precise measurements and measurements that are as accurate as possible.

The precision is the repeatability of measurements, so if you happen to use more than one tape, you want to make sure that they're within a close enough (indiscernible), so if I measure something with one tape and then turn around and measure something with another tape, there's not going to be enough difference in them for it to matter.

So like I said, within a 5 percent tolerance is usually considered acceptable.

- Q. Okay. Now, that's 3.8.
 - 11, what is that?
- A. This is measuring, similarly, from the top back of the seat in front and then back to the actual seat back, Curtis Reeves' seat. So here this one is being measured not on a diagonal, but straight back to the seat back to show that the distance in between them is three feet, two-and-a-half inches.
 - Q. 12? What are we seeing here?
- A. 12, we're looking down. You see the seat, which we've pressed the seat all the way down because, just like the seat back, the seat bottoms also -- they have some

flex in them so when you sit down, it pushes the seat bottom down.

So with it pushed all the way down, I took a measurement, and you can see that the actual length of the seat bottom is one foot, five-and-a-half inches. And then the distance between the front of the seat and the back of the seat in front of it is one foot, three-and-a-half inches.

So that total distance, then, from the back of the seat to where your knees would be at the seat in front of it is two feet, nine inches.

- Q. Next?
- A. This one is showing the width of one of the seat backs. That's one foot, eight inches across at its widest point, which is right up near the top of the seat.
 - O. Next?
- A. This is a measurement showing the distance in between the two armrests, which is one foot, ten inches.
- Q. I want to go back to a couple of them. Could we go back a couple of them? I want to take a look at this one.

Why would you both measure from the back of the seat to the front of the seat as well as from the front of the seat to the back of the seat in front?

A. Well, what you're looking at is measuring how

much actual seating area -- so if you're seated on it, how much room do you have to be seated on that seat, and then measuring how much room there is between the seat and the seat in front of it.

So that's the room where your legs could be, your knees could be, as well as when you stand up, what amount of distance you would have between the two seats.

- Q. So what this is reflecting is that from the edge of the seat to the back of the seat in front, you would only have how much?
 - A. One foot, three-and-a-half inches.
- Q. Next -- let's go through the next two, so keep going.

Now, 14, what does that reflect?

- A. That's the -- the distance between the two armrests across the seat is one foot, ten inches.
- Q. Now, Mr. Knox, are these measurements important?

 And if they are, why are they important?
- A. Well, it's important because, one, it's a confined space. There's restraints in terms of where a person could be where they can move, because obviously we know that Mr. Reeves is seated in the seat in some fashion. He's not sitting up on the armrest or standing on top of the seat.

It's pretty clear from the video that he's

actually seated. It's important to know where he would be and what constraints he would have in terms of movement in 2 the positions that he would be in. 3 Now, these seats have these armrests that are on each side; is that correct? 5 That's correct. Α. 6 And does that prohibit the human body from sliding over to the other side where those armrests are 8 down? 9 Yes. Α. 10 MR. ESCOBAR: Next. 11 BY MR. ESCOBAR: 12 Photo Number 15, what does that reflect? 13 It shows the height from the floor up to the top 14 of the armrest, which is two feet and one-half inch. 15 And why is that measurement an important 16 measurement? 17 Well, that in particular, the -- from the video, 18 it's quite clear that where Mr. Reeves is holding the gun 19 is somewhere above the armrest, because he had -- his arm 20 is raised right above that, no higher than what his 21 shoulder height is, so somewhere within that particular 22 range. 23 So you need to know what's the bottom end, which 24 means it's obviously two feet, one-half inch, would be his 25

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arm resting on the armrest. So we need to know that parameter. That's what we call a boundary value. It's a lower value.

- Q. 16, what does this reflect?
- A. This is showing the height of the seat above the floor with the seat pressed down. So if somebody were sitting in this seat, this is how high the actual seat bottom would be from the floor, which is one foot, four inches.
- Q. So if someone sits in that seat or pushes down with their rear end on that seat, that whole seat actually decreases in the height from the floor?
 - A. Right, right.
- Q. Is there a cushion aspect as well on the individual that is seated in that seat? In other words, does it appear to be cushions?

To me -- would there be a cushion factor that you would have to consider in addition to the pushing down of the seat itself?

- A. There would probably be some compression of the seat cushion, and that would be dependent on how much a person weighs and how much -- how the load is distributed in the seat.
- Q. Certainly how much a person weighed, not today, but on January 13th of 2014?

| 1 | A. That's right. |
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| 2 | Q. Is that one of the reasons that you were not |
| 3 | able to calculate that extra step, is because some time |
| 4 | passed before Mr. Reeves was able to sit down in that |
| 5 | seat? |
| 6 | A. Right. Right. |
| 7 | Q. Next. |
| 8 | What I'm getting at, Mr. Knox, is he was in jail |
| 9 | for a period of time? |
| 10 | A. That's correct. |
| 11 | Q. 17, what is that? |
| 12 | A. This is showing the difference between the seat |
| 13 | bottom where you would be sitting, again with the seat |
| 14 | pressed all the way down and the armrest. It's |
| 15 | eight-and-a-half inches from the seat bottom up to the |
| 16 | armrest. |
| 17 | Q. Now, that individual that is holding the seat |
| 18 | down, who is that individual? |
| 19 | A. That's actually, his name was Mike LaForte. |
| .20 | He's an associate that works with me. |
| 21 | Q. Was he also a major crime scene detective back |
| 22 | in the day when you were with the Sheriff's Office? |
| 23 | A. He's the guy that trained me when I went to the |
| 24 | crime scene unit. |

MR. ESCOBAR: Okay. Next.

BY MR. ESCOBAR:

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- Q. What does number 18 depict?
- A. This is showing the seat. This is the seat that Curtis Reeves was in, and you can see that there's a wall behind that, the seat that goes up, for some distance behind the seat.
- Q. So that's measuring both the top width of the seat as well as it's measuring from the top of the seat up to the top railing of the wall behind the seat?
 - A. Right.
 - Q. Next?
- A. In this photograph, it's just showing -- this is measuring from the floor up to the top of that wall, and that wall is five feet, two inches high.
 - Q. Next.
- A. This is one of the actual photographs that was taken at the shooting scene looking down the aisle. You can see the popcorn bag stuff on the floor, which is right in front of where Mr. Reeves was seated.
 - Q. Is that number 20?
 - A That's correct.
- Q. Next? Number 21, I think we've probably seen this one once before. What is this depicting?
- A. This is just pointing out the location of where the popcorn bag and the popcorn on the floor are.

| 1 | Q. Okay. Next? |
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| 2 | A. Then this one |
| 3 | Q. 22? |
| 4 | A which is number 22 is showing the location of |
| 5 | the phone which is sort of in between where the popcorn is |
| 6 | and the bag. |
| 7 | Q. Next. That is 23? |
| 8 | A. 23. This is just a different angle, a little |
| 9 | bit closer view of showing the phone. |
| 10 | Q. Next? |
| 11 | A. Number 24, this is showing the location of the |
| 12 | fired cartridge case which is on the floor, kind of in the |
| 13 | middle area of the seat to the left of where Mr. Reeves |
| 14 | was seated. |
| 15 | Q. I'm going to show you what has been marked as |
| 16 | Number 495040, and it's Item Number AP01, and ask you to |
| 17 | take a look at it and see if you've seen that exhibit |
| 18 | before. |
| 19 | A. I have seen it, yes. |
| 20 | Q. And what is what an exhibit of? |
| 21 | A. This is the pistol that was used in the |
| 22 | shooting. |
| 23 | MR. ESCOBAR: Your Honor, we would move this |
| 24 | particular item into evidence, and we are going to |
| 25 | further display this firearm. |

THE COURT: Deputy, you verified that firearm? 1 Yes. THE BAILIFF: 2 THE COURT: Any objection? 3 MR. MARTIN: No, stip. THE COURT: Okay. 5 So 38? MR. MARTIN: THE COURT: Yes. 7 BY MR. ESCOBAR: 8 Mr. Knox, I'm going to take this particular Q. exhibit out of the case, and I'm going to have you talk 10 about some of characteristics that you found in the case 11 once you first examined it. And even though it's not 12 loaded, please do not point it at anybody. 13 Let's talk about what type of weapon that is, 14 first of all. 15 Well, this is a Kel-Tec pistol, model number 16 P3AT, and this particular pistol is made with a polymer 17 receiver similar to a Glock. And there are a number of 18 others that have made the same type of design, and Glock 19 sort of originated that design. 20 This particular one, it's in a .380 auto 21 caliber, so it's a fairly small cartridge which allows the 22 pistol to be a fairly -- very small receiver and an 23

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overall size, so that -- the idea behind a pistol like

this is typically for it to be compact and easy for

somebody to carry in a pocket or carry, you know, in a purse or anything like that.

Q. Okay. All right.

The design of this particular pistol -- does the design of it lend itself to it snagging anywhere in your pocket or anything of that sort when you're trying to retrieve that firearm from your pocket?

A. It's designed to be -- I won't say snag-proof -that might be a term that they use, but I would say snag
resistant in terms of you don't -- when the action is
closed, the side is all the way forward, you don't have
any kind of sharp edges that would tend to catch on
things. You don't have anything, you know, along the
sides of it that would tend to catch or hang on to any
type of clothing.

The sights are very low profile, again, so it reduces the chance that it actually would snag or catch or anything. So I can sit here, run my finger over the sight quite easily and it doesn't grab at my finger or anything like that. So it's made to be compact and reasonably snag resistant.

- Q. Now, this particular weapon is a small weapon.
 Would you tell the Court, how many bullets does it carry?
- A. I believe that one could be loaded to six rounds, capacity of six rounds.

| 1 | Q. And certainly it's, frankly, smaller than my |
|----|--|
| 2 | hand? |
| 3 | A. Yes. |
| 4 | Q. Detective, did you examine any of the bullet |
| 5 | types that were used in this particular case? |
| 6 | A. Yes. |
| 7 | Q. Okay. And without me having to remove all of |
| 8 | this, why don't you tell the Court exactly what you |
| 9 | remember the bullet types were that were used in this case |
| 10 | unless you want to see it. |
| 11 | I'm going to show you what's marked AP03 for |
| 12 | purposes of identification and will have you if you |
| 13 | want to open it, I can get you scissors to do that. |
| 14 | A. Yeah, that would be good for me to review it. |
| 15 | This is the magazine here. |
| 16 | Q. If you can just I'll do it in a place where |
| 17 | it hasn't been done before. |
| 18 | I'm going to show you now what's been marked as |
| 19 | APO3. |
| 20 | A. Okay. |
| 21 | Q. Okay. And so you're able to at least identify, |
| 22 | now, some of the casings that were contained within that |
| 23 | firearm? |
| 24 | A. Yes. |
| 25 | Q. And what type of bullets were those? |

A. This is Corbon ammunition. Corbon is a company that made its .380 auto caliber, and you have the cartridge case here. And these had a lead-filled jacketed bullet so it's not a hollow point, but what it has is an open point that has a filling in it, a lead filling in it.

O. And what does that mean?

A. Well, there are different types of bullet designs. Like, you have full metal jacket bullets, for example, that are -- there's copper that completely encases the bullet with this type of a design, similar to a hollow-point design.

By having an open jacket at the nose and having it filled, when that bullet comes in contact with some type of fluid -- and that includes human tissue coming into contact with a body -- it causes the bullet to expand, and that expansion causes the bullet to slow down more rapidly than it would if it didn't expand, the idea being is that you're exchanging more energy and slowing the bullet down, primarily to reduce how much penetration.

Because what you don't want to have is a bullet that -- if you are using it for self-defense, law enforcement purposes and things like that, you don't want to have one that's going to go through and come out the other side and still be going fast enough that it can actually wound another individual that might be standing

behind the person who gets shot. 1 So to a certain extent, it may have some safety features? 3 Right. I mean, the generally-accepted reason Α. 4 for using -- I mean, you know, for example, just about 5 every law enforcement agency I've lived in in the U.S. 6 that I've encountered, officers carry hollow-point 7 ammunition, or something very similar to, because of that exact reason. You do not want to have over-penetration and 10 have the potential that if you're shooting somebody in an 11 uncontrolled environment where there might be another 12 individual behind them, that you end up wounding an 13 additional person by having a bullet that perforates them 14 and then continues on. 15 Okay. Let's put that back in there and we 16 **Q**. will --17 MR. ESCOBAR: Your Honor, we would move 04 and 18 AP03 into evidence. 19 MR. MARTIN: Stipulation. 20 THE COURT: What are they? 21 MR. ESCOBAR: These are the bullets that he 22 just -- it's four Corbon .380 auto bullets removed 23 from AP03. 24 THE COURT: Okay. And the other one is? 25

MR. ESCOBAR: That's coming now. 1 THE COURT: The magazine? 2 Yes. That's coming now. 3 MR. ESCOBAR: BY MR. ESCOBAR: 4 I'm showing you what's been marked as AP03. 5 Q. believe you looked at this already; is that correct? 6 Yes. Α. Is that the magazine that belonged to the 0. 8 9 weapon? Yes, it is. 10 Α. MR. ESCOBAR: Your Honor, we would introduce 11 AP03 as the magazine that belongs to the weapon. 12 THE COURT: These were taken apart, I guess? 13 MR. ESCOBAR: There was some --14 THE COURT: There's nothing inside? 15 16 empty casings? MR. ESCOBAR: =- Casings. 17 THE COURT: All right. 18 They were found at the scene. MR. MARTIN: 19 THE COURT: One was found at the scene and the 20 rest were in the magazine. I don't see all of the 21 live ones. That one is the only one that I see. 22 MR. ESCOBAR: Your Honor, I believe some of them 23 were used for test firing for the actual -- we will 24 be stipulating to, at some point, in time the .25

ballistics on those. 1 MR. MARTIN: Yes. 2 THE COURT: All right, because there's not four. 3 Then for what it's worth, that one Okay. All right. is 39, the jackets, and remnants, and this one is --5 MR. ESCOBAR: The magazine. 6 THE COURT: That would be -- 40 is the magazine. MR. ESCOBAR: Last but not least. 8 (Whereupon, Defense Exhibits 39 and 40 for 9 identification was received in evidence by the 10 Court.) 11 BY MR. ESCOBAR: 12 I'm going to show you what's been marked as 1AP, 13 black holster, again, PR Number 49607, and see if you 14 recognize that. 15 Yes, I do. 16 Α. And what is this an exhibit of? 17 This is the holster that went with the pistol. Α. 18 That is just a slip-type holster for it. 19 Do you know what this is made of? 20 It might be some type of a neoprene or some type 21 of rubber material that's sort of like composite material 22 in it. 23 MR. ESCOBAR: We've stipulated to this as well, 24 Your Honor. Would you like to see it? 25

THE COURT: Yes, thank you.

MR. ESCOBAR: Your Honor, we would like to introduce this into evidence as well.

THE COURT: Is that number 41?

THE CLERK: Yes, ma'am.

(Whereupon, Defense Exhibit 41 for identification was received in evidence by the Court.)

BY MR. ESCOBAR:

Q. Now, we left off with the fired cartridge case.

I haven't forgotten about that.

Tell the Court how it is that a cartridge case is ejected, for lack of a better word -- you may have a more forensic scientific word -- but how is it ejected from a pistol that we've just seen?

A. Well, what you have is a semi-automatic pistol which means it's an auto-loading pistol, so you have a magazine. The magazine carries a certain number of cartridges that are stacked one above the other.

Every time that the arm action itself -- the slide is brought back and then brought back forward again, it picks up the round at the top of the magazine chambers. And then when it's brought back again, it has an extractor that pulls that fired cartridge case out of the chamber, pulls it back to it, engages an ejector, then the ejector

basically flips it out of an open ejection port then it comes to rest at some location nearby in the firearm.

- Q. Can we tell anything about the location of the fired cartridge case and mechanism that rejects this particular cartridge case once a gun is fired?
- A. You can sometimes tell certain things, but generally when you have just one fired cartridge case, all you know is that it has to be within a reasonable proximity of the firearm. But that doesn't give you much information about where firearm was at the time.
 - Q. Why is that?
- A. Well, first, there's a great degree of randomness in how they're ejected, so they're not ejected into one nice, tiny little pile. There will be a certain amount of randomness.

In cases like this where you have only one, there's, you know, always a good chance that it came to rest in a different spot than where you find it because it's been kicked or moved or it could have landed on somebody's clothing and then falls to the floor when that person stands up.

So there could be a lot of reasons why it could be in the location where it's in that don't have anything to do with where it was ejected from.

Q. Okay. Next photo.

What is 26?

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Well, mostly from the documentation from the Α.

- That's just a closer view showing the location of the fired cartridge case that was on the floor of the -- again, the seat that you see in front of it is the seat to the left of where Curtis Reeves was seated.
 - 27? What are we seeing in 28? Ο.
- 28, that's showing the entrance gunshot wound that was in Chad Oulson's chest.
 - Is that important in reconstruction?
 - Α. Yes.
- And why is that important to see the entry wound?
- Well, what you're looking at with gunshot wounds from a reconstruction standpoint is, one, you would look for any type of gunshot residue and things like that. But of course, if there's clothing over that gunshot residue, it could be on clothing instead.

But more importantly, you want to look at the wound path, so the actual path that it took through the body, because then you try to correlate that to the firing position to figure out what position that that person was in when they were shot.

- Q. How do you try to find out what the wound path is?
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medical examiner. So that they would generally give some 1 description of that in the autopsy report as well as the photographs that they take of the wounds and the wound 3 location and so forth. Did you have an opportunity to read in this case 0. 5 the autopsy report? 6 Α. Yes. Next photo. Q. Я What does 29 depict? 9 That is a gunshot wound to Chad Oulson's right 10 Α. wrist. 11 12

- Okay. And is there anything about that particular photo that gives you any information as to how the bullet grazed that particular wrist?
- It does, because you can -- you can look at it and you can see the direction. You can see that the bottom of the wound where the bullet first made contact traveled across in the photograph, and it would be traveling upward in the photograph which would mean that it was traveling toward the anterior side of his wrist.

Then also -- you will see it better in the next photograph, but there's an amount of stippling or pattern tattooing on the wrist in the hand area just beneath the wound.

Next, what does that show?

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- A. This is slide 30. It shows the more complete view of showing that stippling or powder tattooing that's associated with that wound.
- Q. Now, have you had any courses, any instructions, any teachings concerning what you've just described as stippling or tattooing?
 - A. Yes, absolutely.
- Q. Describe to the Court, you know, your knowledge in this particular area and how your knowledge was gained.
- A. Well, it's a topic that comes up a lot in very specific crime scene courses, homicide investigations, shooting reconstructions, but I also took a graduate course in forensic medicine and there's a topic on gunshot wounds.

In there, we talk about that sort of stuff in that class, and I teach it. Every time I teach shooting reconstruction I cover the topic, but basically what you have is what is broadly characterized as stippling, which is that you have particles of unburnt or partially burned gunpowder that comes out of the muzzle of the firearm and make contact with the skin.

Then it can do two different things. It can create what are called punctate abrasions, so you get red marks where it basically makes a small abrasion in the skin, and then you also get what's referred to as powder

tattooing, where you get particles of powder that actually embed themselves in the skin.

So if you look, you'll see red marks and you'll see also the darker ones, and that's what you're seeing is -- either it's an abrasion from being struck with it or there's the actual powder particles that's embedded in the skin.

- Q. Do those particles give you any guidance in reference to opinions concerning the muzzle to target distance?
 - A. Yes.

- Q. How is it that it does that?
- A. Well, what happens is that the powder comes out of the muzzle in generally a cone shape, so as you get further away from the muzzle it spreads out. Of course, as it spreads out, that means the density gets less and less.

So when it strikes, whether it be talking about skin or clothing or anything, the greater the distance was between the muzzle, the firearm, and whatever it struck -- in this case, skin -- then the more spread out or the less dense that pattern will be.

So the way that you generally assess it, you would do test firing, which in this case the Florida

Department of Law Enforcement did, and then assess the

density of the various test fires from the various known distances to the pattern that you see in your actual evidence item, being -- here, being the skin.

- Q. Did you get the opportunity to actually view the FDLE test firings of this particular gun with its ammunition?
 - A. Yes.
 - Q. Okay. And did you review those and study those?
 - A. I did, yes.
- Q. And did you use those in an effort to render an opinion concerning muzzle-to-target distance of this particular hand?

MR. MARTIN: Your Honor, I'm going to object.

That is a mischaracterization of the FDLE report.

She specifically testified that she could only do it with the clothing. She had no opinions whatsoever as far as the skin. She cannot do testing on skin. She cannot determine what was the particulate. She constantly referred to the Medical Examiner's Office, and they have to do that.

Her distance determination was based on her examination of Mr. Oulson's clothing, so to characterize the statement that Mr. Escobar just did, muzzle-to-target, her determination is not based on the wound to the hand but to his chest. So it's

misleading to the trier of fact and for this witness 1 to say just muzzle-to-target determination and then 2 point to the hand. 3 MR. ESCOBAR: Judge, I think he's jumping the gun here. I said muzzle-to-target. He was going to 5 explain exactly what FDLE did with reference to what 6 that target was. He's way too anxious. It's coming, 7 but I'll lay the predicate because I know how to do 8 9 that. THE COURT: I will overrule for now. So noted, 10 though. 11 BY MR. ESCOBAR: 12 The analysis that was done by FDLE, was it an 13 14 analysis on skin? Well, what they did is test fired into cloth Α. 15 samples. 16 Why don't they test fire into skin? 17 Well, obviously you're not going to be able to 18 shoot a person --19 MR. MARTIN: Your Honor, at this time, I'm going 20 to object, because the FDLE report is, in fact, 21 hearsay. 22 What we have stipulated to -- if he wants to 23 read the stipulation that we have, then that's what 24 we have, but it is, in fact, hearsay, and there's 25

been no indication that he has the training to interpret the notes or the report of an FDLE agent who has been qualified and trained as a ballistic expert.

So I object to him just trying his own way to interpret a very technical report, and it is, in fact, hearsay.

If he wants to read the stipulation that we've agreed to, that's why we did it. I did not agree to put that report into evidence, so I will object to this line of questioning.

MR. ESCOBAR: Your Honor, I think Mr. Martin, practicing as long as he's practiced, understands that experts can testify about other documents that they considered in rendering their opinion, including hearsay.

Because let's face it, all the police reports and everything else that they received is also hearsay. That is classic.

What he is doing is nothing different than what every expert does in this particular line. In fact, he and I had that conversation just a few days ago where he admitted to me, "Yeah, you're right. He's going to be able to consider that report and render his own opinion."

Did we not, Mr. Martin?

regurgitate it inside the courtroom. He indicated,
"I reviewed the report, and my opinion is this," but
we're not going to go through the report and have him
critique and make his own interpretation of the notes
in the report for his own purpose as he sits there on
the stand.

MR. ESCOBAR: You see --

MR. MARTIN: We did, not that we're going to

MR. MARTIN: That's why we entered into the stipulation. That's why I did not agree for the report to come in. You need that person to come in and say exactly what was in her mind when she wrote down the documents.

He wants to look at the raw data and say, "I reviewed the raw data," without going into anything that was said and say, "This was my opinion." Then fine. Have at it, but we're not going to go through the report page by page.

MR. ESCOBAR: Have I asked to go to the report,

Judge? This is what I'm telling you. He's just

being disingenuous with this Court.

THE COURT: Hold on.

Are we going to hear from the person that made the report?

MR. MARTIN: We have entered into a stipulation 1 at some point it's going to be read. 2 THE COURT: Okay. 3 MR. ESCOBAR: Judge, let me tell you what the problem is. I will tell you very easily their expert 5 had opined that this particular gunshot wound could 6 be contact, contact to 36 inches. That's what her --7 MR. MARTIN: No, no, no. See what he does? He 8 keeps pointing at the hand and saying, "This contact 9 wound." That's not her testimony. 10 MR. ESCOBAR: No. It's a shared contact wound. 11 12 THE COURT: Stop. Mr. Knox can testify to the extent that he 13 utilized the report and, Mr. Martin, you will have 14 ample opportunity to cross him as to how he arrived 15 at that and what he utilized. And as the trier of 16 fact, I will have to take into consideration all of 17 the testimony both from direct and cross. 18 BY MR. ESCOBAR: 19 Now, Mr. Knox, did you review the report of 20 ballistics FDLE -- I believe her name was Jennifer 21 Clark -- in this particular case? 22 23

Α. Yes.

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Okay. And why did you review that report?

Well, she carried out the actual test firing, so

what I'm looking at is the data of her test firing. what she did is from various different ranges, starting out, I think, with the contact, then three inches and six inches and so forth out at different intervals and then made both notations of the observations that she made as far as the density and the pattern created as well as did 6 chemical testing and produced photographs of the chemical testing that shows the various different densities as they 8 correlate to the different ranges and the different distances that was fired. 10

- In addition to reading her particular analysis, Q. were you able also to see color photographs of the density pattern at the different degrees, six inches, twelve inches, what have you?
 - Α. Yes.

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- And did you use those in formulating your Q. own independent analysis of the distance of muzzle-to-target and this target being the hand? She did muzzle-to-target of the shirt, correct?
 - That's correct.
 - That's a different type of item than human skin? Ο.
 - That's correct. Α.
- And I believe you testified earlier that you had taken a forensic course as part of your Ph.D.; is that correct?

A. Well, a graduate course in my forensic science master's program where we did forensic medicine and dealt with these issues.

Q. And dealt with those issues. Well, explain to the Court how your course in forensic medicine dealt with these issues.

Is there a difference between stippling patterns on the human skin versus stippling patterns possibly on a shirt?

A. There is very little difference in terms of the density. What you -- you may have the -- particles on clothing will tend, depending on the particular type of material, to not adhere as well as it would with skin.

Skin, like I talked about, you're either creating an injury that's never going to go away or you're embedding that particle in the skin so it's not going to go away, whereas in a shirt you could have some issues with -- depending on how it's handled and over time, you could lose some of that, but the density of the pattern is the same because it's relative to distance.

Q. Did you take those considerations into account, meaning that the shirt, you know, was worn by, you know, Mr. Oulson and may have been ripped open and may have been touched by paramedics and all those things put in a bag?

Did you take all of those into consideration

when you were looking at her analysis as well as the 1 analysis of what appeared to be stippling on Mr. Oulson's 2 3 hand? I did, because my primary focus here is that -the stippling on his hand and what was the density of that 5 pattern relative to the test firings. So I mean, I looked 6 at the shirt and gave consideration to the shirt, but what 7 I was particularly interested in was how far away the hand 8 was from the firearm at the time of discharge. 9 Did you form an opinion concerning that issue? 10 Q. I did. 11 Α. And what was that? Q. 12 MR. MARTIN: I object, Judge, for the record. 13 THE COURT: Okay. So noted. 14 BY MR. ESCOBAR: 15 What was that opinion? 16 Ο. Based upon the documentation that she provided, 17 that the density of that particular pattern and the size 18 of that particular pattern is most consistent with the 19 twelve-inch muzzle-to-target distance from her test 20 firings. 21 Is that a twelve-inch a range or -- do we have a 22 Ο. range in these matters or is it just twelve inches? 23 It's most consistent with twelve inches, I would 24

say, based upon the densities and the patterns.

inches would be the absolute minimum, and eighteen inches
would be the absolute maximum, but it's most consistent
with twelve inches, being right in that middle range.

Q. Okay. Next one.

- Number 32, what is that showing?
- A. That is Nicole Oulson's hand. Obviously, she had gunshot wounds to her left ring finger, but also noteworthy is that there was some stippling on her hand as well around the index finger, the middle finger and the thumb area on the back of the hand.
- Q. Now, looking at the medical examiner's report and looking at Oulson's hand and the amount of stippling that you were able to see on that hand as well as looking at the stippling on Mr. Oulson's hand, did you form any opinion concerning relative positions of Mrs. Oulson's hand to that of Mr. Oulson's hand?
 - A. Yes.
 - Q. And what was that?
- A. Well, you can see that the density of the pattern on her hand is considerably less than the density of the pattern that was on Chad Oulson's hand, so that means that her hand would necessarily have been between his hand and his chest.
- Now, exactly where, I can't say, but it's certainly not as close as his hand was, and then it could

be all the way back to his chest because obviously she did suffer a gunshot wound. So her hand had to be in the path of the bullet, so it would put it somewhere between the chest and his hand.

O. Next one.

What is this a picture of?

- A. This is just showing a side-by-side comparison. This is so you can see differences in the density of those two patterns, that the amount of stippling on his hand is considerably greater than on her hand. So that means his hand was closer to the firearm than hers.
- Q. Now, are there objects and things that can -intermediate objects and things that can prevent
 stippling, you know, for example in this case being on
 Ms. Oulsen's hand?
 - A. Yes.
 - Q. And did you consider that?
 - A. Absolutely, yes.
- Q. And tell the Court what your considerations were.
- A. Well, you know, an intermediary target can be just about anything. But given the context of what you have in this case, the object that's between her hand and the muzzle of the firearm was Chad's hand.

So his hand absorbed most of that gunshot

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residue, most of the powder particles, and so there's only
a small portion of that that was able to get by and then
strike her hand, so that's why her hand is obviously
between his hand and his chest, because there's just a
decreased density there.

Q. Next photo.

What is this photo depicting?

A. This is slide 34. This is just showing that the bullet directions that are apparent in the wounds. So the bullet direction from his hand would be coming from this side of the hand and crossing towards this way, toward his chest, which would put his hand out in front of his body somewhere like this.

And then her hand is, obviously, somewhere oriented so that you get the shot across the finger traveling toward the small finger.

- Q. Now, the fact that there doesn't appear to be any stippling on this area of his hand, meaning what I would call the fist area of the hand, what does that indicate to you?
 - A. Well, it can be --

MR. MARTIN: Your Honor, I'm going object to the characterizing of the fist area. If he wants to call it fingers, that's fine, but that type of gratuitous comment is not appropriate in the question.

MR. ESCOBAR: Fingers, fingers. 1 THE WITNESS: -- fingers, and I -- the density 2 of the pattern is such that it kind of starts back 3 here on the wrist and it runs about a four-and-a-half-inch length across to about the 5 knuckle area, then there's none on the fingers. 6 So the most probable explanation of that is that the fingers are not straight out like this, that the 8 fingers are curved in some way, so you're not going 9 to get powder striking those fingers because they're 10 not exposed to the gunshot. 11 BY MR. ESCOBAR: 12 Next. 13 Ο. I believe this is where MR. ESCOBAR: 14 Mr. Martin --15 MR. MARTIN: Yes, we're at the perspective. 16 From these pictures on, I ask this to be a proffer. 17 This is a proffer. THE COURT: 18 BY MR. ESCOBAR: 19 Q. Now, Mr. Knox, tell the Court what we -- what 20 you, not me -- what you were trying to do with picture 36 21 on. What were you trying to get at as part of your 22 shooting incident reconstruction? 23 Well, what I did is we went to the movie 24 We had them set the lighting to the same 25 theater.

lighting level and we had them put on --

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A. Mid 1 level, and we had them put on a trailer.

Now, the trailer that they were playing was not the same one that they were playing at the time. They were able to put on a different one. It was a Star Wars trailer. But what I wanted to do was have lighting coming off the screen at various different tones, so you would have portions of that where the lighting was quite bright and portions of that trailer where the lighting was quite dark.

Then I used some mannequins to be able to move them in different positions to basically show and assess the net effect of when you move figures in that lighting, and that lighting condition given, you know, what the seating is and where the constraints would be as far as where they are positioned to show what effect it has as you move people around and put them in different positions.

- Q. Were you aware of this phenomenon, what happens with back lighting?
 - A. On, yes.
- Q. Tell the Court where you have become familiar with this. Is this a very high-tech or unusual process that you've just recently learned or anything like that?

A. No, no, it's not. You know, I took that course on optics lighting visibility and we've dealt quite extensively with this type of topic. But I've taken photographs like this all the way back to where I was a criminal scene investigator at the Jacksonville Sheriff's Office.

The main thing is to show that effect, because when you have back lighting like you have here -- because you have a movie screen that's reflecting a good bit of light -- then it causes the object that you're looking at, in this case a person, to be more silhouetted.

So rather then seeing all the details of the front of their body, what they're doing, you're seeing a much more shadow area in front of them, and you're seeing the outline of their body.

So as this lighting changes, as positions move, it causes silhouetting of the fingers and causes it to reduce what you can see in terms of the front of the person's body.

- Q. Now, were you trying to portray exactly what Mr. Reeves saw on January 13, 2014, for the Court today?
 - A: No, no.

- Q. Tell the Court why you weren't trying to portray that.
 - A. Well, there -- it would be impossible. The only

way to know -- I mean, there's only one person that knows what Curtis Reeves could see, and that's Curtis Reeves. He knows what he could see, and I can't recreate what he saw, but what I'm doing is showing what's the effect of this particular variable, the variable being that we're moving figures, human figures, into different positions with this particular lighting and showing what occurs as you do that.

So it's not going to be a replication of what he saw, but it's going to represent the effect of these different variables as you move figures in place as you have different lighting on the screen and so forth.

- Q. The figures that you were using here, the male mannequin, did you try to use a figure that was of similar size as Chad Oulson?
- A. As much as the mannequin represents. I mean, you know, these are styrofoam and cloth mannequins. They're not set to any particular size, so it's not really trying to duplicate Chad Oulson or anything like that as much as it is trying to just show the effect of what happens with lighting, what happens in terms of how you see it and perceive a person given those lighting conditions.
 - Q. Okay. Next.

What does 37 represent?

8 the front of their bodies, and that's the net effect.

- Q. Now, where were these mannequins placed on the date of your testing? Were they placed in what I would call Row A, which is the last row, the one that Mr. Reeves was seated in, or were these placed in Row B, which is the row right below Mr. Reeves?
- A. They were right below, so it would be in approximately the locations of where Chad Oulson would have been and Nicole Oulson. But again, I don't have any way of knowing the exact position that they were standing in so this is just approximate locations.
 - Q. Okay. Next one?

 Is this further --

A. Yes, this one is slide 38, another view. Here what obviously is done is we moved the female mannequin a little bit closer to the male mannequin, and what that does, it tends to block out some of the back lighting from between them, so you only have some lighting behind her

head and over his shoulder. Again, just showing what that 1 2 effect is. Now, this TV set right here is set in a very 3 bright, luminous setting. Right. Α. 5 I want you to take a look at the one behind you. Q. 6 Is there a difference? 7 There is a difference, yes. 8 Okay. And is that a product of what the TV is 9 doing or what the actual photos are doing? 10 MR. MARTIN: Your Honor, I'm going to object. 11 He has not laid the proper predicate that he can be 12 able to explain that, and I assure you I'm going to 13 cover that on cross. 14 MR. ESCOBAR: Well, I mean, I can appreciate 15 that he's going to cover that on cross, but I think 16 that is important to show the differences, even on 17 direct, of what they may appear like in two different 18 TV settings. 19 MR. MARTIN: And that is -- that is the whole 20 point of my motion. You can't recreate it, so having 21 him explain what the difference between one TV and 22 the other is, he can't explain that. There is a 23 difference. 24 MR. ESCOBAR: Did he say he was recreating? 25

don't know what -- he said he wasn't recreating. 1 This is for the effect, purely for the effect. Did 2 you hear that?

> The effect. MR. MARTIN: Sure, I heard it. looking at the effect on one screen and then on the It is so different, it is unbelievable. other.

MR. ESCOBAR: Well --

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That's my personal opinion, so MR. MARTIN: that's the whole purpose of this proffer. going -- he cannot explain what the difference is, but that's the whole problem with this type of evidence.

THE COURT: All right. I'm going to allow it to the extent that he knows. I certainly haven't heard a foundation that he's an expert in TVs. I didn't see that one, so let me take a minute and look at it. BY MR. ESCOBAR:

- Now, you're taking a look at two TVs that are representing one darker, the other one lighter. How does that happen?
- It's differences in the settings for various different monitors. If you're trying to view photographs and you want to view everything accurately to the way it was actually recorded, then there are monitor calibration processes that can be done to be able to calibrate the

monitor so that you can prepare the photograph to be printed and you can could print it similarly so that it's calibrated and printed accurately to the way it was rendered.

But the primary thing when it comes to rendering photographs is that I actually sat there and observed it. So what I do is, you take a photograph and I'm able to look at the photograph and then make a determination as to which one accurately represents what could be seen.

Obviously when you have this brighter image here detail is recorded in detail. If the detail is recorded, then it can be seen because the camera cannot record something that cannot be seen.

So this monitor here, the larger monitor to my right, would be much more representative of what it actually looks like than the monitor behind me that's obviously set to a darker setting, and it does not appropriately represent it.

- Q. Is that why we were looking at this monitor during your testimony?
- A. Yes, because this appears to be accurate to the way it was when we took this photograph.

MR. ESCOBAR: I just want to make sure that we brought that out on direct so that the Court doesn't think that we're playing games.

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THE COURT: Okay. 1 BY MR. ESCOBAR: 2 Now, next photo. 3 Q. What is that? This one, which is 39, what that's done is 5 brought the male mannequin in close enough to where the 6 arm could reach to where the popcorn would be, so to the 7 left armrest area where the popcorn was being held by Mr. Reeves. Okay. And measurements were taken in that 10 0. process? 11 Right. Right. Α. 12 What are you seeing on the mannequin that's 13 Q. purported to be Mr. Oulson? Are you seeing any shadows? 14 There are considerable shadows because, again, 15 it's backlighted. You can see a lot of shadow in the face 16 17 area. And, of course, I'm not representing here that 18 this is the field of vision that Mr. Reeves would have. 19 This is the field of vision that the camera has. 20 that's just showing the effect that obviously the lighting 21 is quite subdued and that you don't see considerable 22 detail in terms of the front of this figure. You don't 23 see a lot of detail in the face and things like that that 24 we would see, for example, sitting right here in the

courtroom.

- Q. Now, when you were taking these photos, you indicated, I think, originally that you would take the photo, you would look at the photo on your camera and determine whether -- with your naked eyes whether you were seeing a scene substantially similar to what you were seeing on now your camera that you had captured the photo?
 - A. Right.
 - Q. Is that correct?
 - A. That's correct, yes.
- Q. And on each one of these photos, did you opine whether or not both of those were substantially similar? Meaning the naked eye seeing -- sitting in Mr. Reeves' seat and watching it with the naked eye as well as what you were able to capture in the camera and then looking at the camera, the picture you had taken, and to determine whether they were substantially similar?
 - A. Yes.
- Q. Were all of these that we've gone through so far substantially similar?
- A Yes.
- 22 Q. What is 40?
 - A. 40, this is just a different view showing again with the male mannequin brought in to the approximate location where the (inaudible) would have to be to reach

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the popcorn. This is just a different view. So you can see the face, and then obviously you can see the casting of shadows, and then you have light sources coming from various different directions.

- Now, please explain to the Court where you Q. placed this camera in an effort to capture what you're trying to capture here.
- I actually sat in the seat that Chad Oulson had I put the camera on the tripod and I put been sitting in. it right in front of my face, so the camera would have been basically right as I'm just seated upright, normal in the seat where it's positioned directly in front of us.
 - Why did you do that? Q.
- Well, I wanted to get it as close to the Α. position of being seated in the seat as possible. obviously putting it on a tripod right in front of me is as close as I could get it with the film playing where the camera is basically an inch or two from my face as we sit there.
- Was this all in an effort to show relevant evidence that would certainly be important in Mr. Reeves' perspective as he sat in that seat on January 13th of 2013 and he had to fire the fatal shot?
 - Yes. Α.
 - Now, did you, in fact, also review the video

that had been captured by the Cobb Theater video 1 surveillance system in this case? Α. Yes. 3 Did you provide some analysis on that particular Ο. 5 video? Α. Yes. And is that a process that is undertaken as a 7 Q. major case crime scene detective, both in your work as a 8 detective back in Jacksonville as well as your forensic work thereafter? 10 Yes. Α. 11 This is a common practice that someone would 12 undertake as a crime scene detective? 13 Yes. 14 Α. Before we get started too quickly, let's take a 15 look at some testimony of what you actually did. 16 Tell the Court, first of all, what you did in 17 analyzing this video and what were you trying to analyze? 18 MR. MARTIN: Excuse me, Your Honor. 19 What exhibit number are we looking at? 20 MR. ESCOBAR: I'm sorry. I was going to get 21 That's Exhibit Number 16. 22 there. MR. MARTIN: Yes. 23 MR. ESCOBAR: Okay. 24 MR. MARTIN: Thank you. 25

BY MR. ESCOBAR:

- Q. Tell the Court what you were attempting to accomplish and how you attempted to accomplish this.
- A. Well, the -- anytime that you have video in a shooting incident or any other similar type of thing, what I'm looking to figure out is what the video could tell me about where people were or what position they were in, how did they move, timing of different things, stuff like that.

So what I was looking to do was figure out, you know, what is the positioning -- you know, there's -- there are various movements that are depicted on the video so you would try to determine where these people were, what's the actual positioning of these portions where there's movement.

MR. MARTIN: Your Honor, at this time, I'm going to object to the testimony. I think I've heard enough that it appears that we're in the realm of some type of photographic technician, some type of image examiner, which he has not been qualified to do.

He has not laid the proper predicate that he has the life experience or the training to engage in the critical viewing of a video that is necessary in order to provide sequencing in this particular case. Now, if he wants to give his lay opinion, if this is just what he thinks, well, if you want to allow that, that's fine. But that's not helpful to the trier of fact, either, because we can all look at the video and determine where the people are and what movements there are.

We all have the ability to do that, so I'm going to object to the line of testimony that he has not been qualified as an expert in order to be able to do that.

MR. ESCOBAR: Your Honor, I disagree. The predicate has been laid. In fact, he'll testify that this is timing, not sequencing. He's got the processing wrong.

It is timing that he's looking at. He wants to actually record the timing of certain events so that, at some point in time, his opinion is going to be when, in fact, he believes that, you know, Mr.

Reeves -- from a certain point to another point when Mr. Reeves actually made the decision to pull that weapon and fire it, and so it's something that crime scene detectives do all the time, that competent --

MR. MARTIN: No, it's not.

MR. ESCOBAR: Crime scene directives do it all the time.

Not in Court. They may do it out in the field in an investigation to bring a case to the State Attorney's fact, but they don't sit in a courtroom and explain

No, they don't. No, they don't.

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MR. MARTIN:

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24 25 Office, and then we bring it in and let the trier of what they observed. It is very disingenuous for Mr. Escobar to sit

there and say it's about timing and not sequencing. In order to get the timing down -- he has to have an opinion as to context in order to get the timing, because you heard what he's going to do.

He wants to be able to say it was between this particular time based on the contents that I presume -- that that's when it was reasonable for him to shoot his gun. You can't do that. qualified to do that.

MR. ESCOBAR: Your Honor, he's very qualified to do that. You know, maybe some of the forensic detectives that work for the Pasco Sheriff's Office at this time were not, but he was.

We've laid out all his credentials. out everything. He's going to testify this is exactly what he would have done if he was with the Jacksonville Sheriff's Department. It is a -- it's not a complicated thing. It is a very common

forensic thing that he is capable of doing.

He's going to explain to you the difference between sequencing and he's going to explain to you the difference between timing, and you can take it under consideration.

If you hear his testimony and for some reason the Court believes: Hey, I'm not going to consider it, then, you know, I certainly respect the Court's decision on that. But, you know, we've got the foundation already for him to be able to do this, and he's going to explain to the Court exactly what he did and what he found.

THE COURT: What expertise is needed to do this?

MR. ESCOBAR: Judge, his expertise as a forensic crime scene detective, he's going to talk about and we are going to get into, again, some of these issues dealing with response, reaction and movement that he talked about early on.

He's taken those particular -- those particular courses, and so you've got to hear that body of information, obviously, before you put it all together, but I am very confident that we're going to put it all together and it's going to make a whole lot of sense, and it's going to have a wonderful foundation for his opinion.

THE COURT: So he's going to narrate this little one-second snippet, tell me what's going on and what led up to it?

MR. ESCOBAR: He's going to narrate time between certain events and the firing of the weapon, and that is very, very important to this Court because this Court is going to want to, at some point in time, determine when it was that Mr. Reeves decided to use deadly force.

And it has to do to a great extent -- it has to do to a great extent on his perception of the events. Just like the things are happening in the video, things are happening before he makes his decision to actually fire that gun.

And this is something -- you're listening to

Mr. Martin who is here telling you it never happened.

It never happened. Let's listen to the expert who's

under oath that's going to tell you that it happened

and that he's competent to do exactly what he just

did for us, and he's going to be able to render an

opinion.

And, Your Honor, I am so confident that we're going to lay all this foundation that once you hear it all, then you can make your determination and we've got a record.

MR. MARTIN: Judge, we've had no testimony whatsoever as far as his life experience. How many hours -- hours upon hours, has he set in front of a video and attempted to do a critical view of a surveillance? What training has he had in order to do a critical view?

And then you heard what they want to do. He's going to explain what's in Mr. Reeves' head as to when he decided to use deadly force, and an expert cannot testify what is in Mr. Reeves' head in the video.

Now, if Mr. Reeves wants to take the stand and narrate through the video and say, "This is what I was thinking at this time," I may not have an objection, but Mr. Knox can't do it.

MR. ESCOBAR: It's not anything about

Mr. Reeves' head. This is about -- this is about

actual activity that you're able to see, both the

Court, both Mr. Knox, both myself, both the

prosecutor throughout this video. And, Your Honor,

we're arguing about it. It's going to be proffered

anyway.

THE COURT: All right. I'm just a little skeptical at -- unless there's another video that I haven't seen yet, how that's possible.

MR. ESCOBAR: Okay. Well, let's --1 I'm all ears. I'm going to overrule THE COURT: 2 that. 3 BY MR. ESCOBAR: 4 Now, Mr. Knox, this whole process that you have 5 undertaken here, is this a common practice for shooting 6 incident reconstruction? 7 Α. Yes. 8 And tell the Court how common it is. Q. Well, I mean --10 Α. MR. MARTIN: Judge, he can't speculate how 11 common it is. He hasn't been in every courtroom in 12 the nation for every day since his career. Come on. 13 THE COURT: Sustained. 14 MR. MARTIN: Thank you. 15 THE COURT: Rephrase. 16 BY MR. ESCOBAR: 17 Tell the Court how it's used, this process. 18 0. MR. MARTIN: Well, Judge, he can't do that. 19 MR. ESCOBAR: Judge, this is just -- he's just 20 saying that to interrupt me. 21 MR. MARTIN: He can't say what everyone else 22 23 does. MR. ESCOBAR: You've ruled - he's just trying 24 to interrupt. Every single time he's going to try to 25

interrupt. ,

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THE COURT: Let's hear how you know where it's used and by whom.

BY MR. ESCOBAR:

- Q. Okay. Go ahead.
- A. I mean, I'm not going to speak to everybody who's out there that's using it, but what I can tell you is I know others that use it. I use it commonly in casework because obviously there's -- oftentimes there's video related to a shooting.

I'm not coming in to narrate and say that I can see a bunch of stuff in the video that you can see yourself, but what we do, often you will look for certain things that do show up in the video that any one of us can see, look at when that occurred and then look at other events that occur and then compare that.

In this case, I'll look to the time of when the shot is actually fired, and you look at how much time has elapsed, so it's just a matter of using the video -- the time code that's displayed in the video and then calculating what those times are.

BY MR. ESCOBAR:

- Q. Now, in doing this analysis, did you even use the government's FBI TIF files?
 - A. I did. I used the FBI video.

| 1 | Q. You didn't even use ours. You used their TIF |
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| 2 | files or native TIF files. Not the enhancer, the |
| 3 | native ones, right? |
| 4 | A. That's right. I actually used the FBI video |
| 5 | that has the time stamp, that had the time code displayed |
| 6 | on there, and I went by the time codes that are displayed |
| .7 | on that video. |
| 8 | Q. Now |
| 9 | MR. ESCOBAR: Your Honor, these are the ones |
| LO | the native ones are the ones that we've stipulated to |
| L1 | for introduction in this particular case at some |
| 12 | point in the very near future. |
| 13 | Just so the Court is aware, we are not using |
| 14 | something that you will not be able to hold onto and |
| 15 | see yourself. |
| 16 | MR. MARTIN: Well, that all depends if I put |
| 17 | them into evidence. |
| 18 | MR. ESCOBAR: Well, if he doesn't, guess what, |
| 19 | we've stipulated to them and I will. The native |
| 20 | ones. Not the enhanced ones. Not the Spectra |
| 21 | highlighted or the Spectra highlights, but the native |
| 22 | ones. |
| 23 | BY MR. ESCOBAR: |
| 24 | Q. Now, please explain to the Court the process |
| 25 | that you used in order to make certain determinations. |

Well, there are certain things that are shown in 1 the video that -- like I said, I think anybody who watches 2 the video can see there's a point where what is apparently 3 Chad Oulson's hand crosses into the frame and reaches down to grab the popcorn, retrieves the popcorn back toward 5 him, then throws it back towards Mr. Reeves. Mr. Reeves then starts to move, sits up, his arm 7

raises, and the gunshot is quite obvious in the video.

So all I did was take certain segments of that, look at the time stamp, figure out what the timing was, and then I backed up and said: Well, if we consider the shot to be T-0, and then back up to see how far ahead of that did these other events take place.

- So let's take the events, and please tell the Court each event that you used so the Court can write the Court's notes as to each event that you used in forming this opinion.
- Well, what I did is there's -- the first frame Α. where the hand appears that is headed in the direction of the popcorn bag, then the popcorn bag that begins to move, that was the next time that I recorded.
- Okay. What was that time recording between those two events?
 - Well, the time between those two events was --Α.
 - Give the time for each event, and that way the Q.

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Court can always check your calculations. 1 The time code for the hand appearing in Right. 2 Α. the frame as it's headed toward the popcorn is at 3 13:26:36.346. Could you say that again so the Court has at 5 least the time to be able to write that down? Yeah, so 13:26 and then 36.436. Α. 7 Okay. Q. So I'll give the rest of code with just the 9 36-point-what-have-you, or 37-point-what-have-you. 10 And the definition of that event was what? 11 the Court can make sure that the Court has that event 12 properly memorialized? 13 A. That is the first frame where Chad Oulson's hand 14 appears in the video frame as it's moving toward the 15 popcorn bag. So that's when you first see it, and then 16 from there you see the hand move toward the popcorn bag 17 and eventually grab the bag. 18 Now, this event is different from a previous 19 event where it appears that you see a body coming in 20 21 towards Mr. Reeves? MR. MARTIN: Your Honor, I'm going to object. 22 We're talking about a specific area, and him now 23 explaining what he sees as far as whether or not a 24 body comes in or not, comes in in another area, he 25

can't testify. 1 MR. ESCOBAR: Judge, I'm just trying to give the 2 Court, you know, an absolute area that we're talking about. BY MR. ESCOBAR: 5 We're talking about strictly the popcorn 6 Q. 7 incident --Α. Right. 8 -- and then the firing of the gun. 9 Ο. That's correct. 10 Α. Okay. 11 Q. THE COURT: Overruled. 12 BY MR. ESCOBAR: 13 So the first -- the absolute first recording is 14 when you first see, -- and it's not on this because this is 15 a different video -- is where you first see that hand 16 coming into the video and the recorded portion of the 17 screen? 18 Α. That's right. 19 Okay. What is the next recorded event? 20 Q. The next one that I used the time from is the 21 frame where the popcorn bag begins to move, so you can 22 actually see the popcorn bag is being pulled away from 23 Mr. Reeves. 24 Okay. So what is the time stamp on the event 25

where the popcorn bag has been grabbed and it's starting .1 to be removed now from Mr. Reeves? 2 That's at 36.554. Next event? Ο. The next would be that the popcorn begins to 5 come back towards Mr. Reeves, so the popcorn bag is pulled back and then turned around and then projected toward Mr. Reeves again, and that occurs at 36.946. 8 Next? Q. The next one would be when the popcorn actually 10 hits Mr. Reeves. That occurs at 37.146. 11 So this is now the popcorn actually hitting Ο. 12 Mr. Reeves at that stamp number? 13 That's correct. Α. 14 That is again from the FBI native TIF files Ο. 15 which are the actual files frame by frame of the video? 16 Yes. Α. 17 18 Ο. Next? Then next would be when Curtis Reeves begins to 19 There's a portion in there where he's kind move forward. 20 of -- he's actually out of the view of the camera, kind 21 of -- I think he's down in his seat. But as he begins to 22 appear back in the camera view, he's moving forward toward 23 the -- toward Chad Oulson. That occurs at 37.412. 24

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And these are the time stamps that you're

recording of the FBI TIF files? 1 That's correct. 2 Α. This is what the TIF file's seeing, the time 3 that that event took place? That's right. Α. 5 You're not changing anything; you're just getting that time stamp? 7 That's correct. Α. 8 Next? Ο. Then the last one is when the shot is actually Α. 10 There's a frame in there where you can actually 11 see the muzzle flashing, and that appeared -- that is at 12 37.846. 1.3 Now, before we go to your opinion, let's talk 14 about the human factors. You've already told us about the 15 studies that you've had. You've actually been declared an .16 expert in that particular area. 17 You talk about response reaction movement. 18 does that mean? 19 Well, perception reaction time, what you're 20 basically looking at is the total time it takes for you to 21 perceive something, process what it is, make a decision, 22 how to act, and then actually implement that action. 23 So in a shooting case, what we're looking at is 24 you're starting with visual signals coming in, then the 25

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time it takes to process that, and then actually start implementing some motion, whatever it happens to be with the particular firearm, and then carry that up to the point of the shot being fired.

- Q. Okay. And does that all take time?
- A. Yes, it does. What you have is each different component takes, you know, typically a fraction of a second, but you're adding fraction of a second to another fraction of a second to another fraction of a second, and, as you add that up, you'll start getting into times where you're reaching a full second or even greater time depending on what's actually occurring.
- Q. And so how are you using this response reaction movement in an effort to analyze this video with these time stamps?
- A. Well, what I do is look at the research data that's available with regard to perception reaction times for shooters.
 - Q. Are these peer-reviewed research data?
- A. Yes, there are a number of peer-reviewed journal articles where there's been various different research studies done.
- Q. Okay, and so let's talk a little bit about those particular studies, because the Court needs to have a pretty good, you know, idea of what you're talking about

here.

So let's talk about some of these particular studies and how they play a role in your analysis here.

A. There are a number of different studies that I've looked at that I reference for perception reaction times. One of them is by Jason, and that was from 2010. His name is Alexander Jason, but he did a study looking at various different factors related to shootings, but one of the things he looked at was the times for competitive shooters to draw from a holster and then fire a shot.

And what he found is that the average of the sample that he used -- again, the sample was all competitive shooters -- that on average they could draw from the holster and fire the shot at 0.95 seconds, so just shy of one second.

In that same study he also looked at a sample of police officers. He actually had an age range of 23 years of age to 56 years of age with an average of 37, had them draw from a holster and fire, and what he found is that the fastest that any of them did was .88 seconds. The slowest any of them did it was 2.93 seconds, and the average time was 1.52.

Now, this is -- in both of these cases, you're talking about drawing and firing to a simple signal, meaning there's no decision-making involved. It's just a

matter of a buzzer or a light, and then they had to carry out the action, so that's the way that timing is done.

Lewinski and Hudson, 2003. They did a study in Tempe, Arizona, where they did, similarly, making some determination about how quickly police officers fire.

Most of the research is done with police officers because, for obvious reasons, they're a lot more interested in what police officers do in actual shootings, but what they found is that in a high, ready position -- meaning that the officers have their gun out and they're aimed at the target -- the only thing they have to do is move their finger from outside the trigger guard, move it in and then pull the trigger, and that two a simple stimulus, they could respond and fire on an average at about 0.31 seconds.

So, then that includes the decision-making part as well as the movement of fingers, so that's the total of when the signal is given, which in this case is a light being turned on, the light goes on, and then they're told to fire, so it took on average about one-third of a second to be able to do that.

- Q. That was high ready?
- A. High ready. They're already aimed at the target, and all they're doing is move their finger, you know, into the trigger guard and pulling the trigger.

- 1 Q. And they know that the signal is coming?
 - A. They know the signal is coming. It's just a matter of being on or off.

When they made the signal more complex, where they put a bank of lights and they had to figure out, you know, if a certain light comes on, then you fire; if the other lights come on, then you don't fire. So they have to make some recognition, in terms of what to do, then it almost doubled the time that it took. So it brought it up to an average .56 seconds.

So that's just for him to realize which light is on. Okay. I've got a signal to fire, move the finger, pull the trigger.

Blair, et al, that's a bunch of colleagues, it's a whole list of people on that particular research, that's from 2011, so that's not the most current research out there on this topic.

What they found is -- in their particular study, what they did is they had subjects who were playing the role of being an armed individual with a gun, and then they had police officers that were the reactors for the study, and the police officers were told to give the person a verbal command to drop the weapon, and, then, if the person raised the weapon, then fires.

So a signal for them is when the person moved to

begin to raise the weapon, and then what they did was time how long it would take them from when the person first noticeably moves to when they're actually able to pull the trigger, and they found in that case that the times were between .34 and .42 seconds.

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That's -- again, that's a simple stimulus because they know what they're looking for. They know what they're going to do when they see it.

A number of other studies that have dealt with different issues related to it, Der and Peary, and that's D-E-R and P-E-A-R-Y, that's a 2006 study. One of the things that they address in their paper is that perception reaction times are correlated to age, and what they found is that perception reaction times tend to increase up to about your late 20s. You get into the upper 20s, and that's sort of the peak. That's as fast as you're ever going to be.

Then from there they decline steadily until you reach your 50s, and then from your 50s on it's a significant decrease, so your ability to your perception reaction times get considerably slower after your 50s.

There are couple of studies. Eckner, E-C-K-N-E-R, 2010, and Welchman, W-E-L-C-H-M-A-N, 2010, did just reactions to simple visual stimuli where -- what they do in those tests is they take people -- these are

not police officer candidates.

1.0

These are just general people -- and have a light that comes on and a button that they press to see from when the light comes on to when they push the button, how long did it take, and what they found in their samples, it's an average of .2 to .3 seconds.

There's also a study, Welford, W-E-L-F-O-R-D, 1980, where they discuss the fact that distractions increase perception reaction time, so, obviously, when you're reacting to a simple stimulus, you know what you're doing and you're waiting for a particular signal, you want to be able to react faster than if you have -- you're trying to figure out what's going on and then have to process more information.

Welchman, which I mentioned earlier, as well as Lewinski mentioned it and others have mentioned it is the concept of "actor beats reactor," meaning that what they found in various different studies is that if you are waiting for somebody to act, then they'll be able to act faster than you could react because they can formulate the -- you know, process all the information and formulate the intent to do what they're doing and not have to wait for any particular signal, whereas, if you're waiting on them to do something before you react.

In particular, with a lot of those studies, they

were looking at the gun issue person being able to pull the gun up and fire it at an officer faster than they could fire back.

And a couple of other papers that talk about the perception reaction time, it increases with complexity of the stimuli. So one is Luce from 1986, that's L-U-C-E, as well as Brebner, B-R-E-B-N-E-R, and Welford, W-E-L-F-O-R-D, from 1980.

Both of those talk about the fact that perception reaction time increases with complexity of stimuli, so, obviously, the more information that you have to process, the slower you're going to be when it comes to responding.

- Q. Now, are those numbers very conservative for the real world?
- A. Yes, and that's -- that's -- the general premise of a lot of the research is that, you know, what you're getting is bottom line -- baseline that you can get in a research setting, because obviously in a research setting you can't -- you can't throw in a whole lot of variables because you can't control for them.

So when you're doing research, you have to very closely control your variables so you're going to limit the stimuli that are involved.

You have to to be able to do appropriate

scientific research. So you are necessarily getting conservative numbers. You're not getting real-world numbers. You're getting things that are much lower than that.

reaction time, there's a fair bit of study with regard to traffic accidents. There's probably a lot more perception reactions literature out there in traffic accidents, and the long-held -- those sometimes-argued, baseline perception reaction time and accident reconstruction is 1.6 seconds for a person to see and perceive, you know, for example, encroachment by a car, you know, the light just changed or whatever, and then be able to implement an action, steering or hitting the brakes or things like that.

So -- and a lot of the traffic accident stuff is more -- more real-world type, because you can put somebody in a stimulator and you can make a car come out in front of them and you can time them, and so there's is a lot more research with regard to that.

So the general consensus tends to be among those who have studied and researched it and that, you know, when you're talking about real-world response times to something happening in terms of your shooting, that you're looking at times that would exceed one second, that would

generally reach up to -- perhaps up to -- perhaps a two-second range or even higher.

- Q. And does lighting conditions and noise conditions also have an impact on that perception reaction time?
- A. Yes, and lighting conditions, they haven't really been studied in the shooting context, but lighting conditions have been studied in the driver contexts of perception reaction time, and it's been shown that, you know, nighttime driving people have a slower response time than they do during daytime driving and that the, you know, generally accepted reason for that is that it's —it takes more time to acquire the signal and be able to process it because you don't have a nice clear view of something. You have to acquire that visual signal and be able to process it.

Noise also makes a difference because it goes to total cognitive load, how much stuff you have to process in your brain.

In a perfect example, when it comes to noise, if you've ever been driving your car and get into heavy traffic or especially if you're out of town somewhere and you're not familiar with driving, and you have music playing and you reach up and you turn your radio down so you can concentrate on the driving -- I know I've

certainly done that -- and people make jokes about that and say, "Oh, yeah, I have to turn the radio down to see," but it's not that it affects your vision but it affects your cognitive load.

While that music is playing, there's stuff going on in your brain that's processing all the signals, and when you turn that music down and concentrate on your driving, you're taking out some of that signal; it's noise.

It's background that's not relevant to what you're doing and allowing your brain to be able to concentrate more on what you're doing.

So all the different things that are going on apart from what you need to see, in other words, seeing the threat or danger that you may be observing or what you're perceiving to be such, all of those things, all of the other information that's coming into is adding to the cognitive load, and it's going to necessarily slow down your reaction.

- O. Okay. And so did you consider all of that?
- A. Yes.

- Q. Now, did you form an opinion concerning the firing of the weapon by Mr. Reeves in reference to those other marked and timed events?
- A. Yes.

Would you please tell the Court what that 1 Q. 2 opinion is? Well, when you look at the timing, because --3 I'll back up here and go to -- if I describe the shot as being T-0 and then the backup, the other events as T minus 5 something, the hand appearing, reaching for the popcorn, initially would be --The first time you see the hand in the frame? 0. The first time you see the hand in the frame Α. 9 would be at T minus 1.5 seconds, so you're talking -- that 10 occurred at 1.5 seconds before the shot's fired. 11 The popcorn beginning to move is occurring at T 12 minus 1.28962. The popcorn bag beginning to move back 13 towards Mr. Reeves is occurring at T minus 0.986. 14 popcorn hitting Mr. Reeves is occurring at T minus 0.7, 15 and then Mr. Reeves beginning to move forward is occurring 16 at T minus 0.434. 17 So if you look at those times and you consider 18 the research data on perception reaction times, then it's 19 not reasonable to conclude that Mr. Reeves is reacting 20 21 to --MR. MARTIN: Your Honor, I'm going to object now 22 because now we -- you know, what is reasonable or not 23 reasonable. He can give us the times, but he cannot 24

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go into what is reasonable and not reasonable for

Mr. Reeves because Mr. Reeves is a unique individual like we all are in this courtroom.

There has been no predicate laid that they have any testing on Reeves that they know anything about his hearing, that they know anything about his sight. It's way too general.

He can educate us to these times, but he can't apply it to Mr. Reeves without knowing the unique individual, Mr. Reeves, and his own physical conditions, so I object to the opinion because it's an improper predicate.

MR. ESCOBAR: Judge, I disagree. I think this is exactly -- this is the foundation that we've laid along with all of the empirical studies concerning human factors and action versus reaction.

Trust me, the opinion that he's going to give you is on the very, very conservative side. We believe obviously with Mr. Reeves' age, with lighting conditions, with noise, it's going to be far, far slower, and so we are on the very, very conservative, but I think that that is important for him to explain his opinion, and then the Court can make its own decision as to whether you're going to accept that opinion, whether you're not going to accept that opinion, but that is an opinion that, you know, crime

are able to do day in and day out.

MR. MARTIN: All the studies I've heard were generalizations and within ranges. How do you account for that?

MR. ESCOBAR: The fact that one of the studies indicated to you that as people grow older -Mr. Reeves is on the far, far end of plus fifty -that the reaction time is going to be much, much slower.

He's also indicated and opined that in low lighting situations, again, it's going to affect --

THE COURT: All right. All right. Hold on. My question is much more specific. I got all of that, and that's why I'm trying to do the math in my head.

So we started out with a range, and we can whittle that down to however one sees fit based on age, then whittle it down some more based on the ranges that you have from those studies and whittle, you know, tweak it a little more based on another variable and somehow come up with a number.

MR. ESCOBAR: Well, it's a bracketed number,
Your Honor. It's not -- he's not going to say, you
know, .3166 seconds, but it's a bracketed number, and
what we're trying to show to the Court is that based

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upon these studies and based upon these very solid studies that Mr. Reeves made the decision to pull his weapon and fire his weapon even before, way before the popcorn was even grabbed from his hand.

This is a -- this is a conservative figure.

This is not a speculative figure. This is not a figure that he's grabbing out of thin air. This is based upon empirical studies and looking at the actual film --

THE COURT: All right.

MR. ESCOBAR: -- and those particular time stamps.

THE COURT: All right. I will overrule again as to -- I can give it the weight that I think it deserves and Mr. Martin can cross as well, so go ahead.

BY MR. ESCOBAR:

- Q. What is your opinion, Mr. Knox?
- A. Well, basically, if you look at the times so -for example, the time between when the popcorn hit
 Mr. Reeves in the face and the time when Mr. Reeves
 actually begins to move forward is just barely over a
 quarter second, .266 seconds. The time from when the
 popcorn hits Mr. Reeves to the time that the shot is fired
 is 0.7 seconds.

So if you look at those numbers that I just went through in the literature where you're talking about simple responses and things like that, then the time, certainly the quarter second between the time that Mr. Reeves gets hit in the face with the popcorn to when he begin to move is well below that threshold.

The .7 seconds would be quite fast within those numbers given the fact that it is not a simple reaction time. It is a complex reaction to something that's going on and you're having to process that.

So what that tends to indicate, then, is that the decision to shoot -- because remember, when we talk about perception reaction, the time of the shot and the time of when a person must necessarily have decided to begin to implement it, they're not same. You have to have the time lapse to be able to carry that out. That occurs before the popcorn hit him in the face.

Given the fact that the hand reaches to the popcorn is at T minus 1.5 seconds, it's quite likely that the perception reaction is back in that range, I mean, because again, we saw some of the data that shows things where you're taking multiple seconds to be able to draw and fire and things like that, so you're looking at —that it's quite likely that the decision to fire would have had to occur as far as back as when the hand first

appears in the frame reaching for the popcorn, if not 1 further than that, but certainly, you know, there's only a 2 second and a half for that whole process to have occurred. 3 Now, this is part of your reconstruction process, correct? 5 6 Α. Yes. Now, we talked a little bit about the distance 7. Q. between Mr. Reeves and Mr. Oulson as having some 8 significance in this case. 9 Explain to the Court why the distance between 10 Mr. Reeves as he was seated in Seat 9 and Mr. Oulson was a 11 significant factor for you. 12 Well --Α. 13 Your Honor, I'm going to object. MR. MARTIN: 14 mean, that's the whole point of having a 1.5 reconstruction expert, so he can -- like he said, he 16 can go ahead and define the confined space. 17 then used by the use-of-force opinion expert to 18 provide an expert opinion. 19 He's not a use-of-force expert, and I've made 20 this objection before when we talked about distance, 21 opportunity, intent. That is all Dr. Hayden, not a 22 reconstruction -- he is not offered for that. 23

He was proffered to the State as being a reconstruction expert. That's how he was deposed, as

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a reconstruction expert, to provide all the measurements and space and artifacts that are there. To give it to someone else to come in and give whatever lay opinion the Court will allow regarding use-of-force, not Mr. Knox. He is not that expert.

MR. ESCOBAR: Judge, it was not represented to the Government that Mr. Knox was a forensic tech. It was represented to the Government that he was a major case detective, reconstruction of the crime scene expert. It is as simple as that.

What he is doing right now, is he is reconstructing the shooting incident. He is not one of their normal techs that the Pasco County Sheriff's Office uses to, you know, pick up items, not to degrade what they're doing.

It's a very important function, picking up items and making sure that it's not contaminated and making, you know, measurements and what have you. He is beyond that, and that was represented -- it's in his CV, human factors. Human factors is not in the CV.

He went over his CV in depo with this expert.

There is no surprise here. This is perfect and

proper direct examination of one of our experts.

And, Your Honor, I will tell you, he is getting

up in order to be an obstructionist and only an obstructionist. This Court has already ruled that you are going to determine what you're going to keep in and what you're going to keep out.

The only reason he keeps jumping up is because he wants to break up my direct and it's unfair. It's totally unfair that he's doing what he's doing in this particular case.

MR. MARTIN: Judge, I'm not a potted plant. You may just, you know, decide on your own what you're going to do, but I have a record to preserve for appellate purposes, and the Court is well aware if I don't make my objection contemporaneous with the information that comes in, it is waived, and that is the reason that I'm making the objections.

I'm well aware that you're going to make your own independent decision, but I have to preserve the record, so in the event we go to the Second DCA that I've made a proper objection contemporaneous with the information that came in.

THE COURT: All right. I don't really know what's coming next, but let's keep it within the realm of this -- what this witness has been offered for, crime scene reconstruction.

BY MR. ESCOBAR:

Mr. Knox, part of your crime scene 1 Q. reconstruction, does it have to do with distances between 2 the shooter and the alleged victim? 3 Α. Yes. Tell the Court why that's an important aspect of 0. crime scene reconstruction. 6 Well, it's important to reconstruct what those Α. 7 distances are and be able to make the determination of 8 things like, you know, what's the reach, whether or not one person could have reached the other, you know, 10 particularly where you have a shooting case that there's 11 12 at least a description of somebody being struck or, you know, the perception of somebody coming in to strike. 13 Obviously, you want to be able to document those 14 distances to know whether or not that was a reasonable 15 perception on somebody's part; could that person actually 16 have struck them? I mean, that's sort of a basic question 17 to answer, and that is very much a reconstruction 18 19 question, I think. Is it also a reconstruction question as to 20 whether the individual that was seated in Seat 9 could 21 actually get up if he was being attacked? 22 23 Yes.

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Why is that important?

Well, I mean, with all these questions, from a Α.

reconstruction standpoint, it's a matter of answering what are the possibilities because -- you know, I'm not opining on or making decisions about the reasonableness of anything, but what I am doing is providing the information or hope to be providing, and unfortunately not as able as I could have, but so that those questions could be answered so that, you know, that could be -- information could be given to the Court.

It could be given to other experts who are looking at use-of-force and so forth, because, I mean, that's key to it, is what responses and what things could Curtis Reeves have done, what things could Chad Oulson had been able to do.

I think those are key questions that have to be answered, and that from a reconstruction standpoint and from the crime scene standpoint, that's my responsibility to be able to provide that information.

- Q. So are you wanting to determine -- if Mr. Reeves was seated in Seat Number 9, are you wanting to determine whether merely getting up would put Mr. Reeves in a position closer to Mr. Oulson?
 - A. Yes.
- Q. Would you tell the Court why that would be important in a shooting incident reconstruction?
 - A. Well, I mean, that would be a factor to be

assessed is if a person has to move closer in, then that means that the gap between them and the other person is reduced, and then potentially any violent interaction that might be taking place becomes increased. It's easier to reach and touch somebody when they get closer to you.

- Q. And is there -- in law enforcement circles, is it ever good to decrease the distance between yourself and the attacker?
- A. No. I mean, the only time as a law enforcement officer is you do it if you're actually going to take the person to the ground and make an arrest, but, if you're trying to protect yourself, you want to keep distance between you.
 - Q. Do you also want to create distance?
- A. Yes. Certainly, if you have somebody that's becoming violent, then, yes, increasing distance is preferable.
- Q. Okay. And I think we've already talked about -- and obviously that was one option -- is Mr. Reeves getting up from his seat, just merely getting up from his seat -- merely getting up would put him closer to Mr. Oulson?
 - A. It would, yes.

Q. I think we've already talked about the armrests that were present in those particular seats. Did you take that into consideration --

1 A. Yes.

- Q. -- as far as whether Mr. Reeves could create some distance from Mr. Oulson as a result of his position there in the seats?
 - A. Right.
- Q. What was your consideration with reference to that issue?
- A. Well, the armrest would preclude him from moving to the side, so that's the way I'm looking at it; which directions can he go? If he stood up, he's getting closer. If he moves to the side, he can't because he would have to go over the armrest to be able to move in that direction.
- Q. Now, in your reconstruction in this case, did you consider Mr. Reeves' weight at the time of this incident? What did he look like in that chair?
- 17 A. Yes.
 - Q. And why is that important in an incident -shooting incident reconstruction? Don't be scared to call
 him fat. I've called him fat many times.
 - A. Well, you know, one of the issues to consider when you're talking about confined space is the person's relative size, because you have one foot, ten inches between armrests, and obviously, you know, a very small person, that could be a wide seat range.

Somebody that's his size, that's not so wide, so it's restrictive in terms of ability to move, and it's restrictive in terms of where he could have been positioned, so, from a reconstruction standpoint, I'm looking at it -- you know, it limits the possibilities of where he could have been, but it certainly -- it's -- you know, it's going to be a tighter fit in that seat.

- Q. Are these the types of things that a crime scene detective should be doing in order to determine perception from the view of the shooter?
- A. Yes. I mean, you have to document these things. I mean, you have to be able to know in terms of geometric space where somebody could move, what they could do, because, you know, you as crime scene investigator may not be the one that's applying that information in terms of deciding, you know, the factors with regard to the shooting.

You're providing that information to those who are making those decisions, so it is important to be able to appropriately document and show, you know, things like spatial factors of the constraints that somebody is under and, you know, all of those types of aspects of their environment to be able to provide proper information for decision-making later.

Q. Does that include measuring Mr. Reeves right

there at the scene? "Forensics, come on over. 1 2 going to start measuring Mr. Reeves." Yes, measurements of him would be important to 3 Α. be able to reposition things and be able to figure out, 5 you know, the wound to Mr. Oulson relative to where Mr. Reeves was seated, to be able to figure out Mr. Oulson's position and things like that. During the multitude of reports that you ٥. received early on in this case, did you ever see any 10 measurements of Mr. Reeves --11 Α. No. -- by Detective Aaron Smith or the forensic tech 12 13 of the Pasco County Sheriff's Office? 14 Α. No. The forensic measurements that you saw later on, 15 Ο. were they done subsequent to our forensic measurements of 16 Mr. Reeves? 17 18 Α. Yes. Let's talk about perception distortion and how 19 Q. that plays a role in the interview process by a major case 20 crime scene detective. 21 What is perception distortion? 22 MR. MARTIN: Excuse me, Judge. Now that we're 23 24 entering another topic, we've been going for about

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two hours, and I could really use a break, please.

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THE COURT: Yes, we might as well take a break.
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          We're going to be here a while.
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               Let's take 10 minutes. We'll go to 5:15.
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                (Recess taken.)
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IN THE CIRCUIT COURT OF THE SIXTH JUDICIAL CIRCUIT OF THE STATE FLORIDA, IN AND FOR PASCO COUNTY CASE NO. CRC14-0216CFAES

STATE OF FLORIDA,

Plaintiff,

vs.

VOLUME XIII

CURTIS J. REEVES,

Defendant.

PROCEEDINGS: Stand Your Ground Motion

DATE:

February 27, 2017

BEFORE:

The Honorable Susan Barthle

Circuit Court Judge

PLACE:

Robert D. Sumner Judicial Center

38053 Live Oak Avenue Dade City, Florida 33523

REPORTED BY:

Charlene M. Eannel, RPR

Court Reporter PAGES 1553 - 1634

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Time got away

P-R-O-C-E-E-D-I-N-G-S

MR. ESCOBAR: Sorry, Your Honor.

from us. I think I remember where I was.

BY MR. ESCOBAR:

Q. Mr. Knox, perception distortion, what is that all about?

A. Well, perceptual distortion is a concept that's been studied in a couple of different studies where what's been found is the research that had been done with police officers that had been extensively interviewed following a line of duty shooting, and it's been found that a large percentage of them had experienced various different distortions of their perception.

So, for example, somewhere in the over 80 percent mark report experiencing tunnel vision, so not being able to really see anything in their periphery but being able to see only in their focal vision, directly in front of them.

Many have reported auditory exclusion, not being able to hear sounds, not being able to hear, for example, their own gunshots or the gunshots of other officers being fired during the course of a shooting, and numbers of other distortions, distortions related to time, experiencing things occurring extremely slowly or occurring rapidly, distortions with regard to memory and

memory loss, not remembering things that occurred.

So it's -- there's a fair body of research from one professional named David Klinger, who actually did a government grant study on it, and then there's another police psychologist named Alexis Artwall who has, likewise, studied it, and both have published on it and written books about it.

- Q. So do you use that phenomenon in your accident reconstruction in dealing with the perception distortion that someone seated in Seat Number 9 may be experiencing during the shooting incident?
- A. Yes. I mean, you have to give some consideration to those factors, because when you're trying to represent, for example, what a person can see, and, obviously, you know, as I sit here right now, I have peripheral vision expanding about 180 degrees, and I can see way over here to my left, way off on my right and everything in between, but you would certainly not have the same vision if you were experiencing a tunnel vision distortion at the time.

The same thing with auditory exclusion. There may be issues related to things that somebody doesn't hear and they report not hearing something, and then auditory exclusion can be the explanation for that, so it's certainly something that you would want to address and

1 document and factor that into your reconstruction.

- Q. Is this something that you would address in documenting questions, you know, certainly in the questioning of the shooter himself?
- A. Yes. I mean, when you're looking at those different types of factors, perceptual distortion and things like that, there are no diagnostic tools for that, so it's not like you can give a person a task to figure out what they were experiencing, but you can certainly interview the person and elicit that type of information from them.

So you can ask them questions related to that to try to get some clarification of what they could see and what they couldn't see, what they could hear and what they couldn't hear, and what they were experiencing during the course of that event.

The distortions don't happen just at the moment that the person is pulling the trigger. It's in the time leading up to it, because that's the stress of the event is what's creating that.

Q. We're going to get to the stress in just a second and fear, but is this a process that you would expect a major homicide crime scene investigator to have some knowledge of in order to assist in interviewing of the person that's being interrogated for the shooting on

the issues of self-defense and what they were able to see and not able to see?

A. Right. Certainly, the detective or the person that's doing the interviewing should have some knowledge of that, because they need to be able to question and elicit information with regard to whether or not the person was experiencing those sorts of things.

It's not an issue that's uncommon to law enforcement. I mean, the first time I heard about perceptual distortion was when I was in the basic academy becoming a police officer, so it's information that should be pretty readily known by most law enforcement people, because one of the reasons why it's trained to police officers certainly is that you need to know to expect it if you're ever involved in one of these incidents; if you're involved in a shooting or something, you understand what's occurring, what's taking place.

It also factors into the training that police officers receive and how that training is disseminated, the firearms training in particular that's given to police officers.

- Q. If you don't ask the proper questions in order to try to determine those particular factors, what are you left with?
 - A. Well, you're not going to have any way of

assessing or knowing whether or not the individual is experiencing any of that.

And again, when -- your purpose in documenting, reconstructing, and investigating is to figure out what perception that person had of the event, you know, so it it's key to being able to fully construct and understand what took place.

Q. Fear, anxiety -- how does that play a role in your interview process, especially of the individual that is accused of shooting?

MR. MARTIN: Your Honor, I'm going to object.

Just like the last time we went through -- I forget the topic now -- perception distortion, we never linked it up to the reconstruction. He's just criticizing the interview process potentially, I guess, of one of the officers. That's not reconstruction. What we're dealing with here is not what he's been qualified to do.

So, you know, just to say he's this omnibus crime scene reconstruction, that doesn't include every gamut that we've been talking about here, so I'm going to object. There has not been a proper predicate that -- that he's given us information, but he doesn't lead it back to the reconstruction itself, so there's no relevance.

MR. ESCOBAR: Judge, there's incredible relevance. In fact, if Mr. Martin would remember, his own officer, Aaron Smith, came up here and testified to all of this and said, "Look, we're trained yearly on this, because these particular factors, fear, tunnel vision, those types of things affect us as human beings when we're out there in the line of duty, and if we're not able to recognize those particular things, then guess what happens, okay? We die."

So what this expert is telling you is that:

Listen, this is not something that some scientist is coming up with. This is back from the days of the academy that officers are trained day in and day out on these particular factors, so that not only do they use it themselves, but when there's someone else involved in a shooting incident they can elicit that important information that's going to tell us what that person was experiencing at the time of the incident.

Why? Because we have to determine whether that person's perception was reasonable at the time of the shooting, and, if you don't ask that question right then and there, it's then lost forever.

THE COURT: All right. So the objection is that

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he should not be asking the question?

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MR. MARTIN: If he can't relate it back to, quote, "shooting reconstruction," then we've gone afar from what he was touted as an expert, and I object over and over, trying to point out examples how far afield we've come with Mr. Knox.

THE COURT: Well, somehow, Mr. Escobar has indicated that other witnesses have testified to this, too, so that ought to put it within his realm.

I'm not going to -- we can argue about it for longer than it will take for him to just testify about it. I'll -- I'm just going to allow it. I'll have to overrule, but let's --

MR. ESCOBAR: This is my last area, Judge.

THE COURT: Okay.

BY MR. ESCOBAR:

Q. Let's talk about fear and anxiety and what you have learned to use in your interviews in shooting incident reconstruction.

A. Well, what is known -- and again, I mean, going all the way back to basic academy and then the application for reconstruction is that that's the whole point, is I'm trying to reconstruct what took place including understanding what in this case Mr. Reeves perceived.

So fear leads to what's known as fight or

flight. Basically, a person who's under a stressful event where they perceive a particular threat is going to respond both psychologically and physiologically to that threat; your body actually undergoes certain things. You go through, you know, these things that cause perceptual distortion.

What happens, for example, with tunnel vision is what you do not need to see in your periphery when you're facing a threat, so your body actually diverts resources away, takes oxygen and stuff away and sends to places where you need it. You need to be able to see well in your focal vision. You need to be able to use your large muscle groups.

So one of the things that occurs is you lose fine motor skills. We learned that through the study of various different deadly force incidents including one where police officers got killed and that we used to operate -- when we would work the action on our firearm, we used to reach up, grab it with our thumb and our forefinger, and pull it back.

Then we stopped doing that in training. They changed the training and said, "No, reach over and use your whole hand and pull it back to your shoulder." The reason being is they figured out that police officers were having trouble being able do it under that stress.

They couldn't -- they didn't have the strength in their finger -- their thumb and their finger to be able to grab the slide and rack it, so they wanted to use more gross motor skills.

You know, a number of things. The days when police officers used revolvers, had to use speed loaders, they found they could not load under stress in an actual shooting because they had to get the fine motor skills to align that speed loader into the cylinder.

So these things evolved to the understanding of what happens to a person and when you're assessing a shooting incident, and this is -- we're talking about reconstruction here because we are talking about -- that's the whole idea of reconstruction, to figure out what took place, that you need to understand to the extent that those things affected the person that was shooting.

MR. ESCOBAR: One last question. It departs from this area. This is an area I failed to cover, Your Honor, that I want to just touch upon. It will take me about three minutes.

BY MR. ESCOBAR:

- Q. We talked about infrared being there in the movie theater; is that correct?
 - A. Yes.
 - Q. Tell the Court just briefly how infrared is able

to capture objects within a theater like this. What is 1 the process of infrared? 2 Well, infrared radiation is --3 MR. MARTIN: I give up. Are you going to let it in or do you want to hear it? 5 THE COURT: Yeah --6 MR. MARTIN: It's the same objection. I'm going 7 to object for the record. If you want to hear it, 8 9 you can hear it. THE COURT: At this time, I'm sure there's 10 something in his CV that talks about lighting and all 11 12 of that, so... MR. ESCOBAR: They talked about photography 13 being his expertise --14 THE COURT: Infrared and --15 BY MR. ESCOBAR: 16 How does that happen? 17 Ο. THE COURT: Overruled. 18 THE WITNESS: Well, you're talking about it's 19 part of the electromagnetic spectrum. It's basically 20 the same as lighting except that it's in a portion of 21 a spectrum that our eyes cannot see. 22 Forensically we use infrared for several things. 23 It's used in a lot in document analysis. I use it --24 I have an infrared-sensitive camera that I use for 25

documenting gunshot residue patterns on clothing and such.

BY MR. ESCOBAR:

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- Q. Why do you use it for that?
- A. Well, because what happens is because our eyes don't see it but the camera can see it, sometimes you can look at an article of clothing, particularly if you have an article of clothing that also has blood on it, and not see any type of gunshot residue, not see the powder particles, but, with the infrared camera, what happens is that blood reflects a considerable amount of infrared, so blood becomes very light in the photograph.

Conversely, the gunpowder particles absorb light and so they become very dark in the photograph, so I can actually take -- where with my naked eye I cannot see any powder particles in this clothing with blood on it, but I can take photographs with an infrared camera and be able to render that.

So what an infrared camera is basically able to do is see infrared radiation and record it where our eyes can't do it, so -- a lot of times, for example, these surveillance cameras use infrared because they can see in the dark effectively.

Q. So if you have a black shirt that is being captured by infrared camera and you see that black shirt

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in the screen as being bright white, how does that work?

A. It means that the black material is reflecting a lot of infrared.

Again, in a forensic context, we use light energy, and I testified about the light energy application course I've taken. I've used it for many, many years, but you use light energy specifically to be able to do things like take out background.

So if I have a dark substance or something that's on a dark material, oftentimes, if you use things like infrared, the dark material, if it reflects a considerable amount of infrared, it will become light, and if the material you're looking for is on it does not likewise reflect it, now you get contrast. Now you have dark material that basically turns white.

Then you have other material that remains dark, and now you have contrast to see something that under normal light and under -- with your naked eye you're not able to see.

- Q. Does the chemical makeup that's on shirts for color and what have you sometimes allow the infrared to enhance that color to like a white?
 - A. Yes.

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- Q. Tell the Court how that happens.
- A. It just means that it's reflecting a lot of

infrared, so an infrared-sensitive camera sees all that infrared and it records it as a light color, because, 2 typically if you're doing stuff with infrared, you're 3 looking at black and white images, but it's going to 4 record a lot of light for that which will make it render 5 as -- appear to be white or very light-colored. 6 Do all black objects in an infrared look white? 7 Α. No. 8 And, for example, this tone right here is a **Q**. different makeup of material than a shirt? 10 That's right. 11 Α. So this phone being out there in that theater 12 Q. could possibly not look white at all? 13 That's correct. It just depends how much 14 Α. infrared that material reflects. 15 Especially if we're talking about the back side 16 17 of the phone? Α. 18 Right. MR. ESCOBAR: Defense would pass the witness. 19 20 THE COURT: Okay. Thank you: Who's doing it? 21 Just giving him a moment. I am. 22 MR. MARTIN: May it please the Court, Counsel. 23 24 25

| 1 | IN THE CIRCUIT COURT OF THE SIXTH JUDICIAL CIRCUIT, IN |
|----|---|
| 2 | AND FOR PASCO COUNTY, FLORIDA |
| 3 | CASE NO: CRC1400216CFAES |
| 4 | VOLUME 2 (PAGES 109 - 258) |
| 5 | |
| 6 | STATE OF FLORIDA |
| 7 | -vs- |
| 8 | CURTIS JUDSON REEVES, |
| 9 | Defendant. |
| 10 | |
| 11 | |
| 12 | STATE OF FLORIDA) |
| 13 | COUNTY OF DUVAL) |
| 14 | |
| 15 | Deposition of MICHAEL KNOX, a witness on behalf of |
| 16 | the State of Florida, taken at Official Reporters, |
| 17 | Inc., 421 West Church Street, Suite 430, Jacksonville, |
| 18 | Duval County, Florida, on Thursday, April 7, 2016, |
| 19 | commencing at 9:10 a.m., before Karen Waugerman, a |
| 20 | Notary Public in and for the State of Florida at Large |
| 21 | and Registered Professional Reporter. |
| 22 | |
| 23 | |
| 24 | OFFICIAL REPORTERS, INC. |
| 25 | 421 WEST CHURCH STREET, SUITE 430 JACKSONVILLE, FL 32202 (904) 358-2090 |

1 camera -- then the use of a 50- to 60-millimeter lens

- 2 is generally what's accepted for rendering human
- 3 vision.
- 4 Q And where do you get that information from?
- 5 A Multiple sources. I mean, you see it in
- 6 texts on forensic photography. It's taught in courses.
- 7 It's taught at courses that I help teach at IPTM.
- 8 That's generally the framing that you want to use on
- 9 what's called a "crop sensor" or APSC sensor. You
- 10 would go with 35-millimeter to 45-millimeter range.
- 11 Generally 35ish is closer to human perspective, but
- 12 even then, it depends on exactly what you're trying to
- 13 render.
- 70 millimeter gets you closer to the actual
- 15 distance perspective, but 70 millimeter has a more
- 16 cropped view than obviously human vision. We have
- 17 wider frame of view than you have. So what is --
- 18 appears throughout the literature is 50 to 60
- 19 millimeter on a 35-millimeter frame is the lens choice
- 20 of option.
- 21 Q Other than the focal length of the lens,
- 22 which, when you went back in July of 2015, was
- 23 55 millimeters, was the camera basically the same,
- 24 having the came of same capabilities we previously
- 25 discussed?

- 1 A Yes.
- 2 Q Did you use solely a manual setting in order
- 3 to take the photos, or did you use any time value or
- 4 aperture values?
- 5 A Manual setting.
- 6 Q All right. And all that will be reflected in
- 7 the metadata?
- 8 A Yes.
- 9 Q As far as your light source, I assume it was
- 10 theater settings, what we talked about for lighting
- 11 and --
- 12 A Right. It would have been -- at the time the
- 13 mannequins were done, the movie -- the lights were set
- 14 to the Mid 1 setting, which is the middle setting.
 - 15 Q Were all of the photographs relating to the
 - 16 mannequins set at the Mid 1 setting by the theater
 - 17 management?
 - 18 A Yes.
 - 19 Q And other than the light -- the ambient light
 - 20 that is produced by Mid 1 setting, did you use any type
 - 21 of artificial lighting at all as far as flash
 - 22 photography, any light stands?
 - 23 A No, entirely ambient light from the theater.
 - 24 Q Once you took the photograph with the
- 25 mannequins, was there any type of post processing done,

1 as in enhancements or anything like that with the

- 2 photographs?
- 3 A No.
- 4 Q And did you treat the photographs the same as
- 5 you explained to me when you were at Cobb Theatre in
- 6 January of 2015 as far as the frame numbers and how you
- 7 downloaded them from your camera and how they were
- 8 preserved?
- 9 A Yes.
- 10 Q As far as the photographs with the
- 11 mannequins, all the metadata is still readily available
- 12 regarding those photographs?
- 13 A Yes.
- 14 Q In the photographs that were taken, a trailer
- 15 was played, as you previously testified, behind the
- 16 mannequin on the screen, which was apparently the
- 17 trailer for Star Wars. How was that one selected?
- 18 A I didn't select it. That was what the
- 19 theater management provided. We asked them to have
- 20 something playing, so they had a looping trailer that
- 21 was a Star Wars trailer, several minutes long.
- 22 Q Based on your investigation, do you know what
- 23 trailer was being played at the time of the shooting on
- 24 January 13th, 2014?
- 25 A Not other than it was a Star Wars trailer. I

- 1 don't know the differences between all of those.
- 2 Q In 2014, at the time of the shooting?
- 3 A In terms of the shooting, no. That also,
- 4 likewise, does not appear to be documented anywhere as
- 5 to what exactly the trailer was that was played.
- 6 Q In doing the shooting reconstruction, how
- 7 important is it for you to have the environment that
- 8 you're trying to document as similar as possible as to
- 9 when the actual event took place?
- 10 A Well, I mean, obviously, you want it to be as
- 11 similar as it can be. With any dissimilarities, you
- 12 have to assess to determine how much it affects the
- 13 outcome of the reconstruction.
- 14 Q As far as the background lighting, running
- 15 the Star Wars trailer looped as opposed to the actual
- 16 trailer that was being played at the time of the event,
- 17 how did that impact on your shooting reconstruction?
- 18 A Well, what I did with the trailer that was
- 19 looping is that -- and you can see from the photographs
- 20 that there's -- there were a number of different
- 21 scenes. There were darker scenes, where there's much
- 22 darker background. There were scenes where there's
- 23 bright white background. So as I shot the photographs,
- 24 I'd take pictures intentionally as it looped through
- 25 that.

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1 Again, it's just sort of the same as the
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- 2 boundary values with the measurements. What I'm doing
- 3 is getting photographs with a variety of different
- 4 background lighting to basically be able to cover the
- 5 gamut of what could be reasonably possible.
- 6 MR. MARTIN: Madam Court Reporter,
- 7 what's my next number, please?
- 8 THE REPORTER: 25.
- 9 (The item last above referred to was marked
- for identification as State's Exhibit No. 25.)
- 11 BY MR. MARTIN:
- 12 Q Let me show you Depo Exhibit No. 25, which is
- 13 Frame No. P1, series of photographs that you gave me.
- 14 It appears in the review of the photographs -- and you
- 15 can look at the pictures that are in front of you --
- 16 Frames 1 through 13 are basically the mannequin in the
- 17 position we see in Frame No. 1 with different screen
- 18 backgrounds.
- 19 A That's right.
- 20 Q All right. So using Depo Exhibit No. 25,
- 21 Frame No. 1, what are you attempting to document with
- 22 the mannequin in that particular position with the
- 23 different screen lighting in the background? What are
- 24 you trying to document?
- 25 A Well, this is showing -- the mannequin is

- 1 positioned standing in front of Mr. Oulson's seat,
- 2 which would mean the No. 8 seat in the second to last
- 3 row. And then the camera is from me taking the
- 4 photograph while seated in Mr. Reeves' seat, which is
- 5 the No. 9 seat in the last row.
- 6 Q All right.
- 7 A And what I'm attempting to do here is render
- 8 images that will give a sense of what the visual
- 9 perspective is from Mr. Reeves' vantage point as he's
- 10 looking at Mr. Oulson, if Mr. Oulson were standing
- 11 there in front of his seat.
- 12 Q All right. Did you take any measurements of
- 13 Mr. Reeves?
- 14 A Yes.
- 15 Q What measurements did you take and what are
- 16 they?
- 17 A His standing height, six feet, one inches.
- 18 Then in the standing position, I measured to his --
- 19 from his shoulder seam to the tip of his middle finger,
- 20 which was two feet, 4.5 inches. Then the shoulder seam
- 21 to his elbow was ten inches. And the shoulder seam to
- 22 his wrist was one foot, eight inches. And then in a
- 23 seated position, measured from the seat up to his --
- 24 the top of his right shoulder, which was one foot,
- 25 11 inches.

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1 Q Well, when you talk about the seat, we're
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- 2 talking about the cushion part, the plastic part
- 3 underneath? Where was the start of the measurement?
- 4 A Well, this was not measured in a theater
- 5 seat. This was with him seating on a chair at his
- 6 residence, a wooden kitchen chair. All I'm trying to
- 7 do is get the measurement from the bottom of his body
- 8 in a seated position, up to the top of his shoulder in
- 9 a normal upright fully erect seating position.
- 10 Q All right. Basically from his buttocks to
- 11 the top of his shoulder?
- 12 A That's right.
- 13 Q Regardless of what kind of chair he's in.
- 14 A Right. 'Cause I'm measuring, not including
- 15 any -- on a wooden chair so there was no compression of
- 16 the chair to interfere with that.
- O What was that measurement?
- 18 A One foot, 11 inches.
- 19 Q Okay. What other measurements did you take?
- 20 A That's the measurements. That's all of them.
- 21 Q How did you determine the eye level of
- 22 Mr. Reeves in a seated position, relative to any
- 23 furniture that he may be in?
- 24 A Well, all I would be able to know in any
- 25 measurement of him is what's his maximum eye level. I

- 1 didn't know exactly what his eye level was at the time, ...
- 2 you know, because obviously, me sitting up here right
- 3 now, fully erect in this seat, my eye level's different
- 4 than if I'm leaned back relaxed in a chair. It drops
- 5 considerably.
- 6 Q That's why I'm trying to figure out is when
- 7 you took the photograph of Frame No. 1, Depo Exhibit
- 8 No. 25, you placed the lens at a particular height
- 9 above the floor. How did you make a determination that
- 10 that was Mr. Reeves' level at the time that -- we
- 11 haven't gotten to when this represents but at any time?
- 12 A Well, I don't have any way of knowing exactly
- 13 what his eye level was at any point given. In fact,
- 14 his eye level changes throughout the course of the
- 15 event. I mean, there are times when his head is
- 16 visible above the chair. There are times when it is
- 17 not. So there's no way to really bring that to a
- 18 particular eye level and say it's this level to the
- 19 exclusion of anything else.
- 20 . What I did is use me in a seated upright
- 21 position at my eye level. I'm a little shorter than he
- 22 is so that would probably -- would be something below
- 23 what his fully upright eye level would be and something
- 24 probably above what his leaning back eye level would
- 25 be.

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1 Q Did you -- when you took the picture, did you
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- 2 measure, as far as the center of your lens down to the
- 3 floor, as to what the height was at the time Frame
- 4 No. 1, Depo Exhibit No. 25, was taken?
- 5 A I don't remember measuring that. I gauged it
- 6 from my height in a seated, upright position. I wasn't
- 7 slouching or anything in the seat. I was in a fully
- 8 seated position just like this.
- 9 Q When you took the measurements that we've
- 10 been discussing that you did in January, you did some
- 11 bracket values. Did you do any such bracket valuing,
- 12 Frames 1 through 13, represented by Depo Exhibit
- 13 No. 5 -- 25, as far as different levels that you held
- 14 your camera to try to do a boundary -- bracket value
- 15 boundary? No, that's not it?
- 16 A Boundary value.
- 17 MR. MARTIN: I thought of it and still
- 18 screwed it up. I even took time.
- 19 MR. ESCOBAR: It just didn't come out.
- 20 BY MR. MARTIN:
- 21 Q All right. Start over. We discussed earlier
- 22 in the taking of the measurements that you bracketed
- 23 your measurements so that you could give a range of
- 24 when certain things could take place. So my question
- 25 to you is in July of 2015, when you were holding the

- 1 camera and taking the pictures of the mannequins,
- 2 represented by Frames 1 through 13, did you do the same
- 3 or similar process, where you held the camera at
- 4 different levels from that same position to give us a
- 5 boundary, if you will, a range of where Mr. Reeves'
- 6 level could be?
- 7 A No, no.
- 8 Q Is that something you normally do or never
- 9 thought of doing or doesn't matter?
- 10 A No. I considered that obviously because what
- 11 I actually did is I look at, as I would do in any case,
- 12 what is the affect. So I can take the camera before I
- 13 start taking photographs, looking through viewfinder
- 14 and seeing what's the effect of the photograph? Is
- 15 there any substantial change occurring within the frame
- 16 of the photograph if I move the camera down lower, if I
- 17 move it up higher? What I found is that there's
- 18 basically insignificant change in terms of what you
- 19 would see and the vantage point, and so I shot it from
- 20 my fully upright eye level. I actually had the camera
- 21 on a tripod directly in front of me, and I shot it from
- 22 that level. So basically it would be the mid point
- 23 between what I consider to be the boundary values for
- 24 his eye level.
- 25 Q Now, you were seated in the seat.

- 1 A Yes, sir.
- 2 Q The camera was on a tripod on the floor in
- 3 front of you.
- A Right. I had to position legs where I didn't
- 5 have it -- like, fully open tripod. I had to basically
- 6 open it and lean back so that the camera was right here
- 7 in front of me.
- 8 Q What do you mean, leaned back?
- 9 A Well, if I were to sit in the seat right here
- 10 and set up a tripod, the camera would obviously be way
- 11 out here. What I needed is the camera to be back here
- 12 at my eye 'cause I want the film plane to be as close
- 13 to -- or sensor plane to be as close to my eye as.
- 14 possible. So what I did is set the tripod up so that
- 15 the camera was leaned back, and the camera was directly
- 16 in front of my eye.
- 17 Q And how did you determine where to place the
- 18 manneguin representing Mr. Oulson? You had to stick
- 19 him in space and time three-dimensionally somehow.
- 20 What were the facts that you used to put him in a
- 21 particular position?
- 22 A Well, in relation to Exhibit 25 and the
- 23 series of photographs that are depicted in that
- 24 position, he is in a standing position in front of the
- 25 seat, just fully standing upright with the seat back

- 1 lifted up. And we positioned the mannequin so the top
- 2 of its head would be at the top of his height, which
- 3 was six feet, four inches is what was documented in the
- 4 autopsy. So that's the positioning for that.
- 5 And then as the series of photographs
- 6 progress, then I moved him to different locations to
- 7 show different possibilities.
- 8 Q We'll go over those. But representative of
- 9 the photographs, Frames 1 through 13, for static, we
- 10 just have the different backgrounds.
- 11 A That's right. What I did is he's positioned
- 12 there, and then I actually waited as the trailer went
- 13 through and as the background would change. Bright
- 14 background, I snapped a picture. Background changes
- 15 and then you go through that series. So you can see
- 16 there's probably a half dozen or so in that position
- 17 but with different backgrounds.
- 18 Q Okay. When you placed the mannequin in its
- 19 position, the seat back on the row below Mr. Reeves
- 20 where Mr. Oulson was seated you indicated was up? Is
- 21 that what you said?
- 22 A Yes, the seat back and seat bottom.
- 23 Q I meant the seat bottom is up.
- 24 A Yes.
- 25 Q Then you place the mannequin flush against

- 1 the seat?
- 2 A Yes, yes, basically as if he had just stood
- 3 up from his seat and was standing in that position.
- 4 Q Okay. At what point in time is Frames 1
- 5 through 13 supposed to represent?
- 6 A It doesn't represent any specific point in
- 7 time in the -- because we don't know from the video any
- 8 specific location or stance or body positioning of
- 9 Mr. Oulson other than the couple of times that his arm
- 10 reaches into the frame. What I'm doing here is just
- 11 took a number of different possibilities and presented
- 12 those to be able to give, again, a sense to the
- 13 viewers, to the jury, the Court or whoever may be
- 14 considering it, what the lighting conditions would
- 15 appear to be to Mr. Reeves at the time.
- 16 Q And regarding Depo Exhibit No. 25, Frames --
- 17 Frame 1 -- which we have marked as exhibit, being
- 18 representative of Frames 1 through 13, based on the
- 19 procedure that you followed in producing those
- 20 photographs, how it is they are a fair and accurate
- 21 representation of what Mr. Reeves observed at some
- 22 unknown time in the theater while he was seated in his
- 23 seat? I assume it would have to be a time when
- 24 Mr. Oulson is standing since you put the mannequin in
- 25 the standing position, which is a very limited time

- 1 period.
- 2 MR. ESCOBAR: I'm going to object to
- 3 that last assumption because Mr. Martin does
- 4 not know what that time period is.
- 5 BY MR. MARTIN:
- 6 Q Well, let start over. Mr. Knox, is there any
- 7 other time, any time, other than one time, that
- 8 Mr. Oulson stood up? Based on witness testimony,
- 9 anybody, video, anything, how many times did Mr. Oulson
- 10 stand up?
- 11 MR. ESCOBAR: I'm going to object. I
- 12 don't believe this witness can answer that
- particular question. And you can't assume it
- 14 either.
- 15 BY MR. MARTIN:
- 16 Q Based on all the witness testimony, all the
- 17 depositions, all the police reports --
- 18 MR. ESCOBAR: He doesn't have all the
- 19 witness testimony.
- 20 BY MR. MARTIN:
- 21 Q Based on what you know of this particular
- 22 case, how many times did Mr. Oulson stand up?
- 23 A Well, I don't have any way of knowing,
- 24 outside of what the testimony is, which is incomplete.
- 25 Nobody's testimony is that he stood up at this time and

- l then got shot at this time and nothing else occurred in
- 2 between. But obviously, when the beginning of this
- 3 altercation took place, he stood up.
- 4 Q Who stood up?
- 5 A Mr. Oulson.
- 6 Q At what point in the altercation?
- 7 A Shortly after Mr. Reeves returned from
- 8 speaking to management, but exactly when, I don't
- 9 really know because it's not depicted in the video. I
- 10 mean, if you base it on the video, the only thing you
- 11 know is the two times that Mr. Oulson's arm appearing
- 12 within the frame. From that, I can't really discern
- 13 much other than that his -- he's obviously reaching in
- 14 the direction of Mr. Reeves.
- 15 Q So he'd have to be standing at that point,
- 16 when the popcorn was tossed?
- 17 A Well, he could be -- he could be standing.
- 18 He could be leaning over his seat. He could have a
- 19 knee on the seat. There's a number of possibilities
- 20 from that. I don't have any way of discerning that.
- 21 Q Well, that's what I'm trying to figure out is
- 22 exactly what you're trying to document in Frame No. 1
- 23 through 13, Depo Exhibit No. 25. You have the
- 24 mannequin standing. You indicated how you positioned
- 25 it standing, standing close with the seat -- with his

1 seat back up, and you pressed it all the way forward.

- 2 Now, there's something in the facts that you've
- 3 determined that that's the appropriate place to put
- 4 this mannequin and you took pictures. At what point in
- 5 time did that occur?
- 6 A Well, you've assumed that I picked that
- 7 location because of the facts of the case. If it were
- 8 relying on the facts of the case and the evidence that
- 9 we have, there would be no way to really know exactly
- 10 what position he was in at any given point within the
- 11 time.
- 12 Q So how does Frames 1 through 13, represented
- 13 by Depo Exhibit No. 25, fairly and accurately represent
- 14 what Mr. Reeves saw at any point since you don't know?
- 15 A Well, I don't -- you have to understand, what
- 16 I'm doing here is a simulation, not a representation of
- 17 what he saw. This is -- this is a representation of
- 18 what the lighting conditions are like under those
- 19 circumstances when you have a person that's standing or
- 20 in the various different positions that I had the
- 21 mannequins in. It's not intended to be this is what
- 22 Mr. Reeves saw. There's no way to duplicate that.
- But this is what it looks like if a person is
- 24 standing here in this position, while you have various
- 25 scenes playing on the screen, and you have the house

- 1 lights set at the level that they were set. That's
- 2 what I'm representing is various possibilities and
- 3 various different configurations to give a sense of
- 4 what that lighting is like as far as what a person can
- 5 see. Because other than that, not being in the movie
- 6 theater, nobody that's reviewing this case can really
- 7 know or get any sense of what it would be like -- what
- 8 Mr. Reeves would see, apart from testimony which is
- 9 very difficult to describe in words to people what this
- 10 would look like.
- 11 Q Well, that's why I was asking the question
- 12 because you just said this is what Mr. Reeves would
- 13 see.
- 14 A Well, no. It's not what Mr. Reeves would see
- 15 as far as -- this is not Chad Oulson. This is not the
- 16 exact time, distance. You know, we don't have that
- 17 information. But this is a representation of what it
- 18 looks like if you have a person standing, who is
- 19 basically the size and shape of Chad Oulson, who's
- 20 standing in this location. You have the movie --
- 21 something playing, a trailer playing, on the screen,
- 22 and you have the house lights set at the setting that
- 23 they are. This is what the lighting conditions appear
- 24 like to a person who is sitting in that seat.
- It is not meant to represent every detail

- 1 of -- accurately of what actually took place. It is
- 2 meant to give a sense of what that lighting looks like
- 3 to a person in this position.
- 4 (The item last above referred to was marked
- for identification as State's Exhibit No. 26.)
- 6 BY MR. MARTIN:
- 7 Q Let me show you Depo Exhibit No. 26, Frame
- 8 No. 14, representing a series of photographs, Frames 14
- 9 through 23. The reason I grouped them together is
- 10 because in all those photographs, there is a red line,
- 11 which I believe is indicative of your interpretation of
- .12 the path of the bullet or trajectory. You see that in
- 13 the photograph?
- 14 A Yes.
- Okay. So I guess we're going to have to
- 16 tackle two areas because when we were talking about
- 17 Depo Exhibit No. 25, you indicated that you took
- 18 photographs with the trailer being looped in the back
- 19 at different distances, right?
- 20 A That's right.
- 21 Q All right. So Depo Exhibit No. 26, Frame
- 22 No. 14, the distance between the lens and the mannequin
- 23 is either through adjustment of the lens itself or
- 24 physically moving the camera. It appears to be
- 25 different. Can you explain to me what you're trying to

- 1 depict as far as not the trajectory but just the
- 2 mannequin and the trailer that's being looped in the
- 3 background? What are you attempting to depict?
- 4 A Well, this depiction here is repositioning --
- 5 basically positioning him in an alignment with the
- 6 chest trajectory. I think there are some other ones in
- 7 here where we actually have the hand up and ---
- 8 Q And we're going to get to those. What I'm
- 9 concerned with is does this group of photographs,
- 10 Frames 14 through 23, serve a purpose other than the
- 11 trajectory? Because you indicated when we were
- 12 discussing Frames 1 through 13 that you actually took
- 13 pictures closer. And this appears to be closer. I'm
- 14 just trying to determine if these series of photographs
- 15 have a multiple use.
- 16 A I -- I don't think this series actually is
- 17 closer. It is -- the camera has been tilted down a
- 18 little bit.
- 19 Q All right. So what are we attempting?
- 20 A Instead of looking -- instead of centering on
- 21 here, what I've I done in Exhibit 25 and the associated
- 22 photographs with that one is positioning frame so that
- 23 it's as if you're looking at his head. Mr. Oulson's
- 24 head or the mannequin's head would be within the frame.
- What I've done here would be if you shifted

- 1 your eye. So in Exhibit 26, if you shifted you're
- 2 towards looking at the chest.
- 3 Q All right. Again, you took a series of
- 4 photographs with different screen backgrounds at that
- 5 same angle. What were you trying to document with that
- 6 series of photographs, 14 through 23, when we have the
- 7 red trajectory? Is that a laser?
- 8 A No. I think we did this with just a string
- 9 on this.
- 10 Q String?
- 11 A Yeah.
- 12 Q So what were you trying to document with this
- 13 series of photographs?
- 14 A This is just the same type of view but
- 15 showing if you moved your ey level down to looking at
- 16 the body. The key is with this and with several of the
- 17 other configurations is that as you're moving and
- 18 looking at different portions of the body, obviously
- 19 the amount of background lighting changes. Because if
- 20 you're looking at the torso as opposed to the head,
- 21 you're seeing more of the body, less of the background.
- 22 So that's what I'm doing is just taking
- 23 several different series of photographs from different
- 24 positionings to demonstrate what's the net effect of
- 25 changing eye positioning and then several that show

- 1 changing in position of the mannequin.
- 2 Q And how did taking the series of
- 3 photographs -- I'm going to lump them together -- Depo
- 4 Exhibit No. 25 and 26, Range 1 through 23, when you're
- 5 just changing your focal point of where you're looking
- 6 with the background? How did that aid in your
- 7 investigation as far as reconstructing of this crime?
- 8 What does that -- what does that go to? I'm trying to
- 9 figure out how you use that information.
- 10 A Well, what this is doing is providing some
- 11 representation of what that lighting would be like.
- 12 Q And how is that relevant to the shooting
- 13 reconstruction?
- 14 A Well, because part of reconstruction is to be
- 15 able to determine what Mr. Reeves would be able to see.
- 16 I mean, we do that all the time in officer-involved
- 17 shootings. You know, where a police officer on duty
- 18 shoots somebody, it becomes big issue as far as
- 19 perception. There are police-involved shootings all
- 20 the time where a person pulls out a fake gun or they
- 21 pull out a cell phone or they pull out some other
- 22 object, a wallet, and the police end up shooting them,
- 23 mistaking that object to be something different,
- 24 thinking it's a weapon.
- 25 So you document and in this similar fashion

- 1 to be able to show what was the officer's perspective
- 2 because the issue isn't whether or not it was a wallet
- 3 or an innocuous object or an actual weapon. The issue
- 4 is what did the person firing perceive it to be, and
- 5 how do they perceive the situation.
- 6 So part of reconstructing it is to be able to
- 7 show and demonstrate to the best of our ability what --
- 8 what Mr. Reeves would be able to see and perceive in
- 9 this situation.
- 10 Q I'll ask you the same question I did with
- 11 Depo Exhibit No. 25 with Depo Exhibit No. 26, the
- 12 taking of the series of photographs, Frames 14 through
- 13 23. Explain to me how those photographs fairly and
- 14 accurately then represent what Mr. Reeves saw. That's
- 15 what you just said was important.
- 16 A Well, again, with this representation --
- 17 which frames did you say?
- 18 Q Frames 14 through 23.
- 19 A This is giving another representation of --
- 20 this is -- basically the same positioning of the
- 21 mannequin as the first 13 frames but with the eye
- 22 looking downward.
- 23 Q All right. So --
- 24 A I'm giving a different possibility of what
- 25 could occur.

- 1 Q I appreciate that. My question was, explain
- 2 to me how that is a fair and accurate representation of
- 3 what Mr. Reeves saw.
- 4 A Because this is a fair and accurate
 - 5 representation of what the lighting conditions would
- 6 appear to be, the silhouetting of a human figure and
- 7 things like that. It is not a representation of what
- 8 he actually saw. But it is a representation of what it
- 9 looks like when you have a human figure in this
- 10 location, in this theater, with this lighting.
- 11 Q And what was the purpose of the red string,
- 12 Frames 14 through 23?
- 13 A Well, a lot of that was for setup because we
- 14 wanted it to use for positioning so that we could get
- 15 proper alignment where Mr. Oulson's body would be when
- 16 the shot was fired. This is not a representation that
- 17 that's his positioning at the time that the shot is
- 18 fired because clearly, he had his hand up and things
- 19 like this. But what we had put the string on there to
- 20 be able to help with our alignment and make sure that
- 21 the positioning fit with the physical evidence.
- 22 Q Are you then suggesting that Frames 14
- 23 through 23, represented by Depo Exhibit No. 26, is what
- 24 Mr. Reeves saw at the time that the gun was fired?
- 25 A No.