1 You may proceed. 2 MS. MAGNESS: Thank you, Judge. 3 KIMBERLY ZELLER, 4 having been first duly sworn, testified as follows: DIRECT EXAMINATION 5 BY MS. MAGNESS: 6 7 Q. Good morning. 8 Α. Good morning. 9 Would you introduce yourself to our Ο. 10 jury, please? 11 My name is Kimberly Zeller. Α. 12 And, Ms. Zeller, who do you work for? Ο. 13 For the City of Houston at the Houston Α. 14 Police Department Crime Laboratory. 15 And explain to the jury what your duties Ο. 16 are with the crime laboratory. 17 I test fire firearms for functionality Α. 18 and safety. I examine fired evidence cartridge 19 cases and bullets to determine if they were fired in 20 the same firearm or a particular firearm. 21 And what's your official title? Ο. 22 Criminalist. Α. 23 Let's talk about your educational Q. 24 background. 25 Α. I earned a Bachelor's degree in

1 biological sciences from Southern Illinois 2 University. 3 And after graduating did you come to Q. work immediately for the department? 4 5 No, after college I worked as a research Α. scientist for a pharmaceutical company and then I 6 7 became a forensic scientist here in Houston after 8 that. 9 In order to qualify you for the work Ο. 10 that you do, did you have to attend armors courses? 11 Yes, I did. Α. 12 And explain to the jury what those Ο. 13 courses entail. 14 Α. I took courses from Colt Firearms, 15 Hi-Point Firearms, Sig Sauer Firearms and Glock 16 Firearms; and those courses are -- they talk about 17 the functionality of the firearm. You learn how to 18 detail strip, field strip those firearms and how to repair them, if necessary. 19 20 Q. So essentially those courses make you an expert in firearms? 21 22 They're part of the training process, Α. 23 yes. 24 Okay. I understand you've also gone to Ο. 25 multiple training courses and seminars. Can you

tell the jury about those as well? 1 2 Uh-huh. I'm a member of the Association Α. 3 of Firearm and Tool Mark Examiners. And every year they have a training seminar and I've been able to 4 5 go to two of those. 6 Ο. Okay. Any certifications that you have 7 as well? 8 Α. Yes. I'm certified by the American 9 Board of Criminalistics. 10 Ο. And what exactly does that mean? It means I've been able to take a test 11 Α. 12 and have been qualified by this American Board of 13 Criminalistics to do this type of job. 14 And, finally, let's talk about your Ο. 15 additional accomplishments you've achieved in your 16 professional capacity. 17 Is there something specific you'd like Α. 18 me to discuss? 19 Q. I just want you to tell them about the 20 completion of the barrel testing and the --21 Α. I've completed what's called the Ruger 22 ten barrel test, the ten slide test and also the 23 Hi-Point ten slide test. And these are tests 24 provided in the after community. They come from 25 firearm parts that are consecutively manufactured,

1 meaning those items were manufactured one after the 2 other. So they're a little difficult and you have 3 to identify unknowns to the known slide or barrel 4 that they came from. 5 Ο. Let's -- what I'd like for you to do is 6 educate the jury generally about what happens to a 7 bullet and a casing when it is fired from a specific 8 weapon. 9 So my first question is can you take 10 either a bullet or a casing and determine whether or 11 not it is consistent with being fired from a 12 specific weapon? 13 Yes, in most cases you can do that, yes. Α. Let's talk, first of all, about what 14 Ο. 15 happens to a projectile, a bullet, as it passes 16 through the muzzle of a gun and is discharged. 17 Α. May I use my model? 18 Yes, please do. Ο. 19 Α. This model represents a cartridge. Some 20 people call it the bullet, but that's the incorrect 21 term. It's actually a cartridge, and it consists of 22 four parts. There's the primer here on the bottom. 23 There's the cartridge case, which is this portion 24 (indicating), the bullet on this end (indicating), 25 and inside is the powder, the propellant. Okay?

1 So as the cartridges is loaded in the chamber -- I'm speaking of semiautomatic firearms at 2 3 this point. There are several different types of firearms, but we'll stick with the semiautomatic for 4 5 this part. The cartridge is loaded into the chamber 6 from the magazine typically, sitting inside the 7 chamber; and as you pull the trigger, the firing pin 8 will be released and strike the primer here on the 9 bottom. 10 Inside this primer is an impact 11 sensitive explosive, and on the cartridge case 12 there's a little flash hole on the inside so the 13 flame from the primer is going to ignite your powder 14 causing a lot of gas and pressure to build up which 15 is going to propel the bullet down the barrel of the 16 firearm. 17 As the bullet goes down the barrel of 18 the firearm, the barrel -- it's typically called 19 rifling. It -- if you think of a football player 20 throwing a pass, a spiral pass, it gives it a trajectory. Well, that's what the barrel does. 21 Ιt 22 causes the bullet to twist as it goes down the 23 barrel. So it's better accuracy, better trajectory. 24 But in doing that, the barrel has these 25 raised and lowered portions called lands and

1 grooves, causes these striations on the bullet that 2 you can see here, the lands and grooves impressions 3 as it goes down the barrel. Ο. Those lands and grooves that are on the 4 5 interior of the barrel, how do those get there? 6 Α. Through the manufacturing process of the 7 firearm. 8 Q. And let's say -- let's say we're talking 9 about a .9 millimeter Glock. Is every .9 millimeter 10 Glock going to have the same land and groove 11 markings? 12 What they might have is the same number Α. 13 of lands and groove markings. They might have the 14 same direction of twist, which is going to tell the 15 bullet to go to the left or to the right; but the 16 individuality would be different. 17 Okay. And I guess that's -- that's the Ο. 18 point that -- that I want to make is that while all 19 .9 millimeter Glocks may have consistent land and 20 groove characteristics, the specific land and 21 grooves are individual to the weapon? 22 Yes, that's correct. Α. 23 Okay. And so the pattern inside the Ο. 24 barrel of the firearm is then transferred to the 25 projectile?

1 Α. That is correct. 2 Okay. When you receive a firearm into Q. 3 the lab, explain to the jury how you go about first 4 just testing its functionality. 5 Okay. After it's gone through what we Α. 6 call a log-in process where our evidence is engraved 7 and documented, it will come to me as part of my 8 casework. The first thing I do is I check the 9 firearm, make sure it's clear, so just double-check, 10 safety first. 11 Then I will go through and check the 12 barrel to see if there's any dirt or dirt material 13 in the barrel, anything blocking the barrel. This 14 is another safety check. 15 We will then check the safety, the 16 actual safety on the firearm, make sure they're 17 functioning. After that we'll check the trigger 18 pull, which is testing how much force is required rearward to pull the trigger. It's measured in 19 20 pounds. We will --21 Ο. And let interrupt you for just a moment. 22 Α. Sure. 23 Can you explain to them specifically how Ο. 24 you test for trigger pull? 25 Α. Uh-huh. Sure. You can think of, okay,

1 if I hold the firearm in a vertical position and I'm going to hang a hook off of the trigger. 2 Let's say 3 that we hang a bag of sugar off of that. Sugar typically comes in 4 to 5-pound bags. 4 So we can 5 measure that in weight off that trigger. I think 6 some trigger pulls vary. You can have as light as 1 7 pound, as much as 20 pounds. So all we do is we 8 have a spring scale. We pull the trigger, and it 9 measures and tell us how many pounds of pressure are 10 required to pull that trigger rearward to discharge 11 the firearm. 12 All right. Once you make sure that the Ο. 13 weapon is safe for testing and you have established 14 the trigger pull of the weapon, what do you do to 15 determine whether or not the gun is actually 16 functioning properly? 17 We'll test fire the firearm. Α. 18 And how do you do that? Q. 19 Α. We have the option of using evidence 20 ammunition that comes in the case or we also have a 21 large supply of stock ammunition. And it's examiner 22 discretion as to what we use. We like to compare 23 apples to apples so we want to use as much similar 24 ammunition as we can to whatever came in the case. 25 Ο. And how do you go about test firing?

1	A. We have a shooting room and a water
2	tank; and then we will load the magazine into the
3	firearm, which is pointed into the water tank for
4	safety. We say "preparing to fire," "ready to
5	fire," "firing," and we pull the trigger. We fire
6	the firearm typically three times each set of test
7	fires.
8	Q. And so each time you test fire the
9	weapon you are getting not only a casing but do you
10	also have the projectile that is fired into the
11	tank?
12	A. Yes, we do. We collect the cartridge
13	casings and the bullets.
14	MS. MAGNESS: May I approach the
15	witness, Judge?
16	THE COURT: Yes, ma'am.
17	Q. (By Ms. Magness) All right. I'm going
18	to show you what's already been admitted into
19	evidence as State's Exhibit No. 40 it's a .9
20	millimeter firearm State's Exhibit No. 42, which
21	is live ammunition; and then State's Exhibits No. 31
22	and 32.
23	Let's start, first of all, with State's
24	Exhibit No. 40. Did you receive that weapon in the
25	laboratory and did you perform testing on it?

1 Α. May I pick it up? 2 Yes, of course. Ο. 3 Yes, I did receive this. Α. 4 And will you describe for the jury what Ο. 5 type of weapon that is, please? 6 Α. This is a .9 millimeter Luger Jimenez 7 Model JA9 pistol. 8 Ο. And with reference to the report that 9 you generated, your laboratory report, did you 10 document that serial number in your laboratory 11 report? 12 Α. Yes, I did. 13 And for purposes of reference, what item Ο. 14 number did you give State's Exhibit No. 40? 15 We called this Item 2. Α. 16 MS. MAGNESS: May I approach, 17 Judge? 18 THE COURT: You may. 19 Q. (By Ms. Magness) I'm going to show you 20 also State's Exhibit No. 53. Can you identify that 21 item? 22 Yes, I can. Α. 23 And what is it? Ο. 24 It is a copy of my laboratory report. Α. 25 Q. And is it an exact duplicate of the

1 original? 2 With the exception of missing signatures Α. 3 on the back page, yes. 4 Ο. And were the entries made by you? 5 Α. I'm sorry? 6 The entries on the report, were they Q. 7 made either by you or someone with personal 8 knowledge? 9 Α. Yes. 10 And were those entries made at or near Ο. 11 the time of the events that they were recording? 12 Α. Yes. 13 And the laboratory report, is it kept in Q. 14 the normal course of business of the Houston Police 15 Department Crime Laboratory? 16 Α. Yes. 17 And does this report document your Ο. 18 findings, specifically your analysis of State's 19 Exhibit No. 40? 20 Α. Yes. 21 MS. MAGNESS: Tendering State's 22 Exhibit 53 to opposing counsel. 23 (State's Exhibit No. 53, Lab 24 Report, offered.) 25 MR. CORNELIUS: No objection,

1 Judge. I've seen it. 2 THE COURT: No objection, 53 is 3 admitted. 4 (State's Exhibit No. 53 admitted.) MS. MAGNESS: May I offer --5 6 publish it, Judge? 7 THE COURT: Yes, ma'am. 8 Q. (By Ms. Magness) Okay. Your report 9 lists other firearms that you tested, but what I 10 want to do is focus in specifically on Item No. 2, 11 which is this .9 millimeter Luger. 12 When you received that weapon in the 13 lab, did you also receive ammunition for that 14 weapon? 15 We did, yes. Α. 16 And when you test fired the Luger, did Ο. 17 you use the ammunition that you received or did you 18 use stock ammunition that you had in the lab? 19 I used evidence cartridges from another Α. 20 item in the case. 21 Okay. Now, I want you to take a look at Q. 22 Item No. -- sorry -- Exhibits No. 31 and 32. Do you 23 recognize those items? 24 Α. Yes, I do. 25 Ο. And what are those items?

1 Α. These are actually fired .9 millimeter Luger cartridge cases. 2 3 Now, in your report what item number did Q. you give those two casings? 4 These are Items 1.1 and 1.2. 5 Α. 6 Ο. And Items 1.1 and 1.2 correspond with 7 State's Exhibit 31 and 32, correct? 8 Α. Yes, that is correct. 9 Ο. Now, below that there is indicated in 10 your report that you received one core fragment that 11 has a medical/legal number associated and another 12 fragment that has the same medical/legal number 13 associated with it. Were those two items suitable 14 for testing? 15 No, they were not. Α. 16 And can you explain to the jury why they Ο. 17 are unsuitable for testing, why you can't use those 18 items to draw any conclusions? 19 Α. One item is a core, which is the inside 20 of the bullet without the jacket on the outside, and 21 the other one was just a fragment. And they didn't 22 have those land and groove markings that we were 23 talking about earlier on them, so there's nothing to 24 compare. 25 Q. Okay. So in -- I guess in laymen's

1 terms those two items were at one time part of a 2 bullet, correct? 3 Α. Yes. And either from being fired or whatever 4 Ο. 5 damage or defects were caused from the item they 6 struck or the person that they struck, they -- so 7 much damage had been caused to them that you just 8 can't use them for comparison purposes? That is correct. Because of the damage, 9 Α. 10 there's nothing I could really look at on it. 11 Ο. Okay. Now, those two cartridge casings, 12 you've already done test fires using the .9 13 millimeter Luger. So you have known casings fired 14 from that .9 millimeter, correct? 15 That is correct. Α. 16 Now, did you then take State's Exhibit Ο. 17 31 and State's Exhibit No. 32 and compare those 18 items to your known test fires? 19 Α. Yes, I did. 20 And tell the jury how you go about Ο. 21 making that comparison. 22 The first thing I'll do is I'll look at Α. 23 my test fires. I want to look for consistency in 24 the markings. Like I said, I shot three, three 25 cartridges, so we have three cartridge cases to look

1 at that that we fired. So I established the 2 consistency and then I brought in the evidence 3 items, and I looked at those and compared those to 4 my test fires. 5 Ο. And is that a microscopic examination 6 or --7 Yes, it is. We use what's called a Α. 8 comparison microscope. In a nutshell it's two 9 microscopes put together with an optical bridge. Тο 10 give you a better idea, there's two stages where you 11 put your evidence and I can look at those items at 12 the same time through the one set of binoculars at 13 the top. 14 Ο. Okay. So you can look at your known 15 test fire right up next to your evidence shell 16 casing and make comparisons between the two? 17 That is correct. Α. 18 Okay. Did you perform that task with Q. 19 State's Exhibit No. 31? 20 Α. Yes. Yes, I did. 21 Ο. And did you perform that same task, that 22 same analysis with State's Exhibit No. 32? 23 Yes, I did. Α. 24 Based on your testing, training and Q. 25 experience, do you have an opinion as to whether or

1 not State's Exhibit 31 was fired out of that .9 2 millimeter Luger, State's Exhibit 40? 3 In my opinion, State's Exhibit 31 was Α. 4 fired in State's Exhibit 40. 5 Q. And with respect to State's Exhibit 6 No. 32, do you have an opinion as to whether that 7 casing was fired out of that same gun? 8 Α. In my opinion it was also fired out of 9 State's Exhibit 40. 10 Ο. And when you tested the trigger pull of that Luger, how many pounds of pressure does it take 11 12 to fire that weapon? 13 I measured it at 8 to 9 pounds of Α. 14 pressure. 15 So each time that weapon is discharged, Ο. 16 it is taking a minimum of 8 pounds to cause the 17 discharge? 18 Α. Yes. And in your examination of State's 19 Ο. 20 Exhibit 40, did you find any evidence that would 21 indicate that that gun would misfire, would 22 malfunction, anything that would indicate that it 23 would go off unexpectedly? 24 Α. During my testing, it functioned as 25 expected. Nothing unusual.

1 Ο. And I guess my last question is with respect to getting a bullet into the chamber of that 2 3 weapon, if I have a loaded magazine, I have 4 ammunition in it, but I don't have a bullet or a 5 projectile in the chamber, how -- what -- what --6 how would I rack that gun? 7 Okay. First of all, we call it a Α. 8 cartridge. The bullet is just this part on the end, 9 so we're all speaking the same --10 Ο. Yes. Thank you. 11 Α. -- same language here. 12 So your magazine is loaded with at least 13 one cartridge. You would insert the magazine into 14 the magazine well. I'm sorry. I'll show you 15 through this plastic bag here. 16 Ο. You know, let me -- I can take that out. 17 I think it will be easier for you to demonstrate. 18 (Deputy clearing weapon.) THE BAILIFF: It's clear, Judge. 19 20 THE COURT: Thank you. 21 Q. (By Ms. Magness) There you go. 22 Thank you. Α. 23 All right. So you have a magazine 24 that's already loaded with at least one cartridge. 25 The magazine can be inserted into the magazine well,

1 which is right here (indicating). And I have the 2 slide open at this point. There is the option of 3 the slide also being closed at the same time. So the magazine is there. We'll see the slide is 4 5 closed. To load that cartridge into the chamber, the slide needs to be racked as you go back and then 6 7 forward (demonstrating). 8 Q. Okay. Now, will you perform that action for me one more time, please? 9 10 Α. (Witness complied.) Just pull the slide 11 back and then drop it forward (demonstrating). 12 Okay. The sound that is associated with Ο. 13 that action, that's an audible sound, correct? 14 Α. Yes. 15 Ο. You hear that slide metal on metal and 16 sort of that snapping back in place? 17 Α. Yes. 18 And once that action is performed, then Ο. 19 a cartridge is kicked into the barrel of the weapon? 20 Α. The chamber. 21 Q. The chamber. Thank you. The chamber 22 and is ready for firing? 23 A. It is ready, yes. 24 MS. MAGNESS: I'll pass this 25 witness.

1 THE COURT: Mr. Cornelius? 2 CROSS-EXAMINATION 3 BY MR. CORNELIUS: Ms. Zeller, my name is Skip Cornelius. 4 Ο. We've never discussed this case before, have we? 5 No, we have not. 6 Α. 7 All right. A few questions for you. Ο. 8 MR. CORNELIUS: Judge, can I stand 9 up to demonstrate a couple of things? 10 THE COURT: Yes. 11 Ο. (By Mr. Cornelius) If I'm firing this 12 weapon, because it's a semiautomatic weapon -- I 13 don't want to point the gun at anybody -- the shell 14 casings are ejected through this port right here 15 (indicating), correct? 16 Α. The fired cartridge cases, yes. 17 Ο. The casings alone are -- the fired 18 cartridge casings eject on this gun to the right? 19 Α. Yes. 20 Okay. So if I'm -- let's say this is a Ο. car right here (indicating) and I'm on the driver's 21 22 side of the car and I'm firing at this car. The 23 shell case is going to eject to the right? 24 Α. They would eject whatever direction 25 you're holding the chamber. Assuming you're holding 1

the gun perpendicular --

2 Yeah, I guess I could hold it this way Ο. 3 (demonstrating) or if I'm holding it straight up, firing it, what -- I'm making a car right here. The 4 5 shell cases, if it's operating properly, will eject to the right? 6 7 They typically go up; and depending on Α. 8 environmental conditions of weather and whatnot, 9 yeah, they would typically go up and kind of arc 10 over to the right, yes. They intentionally manufacture them so 11 Ο. 12 they won't go right into your face, right? 13 Well, yes, they probably wouldn't do Α. 14 that. So, if I'm firing this gun at my 15 Ο. 16 hypothetical car right here, the shell cases might 17 not all eject exactly the same distance or roll the 18 same way or bounce the same way when they hit; but 19 they're going to be in relatively the same spot? 20 I would say barring any unusual Α. conditions with ammunition and holding of the 21 22 firearm, typically they would eject in the similar 23 direction. 24 Ο. Okay. If I'm putting myself close to 25 the vehicle -- let's say the vehicle is much further

away when I fire -- what is a ricochet? 1 2 It occurs when a projectile or bullet, I Α. 3 suppose in this case, strikes something and then 4 perhaps bounces off in another direction. 5 Ο. If a .9 millimeter projectile or bullet, 6 as you are calling it, hits concrete, it might 7 ricochet, correct? 8 Α. It's possible. 9 Okay. How far will one of these .9 Ο. 10 millimeters shoot? 11 Honestly I don't know. Α. 12 Nothing, say, like a mile? Q. 13 You're really getting out of my area of Α. 14 expertise. 15 Ο. All right. The fragments that you have 16 up there, those -- when it says medical/legal, that 17 means in all likelihood they came from the autopsy, 18 correct? 19 Α. I don't think I have the fragments up 20 here. 21 Q. Oh, you don't --22 MS. MAGNESS: She does not have the 23 fragments. 24 Ο. (By Mr. Cornelius) Well -- all right. 25 Well, the ones referred to in your report, because

1 they have that medical/legal number, the medical 2 examiner assigns those numbers and it's part of the 3 autopsy report, or do you know that? Α. I don't specifically. They come to us 4 with that number on them. 5 6 Q. All right. Would you expect, if you 7 know this, that a bullet, if it went through a car 8 window and maybe through a seat or went through some 9 things and then hit a human being, that the bullet 10 might fragment? 11 Α. It is possible. 12 And that's the reason you can't really Ο. 13 examine those fragments to determine whether there 14 are lands and grooves on them to try to compare to 15 the barrel of this gun or any gun because they're 16 just fragments, right? 17 They didn't have the characteristics Α. 18 that I needed. 19 Ο. The bullets that came with the evidence 20 that you got, were they jacketed? 21 Α. You mean, the unfired cartridges or the 22 bullet? 23 The cartridges, yes. Ο. 24 Α. I have Item -- what I call Item 3 in 25 front of me, which is State's Exhibit 42, and these

1 are jacketed, yes. 2 What does that mean? Ο. 3 Use my model. Α. So I'll go back to our model of a 4 5 bullet. Jacketed bullets typically have a core, which is on the inside, generally lead-based core; 6 7 and on the outside it will have some sort of 8 brass-type jacket. There are different variations 9 depending on the manufacturer of how much brass 10 versus copper versus nickel that is in the composite 11 of that jacket, but it's wrapped around what's the 12 core that's on the inside. 13 And did you receive any jacket Q. 14 fragments? 15 Α. The fragment that I received could not 16 be determined was specifically from a bullet. There 17 was no indication of having lands and grooves, so I 18 really can't say that it was a jacket from a bullet. 19 Q. Okay. What does the jacket -- the 20 jackets that you have there, what are they made out of, if you know? 21 22 These here --Α. 23 Q. Yes. 24 -- on the unfired cartridges? Α. 25 Q. Yes.

1 Α. They look to be some sort of brass jacket, typical --2 3 Q. Copper? Copper. Copper/nickel mix is brass, I 4 Α. believe. 5 All right. The actual projectile under 6 Ο. 7 the jacket, what is it made out of? 8 Α. Typically it's made out of some sort of 9 lead. Okay. And you can't tell if the 10 Ο. fragments that you got were copper or lead? 11 12 Α. I would like to look at them again if 13 possible. Maybe I could tell, but there is no exam 14 information I can gain from them. So we just call 15 them a fragment. We don't do the copper testing to 16 verify that it is copper or anything like that. 17 Ο. Okay. So they might be jackets. They 18 might be the lead part. You don't know? No, I don't. 19 Α. 20 Okay. Now, in terms of that's an Ο. 21 automatic pistol or handgun, I guess I should say, 22 how fast can you fire it? 23 A. I would say as fast as you can pull the 24 trigger. 25 Q. Could you fire, say, three rounds in one

1 second? 2 That would be very fast. I'm not sure Α. 3 how quick the cycle rate is with this firearm, but 4 the firearm would have the function and cycle -- we 5 said three times, fire it three times in one second? 6 That would -- that would be very fast. 7 Well, if we measured the seconds, it's Ο. 8 like, you know, the basketball refs do it when 9 they're measuring the three-second rule. You know 10 that? 11 Α. No, I'm sorry. 12 1,001, 1,002, 1,003. So between 1,001 Ο. 13 and 1,002, could you hear pop, pop pop? 14 Α. It's possible. I mean, that wasn't part 15 of my testing, so I can't really say for sure. 16 Ο. Okay. Let's go to two seconds, then. 17 Do you think there would be any problem in firing 18 three rounds in two seconds? Again, without actually testing that 19 Α. 20 myself, it's really hard for me to say with that 21 particular firearm. 22 Okay. But it could be fired pretty Ο. 23 fast. I can't pin you down on seconds, but it can 24 be fired pretty much as fast as you can pull the 25 trigger. Is that what you're saying?

1	A. As fast as you can pull the trigger and
2	allow the firearm to cycle properly.
3	Q. Okay. Now
4	MR. CORNELIUS: May I again stand
5	up, Judge, for demonstration?
6	THE COURT: Yes, sir.
7	Q. (By Mr. Cornelius) As you fire a
8	semiautomatic handgun like this, or really any
9	handgun for that matter, if I'm let me stand over
10	here like I'm shooting towards my imaginary car. If
11	I fire this gun, what force do I feel and what
12	effect does that force have on my ability to hold
13	the gun steady?
14	A. You're going to feel a recoil of the
15	firearm cycling because as you're the force
16	pushes the bullet forward it's also pushing back on
17	your hand, on you, equal and opposite forces.
18	Q. Which way does that make your hand go?
19	A. Probably depends on the shooter's
20	experience and ability. I mean, some people are
21	very steady and some people aren't. Most of the
22	time I would say probably more of a vertical.
23	Q. Up?
24	A. Uh-huh.
25	Q. So that would be the first shot, I mean,

1 in my example that I'm talking about. If you fired 2 it a second time, would you have the same impulse --3 or impulse is probably not the right word. But --Α. You would feel the same force. 4 5 MS. MAGNESS: I'm going to object, 6 Judge, because I think it's far too speculative 7 to -- we don't have a specific shooter. We don't 8 have a training level. We don't have an experience 9 level. We don't know how the weapon is held. All 10 we know is that there is recoil to the gun. THE COURT: Sustained. 11 12 (By Mr. Cornelius) Let me ask it this Ο. 13 way: Do you have the same recoil every time you 14 fire the gun? 15 If you were using the same ammunition Α. 16 from the same lot, ammunition was exactly the same, 17 you would probably feel the same type of recoil with 18 every shot, yes. 19 Q. Okay. Somebody really experienced like 20 a police officer who has to show proficiency with 21 their weapon every -- how often? 22 I'm not an officer. I don't know. Α. 23 You don't know. You don't know how Ο. 24 often they have to qualify? 25 Α. I'm quessing -- I think it's once a

1 year, but I really don't know for sure. 2 Q. That person might have the ability to 3 hold steadier than somebody that's not a trained 4 police officer? 5 MS. MAGNESS: Again, I'm going to 6 object to speculation. 7 THE COURT: Sustained. 8 Ο. Okay. Well -- all right. 9 MR. CORNELIUS: Pass the witness, 10 Judge. 11 THE COURT: Ms. Magness? 12 MS. MAGNESS: No further questions. 13 THE COURT: May this witness be 14 excused? 15 MS. MAGNESS: Yes, sir. THE COURT: All right. 16 17 Mr. Cornelius? 18 MR. CORNELIUS: Yes. 19 THE COURT: You may step down. 20 You're free to go. Thank you, ma'am. 21 THE WITNESS: Thank you. 22 THE COURT: Call your next witness. 23 MS. MAGNESS: Judge, may I step to 24 the witness room? He was traveling from out of 25 town, and we started before I could see if he was