

1 IN THE CIRCUIT COURT OF THE FIFTEENTH JUDICIAL CIRCUIT
 2 IN AND FOR PALM BEACH COUNTY, FLORIDA
 3 CRIMINAL DIVISION
 4 CASE No.0012745CF A02
 5 STATE OF FLORIDA,
 6 -vs-
 7 EDMUND ADAMO,
 8 Defendant.

9
 10 DEPOSITION OF RICK SWOPE
 VOLUME II (122 - 215)
 11
 12 WEDNESDAY, OCTOBER 23, 2002
 2:05 - 4:15 p.m.

13 State Attorney's Office
 14 401 North Dixie Highway
 West Palm Beach, Florida 33401

15
 16 Reported By:
 17 Rosalind F. Zuehlk, CSR
 18 Notary Public, State of Florida
 19 Esquire Deposition Services
 20 West Palm Beach Office
 Phone - 800.330.6952
 21 561.659.4155
 22
 23
 24
 25

PROCEEDINGS

1
 2 ---
 3 Deposition taken before Rosalind F. Zuehlk,
 4 Certified Shorthand Reporter and Notary Public in and
 5 for the State of Florida at Large, in the above cause.
 6 ---

7 Thereupon,
 8 (RICK SWOPE)
 9 having been first duly sworn or affirmed, was examined
 10 and testified as follows:

DIRECT EXAMINATION

11 BY MS. ROBERTS:
 12 Q. State your name for the record.
 13 A. Rick Swope, S-w-o-p-e.
 14 Q. All right. And this is a continuation of the
 15 last deposition and I apologize if I go over stuff that
 16 I asked. I took notes but I can't seem to exactly find
 17 out what I did.
 18 A. Yes, ma'am.
 19 Q. Quick question. When you did time distance
 20 analysis, what speed did you use for Adamo?
 21 A. Give me one second here.
 22 MR. RONAN: Well, let's use some time too
 23 while we're on the record and keep it on the
 24 record, I just want to make sure, is there
 25

1 APPEARANCES:
 2
 3 On behalf of the State:
 4 Ellen Roberts, Esquire
 5 Elizabeth Parker, Esquire
 6 Office of the State Attorney
 7 401 North Dixie Highway
 West Palm Beach, Florida 33401
 8
 9 On behalf of the Defendant:
 10 Kenneth J. Ronan, Esquire
 11 Lavalie Brown Ronan & Soff, P.A.
 12 750 South Dixie Highway
 Boca Raton, Florida 33432
 13 ALSO PRESENT:
 14 Ofc. Pete Buhr

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15 WITNESS: DIRECT CROSS REDIRECT RECROSS

16 RICK SWOPE

17 By Ms. Roberts 124

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1 anything you think you don't have that you need
 2 exhibit wise pursuant to my list or anything else?
 3 Because today you have the, we've brought you
 4 copies of the video --
 5 MS. ROBERTS: The animation.
 6 MR. RONAN: The animation. You have copies
 7 of all our charts. I can't think of anything else
 8 that you would want, but if there is let me know,
 9 I'll get it.
 10 MS. ROBERTS: Well, the charts that you had
 11 in here the last time, the big one --
 12 MR. RONAN: Yeah.
 13 MS. ROBERTS: -- which number is that as far
 14 as exhibits go?
 15 THE WITNESS: Well, we haven't really
 16 numbered those, but all of the small diagrams
 17 correspond with that.
 18 I can tell you which one it is, the big one.
 19 MS. ROBERTS: That's all I need to know is
 20 which one it is.
 21 THE WITNESS: Okay. Do you want me to show
 22 you on your copy?
 23 MS. ROBERTS: Yes. Because these are just
 24 the copies that you sent me.
 25 THE WITNESS: Let me just look at this here.

1 MS. ROBERTS: I know you said one was a
2 reference point.
3 THE WITNESS: Yes, the big board would be
4 this one.
5 MS. ROBERTS: Okay.
6 THE WITNESS: We have two of those, just so
7 you know. I mean one is blown up, but we have two
8 of these smaller copies, like one with cars on and
9 one with cars off.
10 MS. ROBERTS: Okay. So you have this one and
11 then this one?
12 THE WITNESS: Right, exactly. Now, again, I
13 don't know if Mr. Ronan will blow up more, but
14 that's what I have right now.
15 MS. ROBERTS: Okay. So 13 and 15 is what I
16 have.
17 MR. RONAN: But I do think that there was one
18 that you thought you wanted blown up that Tucker
19 did not blow up, as I recall from the last
20 deposition.
21 THE WITNESS: Yeah, there's one or two. The
22 one I wanted was the plain one with the reference
23 point on it. I thought we might blow that up.
24 MR. RONAN: I don't know if I have it yet.
25 MS. ROBERTS: And which one would that be

1 So, in other words, it would be a blank
2 diagram with just the reference point that you see
3 there but nothing else on it.
4 MS. ROBERTS: Oh, okay.
5 THE WITNESS: Because, you know, that's
6 computer generated, the one you have, so all I'd
7 have to do is call up the reference point and put
8 it on there. We can put on anything obviously and
9 take it off.
10 MS. ROBERTS: Okay. So that's all that that
11 one's going to have. If you do that one, just
12 Xerox me a copy.
13 THE WITNESS: I can get you a copy.
14 MS. ROBERTS: Yeah.
15 THE WITNESS: Let me just write that down.
16 MS. ROBERTS: Doesn't have to be in color.
17 THE WITNESS: Okay. I'll take care of that.
18 BY MS. ROBERTS:
19 Q. Okay. All right. Getting back to, what
20 speed did you use for Adamo in the time distance
21 analysis?
22 A. Well, I did several.
23 Q. Okay.
24 A. And I used speed ranges from 45 to I believe
25 52, which was one of the speeds that Officer Somers

1 on the ones -- is it one of them I have here?
2 THE WITNESS: It should be. Let me look.
3 MS. ROBERTS: Yeah. Because now Exhibit
4 Number 13, which is 13 from the civil depositions, those
5 would be defense exhibits, has a reference point.
6 THE WITNESS: Right. There should be an
7 Exhibit 3.
8 MS. ROBERTS: All right. That's Number 15
9 civil. I don't know what number that is. No
10 reference point.
11 THE WITNESS: There's a reference point.
12 MS. ROBERTS: But that's the same one as the
13 other.
14 THE WITNESS: You're right, it is the same.
15 There should be one without marks. Let me see if
16 I have that.
17 MS. ROBERTS: Well, that I don't have.
18 THE WITNESS: Okay. Let me just see if I
19 have it.
20 MS. ROBERTS: Everything I've got has got
21 marks on it.
22 THE WITNESS: I know we talked about that.
23 Let me see if I have that or that's something
24 that's going to be copied. I think this blank one
25 is what I suggested putting the reference point.

1 had, but I predominantly used the range of speeds from
2 46 to 49 is predominantly what I used.
3 Q. Okay. And what about Kurlander?
4 A. I used a speed range of Kurlander, one second
5 here, I used predominantly 26 to 27 and I also used a
6 speed of 13 to 19 and I use that also based on some of
7 Officer Somers' information.
8 Q. The 13 to 19?
9 A. Right.
10 Q. All right. Where'd you come up with the 26
11 to 27 that you use for her?
12 A. I use that range also in coming up with a
13 momentum formula dealing with my initial review of the
14 file, plotting the vehicle weights out as they were in
15 Autostats and also using Officer Somers' weights, that
16 give me speeds on Kurlander from 12 miles an hour to
17 27, and that was based on the different angles as you
18 saw in the diagrams.
19 Using the police reference point and using my
20 reference point that changed somewhat the angle of the
21 vehicles hitting.
22 Q. Okay. What do you believe her speed was
23 obviously based on from linear momentum?
24 A. Hang on a second. Where'd I put that note.
25 Sorry. Give me one second here, because I broke this

1 down. I did a whole breakdown of that. Wait one
 2 second here.
 3 Q. Yeah. We'll need all that.
 4 A. Yeah, I just put it all together on a
 5 breakdown here. I have her at approximately 13 miles
 6 an hour.
 7 Q. Okay. So that's based on your linear
 8 momentum analysis?
 9 A. Yes, that's correct.
 10 Q. And do you believe, is it your opinion that
 11 she was traveling 13 miles an hour at impact?
 12 A. Yes. At least, correct.
 13 Q. And what do you mean by "at least?"
 14 A. Well, she possibly could be going a little
 15 faster. She couldn't be going slower but she could be
 16 going a little faster, but certainly not much more.
 17 Q. I mean we're talking a couple miles an hour?
 18 A. Yes.
 19 Q. You say that you did a range of 45 to 52. Is
 20 that what you did on the animation or is that something
 21 --
 22 A. The animation I ran at 49 miles per hour I
 23 believe. It's 49 miles per hour for Adamo.
 24 Q. And what about her on the animation?
 25 A. I have her at 13.19.

1 Q. Now, you indicate -- well, let me ask you as
 2 far as the time distance analysis, did you document
 3 anything other than with diagrams or anything?
 4 A. Well, the diagrams give you an idea of where
 5 the cars were at at certain times, the animation picks
 6 that up and makes it in moving time really.
 7 Q. Okay. So the diagrams that you're referring
 8 to are the ones that you've already supplied to me?
 9 A. Yes.
 10 Q. Okay. You indicated in the civil depo that
 11 Adamo saw the Kurlander vehicle three seconds before
 12 impact.
 13 A. Yes.
 14 Q. And where'd you come up with that number?
 15 A. Well, I came up with that number using his
 16 speed at 49 miles per hour, figuring it's going to take
 17 one second, one to 1.5 seconds for him to perceive and
 18 react to that, another approximate second for him to
 19 actually steer to the right, move his vehicle laterally
 20 to the right and then impact with hers. So that's
 21 about how much time frame that there was from start to
 22 finish.
 23 In other words, about a second and a half for
 24 him to see it, about another second for him to move
 25 over and then there's about .5 seconds or so before

1 they made contact.
 2 Q. At that time she's sort of sitting in the
 3 middle of the road, isn't she, at 13 miles an hour;
 4 she's not moving very fast?
 5 A. Well, she's certainly not moving fast, no.
 6 She's moving obviously laterally in front of him. But,
 7 you know, the point is is that she's still moving.
 8 Q. And what evidence do we have that he actually
 9 perceived her?
 10 A. By him steering to the right. In other words
 11 --
 12 Q. That's all?
 13 A. Well, that's all we have at that point. I
 14 think that if you look at the damage also to the car,
 15 to the Kurlander vehicle, you'll see that the damage,
 16 the majority of the maximum penetration, which I think
 17 Officer Somers has in his notes, occurs lower than the
 18 center mass of the center of the door frame.
 19 When you hit a C pillar, that indicates to
 20 me, since the Explorer sits about eight inches higher
 21 than the center mass, that the vehicle was in a down
 22 position.
 23 In other words, if the vehicle's damage,
 24 maximum damage occurred to, let's say, the shoulder
 25 height of the person in the car or the girl in the car

1 at this point, then damage would be more -- a little
 2 bit higher and be pushed in at that point.
 3 If you look at the pictures, damage is below
 4 center mass of the car, which indicates, since the
 5 Explorer sits higher, that the bumper was in a down
 6 position.
 7 Q. As a result of turning or what?
 8 A. No, I would say it's a result of braking.
 9 Q. So you're now saying in the criminal
 10 deposition that, in your opinion, he was on the brakes
 11 when?
 12 A. I'm saying that he was on the brakes or at
 13 least attempting to brake at the time of impact.
 14 There's certainly no physical evidence, with
 15 the exception of what I told you, and there's no skid
 16 marks, which I wouldn't expect there to be with ABS I
 17 believe in the vehicle, but because he's turned to the
 18 right and in a swerving position and the way that he
 19 impacted the car, I think Officer Somers has the
 20 pictures together of the cars together, which you've
 21 seen.
 22 Q. Didn't you say before though that turning to
 23 the right could have also been a drifting out of his
 24 lane?
 25 A. Well, you asked me that question, I don't

1 think I indicated --
2 MR. RONAN: I'm going to object because it's
3 been asked. And during this deposition we're
4 going to have this problem obviously since this is
5 a continuation, so I was quiet last deposition,
6 but I guess I'll have to make those objections
7 this time, so I will.

8 MS. ROBERTS: Okay.
9 BY MS. ROBERTS:

10 Q. Go ahead.
11 A. I think I indicated to you that it was
12 possible, although I didn't think that was -- it's not
13 probable that he did that. I think that there was some
14 action.

15 I think even Officer Somers agreed that it
16 looked like there was evasive action.

17 Q. But, now, in the civil deposition didn't you
18 say clearly that "I don't know if he was steering to
19 the right or drifting to the right, I don't know, it
20 could have been a drift, it could have been a steer?"

21 A. I don't recall it in those exact terms. I
22 think that what they asked me was "do you have any
23 physical evidence of the vehicle swerving."

24 I indicated, no, there's no physical evidence
25 other than the fact that he was outside of his normal

1 Well, maybe not.

2 A. I know I have a picture somewhere that is
3 actually marked and I'll show you what I did. My notes
4 are all out of order. Actually I do have a diagram of
5 that.

6 This is basically, this exhibit, what I did
7 was take those photographs, place them on the diagram.
8 In other words, just kind of show that.

9 Q. Turn it around the other way. Like that.

10 A. Okay. Got them upside down. So I took those
11 photographs and I had one photo where I drew lines
12 through, in other words, to pinpoint the center masses
13 and the vehicle's widths and measurements.

14 In other words, looking at this photo I know
15 the length of this car and the length of this car and
16 the widths of the cars obviously, so I took those and
17 placed those on and that's the angle Officer Somers
18 has. And I think it's close.

19 Q. Okay. We'll go over the angles in just a
20 minute.

21 A. Okay.

22 Q. So that's how you determined the angles of
23 approach?

24 A. Yes, that's correct.

25 Q. Okay. Now, when you did the, you said three

1 lane and going to the right. That's the only evidence
2 that I have.

3 Q. And that's based on the angles at which you
4 place those vehicles on the roadway?

5 A. Well, yes. But I placed them at Officer
6 Somers', not measurements specifically, but I placed
7 them the way that he put the cars together at the yard.

8 So, in other words, I think I went over that
9 last time, but let me just check real quick here to
10 show you.

11 MR. RONAN: Again, I would object.

12 BY MS. ROBERTS:

13 Q. No, we didn't go over it in the criminal,
14 it's in the civil. But go ahead.

15 MR. RONAN: But, no, I would object because I
16 seem to recall in the last deposition he showed
17 you the photographs where Officer Somers lined up
18 the cars to give the relationships at point of
19 impact.

20 THE WITNESS: I have a picture that is marked
21 also, so give me a second here. I used these
22 photographs and I think I have a photograph that I
23 actually marked.

24 BY MS. ROBERTS:

25 Q. In fact, it may be on the back of these.

1 seconds, he recognized three seconds before impact,
2 what formula did you use to determine that, do you
3 recall?

4 A. Well, all I did on that particular formula
5 would be the time distance formula. I used his miles
6 per hour to give me feet per second and I figured how
7 long it would take Miss Kurlander to get from a stop to
8 the point of impact.

9 Using again, looking at, I don't know what
10 exhibit you want to call this, Miss Roberts, but
11 whatever exhibit it is you want to call it, there's a
12 number on it.

13 Q. Yes, that's 15.

14 A. And looking at that exhibit you'll note that
15 there's --

16 Q. Defense 15.

17 A. You'll note that there's a stop bar which is
18 recessed from where Miss Kurlander would have stopped
19 had she stopped there.

20 I considered the fact that from the stop bar
21 until the lateral line of the roadway, in other words,
22 where you see this yellow line --

23 Q. Yes.

24 A. -- that's not a hazard at that point. In
25 other words, I wouldn't expect somebody to slam on the

1 brakes or turn or anything. Because that distance, as
2 you indicated, it's a slow speed.

3 I'm assuming Miss Kurlander didn't floor it
4 when she took off, she was traveling regular, so for
5 that distance there, which encompasses about a second
6 of her four-point some seconds to reach that, I didn't
7 consider that until she reached the lateral line.

8 So only from the lateral line of the roadway
9 to the point of impact did I consider it a hazard.

10 Q. Okay. So that three seconds is where you
11 backed him up three seconds?

12 A. Exactly.

13 Q. How far is it from the lateral line of the
14 roadway to impact, what did you use for those numbers?

15 A. Well, I used the impact point, in other
16 words, I just measured pretty much off of Officer
17 Somers and I believe it was approximately, from the
18 stop bar itself to the point of impact, was about 52 to
19 54 feet.

20 From the lateral line to impact was about
21 25 feet. So roughly from the stop bar to the lateral
22 line is about 25 to 28 feet, somewhere in there.

23 Q. Okay.

24 A. And, just so you know, I'm taking all the
25 measurements from the front of her car.

1 A. Yes.

2 Q. Did you read Adamo's statement?

3 A. Yes.

4 Q. Did you take into consideration any of the
5 statements that he made, such as she bolted out in
6 front of me, she didn't stop, he didn't see it and then
7 other times he says that he saw her coming, did you
8 take any of those statements of his into consideration?

9 A. I took them all into consideration. I didn't
10 use them in my analysis because there was a difference
11 as to what he said as to which time, so I thought the
12 physical evidence would be better than using his
13 version of events.

14 Q. And what physical evidence did you rely on?

15 A. I relied on the physical evidence in the
16 roadway which was measured by the police, the
17 photographs, the damage to both vehicles, what I told
18 you about I believe the impact between Adamo and
19 Kurlander where I believe that the bumper area was
20 lower than it normally would be traveling on the road.

21 But there was some movement and some braking,
22 although the movement could cause some of the vehicle
23 to be offset a little bit, so I took that all into
24 consideration.

25 Q. Did you ever clarify what Adamo, whether any

1 Q. Okay. Now, was Kurlander's vehicle
2 accelerating the whole time?

3 A. I believe it was accelerating, yes.

4 Q. Okay. But she's constantly going a little
5 faster as she crosses across the road?

6 A. Yes.

7 Q. So in considering that she's accelerating the
8 whole time, do you consider that she actually stopped
9 at the stop sign?

10 A. I'm considering that, yes, absolutely.

11 Q. Okay. That she did stop and then
12 accelerated?

13 A. Yes.

14 Q. Is that what you would testify accordingly,
15 that she actually stopped?

16 A. Yes, I'll say that she stopped. Now, just so
17 we're not, get into a position in trial, don't forget
18 the stop sign is a little few feet ahead of the stop
19 bar.

20 So I'm considering she stopped between the
21 stop bar and the stop sign, that's what my testimony is
22 so there's no confusion.

23 Q. Okay. But you believe she stopped though?

24 A. I think she stopped.

25 Q. And then proceeded?

1 of these statements were true?

2 A. I did not speak with Mr. Adamo and at this
3 point I have no intention to unless Mr. Ronan asks me
4 to speak to him.

5 Q. And when you did your perception reaction
6 time you considered him to be unimpaired?

7 A. Yes, I do.

8 Q. Are you aware that in Mr. Reiff's book, we've
9 been over this, you know this Mr. Reiff --

10 A. Right.

11 Q. -- that he believes that you should first run
12 an analysis ignoring the fact that the driver is
13 impaired and then run an analysis taking that into
14 consideration; are you aware he says that in his book?

15 A. No.

16 Q. So you don't agree with that or you do agree
17 with that?

18 A. Well, I don't know necessarily if I agree or
19 disagree. I know that normally there are times I run
20 formulas both ways if a person's impaired or not.

21 I have difficulty if a person has narcotics
22 in their system and alcohol, because the varying
23 response times are so different for different people.

24 Q. What do you mean by that?

25 A. Well, that there's some books say you should

1 put on two seconds to three seconds and then there are
2 doctors that indicate, such as Dr. Jensen indicates
3 that there's no way to facilitate someone who's on
4 drugs and alcohol at the same time as to what their
5 reaction would be. So what I attempt to do is I
6 attempt to look at the situation to see what we have.

7 In other words, had Adamo run directly into
8 the side of Miss Kurlander and just kept going, then I
9 would say that that shows signs of impairment or
10 something, not paying attention, whatever the case may
11 be.

12 Q. What do you mean "run into her and kept
13 going?"

14 A. I'm saying that if he runs directly into the
15 side of her without taking any kind of action at all,
16 he just stayed right in his lane, stayed in his lane
17 and just runs right into her, in other words, he takes
18 no action whatsoever.

19 In this case, as I indicated, I believe that
20 there's some deceleration of the car. I think that
21 there is, my opinion is that there is serving involved,
22 that he is attempting to avoid the other vehicle.

23 Also he makes the right decision. In other
24 words, he's making the right decision by swerving to
25 the right and not the left.

1 A. I did more of a supplement. In other words,
2 I took the initial article and then added some things
3 to it, subtracted some things and I gave that to him in
4 a file.

5 Q. Okay. Now, I only have the second edition
6 and your article appears in there but there is a
7 supplement in the back, a 2000 cumulative supplement.

8 Is that what you're speaking of?

9 A. No.

10 Q. Okay.

11 A. No. There's always a supplement to the book,
12 things that maybe be in error, something like that, or
13 they add something.

14 No, there is a complete first edition and a
15 complete second edition.

16 Q. So it is a different book?

17 A. Yes.

18 Q. Okay. Did you do any analysis to determine
19 the lateral acceleration values or value when the
20 defendant changed lanes or swerved?

21 A. I looked at that. I run values from .15
22 .25 and I believe the lateral accelerations fall right
23 within that.

24 Q. And you did that on a computer?

25 A. Well, I looked in a book first to check what

1 I've had impaired drivers swerve directly
2 into the object. I think that Officer Somers would
3 agree that swerving away from an object is the proper
4 methodology if that's what you can do, so I think those
5 things went into my analysis.

6 Q. So if he swerved away from her he would have
7 swerved to the east and not to the west into her path,
8 correct?

9 A. No. You never swerve into the object, you
10 always swerve away from the object. In other words, he
11 would not have swerved to the left, that would be
12 improper, you would always swerve away from the object.

13 Like pedestrians, you don't try to swerve in
14 back of them. In other words, in this case he would
15 have to try to swerve in back of her. Well, that's not
16 the appropriate action, the appropriate action is to
17 steer away from the object.

18 Q. Now, you wrote a chapter for Mr. Reiff in his
19 book, in the first book?

20 A. Yes.

21 Q. And the second book, second edition?

22 A. I did an update for the second edition,
23 correct.

24 Q. Was that the supplement that you did or just
25 a totally new article in the second one?

1 the lateral acceleration rates would be and just ran a
2 couple of mathematical formulas on that.

3 And I thought it would be more towards the
4 low end because there really wasn't that much distance
5 involved. In other words, had Mr. Adamo completely
6 changed lanes and got into another lane, you would have
7 one factor. But because the swerve just initiated it
8 you really don't have much distance between the two, so
9 I would say you go more towards the low factor.

10 Q. How did you determine that he steered, what'd
11 you say, 12 degrees, 10 or 12 degrees?

12 A. About 12 degrees or so, that's correct.

13 Q. And how did you determine that?

14 A. Again, that was determined by Officer Somers
15 placing the cars together in the junkyard or tow yard,
16 looking at the measurements that were taken, looking at
17 the scene photographs and putting that together in the
18 computer and plotting the vehicles on the diagram.

19 Q. Okay. Do you have that, any of those
20 plottings with you on the computer?

21 A. No. Well, they're plotted there now on the
22 diagrams so all you'd have to do is measure off the
23 diagram.

24 Q. Okay. Show me how you do that.

25 A. I don't know if I have my 360 with me.

1 Q. I do.

2 A. Okay. I have this with me. All you would do
3 is draw the lane. In other words, you draw the center
4 of the lane, just draw the center of the lane that Mr.
5 Adamo was traveling in.

6 We already know this position of the car, we
7 already know the position of Kurlander's then based on
8 the diagrams, and all you'd do is find a zero heading
9 for him. Just find a zero heading for him, put it
10 right at the point of impact, and you just come off of
11 this, draw a line through here. This is a line here.

12 In other words, this line is marked so you
13 don't even actually have to draw a line through the
14 center mass. If we drew the center mass here, that
15 would give you somewhere about 12 or 13 degrees right
16 there. That would be the angle.

17 This one we don't use, we don't even have to
18 use this one technically because we know where it is.

19 Q. Yes. Okay. Now, did you rely primarily on
20 crush in order to determine impact speeds?

21 A. I wouldn't say I relied on it totally, but I
22 certainly looked at it to see if I was in the right
23 ballpark.

24 In other words, I was attempting to find out
25 if my crush damage came back around 52, 54, then I

1 MR. RONAN: By the way, I took his depo very
2 early on in the case. If any information from him
3 has changed from that depo, I would obviously need
4 to know, since I took his depo.

5 MS. ROBERTS: Okay. What, do you want him to
6 come up with a different opinion?

7 MR. RONAN: No, I sure don't. I'm depending
8 on his depo and his reports and his opinions, if
9 he's going to change it any, just let me know.

10 THE WITNESS: Just so you know, Miss Roberts,
11 I'm sure you've read the civil depositions, the first
12 civil deposition he couldn't extrapolate his
13 measurements, he had difficulty, but he did that
14 later on and I did it off of his measurements.

15 When they asked him to do that he wasn't sure
16 which numbers he used.

17 BY MS. ROBERTS:

18 Q. Yes, that's fine.

19 A. Okay. But I used all his numbers anyway.

20 Q. Okay. Are you familiar at all with -- well,
21 let me ask you this. Did you do actually any physical
22 measuring of the vehicles yourself?

23 A. I did some. All I did was a couple
24 measurements to just kind of verify what he had in his
25 notes, that's all.

1 would say that that would be more or less near the
2 speed Adamo was traveling.

3 But all the crush analysis factors that I
4 used came up with about 49 miles per hour. Actually 46
5 to 49 miles per hour. So I figured that was pretty
6 close.

7 Nothing came up over 50 and I used two
8 different programs and I obtained the stiffness
9 coefficients from Neptune Engineering.

10 Q. Okay. And did I have copies of that?

11 A. You copied everything in here, yes.

12 Q. Okay.

13 A. That would be pages one and two of my -- one,
14 two and three of my folder. It's in the upper
15 left-hand corner.

16 Miss Parker copied this, so if you don't have
17 it it's her fault.

18 Q. Okay. Did you actually measure the vehicles?

19 A. I took, as I indicated last time, I just took
20 cursory measurements. I went with Officer Somers'
21 measurements, he's the one who did all the measurements
22 and I have no reason to disbelieve his measurements.

23 I took his information, I just kind of
24 verified a few points on the car when I was there, but
25 I used his measurements entirely.

1 Q. Are you aware of the circumstances under
2 which he did the measurements?

3 A. Just what he testified to.

4 Q. Okay. And obviously you received your
5 training that you know how to do the linear corral?

6 A. Yes. He had a diagram of the vehicles and he
7 put a corral around them, but I don't call them a
8 corral, I just call them lines on the ground, and he
9 measured from there.

10 So I used that information, he had the little
11 diagrams of the cars and the measurements.

12 Q. Okay. Now, you have in Defense Composite 31
13 that you gave me the last time --

14 MS. ROBERTS: Which I need to give to the
15 court reporter.

16 (Defense Exhibit No. 31 was
17 marked for identification.)

18 BY MS. ROBERTS:

19 Q. -- you have a, let me just show you this. Do
20 you recognize that?

21 A. Yes.

22 Q. Okay. So that's yours. This is on page --

23 A. No, no, no, that's not mine.

24 Q. -- H.

25 A. I think, if I'm not mistaken, I think that's

1 Buckner's.

2 Q. Okay.

3 A. I think. It's not mine and I don't think
4 it's Chris's, so I believe it's Buckner's.

5 Q. Well, I know it's not Chris's. Okay. So
6 that would be Buckner's?

7 A. Right.

8 Q. Would you agree that it's important when you
9 enter information into these computer systems, such as
10 when you're doing crush analysis, that you enter in
11 accurate data?

12 A. Sure.

13 Q. And that the less actual crush damage done
14 the lower the speeds are going to be involved in a
15 crash?

16 A. Not necessarily. In other words, if you're
17 saying to me if you have two measurements, then I would
18 say, yes.

19 But if you have four or six measurements and
20 you have the right A and B coefficients and you have
21 the right measurements for that part of the car, you'll
22 still be pretty close. I mean you're going to be darn
23 close.

24 If you have a measurement at the front left
25 corner and one in the left rear corner, you're not

1 down, obviously the less damage the less speed is
2 involved?

3 A. Well, yes, that's correct, yes.

4 Q. Okay. Now, the stiffness coefficients that
5 you used for these vehicles, actually would be for the
6 Kurlander vehicle, is that an average property for
7 vehicle class?

8 A. No.

9 Q. What particular stiffness did you use for
10 Kurlander's vehicle?

11 A. I used an A coefficient of 137 and a B
12 coefficient of 95, and that was obtained from Neptune
13 Engineering and that was actual tests done with that
14 particular car.

15 Q. And what do you mean by "that particular
16 car?" What year of car?

17 A. That was I believe a '96 Lincoln I believe.

18 Q. And those tests were performed on a brand new
19 '96 Lincoln that had not been exposed to the elements?

20 A. Yes. To my knowledge, yes.

21 Q. And if you were going to rely on crush damage
22 to determine speed, it would be important that the
23 measurements be done accurately and carefully, would
24 you agree with that?

25 A. Sure, yes.

1 going to come up very good. But if you have the width
2 of the area, which is important, the A and B
3 coefficients and as many measurements, you know, as you
4 can, but six are sufficient, you should be pretty good.

5 Q. Okay. Well, what I'm trying to get at is you
6 indicated in the civil deposition that you rounded down
7 some of Chris's numbers.

8 A. Yes.

9 Q. The rounding down is going to lower the
10 speed, perhaps not a great amount, but it is going to
11 lower the speed because you're going to show less crush
12 damage, correct?

13 A. Well, yes and no. There was a reason I did
14 that.

15 Q. Okay. Tell me about that.

16 A. I think on some of his measurements he had
17 like a quarter inch or something like that on a couple
18 of them, and that's pretty tough to do without a
19 computer with you at the scene to handle a quarter
20 inch, so I just rounded them off to -- in other words,
21 if it was 19 and a quarter, I rounded it off to 19.

22 The measurements that I rounded off were only
23 a couple and I would say the mileage effects would be
24 infinitesimal, maybe .5 miles an hour.

25 Q. But you would agree that when you round those

1 Q. Did you ever make any scale diagrams of the
2 Kurlander vehicle showing its original dimensions
3 versus the crush dimensions?

4 A. No. Well, the only type of vehicle there is
5 would be on the diagrams, which indicate an undamaged
6 vehicle.

7 Q. In regards to the diagrams we've been
8 discussing?

9 A. Yes.

10 Q. Okay. Is there a percentage of accuracy
11 involved with the crush program that you used? SLAM
12 used to be plus or minus 10.

13 A. Well, according to Limpert, his program is
14 approximately plus or minus five. And I think that the
15 ARW program is I believe plus or minus five as well.

16 Again, assuming you put the right information
17 in.

18 Q. Did you do any of these calculations by hand
19 or did you strictly do them in the computer?

20 A. I did some by hand initially.

21 Q. Which ones?

22 A. Well, I did some of the crush formulas. I
23 used I think one out of the IPTM book and I also used
24 one out of Limpert's book as well. He's got a very
25 long one, you know, it takes about an hour to do.

1 Q. Okay. And that's just a basic crush formula?
 2 A. Yes. Well, the program here covers, if I can
 3 look at your book.
 4 Q. Yeah.
 5 A. I'll tell you what chapter it covers. It
 6 would be Chapter 21 and basically I looked at, I always
 7 look at the force, force and energy.
 8 Q. Let me look. What page is that on?
 9 A. I'm sorry. It would start with page 280 and
 10 it would go to page 294.
 11 Q. And is the whole formula that long?
 12 A. Well, yes. Well, the crush formulas for
 13 maximum crush is actually a couple of pages.
 14 What you also do is you also run what's
 15 called an energy formula. Actually I call it energy
 16 balance. I think Limpert calls it power force or
 17 something like that.
 18 But what the analysis does is that you figure
 19 out, first of all, how much energy would it take for,
 20 let's say, the Kurlander vehicle and the Adamo vehicle
 21 to go from impact to rest and that would give you the
 22 amount of energy it would take.
 23 Then you go back and check it on your crush
 24 formula and your momentum formula to see how much
 25 energy it actually takes to push that car that far. If

1 you're in the ballpark, then you're on the right track.
 2 Q. Okay. He calls it's crush energy.
 3 A. Well, he calls it maximum crush energy, but
 4 he also calls it something else.
 5 Q. You used his LARM II program to determine the
 6 crush?
 7 A. Yes, I did.
 8 Q. Okay. And the ARW program?
 9 A. Yes.
 10 Q. And the calculations you did by longhand you
 11 don't still have?
 12 A. Friction energy he calls it. Sorry.
 13 Q. Okay.
 14 A. No, I don't have those by hand. I get rid of
 15 all handwritten notes, with the exception of what I
 16 would do in the middle part of the depo because I do
 17 not type them into the computer.
 18 Anything that goes into the computer the
 19 notes get tossed.
 20 Q. And you didn't do a crush analysis for
 21 Adamo's vehicle?
 22 A. No, I didn't.
 23 Q. Now, you did a linear momentum analysis,
 24 correct?
 25 A. Yes.

1 Q. Okay. What approach angle did you use for
 2 the defendant's vehicle?
 3 A. Sixty-eight degrees.
 4 Q. For the defendant's vehicle?
 5 A. Yes.
 6 Q. What about Kurlander?
 7 A. Oh, wait a minute, wait a minute, I'm sorry.
 8 Whoa, whoa, sorry. I got the wrong formula. Hang on a
 9 second. Approach angle for vehicle 1.
 10 Okay. What I used for, I used point of
 11 impact, I used Adamo at zero, I considered him as the
 12 zero-point, and then his depart angle from the point of
 13 impact was 12 degrees.
 14 Q. Okay. So hang on. You used 12 degrees?
 15 A. Yes.
 16 Q. For his departure?
 17 A. Right.
 18 Q. Okay. Her approach angle then.
 19 A. Her approach angle was 68 degrees.
 20 Q. Okay. And what about the departure angle of
 21 her vehicle?
 22 A. Twelve degrees. I had them both on the same
 23 angle.
 24 Q. How'd you determine the departure angles?
 25 A. I did that by the marks on the roadway,

1 photographs where the vehicles ended up at and using
 2 again the photographs from Officer Somers with the
 3 vehicles together, this is basically what I used, the
 4 initial thing to determine how the vehicles separated.
 5 Actually depart.
 6 Q. Tell me, you said marks on the roadway?
 7 A. Yes. There was some marks in the photographs
 8 which we have. This photograph is probably one of the
 9 better ones, the top one, and then the second
 10 photograph as well.
 11 Q. All right. Show me how you took these
 12 photographs and determined the departure angle based on
 13 these two photographs?
 14 A. Okay. What I did, first of all, was I
 15 plotted the vehicles as they are on this diagram. In
 16 other words, I took this photograph or a photograph
 17 like it to show how the vehicles sat together, I then
 18 took Officer Somers' measurements from the lateral line
 19 indicating where each one of these marks went and where
 20 the vehicles ended up at, I took this photograph, which
 21 I think's marked Number 11, whatever that means, and I
 22 followed the lines and drew them exactly as they had at
 23 their measurements on the lateral line and also as they
 24 showed up on the pictures, so that indicated to me,
 25 using the defacement of the car on this photograph, how

1 they came together and the fact that both vehicles
2 departed together.

3 In other words, there's no line over here,
4 Kurlander didn't rotate around, they both went directly
5 in the same direction.

6 So measuring from the point of impact, again
7 using the offset between the two vehicles and using the
8 program to formulate the 12 degrees to where the
9 vehicles came to rest, that's what I used. So it's
10 pretty simple.

11 Q. What is this on Exhibit Number 15 here, this
12 little jog to the right, to the due west of one of
13 these scuff marks?

14 A. That's one of the measurements that Officer
15 Somers listed and that's the different measurements
16 that come out. I think that's a little bit of an error
17 here.

18 Q. But it doesn't show up on his diagram?

19 A. No, because he didn't plot his measurements
20 on the diagram. His diagram is not plotted. Any
21 copies that I have, I have seen no copy where he's
22 plotted them on. In fact --

23 Q. What do you mean by "plotted them on?"

24 A. Well, give me one second. In other words,
25 you'll see that my diagram has the measurements

1 plotted. Officer Somers indicated that, of the civil
2 depo, on page 53 and 54 --

3 Q. Okay.

4 A. -- they asked him what was the distance
5 measured from the point of impact to final rest. He
6 indicated he didn't know and he didn't figure that out.

7 Q. Well, he had to in order to do linear
8 momentum.

9 A. Well, I'm just telling you what he said now.

10 Q. Did you see his measurement sheet that was
11 part of --

12 A. Yes.

13 Q. Okay. So you know that he did that?

14 A. That wasn't your question. Your question was
15 were they plotted out. They were not plotted out, they
16 were measured.

17 They were listed on that sheet but they're
18 not plotted out on a diagram that matches those sheets.

19 Q. All right.

20 MS. ROBERTS: This is going to be State's
21 Exhibit Number 30.

22 And here's a copy for you.
23 (State's Exhibit No. 30 was
24 marked for identification.)
25 BY MS. ROBERTS:

1 Q. Is that plotting the evidence?

2 A. I don't know. I've never seen this before.
3 First time I've ever seen it.

4 Q. Well, you refer to page 38 in Officer Somers'
5 report.

6 A. Right.

7 Q. In fact, we're going to get into that in a
8 minute.

9 A. Okay.

10 Q. But you refer to page 38, and on page 38 he
11 has the evidence plotted in, correct?

12 A. But it doesn't match. In other words, this
13 is different than this. This diagram, if you measure
14 off of here, doesn't come anywhere close to the
15 measurements.

16 Q. That's because it's not to scale. Did you
17 consider page 38 to be to scale?

18 A. I was trying to find something -- no, I
19 didn't consider it to be exactly to scale, but I was
20 looking for a proportional relationship.

21 Usually that's what you find in police
22 diagrams is the proportional relationships between the
23 accident scene and what they found. This one I haven't
24 seen before.

25 Q. That's just the scale version of it, the

1 other one was scaled down to fit in his report.

2 MR. RONAN: Ellen, do you know when that was
3 done and do you know if you sent it to me?

4 MS. ROBERTS: Well, actually it was what I
5 was going to use as an exhibit, but it's this
6 right here, it's just not scaled down.

7 MR. RONAN: Right.

8 MS. ROBERTS: That's the same thing scaled
9 down to fit in.

10 MR. RONAN: Just so we're clear on the
11 record, I mean here's my question, page 38 of the
12 homicide report --

13 MS. ROBERTS: Is the exhibit I just gave you.

14 MR. RONAN: Okay. There's an exhibit marked
15 that you just handed me as State's Exhibit Number
16 30 that I don't believe I received in discovery, I
17 mean a document like this.

18 I did early on in the case send a letter I
19 think which indicates "if there's anymore things
20 let me know and I'll come take a peek, exhibits or
21 diagrams or anything."

22 MS. ROBERTS: Which we haven't done yet. I
23 haven't seen yours and you haven't seen mine.

24 MR. RONAN: No, it's my position now that
25 you've seen anything I have to date. And I don't

1 know if I'm going to have anything else, if I do,
2 immediately I'll let you know, because I want to
3 avoid any concerns about having time to look at
4 things.

5 But, in any event, here's my point I'm just
6 trying to make, I don't believe that I have
7 Exhibit, State's Exhibit Number 30. So if you
8 know you've sent it to me, maybe you can respond
9 now, maybe you don't know, you can check and let
10 me know later.

11 MS. ROBERTS: I don't know if I sent it to
12 you, but I have a copy here I will give you today
13 that I gave you.

14 But what I'm telling you is this document,
15 Number 30, State's Number 30 is the same thing in
16 the book.

17 MR. RONAN: That's the homicide report, page
18 38?

19 MS. ROBERTS: Correct.

20 MR. RONAN: Okay.

21 MS. ROBERTS: That's the same document, it's
22 just to scale as opposed to the one that was
23 shrunk down for purposes of putting it in the
24 homicide report on page 38.

25 THE WITNESS: Well, the vehicles are

1 MS. ROBERTS: You got it. I mean it's the
2 same thing. I think Rick knows that.

3 THE WITNESS: I'm just saying that on May
4 29th, 2001 he didn't indicate that he had one of
5 those yet.

6 BY MS. ROBERTS:

7 Q. That was from his depo?

8 A. Right, from his depo, civil depo, right. I'm
9 just saying that he indicated he didn't have this, he
10 didn't know the distances.

11 Q. I don't know, because I'm telling you right
12 now that is a shrunk down version, page 38 is a shrunk
13 down version of that.

14 A. I'm not disagreeing, Miss Roberts, I'm just
15 saying he indicated in May he didn't have anything.

16 Q. May of, when was it taken?

17 A. 2001. That was his second or third depo, he
18 indicated he didn't have it.

19 Q. No, he would have been finished by then.

20 A. Well, I'm just saying he said on that depo
21 that he didn't have that material, he didn't know the
22 distances or anything.

23 Q. Maybe he didn't have it with him.

24 A. Well, he said he didn't have it. All I know
25 is what he said. They asked him to bring everything

1 different on here. I mean I don't know if they're
2 to scale, the vehicles, but they're different on
3 page 38 then they are here.

4 MR. RONAN: On State's Exhibit 30?

5 THE WITNESS: Yes.

6 BY MS. ROBERTS:

7 Q. What I'm telling you is, the overall layout
8 of the roadway --

9 A. Okay.

10 Q. -- the reference point and all of that is the
11 same as that, this has been shrunk down, for lack of a
12 better phrase, to fit in the book.

13 A. Okay.

14 Q. That's all.

15 A. All right. I'll have to figure it out.

16 MR. RONAN: When was this State's Exhibit
17 Number 30 that I'm now holding, you know, mine
18 doesn't have an indication on it, do you know when
19 Chris did these?

20 MS. ROBERTS: Well, he had to do them when he
21 did this report, because they're in his report.

22 MR. RONAN: Well, what Rick seems to be
23 saying and what I'm concerned is I just don't have
24 it until now, I'm not pointing fingers, I just
25 want to make sure I have everything.

1 with him.

2 I haven't seen it before, I'll certainly look
3 at it.

4 MR. RONAN: If there's anything else, any
5 diagrams or things you intend to use, would you
6 let me know? I need to have time for Rick to look
7 at everything obviously.

8 MS. ROBERTS: Well, I've got two aerials that
9 I may use.

10 MR. RONAN: Okay.

11 MS. ROBERTS: But they're aerials, they're
12 photographs.

13 MR. RONAN: What I want to avoid is the
14 obvious, where there's something I haven't seen.

15 MS. ROBERTS: Yes, I remember that, Ken.

16 MR. RONAN: Where he, Rick, it would affect
17 his testimony one way or the other, so that's what
18 I'm trying to do.

19 MS. ROBERTS: I don't have any smoking guns.

20 MR. RONAN: Okay. And sometimes it just
21 happens, there's so much stuff, you know, it's
22 kind of hard sometimes to get it all.

23 MS. ROBERTS: Oh, yeah.

24 MR. RONAN: Maybe if we set up a separate
25 date to just go over everything and I'll come on

1 up here and everything you got we'll take a look
2 at.
3 MS. ROBERTS: I'm sure that we'll probably be
4 extending this depo again too, so we'll do it
5 then. How about that?
6 BY MS. ROBERTS:
7 Q. Okay. Got the angles. You were telling me
8 how you determined the departure angles.
9 A. Yes, ma'am.
10 Q. Okay. And then I asked you about that little
11 sort of bootleg to the west --
12 A. Right.
13 Q. -- in the evidence that you have, the red --
14 A. Yes, ma'am.
15 Q. -- scuff marks I'm assuming.
16 A. Right. That's off his measurement sheet.
17 Q. Okay. So did Bruce Buffo plot that in there
18 or did you?
19 A. I'm not sure exactly, but I think I was at
20 his office when we plotted that out I believe, so I
21 think we did it together.
22 I think he physically put the numbers in, I
23 read the measurements off and we checked it. I believe
24 that's what we did.
25 Q. What departure distance did you use for

1 Adamo's vehicle?
2 A. I'll have to look for that. I put Somers'
3 information here. I'm disorganized today.
4 Q. Is it on the linear momentum printout we had?
5 A. It just gives you the speeds.
6 Q. Oh, okay. So it's not on that.
7 A. It just gives you the speeds. I know that I
8 think Somers used 37 and 29. I'm just trying to see
9 whether I plotted it out, but I'm trying to figure out
10 where it is.
11 I believe it was about a 110 or 15 feet from
12 impact to final rest of Adamo's vehicle.
13 Q. I'm sorry. A 115 feet?
14 A. Yeah, I believe to a 110. I believe that's
15 one of the numbers I used.
16 Q. A 110 to a 115?
17 A. Right.
18 Q. Okay.
19 A. Because I used the final rest. Let me just
20 double check here.
21 MR. RONAN: Let's get back to this to make
22 sure I understand something. This exhibit which
23 we were talking about, this Number 30 which
24 corresponds with the page 38 of the homicide
25 report --

1 MS. ROBERTS: It's just a shrink down
2 version, page 38 is, so it fits in the report.
3 MR. RONAN: Got you. Okay. So is this
4 supposedly to scale?
5 MS. ROBERTS: Well, I mean to scale as best
6 it can be, yes.
7 THE WITNESS: What I did was, just so you
8 know, I used measurement sheet on page 34.
9 BY MS. ROBERTS:
10 Q. Okay.
11 A. He indicated Adamo's vehicle, using the
12 longest measurement was 74.9, which is the right rear,
13 and then that would be south; and the north measurement
14 is 16.6, that'll give you about 91 feet.
15 Then you have the impact point itself from
16 the center mass of the vehicle would add on about
17 another 15 feet or so, 10 to 15 feet, and that's what I
18 plotted out on this.
19 Q. I'm sorry. Plotted out on?
20 A. On Chris's measurement sheet. I used that
21 number because he indicates a measurement south and he
22 indicates a measurement north.
23 Q. So you're saying you added 91 plus the 10 or
24 15?
25 A. Right, right. That would be pretty close to

1 what the vehicle traveled.
2 Q. All right. What about the departure distance
3 for Kurlander?
4 A. And Kurlander was -- be about 80 feet
5 roughly.
6 Q. And you got those distances from what?
7 A. Well, I got it from the measurement sheet,
8 Chris Somers' measurement sheet.
9 Q. What coefficient of friction did you use for
10 the roadway?
11 A. I used a .65 for the roadway and I used the
12 rotational .35.
13 Q. I'm sorry. .35 for the grass?
14 A. Correct, the grass and the rotation. There
15 was some rotation of both vehicles.
16 Q. Which direction?
17 A. Adamo rotated clock wise and Kurlander
18 rotated clock wise as well. Both vehicles clock wise.
19 Q. Okay. What was the degree of rotation?
20 A. Adamo was approximately 170, Kurlander was
21 approximately 90 to a hundred, something like that.
22 Q. Ninety to a hundred?
23 A. Correct, somewhere in there.
24 Q. Okay. Now, how did you determine the
25 coefficient of .65 for the roadway?

- 1 A. I checked the roadway.
 2 Q. And what do you mean "you checked the
 3 roadway?"
 4 A. I did a drag sled test on the roadway.
 5 Q. When did you do that?
 6 A. Sometime shortly after I was hired. If I
 7 recall, it was around May, so somewhere around there.
 8 Q. May of 2000. And what were the conditions
 9 under --
 10 A. It was afternoon, about 5:00 o'clock p.m.
 11 Sometime around May 2001.
 12 Q. May 2001?
 13 A. Yes.
 14 Q. Afternoon 5:00 o'clock. Where in the area
 15 did you drag the sled?
 16 A. I drug it -- well, I didn't drag it in the
 17 center of the roadway, I tried to but that was out the
 18 door, so I drug it in the right lane is where I checked
 19 the roadway.
 20 Q. Right lane of?
 21 A. Of Federal Highway. U.S. 1. I did it in the
 22 direction that Adamo was going. Obviously he had the
 23 greater speed, so I did it in his direction.
 24 Q. How many pulls did you do?
 25 A. Ten.

- 1 the sidewalk.
 2 Q. But you did consider the grass?
 3 A. Yes. Well, I looked at the grass, yes, I
 4 used that. But the grass was similar to my rotation so
 5 it didn't really, you know -- it fell in the same
 6 ballpark.
 7 Q. Are these the same numbers that Officer
 8 Somers used?
 9 A. Pretty close. I think we're within, if I'm
 10 not mistaken, we're probably within about 2 miles an
 11 hour overall.
 12 Q. No, I mean as far as your coefficients.
 13 A. I'm not sure actually what he used. Give me
 14 a second here. I know one time he wasn't certain what
 15 numbers he used.
 16 Q. Well, in your civil depo you said that you
 17 used the same ones he did.
 18 A. Well, I did. I have to see if he used the
 19 .35. I don't remember. I found that out later. Let
 20 me see here.
 21 I believe he used initially a 65 and then he
 22 had somebody conduct a test. Hang on a second here.
 23 Yeah, he had somebody run some tests for him and they
 24 came out with a roadway of friction of .65. I used
 25 that number.

- 1 Q. What was the average?
 2 A. .65.
 3 Q. Do you have the numbers with you or not a
 4 clue?
 5 A. I do. Point 65 is the average. That's what
 6 it came out to be after 10 pulls.
 7 Q. Did you have a Vericom or any instrument like
 8 that you used to determine drag factors also?
 9 A. Yes.
 10 Q. Did you use that?
 11 A. No.
 12 Q. Did you do an acceleration test in the area?
 13 A. No.
 14 Q. Did you do any skid testing to see what the
 15 coefficient was?
 16 A. No. You want Somers to lock me up or
 17 something doing skid tests out there?
 18 Q. Well, he could. All right. Did you use any
 19 -- or did you consider the sidewalk at all?
 20 A. No.
 21 Q. And why not?
 22 A. Well, the vehicles traveled such a short
 23 distance on the sidewalk that I didn't feel it was
 24 really that big a deal. I just didn't figure it was
 25 important, since they traveled such a short distance on

- 1 Q. And you're referring to something you're
 2 looking at. What is that you're referring to?
 3 A. I'm looking to a letter dated September 16th,
 4 2000, Officer Somers from Sergeant King. I'm sorry.
 5 Fleming. And copy to you.
 6 Q. Okay.
 7 A. So the roadway was .65 using a drag tire. I
 8 believe I did some runs with antilock brakes as well
 9 and they came up with a .66. So we're pretty close.
 10 Q. Okay. And you were aware of page 26 and 27?
 11 A. Page what?
 12 Q. Page 26 and page 27 of his report also?
 13 A. The homicide report?
 14 Q. Yes.
 15 A. Yes.
 16 Q. Okay.
 17 A. I don't think he used these numbers though in
 18 his formula.
 19 Q. Which ones, on the --
 20 A. The ones that he came up with. For some
 21 reason I think he did the ones that Fleming came up
 22 with.
 23 Q. The lower numbers?
 24 A. I think that's what he did, yeah. I don't
 25 recall his numbers coming out at a .91. I don't recall