

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

BETTY LOU HESTON, individually,)
and ROBERT H. HESTON,)
individually and as the)
personal representatives of)
ROBERT C. HESTON, deceased,)

Plaintiffs,)

No. CV 05-03658 JW

-vs-

CITY OF SALINAS and SALINAS)
POLICE DEPARTMENT, SALINAS)

(CAPTIONS CONTINUED NEXT PAGE)

RULE 30(b) (6) ORAL AND VIDEOTAPED
DEPOSITION OF TASER INTERNATIONAL, INC.

(PATRICK WALLER SMITH, PMK)

AND

ORAL AND VIDEOTAPED DEPOSITION OF
PATRICK WALLER SMITH, AN INDIVIDUAL

(Volume I, Pages 1 - 180)

Scottsdale, Arizona

December 14, 2006

10:17 a.m.

REPORTED BY:

Jacquelyn A. Allen, RPR

AZ Certified Reporter No. 50151

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

)
 (CAPTIONS CONTINUED))
)
)
 POLICE CHIEF DANIEL ORTEGA,)
 TASER INTERNATIONAL, INC., and)
 DOES 1 to 10,)
)
 Defendants.)
)
)
 EVELYN ROSA and ROBERT ROSA)
 as individuals, and TAMMY)
 HIKE, as Guardian as Litem)
 for H.R., a minor, and as the)
 personal representatives of)
 MICHAEL ROBERT ROSA, deceased,)
)
 Plaintiffs,)
)
 -vs-)
)
 CITY OF SEASIDE, et al.,)
)
 Defendants.)
)

No. C 05-03577 JF

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

I N D E X

EXAMINATION BY	PAGE
Mr. Burton	7

EXHIBITS	DESCRIPTION	PAGE
1	Three-page document entitled "TASER International Training Bulletin 12.0 - 04 June 18, 2005"	127

1 APPEARANCES: (Continued)

2

For the Defendant TASER International, Inc.:

3

TASER International

4

By: Holly L. Gibeaut, Esq.,

Litigation Counsel

5

17800 North 85th Street

Scottsdale, Arizona 85255-9603

6

(480) 502-6265

7

ALSO PRESENT:

8

Michael Brave, Esq.

9

Jim Law, videographer

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 Scottsdale, Arizona

December 14, 2006

2 10:17 a.m.

3
4 THE VIDEOGRAPHER: We are on the record, and
5 this is the first tape in the videotaped deposition of
6 Rick Smith, taken by the plaintiffs in the matter of
7 case number CV 05-03658 JW, styled Heston versus
8 Salinas, and also case number CV 05-03577 JW, (sic)
9 styled Rosa versus City of Seaside, filed in the United
10 States District Court for the Northern District of
11 California.

12 Today is December 14th of the year 2006 at
13 approximately 10:17 a.m. Our location is 17800 North
14 85th Street, Scottsdale, Arizona. Jackie Allen is your
15 certified court reporter, and Jim Law is your certified
16 legal video specialist with Driver and Nix, 3131 East
17 Clarendon Avenue, Suite 108, Phoenix, Arizona 85016.

18 If counsel would please state their name, firm,
19 and whom they represent, beginning with plaintiffs'
20 counsel please.

21 MR. BURTON: John Burton, the Law Offices of
22 John Burton, representing all the plaintiffs in both
23 cases.

24 MR. BROWN: Ray Brown from the Law Offices of
25 Lee A. Wood, representing defendant City of Seaside in

1 the Rosa case.

2 THE VIDEOGRAPHER: Will the certified court
3 reporter please swear the witness.

4 MR. BURTON: I'm sorry; there's more counsel.
5 There's defense counsel.

6 THE VIDEOGRAPHER: Oh, I'm sorry.

7 MS. GIBEAUT: That's okay. You forgot about me
8 already.

9 Holly Gibeaut, I'm in-house counsel with TASER
10 International, and I'm appearing specially on behalf of
11 Manning & Marder, who represents TASER International in
12 both the Heston and Rosa cases.

13 THE VIDEOGRAPHER: Will the certified court
14 reporter now swear the witness.

15

16 PATRICK WALLER SMITH,
17 called as a witness herein, having been first duly
18 sworn, was examined and testified as follows:

19

20 E X A M I N A T I O N

21 BY MR. BURTON:

22 Q. Can you state your name for the record, please,
23 sir.

24 A. My name is Patrick Waller Smith -- middle name
25 is W-a-l-l-e-r -- but I go by "Rick."

1 Q. I've had the benefit of reviewing your
2 depositions in the Borden and Alvarado cases. I
3 understand the Borden deposition was on July -- well, in
4 July of last year, 2005. How many depositions have you
5 given since that time?

6 A. Since July of 2005?

7 Q. Right, the Borden one.

8 A. I would estimate four.

9 Q. And what kind of actions were those?

10 A. There was, I believe, a deposition for the
11 Alvarado trial, which was -- involved a death in police
12 custody. There was a case, I think it was Lewis, where
13 there was an allegation of injury in a case involving
14 police use of a TASER.

15 I'm trying to think what the other ones might
16 have been. They're not coming to me offhand. I know
17 I've had a few depositions this past year.

18 Can I throw a lifeline out to my counsel?

19 MR. BURTON: That's fine with me.

20 THE WITNESS: Anything else I'm missing as far
21 as depos?

22 MS. GIBEAUT: We can look at your calendar.

23 Q. BY MR. BURTON: What were the --

24 A. Alvarado and Lewis are the two that come to
25 mind.

1 Q. Well, when you say -- you testified at the
2 Alvarado trial, right, in Los Angeles just earlier this
3 year?

4 A. That's correct.

5 Q. And the date that I have on the Alvarado
6 deposition, which was taken here in Scottsdale by
7 Mr. Mills, was that it was a month before the Borden
8 deposition. Does that sound like it could be right?

9 A. It could be right, yes.

10 Q. What was the nature of the injury in the Lewis
11 case?

12 A. It was an allegation of impotence.

13 Q. Allegedly caused by a TASER device?

14 A. Allegedly, yes.

15 Q. Do you know if the allegation was that the
16 trauma of the dart is what -- you know, hitting the
17 person in the groin is what caused it, or that there was
18 some other allegation?

19 A. It was very unclear. They never really had a
20 theory that made much sense, as I recall. I don't
21 recall the dart -- the evidence showed the dart did not
22 even penetrate the skin.

23 That case has since gone away. It was
24 dismissed.

25 Q. I know the phrase "drive stun" for when a

1 cartridge is not used. Do you have a term that you use
2 when the TASER M26 is in the dart mode?

3 A. Yes. We generally say a probe deployment.

4 Q. Was the Lewis case a probe deployment or a
5 drive stun; do you know?

6 A. I believe it was a probe deployment.

7 Q. Do you know where, what court that was pending
8 in?

9 A. It was somewhere in Florida.

10 Q. Do you happen to know who the plaintiff's
11 lawyer is off the top of your head?

12 A. I don't.

13 Q. And do you understand that that case was
14 dismissed by some sort of court action or order or was
15 dismissed as to TASER -- I'm talking about as to
16 TASER -- voluntarily by the plaintiff?

17 A. I think it was a voluntary dismissal when they
18 saw how the evidence was coming together.

19 Q. And did TASER pay any consideration in exchange
20 for that dismissal?

21 A. No.

22 Q. I understand that you're very familiar with
23 this deposition process. I'm going to be asking a
24 little bit about two specific cases where TASERs were
25 deployed and where the person subsequently died.

1 One is the death of Michael Rosa, which the
2 incident happened in the late hours of October 29th,
3 2004 in the City of Del Rey Oaks, California. The
4 second incident involved Robert Heston, who had a
5 cardiac arrest on February 19th, 2005 in Salinas,
6 California and was disconnected from life support and
7 passed away the next day, February 20th.

8 I'm going to be asking a few specific questions
9 about each of these incidents, but most of my
10 questioning I think will be general and will be relating
11 equally to both cases and some concerns about them. If
12 that gets confusing to you or to anybody else in the
13 room, they should just speak up, and then we'll back up
14 and straighten it out.

15 This is, by agreement, a joint deposition in
16 those two cases. It's also a joint deposition of you as
17 an individual and your role as an individual in TASER
18 International, and also, you've been designated as the
19 person most knowledgeable on a series of subjects. So
20 we've agreed to combine those two depositions as well.

21 If I ask a question and you feel that you are
22 not the person most knowledgeable who would be selected
23 by TASER International to answer that question and it's
24 within our designation of persons most knowledgeable, I
25 think the appropriate thing for you to do, in

1 consultation with your attorney, is to say so and
2 identify the person who would be the most knowledgeable,
3 and if appropriate, we can make arrangements to take
4 that deposition or deal with that.

5 Obviously, all the regular rules for a
6 deposition apply. The two I want to stress to you right
7 now are that if I ask a question that is unclear to you
8 for any reason, and I know that we're going to be
9 dealing with some technical matters that I may not have
10 the firmest grasp of, so if my question is awkward or
11 phrased in a way that presents any difficulty for you to
12 answer, please speak up and let me know. I'll try to
13 back up, withdraw the question, rephrase it in a way
14 such that when somebody is subsequently reviewing this
15 transcript, they will have no question about the fact
16 that you understood the question and answered it in the
17 way that you meant to answer it.

18 Let me just take one second. I forgot to turn
19 off my cell phone.

20 Secondly, remember that, unlike the courtroom
21 testimony you gave in Alvarado, for example, you will be
22 provided a transcript of this deposition and an
23 opportunity to make any changes or modifications to your
24 answer. For example, you could realize that there was
25 another deposition you should have told me about if you

1 had recalled it, you know, to my earlier question about
2 depositions since Borden, and you could put it in at
3 that time. I think everybody would understand a change
4 like that as something that just is a question of
5 recollection. However, sometimes witnesses change
6 something that's material or important in the case, and
7 lawyers can use the fact that they've changed their
8 testimony to attack their credibility. So it's
9 important to try to get things as right as possible the
10 first time.

11 Let me know if you need a break or if you want
12 to consult with your attorney, and I'm sure we can
13 accommodate you.

14 Before I get into sort of the substance of what
15 I want to get into, I'd just like to ask you about other
16 products liability cases that are pending against TASER
17 relating to allegations that TASER applications can
18 cause death. I understand that both the Borden case and
19 the Alvarado case and then these two cases involve that
20 particular allegation. I understand that the Borden
21 case has been resolved. Was that resolved with a
22 voluntary dismissal by the plaintiffs?

23 A. I believe so.

24 Q. That's your understanding?

25 A. My understanding is that it was voluntarily

1 dismissed.

2 Q. And was any consideration paid by TASER in
3 connection with that voluntary dismissal?

4 A. Absolutely not.

5 Q. Do you know whether consideration was paid to
6 those plaintiffs by the police agency that used the
7 TASER?

8 A. I'm not sure about that.

9 Q. Do you know whether there was any I'd say
10 package deal, where the police agency agreed to pay the
11 plaintiffs in exchange for voluntary dismissal of the
12 entire action, which would include TASER?

13 A. No, I'm pretty sure there was not.

14 In fact, as I think back about it, I believe
15 the agency may have engaged in a settlement at a time
16 period that was significantly different than when the
17 case against us was dropped, so I don't think there was
18 any interaction whatsoever.

19 Q. And I understand that just recently, Alvarado
20 was resolved with a defense verdict after a jury trial.
21 Have there been any other TASER products liability cases
22 involving an alleged death that have proceeded to trial,
23 to jury trial?

24 A. I don't believe so.

25 Q. Now, I know the Powers case, which did not

1 involve a death, did go to jury trial and also resulted
2 in a defense verdict; is that correct?

3 A. That is correct.

4 Q. Do you know whether there are any other
5 products liability cases involving alleged safety of the
6 TASER International products that have gone to trial
7 besides Powers and Alvarado?

8 A. Not that I know of.

9 Q. Did TASER, to your knowledge, ever offer any
10 consideration to Powers in exchange for a voluntary
11 dismissal?

12 A. TASER did not.

13 Q. Do you know if somebody else did?

14 A. I believe our insurance company may have made a
15 pretrial settlement offer.

16 Q. There's something in the law called -- well, I
17 call them consent policies, lawyers and doctors tend to
18 have them, which means it's different than, like, the
19 typical auto policy which an insurance company can
20 settle without the consent of the insured. Do you know
21 if the TASER policy that this offer may have been made
22 under was a consent policy?

23 A. My recollection was that TASER did not have the
24 ability to stop that offer.

25 And in fact, when the insurance company

1 indicated they were going to make yet another offer
2 during the trial, TASER -- under that policy, we could
3 not stop them, so we elected instead to step in and
4 settle out with our own insurance to prevent them from
5 settling the case.

6 Q. Has TASER ever -- let me withdraw that.

7 Do you know whether the present policy that
8 would cover TASER products liability claims such as
9 these two cases is a consent policy?

10 A. I don't know.

11 Q. Besides the Powers case, has anyone on behalf
12 of TASER, either an insurance company on behalf of TASER
13 or TASER itself, made financial offers to settle any
14 other products liability claims against TASER
15 International based on allegations that the product is
16 defective or unreasonably dangerous and caused some type
17 of physical injury?

18 A. Yes.

19 Q. And do you know how many cases fall under that
20 category?

21 A. Maybe four or five.

22 Q. Were any of them death cases?

23 A. One.

24 Q. What's the name of the death case?

25 A. That was the Alvarado case.

1 In a similar pattern, our insurance company was
2 engaging -- seeking to settle the case, and we again
3 made a determination it was in our best interest to step
4 in and prevent that, so we settled out with our own
5 insurance and took the case to trial.

6 Q. Were any of the other cases in which offers
7 were made, were the offers ever accepted?

8 A. Yes.

9 Q. And which cases would fall under that category?

10 A. I don't know them by name, but there have been
11 a small number of cases involving police officers
12 injured during training, where either we or our
13 insurance made a determination that in those cases and
14 for de minimus, for small -- relatively small amounts of
15 money, we were able to resolve them. We made the
16 determination that it was not in our best interest to be
17 across the courtroom from our customer base. And again,
18 those cases are relatively small amounts of money.

19 Q. So aside from -- well, and Powers would sort of
20 fall into that category of being a police officer
21 injured during training; is that correct?

22 A. That's correct.

23 Q. So other than Alvarado, is there any other
24 products liability case involving an alleged physical
25 injury caused by a TASER deployment in which TASER or

1 somebody on TASER's behalf has offered money to settle?

2 MS. GIBEAUT: Objection; asked and answered.

3 THE WITNESS: Not that I'm aware of, other
4 than, you know, our previous discussions.

5 Q. BY MR. BURTON: Has TASER ever entered into a
6 settlement of a personal injury claim against it that
7 was -- as one of the conditions of settlement, there was
8 a confidentiality agreement?

9 A. Yes.

10 Q. Was that a case involving an alleged personal
11 injury caused by a TASER, or were those cases?

12 A. Could I ask a question of my counsel?

13 Q. Sure.

14 A. It has to do with the scope of confidentiality
15 agreements.

16 MR. BURTON: Do you want to step out? Because
17 that's an appropriate thing to talk to your attorney
18 about.

19 We can go off the record.

20 THE VIDEOGRAPHER: We are going off the record
21 at 10:38 a.m.

22 (Recessed from 10:38 a.m. until 10:40 a.m.)

23 THE VIDEOGRAPHER: We are back on the record at
24 10:40 a.m.

25 Q. BY MR. BURTON: I think there's a pending

1 question. I can restate it if you need to.

2 A. Please.

3 Q. Okay. Has TASER entered into any settlement,
4 in cases based on allegations that its products caused a
5 personal injury, where there has been an agreement to
6 keep the settlement confidential?

7 A. Yes.

8 Q. How many such agreements -- how many such
9 settlements are there?

10 A. I don't know the exact number. It would be a
11 handful, you know, approximately four or five.

12 Q. In each of those cases, was the plaintiff or
13 the claimant a police officer who alleged he was injured
14 in training?

15 A. Yes.

16 Q. So those would be the same cases that you were
17 talking about before that short break?

18 A. Yes.

19 Q. Were any of those cases involving allegations
20 of any cardiac-type injury?

21 A. No. I should say no, I don't believe so. I'm
22 not intimately familiar with the details, but I
23 certainly don't think so.

24 Q. To your knowledge, did any of those cases
25 involve -- I sort of have the three categories. One

1 would be multiple devices at more or less the same time;
2 the second would be multiple shocks from the same
3 device, in other words, multiple cycles; and the third
4 would be prolonged shock, in other words, longer than
5 five seconds. Did any of those settlements involve any
6 of those three things, as far as you know?

7 A. No.

8 Q. So is it true, and this is kind of asked and
9 answered but I just want to wrap this up, but is it true
10 that TASER has never settled a case with a plaintiff who
11 claims that he or she was injured by the device in a
12 field setting?

13 A. I believe that's correct.

14 Q. And to your extent, the only such offer that
15 was made under those circumstances was one that was made
16 against the wishes of TASER in the Alvarado case?

17 MS. GIBEAUT: Objection; misstates testimony.

18 MR. BURTON: Okay.

19 MS. GIBEAUT: He testified about the Powers
20 case as well.

21 MR. BURTON: But the Powers was not a field
22 case.

23 MS. GIBEAUT: But that wasn't part of the
24 question.

25 MR. BURTON: I think it was, but I can re-ask

1 it.

2 MS. GIBEAUT: Okay. You want to restate it?

3 MR. BURTON: It was meant to be if it wasn't,
4 so that's my mistake.

5 Q. BY MR. BURTON: In terms of plaintiffs who are
6 claiming they were injured by the TASER in a field
7 setting, the only time an offer has been made to settle
8 one of those was in the Alvarado case, and that was
9 against the wishes of TASER; is that correct?

10 A. Yes, to my awareness. Again, because we do
11 sometimes have insurance companies involved, I don't
12 know everything that they're up to, but the only one I'm
13 specifically aware of was Alvarado, and we took measures
14 to address that.

15 Q. Do you know how many products liability cases
16 involving allegations of physical injury arising in a
17 field setting as opposed to a training setting are
18 pending against TASER International right now?

19 A. I can give an order of magnitude. I don't know
20 the exact number.

21 Q. What would be your best estimate?

22 A. My best estimate would be 30, maybe 35.

23 Q. Of those 30 to 35 cases, could you estimate how
24 many are death cases?

25 A. The significant majority.

1 Q. Thank you.

2 I want to now sort of work through an outline a
3 little more chronologically. I just wanted to get that
4 background first. I appreciate it.

5 A. Okay.

6 Q. When TASER International, Inc. was established
7 in 1993, it was privately held; is that correct?

8 A. Correct.

9 Q. And it went public in 2001?

10 A. Yes.

11 Q. During the period that it was privately held,
12 who were the shareholders?

13 A. Myself, Tom Smith, Phillip Smith, Bruce Culver,
14 Ray Rivera, and Steven Tuttle. There may have been a
15 few more small shareholders.

16 Q. And did your percentage, respective percentages
17 of ownership, change over time?

18 A. They did.

19 Q. And Tom Smith is your brother?

20 A. Correct.

21 Q. And is Phil Smith your father?

22 A. He is.

23 Q. And then Steve Tuttle, is he a relation to you?

24 A. No. He's one of our employees.

25 Q. When TASER International incorporated in 1993,

1 was it actively involved in the sales of products?

2 A. No.

3 Q. When did TASER International first actually
4 sell products?

5 A. December of 1994.

6 Q. And what was the first product that TASER
7 International introduced or sold?

8 A. The Air TASER Model 34000.

9 Q. Would you -- the Air TASER also had probe
10 deployment; is that correct?

11 A. Correct.

12 Q. And those probes were also nitrogen powered?

13 A. Correct.

14 Q. And it would be fair to say that the electrical
15 charge of the Air TASER was of a significantly different
16 character than that of the M26?

17 A. I would agree.

18 Q. And the intended effect of the Air TASER was
19 to -- would it be fair to say was to inflict pain in
20 order for the user to gain pain compliance?

21 A. I would say the original design of the device,
22 the intent was for it to cause a muscular
23 incapacitation, but it failed to achieve that in its
24 implementation. It only caused the pain effect that you
25 talked about.

1 Q. How long did the -- TASER International sell
2 the Air TASER?

3 A. From 1994 through I believe 2002, possibly
4 2001.

5 Q. Prior to the M26, did TASER International, Inc.
6 sell any other products other than the Air TASER 34000?

7 A. Yes.

8 Q. And what products are those?

9 A. Well, we sold a variety of accessories,
10 holsters, cartridges, batteries, et cetera, for the Air
11 TASER, and then we also had a separate product line
12 called the Auto TASER that was an automotive security
13 device.

14 Q. And the basic concept behind the Auto TASER was
15 that if somebody was stealing a car, they would get an
16 electric shock?

17 A. Similar. It was a steering wheel lock, like
18 The Club. It would lock on the steering wheel, and then
19 if -- it had a tamper-resistant feature. If somebody
20 was trying to get it off the wheel, it would deliver a
21 shock unless they had the remote control to deactivate
22 it.

23 Q. So other than the Auto TASER product line and
24 the Air TASER product line, did TASER International have
25 any other products before the M26?

1 A. Yes, there was one other.

2 Q. And what was that?

3 A. It was called First Sight. It was basically an
4 enlarged viewing portal that replaced a peephole in a
5 door so you could see through it, standing a few feet
6 back, who was on the other side.

7 Q. And would that be all the products that TASER
8 International sold prior to the M26?

9 A. Yes.

10 Q. Could you estimate just a ballpark number as to
11 what its, let's say, gross revenues were, average, from,
12 let's say, 1995 through 1999? I know the M26 was
13 introduced at the end of 1999.

14 A. Revenues would be in the 1 and a half to
15 \$3 and a half million range.

16 Q. And profits. Could you estimate those?

17 A. We were not profitable before 1999.

18 Q. What was the first year that TASER
19 International operated at a profit?

20 A. I believe 2000 or 2001.

21 Q. Now, you actually worked personally with
22 engineers to develop the M26; is that correct?

23 A. That is correct.

24 Q. And that began sort of in this same time
25 period, the mid 1990s?

1 A. Correct.

2 Q. And the purpose of the M26 was to change the
3 character of the electrical discharge through the probes
4 so that the device would become an incapacitating device
5 and incapacitate the target?

6 A. Correct.

7 Q. And I know, I read in the literature, like,
8 ECDs and different acronyms for this device, and I think
9 even TASER has changed its use over time. What do you
10 call this type of device today?

11 A. Well, today we call them ECDs, electronic
12 control devices.

13 Q. And why did you select that particular
14 expression?

15 A. I believe that was one that was being
16 standardized in Canada, and we felt it was a reasonable
17 name. There have been a number of different generic
18 names used, and we evaluated them all and felt that that
19 was a good name. A good generic term, I should say.

20 Q. Now, the M26 ECD was first sold right at the
21 very end of 1999?

22 A. Correct.

23 Q. Was there some reason why you introduced it at
24 the end of the year rather than waiting until the next
25 calendar year, or is that just when it was ready?

1 A. It's just when it was ready.

2 Q. And then you've also marketed a series of
3 accessories that relate to the M26; is that correct?

4 A. Correct.

5 Q. Besides the M26 product line, prior to the
6 introduction of the X26 in, I think that was 2003, if
7 I'm right, what other products has TASER
8 International -- during that time prior to the X26, what
9 other product lines did TASER International develop and
10 market?

11 A. Really only accessories for the M26.

12 Q. And then after the X26 in 2003 to the present,
13 I know you have these civilian models, can you explain
14 what other product lines you've been selling?

15 A. The product lines are basically the M series,
16 which includes the M26, and then some private citizen
17 versions, the X26, and then there are some private
18 citizen variances of that, and then cartridges and
19 accessories.

20 Q. Are you aware of any law that would prohibit
21 TASER from selling M26s or X26s to private citizens?

22 A. Yes.

23 Q. And what laws are those?

24 A. There are restrictions against stun guns of all
25 types in seven states.

1 Q. Outside of those seven states, in the other 43
2 are you aware of any legal restrictions that would
3 prevent TASER from selling M26s to private citizens?

4 A. Yes.

5 Q. And what laws are those?

6 A. There are some city- and county-level
7 ordinances that prohibit stun guns of all types in
8 certain cities, such as Washington, DC and Chicago, and
9 there are some others.

10 Q. Outside of particular city and county
11 ordinances and the laws in the seven states, are there
12 any other laws that preclude TASER International from
13 selling M26s or X26s to private citizens?

14 A. Not that I'm aware of.

15 Q. So is -- TASER International has a policy, is
16 it true, of only selling M26s or X26s to law enforcement
17 agencies?

18 MS. GIBEAUT: Objection; form. There's an X26
19 citizen version, which he --

20 MR. BURTON: But that's the X16, right?

21 MS. GIBEAUT: No, it's X26C.

22 MR. BURTON: Oh, okay.

23 MS. GIBEAUT: Just the way you asked it, there
24 would be some confusion.

25 Q. BY MR. BURTON: Since this case just involves

1 M26s, let me just keep it simple. Is there a policy of
2 TASER International to not sell M26s to private
3 citizens?

4 A. There is.

5 Q. And is that a voluntary decision of TASER
6 International?

7 A. It is.

8 Q. And --

9 A. It's really market segmentation. We have a
10 version that's sold in the consumer markets and one
11 that's sold to police.

12 Q. I understand market segmentation, but here, if
13 I, like -- because I'm a private citizen, not a law
14 enforcement agency -- if I wanted to buy an M26 from
15 TASER International, it would not sell it to me,
16 correct?

17 A. Correct.

18 Q. And why is that?

19 A. Basically for market segmentation purposes.
20 The M26 is designed for law enforcement use. We have a
21 very similar product line called the M18 and M18L that
22 we sell for private consumer use. And the biggest
23 difference is that the law enforcement unit has
24 additional tracking features built in for auditing the
25 use of the device, and those are not built in on the

1 M18s.

2 Q. Is there any federal governmental agency that
3 regulates or supervises the safety or specifications of
4 TASER International ECDs?

5 A. Yes.

6 Q. And what agency is that?

7 A. It's the Consumer Products Safety Commission
8 that regulates all consumer products from blenders to
9 lawn mowers to chain saws to Tasers.

10 MR. BROWN: Is it Division or Commission?

11 THE WITNESS: Commission. Consumer Products
12 Safety Commission.

13 Q. BY MR. BURTON: Do you know what department
14 that's in off the top of your head?

15 A. I don't.

16 Q. To your knowledge, has the Consumer Products
17 Safety Commission ever conducted specific testing of the
18 M26?

19 A. Specific testing, I'm not aware if they have.

20 Q. Do you know whether the Consumer Products
21 Safety Commission has ever issued a report regarding the
22 safety of the M26?

23 A. Not a public report that I've seen. I know
24 we've met with them and presented safety data on our
25 products.

1 Q. Do you have any writings or documents generated
2 by the Consumer Products Safety Commission that refer or
3 reflect that commission's views on the safety of the
4 M26?

5 A. No.

6 Q. As far as you know, there are no such documents
7 in possession of TASER?

8 A. That are specific to the M26, that is correct.

9 Q. How about the X26?

10 A. That would also be correct.

11 Q. How about ECDs in general?

12 A. There was some documentation from the 1970s
13 with the original version of the TASER. They did some
14 analysis back at that point in time.

15 Q. That was the 1976 study?

16 A. Roughly, though I should probably point out
17 that the author of that study, Ted Bernstein, has
18 presented at TASER conferences and has analyzed the M26
19 and has basically presented his views supporting its
20 safety.

21 Q. I just have a couple questions about the basic
22 design of the M26. As I understand it from reviewing
23 the literature, one of the really important
24 characteristics is the nature of the electrical -- hope
25 I'm using this word right -- current, and the number of

1 pulses per second, so that they will sort of override
2 the brain's electrical impulses and cause the muscle
3 contractions. Would you agree with that?

4 A. Broadly, yes.

5 Q. And that a TASER M26 is designed to, I'll say
6 fire -- maybe you don't like that word -- 15 to 20
7 pulses a second.

8 A. Correct.

9 Q. Is that correct?

10 A. (No verbal response.)

11 Q. How was that number, how was that pulse
12 frequency arrived at?

13 A. Theoretically and experimentally.

14 Q. Can you sort of summarize how it was arrived at
15 theoretically?

16 A. Certainly. Theoretically, individual
17 electrical pulse discharges will stimulate excitable
18 tissues, particularly the motor nerves of the targets
19 for the M26. So a singular pulse will cause a twitch.

20 As pulses are then repeated, those individual
21 twitches -- for example, at two pulses per second, one
22 would see a twitch, for example, like my hand, a twitch
23 and relaxing. But a subject can continue to move
24 through twitches. At about ten pulses per second, a
25 phenomenon called clonus begins to occur. That's where

1 those twitches start to overlap. And now you might see
2 a jerking movement, but where there's a movement of the
3 muscle.

4 As you get up towards 15 to 20 pulses per
5 second, you start to get a more smooth and sustained
6 contraction of the muscle. And when that happens, it
7 becomes much harder for that person to perform
8 coordinated movement. So we would say they're really
9 becoming much more incapacitated at 15 or 20 pulses per
10 second than at 10 or less.

11 Q. Would you call that tetany?

12 A. There's some discussion of tetany. Tetany is
13 where the contraction of the muscle becomes smooth to
14 the naked eye, to where you don't see the individual
15 twitches. You start to approach tetany in the 20 to 30
16 range, although maximal tetanic contractions don't occur
17 until up to 60 or 80 pulses per second, to where you're
18 really now maximizing the contraction capability of the
19 muscle.

20 So we're -- I guess the net answer is we're
21 sort of somewhere at the high end of clonus and the low
22 end of tetany.

23 Q. How was the duration of five seconds arrived
24 at?

25 A. Again, experimentally, as well as through

1 discussions and research with police and users.

2 Q. Did you have any role in selecting the
3 five-second duration?

4 A. I did.

5 Q. And what was your role?

6 A. I was really intimately involved in the team
7 where we had discussions researching what the optimal
8 pulse duration would be. I may be -- let me just be
9 sure, pulse train duration. Each individual pulse is a
10 few microseconds in duration, but how long we should
11 have the device deliver an automated train of pulses
12 for.

13 Q. Can we call that a cycle?

14 A. Perfect.

15 Q. And so TASER M26s are designed to -- and I know
16 there's exceptions to this, which we'll get to -- but a
17 single trigger pull to deliver a five-second cycle.
18 Correct?

19 A. Correct.

20 Q. And what -- you sort of explained abstractly
21 how that five seconds was arrived at. Can you tell us
22 more concretely, what were the considerations? Why five
23 seconds and not three seconds and not 10 seconds?

24 A. Okay. Well, first, the decision to have a
25 timing cycle at all was based on feedback from end users

1 that, for example, Darren Laur, a sergeant in Victoria,
2 Canada, related that in training with the old versions
3 of the TASER where the operator had to hold the button
4 down, that even with a SWAT team, 50 percent of the SWAT
5 team would forget. And these are highly trained police.
6 Just went through TASER training. You'd put them in
7 scenarios, and they'd fire and release the button.
8 Well, in the field, that would cause failure, because
9 there would be no flow of electricity. And the results
10 could be very bad if a subject pulled the darts out and
11 keeps fighting. So given a significant failure rate of
12 officers not holding the button down, we determined it
13 would be optimal for the device to automatically run for
14 a period of time.

15 Now, in terms of selecting that period of time,
16 originally for the Air TASER 34000, we did 30 seconds.
17 And the reason for 30 seconds was to give a user a
18 chance, if my wife, for example, were using it, to drop
19 somebody and get away, because the recovery from the
20 TASER is so fast, you wouldn't be able to shut it off,
21 and the subject could get up. So we gave them a
22 30-second discharge.

23 When we moved to police, we felt that, well,
24 this is a different application. They don't need to get
25 away. Police are going to stay there. They're likely

1 going to restrain the subject. So we wanted to have a
2 time period that was sufficient for them to begin
3 restraints and to assess whether the weapon was working
4 or not, yet not go any longer than necessary, because we
5 still have a police officer there, and if they need more
6 time, they could re-trigger it.

7 Also, I should mention, we give the operator
8 the ability to shut the unit off at any point in time so
9 that the operator can determine how long the cycle
10 should be. We just want them to make a conscious
11 decision how long it should be so they consciously shut
12 it off, rather than accidentally or inadvertently shut
13 it off by releasing the trigger too soon.

14 So the five seconds, in discussions with
15 Captain Greg Meyer at LAPD, Darren Laur of Victoria,
16 Canada, Steve Ijames out of Missouri, Sid Heal from Los
17 Angeles County Sheriff's, we went around and talked to a
18 lot of people who had experience using the older TASERs,
19 and many agencies trained their officers to press and
20 hold the trigger for five to eight seconds, again, that
21 being a time period to give the device some time to
22 start working, for the operator to assess its effect,
23 and for them to put the subject on the ground.

24 I would also augment that in some of our
25 experimentation on human subjects, our first human

1 subject was Hans Marrero, who is now our chief
2 instructor. We hit him with about a
3 two-and-a-half-second blast, and he was starting to go
4 to the ground, but when we shut it off, he was still
5 standing and he immediately recovered. And we felt
6 tactically, that if an officer makes a decision to
7 deploy a TASER, we want to give it a chance to put the
8 subject on the ground, which yields the officer a much
9 better tactical advantage than if they're still
10 standing. So we saw two and a half, three seconds was
11 probably too short. Agencies were training for five to
12 eight. Five seconds seemed like the right choice, and
13 we rolled it into the product.

14 And of course, we evaluated over time with
15 human volunteers and exposures and further discussions
16 with law enforcement. And five seconds, as I sit here
17 today, I think was the right choice.

18 Q. Has -- well, withdraw that.

19 In terms of the shut-off with the safety, do
20 you know whether TASER trains that as a general rule,
21 the officer should allow the whole five-second cycle
22 rather than shutting it off?

23 A. Yes, we do train that in general, it makes
24 tactical -- depending on each tactical situation, but
25 that they should give the device a chance to start

1 working, and that would mean give it the five seconds,
2 the risk being if they shut it off too soon, it could
3 result in an ineffective use.

4 Q. Now, on the M26, the dataport will not record
5 if the device is shut off before the five-second cycle
6 is completed; is that correct?

7 A. That is correct.

8 Q. And has that feature been changed on the X26?

9 A. It has.

10 Q. And are you still marketing M26s with the
11 original feature?

12 A. Yes.

13 Q. And why haven't you changed it on the M26?

14 A. It's not possible on the M26. The way the M26
15 circuit functions, when you flip the safety down, it
16 shuts off power to the microprocessor, so literally when
17 you shut the device down, there's -- the micro is not
18 awake to be able to go and check the time and how long
19 it was on and record that termination event.

20 So the hardware is very different when we
21 designed the X26. It has to use a totally different
22 control methodology to be able to note the time at which
23 the safety is switched down and then to record the
24 duration.

25 Q. Now, you mentioned that in doing some of your

1 research for this device that you said 50 percent of
2 these SWAT officers would forget to hold down the
3 button. Did your research also uncover that sometimes
4 officers would hold down a button too long?

5 A. Yes. That was more qualitative feedback from
6 law enforcement.

7 And I think the best way to characterize it
8 would be that a person who is under stress has a poor
9 ability to measure time. For example, when you get in a
10 car wreck, people relate that time seems to greatly slow
11 down. So under stress, the idea of having the
12 officer -- if training an officer, say, to hold the
13 button down for five seconds, you might get very
14 different results in the field, because there's so many
15 things going on and that officer's perception of time
16 may change. So they may think five seconds goes by very
17 quickly and release it, they may release it immediately
18 and forget to hold it down at all, or they might in
19 fact -- may hold it down and sort of lose track of time.

20 That's why we in general wanted them to think
21 in terms of the TASER device as a binary decision once
22 they deploy it, and then the device handles the tracking
23 of time, at least initially, while they can assess the
24 situation during that first five seconds, and then make
25 a determination as to whether they're going to need to

1 come back and re-administer.

2 Q. Now, if one holds down the trigger, pulls a
3 trigger and holds it down in an M26, it will continue to
4 discharge electricity so long as the trigger is held
5 down, at least until the battery expires; is that
6 correct?

7 A. Yes.

8 Q. And let's say just a regular, fully charged
9 unit with regular batteries, off-the-shelf batteries,
10 how long a period could that be?

11 A. About six minutes, six to ten minutes, I'd say.

12 Q. If, let's just say hypothetically, an officer
13 were to hold down a trigger for, let's say, a full
14 minute and do a full minute of discharge, would you
15 expect a regular M26 to, like, overheat or malfunction
16 in any way because of that amount of discharge?

17 A. In a minute? No.

18 Q. When would you expect a malfunction, as opposed
19 to just a battery running out, to likely set in to an
20 M26?

21 A. I would say at approximately five minutes we
22 would have concern about overheating, which would cause
23 the weapon to fail working would be what you'd see. The
24 field effects transistor, the FET that controls the
25 current, would most likely be the piece that overheats,

1 and then it should shut the system down. So it would
2 fail to a nonoperative mode.

3 Q. When you were developing the M26 and this
4 five-second cycle, did you consider having the device
5 end the five-second cycle after five seconds regardless
6 of whether the operator was holding the trigger down?

7 A. There were some discussions along those lines.
8 I don't recall if it was before or after the product's
9 initial release.

10 Q. And can you summarize what the gist of those
11 conversations were?

12 A. Well, there was some discussion about, you
13 know, what to do when the trigger is held down. And the
14 feeling was that if an officer is there and he's holding
15 the trigger down, the device needs to function for him
16 or her, and the idea of, for example, making it where
17 the device would just shut off and stay off after some
18 period of time could present a real safety hazard to the
19 officer and potentially to the subject involved.

20 The point being, for example, you can imagine
21 an officer using this in a situation where maybe someone
22 had a knife, and the TASER is running for a period of
23 time, and the subject is on the ground, and the officers
24 are trying to get the knife out of a clenched fist, and
25 all of a sudden, the device shuts off on its own accord,

1 and the subject wakes up and stabs somebody or hurts an
2 officer or himself. Again, there's a man in the loop.
3 We can't automate all of the decision-making process.
4 We just tried to eliminate the risks of inadvertently
5 not holding the triggers down.

6 But making a device that fails to work at an
7 arbitrary point in time could be very dangerous. It
8 would be like designing a gun that jams after the fifth
9 or sixth shot. You just -- you can't do it, because
10 we're not there, and we've got to rely on the
11 professionalism and training of those officers to
12 determine when they need the TASER on.

13 Q. Just from your understanding of an engineering
14 design point of view, could the M26 have been designed
15 so that, let's say, the trigger is pulled, the darts are
16 deployed, and there's a five-second cycle that would
17 shut off after five seconds, even though the operator
18 held the trigger down, and to reenergize the device, you
19 would have to release the trigger and then pull it
20 again, as opposed to how it currently works, which is
21 just it would continue after the five seconds to deliver
22 power?

23 A. So is your -- was that is it possible?

24 Q. Yes.

25 A. Yes.

1 Q. Was that option considered and rejected for the
2 reason that you just stated?

3 A. Yes.

4 And also because of the concern that once it
5 shuts off, again, even if the operator just had to
6 re-trigger the device, we don't know how long it would
7 take the officer to notice that it had stopped working
8 and to make that adjustment. And we felt that it was an
9 officer safety issue, and that it was best, if the
10 officer is holding the trigger down, the device needs to
11 be emitting an output.

12 Q. In firing an M26, can one who is operating it,
13 if there's not, let's say, too much noise, if you're not
14 next to a pile driver or something, should the officer
15 be able to hear whether it's working or not?

16 A. In -- depends on the circumstances. But with a
17 good hit, where the probes have actually penetrated the
18 skin, you really won't hear much. It's very quiet. You
19 normally hear it most loudly when it's not connected to
20 the target, when you have a misfire or you missed with
21 one of the darts or you've got a loud arc occurring
22 somewhere. That's usually an indicator that you don't
23 have a good circuit connection.

24 Q. But let's say in a reasonably quiet room, like
25 this, even if there was -- and there were two darts that

1 actually went into, let's say, the skin of a guy who
2 wasn't wearing a shirt, would we still be able to hear
3 that clicking sound of the TASER cycling?

4 A. It would be very muted and quiet. In an
5 absolutely quiet room in a scientific experiment, you
6 would -- you would hear it. In a confrontation where
7 there is likely to be yelling and screaming and audio
8 exclusion, you know, officers frequently don't even hear
9 gunshots. I would not expect an officer to be expected
10 in those circumstances to be able to hear it,
11 particularly with a good connection. It's very subtle.

12 Q. Can you see whether the TASER is actually
13 discharging power into its target, other than just the
14 behavior of the target?

15 A. Primarily you'll see behavioral clues. It's
16 very difficult to see electrical corona at the target,
17 because if it is occurring, it's normally occurring on
18 the other side of clothing. So the dart might be in the
19 clothing. You might have an arc occurring between the
20 tip of the dart and the skin of the subject, but that's
21 going on behind the clothing, not on the outside.

22 Q. But if you looked at, like, the cartridge, the
23 end of the barrel as I'll call it -- I know it's not a
24 barrel -- of the M26, you wouldn't see, like, sparks
25 jumping around or anything?

1 A. You might if you look -- you know, you'd have
2 to hold the device up at an angle and peer down into the
3 space where the cartridge connects to the device. So
4 again, you could see, in an experimental setting,
5 it's -- would somebody be able to do it. In a field
6 setting, these are subtle cues that are not immediately
7 obvious. But generally behavioral cues of the subject
8 are the most reliable indicators of whether or not you
9 have a connection.

10 Q. And those behavioral clues would be, just in
11 very general, the sort of muscle contractions that are
12 kind of in between clonus and tetanus?

13 A. Correct, and verbalization. It's frequent that
14 there's -- you know, there's a verbal reaction.

15 Q. Now, did you consider, when you were
16 engineering this M26, putting some sort of indicator
17 light or sound or whatever that would tell the operator
18 as to whether or not the device was delivering a charge
19 to the target?

20 A. Very difficult to do. Did we have some
21 discussions about it? Yes. But trying to determine
22 whether or not you've got a connection on the other end
23 is extremely difficult. Because of the high voltages
24 involved, any sort of sensor equipment on the output end
25 would be very difficult and expensive to engineer and

1 implement.

2 And in many cases, you know, you might have a
3 good contact where the darts have penetrated and they're
4 touching the skin. You might have other cases where it
5 has to arc a significant distance, but it's still going
6 into the subject. And it's very difficult to reliably
7 tell the difference between whether the current is going
8 into the subject or not, other than the behavioral cues
9 of the subject.

10 Q. Where did the idea for the dataport come from?

11 A. Me.

12 Q. Can you describe how you came up with that
13 idea?

14 A. Yes. I was in the city of Baltimore. Before
15 the launch of the M26, we were promoting the Air TASER
16 34000, and one of the comments there was something to
17 the effect that they had a concern about their officers
18 misusing the equipment. And I believe a story was
19 related that they even had a case where officers did a
20 drive-by and they pepper-sprayed people standing on the
21 corner of a street to disburse them, and they were
22 concerned about the potential for misuse. And in sort
23 of a brainstorming mode, I suggested, well, what if we
24 put a tracking device in the unit that would allow us to
25 know the time and date it had been fired so that that

1 type of thing could be audited. And they were very
2 excited about it.

3 So we started to survey other law enforcement
4 potential customers and got a similarly positive
5 reaction that that would help agencies control and audit
6 misuse and deter misuse by having a function that the
7 officers knew would document usage patterns.

8 Q. And also protect officers against false
9 accusations. Would that be correct?

10 A. Absolutely. It cuts both ways. The truth
11 always does. So if officers are behaving appropriately,
12 it's going to be very helpful for them, and if not, then
13 the data will show what the data shows.

14 Q. Do you know whether, when TASER International
15 sells its M26s to law enforcement agencies, that it
16 recommends that the dataports, that the devices, the
17 time on the dataports, be set to the correct time?

18 A. I know we bring it up during the training as an
19 issue, but in terms of how it's revolved, the devices
20 are shipped from TASER International, they're all preset
21 to a given time. I believe at some points in time it
22 was Arizona local time, and then I believe we shifted to
23 Greenwich Mean Time, GMT, because we wouldn't know
24 exactly where these devices would end up in final use.
25 So we advised agencies that they could consider whether

1 it was worth the logistics effort to reset the clocks to
2 the local time or to have them just continue on the
3 preset time from the factory.

4 Q. Where are the TASER M26s manufactured, by the
5 way?

6 A. They are manufactured here in Scottsdale.

7 Q. And is every one, the dataport, actually, like,
8 inspected right before it ships to make sure that the
9 time is reasonably accurate?

10 A. Yes, I believe as part of our pre-shipment
11 production. I haven't been back there recently
12 inspecting exactly every step, but I believe that we
13 have an inspection point that not only is the clock
14 working properly, but we pull the dataport -- we pull
15 the trigger several times to make sure it's recording
16 properly.

17 Q. So if I were a police agency and I got a brand
18 new TASER and I immediately downloaded the dataport,
19 there should be some firings on it?

20 A. I'm not sure about that. And that would vary
21 by point in time, because I do recall that at some point
22 in time we instituted some procedures where we were able
23 to go in and basically reset the system after validation
24 that it was working, because there was some concern
25 about weapons showing up with, you know, firings that

1 occurred before it got to the agency.

2 But I don't recall, frankly, the exact
3 resolution where we're at today, whether the trigger
4 pulls are on the device or not when they ship.

5 Q. Is it your understanding that the dataport time
6 will stay accurate indefinitely, or does it -- are they
7 fast or slow, like my wristwatch?

8 A. Just like your wristwatch, there can be drift.
9 Mainly, of course -- you know, the world atomic clock is
10 exactly that, an atomic clock. It takes quite a degree
11 of precision to really hold time perfectly, so like a
12 watch or any other mechanical instrument, sometimes
13 these devices over time, if it's just slightly different
14 in terms of, you know, calculating the passage of days
15 and minutes, over the course of time, it might shift.
16 So for example, you might look at your watch at the end
17 of the year and notice, hey, I'm off by five or ten
18 minutes now. Same thing could occur with a TASER
19 device.

20 Also, depending on temperature as well.
21 Obviously, in cold temperature and hot temperature, just
22 like with other types of electronic and mechanical
23 systems, you might see some very minor shift in the
24 clock just in terms of the passage of time.

25 So again, it's not that it changes time, that

1 it just randomly skips around. It certainly doesn't do
2 that. But, like, your watch is a great analogy. If
3 it's been a year since you reset it, it might be a
4 little off in time.

5 Q. Has TASER calculated the range of the drift of
6 its dataports?

7 A. I believe we have.

8 Q. Do you know what that figure is?

9 A. Not sitting here today, I don't remember the
10 exact results.

11 Q. I've heard seven minutes a month. Have you
12 ever heard that?

13 A. I think that would be a maximum, but I don't
14 recall the exact numbers.

15 Q. This is just a little different than the
16 earlier question I asked you. Does TASER International,
17 when it ships or sells its TASERS to these -- M26s to
18 these police agencies, suggest to them that they
19 periodically check their units and set the clocks to
20 eliminate or minimize drift?

21 A. I know we advise them as to the existence of
22 the potential for drift. We're generally fairly careful
23 to avoid setting specific policy guidelines for
24 different agencies. So we advise them that over time,
25 the clocks may drift slightly, you need to determine for

1 your agency what the right answer is.

2 For example, even if the clock does drift a
3 fair amount over time, the point of the dataport is not
4 necessarily to nail the exact time to the microsecond
5 when the device was deployed, but to give you an idea of
6 the usage pattern over, for example, the last 24 hours.
7 So if I went in today and I downloaded a TASER that was
8 used yesterday and I noticed that my TASER was off by as
9 much as an hour, well, when I look at the data from
10 yesterday, between yesterday and today the clock would
11 not have drifted very much. Might be a few seconds,
12 worst case. So I would know that yesterday, those same
13 times would be off by the same hour that the clock was
14 off today.

15 So it's not an issue of absolute criticality,
16 and agencies need to determine what their logistics
17 capabilities are and what's practical for them as far as
18 being -- when to make downloads of the devices, because
19 it does take time and effort to bring them into a
20 computer and hook them up and download the devices.

21 Q. Will you, meaning TASER International, sell
22 TASERS to a police agency without the -- I'll call it
23 the dataport software?

24 A. I don't believe we have. I don't know that I
25 would make a blanket statement. If there was a good

1 rationale that it was required for a certain
2 application, I don't know that we'd be dogmatic about
3 it, but I don't believe we have sold it without the
4 dataport.

5 Q. One reason I ask that question is Sergeant Mike
6 Grove of the Salinas Police Department, Heston case,
7 said he had to contact TASER and get the dataport
8 software. Now, whether they had it originally and
9 misplaced it, who knows. I just ...

10 A. That may have been in reference to the download
11 kits and software. Those do not come standard with the
12 device. The device's internal dataport capability is
13 there, it's recording, it's doing what it needs to do,
14 but now to actually extract that data requires a special
15 cable and special software designed to work with the
16 M26.

17 Q. Well, let me back up, then. That was the
18 question I meant to ask. So I think we had a -- and
19 thank you for correcting that.

20 So I'll call it the download kit. Is that
21 okay?

22 A. Okay.

23 Q. Is that an accessory?

24 A. It is.

25 Q. And so if, let's say I'm Anytown, USA, and I

1 say I want ten M26s for my police officers. I could buy
2 those ten M26s without the download kit?

3 A. Correct.

4 Q. And so that particular agency would have no way
5 of, let's say, monitoring or verifying its officers'
6 usage unless it then subsequently ordered a download kit
7 or sent the TASER to TASER International to be
8 downloaded?

9 A. Well, or sometimes small agencies in an area
10 may share equipment, so if there's an issue they want to
11 investigate, they may run over to a neighboring agency
12 and do the download there. It's not that the data is
13 lost, but you're right, it would mean they would need to
14 acquire the equipment or go where the equipment is to do
15 the download.

16 Q. Well, roughly how much does a download kit
17 cost?

18 A. I should know this. I think about \$150.

19 Q. Does TASER make an agency get certain training
20 before it will sell the agency M26s?

21 A. No. We offer training; we offer an
22 industry-leading certification program, but we're not in
23 a position to require any training standards of
24 customers. And for example, in some cases, we can't.
25 In the United Kingdom, they have a nationalized training

1 program that specifically precludes the manufacturer
2 from providing training or training services.

3 So we make it available, but it's not something
4 we're in a position to require.

5 Q. So if I'm a police chief for Anytown, USA
6 Police Department, and I say ship me ten TASER M26s,
7 you're going to sell them to me even if I'm just going
8 to hand them out to my officers without making them
9 undergo any training, because that just would be beyond
10 your scope and your power?

11 A. Well, beyond that, even, we sell through
12 distribution, so we actually sell to law enforcement
13 equipment distributors. That's typically how law
14 enforcement agencies purchase. They buy from local
15 distributors that warehouse, handle the shipping,
16 customer service, returns, et cetera, for bunches of
17 different law enforcement products, so we sell to those
18 distributors. They then sell to law enforcement
19 agencies. So we're even one step further removed.

20 Q. Your packaging of M26s includes warnings that
21 they should not be used by people who have not received
22 TASER training; is that correct?

23 A. Correct. I believe there is a warning there
24 that advises against using it without being trained. I
25 don't know if the warning specifically addresses TASER

1 International's training, but I know the warning
2 suggests it's a bad idea to put it out there without any
3 training at all.

4 Q. While we're talking about training, are you
5 familiar with something called POST in California?

6 A. I am.

7 Q. And has TASER International worked with POST to
8 develop standards for use of the M26?

9 A. I believe we've worked with POST to develop
10 standards for training within California regarding M26
11 and X26.

12 Q. And when is it your understanding that TASER
13 International did that?

14 A. I know we've been in discussions with POST in
15 many states for years. I recall that it was probably
16 over the past 18 months that we've been more intensively
17 involved with Cal POST.

18 Q. Do you know if California POST has implemented
19 any training based on its collaboration with TASER
20 International yet?

21 A. I believe they have.

22 Q. Do you know when that started?

23 A. I don't.

24 Q. Do you know whether there's a specific contact
25 that TASER International -- an individual that TASER

1 International has with California POST?

2 A. Yes.

3 Q. And who is that?

4 A. Rick Guilbault, our vice president of training.

5 Q. He's your employee who is in touch with POST?

6 A. Correct.

7 Q. Do you know who he's in touch with at POST?

8 A. I do not.

9 Q. Back to the dataport. Do you know of any
10 reason -- well, let me back up a second.

11 Now, on occasion, the TASER wires that are
12 attached to the darts will, let's say, burn the
13 insulation off of each other; is that correct?

14 A. Correct.

15 Q. And how does that happen?

16 A. The wires that fire out are insulated to a
17 maximum voltage of about 25,000 volts per wire, so if
18 you have the two wires together, double the insulation,
19 one on each wire would be about 50,000 volts. If you
20 fire at the target and you miss so there's no connection
21 on the other end of the wires, as each pulse comes down
22 the wires, the voltage builds up, and when it gets to
23 the peak rating of about 50,000 volts, as you repeat
24 this over time, particularly -- again, it's normally an
25 indicator you don't have a good connection on the other

1 end -- what can happen is that the voltage spike between
2 two wires exceeds the rating of the insulation, and it
3 basically breaks through the insulation.

4 So you see a -- normally you'll see a black
5 mark where it burned through the insulation. And then
6 once it punches through the insulation, if the wires are
7 close to each other, then the electricity can just very
8 easily arc between the two.

9 Q. And will that have an effect on the efficacy of
10 the M26?

11 A. Oh, yes. The electricity will then
12 short-circuit. Instead of going out and through the
13 target, it goes out and just short-circuits between the
14 two wires and returns back to the device without
15 creating the desired effect.

16 Q. So is it possible to shoot an M26 into an
17 individual -- let's say a guy not wearing a shirt, just
18 to make it real simple -- and the darts go in, and
19 there's a nice circuit going through the target, and the
20 target is exhibiting the effects of the device. Is it
21 still possible for that insulation to burn off?

22 A. Probably not.

23 Q. Is it possible for -- let's say the target is
24 shocked by two different devices and the wires cross and
25 get -- and touch or get close to each other. Is it

1 possible for that to cause the insulation to burn?

2 A. Yes, there's some possibility about that.

3 Again, more particularly, if you have a
4 disconnect in any one of the two circuits, the
5 electricity is under a fair amount of voltage pressure
6 to try to complete the circuit. And particularly if you
7 don't have a good connection, it's going to be looking
8 for alternate pathways that might include an
9 entanglement of wires from one or more devices.

10 Q. Can you think of any reason why wires -- I'll
11 just call them wires that shorted, just, I think we know
12 what we're talking about -- that the shorting of wires
13 from one of these two different ways, either a wire
14 shorting from a single cartridge or two cartridges
15 crossing, should have any effect at all on a dataport
16 readout?

17 A. It's hard to say. It is conceivable that -- we
18 have had some cases where we've seen some corruption in
19 the dataport data, and it's usually related to EMI,
20 electromagnetic interference. Because the TASER, the
21 nature of TASER, it's generating very high peak voltage,
22 very short pulses, and because we use an open core
23 transformer that -- if you have a closed core
24 transformer, that would generate less electromagnetic
25 noise -- sometimes that level of noise can actually

1 interfere with the proper functioning of some of the
2 data management within the circuits.

3 It's fairly rare, but when it does happen, it's
4 sometimes associated with more abnormal-type
5 deployments. So if you had, you know, multiple -- a
6 wire nesting, maybe had one unit feeding, cross-feeding
7 its current through the front cartridge of another
8 TASER, I would think that's certainly a possibility. By
9 no means is it expected, but, you know, if you start
10 getting multiple units and wires entangled, I could
11 envision some strange things could occur.

12 Q. Do you have any experimental data showing that,
13 let's say tangled wires, for example, could have any
14 effect on dataport readout?

15 A. No, not to my awareness.

16 I was -- you asked me to sort of speculate a
17 little bit there. You didn't say the word "speculate,"
18 but you asked me if it was plausible. So I was being
19 somewhat speculative there.

20 Q. Now, one of the problems that I've run into
21 with a couple of dataports -- just incidentally, I've
22 only had sort of anecdotal exposure to field operation
23 of dataports, but I've never seen one that was set
24 anywhere close to what the actual time was. Do you have
25 any kind of feeling as to how often police departments

1 actually set these things to be somewhat accurate
2 timewise? Do you have any feeling for that?

3 A. I don't.

4 Q. Have you seen instances where they actually
5 were set to the correct local time?

6 A. Oh, certainly.

7 Q. One of the problems I've seen, actually, twice,
8 including in the Heston case, is something called a data
9 shift. Do you know what I'm talking about?

10 A. I might. I'm not sure how you're using the
11 term.

12 Q. Well, as I understand it, the dataport records
13 data sort of in different columns. Like one will be the
14 day of the week, one will be the hour of the day, the
15 second, and so on, in a series of columns. And so when
16 it's downloaded and printed out, you get a nice day of
17 the week, date, time down to the second, for when the
18 trigger was pulled, but that something can cause all
19 these numbers to move over one column, be shifted, and
20 so the readout is kind of garbled because there's no --
21 12, which is the month, then all of a sudden becomes,
22 you know, the hour, and the month becomes 31 or
23 something, and there's no month 31 and et cetera. So
24 that's what I mean by the data shift.

25 Are you familiar with that?

1 A. Somewhat.

2 Q. And is that something that just sort of happens
3 given the nature of the dataport shift and so on?

4 A. Yeah, I think it's generally related to EMI.
5 If during the electromagnetic interference when the
6 device is operating, sometimes I believe it could shift
7 the record pointer by one slot, and of course, that ends
8 up garbling some of the data.

9 I know over time and over the years, we've
10 implemented enhancements in newer weapon systems, like
11 the X26, or in -- even in software revisions over time
12 with the M26 to mitigate those issues, but they do
13 exist.

14 Q. And so it's your understanding that this data
15 shift is not just sort of a random glitch that shows up,
16 but is something that might be caused by the EMI that
17 you discussed earlier?

18 A. Well, I would say I would characterize it as a
19 glitch. Infrequent at best, but it does occur. It's
20 not something that occurs regularly or predictably. It
21 is an infrequent event. But they do occur.

22 Q. But do you think it's related to this EMI that
23 you discussed earlier?

24 A. That's my understanding, is generally it would
25 be related to EMI. But I'm not that familiar with the

1 details. I'd defer to our technical experts who would
2 know more specifically.

3 Q. Like Mark Johnson, for example?

4 A. Yeah, I'd probably defer to Mark, or Max
5 Nerheim, our VP of R&D.

6 Q. I know of instances -- and I think it's this
7 case, the Heston case, is an instance, and I know
8 another one that I was involved in -- which didn't
9 involve an injury caused by the TASER, where -- but a
10 TASER was deployed, where the device was sent back here
11 by the agency, and Mr. Johnson was able to do whatever
12 he does and shift the data so that there was a correct
13 printout. Is it your understanding that can happen?

14 A. Yes. I know we have more forensic
15 capabilities, assuming, than an agency would.

16 Q. Now, another one of your accountability
17 features of the M26 are the AFIDs?

18 A. Correct.

19 Q. And what does AFID stand for?

20 A. It stands for Anti-Felon IDentification, and it
21 was originally implemented when we were selling TASERS
22 primarily to consumers, that by putting these serialized
23 identification tags, we felt that it would prevent
24 misuse or felons from using our product to commit bad
25 deeds if they knew that in the process, they'd be

1 leaving basically a calling card behind with their
2 serial number, which we could track back to user
3 registrations.

4 MR. BURTON: I was wondering where that "Felon"
5 came from.

6 Now I'd like to turn to -- can we go off the
7 record just one second? I just want to see how ...

8 THE VIDEOGRAPHER: We are going off the record
9 at 11:50 a.m.

10 (Recessed from 11:50 a.m. until 11:51 a.m.)

11 THE VIDEOGRAPHER: We are back on the record at
12 11:51 a.m.

13 Q. BY MR. BURTON: Now, we've talked about the
14 M26, which was -- I like to think of it as being
15 introduced in 2000. I know it was just shortly before
16 that. How many M26s were sold, approximately, in 2000?

17 A. That's a tough question.

18 Q. Well, can you do maybe your total sales in
19 dollars?

20 A. In 2000? Would have probably been around
21 3 million, 3 and a half million.

22 Q. And were you profitable in 2000?

23 A. I think we were on the cusp of profitability,
24 so we may have been in 2000. I'm pretty sure we were in
25 2001.

1 Q. Do you know what your sales were in 2001?

2 A. I believe around 7 million.

3 Q. Was that virtually all because of the M26 and
4 accessories?

5 A. Yes, the majority was. We still sold some Air
6 TASERS, but it was primarily the M26.

7 Q. Like over 90 percent M26 and accessories?

8 A. Most likely.

9 Q. And then your sales in 2002?

10 A. I believe was around 9 million.

11 Q. And then 2003?

12 A. 2003, we were in the 23 to 25 million range.

13 Q. And then 2004?

14 A. 2004, I think we were about 68 million in
15 sales.

16 Q. 2005?

17 A. Was right around 50 million.

18 Q. And then do you have an estimate of where
19 you're going to wind up this year?

20 A. The company doesn't issue financial guidance,
21 but there are some analysts that have issued earnings
22 estimates, and they vary between 65 and 70 million.

23 Q. Now, 2003 would be the first year that would
24 reflect sales of the X26?

25 A. Correct.

1 Q. And of the years since 2003, how much would you
2 just -- if you could just give me a percentage, just
3 very general, how much would be X26 and accessories and
4 how much would be M26 and accessories?

5 A. In dollar terms or unit terms?

6 Q. Or just percentage.

7 A. I'll go with dollar terms in percentages of
8 revenue. Well, they use the same cartridges, so the
9 cartridges could fall into either category, but if we
10 assume the cartridge sales are prorated to the device
11 sales, I would say in 2003 it was 50/50. In 2004, I
12 would say it was 75 percent associated with the X26,
13 25 percent with the M26. In 2005, probably 80/20 in
14 favor of the X, and in 2006, probably 85/15 in favor of
15 the X.

16 These are ballpark approximations.

17 Q. So as soon as the X26 was introduced, it
18 displaced a significant amount of the M26 market share?

19 A. Correct.

20 Q. And do you see that the X26 is eventually going
21 to replace the M26?

22 A. No. It is by far the dominant product because
23 of its size. It's so much smaller. Officers can carry
24 it -- it's kind of like, you know, the old Motorola
25 brick phone versus the StarTech, the little phone.

1 But the advantage of the M26 is it's a lot less
2 expensive to manufacture and it carries a lower price
3 with it accordingly, so agencies that have more
4 budgetary constraints will tend to go with the M26 as
5 opposed to the X. So we think they both fill important
6 needs in the marketplace.

7 Q. And in terms of the accountability, besides the
8 difference in the dataport, which we've already covered,
9 is there any other difference in the accountability
10 features?

11 A. Well, the X does have a little more
12 sophisticated dataport, as we talked about, and then the
13 X also is compatible with the new TASER Cam system, an
14 audio-video recording system that is not compatible with
15 the M26.

16 Q. Has the TASER Cam actually been deployed?

17 A. Yes.

18 Q. That's in use?

19 A. Yes.

20 Q. Do you know how many of those are in use?

21 Roughly, I mean.

22 A. On the order of 5,000, 3 to 5,000. Somewhere
23 in there.

24 Q. Are agencies somewhat resistant to them because
25 of cost?

- 1 A. That's certainly one concern.
- 2 Q. How much do they add to a unit?
- 3 A. \$400.
- 4 Q. Now, your company went public in what month in
5 2001?
- 6 A. In May.
- 7 Q. And what percentage of ownership, let's say,
8 did you, your brother, your father, and Mr. Tuttle
9 retain, roughly?
- 10 A. Are you saying did the -- what percentage did
11 the whole block that owned the company when it was
12 private as a block?
- 13 Q. Okay, why don't we do that --
- 14 A. Yeah.
- 15 Q. -- if that will be easier.
- 16 A. We retained probably about 50 to 60 percent
17 ownership immediately after the public offering. But
18 the public offering also included warrants, which are
19 options to buy additional stock that the warrant holders
20 could exercise, and those were exercised about a year
21 and a half after we went public. So the warrants after
22 that -- so if we started at 100 percent, we fell to
23 probably 60 percent, and then down to probably 35 or 40
24 percent.
- 25 Q. So that's what you currently, "you" meaning the

1 original group?

2 A. Well, no, the individuals then also sold
3 portions of their stock over time. You know, like any
4 investment, people buy it one day, they'll sell it to
5 make a profit. So the group of employees and previous
6 owners have probably sold off. Some have sold out
7 completely, like my dad, who is 69 years old. Well,
8 he's got a little bit left, but he sold most of it.

9 So I would say we were diluted down to maybe 35
10 percent, and then between sales and whatnot, we're
11 probably down to 15 percent, maybe 20 percent now.

12 Q. Now, I understand that the stock reached a peak
13 price in December of 2004.

14 A. Correct.

15 Q. And what was that price?

16 A. Around \$33 a share.

17 Q. And then it lost quite a bit of value in the
18 next couple months?

19 A. It did.

20 Q. And what was its low? \$7 something?

21 A. It may have even tickled into the 5s, but
22 somewhere between, you know, 5 and \$7.

23 Q. To what do you attribute the drop in stock
24 price?

25 A. There was a lot of controversy about TASER that

1 led to the SEC stepping in and doing an investigation,
2 and as soon as the public found out there was an SEC
3 investigation, that added a tremendous amount of risk to
4 the company as an investment. Literally from the day,
5 from the moment the SEC investigation was announced, we
6 saw a 50 percent drop in stock price in probably two
7 days. And it continued to drop from there.

8 Q. And when you say a controversy about TASER, you
9 mean a controversy about the safety of the device?

10 A. Correct.

11 Q. And what happened to the SEC investigation?

12 A. We provided around 100,000 pages of
13 documentation; we voluntarily flew and offered our
14 testimony in San Francisco at the SEC offices, basically
15 because it was very much hurting our business. And in
16 about 12 months, they concluded that investigation with
17 a finding of no enforcement action, which means they
18 looked through the documentation and found no evidence
19 the company had misstated the safety of our products.

20 Q. So there was a point when the SEC closed its
21 investigation with a finding of no enforcement action?

22 A. Correct. It occurred in two points in time.
23 One was in December of 2005. They alerted us that they
24 had closed the investigation into the safety issues.
25 There were some straggling accounting issues that they

1 were investigating that they closed those, and the
2 entire investigation was closed out around June of 2006.

3 Q. Let me just finish one kind of related line of
4 questioning --

5 A. Sure.

6 Q. -- and then we can break for lunch.

7 There was a settlement between TASER
8 International and some shareholders?

9 A. Correct.

10 Q. And that was something in the magnitude of
11 \$21.5 million?

12 A. Correct.

13 Q. And what was the basis of that? Was that
14 related to this SEC action?

15 A. Yes. The shareholder lawsuits, anytime a stock
16 drops significantly, you tend to get these shareholder
17 plaintiff firms that file lawsuits.

18 And when there's an SEC investigation, they
19 basically filed a suit alleging the same matters as were
20 in the SEC investigation, so if the world was right,
21 that should have just gone away when the SEC concluded
22 there was no problems. But unfortunately, I learned
23 from our law firm that the nature of shareholder
24 litigation is such that virtually 100 percent of those
25 cases settle, so as much as we believe in doing the

1 right thing and not settling cases where we don't
2 believe there's been something that was done wrong, that
3 was a unique case. And it was presented to me by our
4 counsel that the process of the discovery of a
5 shareholder case could potentially destroy the company,
6 because it would open up all of our customers to very
7 intrusive depositions and discovery requests that could
8 greatly impair our ability to do business with our own
9 customers.

10 So it was kind of like dealing -- it was
11 someone's got your family hostage, and even though we
12 felt very strongly that we could win on the merits of
13 the case, the process of winning is sort of like
14 fighting a nuclear war. It didn't -- and again, when
15 our law firm explained that nobody takes these cases to
16 trial, and they explained the magnitude of what was
17 happening, we had no choice but to settle that case. So
18 we did. It was very painful.

19 But that shouldn't be confused with our
20 strategies in our other course-of-business cases where
21 we tend to take a different tactic.

22 Q. What would you characterize as sort of the
23 fundamental allegation of the shareholder lawsuits?

24 A. The fundamental allegation of the shareholder
25 lawsuits was that the company insiders knew that there

1 was a problem coming in the future, that the stock price
2 would drop, and that insiders had sold stock knowing
3 that the stock would drop in the future. Of course, our
4 response was the stock dropped in response to the SEC
5 investigation. We had no idea we would be investigated
6 until the day we found out and the rest of the markets
7 did. So that's the nature of the claims there.

8 Q. Famous last words from a lawyer, "one more
9 question," but have there been other suits against TASER
10 that relate to product safety other than, let's say, the
11 shareholder lawsuits that you resolved, the products
12 liability lawsuits that we talked about at the beginning
13 of the deposition today? For example, a competitor or
14 somebody filing lawsuit saying that TASER has
15 misrepresented the safety of its products?

16 A. Yes.

17 Q. And what lawsuits have there been in that
18 regard?

19 A. Probably two that would fit that description.
20 There was a lawsuit between us and Stinger, which is a
21 competitor, and we sued them over a number of what we
22 felt were false advertising claims. And I think they
23 probably countersued -- I don't remember the
24 specifics -- and I'm sure their countersuit included
25 allegations about product safety advertising.

1 And then a second case with Bestex, which is a
2 company that we sued for patent infringement, and as
3 part of their response, I believe they've counterclaimed
4 for, you know, interference with contracts and things
5 that might have some allegations about safety.

6 Q. Are either of those cases still pending?

7 A. The Stinger case was resolved. We were paid a
8 settlement in that case, and so we dropped that case.
9 We settled that one.

10 The Bestex case is still ongoing.

11 Q. So Stinger actually wound up paying TASER?

12 A. Correct.

13 Q. And Bestex is still pending?

14 A. Correct.

15 Q. Do you know what court it's pending in?

16 A. I do not.

17 Q. Los Angeles?

18 A. Yeah, I just don't know.

19 MR. BURTON: Why don't we go off the record.

20 THE VIDEOGRAPHER: We are going off the record
21 at 12:07 p.m.

22 (Recessed for lunch from 12:07 p.m. until
23 1:21 p.m.)

24 THE VIDEOGRAPHER: We are back on the record at
25 1:21 p.m.

1 Q. BY MR. BURTON: Mr. Smith, how many employees
2 does TASER International currently have?

3 A. Between 200 and 250.

4 Q. Are the master instructors considered
5 employees?

6 A. They are not.

7 Q. Are they independent contractors?

8 A. In some cases.

9 Q. Well, how would you characterize the master
10 instructors?

11 A. Master instructors is certification that is
12 received for attending a four-day intensive
13 instructional seminar and passing the course on a yearly
14 basis, and there's additional qualification requirements
15 as well in terms of years in training, et cetera. Those
16 persons that pass and are certified as master
17 instructors are certified to train other personnel and
18 certify them as instructors, and those instructors can
19 then go out and certify users. But one must be a master
20 instructor to make other persons an instructor.

21 Some of those master instructors do some
22 consulting work for TASER and for other manufacturers,
23 where they will conduct privately arranged instruction
24 courses, usually for multiple agencies. Smaller
25 agencies may not even have instructors on staff, so

1 private companies will facilitate regional training
2 events like TASER does. And of course, people don't
3 work for free, so we compensate those instructors for
4 working in their off-duty hours. On days when they're
5 not employed by their home agency, they'll do training
6 on a contract basis.

7 But not all master instructors do contract
8 training. Some of them may only be certified as master
9 instructor for the purposes of overseeing instruction
10 within their own agencies. They may not train outside
11 of their agencies. So some are consultants, but not
12 all.

13 Q. Does TASER have a standard rate it pays for
14 consulting master instructors?

15 A. Yes.

16 Q. What's that?

17 A. I don't know what it is today. Historically,
18 it was about \$300 a day. For a two-day class would be
19 \$600.

20 Q. Has TASER issued any stock options to master
21 instructors?

22 A. Not to master instructors per se, but to a
23 subset of master instructors who served on -- above the
24 master instructors is our master instructor board. This
25 is a board of officers, full-time police officers, that

1 serve as an independent advisory group to the company.
2 And they oversee the requirements of our training
3 program, the development of our training programs and
4 curricula, and basically, again, serve in an oversight
5 function, not on behalf of the company but on behalf of
6 the law enforcement community.

7 Like most companies that have exterior advisory
8 boards, TASER has compensated those people with both
9 stock and -- I'm sorry, not stock -- with both cash and
10 some stock options. However, I think the last time we
11 did stock options with our instructor training board was
12 2003. So it's been a while.

13 Q. Did Jim Halstead get stock options?

14 A. Jim Halstead did. He was on the instructor
15 board from the very beginning. I think he was the first
16 member.

17 Q. And did he also urge the City of Chandler to
18 adopt a TASER program?

19 A. He was asked by his chief to make a
20 presentation to the city council regarding TASERs,
21 because Jim was correctly identified as the person most
22 knowledgeable at Chandler, especially because he had
23 taken part in developing our training programs. And he
24 did have stock options, and he was compensated by TASER
25 for off-duty work. And his chief knew that when he

1 asked Jim to make the presentation.

2 As a quick side note, just so you know, the
3 reason Chandler bought 300 TASERS for their officers had
4 nothing to do with Jim Halstead's advocacy. Weeks
5 before that happened, a Chandler police officer shot and
6 killed a young man with a knife, and local television
7 stations were on scene and have radio transmissions of
8 those officers screaming helplessly for a TASER as the
9 subject with a knife was moving around a room, cornering
10 those officers. They had to kill him because they
11 didn't have them. That's what convinced the chief and
12 the city council to put TASERS on every officer, so they
13 would never have to live with that again where officers
14 didn't have the equipment they needed.

15 Q. Now I'd like to turn to a slightly -- oh, by
16 the way, just, there was another -- was there ever an
17 investigation of TASER by the Arizona Attorney General's
18 Office?

19 A. No.

20 Q. Was there ever, like, an inquiry?

21 A. Yes, we met with the Arizona Attorney General's
22 Office, but it was -- I don't think it was ever a formal
23 investigation.

24 Basically when the SEC investigation became
25 public, that tends to create a lot of publicity, and

1 local investigative agencies also made inquiries,
2 particularly the Arizona -- the Office of the Attorney
3 General made an inquiry into our consumer sales
4 promotions. And in particular, we met with them to
5 discuss solely our consumer programs. They had nothing
6 to do with our law enforcement programs.

7 Q. And was that inquiry all resolved?

8 A. Yes. Yes, it was.

9 Q. Have the activities of TASER International been
10 investigated, kind of giving the broadest meaning to
11 that word, by any other governmental regulatory or law
12 enforcement agencies, other than the SEC and the Arizona
13 Attorney General's Office?

14 A. Absolutely. This company has undergone
15 probably more scrutiny than any other I know of.

16 Q. What other investigations have there been?

17 A. Do you want me to list them all?

18 Q. Well, if you can.

19 A. Okay. Let's start with the U.S. Department of
20 Defense, Human Effects Center of Excellence conducting
21 an investigation into the safety of TASER devices before
22 they approved it for purchase by the military.

23 In the United Kingdom, the Home Office of the
24 United Kingdom spent about \$3 million on various
25 investigations and studies into TASER safety before

1 approving TASER deployment in the U.K. Those studies
2 included not just the Home Office, but the Ministry of
3 Defense and the Defense Scientific and Technical
4 Laboratories.

5 In Austria, the Austrian government and the
6 University of Vienna have investigated TASER safety
7 prior to deployment of TASERs in Austria.

8 In Australia, the Australian government, and
9 particularly the Alfred Hospital, conducted safety
10 evaluations and investigations into TASER safety.

11 In Canada, the Canadian Police Research Center,
12 the Office of the Complaints Commissioner for British
13 Columbia, the Coroner's Office in Toronto have all
14 initiated investigations into TASER safety and have all
15 come out affirmative and supportive.

16 Here in the United States, the Department of
17 Justice in Wisconsin launched a study into TASER safety.
18 Originally the media speculated that would result in a
19 ban on TASERs in the state of Wisconsin. Instead, the
20 Department of Justice mandated TASERs now are required
21 training throughout the state of Wisconsin.

22 In Georgia, we saw a similar thing with the
23 Georgia Department of Justice and the Georgia Chiefs
24 Association doing investigation of TASER and TASER
25 safety.

1 In Florida, the Orange County Sheriff's Office
2 created an independent task force of medical experts.
3 The Orange County Medical -- TASER Medical Safety Task
4 Force investigated this.

5 There was a grand jury in Miami that was
6 convened for the purpose of evaluating TASER safety and
7 TASER safety claims.

8 I could keep going. There have been numerous
9 other agencies that have done other similar safety
10 studies in Singapore, in Korea, the French national
11 government, before they deployed TASERs. So we've had a
12 tremendous amount of government and scientific scrutiny.

13 Q. Now, during the 1990s when you were developing
14 the M26 with these other people, you mentioned that
15 you -- I just want to see if I can get the phrase you
16 used. Well, you said you developed it theoretically and
17 experimentally. We were talking about the 15 to 20
18 pulses. But what experiments, on either animals or
19 human beings, did you conduct specifically with the M26
20 prior to putting it on the market?

21 A. Prior to putting it on the market, or prior to
22 this incident?

23 Q. No, prior to putting it on the market in 1999.

24 A. Prior to putting it on the market in 1999, we
25 conducted -- now, particularly to the pulse repetition

1 rate, we did a study in 1996, which was an exploratory
2 study using an anesthetized pig, with Dr. Robert
3 Stratbucker, where we varied the amplitude of the TASER
4 pulses and the pulse repetition frequency. And we saw
5 the correlation between the lower pulse repetition
6 frequencies having this more spasmodic sort of twitch
7 effect, whereas above about 10 pulses per second we were
8 able to observe, you know, more of a smooth muscular
9 contraction.

10 We then validated that in human volunteers,
11 basically in demonstrations where we would test the
12 device with a fresh set of batteries and then with a
13 diminished set of batteries, where the pulse repetition
14 rate was much less. And you could see that some of
15 those individuals regained much more mobility than the
16 subjects that were hit at the full 15 to 20 pulses per
17 second.

18 Q. Now, the 1996 test with Dr. Stratbucker, were
19 those results ever published?

20 A. Yes.

21 Q. Was that in -- I call it PACE?

22 A. No.

23 Q. Where were those results published?

24 A. Those results were published in our training
25 materials. I believe there was a three- or four-page

1 consulting report from Stratbucker & Associates to
2 TASER.

3 Q. From the 1996?

4 A. Correct.

5 Q. I assume that's been produced to me. I have
6 this big stack of CDs. I'm not --

7 A. It's on all of the training versions to date, I
8 know at least through version 10.

9 Q. Well, if I have a problem finding it, I'll -- I
10 know how to contact your people. Thank you.

11 Now, when you tested the device on the pigs in
12 1996, did you instrument their extremities to see what
13 the -- to get some sort of quantitative measurement of
14 the muscle contractions?

15 A. No, we did not.

16 Q. Now, I know that was done in -- I hope I
17 pronounce his name right -- Dr. Jauchem's -- how do you
18 pronounce that? Jauchem?

19 A. Jauchem.

20 Q. Jauchem -- Dr. Jauchem's study. He did that,
21 right?

22 A. Correct.

23 Q. Do you know if that was ever done before with
24 pigs?

25 A. Oh, absolutely.

1 Q. Where the actual quantitative measurement of
2 the muscle contractions was done?

3 A. Yes.

4 Q. Do you know, when was that first done?

5 A. 2002 by Dr. Stratbucker and McDaniel. If you
6 read Jauchem's report, he attributes his methodology
7 to -- he basically replicated Stratbucker's work.

8 Q. And did he, as far as you know, come up with
9 similar results?

10 A. Yes.

11 Q. And those were --

12 A. As far as the muscular contractions that he
13 measured?

14 Q. Right.

15 A. Yes.

16 Q. Let's just talk about muscular contractions. I
17 mean, as I understand Dr. Jauchem's results in that
18 regard, the probes were put on, let's say, the trunk of
19 the pig, or whatever you call that, and he measured that
20 there were contractions in the extremities, even though
21 they were not in the direct path of the current.

22 A. Well, not necessarily. What he measured is
23 that there was force exerted on the limbs, but for
24 example, the pectoralis major muscle that comes and
25 pulls my arm in this way, the majority of force

1 generated to move this limb down across the torso comes
2 directly from the muscle in this region. Similarly in
3 the legs, the musculature that lifts the legs up runs up
4 and connects up in the torso area.

5 So they were using electrodes across the torso,
6 but I don't know that they were demonstrating specific
7 contractions of the biceps/triceps muscles in the arm.
8 They were measuring the force, the contractile force of
9 the limb downward, which was the same technique that
10 TASER International's used.

11 Q. And they measured a significant amount of
12 force, I think it was 60 pounds or something, in the
13 extremities of these pigs that were -- where the
14 electrodes were on the trunk?

15 A. They did measure some significant force. As I
16 recall, the TASER M26, though, was only about 40 percent
17 of their demonstrated maximal force that they were able
18 to generate with customized waveforms. So it was
19 nowhere near maximal, but it was significant force.

20 Q. And I know some of these tests use X26 and some
21 use M26, and our cases are both M26 cases, so if there's
22 a distinction that you think is material -- like I know
23 in Dr. Jauchem's study it was principally X26s -- if you
24 think that makes a difference, I think it would be
25 helpful to all of us if you point it out.

1 A. Okay.

2 Q. Did you ever measure -- "you," the people who
3 developed the M26 -- ever measure the force of these
4 contractions before putting the M26 on the market?

5 A. Not before putting it on the market.

6 Q. So would the 2002 Stratbucker and McDaniel
7 study be the first?

8 A. Of actual strain gauge measurements, yes.

9 Q. And was that a study funded by TASER?

10 A. Yes.

11 Q. Was it peer reviewed?

12 A. Yes, some of the results were published in
13 peer-reviewed literature.

14 Q. Do you know where they were published?

15 A. In PACE, Pacing And Clinical Electrophysiology.

16 Q. Is that the January 2005 article?

17 A. Correct.

18 But it did not include the muscle contraction
19 data. We've treated that as trade secret, so we've not
20 published the contraction data.

21 Q. Now, Dr. Jauchem's results on the contraction
22 were that with subsequent cycles, the amount of the
23 contraction or the quantitative measure of the
24 contraction diminished. Is that your understanding?

25 A. I don't recall whether they diminished or not.

1 Q. Do you know if Dr. Stratbucker or Dr. McDaniel
2 reached any such conclusion?

3 A. No.

4 In fact, I was present at some of those
5 testings, and one pig was on the table for something
6 like 15 hours and underwent hundreds and hundreds of
7 TASER discharges, and we didn't -- we may have seen a
8 slight drop in contractile force at the beginning, but
9 there was no measurable fatigue effect over the course
10 of the day. Or at least, nothing significant. There
11 may have been some minor diminution of strength.

12 Q. Do you know what the intervals were between the
13 different TASER jolts?

14 A. Usually about two minutes, although some of the
15 jolts were as long as 90 seconds in nature.

16 Q. In other words, a continuous 90-second jolt?

17 A. Correct. We did some 90 seconds, some 60
18 seconds, some that were 30, and the majority were five
19 seconds.

20 Q. And was this done in the year 2002?

21 A. 2002 and 2003. There were several days of
22 testing.

23 Q. And do you have any data from that testing that
24 was not published in the PACE January 2005 article?

25 A. Yes.

1 Q. Do you consider it a trade secret?

2 A. We do.

3 Q. Do you know whether any of the pigs that were
4 used in that study developed acidosis?

5 A. Yes, I know that.

6 Q. And what was done to measure the acidosis
7 during this test?

8 A. There were periodic blood draws that were done
9 to measure blood chemistry.

10 Q. These are the 2002/2003 tests?

11 A. Correct. Correct. And there was no acidosis
12 observed, other than there was one case, but that had to
13 do with the respirator had exhausted its carbon dioxide
14 filter, and so it was not filtering out carbon dioxide.
15 So that was an equipment-related issue not related to
16 the TASER. Once we corrected the filter on the
17 respirator, then everything returned to normal.

18 Q. Do you have that data?

19 A. Yes.

20 Q. You're familiar with the results of
21 Dr. Jauchem's, I believe that's October 2005, report of
22 his study?

23 A. I am.

24 Q. And did he reach the same conclusions regarding
25 acidosis as your tests?

1 A. His experiment was different, so he reached
2 conclusions in different areas.

3 Q. Well, he measured pH levels in the pigs that he
4 shocked --

5 A. Correct.

6 Q. -- repeatedly. Right?

7 A. Correct.

8 Q. And they had significant decreases in pH
9 levels?

10 A. Consistent with exercise, yes.

11 I talked with Dr. Jauchem on numerous occasions
12 before and after his experiments. So when he did his
13 experiments, they were measuring blood draws right
14 immediately before and after the TASER discharges, and
15 they were doing many of them back to back. And he found
16 changes in blood chemistry very similar to if the pigs
17 had been on a treadmill for the same period of time,
18 whereas our test in Missouri tended to look at shocks
19 spread out over a longer time period, because we were
20 looking more at cardiac safety issues.

21 Q. Well, is there any relationship between
22 diminished pH and cardiac safety issues?

23 A. There can be, in extreme circumstances.

24 Q. Would you consider a blood pH of below 7 an
25 extreme circumstance?

1 A. It depends. I've seen blood pH's as low as 6.8
2 from treadmill work.

3 Q. Have you ever heard of instances where marathon
4 runners experience cardiac arrest?

5 A. I have.

6 Q. And has anybody ever explained to you that that
7 may be the result of acidosis?

8 A. Generally speaking, yes.

9 Q. Did you test for changes in pH levels in pigs
10 before you marketed the M26?

11 A. No.

12 Q. Did anybody ever discuss that potential?

13 A. I should step back. I think Dr. Stratbucker
14 monitored pH levels in part of his 1996 and other
15 testing, but it was not something that we designed a
16 specific study on.

17 Q. Do you consider Dr. Jauchem's October of 2005
18 report that appeared in the, I think it's in Forensic
19 Science International, to be a valid study?

20 A. I think it yields helpful information, but
21 you've got to look at the study design before drawing
22 meaningful conclusions.

23 Q. Well, do you have any issues or problems with
24 the study design?

25 A. It has limitations, certainly.

1 Q. And what are the principal limitations?

2 A. The principal limitations in that study was
3 that they looked at respiration in pigs that were placed
4 on their backs and anesthetized without ventilation.
5 And what's important about that, anesthesia suppresses
6 the breathing response. In fact, that's why under most
7 anesthetic situations, they have assisted ventilation,
8 because if you go too deep with anesthesia, the subject
9 stops breathing.

10 So in that case, when they were hitting the
11 pigs with the TASER device, again, these pigs that were
12 deeply anesthetized, they were breathing on their own,
13 but we don't know how much or how well. When they were
14 hit with the TASER, they appeared to have a reflex where
15 they did not breathe during the five-second burst, and
16 then breathing would return during the breaks. So some
17 of the acidosis that they saw was related to increased
18 carbon dioxide levels that you would not see if a
19 subject was breathing normally, unlike these pigs in
20 their somewhat impaired state.

21 Even with that limitation, the conclusions that
22 I discussed with Dr. Jauchem was that he saw changes in
23 blood chemistry that were quite similar to what one
24 would see with physical exercise.

25 Q. Has TASER International ever paid any money to

1 Dr. Jauchem for any reason?

2 A. We have not, not to my awareness.

3 Q. Have you, has TASER International, to your
4 knowledge, ever made any donations to any institutions
5 that Dr. Jauchem is affiliated with?

6 A. No.

7 Q. There are three coauthors -- I can read their
8 names if you need me to.

9 A. Please.

10 Q. Clifford Sherry, David Fines, and Michael Cook.
11 To your knowledge, has TASER ever paid any money to any
12 of those gentlemen for any reason?

13 A. No, I don't think so.

14 Q. And would you consider this to be an
15 independent study?

16 A. Yes.

17 Q. Is it your understanding it was peer reviewed?

18 A. Yes.

19 Q. Do you know of any independent studies that
20 have come to any different results regarding the ability
21 of pigs to breathe while being subjected to the TASER
22 current?

23 A. Pigs, no. Humans, yes.

24 Q. Do you know of any other independent studies
25 that are published that have come to a different

1 conclusion than the Jauchem study on the effect of
2 Tasing and respiration?

3 A. Yes.

4 Q. On pigs?

5 A. No.

6 Q. I'm sorry, I think I mis-phrased that last
7 question. This is an after-lunch problem I have.

8 I meant to ask on the Jauchem study, on the
9 drop in pH from TASER applications, sequential TASER
10 applications, do you know any independent studies that
11 have come to -- that are published that have come to a
12 contrary conclusion on whether TASER applications to
13 pigs, sequential TASER applications to pigs, cause a
14 drop in systemic pH.

15 A. I'm not aware of any other studies in pigs that
16 looked at that issue. I am aware of human studies in
17 that space.

18 Q. Now, in connection with the human studies, are
19 they published?

20 A. One is published. Another one I understand has
21 been accepted for publication and will be published in
22 the next three to six months. And there are several
23 more -- I may know of two that are published,
24 actually -- one that's been accepted for publication and
25 three or four more that are in submission at various

1 journals.

2 Q. Which one is -- which is the published study
3 you are referring to?

4 A. I was referring to two. The first was
5 Dr. Jeff Ho, et al., published a study of I think 67
6 human volunteers that looked at five-second durations
7 and did blood chemistry and a variety of other tests
8 before and after TASER exposure, and found no changes in
9 blood pH or no significant changes in blood chemistry.

10 There was a parallel study done by Ted Chan out
11 of, I think, University of California-San Diego that
12 came to the same conclusions.

13 Q. And those -- both of those studies were based
14 on single five-second cycles; is that correct?

15 A. Correct, both of those were.

16 Q. Have there been any studies published that
17 dealt with the effect of multiple cycles within a short
18 period of time on blood chemistry?

19 A. Yes. There are two that are in the publication
20 process, so they've not yet published, but they've been
21 cleared by the peer review process for publication.

22 Q. So there's none that are published right now?

23 A. That look at extended duration in humans, to my
24 awareness, they're not published yet.

25 Q. Now, over the years, TASER International has

1 paid Dr. Ho for various services; is that correct?

2 A. Correct. We've sponsored his work.

3 Q. And did you sponsor the study that you're
4 referring to?

5 A. The Ho study, yes. The Chan study, no.

6 Q. So would you call the Ho study an independent
7 study?

8 A. Yes, I would.

9 Q. Even though it was sponsored by TASER
10 International?

11 A. Yes.

12 Q. What does an independent study mean to you?

13 A. An independent study means that editorial
14 oversight of the study is controlled outside of the
15 company. For example, we have independent auditors that
16 we pay here at TASER International, yet their function
17 is outside of the control of the company. In fact,
18 their function is to audit the controls of the company.

19 If you look in the medical device and medical
20 products, you know, whether it's drugs or devices,
21 something like north of 95 percent of research that's
22 published in the world today is sponsored by industry,
23 because the government simply doesn't sponsor nearly as
24 much research as private industry does. And those
25 studies are considered independent, because industry

1 specifically goes to academic institutions that have the
2 oversight capabilities and the peer review process, so
3 that even though companies are paying for that study,
4 they're sponsoring it, they're paying the costs, the
5 results are independent. But their -- the results are
6 not dependent on the financial contribution, that
7 they're independent. That pays for the work, and what
8 happens happens.

9 And in many of the cases where TASER sponsored
10 research, we sign specific agreements up front that once
11 the payment is made, that we have zero editorial
12 control. The results will be published at the
13 discretion of the institution.

14 Q. Do you have any idea -- I mean, do you have any
15 estimate as to how much money TASER International has
16 paid Dr. Ho over the years?

17 A. Well, by my recollection, most of the time that
18 Dr. Ho is working for TASER, we have actually -- or
19 working on TASER projects, we're actually paying his
20 institution for his time. So I don't know that he
21 stands to benefit from working on a TASER project any
22 more than doing an emergency room shift in the emergency
23 room where he works. So from a financial incentive, I
24 think he's generally neutral between the two.

25 In terms of the total magnitude of what's been

1 paid, you know, I wouldn't know offhand.

2 Q. If you include to Dr. Ho and to his
3 institution, can you give us an estimate?

4 A. It would be hard for me to give an estimate
5 today. I just don't know.

6 Q. Could you give a ballpark, like under 100,000,
7 more than a million?

8 A. Again, it would be very hard for me. I haven't
9 been that involved. Mark Johnson would be the person
10 most knowledgeable on that subject. It's not a good
11 place for me to guess.

12 Q. Now, the study that is accepted for
13 publication, this is one study?

14 A. I know of at least one.

15 I believe that there is a Chan study as well.
16 Ted Chan, out of San Diego, is sort of a professional
17 colleague and competitor with Dr. Ho. Dr. Chan's work
18 is generally funded by the National Institute of
19 Justice, or the Department of Justice. So it's my
20 understanding that he has a study that is in the
21 publication process now as well, but I obviously don't
22 have as much insight.

23 Q. So Dr. Ho's study is out of the University of
24 Minnesota?

25 A. Correct.

1 Q. And TASER funded that?

2 A. I know we funded at least part of the study.

3 In some of these studies -- again, Mark Johnson would be
4 the person most knowledgeable, but in some cases, TASER
5 merely provides materials and covers the cost of
6 expendable equipment, blood draw equipment, rental of
7 certain testing machinery. But I believe there have
8 been some cases where the researchers have done the
9 research on their own time, where we've not sponsored
10 their -- actually paid them for the research, other than
11 providing them materials, but I don't know which case is
12 which on which studies.

13 Q. Do you have any estimate as to how much money
14 TASER International has paid University of Minnesota or
15 Dr. Ho or anybody affiliated with either of them in
16 connection with this study that is, I guess, accepted
17 for publication?

18 A. I don't know.

19 Q. Were you present during any of the testing?

20 A. Yes.

21 Q. So you were actually there and, like, in the
22 room?

23 A. Yes.

24 Q. And this was a human study?

25 A. Yes.

1 Q. And were they -- were the subjects police
2 officers who were volunteering to be Tased?

3 A. Yes.

4 Q. Was the study conducted here?

5 A. His first study was conducted here at our
6 headquarters. Subsequent studies have been conducted at
7 other facilities.

8 But generally, Dr. Ho has conducted many of his
9 human experiments at TASER training events where
10 volunteers, as part of the training, will undergo a
11 TASER exposure, and so that gives him a unique
12 opportunity. That's why I was there, because they were
13 there at a training event, and then Dr. Ho used that as
14 an opportunity for instrumented research by having some
15 of the volunteers volunteer to be instrumented and put
16 through certain protocols.

17 Q. And if we talk about the study accepted for
18 publication by Dr. Ho, I'm particularly interested in
19 that study. What were the duration of the shocks?

20 A. In that one they were 15 seconds.

21 Q. These were single 15-second shocks?

22 A. Correct.

23 Q. Or cycles?

24 A. Correct.

25 Q. Were any of the human subjects given more than

1 that?

2 A. Not in the study that has been accepted for
3 publication, but in subsequent studies, yes.

4 Q. Well, let's talk about the one that's been
5 accepted --

6 A. Okay.

7 Q. -- so I don't get confused. Do you know how
8 many subjects there were that got 15 second -- the
9 15-second cycle?

10 A. I think between 30 and 50.

11 Q. Do you know if that was M26 or X26?

12 A. Primarily X26. The X26 causes stronger
13 muscular contractions. Its overall physiological effect
14 is slightly stronger than the M, so we tend to focus our
15 scenario, our testing, on the X26.

16 Q. And were the probes fired from darts, or were
17 they attached in a different way?

18 A. I believe in some cases they were fired with
19 darts, and in some cases they were attached by other
20 means.

21 Q. Were they attached different places, or were
22 they attached to the trunk?

23 A. Generally to the trunk. I know that there were
24 some -- they alternated putting some of the electrodes
25 on the front of the body and some on the back, but

1 pretty much always on the trunk of the body.

2 Q. Some on front and some on the back?

3 A. Correct.

4 Q. Do you know whether the strength of the
5 contractions in the extremities was measured in these
6 tests?

7 A. No, it was not measured.

8 Q. Was the effect of the TASER discharge on
9 respiration measured?

10 A. Yes, it was.

11 Q. And how was that measured?

12 A. Well, a couple ways. First, they would do
13 blood draws before and after the TASER.

14 Second, and more importantly, they used a
15 breathing apparatus that was hooked up to the face of
16 the person so that they had to breathe through a
17 machine. And that piece of equipment would measure the
18 volume of the breathing, the repetition of the breathing
19 rate, and some of the various gases in the blood -- I'm
20 sorry, gases in the breath, CO2 and oxygen exchange.

21 Q. And I think for lay people, the higher the CO2,
22 the more effect that it would be having on respiration?

23 A. I don't understand the question.

24 Q. Well, they measure respiratory impairment by an
25 increase in the CO2 level?

1 A. In some cases. In this case -- well, an
2 increase in CO2 level can also just be part of exercising
3 with completely unimpaired respiration. Your CO2 levels
4 will go up when you exercise. You breathe it off to
5 compensate for that. But even perfect breathing, if you
6 start to exercise, you'll see some increase in CO2
7 levels.

8 Q. And in terms of the breathing apparatus, that
9 actually -- that's something that actually goes over the
10 mouth and nose?

11 A. Correct.

12 Q. What were the results of that?

13 A. I don't know the detailed results. I know that
14 the big picture was that on average, breathing rates
15 went up, not down, and they saw no cases of respiratory
16 arrest. None of the people stopped breathing. On
17 average, they breathed deeper and more than the same
18 person at rest.

19 So it was very similar to exercise. When you
20 start exercising, your breathing rate goes up. They saw
21 the same thing with the TASER.

22 Q. Does TASER International have this data?

23 A. We do not.

24 Q. Is it your understanding Dr. Ho has this data?

25 A. Yes.

1 Q. How do you explain, given your knowledge and
2 expertise about this weapon -- or this device and how it
3 works, if it's causing muscle contractions, it's not
4 causing muscle contractions also in the muscles that are
5 responsible for respiration?

6 A. Okay. Well, first, I lift weights five days a
7 week, travel schedule permitting, and just like anybody
8 who is doing a bench press or even a squat press, you
9 can be significantly flexing your muscles, yet your body
10 is still breathing.

11 Now, in the case of the TASER where it's
12 causing involuntary muscular contractions, we know from
13 computer modeling that the current tends to stay up near
14 the surface of the body. We also know that the TASER,
15 its effect is nerve mediated. Experimentally, if we
16 block the neuromuscular junction, the effect of the
17 muscle stops, meaning that we know the TASER is
18 affecting the nerves that then cause the muscle to
19 contract, because if we block the communication between
20 the nerve and the muscle, the electrical stimuli does
21 not cause the muscle to contract on its own.

22 So now, knowing something about the physiology
23 of the body, the current stays up near the surface, we
24 intercept the nerves that are hitting the motor -- the
25 motor nerves that hit the muscle tissue. That's causing

1 contractions around the body. But breathing is
2 primarily controlled by the diaphragm, which is, you
3 know, a big muscle that basically runs across the body,
4 deep -- cutting through the body cross-sectionally this
5 way.

6 We also know that the phrenic nerve, which
7 controls breathing, comes out of the spine in the neck
8 and goes -- if you look at the human body, the phrenic
9 nerve is right in the center of the body. It is very
10 far from the electrical fields where we can excite
11 nerves. So the insulated location of the phrenic nerve
12 prevents the TASER from stimulating that, which would --
13 if you did stimulate the phrenic nerve, that would then
14 start to have an impact on the movements of the
15 diaphragm.

16 But with the diaphragm being across the body
17 this way, most of the diaphragm is away from the
18 electrical stimuli, and the innervation, the nerve that
19 controls it, comes down the center of the torso. So
20 although we're causing the exterior muscles of the body
21 to contract, the diaphragm continues to function and
22 responds normally, i.e., as increased muscle tension and
23 muscular activity, we see an increase in breathing.

24 Would you mind if I grabbed another bottle of
25 water?

1 MR. BURTON: Why don't we go off the record. I
2 think we want to change tapes anyway. We can just take
3 a short break here.

4 THE WITNESS: Okay, thanks. Sorry. I was
5 getting pretty parched.

6 THE VIDEOGRAPHER: We are going off the record
7 at 2:07 p.m.

8 (Recessed from 2:07 p.m. until 2:20 p.m.)

9 THE VIDEOGRAPHER: We are on the record. This
10 is tape 2 of the continuing deposition of Rick Smith.
11 My name is Jim Law. It's 12/14/2006, at approximately
12 2:20 p.m.

13 Q. BY MR. BURTON: Thank you.

14 Aside from what you've already testified to,
15 and I don't want you to have to repeat yourself, but as
16 I read Dr. Jauchem's study, the pigs stopped breathing
17 during the duration of -- or they stopped breathing to a
18 certain extent during the duration of the TASER shocks,
19 and you're testifying that the human volunteers did not
20 during Dr. Ho's tests, thus leading to this report
21 that's going to be published in the next three to six
22 months.

23 A. That's correct.

24 Q. Outside of what you've already testified to, do
25 you have any other explanation for that particular

1 discrepancy? I just want to make sure I've got all the
2 reasons already.

3 A. Again, as I understand it in talking to various
4 experts myself to understand that issue, the differences
5 were, first of all, the pigs. We don't know if there's
6 some physiological difference with pigs. They were
7 under deep anesthesia, so they were breathing, but, you
8 know, as you know, with the anesthesia, if you go too
9 deep, they stop breathing just from the anesthesia. And
10 then with the five seconds on, five off cycle, we don't
11 know if perhaps it was a gas pain reflex that they
12 didn't breathe during the TASER.

13 So we don't know why precisely that happened,
14 but that research caused us to go move into human models
15 to try to understand what was going on. And we have, to
16 my awareness, never seen a human stop breathing during
17 exposure to any of the commercial TASER products or any
18 of our future products that we're developing.

19 Q. Well, is this the first time that a
20 TASER-funded study has actually tried to measure
21 breathing during TASER exposures?

22 A. I think this was the first study that measured
23 human breathing.

24 Q. Now, was there also a measurement of blood
25 gases?

1 A. Yes.

2 Q. And what were the results of the measurements
3 of blood gases?

4 A. Generally speaking, there was, as I understand
5 it, no significant changes. But I haven't seen all the
6 blood gas work, to be honest. Most of what I saw was
7 the realtime breathing data, and that's mostly what I've
8 discussed with Dr. Ho.

9 I understand there are similar results coming
10 from Ted Chan's research as well, funded by the
11 Department of Justice.

12 Q. That's the U.S. Department of Justice?

13 A. Correct.

14 And that was just simply based on Dr. Chan's
15 testimony at the Alvarado trial.

16 Q. Did TASER pay for Dr. Chan to testify at the
17 Alvarado trial?

18 A. No.

19 Q. Was that the co-defendant, the City of Los
20 Angeles?

21 A. Correct.

22 Q. Did the Ho study that's unpublished also
23 measure lactic acid and acidosis?

24 A. It did.

25 Q. And what were the results in that regard?

1 A. I know there was nothing concerning. To be
2 honest, I don't know the specifics. I know Dr. Ho's
3 been designated in this case, so I'd probably defer
4 specific details to him.

5 Q. Well, you can defer the details to him, but I'd
6 just like to get the extent of your knowledge here today
7 on what you understand to be the -- I guess the right
8 way to say it is the effect on the systemic pH of the
9 15-second TASER shots.

10 A. I don't recall discussing pH specifically. I
11 know that we discussed mostly that breathing, increased
12 respiratory function was enhanced, not decremented. I
13 don't recall discussing pH.

14 Q. So you don't actually know what Dr. Ho's
15 results are in regards to whether the 15-second TASER
16 shock had any effect on the systemic pH of the subjects;
17 is that correct?

18 A. Yes, as I sit here today, I don't know.

19 Q. Now, you talked about Dr. Chan's study. Is all
20 that you know about Dr. Chan's study what you learned
21 during the Alvarado trial?

22 A. No.

23 Q. Before we move on from Dr. Ho's unpublished
24 study, have we covered the principal points of what you
25 understand is in that study, or is there more?

1 A. In that study, yes.

2 Q. Are there other pending studies of Dr. Ho and
3 the effect of TASERS that you're aware of?

4 A. Yes.

5 Q. What are they?

6 A. A study of extended TASER duration hits post
7 exercise, so in persons that have been exerted to their
8 physical limits; extended duration TASER applications in
9 persons under the influence of alcohol; the effect of
10 TASER on core body temperature; relative effect of TASER
11 applications compared to pain stimulus as it relates to
12 catecholamine release and body -- basically stress
13 responses.

14 There might be another one that I'm forgetting.
15 Oh, also study of extended durations as long as 45
16 seconds.

17 Q. Are you aware of any human subjects that have
18 been shocked for a 45-second cycle?

19 A. Yes.

20 Q. And how many?

21 A. I believe there's between five and ten.

22 Q. And these are just human volunteers?

23 A. Correct.

24 Q. Do you know any of their names?

25 A. I do not.

1 Q. Are there any tests of, that you are aware of,
2 of human volunteers being shocked with more than one
3 TASER at the same time?

4 A. Human volunteers shocked with more than one
5 TASER. I am aware of volunteer exposures where that's
6 happened, and yes, some of those have been instrumented.

7 Q. Who did that?

8 A. Dr. Ho's group.

9 Q. So that's part of this whole series of --

10 A. Correct.

11 Q. -- work that Dr. Ho is doing?

12 A. Correct.

13 Q. Does that pretty much cover everything that you
14 can think of that Dr. Ho has in progress right now that
15 you're aware of?

16 A. I think so.

17 Q. And so you expect some additional publications
18 to be peer reviewed and then accepted and published --

19 A. Certainly, yes.

20 Q. -- out of this body of work?

21 A. Yes.

22 Q. Now, Dr. Chan. What do you understand to be
23 the difference between what Dr. Chan is doing and what
24 Dr. Ho is doing, if anything?

25 A. Largely the sources of funding. Dr. Chan is

1 doing his work primarily for the Department of Justice.
2 But as I understand it, he and Dr. Ho have been doing
3 similar type of test protocols, looking at similar
4 issues.

5 Q. Do you know what their professional
6 relationship with each other is like? I mean, are they
7 colleagues where they exchange information? Are they
8 competitors where they --

9 A. I would say they're friendly competitors. I've
10 seen them interact once at a conference. I know there's
11 some degree of competition between researchers.
12 Obviously, each one wants to be the first to publish any
13 certain type of data, so there's a natural competition
14 there.

15 Q. Do you know if Dr. Chan was able to measure any
16 increase in acidosis, any decrease in systemic pH, from
17 repeated or prolonged TASER shocks?

18 A. I don't recall him having that finding, no.

19 Q. I mean, do you recall him measuring the pH?

20 A. It is one of the things I recall him measuring.

21 Q. But is it the case you don't know what his
22 finding is?

23 A. I don't know what his finding is beyond they
24 were generally affirmative as far as breathing and
25 respiratory function. There may have been some pH

1 effects, again similar to exercise, but there was
2 nothing remarkable that stands out about his pH
3 findings.

4 Q. Before -- well, let me invite your attention to
5 a document. Unfortunately, I don't have a copy, if we
6 need to take a break to make one.

7 But I understand this to be a presentation you
8 made in Seattle -- I think it was earlier this year --
9 at something called -- well, it's the AAFS, the American
10 Association of Forensic Scientists.

11 Does that ring a bell?

12 A. It does.

13 Q. And your presentation is identified as C17.
14 You made some statements in it I just wanted to ask you
15 about. That was a part of a conference that dealt with
16 a number of unrelated subjects, but there was a part of
17 the conference that was -- addressed TASER and had
18 speakers with different points of view.

19 A. Correct.

20 Q. And you said in that that -- let me just read
21 this statement. You've said things like this several
22 times, I think: Primary risks associated with TASER use
23 include fall-related injuries and injuries associated
24 with strong muscle contractions, which are similar to
25 strenuous athletic exertion.

1 Right?

2 A. Correct.

3 Q. And has that been your view since the TASER M26
4 was put on the market?

5 A. Yes.

6 Q. And that's still your view today?

7 A. Yes.

8 Q. I'd like to just set aside the fall-related
9 injuries and talk about injuries associated with strong
10 muscle contractions, which are similar to strenuous
11 athletic exertion. Okay?

12 A. Okay.

13 Q. That half of what you're saying there. What do
14 you mean by that?

15 A. Generally that a TASER exposure does cause
16 musculature contractions, and as such, there have been
17 some injuries. It's unclear if all of them are truly
18 associated with the TASER, but we've certainly had some,
19 such as a shoulder dislocation or a couple of back
20 injuries, just like someone might hurt their back
21 picking up a heavy object. A TASER shock to the back
22 causes strong contractions and significant movement
23 around the spine, and someone with a bad back might
24 experience some aggravation or an injury.

25 Q. So you're referring there to orthopedic

1 injuries?

2 A. Generally speaking, yes.

3 And again, it's hard to differentiate whether
4 the injuries in those cases would have been from the
5 actual contractions, from the fall, from the way they
6 fell. In the case of a shoulder dislocation, if we're
7 talking about a volunteer who's being hit and some two
8 people are holding him up by the arms, well, as they
9 rotate him forward to the ground, is it the act of the
10 fall with the person holding the shoulder that caused
11 the dislocation, or was it a muscular contraction that
12 caused a direct dislocation?

13 But those are the types of issues that we're
14 talking about when I made that statement.

15 Q. Were you thinking about changes in the pH
16 level?

17 A. Generally not, because really only in extreme
18 cases of very, very prolonged muscular exertion would
19 that be a health risk. Dealing with a TASER-type
20 application, we are at a non-maximal muscle contraction,
21 we know that, for periods of time that are probably
22 comparable to what people would do for lifting weights,
23 wrestling, et cetera. So we don't -- in my personal
24 opinion, those are not risks one would worry about in
25 sort of normal applications.

1 Q. Well, what do you mean by a normal application?

2 A. In an application during a physical altercation
3 to get someone under control. Where perhaps one might
4 start to get worried more about that would be, you know,
5 applications that are tens of minutes in duration, for
6 example. Periods of time, I guess, that exceed a
7 person's ability to forcibly exert themselves for that
8 period of time.

9 Q. And would that be dangerous because the acid
10 level from the strong muscle contractions in the blood
11 would, could, rise to a dangerous level?

12 A. I'm not certain if that would or would not
13 happen, but it certainly becomes conceivable if we're
14 talking about, again, applications that far exceed
15 levels of normal human exertion. So I wouldn't
16 speculate that it would happen with certainty, but it's
17 conceivable.

18 Q. Right, but that's what you're talking about is
19 the strong muscle exertion over, you know, this
20 unnaturally long or irregular period of time would lower
21 the pH or raise the acid level -- I think two ways of
22 saying the same thing -- to a point where it could pose
23 a cardiac risk?

24 A. Now we're getting pretty far afield. If we're
25 talking about the statement I made at AAFS about

1 injuries related to musculature, there I was focused on
2 orthopedic-type injuries. So that was not, you know, in
3 my mind or what I was intending to convey at that point
4 in time.

5 Q. Now, you also said: Numerous independent
6 studies have established the general safety.

7 Can you list each of those studies?

8 A. I can give you a sampling.

9 Q. Okay.

10 A. First would be the U.S. Department of Defense
11 HECOIE study, the U.K. Home Office-sponsored studies that
12 included other agencies within the United Kingdom, Ted
13 Chan's studies out of University of San Diego for the
14 United States Department of Justice, the findings of the
15 Orange County Florida Medical Task Force on TASER, the
16 findings of the Alfred Hospital in Australia, the
17 findings out of the Cleveland clinic that did some
18 studies that looked at ventricular fibrillation
19 thresholds in cocaine, these studies out of University
20 of Missouri, such as the one that were published in
21 Pacing And Clinical Electrophysiology, and then a
22 variety of field studies from various police agencies
23 that have documented significant decreases in injury
24 rates when TASERs are deployed, showing the relative
25 safety of the TASER versus conventional police tactics.

1 And those would include studies done from Madison,
2 Wisconsin to Cincinnati, Ohio; Columbus, Ohio; Phoenix,
3 Arizona; Orange County, Florida; Houston, Texas. And
4 the list goes on.

5 And it would also include -- geez, there was
6 another study I just had in mind -- oh, a comparative
7 risk study out of the United Kingdom that was recently
8 published that found the TASER had a significantly
9 better safety record and lower injury risk than
10 conventional policing tactics, including baton, pepper
11 spray, CS gas, and canines, in the United Kingdom
12 policing environment.

13 Q. Now, you said at this AAFS presentation: Not
14 one of the autopsy reports ruled or suggested that the
15 TASER was a primary cause of death.

16 Do you remember that, in talking about the
17 cases where people died after a TASER application?

18 A. I don't know if I recall that specifically, and
19 I would have to place that in context at certain points
20 in time. There have been, you know, autopsy findings
21 where a TASER has been listed as a primary cause of
22 death. I don't know if this presentation was before or
23 after I became aware of those.

24 And I should say those disputed autopsy
25 findings. In my opinion, they're not correct, and in

1 the opinions of the experts I talked to.

2 Q. And Heston is one of those, correct?

3 A. I'm not as familiar with the actual findings in
4 this case.

5 Q. So you don't know whether or not the medical
6 examiner who -- let me ask you this: Do you know the
7 name of the medical examiner who performed the autopsy
8 in Heston?

9 A. I don't.

10 Q. Do you know whether the medical examiner who
11 performed the autopsy in Heston on behalf of the
12 Monterey County, California sheriff/coroner determined
13 the TASER to be a primary cause of death?

14 A. I don't. I seem to recall that there were
15 several autopsies or several medical examiners that
16 looked at this case, but to be honest, I have not gone
17 through those in great detail.

18 Q. Well, would it concern you if someone told you
19 that a medical examiner who had done an autopsy had
20 found that the TASER was a primary cause of death?

21 A. Certainly those would be cases we would
22 investigate very carefully. But I would not do that
23 personally. I would rely on Mark Kroll, for example,
24 the head of our scientific and medical advisory board,
25 among other experts, to look into the case.

1 And I know that's happened in this case, and I
2 don't know the exact phraseology of the findings and
3 whether or not the TASER was deemed contributory or to
4 what degree. I know that the people that I rely on to
5 interpret and look at these cases inform me that they
6 don't see that as being the case here.

7 Q. Do you know how many times Mr. Heston was
8 shocked by TASER weapons?

9 A. No.

10 I do know there were a number of failed
11 attempts, apparently, where the darts had missed, but I
12 don't know the actual number of cases where contact was
13 made.

14 Q. Well, do you know how many dart puncture wounds
15 he had on his body, according to the medical examiner?

16 A. I do not.

17 Q. Do you believe it possible, based on your
18 knowledge, that let's say overuse of TASER weapons on a
19 subject could kill them?

20 MS. GIBEAUT: Objection to form.

21 MR. BURTON: Can you clarify that? And maybe I
22 can rephrase it.

23 MS. GIBEAUT: I guess I don't know what you
24 mean by "overuse."

25 MR. BURTON: Well, let me ask it a little

1 differently. That's a good point.

2 Q. BY MR. BURTON: I sort of see this in three
3 dimensions. I kind of mentioned it earlier. One would
4 be more than one device being deployed at the same time
5 so that there's more than one of the currents going into
6 the target, another would be one device cycling more
7 than once, like repeatedly, and the third would be just
8 a continuous charge, where the person is holding it
9 down, which is kind of like continuous ones. Do you
10 believe that there is an amount of TASER application
11 that could be lethal to a target?

12 A. If there is, I've not seen any evidence
13 supporting that, so I'm not aware of a circumstance that
14 would meet your -- the question you just asked where a
15 specific level would be lethal, aside from the -- for
16 example, in the PACE study, where, increasing the power
17 output of a modified device, you can take it up to
18 levels where it can be lethal. But that would not be
19 possible in a field application.

20 And multiple devices are not additive. They're
21 not synchronized. So that wouldn't apply.

22 Q. Because the pulses would be in different
23 microseconds?

24 A. It would be separated both spatially and
25 temporally. The darts would be at different locations

1 on the body, and the pulses -- you know, each pulse is,
2 you know, roughly 1/100,000 of a second in duration
3 separated by 50 milliseconds -- what is that? 50,000 --
4 or 5,000/100,000 of a second.

5 The point is, the odds of two pulses occurring
6 from two separate devices at the same point in time to
7 where they would be additive is, you know, in the
8 thousands to one against that, the probability of that
9 happening. And then further, the darts would have to be
10 in the exact same location in order for those electric
11 fields to be additive. So I just don't see that
12 happening.

13 Q. Well, let me ask this. If two darts -- well,
14 let's say four darts, two pairs of darts from two
15 devices, both fully functional, were more or less in the
16 same general region of the body and were delivering a
17 current, would it be fair to look at that, at least in
18 the sort of neighboring tissue, as 30 to 40 pulses a
19 second instead of 15 to 20, so that the effect would be
20 more tetanic than the normal?

21 A. Doubtful, because the electrical fields tend to
22 fall off fairly quickly as you move away from the darts.
23 So I mean, they'd really have to be right on top of each
24 other.

25 Q. Did you -- you said at this AAFS conference

1 that the TASER devices are imperfect. Do you remember
2 that?

3 A. Probably.

4 Q. Can you explain what you mean by that?

5 A. Well, there are no perfect devices or
6 technologies. They're not without their drawbacks.

7 Q. Well, what were you referring to as the
8 imperfections in the TASER device at that conference?

9 A. I don't recall, but if I had to think about it
10 today, we have a limited range that can only fire out up
11 to 35 feet. That's certainly an imperfection for many
12 applications. Police want to shoot further.

13 It's a single-shot device. You have to reload
14 between each of the applications.

15 You know, it's battery operated, so therefore,
16 batteries must either be charged or changed
17 periodically.

18 Like any device, it's got operating
19 limitations.

20 Q. How about safety limitations? When you said
21 the TASER was imperfect, were you referring to any of
22 its safety limitations?

23 A. I don't think so.

24 Q. Now, you know Dr. Adam Alexander?

25 A. I do.

1 Q. He made a statement at the conference, you're
2 probably aware of it, something like, quote: The safety
3 culture at TASER International was changed, and he was
4 referring to the AAFS presentation of the preceding
5 year.

6 Do you recall that comment?

7 A. Vaguely.

8 Q. Do you agree?

9 A. I would say that Dr. Alexander actually came
10 out here and gave us -- we hired him as a consultant on
11 warnings issues, and I would say over the course of
12 time, our legal warnings became more sophisticated and
13 were more effective at legally protecting the company.
14 I think the company has always had a huge focus on
15 safety and operational safety, so from a layperson's
16 perspective or somebody going through our training, I
17 think this company has always had an outstanding focus
18 on safety.

19 But I would agree with Dr. Alexander that we
20 became more focused on some of the legal issues
21 surrounding warnings and protecting the company in a
22 high-risk environment, which is where our devices are
23 used.

24 Q. Now, have you ever read the report that
25 Dr. Alexander did in the Heston case?

1 A. I don't believe I have.

2 Q. In it, he analyzed the TASERS that were
3 actually used in this incident and their dataports.
4 Based on what you know about Dr. Alexander, would you
5 have any reason to doubt his findings?

6 A. I'm not sure. I would say Dr. Alexander is a
7 very smart man. As far as his technical understanding
8 of the technical operations of the TASER or the function
9 of the dataport and all that, I don't know the level of
10 competence. I just don't know the level of his
11 understanding in those very specific subject areas.

12 Q. Now, you've been quoted in the press as calling
13 some of these products liability cases against TASER
14 nuisance lawsuits. Does that sound correct?

15 A. I may have.

16 Q. Do you think that the Heston case is a nuisance
17 lawsuit?

18 A. I would say that this case is certainly a
19 tragedy for all involved, and I certainly would not want
20 to minimize the impact emotionally on people's lives of
21 this terrible incident.

22 I would say that the causality of this incident
23 unfortunately lies elsewhere, not with the police or
24 with their use of the TASER or our product.

25 Q. And what do you base that on?

1 A. I base that on my discussions with some of the
2 experts in this case, and I've reviewed topically,
3 through a few of the expert reports before today. It's
4 my understanding that there was a long history of toxic
5 methamphetamine abuse that we all know is horribly
6 dangerous, deteriorates the mind and the body in a very
7 dangerous way, and that there was a level of
8 methamphetamines involved in this case that was above a
9 level that is potentially lethal, and the behavioral
10 cues that were involved were indicative of excited
11 delirium, acute methamphetamine intoxication, and other
12 very dangerous underlying medical conditions.

13 Q. Did anybody tell you that Mr. Heston, the
14 decedent in this case, was not hypothermic?

15 A. I don't recall any information on hypothermia
16 one way or another.

17 Q. Well, have you been told by your experts that
18 hypothermia invariably accompanies death by excited
19 delirium?

20 A. No. I know that it can in certain cases, but
21 that it's not always present.

22 Q. Now, has anybody told you that the dataports,
23 when combined with the officer statements in Heston,
24 according to the analysis at least of the dataports done
25 by Dr. Alexander, show that he was -- he may have been

1 hooked up to three devices and given a total of 25
2 cycles within a 70-second period?

3 A. I did not know the specific number of potential
4 applications. I know that there were multiple
5 cartridges fired, that many of them appear not to have
6 had an effect, and that the dataports indicate a fair
7 number of trigger pulls.

8 But I also seem to have a recollection, I don't
9 know where I'd read it, that at least one of the
10 officers was hitting the trigger repeatedly out of
11 frustration that it didn't seem that he was getting an
12 effect.

13 Q. Now, one of the reasons that you gave at the
14 AAFS presentation for not attributing cardiac arrest to
15 the TASER applications was the fact that the cardiac
16 arrest happened sometime later, and you would expect the
17 TASER applications to be more or less contemporaneous if
18 they were causally related?

19 A. Correct. If they were causally related, they
20 would be very close in time. But that is not -- the
21 reverse causality does not apply, if they were close in
22 time does not indicate necessarily causality.

23 Q. Does it suggest a higher likelihood of
24 causality?

25 A. I would say that you can exclude causality with

1 a time period, a time lapse in between. You would look
2 more closely at a case where they were, you know,
3 happening at the exact same time.

4 Although, you know, one explanation is simply
5 that an operator would stop deploying the TASER if the
6 struggle had stopped. So if there were some other
7 catastrophic health event that had occurred, you would
8 expect the officer, of course, would stop applying the
9 TASER, because the fight would have stopped.

10 Q. Is it your understanding in the Heston case
11 that the cardiac arrest happened in close proximity to
12 the time of the Tasing, or at some point later?

13 A. It's my understanding that there was some form
14 of collapse that was within minutes of the Tasing. I
15 don't know the exact time course. I have not seen the
16 police reports or anything that documents the specific
17 time.

18 Q. No one told you that the collapse was visible
19 to the officers either simultaneously with or shortly
20 before the end of the last cycle?

21 A. No.

22 Q. Would that change your view of the case?

23 A. No.

24 Q. If it were, let's say, established to your
25 comfort level -- this is somewhat hypothetical -- that

1 that did happen, and that prior to that, he had been
2 shot with at least two other devices, and the three
3 devices together administered about 25 cycles in 70
4 seconds directly preceding the cardiac arrest, would
5 your opinion still be that there would be no causal
6 relationship between the TASER applications and the
7 cardiac arrest?

8 A. Well, again, that's a very fuzzy question. I'd
9 have to understand which of those cartridges made
10 contact, where they made contact, basically everything
11 that had happened in much greater detail.

12 And at that point, I would talk with some of
13 the real experts that I rely upon to help interpret that
14 kind of data. And those folks have looked at this data
15 and have told me that in their opinion, it's totally
16 unrelated to the use of the TASER. So I'm operating
17 under the assumption that, you know, they reviewed the
18 facts in this case.

19 Q. Now, you mentioned warnings, and I would like
20 to show you a document at this time. I'm sure you're
21 familiar with it.

22 A. Okay.

23 (Discussion off the record. Marked for
24 identification Deposition Exhibit 1.)

25 Q. BY MR. BURTON: I photocopied all three pages,

1 but I really think that the front page is the most
2 important one.

3 Is this a warning that was issued by TASER
4 International on or about June 28th, 2005?

5 A. I believe it was.

6 Q. Can you explain how this particular warning
7 came about to become issued?

8 A. Yes. There was a report around this time out
9 of Canada that had language in it that said it is
10 conceivable that the application of a TASER-type device
11 for an extended period of time might impair breathing.
12 I think part of that was based on some discussions with
13 research in Canada with Jauchem, based on his pig work.

14 As soon as we became aware of that, in an
15 abundance of caution, we issued this warning to make our
16 customers aware, hey, there's been a safety concern that
17 has been raised as a possibility, and we issued this
18 training bulletin.

19 And then we also commissioned work to further
20 investigate whether or not this is an issue in human
21 subjects.

22 Q. And those would be the Dr. Ho studies that you
23 previously mentioned?

24 A. Correct.

25 Q. Anything else other than the Dr. Ho studies you

1 previously mentioned?

2 A. Well, that's what we commissioned.

3 Independently, based on this warning bulletin
4 and the Canadian report, other folks engaged in research
5 in this area as well, notably Ted Chan and the DOJ. We
6 wanted to know if this is an issue, and until, you know,
7 we had good, scientific, rigorous data about it, we were
8 going to put the warning out there and make people aware
9 that it was a conceivable risk.

10 But I certainly don't think that this is any
11 documentation that it actually causes impairment of
12 breathing. We're just alerting people, hey, this has
13 been brought up, be aware of it, and when you're
14 deploying TASERS, exercise care. And then we covered
15 some basic, you know, use-of-force-type issues, like
16 don't use more force than necessary, whether it's a
17 TASER or a baton. Only use the amount of force
18 necessary to get the situation under control.

19 Q. Was there an underwriter or any sort of
20 financial institution, in the broadest sense of the
21 word, that required TASER International to issue this
22 warning?

23 A. No. No. We did this entirely on our own
24 initiative.

25 Q. The reason I ask that is it was sort of implied

1 in a question that Ms. O'Linn had asked at a deposition,
2 that there was some -- like, she referred to some
3 underwriting reason for this warning to have been
4 issued. But you're not aware of anything like that?

5 A. It was an abundance of caution, and also, you
6 know, dealing with our own internal legal department in
7 terms of constructing the language and the warnings.

8 Q. Now, I would like to just go through some of
9 the points here. It says, "It is important to
10 emphasize" -- point 1 on page 1 -- "that arrest teams
11 can handle the subject during TASER system application.
12 Failure to begin restraint procedures during a TASER
13 device application can unnecessarily prolong the
14 duration or number of TASER device applications
15 administered to a given subject."

16 Now, in that regard, generally what is being
17 referred to there is arrest teams are the officers who
18 are not actually deploying the TASER; who are moving in
19 to place the subject into restraints, such as handcuffs?

20 A. Generally speaking, yes.

21 Q. I mean, typically you would have a person lying
22 down because they fell from the TASER, and then the
23 other officers move in, grab the hands, get them behind
24 the back, and put them in handcuffs. Right?

25 A. Depending on the situation, yes.

1 Q. I mean, the most general situation I'm just
2 referring to. I know there's all sorts of ...

3 A. Where it's practical and safe, you know, and
4 makes tactical sense, the operators should move in and
5 close.

6 Q. And what you're saying here is that the arrest
7 teams, these officers who are doing the handcuffing,
8 should not wait until the end of the TASER cycle, but
9 should move in?

10 A. They don't have to wait until the end of the
11 cycle. They can touch the person during the cycle.
12 There may be other tactical reasons that they don't.

13 The purpose of this warning is basically to
14 avoid a situation where an officer deploys a TASER and
15 that other officers basically stand around and wait for
16 something to happen. It's sort of just a reminder that
17 when the TASER is deployed, it is part of an overall
18 use-of-force options toolkit, and that as we state here,
19 that they should be comfortable moving in and beginning
20 the restraint procedures during the TASER application.
21 Again, I'm just excluding all tactical considerations
22 because every situation is different.

23 Q. Now, if an officer moves in while a TASER
24 device is still cycling, it is possible for that officer
25 to get an electric shock; is that correct?

1 A. Only under certain circumstances. We train
2 officers should avoid touching the probes, getting
3 tangled in the wires, or placing their hands anywhere
4 between the probes. So if you follow those protocols,
5 you should not get shocked.

6 Q. This thing about touching between the probes,
7 would that include just in space between the wires and
8 not actually touching the body of the subject? Do you
9 follow me?

10 A. Yes. From a safety protocol, we advise them to
11 stay away from the wires and the darts because, you
12 know, in a moving situation, you don't want to be
13 anywhere near them.

14 Now, from a scientific standpoint, you can
15 touch the wires. If they've got a good connection on
16 the other end, they're not going to short out. But now,
17 if one of the darts falls free and now there's no
18 connection, your hand is right there connecting those
19 two wires together, and if they're exceeding their
20 maximum voltage rating, a shock could occur.

21 So generally, as with any type of training, we
22 try to give them simple rules of thumb that make sense,
23 so stay away from the wires, stay away from the darts,
24 but you can touch the body of the subject.

25 Q. Now, this next question I have is kind of

1 convoluted, and I'll rephrase it if you need me to, but
2 if you're suggesting to officers here that they move in
3 and take the subject's arms and put the subject's arms
4 behind his back for handcuffing, the typical sort of
5 handcuffing position, during a TASER application, and
6 if, as indicated in Dr. Jauchem's study, the TASER is
7 causing some significant contractions in the
8 extremities, then is it possible that the officers are
9 going to have a hard time putting the arms behind the
10 back for handcuffing because of the tetanic effect of
11 the TASER itself?

12 MR. BROWN: I'll object. That's an incomplete
13 hypothetical.

14 THE WITNESS: Do I answer?

15 MS. GIBEAUT: Yes.

16 THE WITNESS: Okay.

17 That's hard to answer. It's going to depend on
18 where the darts are located, what muscles are being
19 stimulated, how impaired the individual is. We go over
20 in our training, different shot locations have different
21 effects. Darts that are close together don't cause
22 nearly as much contraction as probes that are further
23 separated.

24 So is it conceivable that it could be difficult
25 to get handcuffs on because the subject is either

1 voluntarily thrashing about or because of some of the
2 contractions? Yes, it could be difficult. That's going
3 to depend -- every situation is going to be unique and
4 challenging.

5 Q. BY MR. BURTON: Well, let me kind of narrow my
6 question and -- because this does have a lot to do with
7 the facts, particularly of the Heston case. Is it
8 possible under certain circumstances, and I understand
9 there are all sorts of variables, that the intended
10 effect of the TASER, in other words, the muscle
11 contractions, could in itself, while the TASER is
12 cycling, make it hard for members of the arrest team to
13 place the arms behind the back in handcuffing position?

14 A. Again, it's hard to know without looking at
15 each specific case.

16 I would say this, that the TASER does add other
17 muscular movements around the body. A hit to the torso
18 generally is not going to cause contractions in the
19 limbs per se, but in some of the supporting musculature.
20 So for example, a hit to the back is generally going to
21 contract and pull the arms backwards, so in that case,
22 it might actually assist in getting the arms back.

23 I would say that in any event, it's not going
24 to be as difficult as someone who is intentionally
25 putting their hands -- trying to hold them in a location

1 where the officers can't get to them or can't get the
2 cuffs on. You know, the TASER is going to be causing
3 uncoordinated muscular contractions within the body that
4 generally impair the subject's ability to do coordinated
5 movement, more so than it would be impairing to the, you
6 know, police officers that may be trying to move the
7 limbs in a specific way.

8 That would just be my general interpretation of
9 it, that somebody who is focused on specific muscle
10 groups to fight against handcuffing is going to be much
11 harder to handcuff than somebody that's under the
12 influence of the TASER, where you've got psychological
13 distraction from the discomfort and random -- well,
14 maybe they're not random at that point in time, but
15 depending on where the darts are, I would say
16 uncoordinated by the subject -- muscular contractions.

17 So generally speaking, the feedback we get from
18 law enforcement is it's easier to handcuff a resistant
19 subject who is being hit with a TASER than a resistant
20 subject who is under his complete volition.

21 Q. Okay, but that's not my question. My question
22 is, let's just hypothetically take a relaxed subject
23 who's, let's say, been hit in the chest with nice
24 spacing in the darts from, let's say, 12 to 15 feet.
25 Let's say he's not wearing a shirt, so we have really

1 good dart-embedded connections, and he's gone down just
2 like he's supposed to from the effect of the device, and
3 the device is cycling. Is the -- and let's say the
4 person is fairly muscular.

5 Is the effect of the device cycling in itself
6 potentially going to make it harder to put that
7 subject's hands behind his back for handcuffing than
8 if the person was just there relaxed and not being
9 Tased?

10 MR. BROWN: I'll object again. That's an
11 incomplete hypothetical. Calls for an expert
12 opinion.

13 MS. GIBEAUT: Join.

14 THE WITNESS: Again, if we're talking about
15 somebody who is totally limp and relaxed and they're
16 going to let their arms move, then some muscular
17 activity may make it more difficult than a relaxed
18 individual.

19 But generally, my impression is if the
20 individual is relaxed, law enforcement would -- well, I
21 won't speculate there. I'll just say that if we have a
22 broad spectrum of somebody who is completely relaxed,
23 asleep, on one end, and somebody who is voluntarily
24 trying -- who is resisting their hands being taken out
25 or who is noncooperative or who is not -- indicating

1 they're not going to follow instructions to do so,
2 somebody who is under the influence of the TASER is
3 going to be closer to this spectrum than this one; that
4 you're going to have muscular activity that's going on
5 that does make it more difficult to control than the arm
6 of someone who is passed out, but it's probably closer
7 there than to somebody who is voluntarily coordinating
8 their muscular movements and intentionally not complying
9 and moving their muscles adversely in a coordinated
10 fashion to prevent cuffing.

11 Q. BY MR. BURTON: Well, I'm thinking about
12 Dr. Jauchem's study and his measurements that I read in
13 that journal, where he said -- I mean, he actually
14 measured this on pigs and said there were, like, 60
15 pounds of force on the limbs, even though the probes
16 were attached to the trunk of the pigs. In your
17 opinion, is that finding transferable to human field
18 situations, that we could expect to see 60 pounds or
19 more of force being exhibited on limbs of people who are
20 being Tased in their trunks?

21 MR. BROWN: I'll object that it calls for
22 speculation, calls for an expert opinion.

23 THE WITNESS: Again, you'd have to -- I'd have
24 to go back and review how big the pigs were.

25 What I do know is that the contractions are

1 about 40 percent of maximal muscle contraction strength,
2 so it's not as strong as somebody who is physically
3 attempting to move their limb in the same way, so ...

4 Q. BY MR. BURTON: Right, but my question is just
5 do you know of any reason why we can't transfer that
6 particular finding of Dr. Jauchem on these anesthetized
7 pigs in that particular study to assume that's what
8 happens in human-based field situations, or may happen
9 in a human-based field situation?

10 MS. GIBEAUT: Objection; asked and answered.

11 MR. BROWN: And I'll -- same objections as
12 before, calls for an expert opinion, beyond the
13 witness's expertise.

14 THE WITNESS: Okay. Generally, if what we're
15 talking about are torso hits of the TASER device, I
16 would expect to see some level of contraction of the --
17 that's what we're talking about, right, torso hits?

18 Q. BY MR. BURTON: The tor --

19 A. So you're going to see localized muscular
20 activity. I don't know that you'll see it way out in
21 the limb directly.

22 Q. I mean, I can refer you to what Dr. Jauchem
23 said. I just want to know if you know of some reason
24 why this cannot be transferred to human beings. For the
25 five subjects, these are pigs, receiving two

1 three-minute exposure periods, the mean level of maximal
2 limb flexion was 30.5 kilograms, 67.3 pounds, for the
3 first of the two exposures. The mean level for the
4 second session of TASER exposures was 21.6 kilograms,
5 47.5 pounds. And these were -- I mean, he has a
6 diagram. He attached the probes to the trunk of the
7 pig, not to the extremities, and he's talking about
8 maximal limb flexion.

9 I mean, do you know, is this -- this is a
10 report on your product. Do you consider that to be a
11 valid finding, a), and b), is it transferable to human
12 beings? And if not, why not?

13 MR. BROWN: Same objections.

14 MS. GIBEAUT: Same objections.

15 THE WITNESS: Generally, again, just so we're
16 clear, when he's talking about limb flexion, the pigs
17 were in a -- on their back in a location where they were
18 splayed out, effectively, and ropes with strain gauges
19 would be attached to hold the limbs straight. As a
20 charge is applied here on the torso, you'll get
21 contraction of the pectoralis muscle and the flexors in
22 the hip area that are going to tend to pull those limbs
23 in. I believe that's the force he was measuring. And I
24 think it would be probably speculative to try to
25 translate the exact amount of force into a human model,

1 but I see no reason why we would expect any different
2 response as far as muscular stimulation in the regions
3 where the probes are at.

4 Q. BY MR. BURTON: Now, he also found in these
5 animals that the lactate was highly elevated, both
6 because of the muscle contractions and the changes in
7 respiration. Do you agree or disagree that that finding
8 is transferable to human beings?

9 A. That finding I think is not going to be as
10 reliable as the human studies done by Ho and Chan, and
11 frankly, I don't recall exactly what their findings on
12 lactate were.

13 I even recall from Jauchem, he explained to me
14 that his lactate findings were very similar to what you
15 would see for exercise, but because, as we talked about,
16 of the anesthetic issues and these being a different
17 species that seemed to behave differently when it came
18 to respiration than human subjects, I would not feel
19 comfortable porting that data over to a human model when
20 you have good human data that you can rely on. The
21 human data is much more relevant.

22 Q. But you haven't seen any human data on
23 lactate levels other than the Dr. Ho single five-second
24 study?

25 A. I know I've talked qualitatively about lactate

1 levels with Dr. Ho on the prolonged exposures, the
2 post-exertion exposures, the alcohol-related exposures,
3 and there's nothing remarkable that comes to mind. I
4 don't remember his specific findings on lactate, other
5 than they were not remarkable. They were either similar
6 to -- probably similar to exercise.

7 Q. Would you agree that the best time to take
8 somebody's arms who is a subject in the field being
9 subjected to a TASER, put them behind their back and
10 into restraints if there's enough officers available, is
11 right after the TASER finishes cycling?

12 MS. GIBEAUT: Objection; foundation.

13 MR. BROWN: I'll object that that's an
14 incomplete hypothetical that calls for an expert
15 opinion.

16 THE WITNESS: That's really going to depend on
17 the situation. If the subject after the TASER exposure
18 is docile and compliant, absolutely. If the subject is
19 extremely violent in behavior, then they're going to
20 immediately resume violent behavior at the cessation of
21 the impairment caused by the TASER. So that's one I'm
22 just not comfortable making a judgment call.

23 I would rely on -- I think only the people that
24 are at the scene that have had training in restraint,
25 which I have not, would be able to make that call.

1 Q. BY MR. BURTON: Do you look at the TASER M26
2 probe deployment as an incapacitating tool or as a pain
3 compliance tool?

4 A. It's designed as a -- to be an incapacitating
5 tool. However, you know, as we go over extensively in
6 our training, there are many variables that come into
7 effect as to how significant the incapacitation will be.
8 In some cases where the darts hit very close together,
9 you may get more of a pain response. If there's no dart
10 connection, you might get some eddy currents occurring,
11 some very small currents that might be distracting, but
12 maybe not even to the pain level.

13 So in an optimal world with the right
14 application, with good connections and a good spread,
15 we'd generally see something I would define as
16 incapacitation. But that's not always the case in the
17 real world.

18 Q. Now, when the TASER is being deployed in the
19 drive-stun mode, then you would consider it to be a pain
20 compliance tool and not an incapacitating tool; is that
21 correct?

22 A. Generally speaking, it's going to have a much
23 more localized effect. There are things you can do to
24 compensate that will make it closer to incapacitating,
25 such as, you know, moving up into the areas around the

1 neck where there's really high nerve densities where you
2 might intercept a lot of nerves that are in one location
3 that will stimulate muscles downstream.

4 But for training purposes, you have to keep to
5 really simple rules of thumb. We train law enforcement,
6 when it's in the drive-stun mode, you should expect it
7 to be more of a pain compliance response, less likely to
8 be incapacitating than when we're in the dart mode or
9 the probe mode.

10 Q. Now, let me speak a little bit about drive stun
11 just while we're here. There was apparently, although
12 there's some question in the evidence, a single drive
13 stun in the Rosa case; not in the Heston case, but in
14 the other one I'm here on today.

15 And was the drive stun something that you just
16 kind of stumbled on when you were developing the TASER?
17 You found that if you didn't have the cartridge in, you
18 could shock somebody with this thing? Or was this
19 actually a consciously developed alternative way to use
20 the tool?

21 A. It was consciously developed.

22 Q. And it had to do with, like, arranging the
23 probes a certain way so that it would work for that?

24 A. Correct.

25 Q. Are you aware that your company's training

1 materials have recommendation that the drive stun, one
2 of the target areas be a man's groin?

3 A. As I understand it, I don't have them in front
4 of me, that we recommend that the groin is an area of
5 high effect. But we also warn that the groin is an area
6 of potential mechanical injury, so that then becomes up
7 to the officer and the agency to determine whether the
8 groin is an appropriate target. And again, it will
9 depend on the situation.

10 Q. So do you think it might be appropriate to
11 shock somebody with an M26 in air Tase mode on their
12 penis or testicles?

13 A. Well, let me put it to you this way: If I'm a
14 police officer and I've fired a cartridge and I miss,
15 and I have someone who is significantly larger than
16 me -- well, maybe even if they're not -- a very
17 dangerous person that now attacks me as an officer, and
18 the TASER is what I've got in my hand, if I'm now in an
19 all-out physical fight where I'm now defending my
20 safety, I would go for the groin or for the neck,
21 because I know those are two areas that are going to be
22 much more impactful because of the high nerve density.
23 I'm going to get more of an effect, and it's more likely
24 the person is getting off of me, understanding that
25 there's a risk of a crushing injury to a testicle or the

1 throat if I over-apply it, I need to know that
2 information as a police officer in case I'm using the
3 TASER and I'm defending myself.

4 That might be different than if an agency
5 elects to use the TASER as a pain compliance for a
6 come-along, for example, to move someone from one
7 location to another. Some agencies make the
8 determination that the pain from a TASER is safer than
9 the pain from a wrist lock or a joint lock that might
10 dislocate the joint. Now, in that case, you know, I
11 think the judgment might be different about applying the
12 TASER to the groin. I think most people would agree
13 that that's not a reasonable way to use the TASER in a
14 proactive sort of method to move the subject; whereas if
15 I'm using it in a situation to prevent physical harm to
16 myself, I'm going to take more aggressive measures with
17 it.

18 Q. Have you ever heard of a subject being Tased on
19 the penis by a drive stun M26 while in handcuffs by a
20 police agency?

21 A. I'm not sure I've heard of that specifically.

22 Q. Have you ever heard reports of police agencies
23 misusing your devices, your products?

24 A. I've certainly heard of allegations about
25 misuse, and there are some that I would probably agree

1 were misuse.

2 Q. Are there any that pop to mind?

3 A. With a prior generation of the TASER, actually,
4 not with ours, there's one that comes to mind.

5 Q. No, I'm thinking specifically of M26s or X26s.

6 A. M's or X26s. There would be a clearcut --
7 there are some that are debatable.

8 As far as a clearcut misuse, the one that's
9 closest that's coming to mind is a case in Florida where
10 officers were attempting to get a blood draw, I think,
11 from a subject, or a urine draw, and they used the TASER
12 to assist in that process. I don't know -- you know, it
13 sounded very -- it sounded bad when I heard it. I'm not
14 sure if the subject was physically resisting and they
15 responded with the TASER, or whether they were frankly
16 misusing it in some way to coerce the subject.

17 Other than that, I'm not having any that pop to
18 mind that were a clearcut misuse.

19 Q. It's your testimony that as far as you know,
20 there was no misuse in either of the cases that I'm here
21 on today, right, Heston and Rosa?

22 A. To be honest, I'm not very familiar with the
23 Rosa case, so I'm not aware of any as I sit here
24 today.

25 Q. Are you aware of an incident -- it used to be

1 on your website until it got taken down -- of, I think
2 you called it the Chula Vista riot?

3 A. Yes.

4 Q. Did anybody ever bring to your attention that
5 there was a jury verdict that that particular use of the
6 TASER was inappropriate?

7 A. No.

8 Q. Do you know why it was taken off your website?

9 A. Yes.

10 Q. What's your understanding of that?

11 A. The reason I understand we took it off the
12 website was that the subject that was hit with the TASER
13 there, basically his lawyer called in and complained
14 that we didn't have his authorization to show his
15 likeness, you know, on the Web. And so my understanding
16 is that's why we took it off. He was very upset about
17 us showing him in an altercation with the law
18 enforcement officers.

19 Q. Do you know who his lawyer was?

20 A. I don't.

21 Q. No one told you that the lawyer provided a
22 judgment on the jury verdict that that particular use of
23 the TASER was found to be a battery by the police
24 officer?

25 A. No. I am actually learning that today.

1 Compared to the baton strikes that were ongoing, I'm
2 surprised at that verdict. But that may have more to do
3 with what precipitated the use of force. I don't know
4 what led up to that. But comparatively, I'm frankly
5 surprised at that.

6 Q. Do you know why that particular subject was
7 being hit with a baton and shot with a TASER?

8 A. I do not, other than obviously there was some
9 sort of crowd altercation going on.

10 Q. Do you have any idea what the crowd altercation
11 was all about?

12 A. I seem to recall that at the point we were
13 contacted by this person's lawyer that it was some sort
14 of trade disagreement, like a union disagreement or a
15 union demonstration of some type.

16 MR. BURTON: Let me move on with the warning
17 here. Is everybody doing okay in terms of -- we'll go
18 off the record a second and take a short break.

19 THE VIDEOGRAPHER: We are going off the record
20 at 3:36 p.m.

21 (Recessed from 3:36 p.m. until 3:58 p.m.)

22 THE VIDEOGRAPHER: We are back on the record at
23 3:58 p.m.

24 Q. BY MR. BURTON: Just to follow up on something
25 that we discussed off the record during the break, I

1 didn't mean to insinuate from any of my questioning that
2 there was a drive stun in the Rosa case that was
3 anywhere near the groin area. I can understand why it
4 might have sounded like that, and I know we discussed
5 that off the record, which was fine, but I just wanted
6 to make sure it was clear on this record for somebody
7 else who was looking at it.

8 A. Right. Thank you.

9 Q. There was what I thought was kind of an anomaly
10 in Rosa, which is the officer said that he drive-stunned
11 him on the outside of his thigh, which he was wearing
12 shorts so it was on bare skin, he said, but there was no
13 corresponding autopsy finding.

14 Is it your experience that -- I mean, from my
15 look at the literature, it appears that drive-stunning
16 leaves a burn. Is it your experience that that may or
17 may not be the case, or do you think it does leave a
18 burn?

19 A. Generally it will leave a burn-like mark,
20 particularly if you're touching the skin. If the
21 electrodes touch the skin, it tends to leave a much more
22 intense mark than if it's just arcing to the skin. An
23 arc to the skin will be a more diffuse redness. An
24 electrode touching the skin will leave a mark the shape
25 of the electrode.

1 Q. That's a mystery we'll work out later. Thank
2 you.

3 I would like to get back to the TASER training
4 bulletin that we have marked as Exhibit 1. And I'd like
5 to go to paragraph 8 on page 2, and it actually
6 continues on to page 3. And this has a number of
7 assertions in it. Let me start with paragraph 1 on
8 page 2.

9 A. Okay.

10 Q. And the language, the "... risk of serious
11 injury or death due to the subject's individual
12 psychological, emotional, and physiological states and
13 responses, physical exertion and stress, unforeseen
14 circumstances, and the individual's preexisting medical
15 conditions and susceptibilities."

16 Do you see that language?

17 A. Unfortunately, I can't find it. It's on
18 page 2?

19 Q. Right.

20 A. What line from the top or the bottom?

21 Q. It's in the paragraph marked paragraph 1. It's
22 about --

23 A. Oh, paragraph 1. Okay.

24 Q. I'm sorry, I switched up. I put you on 8 at
25 the beginning. Now I've got you on 1.

1 A. Okay.

2 Q. Kind of in the middle there.

3 A. Okay.

4 Q. Now, one of the reasons -- is it your
5 understanding that one of the reasons that somebody who
6 is in that condition may be at risk of serious injury or
7 death when they encounter the TASER device is that that
8 person may already have an acidotic condition?

9 A. Frankly, I would just say that this paragraph
10 was designed to just make very clear that use of force
11 involves risk, and there's all these other factors. I
12 don't know that we were being specific about any
13 specific type of risk, we were just basically trying to
14 protect the company by making it very clear that any use
15 of force carries risk, and whether it's from falling
16 down or from the pain or stress of a situation that may
17 somehow influence someone with some unforeseen, you
18 know, susceptibility, we just don't know. But it's
19 basically setting the stage for the user to understand,
20 this is a use of force, and like all uses of force, you
21 know, it shouldn't be undertaken lightly.

22 Q. Now I'd like to skip to paragraph 7 and the
23 last sentence, "Repeated, prolonged, and/or continuous
24 TASER device exposure(s) may contribute to or cause
25 cumulative exertion or exhaustion results or

1 effects."

2 Do you see that?

3 A. Yes.

4 Q. Do you agree with that sentence?

5 A. I think what we were particularly referring to
6 here was in context around the Canadian report with
7 breathing and the effects there. So as I sit here
8 reading today, I think our concern is lessened by the
9 research since that time.

10 Q. So do you think this sentence is not true?

11 A. Could you read the sentence exactly, the one
12 we're talking about again?

13 Q. "Repeated, prolonged, and/or continuous TASER
14 device exposure(s) may contribute to or cause cumulative
15 exertion or exhaustion results or effects."

16 A. I would say that, you know, theoretically,
17 there's certainly some truth to that. You know, if
18 we're talking about a ten-minute-long exposure, I would
19 expect that that would contribute to stress and
20 exhaustion. So certainly at extreme levels, there are
21 cases where that may be true.

22 Q. And is one of the results or effects of
23 overexertion or exhaustion acidosis?

24 A. It can be.

25 Q. So do you believe that repeated, prolonged, or

1 continuous TASER device exposures could contribute to
2 someone's acidotic condition?

3 MR. BROWN: I'll object that it calls for an
4 expert opinion.

5 MS. GIBEAUT: Join.

6 THE WITNESS: Again, I think there's context
7 there. Relative to a person who is sitting and relaxed
8 and completely inactive, a TASER application will
9 function more like exercise and there will be some
10 degree of acidosis. But the data I'm aware of shows
11 that the actual breathing patterns, et cetera, are more
12 like a sustainable level of activity, so I don't know
13 that I'm aware of any data that would be concerning
14 about any acidosis related to the muscular effects of
15 the TASER.

16 Again, I guess to clarify that for you, if the
17 alternative is a TASER application or a physical
18 altercation, I believe the physical altercation is more
19 likely to have more severe metabolic and acidotic
20 effects than a TASER use in the same situation.

21 Q. BY MR. BURTON: Has that been measured?

22 A. Yes.

23 Q. And is that, again, the Dr. Ho study that has
24 not been published yet?

25 A. Correct.

1 Q. And aside from anything that Dr. Chan might be
2 coming up with, is there anything else that would
3 support the statement you just made?

4 A. I think those are the two most quantitative
5 supports. There might be qualitative evidence from our
6 experience in hitting human volunteers, but that's not
7 going to be as strong as the quantitative measured data
8 from Drs. Ho and Chan.

9 Q. Let me move on to paragraph 8, and let me just
10 read the first sentence. "Repeated, prolonged, and/or
11 continuous exposure(s) to the TASER electrical
12 discharge may impair breathing and respiration,
13 particularly when the probes are placed across the chest
14 or diaphragm."

15 Do you agree with that sentence?

16 MR. BROWN: I'll object. It calls for an
17 expert opinion.

18 THE WITNESS: Well, as far as saying that it
19 may impair breathing and respiration, I would say this
20 has been largely disproved with the human data, but at
21 the time we issued this in an abundance of caution, I
22 think the warning made sense. And its intention even
23 today still makes sense, to have a warning that the
24 user should be cognizant that this has been an issue,
25 but I think the data has largely shown it doesn't

1 happen.

2 So I think as a warning, this is helpful to the
3 end user, but as far as my belief that the TASER
4 actually causes any impairment of breathing, it's pretty
5 clear it doesn't, based on my personal experience of
6 being Tased, as well as all the experiments we've talked
7 about.

8 Q. BY MR. BURTON: The next sentence, "User should
9 avoid prolonged, extended, uninterrupted discharges or
10 extensive multiple discharges whenever practicable in
11 order to minimize the potential for over-exertion of the
12 subject or potential impairment of full ability to
13 breathe over a protracted time period."

14 Do you presently agree with that statement?

15 MR. BROWN: I'll object. That calls for an
16 expert opinion.

17 MS. GIBEAUT: Join.

18 THE WITNESS: You know, I agree with the
19 intention that basically says user should avoid using
20 more cycles than are necessary, just like they shouldn't
21 use more baton strikes than are required to get the job
22 done.

23 You know, again, I don't believe that the TASER
24 impairs ability to breathe, but in an abundance of
25 caution, you know, it's not a bad thing for officers to

1 be looking for that and to be cognizant. And if that is
2 a sort of a further motivation for them to be careful in
3 terms of how they're applying the device, then that's a
4 good thing. But I don't think that, you know, at the --
5 at the time we issued this, there was some concern in
6 this space. That concern has largely been relieved.

7 Q. BY MR. BURTON: Did you give this particular
8 warning about avoiding prolonged, extended, or
9 uninterrupted discharges prior to the issuance of this
10 June 28, 2005 training bulletin?

11 A. I don't believe so, but there may have been in
12 prior trainings issues about trying to restrain the
13 subject quickly using a five-second window of
14 opportunity and avoiding, you know, prolonged
15 discharges. I don't remember the exact language.
16 Certainly nothing this specific.

17 Q. The next sentence, "Particularly when dealing
18 with persons showing symptoms of excited delirium, use
19 of the TASER device should be combined with physical
20 restraint techniques to minimize the total duration of
21 the struggle and minimize the total duration of TASER
22 device stimulation."

23 Do you see that?

24 A. I do.

25 Q. Do you still agree with that?

1 A. Yes.

2 Q. And is that because somebody who is in a state
3 of excited delirium is likely already acidotic?

4 A. Well, I would say in general, whether they're
5 in a state of excited delirium or not, the TASER should
6 be used as effectively as possible to bring the
7 situation quickly under control. Nobody has an interest
8 in someone being Tased or hit or subjected to any level
9 of force more than necessary, and especially us as the
10 manufacturer.

11 This I think was -- in particular, we
12 emphasized excited delirium in light of the Canadian
13 report that led to the issuance of this warning. I
14 think our level of concern there has decreased. But
15 even the Canadians in that report, with the assumptions
16 they had about breathing, had come to the conclusion
17 that the TASER was likely the best use of force against
18 people under excited delirium, they just should use it
19 expeditiously and get them quickly under control. I
20 think that's the type of information we're trying to
21 convey here.

22 Q. Well, I'm looking at the next sentence,
23 "Excited delirium is a potentially fatal condition
24 caused by a complex set of physiological conditions
25 including over-exertion of the subject and inability for

1 sufficient respiration to maintain normal blood
2 chemistry."

3 Do you see that?

4 A. I do.

5 Q. Isn't what this warning is referring to here
6 by, I guess, abnormal blood chemistry, inability to
7 maintain normal blood chemistry, acidosis?

8 MR. BROWN: Objection; it calls for
9 speculation.

10 THE WITNESS: That could be part of it, yes.

11 Q. BY MR. BURTON: Well, I mean, this is your
12 warning, and this is squarely what I put in the PMK
13 notice, in the designee notice, so you're speaking on
14 behalf of TASER as to what this warning means.

15 A. Correct.

16 Q. And if there's somebody else I should talk to
17 about it, but if you're the guy, then, you know, this is
18 it. So is there something other than acidosis that
19 you're referring to there?

20 A. Well, excited delirium in terms of blood
21 chemistry would be primarily acidosis, although there
22 can also be other attendant blood chemistry changes.
23 Rhabdomyolysis might be seen associated with excited
24 delirium, hypothermia, increase in lactate levels, and
25 other things beyond just the blood pH.

1 Q. And is TASER here warning people that when
2 they encounter subjects who are in this state of
3 excited delirium, that repeated, prolonged, or
4 continuous exposures to a TASER electrical discharge can
5 aggravate the inability to maintain normal blood
6 chemistry?

7 A. I think here we were particularly focused on
8 the perceived possibility of respiration problems, and
9 as I've mentioned, those are much less of a concern
10 today than they were at the time we wrote this.

11 Q. Well, isn't it true that respiration problems
12 are kind of only half of the equation? I mean, as I
13 understand this subject, when the muscles are exerting,
14 they're increasing the lactate acid discharge and
15 increasing the acid content of the blood, and then
16 respirations are neutralizing that and restoring the
17 alkaline level or the pH. So there's kind of two sides
18 to it. One is the contractions that are elevating the
19 acidosis, and the other is the respiration, normal, if
20 not impaired in any way, is reducing it.

21 A. I would agree with that.

22 Q. And so there's sort of two ends to it.

23 A. Correct.

24 Q. Well, does TASER warn people that are using
25 their product that if somebody is in this excited

1 delirium state and once they're restrained, that steps
2 should be taken so that their airways are clear so that
3 they can breathe?

4 A. That's a good practice.

5 Q. Does TASER warn about that?

6 A. I don't know that we warn about it. That may
7 be a recommendation. If it's in this document, if you
8 want to point it out to me. Again, I don't know if,
9 again, we consider that a warning or just a good
10 practice recommendation.

11 Q. Why is that a good practice?

12 A. It's just my understanding from discussions
13 with emergency medical personnel and with law
14 enforcement and experts in this field, once somebody is
15 restrained, it's a good practice to make sure they've
16 got a clear airway.

17 Q. Well, why?

18 A. Well, certainly so that they can breathe.

19 Q. Why is that important?

20 A. They may have a risk. Particularly, some of
21 these cases involve drugs. One of the big risks would
22 be somebody that vomits and aspirates on it. That can
23 be lethal.

24 There's been discussion about various types of
25 positional asphyxia, which from the data I understand

1 today is largely -- really does not occur, but, you
2 know, the risk of somebody who is in a compromised
3 metabolic state, if they were in a condition where they
4 could not breathe from aspiration or from some
5 positional reason, that would further exacerbate their
6 problems.

7 Q. The problem being acidosis?

8 A. And the metabolic effects of overexertion and
9 under-respiration.

10 Q. Which can trigger cardiac arrest?

11 A. It's my understanding that it can.

12 Q. So TASER has gotten somewhat involved in this
13 whole field of in-custody deaths, is that correct, even
14 ones that maybe don't involve application of a TASER
15 device?

16 MS. GIBEAUT: Objection; form and
17 foundation.

18 THE WITNESS: I would agree, yes. We're
19 interested in sharing information that can save lives
20 whether our product is involved or not.

21 Q. BY MR. BURTON: And have you ever heard of an
22 organization called the Institute for the Study of
23 In-Custody Deaths?

24 A. Yes.

25 Q. And I assume you know Mr. Michael Brave, as

1 he's sitting at the table with us and he's an attorney
2 for your firm?

3 A. Yes.

4 Q. And what's your understanding of his
5 relationship to the Institute for the Study of
6 In-Custody Deaths?

7 A. I think he's been a resource and an advisor to
8 them. And I know he knows Dr. Peters, who runs the
9 institute, and we've, you know, clearly been supportive
10 of their mission.

11 Q. And how have you been supportive of their
12 mission?

13 A. Well, we've sponsored courses here at TASER
14 International on a regular basis where we've paid
15 Dr. Peters to come down and basically teach his
16 curriculum.

17 We've also sponsored events other places around
18 the country where maybe some of our end-user agencies
19 are interested in hosting events or hosting courses to
20 learn about this subject.

21 Q. Did you sponsor the Las Vegas seminar last
22 month?

23 A. We did not -- I don't think we directly
24 sponsored the seminar. I think we did provide some
25 equipment for them. Basically, I think they asked if

1 they could borrow some of our video recording
2 equipment.

3 Q. Has TASER International made direct cash
4 payments to the Institute for the Study of In-Custody
5 Deaths?

6 A. Yes, we have, as I've mentioned, particularly
7 for courses that were put on here.

8 Q. How much has TASER paid either Dr. Peters or
9 the Institute for the Study of In-Custody Deaths?

10 A. I wouldn't know offhand.

11 Q. Can you give me any kind of ballpark number?

12 A. No. It would be a function of how many courses
13 they've taught, and I don't know what his daily rate is
14 for teaching classes.

15 Q. Well, I guess my question, Mr. Smith, and it's
16 kind of a hard one to phrase, but if -- maybe I'm wrong
17 about characterizing this Institute for the Study of
18 In-Custody Deaths, but it strikes me that they're
19 attributing most of these, if not all of these
20 in-custody deaths, to the direct effect of the drugs and
21 the excited delirium condition itself and saying that
22 the police restraint procedures -- let's just take TASER
23 out of the equation for a moment -- are irrelevant to
24 it, are not the cause of death. But if you think that
25 taking somebody and putting them in a better position to

1 breathe is a good idea, why is that?

2 MS. GIBEAUT: Objection to form and
3 foundation.

4 Q. BY MR. BURTON: Do you disagree with the
5 premise that the position they're left in afterwards can
6 cause death?

7 MS. GIBEAUT: Same objection.

8 THE WITNESS: I'm not -- can you repeat the
9 question? There were kind of two there.

10 Q. BY MR. BURTON: Well, why do you think it's a
11 good idea to put somebody in a position where they can
12 breathe better after they've been restrained when
13 they're in a state of excited delirium?

14 A. Well, it's -- in my opinion, the most important
15 thing is making sure that they can breathe, that you
16 don't get aspirated vomit, et cetera.

17 And then aside from that, whether or not a
18 person believes in positional asphyxia, it's probably a
19 good idea to at least be aware that there's a debate in
20 that area, and that if somebody -- these people in
21 excited delirium are at high risk of death or serious
22 injury, and when dealing with persons like that, extra
23 precautions should be taken. For example, even if the
24 subject can breathe and they subsequently expire, you
25 know, I think the agency wants to show that they're

1 showing all due care along the way.

2 So again, it's sort of like some of the
3 warnings we've talked about here where an abundance of
4 caution indicates that, you know, you pay special
5 attention to things, even things that some of the
6 scientific evidence may indicate are not contributory
7 factors. You may still want to be cautious about them.

8 Q. Now I'd like to turn to another subject that
9 will probably take us right until 5:00 o'clock, and
10 that's the HECOE study.

11 A. Okay.

12 Q. Is that how you pronounce that?

13 A. Yes.

14 Q. All capitals, H-E-C-O-E?

15 A. Correct.

16 Q. And as I understand this study, which was a
17 rather lengthy one, it was performed by a contractor, a
18 private contractor for the Department of Defense.

19 A. I don't know that I would necessarily agree
20 with that. It was performed under the auspices of the
21 Human Effects Center of Excellence, which is run by the
22 Joint Non-Lethal Weapons Directorate at Brooks Air Force
23 Base in Texas. But there were a number of -- just like
24 anything the government does these days, there were some
25 private-sector contractors that may have played various

1 roles in the administration or contributing in that
2 study or expert groups, private toxicologists or risk
3 analysis groups that were involved.

4 Q. But it was ultimately a project of the United
5 States Department of Defense?

6 A. Correct.

7 Q. And did TASER fund any part of this particular
8 study?

9 A. No.

10 Q. Did TASER participate in the review in any
11 fashion?

12 A. We participated in the data gathering. There
13 were three workshops where there was a call for data,
14 and that's where we presented our human data, our
15 medical studies, et cetera, at those meetings. But
16 TASER had no -- we had no editorial control on the
17 documents that came out of that meeting in any way.

18 Q. And did your company find out what the results
19 of the HECOIE study were in advance of them being made
20 public?

21 A. Yes.

22 Q. And how far in advance, do you know?

23 A. Oh, well, I mean, we knew the general
24 results.

25 The third meeting was a workshop where they

1 sort of went through their findings and gave an
2 opportunity for people to comment. So I'd say by the
3 third workshop, we knew generally what the results would
4 be, but then the actual finished report, I believe we
5 got a draft at some point prior to release, maybe a few
6 months before, again to provide comment on. They wanted
7 to make sure that there was no -- nothing that was
8 factually wrong. So I think all participants got a copy
9 of the draft before it was released, had the opportunity
10 to provide comments, and then they did the final release
11 in October of 2004.

12 Q. And did you, did your company, issue a press
13 release in connection with the issuance of the HECOE
14 study?

15 A. We did.

16 Q. Was that in advance of its official release?

17 A. The press release actually was not just TASER
18 International. We jointly did that press release. It
19 was authored between our communications department and
20 the press office for the Joint Non-Lethal Weapons
21 Directorate. Captain Dan McSweeney was the point man on
22 that. So it was a jointly authored document.

23 And with the release of the press release, they
24 released the executive summary of the full -- of the
25 report, but I think they did not release the full report

1 until sometime later.

2 Q. When you issued the press release on the HECO
3 findings, "you" meaning TASER International, did that
4 have any effect on your stock price?

5 A. Pretty minimal. I think in the 24 hours around
6 when we released it, the stock moved less than it did in
7 the average day in 2004. It may have moved up a little
8 bit.

9 Q. Were you ever, "you" meaning your company
10 again, ever criticized for your characterization of the
11 HECO report?

12 A. Yes.

13 Q. And I'm talking about criticism in the media.

14 A. Yes.

15 Q. Did you consider that criticism to be well
16 founded or not well founded?

17 A. It was absolutely bogus. So that would be not
18 well founded.

19 Q. I like "absolutely bogus." That's fine.

20 Can you just summarize what the dispute was and
21 what your position was and why you would characterize it
22 that way?

23 A. Certainly. Alex Berenson at the New York Times
24 wrote an article on the front page of the business
25 section, and the title was "Taser's Safety Claims

1 Disputed." And the theme of his article was that in our
2 press release, TASER said the device was generally safe,
3 but when he talked to the Air Force research labs, they
4 said that there may be risks for susceptible
5 populations. And the way the article was written, it
6 sounded like there was a conflict.

7 But if you go back and you read our press
8 release, the same qualifying statements he got from the
9 Air Force research labs were in our press release. In
10 the headline it said that TASER is found generally safe.
11 And the Department of Defense still backs that up. Then
12 as you read the body of the document, it says that there
13 may be susceptible groups, more study is needed, and
14 there may be unintended severe effects. And in fact,
15 those same qualification statements were in the attached
16 executive summary of the report that we put on our
17 website.

18 So what really made me, frankly, incredibly
19 angry was how Berenson could manufacture news where none
20 existed. There was no controversy. He could have taken
21 our own press release and taken the statements right out
22 of it. What he did was manufacture news. He didn't
23 lie; he didn't make something up, but what he made up
24 was the controversy. The same statements that he used,
25 it was like taking two different paragraphs that say

1 here's the benefits, here's the general findings, and
2 here's some of the qualifications, and then he spun it
3 as if TASER had never mentioned those in the press
4 release.

5 And to this day, I'm still quite upset about
6 that, because that article, you know, caused this
7 company a lot of pain, and it was completely unfounded
8 and unfair.

9 Q. Could you just elaborate a little bit on the
10 pain it caused your company?

11 A. Well, you know, frankly, I think that that
12 article is likely the reason why the SEC investigation
13 ensued, because Mr. Berenson in his article accused the
14 company of lying about the results of this study and
15 that insiders sold stock.

16 And he made an allegation as well that the
17 stock went up after the HECOE report, and that
18 therefore -- the allegation on his part was stock fraud,
19 that the company had lied to drive the stock price up.
20 And the data just doesn't support it. How could we have
21 lied about a report or a press release when it was
22 approved by the Department of Defense themselves?

23 Secondly, if you look, the day the HECOE report
24 came out, the stock didn't move very much. The next
25 day, we released our financial numbers. We had, again,

1 record earnings, record revenue growth, we turned in
2 astounding -- we significantly beat analyst
3 expectations. That's when the stock began to move was
4 from our financial performance.

5 The HECOE report was really more about risk
6 mitigation than the stock. It was an important factor
7 for our customers and for people to understand this
8 report was done. Had nothing to do with movements in
9 the stock price.

10 But unfortunately, I think Mr. Berenson has a
11 very personal agenda. And I was quite frustrated it
12 took until January, until after the SEC had stepped in
13 to investigate, that an investigative journalist from
14 the Wall Street Journal finally bothered to dig deep
15 enough and put a story out that exonerated us. And
16 indeed, they talked to the Department of Defense, that
17 they stood 100 percent behind the press release, and
18 that there was no controversy there. But by then, the
19 SEC investigation had begun, and needless to say, it was
20 a very painful experience.

21 Q. Do you agree with the findings of the HECOE
22 report?

23 A. Generally speaking, yes.

24 Q. Are there any specific disagreements? I know
25 that's -- I hate those kind of questions, because

1 there's so much in there and so many different topics,
2 and you hate to sort of -- you know, it's sort of a
3 compound question, but is there anything specifically in
4 the HECO report that you disagree with?

5 A. I would just characterize that there was an
6 incredible abundance of caution in that report, and that
7 sometimes they under-weighted some of the safety data
8 that was out there, particularly the PACE report, Pacing
9 And Clinical Electrophysiology. In the meetings where
10 that data was presented, it was described as the gold
11 standard for nonlethal weapons. There was quite a bit
12 of excitement that for the first time, they had a
13 nonlethal weapon with a clear study that showed the
14 difference between the effective dose and a potentially
15 lethal dose. But I think that got underplayed in the
16 final report.

17 I'll just leave it at that.

18 Q. Let me just ask you about some specific
19 passages in the report. On page 9 of the report, it
20 says that rhabdomyolysis is a significant concern only
21 for extended duration stimulation.

22 Are you familiar with that passage?

23 A. Yes.

24 Q. Do you agree with that?

25 A. I would agree for truly extended durations of,

1 you know, tens of minutes or more. But knowing the
2 contractile strength of the contractions as proven by
3 Jauchem to be about 40 percent of the maximum, we know
4 that the contractions are within the range that we as
5 human beings use on a fairly regular basis, so if we're
6 talking about, you know, minutes, even, or tens of
7 seconds of exertion, I don't think that would be a
8 concern.

9 And I think that's been borne out in Ho's work,
10 Dr. Ho's work.

11 Q. Well, have any laboratory tests been done to
12 establish when, duration-wise, one could expect
13 rhabdomyolysis to develop in a TASER subject? I know
14 you couldn't do that to a human being.

15 A. I don't think we've seen any studies that have
16 gone out that -- far enough to see when you might see
17 it. We've gone to 45 seconds or so and shown that
18 there's no indications at that point.

19 Q. Now, you understand -- do you know that in this
20 case, well, at least one of these cases, Mr. Heston did
21 have pretty significant rhabdomyolysis?

22 A. I understand that was the case.

23 Q. And you understand that Dr. Karch attributed
24 that to the TASER exposures?

25 A. I understand that at one point that he had made

1 that assertion. It's -- I'm not sure he believes that
2 today as he's become more educated about the TASER and
3 some of the testing behind it.

4 Q. Has TASER paid any money to Dr. Karch for any
5 reason?

6 A. I don't think so, but I can't say for sure
7 whether or not he's been engaged as an expert in any of
8 the, you know, cases we're involved in.

9 Q. Do you know he appeared on the panel at -- did
10 you know he appeared as a speaker at the Institute for
11 the Study of In-Custody Deaths?

12 A. Yes, I did know that.

13 Q. Do you have any details as to how his
14 invitation came about?

15 A. He's well known in the field, but I -- other
16 than that, I don't know.

17 Q. Do you know what he testified to, his
18 deposition, as to the rhabdomyolysis in this Heston
19 case?

20 A. I do not.

21 Q. You personally do not attribute Mr. Heston's
22 rhabdomyolysis to his TASER exposure?

23 A. That's correct.

24 Q. Now, on page 19 I find the following statement:
25 Field experience indicates that in most cases, only one

1 or a small number of five-second activations are
2 needed.

3 Would you agree with that?

4 A. I would in general agree that most applications
5 are one or a few five-second bursts.

6 Q. And what is that based on?

7 A. That's based on our use of force reports that
8 are submitted to the company from law enforcement
9 agencies.

10 Q. You know, I was looking at those yesterday, and
11 is that data actually placed into a database so it can
12 be compiled and searched?

13 A. I believe it is.

14 Q. Maybe you could check on that, because I spoke
15 to your paralegal, who is Kelly, who said it wasn't,
16 because I was trying -- I wanted to see if I could
17 access that. And maybe you could double-check,
18 because ...

19 A. Okay.

20 Q. I also found -- I don't mean to kind of be
21 testifying here, but I found the question on the length
22 of the exposure kind of confusing, that it was not the
23 number of cycles, but the number of shots, which is kind
24 of ambiguous, if you know what I mean.

25 A. Okay.

1 Q. But it would be what is put in that box as the
2 number of shots that would be the basis of the statement
3 that most cases only involve one or a small number of
4 five-second activations?

5 A. I believe there was another box that talked
6 about what was the duration of the application, that
7 there's a slot where they can put, you know, 1, 2, 3, 4,
8 5, or more.

9 MR. BURTON: Yeah, there was something else. I
10 forget what it was.

11 Actually, I asked her to copy a few of those,
12 and she didn't bring those, I guess.

13 MS. GIBEAUT: I think we have the issue with
14 the protective order.

15 MR. BURTON: Can you just redact the names or
16 something?

17 MS. GIBEAUT: Well, we only produced those
18 under the protective order, so as soon as that's done,
19 we can get you all the copies you want.

20 MR. BURTON: Okay.

21 MS. GIBEAUT: Yeah. So we can talk to Missy
22 about that.

23 MR. BURTON: All right.

24 Q. BY MR. BURTON: Now, in the cases where people
25 have died following TASER exposures in the dart mode,

1 have you noticed whether there's any tendency of there
2 to be multiple five-second activations?

3 A. I would say that the incidence of multiple
4 five-second activations is probably higher in that group
5 than in the general population, most likely because most
6 of those people are experiencing extreme excited
7 delirium, and as such, they're very difficult to get
8 under control.

9 Q. Well, do you have any concern that the multiple
10 applications may themselves be contributing to the
11 demises of these individuals?

12 A. No. Based on the scientific research and the
13 underlying physiologic mechanisms, the more data comes
14 back, the more solidly it seems to support that, you
15 know, unfortunately, these are very similar to the same
16 types of deaths where TASERS are not used. We've
17 seen -- you know, it doesn't make them any less tragic
18 for the people involved, but unfortunately, these cases,
19 these deaths, have occurred for years before TASERS came
20 on the market, with the same set of symptoms. And we
21 see them today.

22 You know, in 70 percent of these cases a TASER
23 is not used, according to an epidemiological study of
24 in-custody deaths, sudden and unexpected deaths,
25 excluding trauma deaths that are readily recognizable.

1 TASERS are only used in less than a third, and the
2 symptom pattern looks really quite identical to what we
3 see in these TASER cases. So I think the causality is
4 reversed.

5 The multiple TASER hits are being used because,
6 unfortunately, these people are under the influence of
7 some really high-powered drugs, or they're off
8 medication and they're in a case of excited delirium.
9 They're extremely difficult for police to get ahold of,
10 to control.

11 Q. Now, would you agree that the HECOE study only
12 considered the risks of TASER usage of impulse duration
13 trains no longer than five seconds?

14 A. I don't know that I would agree with that. I
15 mean, I think the HECOE study looked at TASER use in
16 general. They may have expressed some thoughts about
17 data gaps, about longer uses, but I wouldn't say that
18 they constrained their entire study to only five-second
19 discharges. At least, that's not my understanding.

20 Q. Well, let me just refer you to a few passages.
21 This one is on page 19.

22 A. Is it possible that I could -- do you have an
23 extra copy so that I could get the context of your --
24 actually, would you mind if I -- sorry, it's my wife
25 calling. We've got some things --

1 MR. BURTON: Why don't we go off the record.

2 THE VIDEOGRAPHER: We are going off the record
3 at 4:44 p.m.

4 (Discussion off the record.)

5 THE VIDEOGRAPHER: This concludes tape 2 of the
6 continuing videotape deposition of Rick Smith in the
7 case of Heston versus Salinas and Rosa versus Seaside on
8 12/14/2006.

9 We are off the record at approximately
10 4:53 p.m. on December 14th, 2006. We are off the
11 record.

12 (4:53 p.m.)

13 ---o0o---

14

15

PATRICK WALLER SMITH

16

17

18

19

20

21

22

23

24

25

CERTIFICATE

I, Jacquelyn A. Allen, Certified Reporter for the State of Arizona, certify:

That the foregoing deposition was taken by me; that I am authorized to administer an oath; that the witness before testifying was duly sworn by me to testify to the whole truth; that the questions propounded by counsel and the answers of the witness were taken down by me in shorthand and thereafter reduced to print by computer-aided transcription under my direction; that deposition review and signature was requested; that the foregoing pages are a full, true, and accurate transcript of all proceedings and testimony had upon the taking of said deposition, all to the best of my skill and ability.

I FURTHER CERTIFY that I am in no way related to any of the parties hereto, nor am I in any way interested in the outcome hereof.

DATED at Phoenix, Arizona, this 28th day of December, 2006.

JACQUELYN A. ALLEN, RPR
Certified Reporter No. 50151
For the State of Arizona