UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

UNITED STATES OF AMERICA,

Plaintiff,

Criminal Action
No. 13-10200-GAO

DZHOKHAR A. TSARNAEV, also
known as Jahar Tsarni,

Defendant.

BEFORE THE HONORABLE GEORGE A. O'TOOLE, JR. UNITED STATES DISTRICT JUDGE

JURY TRIAL - DAY FORTY-ONE

John J. Moakley United States Courthouse
Courtroom No. 9
One Courthouse Way
Boston, Massachusetts 02210
Monday, March 30, 2015
9:34 a.m.

Marcia G. Patrisso, RMR, CRR
Cheryl Dahlstrom, RMR, CRR
Official Court Reporters
John J. Moakley U.S. Courthouse
One Courthouse Way, Room 3510
Boston, Massachusetts 02210
(617) 737-8728

Mechanical Steno - Computer-Aided Transcript

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		I N D E X			
THE TIME OF	NEG TOD THE	Direct	Cross	Redirect	Recross
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1
                          PROCEEDINGS
              THE CLERK: All rise for the Court and the jury.
 2
 3
              (The Court and jury enter the courtroom at 9:12 a.m.)
              THE CLERK: Be seated.
 4
 5
              THE COURT: Good morning, jurors.
 6
              THE JURORS: Good morning, your Honor.
 7
              THE COURT: Let me just ask you after a long weekend
 8
     whether you've been able to avoid news reports about the case
     and avoided any discussion with anyone, including among
 9
10
     yourselves?
11
              (No verbal response.)
12
              Okay. Mr. Mellin?
13
              MR. MELLIN: Good morning, your Honor. The United
14
     States calls Dr. Katherine Lindstrom.
15
                  KATHERINE LINDSTROM, M.D., duly sworn
              THE CLERK: State your name, spell your last name for
16
     the record, keep your voice up and speak into the mic.
17
18
              THE WITNESS: Katherine Lindstrom, L-I-N-D-S-T-R-O-M.
19
                            DIRECT EXAMINATION
20
     BY MR. MELLIN:
          Good morning, Dr. Lindstrom.
21
     Q.
22
     Α.
         Good morning.
         Where are you employed?
23
     Ο.
         The Boston Office of the Chief Medical Examiner.
24
     Α.
25
     Q.
         How long have you been there?
```

- A. Approximately four years.
- 2 Q. Let's go back through your education. Where did you go
- 3 undergrad?

- 4 A. I did undergraduate at the University of Iowa.
- 5 Q. And what degree did you get?
- 6 A. A bachelor of science in chemistry.
- 7 Q. After that, did you go to medical school?
- 8 A. I did.
- 9 Q. Where did you go to medical school?
- 10 A. At the University of Iowa as well.
- 11 Q. If you could do me a favor and try to keep your voice up a
- 12 | little bit, and maybe you could pull the microphone closer.
- 13 After you got your degree, where did you go?
- 14 A. I did a general pathology residency at the University of
- 15 Virginia.
- 16 Q. What is a general pathology residency?
- 17 A. Basically it covers all areas of pathology which includes
- 18 surgical pathology, which is examination of surgical specimens,
- 19 blood banking, chemistry, laboratory medicine, things like
- 20 that.
- 21 | Q. After that time at UVA, what did you do?
- 22 A. I stayed at UVA for two more years to do a neuropathology
- 23 fellowship.
- 24 Q. Okay. What is neuropathology?
- 25 A. Study of the brain.

- 1 Q. And what did you do after that?
- 2 A. Then I went to the University of New Mexico to do a
- 3 forensic pathology fellowship.
- 4 Q. What is a forensic pathology fellowship?
- 5 A. Basically it's learning to do autopsies in order to
- 6 determine cause and manner of death.
- 7 Q. How long was that fellowship?
- 8 A. One year.
- 9 Q. During that time, how many autopsies did you either
- 10 perform or see performed?
- 11 A. During my fellowship, a little over 200.
- 12 Q. And then after your fellowship was over, where did you go?
- 13 A. Here to the Boston office.
- 14 Q. Okay. And you came here what year again?
- 15 A. 2011.
- 16 Q. So from 2011 until today in 2015, approximately how many
- 17 | autopsies have you done?
- 18 A. Probably around 800 or so.
- 19 Q. Have you testified as an expert before as a forensic
- 20 pathologist?
- 21 A. Yes.
- 22 Q. Approximately how many times have you testified?
- 23 A. About a dozen or so.
- Q. Back on April 16th of 2013, did you perform an autopsy on
- 25 | Lingzi Lu?

- 1 A. I did.
- 2 Q. At that time can you just generally describe the
- 3 procedures that you followed in performing that autopsy?
- 4 A. So the first thing we do is a complete external
- 5 examination of the body. So we note what they're dressed in
- 6 and any external injuries to the body along with any defining
- 7 characteristics, such as hair color, eye color. We follow that
- 8 with an internal examination of the chest cavity, abdominal
- 9 cavity and the head.
- 10 Q. Okay. Did you also prepare a report?
- 11 A. Yes.
- 12 MR. MELLIN: Your Honor, if I may approach with
- 13 Exhibit 1586, which is the doctor's report of the examination.
- 14 THE COURT: All right.
- 15 BY MR. MELLIN:
- 16 Q. And, Dr. Lindstrom, is that your report of the autopsy?
- 17 A. Yes, it is.
- 18 Q. And if you need it as you go through your testimony, feel
- 19 free to refer to it.
- 20 Did you determine the cause and manner of Lingzi Lu's
- 21 death?
- 22 A. I did.
- 23 Q. What did you determine those to be?
- 24 A. The cause of death was blast injuries of the lower
- 25 extremities and the manner was homicide.

- 1 Q. When you say the cause of death was the blast injuries,
- 2 what do you mean by that?
- 3 A. So a bomb blast can cause a variety of injuries. In this
- 4 case her injuries were caused by debris hitting her body and
- 5 going through her body.
- 6 Q. In particular, what parts of her body were hit by debris?
- 7 A. Predominantly her lower legs. Her legs.
- 8 Q. Were you able to determine how quickly she died?
- 9 A. It would have been not immediate but relatively quickly,
- 10 within seconds to minutes.
- 11 Q. You said her lower body was affected. What part of her
- 12 lower body?
- 13 A. So both her thighs and lower legs had injuries.
- 14 Predominantly her thighs had the major injuries.
- 15 Q. Did those injuries involve the severing of nerves?
- 16 A. Yes, they would have.
- 17 Q. Did they involve cutting through and gashing muscle?
- 18 A. Yes.
- 19 Q. How painful would those injuries have been?
- 20 A. They would have been very painful.
- 21 Q. The injury to her right leg, on page 3 of your report you
- 22 described it as a perforating injury of the right upper thigh?
- 23 A. Yes.
- 24 Q. What do you mean by a perforating injury?
- 25 A. That the injury went completely through her thigh.

- 1 Q. You described it as a gaping laceration that measured six
- 2 inches by two inches. Is that right?
- 3 A. Yes.
- 4 | Q. And you said that there was another gaping laceration that
- 5 measured seven and a half inches long after reapproximation of
- 6 the skin?
- 7 A. Yes.
- 8 Q. What do you mean by that?
- 9 A. So the injuries were gaping open, or basically they were
- 10 | pulled open by just the skin tension. So when you put the skin
- 11 back together, that's how long it measured.
- 12 Q. When you think about that injury, how large would you
- 13 describe it, in general terms?
- 14 A. The -- I'm sorry. Which part of the injury?
- 15 Q. The right upper thigh injury.
- 16 A. So there was basically a cavity left in the muscle tissue
- 17 probably approximately around this size that went completely
- 18 through her upper thigh.
- 19 Q. And for the record, you put your fingers together in
- 20 somewhat of a circle. Is that right?
- 21 A. Right. It would be a couple of inches in diameter, two or
- 22 three inches.
- 23 Q. And then regarding her left leg, were there injuries to
- 24 her left leg as well?
- 25 A. Yes.

- 1 Q. What injuries did she have to her left leg?
- 2 A. So her left upper thigh had a large cavity in it that had
- 3 been caused by the debris going through; her skin was torn
- 4 almost completely around her upper thigh; her left femoral
- 5 artery and left femoral vein were also transected, or cut in
- 6 half.
- 7 Q. When you say "transected," meaning that it was completely
- 8 cut through?
- 9 A. Yes.
- 10 Q. All right. What effect would that have on her ability to
- 11 sustain life?
- 12 A. It would have caused her to bleed out, or lose her blood
- 13 volume relatively quickly.
- 14 Q. And the femoral artery, what is the significance of that?
- 15 A. It's basically the major artery carrying blood down to the
- 16 leg.
- 17 Q. Again, did that injury have a large perforating -- or a
- 18 large laceration?
- 19 A. Yes.
- 20 Q. And when you looked at those two leg injuries, did you
- 21 notice that there were any -- was there any debris in the
- 22 injuries?
- 23 A. Yes.
- 24 Q. What type of debris was in the injuries?
- 25 A. So there were round metal pellets, small nails, there was

- 1 some larger pieces of silver-colored metal, and then there was
- 2 also some other things like plastic and fabric and things like
- 3 that.
- 4 Q. You found pieces of silver metal in her body?
- 5 A. Yes.
- 6 Q. Did you also find a large piece of metal somewhere else?
- 7 A. Yes, there was a large piece of metal that had torn into
- 8 her purse, and it was basically inside her purse.
- 9 Q. If I could have you look at a few photographs.
- 10 MR. MELLIN: Mr. Bruemmer, if we could pull up Exhibit
- 11 662.
- 12 Your Honor, Mr. Bruemmer makes a good point. Are the
- 13 monitors off?
- 14 THE COURT: Yes. All right. Do you want to test it?
- MR. MacELHINEY: Yes. Do you want to put something
- 16 up? Anything. Okay. None are on.
- 17 THE COURT: None? All right.
- 18 MR. MELLIN: Thank you, your Honor.
- 19 BY MR. MELLIN:
- 20 Q. Dr. Lindstrom, I'm going to pull up three photos for you
- 21 to look at very quickly just so you can identify them, all
- 22 right?
- 23 A. All right.
- 24 Q. Exhibit 662.
- 25 THE COURT: Let me just be sure that this camera is

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not shooting the monitor that Mr. Bruck is looking at.
 1
 2
              MR. MacELHINEY: No, it's not.
 3
              THE COURT: All right.
    BY MR. MELLIN:
 4
 5
          And just very briefly, do you recognize that as a photo
     from the autopsy?
 7
          There's nothing on my screen.
     Α.
 8
         Excellent. Anything on your screen yet?
     Q.
 9
     Α.
        No.
10
              THE COURT: It should be. No, never mind. I'm sorry.
11
    My mistake. It should be now.
12
     0.
          Anything on your screen yet?
13
    Α.
         Yes.
14
         Do you recognize that photograph?
15
    Α.
         Yes.
        Okay. Is that one of the photos from the autopsy?
16
     Q.
         It is.
17
    Α.
         Okay. If we could move on to Photo 667, please.
18
     Q.
19
          And do you recognize that photo as one of the photographs
20
     from the autopsy?
21
    Α.
        Yes.
22
     Q.
        And then finally 668.
23
          Do you recognize that as yet another photograph from the
24
     autopsy?
```

Α.

Yes.

- Q. And were all three of those photos fair and accurate photographs of the photos that were taken at the autopsy?
- 3 A. They are.
- 4 MR. MELLIN: Your Honor, we would move into evidence 5 Exhibits 662, 667 and 668.
- THE COURT: All right. And they may be exhibited to the jury.
- 8 MR. BRUCK: As noted.
- 9 THE COURT: Yes, of course.
- 10 (Government Exhibit Nos. 662, 667 and 668 received into evidence.)
- THE COURT: And again, jurors, these are graphic photographs.
- MR. MELLIN: If we could go back to 662, Mr. Bruemmer.
- 15 BY MR. MELLIN:
- 16 Q. Dr. Lindstrom, as you look at Exhibit 662, that is Lingzi
- 17 Lu in the photograph. Is that right?
- 18 A. It is.
- 19 Q. And now can you describe -- as you look at it, can you
- 20 please describe what you see on the left side of her left leg?
- 21 A. So on her left thigh you can see a large -- basically a
- 22 tear through the skin and muscle that leaves kind of a gaping
- 23 cavity. It goes completely through her left thigh.
- Q. On the inner portion of her left thigh there appears to be
- 25 injuries as well. Is that right?

- 1 A. Yes, there was a separate laceration there, or tear in the
- 2 skin.
- 3 Q. And just for the record, as we're looking at this, this
- 4 is -- she is laying face up in this photograph?
- 5 A. Correct.
- 6 Q. Okay. And then as you look at this, there also appears to
- 7 be some injury to her right thigh that is visibile on the
- 8 inside. Is that right?
- 9 A. You can see part of it here. There's a tear on the inner
- 10 right thigh.
- 11 Q. Now, as you look at this photograph, also just below her
- 12 | right knee there appears to be some black marks. Do you see
- 13 those?
- 14 A. Yes.
- 15 Q. What are those?
- 16 A. So they are abrasions and small lacerations on her skin
- 17 that were caused by debris hitting it.
- 18 Q. You mentioned -- or do you know the term "pseudo
- 19 stippling"?
- 20 A. Yes.
- 21 Q. What is that?
- 22 A. Basically it just means, again, like abrasions or small
- 23 | lacerations usually from debris hitting the skin. And it's
- 24 called "pseudo stippling" because it's not made by gunpowder,
- 25 which it would be called "stippling," just plain "stippling."

- 1 Q. And you noted areas of pseudo stippling throughout her
- 2 lower extremities?
- 3 A. They are mostly -- so on the back, on the side of her left
- 4 leg -- so along the side of her left leg, and then along this
- 5 side of her right leg, so the medial, or the middle back part
- 6 of her right leg.
- 7 Q. And for the record, you indicated the left sides of both
- 8 of the legs. Is that right?
- 9 A. Correct.
- 10 Q. All right.
- MR. MELLIN: If we could then pull up Exhibit 667,
- 12 please.
- 13 Q. For the record, what are we looking at?
- 14 A. So this is her body basically turned face down.
- 15 Q. All right. And as you now look at this photograph on her
- 16 left leg, do you see the injury to her left leg better?
- 17 A. Yes. So you can see the back side of the cavity that we
- 18 saw from the front over here on the outside of her left leg.
- 19 Q. And you mentioned before that both her femoral artery and
- 20 femoral vein were transected. Is that right?
- 21 A. Yes.
- 22 Q. And would that be somewhere located in this injury?
- 23 A. Within the tissue. You can't see it in this photograph.
- 24 Q. And again, you see there is some injury to her right leg
- 25 as well. Is that right?

- 1 A. Yes.
- 2 | Q. Can you describe that?
- 3 A. So you can see a tear on the middle part of her right leg
- 4 here and then on the outer part of her right leg here where the
- 5 debris went through.
- 6 Q. You just indicated that the debris went through from left
- 7 to right. Is that right?
- 8 A. Yes. Based on her injuries that's what appears to have
- 9 happened.
- 10 Q. And then finally, if we could please look at Exhibit 668.
- 11 What is Exhibit 668?
- 12 A. So this is, again, the back side of her body, slightly
- 13 closer-up view of injuries.
- 14 Q. Thank you. You mentioned there was the piece of
- 15 metal -- well, let me ask you: When she came in to see -- into
- the autopsy, were there tourniquets on either of her legs?
- 17 A. There were two belts around her right leg.
- 18 Q. Did you notice any head injuries?
- 19 A. She did have a bruise underneath the skin on her -- on her
- 20 right side of her head.
- 21 Q. You mentioned in your report there was a one-inch by
- 22 one-inch hemorrhage. What do you mean by that?
- 23 A. So it's basically a bruise on the muscle and under the
- 24 skin on the right side of the head.
- 25 Q. What impact would that bruise have on her ability for her

- 1 brain to function?
- 2 A. It was a relatively minor injury, probably didn't have any
- 3 impact on the....
- 4 Q. So while she was bleeding to death, her brain was
- 5 functioning properly at that time?
- 6 A. It would have been, yes.
- 7 Q. She would have been conscious until she bled to death?
- 8 A. Possibly, yes.
- 9 Q. If I could have you also, then, look at Exhibit 672. Do
- 10 you recognize Exhibit 672?
- 11 A. Yes, I do.
- 12 0. What is that?
- 13 A. So these are pieces of metal that I recovered. The three
- small pieces of metal were recovered from within her right leg,
- and the large piece of metal was the piece that was in her
- 16 purse.
- 17 MR. MELLIN: Your Honor, I would move into evidence
- 18 and ask to publish Exhibit 672.
- 19 MR. BRUCK: No objection.
- THE COURT: Okay.
- 21 (Government Exhibit No. 672 received into evidence.)
- 22 BY MR. MELLIN:
- 23 | Q. As we look at Exhibit 672, can you describe the pieces of
- 24 metal that you found in Ms. Lu's body?
- 25 A. So the three smaller pieces of metal are silver-colored

- 1 metal. They're jagged, twisted, have sharp edges.
- Q. And as you look at them on this photograph, they're the
- 3 three smaller pieces on the left side?
- 4 A. Yes.
- 5 Q. And the large piece of metal to the right?
- 6 A. Yes.
- 7 Q. Where did you find that?
- 8 A. So that had torn into her purse.
- 9 Q. And would that piece of metal, would that be consistent
- 10 with something that would have been consistent with the gashing
- 11 of her legs?
- 12 A. Yes.
- MR. MELLIN: Your Honor, if I may approach with
- 14 | Exhibit 844.
- 15 Q. Dr. Lindstrom, 844 has a package inside of it. Can you
- 16 pull that out and tell me if you recognize it?
- 17 A. And so one of these pieces is the large piece of metal
- 18 that was found in her purse, and then there's a small envelope
- 19 with one of the smaller pieces of metal that was in her right
- 20 leg.
- 21 MR. MELLIN: Your Honor, I'd move into evidence
- 22 Exhibit 844 and ask to publish the large piece of metal.
- THE COURT: Okay.
- 24 (Government Exhibit No. 844 received into evidence.)
- MR. MELLIN: If I may retrieve it.

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1
              (Exhibit No. 844 displayed to the jurors.)
              MR. MELLIN: Thank you, your Honor. Nothing further.
 2
              MR. BRUCK: No questions for the witness.
 3
              THE COURT: All right. Thank you, Dr. Lindstrom.
 4
 5
     may step down.
 6
              THE WITNESS: Thank you.
 7
              (The witness is excused.)
 8
 9
10
11
12
13
              MR. WEINREB: Good morning, your Honor. The United
14
     States calls Michelle Gamble.
15
              MS. CONRAD: Your Honor, we would like to be heard at
     sidebar.
16
17
              THE COURT: Okay.
18
              MR. WEINREB: She's an FBI field photographer. For
19
     the past two years -- she took many, many of the photos at the
20
     two scenes, and for the past two years she's been analyzing the
     photos, categorizing them, assembling them in databases and
21
22
     putting together exhibits or useful compilations of photos.
23
              She will testify as to a couple of things: There were
24
     certain additional photos that everybody's been putting in
25
     through her that were provided to the defense last Wednesday.
```

For example, one shows both the second explosion and the race clock in the same photo so it's possible to know exactly when the second explosion took place.

She's also, at my request, put together a chalk that shows the approximate location of various things and people at the -- at various times, including the time roughly around when the explosion took place based on analysis of various photos.

All of that was provided to the defense a week ago.

THE COURT: These are not necessarily photos she took?

MR. WEINREB: These are not necessarily photos she took, no. That's correct.

MS. CONRAD: So there are a couple of issues with respect to this witness. With respect to photos that she took, no issue with that. With respect to the chalk, this is the chalk that the government proposes to use.

MR. WEINREB: Just this part.

MS. CONRAD: Okay. So, first of all, this is highly prejudicial. I think it should be excluded under 403. She has eliminated everybody else who was in this area. It's not clear what she based this on. The closest we can tell, it's based on this photograph which was not previously provided in discovery which was taken at approximately 2:48 p.m. I asked the government yesterday and again today to provide the originals so we can look at the metadata to determine when it was taken.

This is designed to essentially make it appear -- and

Mr. Weinreb says that this chalk shows the time when the second bomb exploded. Now, we know that's not true because Mr. Tsarnaev wasn't standing there when the second bomb exploded; otherwise, he would be dead. But it's designed to make it appear like there was no one in this area except the children.

It's not relevant to any material issue in this case. To the extent that she has determined these locations, it seems to me she's essentially testifying as an expert. We don't have any of the underlying basis for her opinion about where everyone was.

This was just not disclosed until last Wednesday. We were not given expert notice on this witness, and I think that this chalk should be excluded under 403.

In addition, we would object to the admission of this photograph, the one that's labeled -- I think it was provided to me as "railing" -- I can't read that. But it looks like 22836.jpg, I think. Not previously disclosed. Now, we did review thousands of photographs. I can't tell if this is an enlargement, I can't tell -- I don't have the underlying source of this. The government emailed me a rather cryptic description of the source this morning but did not provide the original for our review. And we object to this.

MR. WEINREB: Your Honor, this was provided in discovery six months ago in something called a "raid drive"

along with thousands of other photos. The defense essentially asked for every photo that the government had received from the public. This was one of them. It was produced to them along with the others. I think that they did not focus until recently on the significance of the photo, but that doesn't mean it wasn't provided in discovery.

As for this, this is not a chalk through which the government intends to establish the timing of the bombing. That's something separate. This is simply a chalk that will help illustrate testimony about where various people were at various times. I don't think the government every time it puts together a chalk has to put in every detail that the defense thinks may be relevant. It can put in details it thinks is relevant.

If I could just say one more thing? She is not offering expert testimony; all -- she is testifying as a lay expert, as someone who, through her normal experience looking at photos and analyzing them and learning about them, is offering her lay opinion, which need not be to a scientific certainty, can be to a fair approximation if you look at Rule 701 which I just reviewed, of where various things are.

If I had her up on the witness stand and said,
"Looking at this picture, where on this diagram is Dzhokhar
Tsarnaev standing?" and she circled it, nobody would object.
She's just done it in advance.

1 THE COURT: Well, okay. I don't think the private testimony is expert. I'm not sure it's a lay opinion either, 2 but we'll get to that. It will depend on the foundation that 3 she lays and as she's examined for what comes in. Generally 5 the objection is overruled. I think it's a matter of cross-examination to show weakness in her methodology. 7 MS. CONRAD: Well, your Honor. Two issues: With respect to the 403 objection, this -- which is designed only to 8 9 show the children, and that's what the government's trying to 10 do. 11 THE COURT: Overruled. 12 MS. CONRAD: With respect to this photograph, your 13 Honor, I am not going to be prepared to cross-examine her 14 unless I am provided with the original and the source for it. 15 For the government to say, We provided the raid drive months ago and then without any prior notice, without listing it as an 16 exhibit, to pluck it out a few days before offering it without 17 18 providing us with the source -- we did a search of that entire 19 raid drive for that file name and could not find it. 20 THE COURT: Okay. Your objection is overruled. 21 (In open court:) 22 MICHELLE GAMBLE, duly sworn 23 THE CLERK: State your name, spell your last name for 24 the record, keep your voice up and speak into the mic. 25 THE WITNESS: Michelle Gamble, G-A-M-B-L-E.

DIRECT EXAMINATION

2 BY MR. WEINREB:

1

- 3 Q. Good morning.
- 4 A. Good morning.
- 5 Q. Where do you work?
- 6 A. I work for the FBI in Boston.
- 7 | Q. How long have you worked for the FBI in Boston?
- 8 A. Fourteen years.
- 9 Q. What's your current job assignment?
- 10 A. Primarily I am the field photographer for the division.
- 11 Q. What training have you had at the FBI?
- 12 A. I've had various photographic training, and I also had
- 13 training in both audio and video work.
- 14 Q. Can you describe the kinds of training you've had inside
- 15 the FBI?
- 16 A. Sure. I've had advanced photography, intermediate
- 17 | photography, surveillance, crime scene, digital imaging, video
- 18 analysis, audio analysis.
- 19 Q. How many years of training?
- 20 A. Probably around 14.
- 21 Q. Have you had outside training as well?
- 22 A. Yes. I've also taken classes at the New England School of
- 23 Photography and Future Media Concepts.
- 24 Q. Do you have training in evidence -- as an evidence
- 25 recovery technician?

- 1 A. Yes. So I've been on the Evidence Response Team for
- 2 approximately 12 years, and I've received training through them
- 3 as well. Do you want me to tell you about that?
- 4 Q. Just briefly.
- 5 A. Okay. So basic training, advanced photography training,
- 6 body recovery training, latent print training.
- 7 Q. How many investigations have you worked on at the FBI?
- 8 A. God, hundreds.
- 9 Q. Were you the field photographer on the Boston Marathon
- 10 bombing investigation?
- 11 A. Yes.
- 12 | Q. What does it mean to be a field photographer?
- 13 A. A field photographer, you basically meet any of the
- 14 photographic needs of the division. That could be taking a
- 15 passport photo all the way up to photographing a major crime
- 16 scene. You deal with a lot of digital imagery. Sometimes
- 17 you're creating it, like graphics or photo spreads. I'm also
- 18 | the photo and the audio-video coordinator for the division, so
- 19 I deal with all of the audio and video requests that come in as
- 20 well. And it's just basically you deal with imagery daily.
- 21 Q. How soon after the bombs exploded were you assigned to the
- 22 Boston Marathon bombing investigation?
- 23 A. Almost immediately.
- 24 Q. What was the first thing you did?
- 25 A. I geared up and went down to Boylston Street and was asked

- 1 to photograph several pieces of evidence in front of the Forum.
- 2 I then went and photographed several pieces of evidence in
- 3 front of Scene A, which would be LensCrafters, Marathon Sports,
- 4 and I also was -- I was asked to photograph the body of Krystle
- 5 Campbell, Martin Richard and Lingzi Lu.
- 6 Q. How many days were you on the Boylston Street scene taking
- 7 photographs in the aftermath of the bombing?
- 8 A. I was there continuously until we closed -- finished
- 9 processing the scene, which I believe was the 22nd.
- 10 Q. So roughly seven days?
- 11 A. Yes.
- 12 Q. Since then have you continued to work on the Boston
- 13 Marathon bombing investigation?
- 14 A. Yes.
- 15 Q. Part time, full time?
- 16 A. Full time. It's probably taken up 90 percent of my work
- 17 responsibility.
- 18 Q. And what have your responsibilities been?
- 19 A. Fulfilling investigative requests; compiling or putting
- 20 together compilation videos, things of like Whole Foods and
- 21 Mobil and Shell gas station. I organized a database full of
- 22 all of the scene photographs and search photographs and
- 23 reviewed those for any important pieces of evidence. I
- 24 assisted with coming up with some of the exhibits, laying the
- 25 groundwork for that, doing the graphics, finding which photos

```
1
     pertain to which piece of evidence and then where that evidence
     was found. I've reviewed pretty much all of the imagery that
 2
     we received, whether it be photo or video in nature.
 3
          How many photos were taken and collected as part of the
 4
 5
     investigation?
     Α.
         Thousands.
 7
         And how many have you personally reviewed?
 8
         All of them.
     Α.
        Have you also spent time at the blast sites on Boylston
     Street?
10
11
        Yes.
     Α.
12
          I want to turn to a slightly different matter, though, to
13
    begin with.
14
              MR. WEINREB: Can we have Exhibit.
15
              1586 for the witness, please?
              MS. CONRAD: Excuse me. May I spoke with Mr. Weinreb
16
     for a moment?
17
              (Counsel confer off the record.)
18
19
              MR. WEINREB: May we approach?
20
              (Discussion at sidebar and out of the hearing of the
21
     jury:)
22
              MS. CONRAD: We don't have it.
23
              THE COURT: What?
24
              MS. CONRAD: That exhibit.
25
              THE COURT: What is it?
```

```
1
              MS. CONRAD: It's a T-Mobile --
              MR. CHAKRAVARTY: T-Mobile records about the purchase
 2
 3
     of a SIM card purchased on Sunday --
              MR. WATKINS: We have it. I didn't see an exhibit
 4
 5
     number with it, though.
 6
              MS. CONRAD: That's the problem. When they put these
 7
     exhibits up, we get a list and --
 8
              MR. CHAKRAVARTY: We did send the exhibit number
 9
     later, but that exhibit number now has been taken by the
10
     exhibit that was just marked for identification with the
11
    medical examiner, 1586. So I think this we need to label as
     1586A or a different number.
12
13
              MS. CONRAD: Can we just get a copy of it, whether you
14
     email it to us or give us a hard copy? I can't see it on the
15
     screen. I don't know what you're offering.
              THE COURT: What's the significance of it? What is
16
17
     it?
              MR. WEINREB: So, your Honor, there was testimony
18
19
     earlier there were phone records of calls that were made
20
    between Jahar Tsarnaev and Tamerlan Tsarnaev immediately before
     or after the bombing, depending on how you interpret it.
21
22
     is simply the receipt for the SIM card that was in one of the
23
    phones that was used.
24
              MS. CONRAD: That's fine.
25
              MR. WEINREB: It's a business record.
```

```
1
              MS. CONRAD: I'm probably not going to object. I just
     want to see what it is. I can't see it on the screen.
 2
 3
              THE COURT: Do you have a paper copy?
              MR. CHAKRAVARTY: I'm not sure we do, but I can try to
 4
 5
     email it.
 6
              MS. CONRAD: If there are other exhibits that are
 7
     going to be marked through this witness that I don't have
     copies of, I would like a copy now.
 8
 9
              MR. WEINREB: We did email copies of it to
10
    Mr. Watkins. There was no request for the actual exhibit until
     just a second ago.
11
12
              THE COURT: I was going to ask if this is
13
     controversial.
14
              MS. CONRAD: I don't think so. The problem is when we
     get an exhibit without a number attached to it, then we don't
15
     know what they're offering when they put it up on the screen.
16
              THE COURT: I do want to make sure that we don't have
17
18
     a mix, using bad numbers. So 1586 was used with the last
19
     witness?
20
              MR. CHAKRAVARTY: It was used with the last witness to
21
     mark something for ID, just the autopsy report. There are
22
     two -- there's a 1585, which is a certificate of authenticity
     for the T-Mobile records which we don't need to tender into
23
24
     evidence. We can simply take the 1585 and make that its
25
     exhibit.
```

```
1
              THE COURT: Okay.
              MR. WEINREB: That's what's on the screen.
 2
 3
              THE COURT: Okay.
              MS. CONRAD: So can I -- do you have a copy? I'm
 4
 5
     going to get a copy.
 6
              THE COURT: Well, if it was emailed, there should be
 7
     an email.
 8
              MR. WATKINS: There definitely is. I can show it to
 9
     you if we can take a quick break.
10
              MS. CONRAD: Can you email it to me?
11
              MR. WATKINS: Yes.
12
              MS. CONRAD: Okay. Thanks.
13
              THE COURT: Real time?
14
              MS. CONRAD: Yeah.
15
              THE COURT: Okay. Fine.
16
              (In open court:)
              MR. WEINREB: So, your Honor, in an effort to avoid
17
     confusion, the autopsy report that was previously marked for
18
19
     identification as Exhibit 1586 has been renumbered Exhibit
     1591.
20
21
              THE COURT: Okay.
22
              MR. WEINREB: Therefore, the exhibit --
23
              THE COURT: That's just for identification.
              MR. WEINREB: Just for identification.
24
25
              So now I would ask that the -- just for the witness,
```

```
1
     we have 1585, and in light of 1585, we would offer 1586.
 2
              MS. CONRAD: I'm trying to take a look at it.
 3
              (Pause.)
              MS. CONRAD: No objection.
 4
 5
              THE COURT: All right.
 6
              (Government Exhibit No. 1586 received into evidence.)
 7
              MR. WEINREB: I'd ask it be published.
 8
              (Pause.)
 9
              MR. WEINREB: Your Honor, it appears the other screens
     are still deactivated.
10
11
              THE COURT: Can we activate the gallery monitors?
12
     BY MR. WEINREB:
13
         Ms. Gamble, can you describe what this document is?
14
          Sure. It's a T-Mobile receipt, and it appears to be for a
15
     micro SIM plug, electronic pin, and a SIM starter kit.
         And a SIM card, what is that?
16
         A SIM card would be something that you would put in a
17
18
     phone. You could also use it, I believe, for a camera.
19
     Q.
        And does a SIM card in a phone bring a unique phone number
    with it?
20
21
     A. Yes.
22
     Q.
         And what -- who does it say is the purchaser of the SIM
23
    card?
        Jahar Tsarni.
24
     Α.
25
     Q.
         And the date and time on which it was purchased?
```

- 1 A. 4/14/2013 at 17:59:50.
- 2 Q. And in non-military time, what's that?
- 3 A. It is, let's see, almost six o'clock.
- 4 Q. 6 p.m.?
- 5 A. Yes.
- 6 Q. Where was it purchased?
- 7 A. 100 Cambridge Side Place in Cambridge.
- 8 Q. And the mobile phone number associated with it?
- 9 A. Is (617) 286-9151.
- 10 Q. And there's a prepaid activation?
- 11 A. Yes.
- 12 Q. So it was purchased and activated the day before the
- marathon bombings?
- 14 A. Yes.
- MR. WEINREB: Can we bring up next to this Exhibit
- 16 882, which is already in evidence.
- 17 Q. This is a receipt from a Target?
- 18 A. Yes.
- 19 Q. And do you see -- and it's a Target in Watertown, Mass.
- 20 Is that it?
- 21 A. Yes.
- 22 Q. What's the date and time?
- 23 A. 4/14/2013 at 4:06 p.m.
- 24 Q. And that's a purchase for backpacks?
- 25 A. Yes.

- Q. And how does the date and time on that receipt compare to the date and time on this receipt?
- B A. It's two hours earlier.
- 4 MR. WEINREB: Exhibit 1584 for the witness, please.
- 5 Q. Do you recognize this photo?
- 6 A. Yes.
- 7 Q. What is it a photo of?
- 8 A. This is a video still from the Boston Athletic Association
- 9 video, and it is of first -- I'm sorry -- the second blast.
- MR. WEINREB: The government offers 1584.
- MS. CONRAD: No objection.
- 12 THE COURT: Okay.
- 13 (Government Exhibit No. 1584 received into evidence.)
- 14 BY MR. WEINREB:
- 15 Q. So by touching the screen which will leave an arrow, can
- 16 you indicate the second blast?
- 17 A. (Witness complies.)
- 18 Q. Okay.
- 19 A. Sorry.
- 20 Q. And then in front we see a clock. Is that correct?
- 21 A. Yes.
- 22 Q. Which clock is that?
- 23 A. That is the official marathon clock.
- 24 Q. What time is shown on the clock?
- 25 A. Four hours, nine minutes and 57 seconds.

```
1
         Do you know how that clock is set?
 2
              MS. CONRAD: Objection.
              MR. WEINREB: There's already been testimony from
 3
     Mr. Grilk about it, your Honor.
 4
 5
              MS. CONRAD: Well, but there's no foundation.
 6
              THE COURT: Sustained. Sustained.
 7
     BY MR. WEINREB:
 8
         Do you know when the third wave of runners is released at
     the Boston Marathon?
10
              MS. CONRAD: Same objection, your Honor.
11
              THE COURT: Sustained.
              MR. WEINREB: But if she knows.
12
13
              MS. CONRAD: Objection.
14
              THE COURT: Sustained.
     BY MR. WEINREB:
15
          Taking 10:40 a.m. as your starting point and adding the
16
     amount of time that is shown on this clock, four hours, nine
17
    minutes and 57 seconds, what time does that yield?
18
19
              MS. CONRAD: Objection.
20
              THE COURT: Overruled.
21
              You may answer that.
22
              THE WITNESS: It would be 2:49:57 p.m.
              MR. WEINREB: Can we have 592 for identification? I'm
23
24
     sorry, 1592.
25
              (Discussion off the record.)
```

```
MR. WEINREB: 1593 for identification.
 1
    BY MR. WEINREB:
 2
 3
     Q. Did you prepare an exhibit for use in connection with your
     testimony?
 4
 5
             MS. CONRAD: Your Honor, we haven't been provided
 6
     this.
 7
             MR. WEINREB: It was. In any event, your Honor, it's
 8
     just -- it's something she could be doing right here in real
     time on the screen.
10
             THE COURT: Yeah, I think that's probably right.
11
             MR. WEINREB: Can we have the first line?
     BY MR. WEINREB:
12
13
     Q. Okay. So you just testified that beginning with 10:40
14
     a.m., adding the amount of time on the race clock, the actual
    time would be 14:49:57?
15
16
    A. Yes.
     Q. Or 2:49:57 p.m., correct?
17
18
    Α.
         Yes.
19
        Okay. Are you familiar with the Forum restaurant
     Q.
     surveillance video?
20
21
    Α.
        Yes.
22
     Q.
         How familiar are you with it?
         I extracted some of the video from that.
23
    Α.
24
     Q.
         And how many times have you reviewed that video?
```

Α.

Hundreds.

```
1
              MR. WEINREB: Exhibit 22, which is already in
 2
     evidence.
              (Video recording played.)
 3
          What just happened on that video?
 4
     Q.
 5
     Α.
         The bomb exploded.
         And what time is the timestamp on that video according to
 7
     the Forum surveillance system?
          It's -- the DVR time here is 14:49:37.
 8
 9
              MR. WEINREB: Can you go back to the previous exhibit,
     1593.
10
11
        So how does the race clock time compare to the timestamp
     on the Forum video?
12
13
          The timestamp for the Forum video is 20 seconds slower,
     Α.
14
     and that would just be by somebody --
15
              MS. CONRAD: Objection. Nonresponsive.
              THE COURT: I think she'd answered the question.
16
    BY MR. WEINREB:
17
18
         So if the race clock is accurate, the Forum video is 20
19
     seconds slow?
20
     Α.
          Yes.
21
              MS. CONRAD: Objection. Leading.
22
              THE COURT: You may have it.
              MR. WEINREB: Now let's go back to Exhibit 22, please.
23
24
              (Video recording played.)
25
     BY MR. WEINREB:
```

```
I would just ask you to direct your attention to the
 1
     figure in the white circle on the left-hand part of the image.
 2
 3
              (Video recording played.)
          Do you see his hand just go to his face?
 4
     Q.
 5
     Α.
         Yes.
         What's the timestamp there?
 7
     A. 14:48:48.
 8
              MR. WEINREB: Can we go back to -- can we go to the
     second line.
 9
         So if that's the timestamp on the Forum video, what would
10
11
     the time be according to the race clock?
              MS. CONRAD: Objection.
12
13
              THE COURT: Overruled.
14
              THE WITNESS: 14:49:08.
15
              MR. WEINREB: Exhibit 1172 -- I'm sorry. Not yet.
     Let's go back to Exhibit 22.
16
17
              (Video recording played.)
    BY MR. WEINREB:
18
19
     Q.
          Did the figure just take his hand away from his face?
20
     Α.
          Yes.
21
         You have to answer out loud.
     Q.
22
    Α.
         Yes.
         And what time is the timestamp on the Forum video?
23
         14:49:07.
24
     Α.
25
              MR. WEINREB: Now let's go back to 931 -- 932.
```

- 1 | 1593. Go to the next line.
- 2 Q. So how does -- if that's the timestamp on the Forum video,
- 3 | what would the race clock time be?
- 4 A. 14:49:27.
- 5 Q. And if you subtracted the phone call start time from the
- 6 phone call end time, how long did that phone call last?
- 7 A. 19 seconds.
- 8 MR. WEINREB: May I have Exhibit 1172, which is
- 9 already in evidence?
- 10 Q. These are phone records for that phone 9151 that we saw
- 11 earlier?
- 12 A. Yes.
- 13 Q. Did I ask you to incorporate this into the exhibit --
- 14 A. Yes.
- 15 Q. -- that I asked you to prepare?
- MR. WEINREB: Let's go back to 1593. And go to the
- 17 second page.
- 18 | Q. So looking at the call that, according to Exhibit 1172,
- 19 was made at 2:49:06, how does that compare to the phone call
- 20 start time pursuant to the race clock time?
- 21 A. It's -- the race clock time, is that what you asked?
- 22 Q. Yes, the race clock time.
- 23 A. It's two seconds slower.
- 24 Q. And how long does it last?
- 25 A. 19 seconds.

```
Did that call take place before or after the first
 1
    marathon bombing explosion?
 2
              MS. CONRAD: Objection to "that call."
 3
              THE COURT: Overruled.
 4
 5
              THE WITNESS: Before.
 6
    BY MR. WEINREB:
 7
         And do you see the next call on that slide, an incoming
     call that began at 2:51:19? Did that call take place before or
 8
     after the second bombing?
        After.
10
    Α.
11
     Q. How long after the second bombing did it take place?
              MS. CONRAD: Objection.
12
13
              THE COURT: Overruled.
14
              THE WITNESS: Approximately a minute, 20 seconds.
    BY MR. WEINREB:
15
          Was one of your responsibilities in this investigation to
16
     determine the location of people and things at various times?
17
18
    A. Yes.
19
        And did you at my request prepare an exhibit or a chalk
20
     that indicates some of those things?
21
    A. Yes.
22
              MR. WEINREB: Can I have Exhibit 29, please, just
     for -- no, it's in evidence.
23
              THE COURT: 29 is in evidence?
24
25
              MR. WEINREB: It is.
```

- 1 BY MR. WEINREB:
- 2 Q. Do you see the defendant in this photo?
- 3 A. Yes.
- 4 Q. Can you circle him?
- 5 A. (Witness complies.)
- 6 Q. Do you see something at his feet?
- 7 A. Yes.
- 8 Q. Have you seen that -- images of that before?
- 9 A. Yes.
- 10 Q. What is it?
- 11 A. It's a backpack.
- 12 Q. You said you watched the Forum video hundreds of times?
- 13 A. Yes.
- 14 Q. On the Forum video, are people able to walk directly into
- 15 the backpack?
- 16 A. No.
- 17 Q. Why not?
- 18 A. He pretty much stands behind it most of the time, almost
- 19 kind of like hovering over it.
- MR. WEINREB: Can I have Exhibit 1581 for
- 21 identification, please.
- 22 Q. What's that a picture of?
- 23 A. That's a still image of the Forum video taken at, I
- 24 believe, six o'clock in the morning.
- 25 Q. Of the day of the marathon?

```
1
         Of the day of the marathon, yes.
 2
        This grate here that the tree -- surrounds the tree, have
 3
    you seen that?
    Α.
        Yes.
 4
     Q. What is it made of?
 5
    A. Steel.
 7
             MR. WEINREB: Exhibit 1582 for the -- I'm sorry. Can
 8
     I offer 1581.
 9
             MS. CONRAD: No objection.
10
             THE COURT: All right.
11
              (Government Exhibit No. 1581 received into evidence.)
12
             MR. WEINREB: Can we go back out?
13
    BY MR. WEINREB:
14
        So this is the patio of the Forum restaurant --
15
    Α.
         Yes.
     Q. -- on the morning of the bombing?
16
17
         And this is the grate you were referring to?
18
         Yes.
    Α.
19
             MR. WEINREB: Exhibit 1582 for identification.
20
     Q.
         Do you recognize that?
21
    Α.
       Yes.
22
    Q.
         Is that a fair and accurate picture of how that grate
    looked after the blast?
23
24
    A. Yes.
25
             MR. WEINREB: The government offers 1582.
```

```
1
              MS. CONRAD: No objection, but I think it may already
 2
     be in.
 3
              THE COURT: It's already in evidence.
              MR. WEINREB: It is? That's fine, then.
 4
 5
    BY MR. WEINREB:
          Do you see here now part of the grate is missing?
 7
     Α.
          Yes.
 8
         Is that where the second bomb exploded?
     Q.
 9
     Α.
         Yes.
10
              MR. WEINREB: Exhibit 1580, please.
11
         Is this the exhibit or chalk I asked you to prepare?
     Q.
12
         Yes, it is.
     Α.
13
          Okay. Did you indicate on there the seat of the blast, or
     Ο.
14
     where the second bomb exploded?
15
    Α.
         Yes.
     Q. Can you point it out for us?
16
17
         (Witness complies.)
     Α.
18
          Now, in this photograph we see a figure here dressed in a
     Q.
19
     Tyvek suit. Is that correct?
20
     Α.
          Yes.
21
          I circled it, the figure on the left?
     Q.
22
     Α.
         Yes.
         So when was this photograph taken?
23
     Q.
24
     A. This was at the end of the processing of the crime scene.
```

So the tree is no longer there. Is that right?

25

Q.

```
1
    Α.
          No.
         What happened to the tree?
 2
     Q.
         We took the tree as a piece of evidence.
 3
     Α.
              MR. WEINREB: Exhibit 24, please. It's already in
 4
 5
     evidence. Oh, I'm sorry. I'm sorry. Can we publish 1580,
    please?
 7
              MS. CONRAD: Objection.
 8
              THE COURT: Overruled.
              MS. CONRAD: Is this being admitted or just a chalk?
 9
10
              MR. WEINREB: No, just a chalk.
11
    BY MR. WEINREB:
          So the figure in the Tyvek suit that I circled earlier on
12
13
     the left-hand side I just circled again. Is that right?
14
    A. Yes.
         And the seat of the blast is here?
15
     Q.
16
    A. Yes.
17
          Okay. And I've circled the red mark that's roughly in the
     Q.
18
     center of the page and it's labeled "backpack with bomb"?
19
    Α.
        Yes.
20
     Q.
         Exhibit 24, please.
21
              THE COURT: Is this in evidence?
22
              MR. WEINREB: It is.
    BY MR. WEINREB:
23
24
     Q.
          Do you see Lingzi Lu in this photo?
25
     Α.
         Yes.
```

- 1 Q. Can you point her out to us?
- 2 A. Sure.
- 3 Q. Do you see Martin Richard?
- 4 A. Yes.
- 5 Q. Can you circle him, please?
- 6 A. (Witness complies.)
- 7 Q. Is that him lying there face up?
- 8 A. Yes.
- 9 Q. Did you indicate their locations on the chalk that I asked
- 10 you to prepare?
- 11 A. I did, yes.
- MR. WEINREB: Go back to 1580.
- 13 Q. So can you point -- circle where the body of Lingzi Lu was
- 14 located?
- 15 A. Sure.
- 16 Q. And that's labeled with her name and where the body of
- 17 | Martin Richard was located?
- 18 A. (Witness indicates.)
- 19 Q. And that's labeled with his name?
- 20 A. Yes.
- MR. WEINREB: Exhibit 1575 for identification.
- 22 Q. Is this a close-up of a photo that was received from a
- 23 member of the public?
- 24 A. Yes.
- 25 Q. Was there an internal timestamp that revealed when the

```
1
     photo was taken?
          The metadata said it was 2:48 p.m.
 2
          And how does that compare to the time of the actual blast?
     Q.
         It's a minute before.
     Α.
 5
     Q.
          Do you see the defendant in this photo?
     Α.
          Yes.
 7
              MR. WEINREB: Actually, the government offers 1575.
 8
              MS. CONRAD: As noted.
 9
              THE COURT: I'm sorry?
10
              MS. CONRAD: As noted.
11
              THE COURT: Okay. Admitted.
              (Government Exhibit No. 1575 received into evidence.)
12
    BY MR. WEINREB:
13
14
          Do you see the defendant in this photo?
15
     Α.
         Yes.
        Can you point him out?
16
     Q.
17
         (Witness complies.)
     Α.
18
          So you've circled the individual whose face is partially
     Q.
19
     obscured by the tree?
20
     Α.
          Yes.
21
          Do you see Martin Richard in this photo?
     Q.
22
    Α.
          I do.
23
         Can you point him out?
         (Witness complies.)
24
     Α.
25
     Q.
          And you've circled the little boy who's standing over
```

```
1
     against the railing near the tree?
 2
          Yes.
     Α.
          Do you see Jane Richard in this photo?
     Q.
         I do.
    Α.
 5
     Q.
         Where is she located?
    Α.
         Right here (indicating).
 7
          You've circled the little girl in the green coat who's
     Q.
     standing next to Martin?
 9
    Α.
          Yes.
10
     Q.
          Do you see Bill Richard in this photo?
11
    Α.
         I do.
         And where is he located?
12
    Ο.
13
         (Witness indicates.)
    Α.
14
    Q.
         You circled the man standing in between Martin and Jane?
15
    Α.
         Yes.
16
         Do you see Denise Richard in this photo?
     Q.
17
         I do.
    Α.
         Where is she standing?
18
     Q.
19
    A. (Witness indicates.)
20
     Q.
         You've circled the person all the way at the left-hand
21
     side --
22
    Α.
         Yes.
23
     Q. -- of the photo?
              MR. WEINREB: I have no further questions, your Honor.
24
25
                            CROSS-EXAMINATION
```

```
1
    BY MS. CONRAD:
 2
     Q.
        Good morning.
         Good morning.
 3
     Α.
 4
     Q. I'm Miriam Conrad. I'm one of the lawyers for
 5
    Mr. Tsarnaev.
          In addition to your duties with respect to photography at
 7
     the scene, you also participated in some of the searches that
    were conducted in this case, correct?
 8
 9
          I did, yes.
     Α.
10
              MR. WEINREB: Objection, your Honor. Outside the
     scope of direct examination.
11
12
              THE COURT: Sounds it.
13
              MS. CONRAD: Your Honor, may we approach?
14
              THE COURT: All right.
15
              (Discussion at sidebar and out of the hearing of the
16
     jury:)
              MS. CONRAD: Your Honor, I thought we had an agreement
17
18
     with the government that we would be able to offer exhibits
19
     seized at 410 Norfolk on May 5, 2013, by this witness. You
20
     know, we'll have to call them back, I guess, if the government
21
     has changed its mind about that, but I thought we had an
22
     agreement. I had asked Mr. Chakravarty to make a number of
     exhibits available; he indicated that he would do so. You
23
24
     know, we determined this was the appropriate witness.
25
              THE COURT: What are the exhibits?
```

MS. CONRAD: They're a number of items that were found during the May 5th search. One is a wiring book that was found under the living room couch. We have photographs of that and we asked the government to produce it. It was tested for fingerprints at the FBI lab and found to bear the fingerprints of Tamerlan Tsarnaev. We also — there were a number of boxes of plastic gloves and I believe also some face masks.

Those are the only items I was going to go into. It was going to be very brief.

MR. CHAKRAVARTY: So Ms. Conrad did ask for those items to be available. We made them available. She proposed whether they could come in through Ms. Gamble. We did not agree to have Ms. Gamble necessarily be the witness to have them come in. She is competent to testify about what happened during that search however.

THE COURT: Was she present?

MR. CHAKRAVARTY: She was present. She was the photographer on the subsequent search, which I believe was a week and a half after the initial search.

The parties are in the process of crafting a stipulation, I think, with regards to a number of fingerprints all throughout 410 Norfolk Street. A fingerprint on a wiring book would somehow suggest -- which this witness could not testify to. She could just testify to seeing the wiring book. The fingerprint itself would not come in through this witness.

So the relevance of the wiring book seems to be lacking absent having the fingerprint.

To the extent that we offered the fact that the volume of fingerprints -- of Tamerlan Tsarnaev's fingerprints were found on a variety of objects around the house, that is not going to be controversial. It's selecting this book to be introduced, especially through this witness who could not testify to the fingerprint, and then also to suggest that there are gloves and masks in there, somehow suggesting Tamerlan was either donning these without any fingerprints at all, as opposed to Dzhokhar Tsarnaev -- those also don't seem to be particularly relevant and could confuse the jury into thinking somehow this is -- they need to be figuring out why there are fingerprints or other evidence available.

MS. CONRAD: Your Honor, first of all, it's a link in the chain. First we put in the book and then we put in the fingerprints. The other thing I was going to ask about --

THE COURT: Where would the fingerprint evidence come from? From whom?

MS. CONRAD: It would either be a stipulation or we would offer the lab report of Elena Graff. It's more

Ms. Clarke's department than it's my department. We're trying to work out a stipulation with the government. The first step is just, "You found this?" and where it was. It was sent to the lab. That's all I was going to ask about the book.

```
1
              The second thing is, I was going to ask her about --
     she participated in the search of Mr. Tsarnaev's property down
 2
     at UMass Dartmouth in which she was also one of the searching
 3
     agents and she kept a log, and there were vacuum samples taken
 4
 5
     at some point.
 6
              THE COURT: Okay. So it seems to me that is all
 7
     admissible by the defense. The question is does it come now or
     do we have the witness re-called to do it?
 8
 9
              MR. WEINREB: It is completely outside the scope of
10
     direct examination.
11
              THE COURT: You're right. It is.
              MR. WEINREB: We would prefer them to directly examine
12
13
     their own witness.
14
              THE COURT: All right.
15
              MS. CONRAD: I thought we had --
16
              (In open court:)
              MS. CONRAD: May I just get organized for a minute? I
17
18
     also seem to have lost Mr. Watkins, who I'm relying on for some
19
     of these exhibits.
20
              Actually, may I have on the screen, please -- is it
21
     1580, whichever the chalk was.
22
     BY MS. CONRAD:
23
          Now, you said that you were asked to determine where
24
     certain individuals were, correct?
25
     Α.
         Yes.
```

- 1 Q. And you were asked to determine where they were at what
- 2 time?
- 3 A. Everybody that's in that graphic was in there from -- the
- 4 first photograph that I looked at was 2:37 with the exception
- 5 of Tsarnaev.
- 6 Q. Well, that doesn't really answer my question. You depict
- 7 in here -- you say, "Where the bomb went off." So is this
- 8 meant to depict where everyone was at the time of the second
- 9 explosion?
- 10 A. This is a minute before the bomb went off.
- 11 Q. And a minute before the bomb went off. So that would be
- 12 | 2:48 p.m., correct?
- 13 A. Yes.
- 14 Q. So not at the time of the phone call that you testified
- 15 about occurring at 2:49?
- 16 A. No.
- 17 Q. And so, in fact, Mr. Tsarnaev was not standing right next
- 18 to the backpack at the time of the second explosion, right?
- 19 A. When the explosion went off?
- 20 Q. Yes.
- 21 A. No, he was walking down the street.
- 22 Q. Okay.
- MS. CONRAD: Now, may I have, Mr. Bruemmer, 1172,
- 24 please.
- THE COURT: Is this in evidence?

- 1 MS. CONRAD: Yes, it's the government's exhibit.
- 2 And could we enlarge that, please.
- 3 BY MS. CONRAD:
- 4 Q. Now, you're not a cell phone expert, I take it?
- 5 A. No.
- 6 Q. And so where it says "duration" here, 19 seconds for the
- 7 2:49 p.m., are you aware that that's actually the time from
- 8 | when the call is first dialed by the caller?
- 9 A. Yes.
- 10 Q. It's not actually the time or the duration of the
- 11 conversation itself.
- 12 A. (Nonverbal response.)
- 13 Q. Could I get a verbal response, please?
- 14 A. Yes.
- 15 | Q. So looking at this, you don't know how long either the
- 16 2:49 or 2:51 p.m. conversations were, right?
- 17 A. I don't.
- 18 Q. And -- but you do know from looking at the video that it
- 19 appears that the conversation that you see on that video lasted
- 20 about 19 seconds, the conversation itself?
- 21 A. Yes.
- 22 Q. And would it be fair to say that the duration in terms of
- 23 cell tower engagement would probably be longer than that?
- 24 A. I don't know the answer to that.
- 25 Q. Okay.

```
1
              MS. CONRAD: Could I please --
          Now, the conversation that you see on that video occurred
 2
     closer in time to the second -- excuse me -- to the first
 3
     explosion than the 2:48 photograph that Mr. Weinreb just showed
 5
     you. I think it was Exhibit 1575.
     Α.
         Yes.
 7
          But you based your chalk that you -- or your diagram on
     the 1575 photo. Is that right?
 8
 9
          I based that off of several photos.
10
         Okay. So let's just take a look at some of those photos,
11
     if we could.
12
              MS. CONRAD: If we could have, Mr. Watkins, what's
13
    been marked for identification as Exhibit 3146, just for the
14
     witness.
15
             And that would be off Mr. Watkins' laptop, please, Mr.
16
     Lyness.
              THE COURT: Well, the podium or is it the table?
17
18
              MS. CONRAD: I don't trust myself. Mr. Watkins,
19
    please.
              MR. WATKINS: It's the podium.
20
21
              MS. CONRAD: It's the podium cart. We're going to
22
     share.
23
              THE COURT: There it is.
24
              MR. WATKINS: That's for the witness?
25
              MS. CONRAD: Just for the witness.
```

- 1 MR. WATKINS: What number?
- 2 MS. CONRAD: 3146.
- 3 BY MS. CONRAD:
- 4 Q. Okay. And you've seen this photograph before, right?
- 5 A. Yes.
- 6 Q. In fact, it's, I think, previously marked -- I'm not sure
- 7 if it was admitted -- as Government Exhibit 675-5, if
- 8 Mr. Bruemmer wouldn't mind calling that up, which is a close-up
- 9 of that.
- 10 MS. CONRAD: Mr. Bruemmer, if you could focus on the
- 11 upper right-hand image.
- 12 Q. And you've seen that photograph before?
- 13 A. Yes.
- 14 Q. And that comes from D108, which is the same image that we
- 15 just had up on the screen over here, but this is cropped,
- 16 right?
- 17 A. Yes.
- 18 Q. Enlarged and cropped?
- 19 A. Yes.
- 20 Q. And you know that the metadata for that photograph shows
- 21 it's at 2:49 p.m., correct?
- 22 A. I believe it is 2:48 unless that's a different photo from
- 23 the one previously brought up.
- MR. WEINREB: Objection. I would ask the witness not
- 25 to speculate. She answered the question.

```
1
              MS. CONRAD: We'll get the metadata up.
    BY MS. CONRAD:
 2
 3
         But would you agree with me that that's a zoomed-in
     version of what Mr. Watkins just showed you marked as
 5
    Defendant's Exhibit 3146?
          Can you pull up that photograph again?
 7
          I can switch back over, sure.
     Q.
 8
    Α.
         Yes.
              MS. CONRAD: I would offer 3146.
 9
10
              THE COURT: Any objection?
11
              MR. WEINREB: No objection.
              (Defense Exhibit No. 3146 received into evidence.)
12
13
              MS. CONRAD: And, Mr. Watkins, if we could pull up the
14
    metadata for that image.
    BY MS. CONRAD:
15
        And you know what metadata is, right?
16
        Uh-huh.
17
    Α.
18
        I'm sorry, could you just --
19
              MR. WEINREB: Your Honor, I don't know why this is in
20
     front of the jury right now. It's not in evidence.
21
              MS. CONRAD: Oh, I'm sorry. I didn't mean that to be
22
     in front of the jury. I apologize.
23
              THE COURT: All right.
    BY MS. CONRAD:
24
25
     Q. And metadata is the time and the information that's
```

- 1 recorded internally in the camera, right?
- 2 A. Yes.
- 3 Q. And you examined the metadata for some of these images, or
- 4 all of these images, correct?
- 5 A. Yes.
- 6 Q. And would you agree with me that the metadata for this
- 7 image which has just been introduced as 3146 shows the time --
- 8 MR. WEINREB: Objection, your Honor. There's no
- 9 foundation that she actually has memorized the metadata for
- 10 this image.
- 11 THE COURT: Overruled.
- 12 BY MS. CONRAD:
- 13 Q. The metadata shows that that photo was taken at 2:49 p.m.,
- 14 correct?
- 15 A. Yes.
- 16 Q. And that's closer in time to the first explosion than the
- 17 | photograph that I think was offered as 1575, right?
- 18 A. Yes.
- 19 MS. CONRAD: And so, Mr. Watkins, if we could just
- 20 zoom in, please, on 3146, and particularly in the area
- 21 surrounding the tree and Mr. Tsarnaev. Could you move it over
- 22 | just a little bit to the right, please. Okay.
- 23 Q. So in that photograph do you see that Mr. Tsarnaev is some
- 24 distance to the right of that tree?
- 25 A. Yes.

- 1 Q. And do you see that there are one, two, three, four people
- 2 in front of him, correct?
- 3 A. Yes.
- 4 Q. And you did not include any of those people on the chalk
- 5 that you prepared?
- 6 A. No.
- 7 Q. And is that because you weren't asked to by the
- 8 prosecution?
- 9 A. Yes.
- 10 Q. Were you asked to determine where the --
- MS. CONRAD: Actually, Mr. Watkins, can you just
- expand the view we're seeing there slightly to the left? Just
- 13 | right about where we see that woman running. Yeah, that's
- 14 good.
- 15 Q. Okay. So you didn't put any of the people to the right of
- 16 Martin Richard in your diagram, right?
- 17 | A. No.
- 18 Q. And again, that was because the prosecution asked you not
- 19 to. Is that right?
- 20 A. Yes.
- 21 Q. And the -- you know from the video of the Boston -- the
- 22 | timeline video that I think was Exhibit 24 -- maybe 22 --
- 23 excuse me -- that Mr. Weinreb showed you --
- 24 A. Yes.
- 25 \ Q. -- that it appeared -- there's no exact point where you

- 1 can say you see Mr. Tsarnaev put the backpack down, correct?
- 2 A. In that video?
- 3 Q. Yes.
- 4 A. I'm not sure.
- 5 Q. Well, in the Forum video there appears to be a point where
- 6 at least he puts the backpack down at about 2:45, right?
- 7 A. Uh-huh.
- 8 Q. I'm sorry. I need a yes-or-no answer, please.
- 9 A. Yes.
- 10 Q. Thanks. So I just want to show you -- and did you do a
- 11 similar chalk to show where the individuals were at that
- 12 moment?
- 13 A. No.
- 14 Q. You weren't asked to?
- 15 A. No.
- 16 Q. And I just want to --
- 17 MS. CONRAD: Can I have the cord back? I think this
- 18 is 22 in evidence. So if we could have this for the jury as
- 19 well. Here we go.
- 20 Q. So this is starting at about 2:45 p.m., right?
- 21 A. Yes.
- 22 Q. Okay. And you see Mr. Tsarnaev coming down the street,
- 23 right?
- 24 A. Yes.
- 25 Q. And you see him stop behind that tree and a little bit to

- 1 the left of it as you face it, correct?
- 2 A. Yes.
- Q. Right?
- 4 A. Yes.
- 5 Q. And did you see him put the backpack down?
- 6 A. Yes.
- 7 Q. And that was right around 2:45?
- 8 A. Yes.
- 9 Q. And did you look at any photographs to indicate where the
- 10 individuals were depicted at 2:45?
- 11 A. I looked at several photographs, the first one being at
- 12 | 2:37; several photographs after that I believe at 2:47 -- I'm
- 13 sorry -- the first one was 2:37, 2:47, 2:48. The people that
- 14 are indicated in that graph did not move at all from photo to
- 15 photo.
- 16 Q. But there are other people in that area, correct?
- 17 | A. Yes.
- 18 Q. And there are other people in the direct, immediate
- 19 vicinity of Mr. Tsarnaev, correct?
- 20 A. Yes.
- 21 Q. And so showing you, for example, what's been marked for
- 22 identification --
- 23 MS. CONRAD: Just for the witness as Exhibit 3137.
- 24 Can we zoom in, please?
- 25 Q. And the metadata on this image is also 2:48 p.m., correct?

```
1
     Α.
          Yes.
          And again, you see a number of people in front of
 2
     Mr. Tsarnaev, right?
 3
 4
    Α.
          Yes.
 5
         And you left them out of the chalk?
     Q.
 6
     Α.
         Yes.
 7
         At the direction of the government?
     Q.
 8
     Α.
         Yes.
 9
              MS. CONRAD: And could I now display for the
10
     witness -- I believe this is not -- this is a government
11
     exhibit but not in evidence. Oh, I'm sorry. Can we zoom in on
12
     that?
13
              And I would offer this, your Honor.
14
              MR. WEINREB: I believe it's already in evidence.
15
              MS. CONRAD: Okay.
              THE COURT: As a different number or --
16
              MS. PELLEGRINI: A different number, your Honor.
17
18
              MR. WEINREB: In that case, no objection.
19
              THE COURT: Yeah, we'll use the defense number.
20
              MS. CONRAD: I'm sorry. I don't know if the jury saw
21
     that when I was showing it.
22
              THE COURT: They are now.
              (Defense Exhibit No. 3137 received into evidence.)
23
     BY MS. CONRAD:
24
25
        Okay. So that photo was taken at 2:48 p.m.?
```

- 1 A. I believe so.
- 2 Q. And again, you see in front of Mr. Tsarnaev -- can you
- 3 just count, starting right to left, the number of people you
- 4 see?
- 5 A. One, two, three.
- 6 Q. And you also see some people in the background --
- 7 A. Yes.
- 8 Q. -- walking by, right?
- 9 A. Yes.
- 10 Q. Okay. And again, you left all of those people out, right?
- 11 A. Yes.
- 12 | Q. And you even left Bill Richard out, right?
- 13 A. No.
- 14 Q. Of your --
- 15 A. I'm sorry. Yes, I did.
- 16 Q. And again, that was at the direction of the government?
- 17 | A. Yes.
- 18 Q. And showing you what's been marked for
- 19 identification -- well, marked by the government but not
- 20 offered --
- MS. CONRAD: And this is just for the witness, please.
- 22 Q. -- Exhibit 1492, do you recognize this image?
- 23 A. I do, yes.
- 24 Q. Did you prepare that chalk as well?
- 25 A. I did.

```
1
              MS. CONRAD: I would offer this, your Honor.
 2
              MR. WEINREB: No objection.
 3
              THE COURT: Okay.
              (Defense Exhibit No. 1492 received into evidence.)
 4
 5
              THE COURT: Well, okay. It's a chalk, but you're
 6
     offering it as an exhibit?
 7
              MS. CONRAD: I'm offering it as an exhibit, yes.
 8
              THE COURT: Okay.
 9
              MS. CONRAD: Thank you. May it be published?
10
     BY MS. CONRAD:
11
          And this is an image -- and you drew those lines in and
12
    put those names in?
13
     Α.
         Yes.
14
          And in this picture which shows the Forum timestamp of
15
     14:49:36, this is immediately after the first blast, correct?
16
     Α.
          Yes.
          And you identified where members of the Richard family
17
18
     were standing in this photograph, right?
19
     Α.
          Yes.
20
          And do you see Mr. Tsarnaev in this photograph?
     Q.
          If you can zoom in more, I probably could find him.
21
     Α.
22
     Q.
          It would be further up to the upper right-hand --
23
         Yeah, the top of the screen.
     Α.
24
     Q.
         The upper right-hand corner.
25
     Α.
          You have to go further up. I believe he's right in --
```

- 1 Q. Can you circle where you see him?
- 2 A. I believe he's right around this location here
- 3 (indicating).
- 4 Q. Okay. So at that point he has walked away, right?
- 5 A. Yes.
- 6 Q. So the chalk that you did does not show where he was at
- 7 | the time even of the first blast, right?
- 8 A. Say -- I'm sorry. Say that again?
- 9 Q. The chalk that was introduced during your direct
- 10 examination does not show where he was even at the time of the
- 11 first blast, correct?
- 12 A. No.
- 13 Q. And, in fact -- strike that.
- And this was, of course, before the second bomb exploded,
- 15 correct?
- 16 A. Yes.
- 17 Q. And at the time the second bomb exploded, Mr. Tsarnaev is
- 18 | not visible in the Forum video, correct?
- 19 A. He is at the top of it. This is the still right before
- 20 the bomb goes off.
- 21 Q. Okay. So he was actually pretty close by at that time?
- 22 A. I wouldn't know the approximate distance.
- 23 Q. You haven't measured the distances in that area?
- 24 A. No.
- 25 Q. You were involved in evidence collection?

```
1
    Α.
         Yes.
        You marked the location of items?
 2
         Uh-huh.
 3
    Α.
     Q. Is it fair to say you spent a lot of time on Boylston
 5
    Street --
    Α.
         Yes.
 7
          -- during the immediate aftermath of the bombing?
     Q.
 8
    Α.
         Yes.
         And you didn't take note of the distances?
10
    Α.
         No.
11
     Q. And --
12
              MS. CONRAD: May I just have one moment, please?
              (Counsel confer off the record.)
13
14
              MS. CONRAD: All right. Can we just go back to the
15
     timeline video? Unfortunately, I'm going to have to borrow the
16
    cable back from Mr. Watkins.
17
              (Pause.)
          So this is the Forum video at 14:49:11, correct?
18
19
    Α.
         Yes.
20
     Q.
          This is right after Mr. Tsarnaev got off the phone, right?
21
         Uh-huh.
    Α.
22
    Q.
         And he moves around a bit?
23
         He does.
    Α.
24
     Q.
         And then he begins to move away at 14:49:28, correct?
```

25

Α.

Yes.

- 1 Q. And then people move around a bit, correct?
- 2 A. Correct.
- 3 MS. CONRAD: Nothing further.
- 4 REDIRECT EXAMINATION
- 5 BY MR. WEINREB:
- 6 Q. So, Ms. Gamble, you were asked some questions about how
- 7 | far back in time you reviewed photographs in order to make that
- 8 chalk?
- 9 A. Yes.
- 10 Q. You said you first went back to 2:37 p.m.?
- 11 A. Yes.
- 12 Q. And that was before Mr. Tsarnaev was even on the scene?
- 13 A. Exactly.
- 14 Q. And you said that the children who were arrayed along the
- 15 railing, they were there at 2:37?
- 16 A. They were, yes.
- 17 Q. And they were still there ten minutes later?
- 18 A. Yes, in the same, pretty much, position.
- 19 Q. And that was true all the way up until the bomb exploded?
- 20 A. When the first bomb went off they moved. Everybody within
- 21 the scene moved around. But right up until that first blast,
- 22 that's where they were.
- 23 Q. And so that means that the defendant walked right by them
- 24 when he walked up to the scene and put his backpack down?
- MS. CONRAD: Objection. Objection.

1 THE COURT: Sustained to the form of the question. BY MR. WEINREB: 2 You remember the defense showed you an exhibit marked 3146 that was a photo of Mr. Tsarnaev with the phone to his ear? 5 Α. Yes. Q. Do you know what kind of device that was taken with? 7 The photograph? Α. 8 Yes. Q. Was with an iPhone. 9 Α. MR. WEINREB: Can we have Exhibit --10 11 MS. CONRAD: Objection to scope, your Honor. 12 THE COURT: I don't know what the question is yet. 13 MS. CONRAD: Well, the last question. I'm just a 14 little slow. 15 THE COURT: No, that's all right. MR. WEINREB: Can we have Exhibit 1575, please. 16 17 BY MR. WEINREB: So Ms. Conrad asked you many questions about these three 18 19 individuals right here. 20 Α. Yes. 21 Q. Do you recall that? 22 Α. Yes. 23 Q. After the first blast went off, did all three of these individuals leave the scene? 24

25

Α.

Yes.

- 1 Q. So that the only people left were this woman --
- 2 MS. CONRAD: Objection. Foundation, your Honor.
- THE COURT: Overruled.
- 4 BY MR. WEINREB:
- 5 Q. So that the only people left were this woman I'm circling
- 6 right here, correct?
- 7 A. Uh-huh.
- 8 Q. Do you know what her name is?
- 9 A. Roseann Sdoia.
- 10 Q. And these people right here, correct?
- 11 A. Yes.
- 12 Q. So after the defendant got off the phone, saw the first
- 13 blast occur and got ready to set off his bomb, that's who was
- 14 there?
- MS. CONRAD: Objection.
- 16 THE COURT: Sustained to the form of the question.
- 17 BY MR. WEINREB:
- 18 Q. Were any of these three people, to your knowledge, killed
- 19 by the blast?
- MS. CONRAD: Objection.
- 21 THE COURT: Sustained.
- 22 BY MR. WEINREB:
- 23 Q. Ms. Conrad showed you images of the defendant walking away
- 24 as -- after the first blast occurs, correct?
- 25 A. Yes.

- Q. And then when he's almost off the screen, the second blast occurs, correct?
- 3 A. Yes.
- 4 Q. And you said you looked at that video hundreds of times?
- 5 A. Yes.
- Q. As he walks away, does he keep looking back over his
- 7 shoulder?
- 8 MS. CONRAD: Objection. The video speaks for itself.
- 9 THE COURT: Sustained.
- 10 BY MR. WEINREB:
- 11 Q. And right before the bomb goes off, does he turn his head
- 12 back for the last time?
- MS. CONRAD: Objection. The video speaks for itself.
- 14 THE COURT: Sustained.
- MS. CONRAD: Recross, your Honor? It's within the
- 16 scope.
- 17 | RECROSS-EXAMINATION
- 18 BY MS. CONRAD:
- 19 Q. Agent Gamble, those people that Mr. Weinreb said -- or
- 20 excuse me -- you said after Mr. Weinreb asked you -- left the
- 21 | scene after the first blast, that was after Mr. Tsarnaev walked
- 22 away, correct?
- 23 A. Yes.
- 24 Q. And because he walked away at the time of the first blast,
- 25 right?

```
I believe they actually -- when they heard the first
 1
     blast, they immediately started to remove themselves from --
 2
          As we saw the video, he had started to walk away
     Q.
     immediately at the time of the first blast, right?
 5
     Α.
          Yes, and so did some of those girls.
          Okay. So he would not have -- strike that.
 7
          Now, there's an exhibit I think the government --
 8
              MS. CONRAD: This is just for the witness.
 9
          Are you familiar with this photograph?
     Q.
10
     Α.
         Yes.
11
     Q. And that was taken approximately 2:37 p.m.?
              MR. WEINREB: Your Honor, I think introducing new
12
13
     exhibits at this point is beyond the scope. This is recross.
14
              THE COURT: Go ahead. You may have it.
     BY MS. CONRAD:
15
         And this is a photograph that -- I'm sorry. I think I
16
     lost my thread there.
17
18
          You're familiar with this photograph?
19
     Α.
         Yes.
20
     Q.
          And that photograph was taken approximately 2:37 --
21
     Α.
         Yes.
22
     Q.
         -- p.m.?
23
              MS. CONRAD: And I'd offer this, your Honor.
24
              THE COURT: Okay.
```

THE CLERK: As what number?

25

```
1
              MS. CONRAD: I don't know. I would have to ask
 2
     Mr. Watkins. I thought the government was offering that, so I
     don't know if they had a number for it. So the next number I
 3
     think would probably --
 4
 5
              THE CLERK: The last one we left off was 3137.
 6
              MS. CONRAD: So 3138.
 7
              (Defense Exhibit No. 3138 received into evidence.)
 8
              MS. CONRAD: And may that be published, please?
     BY MS. CONRAD:
 9
10
          And you said that you examined these photos from
11
     31 -- excuse me -- from 2:37 forward, correct?
12
     Α.
         Yes.
13
         So this is one of the photos that you examined?
     Q.
14
     Α.
         Yes.
15
     Q.
          And do you see a woman standing here?
16
    Α.
         Yes.
17
     Q.
         And do you see a man standing here?
18
    Α.
         Yes.
19
     Q.
          In the vicinity of the Richards family?
20
     Α.
          Uh-huh.
          Okay. And so those people weren't there at 2:48, correct?
21
     Q.
22
     Α.
          (Nonverbal response.)
23
              MS. CONRAD: I have nothing further.
24
              THE COURT: Okay, Agent. Thank you. You may step
25
     down.
```

```
1
              (The witness is excused.)
              THE COURT: We're close enough to eleven o'clock.
 2
 3
     We'll take the morning recess at this time.
              THE CLERK: All rise for the Court and the jury. The
 4
 5
     Court will take the morning recess.
 6
              (The Court and jury exit the courtroom and there is a
 7
     recess in the proceedings at 10:49 a.m.)
 8
              (After the recess:)
 9
              THE CLERK: All rise for the Court and the jury.
10
              (The Court and jury enter the courtroom at 11:14 a.m.)
              THE CLERK: Be seated.
11
              MS. PELLEGRINI: The United States calls Dr. Henry
12
13
     Nields.
14
              THE COURT: Are the monitors shut off?
15
              MS. PELLEGRINI: Not just yet, your Honor. If I may,
     we have some exhibits that -- there are some that are already
16
     in evidence and some that can go before the jury, and I'll
17
18
     advise the Court.
19
              THE COURT: Okay.
20
                     HENRY NIELDS, M.D., duly sworn
21
              THE CLERK: Have a seat. State your name, spell your
22
     last name for the record, keep your voice up and speak into the
23
     mic so everyone can hear you.
24
              THE WITNESS: So my name is Dr. Henry Nields. My last
25
     name is spelled N-I-E-L-D-S.
```

DIRECT EXAMINATION

2 BY MS. PELLEGRINI:

- 3 Q. Good morning, Dr. Nields.
- 4 A. Good morning.
- 5 Q. Can you tell the jury by whom you are employed?
- 6 A. By the Commonwealth of Massachusetts.
- 7 Q. In what capacity?
- 8 A. Presently as chief medical examiner.
- 9 Q. And before we go into what those duties entail, can you
- 10 give us, please, a brief explanation of your educational
- 11 background?
- 12 A. So I went to medical school at Boston University School of
- 13 Medicine. I did residency training in general pathology at
- 14 Beth Israel Hospital in Boston and Boston University Medical
- 15 | Center. And I did specialty training in forensic pathology at
- 16 the Office of the Chief Medical Examiner also in Boston.
- 17 Q. And the degrees that you currently hold include what?
- 18 A. Well, bachelor of science, M.D. and Ph.D.
- 19 Q. And with respect to your professional backgrounds, what
- 20 can you tell us about your licensure and certification?
- 21 A. I'm licensed -- I have medical licenses in the State of
- 22 New York and the Commonwealth of Massachusetts. I'm board
- 23 certified in anatomic and clinical pathology and forensic
- 24 pathology.
- 25 Q. Dr. Nields, as the chief medical examiner, what do your

duties entail?

- 2 A. Well, in addition to the general duties of a medical
- 3 examiner, I have some administrative responsibilities to
- 4 oversee the central office in Boston, and we have satellite
- 5 offices also in Worcester and on the Cape and Holyoke.
- 6 Q. And what exactly is the mission of the Office of the
- 7 Medical Examiner?
- 8 A. Well, it's to investigate sudden, violent, unexpected
- 9 deaths that occur in the Commonwealth of Massachusetts.
- 10 Q. And with respect to prior employment as either a deputy
- 11 chief or the chief medical examiner, what employment have you
- 12 had in that field?
- 13 A. I was a medical examiner in Massachusetts from 1995 until
- 14 | 1998, then I was a medical examiner in New York City from 1998
- 15 until 2006, and then a medical examiner back in Massachusetts
- 16 since July of 2006.
- 17 Q. And over the course of your employment, how many autopsies
- 18 have you performed?
- 19 A. I've performed approximately 4,700 autopsies.
- 20 Q. And is there a difference between an autopsy and a view?
- 21 A. Oh, we refer to views -- there are certain postmortem
- 22 examinations that we feel we can arrive at a reasonable
- 23 determination of cause and manner of death by performing only
- 24 an external examination of the body and usually drawing some
- 25 | samples of blood for toxicology testing. So that was what we

- 1 | would refer to as a view.
- Q. And with respect to a full autopsy, does that 4,600 [sic]
- 3 include the full autopsy number?
- 4 A. Yes.
- 5 Q. And have you previously testified as an expert?
- 6 A. Yes.
- 7 Q. In what courts?
- 8 A. In the courts of New York City, I believe all of the
- 9 counties in New York City, and multiple counties in
- 10 Massachusetts.
- 11 Q. Have you also testified previously as an expert in federal
- 12 court?
- 13 A. Yes.
- 14 | Q. And where was that?
- 15 A. New York City and Massachusetts.
- 16 Q. And, Dr. Nields, with respect to the protocols regarding
- an autopsy, we've now heard from several members of your
- 18 office. And is there a protocol for an autopsy procedure
- 19 within the Office of the Medical Examiner?
- 20 A. Yes.
- 21 | Q. And would it be fair to assume that you also follow those
- 22 procedures that we've previously heard?
- 23 A. Yes.
- Q. Dr. Nields, in your capacity, did you perform an autopsy
- 25 on Martin Richard on August 16, 2013?

- 1 A. On April the 16th.
- 2 Q. I'm sorry. April 16, 2013?
- 3 A. Yes.
- 4 Q. You remind me: Do you have your report in front of you?
- 5 A. Yes.
- 6 Q. And with respect to that autopsy -- and before you begin
- 7 the examination, did you make observations generally of Martin
- 8 Richard?
- 9 A. Yes.
- 10 Q. And tell us, please, what you observed.
- 11 A. Well, he was approximately 53 inches tall, approximately
- 12 69-and-a-half pounds, he was dressed in clothing.
- 13 Q. All right. Did you make observations of the clothing?
- 14 A. Yes.
- 15 Q. And prior to coming into court today, have you had
- 16 occasion to review and observe the clothing again?
- 17 | A. Yes.
- 18 MS. PELLEGRINI: Your Honor, if I may approach.
- 19 Q. Dr. Nields, I'm showing you what has been marked as
- 20 Government Exhibit 1592. Do you recognize this box?
- 21 A. This appears to be the same box that contains Martin
- 22 Richard's clothing that I examined a couple -- last week, I
- 23 believe it was.
- 24 Q. All right. I'm going to give you some gloves and this
- 25 | piece of paper. And before I move it from the box, I would ask

- $1 \mid$ you to look inside and tell me if, in fact, that is the same
- 2 clothing that you observed Martin Richard wearing before you
- 3 performed the autopsy in April of 2013?
- A. Yes. I don't see the sneakers.
- 5 Q. They're on the bottom.
- 6 A. Yes, I do.
- 7 Q. All right. Dr. Nields, I'm going to ask you to remain
- 8 standing, if I might, your Honor. Let me borrow the glove.
- 9 And, your Honor, the government would at this time
- 10 offer Exhibit 1592 and its contents.
- MR. BRUCK: No objection.
- 12 THE COURT: All right.
- 13 (Government Exhibit No. 1592 received into evidence.)
- 14 BY MS. PELLEGRINI:
- 15 Q. Dr. Nields, I'm going to show you what I've removed from
- 16 the box. And you're at a taller spot than I am so I'm going to
- ask you to describe what we're seeing here for the jury.
- 18 A. This is a long-sleeved jersey that Martin Richard was
- 19 wearing at the time that I did my examination. It shows some
- 20 tearing, principally of the left side of the body part of the
- 21 jersey. And it shows tearing -- pretty significant tearing of
- 22 the left sleeve of the jersey.
- 23 Q. If I may, Doctor, ask you, what are we looking at here?
- 24 A. This is a T-shirt that Martin Richard was also wearing.
- 25 You can see also the large defect on the left side of the

- 1 T-shirt in a similar location to where it was in the
- 2 long-sleeved jersey, and you can also see more clearly the
- 3 blood stains on the T-shirt that were also present on the
- 4 jersey. They're a little bit more difficult to see.
- 5 Q. And this item of clothing?
- 6 A. This was a jacket that he was wearing. Again, it shows a
- 7 large defect on the left side, and the defect, or shredding, of
- 8 the left sleeve. And there is also a blood stain as well.
- 9 Q. Doctor, I don't think we mentioned, on the green jersey,
- 10 the discoloration on that, what is that, do you know?
- 11 A. I think -- well, part of it is the blood stains that I was
- 12 referring to. Dried blood.
- 13 Q. This belt. Do you recall where this was on Martin's body?
- 14 A. That was around his left arm.
- 15 Q. And what was the purpose of that?
- 16 A. I believe likely it was placed there as a tourniquet.
- 17 | Q. And then finally, this item?
- 18 A. This is a pair of -- it was either shorts or pants. It
- 19 | was difficult to say because of all of the melted fabric that
- 20 occurred, but he was wearing these as well.
- 21 Q. Now, you mentioned shoes?
- 22 A. Yes.
- 23 Q. And are these, in fact, the shoes that Martin Richard was
- 24 wearing that day?
- 25 A. Yes.

- 1 Q. And all of these items were items he was wearing when he
- 2 came in. Is that correct?
- 3 A. Yes. Yes.
- 4 Q. Dr. Nields, after noting Martin's height and weight, did
- 5 you, in fact, perform the autopsy?
- 6 A. Yes.
- 7 Q. Starting first with his head and neck, what, if any, were
- 8 your significant findings?
- 9 A. Well, he had four abrasions to the left side of his face,
- 10 including the forehead. He had two abrasions to the right side
- of his forehead. He had an area of stippling around his left
- 12 ear and a little bit forwards of his left ear and a little
- 13 behind his left ear, and there was a skin perforation about
- 14 3/16ths of an inch in diameter behind his left ear. And there
- 15 | was another small abrasion on the lower part of the left side
- 16 of his neck.
- 17 Q. So "abrasion" is just another word for?
- 18 A. For "scrape."
- 19 Q. And with respect to the stippling of the face and the
- 20 | scalp that you noted, what can you tell us about that? What do
- 21 you mean?
- 22 A. Stippling is something that is caused by essentially
- 23 pinpoint abrasions to the skin that are caused by the impact of
- 24 gunpowder particles against the skin.
- 25 Q. And with respect to your examination of his torso, what

- 1 were your significant findings there?
- 2 A. He had three small abrasions to his right upper chest, and
- 3 he had an approximately 6-by-6 inch open jagged-edge laceration
- 4 to the left the side of his abdomen with evisceration of
- 5 several loops of small intestine.
- 6 Q. Doctor, can I stop you there? "Evisceration" means what?
- 7 A. It means essentially that an organ that is normally within
- 8 the body is outside of the body.
- 9 Q. And what part of Martin Richard was outside his body?
- 10 A. There were several loops of small intestine.
- 11 Q. I'm sorry. I interrupted you. Go ahead.
- 12 A. There was another approximately 4-1/2 inch by 2-1/4 inch
- open jagged laceration to the right side of his abdomen that
- 14 exposed areas of his liver, and two underlying rib fractures of
- 15 the sixth and seventh ribs. And there were two smaller
- 16 lacerations just to the right of that, on the right side of the
- 17 abdomen.
- 18 Q. Were there any further observations that you made?
- 19 A. Yes. Internally there were lacerations of the liver, of
- 20 the left kidney. There were lacerations of the capsule, or
- 21 surface of the spleen; there was transection or essentially --
- 22 it's just another word for cutting off a piece of the left side
- 23 of the liver; there was transection of a portion of the tail of
- 24 the pancreas; there was transection of the left side of the
- 25 | large intestine; there was near complete transection of the

- 1 abdominal aorta.
- 2 Q. Again, can I stop you there and ask you to explain what
- 3 exactly that means.

- A. With what, the --
- 5 Q. Transection of the abdominal aorta.
- 6 A. It means that -- the aorta is a major blood vessel that
- 7 brings blood from the heart to the organs of the body, and the
- 8 abdominal organ is just the main part of the aorta as it
- 9 travels through the abdominal cavity. And the near transection
- 10 again means most of it was cut in half. Not completely cut in
- 11 half, but most of it was -- was essentially transected.
- 12 In addition, there was a rupture of the fundus, or body of
- 13 the stomach. He had shredding of his left adrenal gland; he
- 14 | had partial shredding of the left hemidiaphragm, which is --
- 15 the diaphragm is a layer of muscle that separates the abdominal
- 16 cavity from the chest cavity. He had contusions of the lower
- 17 lobe of his right lung as well.
- 18 Q. Did you make any observations of any thermal injuries to
- 19 his --
- 20 A. Actually, I'm sorry. If I could just --
- 21 Q. Yes, sir.
- 22 A. -- add as well that there was also -- there was a
- 23 perforating injury of his lower thoracic spine. There was a
- 24 perforation through one of -- the left side of his vertebral
- 25 | body, T-11, which -- and, in turn, perforated through a portion

- 1 of the underlying spinal cord, thoracic spinal cord. And then
- 2 that fragment exited his back, just to the left of the midline
- 3 of his back.
- 4 Q. So according to your examination, there was a piece that
- 5 entered his body and exited?
- 6 A. Yes.
- 7 Q. And could you tell from the autopsy where the entry was?
- 8 A. It would be difficult to say the exact location given the
- 9 size of the openings in the abdomen. Most likely, from the
- 10 left side, but it would be hard to say exactly.
- 11 Q. And the exit?
- 12 A. The exit was in the back, just to the left of the midline.
- 13 Q. And you mentioned then the perforation of the -- is it the
- 14 | spine and spinal cord?
- 15 A. Yeah. Well, with a spine, we generally refer to as the
- 16 whole -- the vertebral column and the spinal cord. So both
- of -- one of the bones of the vertebral column -- or vertebral
- 18 | body, T-11, specifically, and the underlying spinal cord that
- 19 runs within that column were perforated on the left side.
- 20 Q. And any further observations with respect to his torso,
- 21 either front or back?
- 22 A. Well, on the back there were two relatively small
- 23 contusions or bruises to the left side of his back. There was
- 24 an abrasion to the mid lower back, another contusion to the
- 25 | lower right back; there were three abrasions to his left

- 1 buttock; there were two small thermal injuries to his left
- 2 buttock and an abraded contusion, which is just essentially an
- 3 abrasion and a contusion in the same location, also to the
- 4 right buttock.
- 5 O. And, Dr. Nields, when we say "thermal injuries," what are
- 6 we talking about in layman's terms?
- 7 A. Aburn.
- 8 Q. A burn?
- 9 A. Yes.
- 10 Q. Was there a degree of burn that you were able to
- 11 ascertain?
- 12 A. I believe a third-degree burn.
- 13 0. Is that the most severe?
- 14 A. It's not the most severe. There can be fourth-degree
- 15 burns. A third-degree burn is a serious burn, however.
- 16 Q. And, Dr. Nields, with respect to other observations of any
- 17 | foreign matter in your examination of the torso, what, if
- 18 anything, did you observe?
- 19 A. There's a small nail in the right chest cavity, a small
- 20 metal pellet in the abdominal cavity, and some small fragments
- 21 of wood also in the right chest cavity.
- 22 Q. Before we go on, is there any other observations you made
- 23 of the torso area that you can recall?
- 24 A. Not that I can recall, no.
- 25 Q. With respect to the extremities, the arms and the legs,

what observations did you make?

- There was an abraded contusion to the ventral, or inner 2 part of his right forearm, and a laceration also to the distal part of his forearm and wrist; there were five contusions to the back of his left arm and an abraded contusion to the back of his left arm; there was a near transection of his left 7 forearm; there was a fragment of skin -- a strip of skin approximately -- and soft tissue approximately an inch wide that was connecting the two pieces of the forearm together; 10 there was complete transection of the radius and the ulna,
- 12 That means a complete severing?
- 13 Α. Yes.

1

5

8

11

- 14 Q. Okay.
- There was stippling, again, on the back of his left hand, 15
- some abrasions on the back of his left hand and then a 16
- contusion on the back of his left hand. And I isolated or 17

which are the two bones that run through the forearm.

- retrieved two small nails also from the soft tissue of his left 18
- 19 wrist.
- 20 Dr. Nields, with respect to his left arm that you just
- described, is that where you observed the belt being used as a 21
- 22 tourniquet?
- 23 Excuse me. Yes. Well, up higher, on the upper arm, yes. Α.
- 24 Q. On the arm?
- 25 Α. Yes.

- Q. And were there any other observations that you made with respect to the extremities?
- 3 Α. To the lower extremities, there was an area of stippling on the lateral part, which is the side, outer part, 5 of the left calf and the -- and a portion of the -- the lower portion of the left thigh. And within that broad area there 7 were several other injuries to include a laceration to his left thigh, some abrasions to the left leg, a perforation of the 8 skin of the left calf. There were two lacerations around the 9 10 left -- the lateral part of the left ankle area; there was an 11 area of charring to the skin also just above the left ankle, and there was fracture of the distal head, or lower part of the 12 13 left fibula, which is -- it's a bone that is -- it's a smaller 14 bone that runs next to your main shin bone, or tibia. And so -- and associated with that fracture were multiple fragments 15 of this black plastic that was embedded in the soft tissue and 16 in the bone. 17

There was third-degree thermal injury to the lateral part -- and posterior part of his left calf and extending up a portion of the posterior part of his left thigh as well.

Q. And on his hands?

18

19

20

21

- A. Again, with regard to the left hand, there was stippling
 on the back of his left hand, abrasions on the back of his left
 hand and a contusion to the back of his left hand.
 - Q. Dr. Nields, with respect to your examination of Martin

- 1 Richard's head and neck, his torso, front and back, his
- 2 extremities, arms and legs, front and back, was there any
- 3 portion of his body that did not have either a contusion, an
- 4 abrasion or a laceration or a transection or a broken bone?
- 5 A. Well, all of those areas had injuries.
- 6 Q. And with respect to the items that you removed from Martin
- 7 Richard's body, tell us a little bit more about that. What
- 8 type of items did you remove?
- 9 A. Well, there were small nails; there were round, metal -- a
- 10 pellet; and there were small fragments of wood and there were
- 11 fragments of black plastic; and there was a fragment of metal
- 12 but that was actually not in the body, that was in the
- 13 clothing, or underneath the T-shirt.
- 14 Q. And underneath the T-shirt, did that small metal
- 15 | fragment -- was that consistent with the exit wound that you
- 16 saw on Martin Richard's back?
- 17 | A. Yes.
- 18 Q. In shape and in size?
- 19 A. Yes.
- 20 MS. PELLEGRINI: Just for the witness, your Honor, at
- 21 this time, can we have --
- 22 | Q. Well, actually, Dr. Nields, did you have photographs taken
- 23 of the items, the foreign matter that you observed during the
- 24 | course of your autopsy?
- 25 A. Yes.

- 1 Q. And have you had occasion to review those photographs
- before you came into court today?
- 3 A. Yes.
- $4 \mid Q$. All right.
- 5 MS. PELLEGRINI: For the witness, please, your Honor,
- 6 may I have starting with Exhibit 648.
- 7 Q. Dr. Nields, do you recognize this photograph, or these
- 8 items?
- 9 A. Yes. These are the nails that I was referring to. I'm
- 10 not sure if these are the ones that came out of the --
- 11 Q. I'll get there in just a sec.
- 12 A. Okay. Sorry.
- 13 Q. Okay.
- 14 MS. PELLEGRINI: May I have 649 just for the witness
- 15 again, please?
- 16 Q. Do you recognize these items?
- 17 A. These actually, I believe, are items that were recovered
- 18 from the body bag at the time of the autopsy.
- 19 Q. And 650. Do you recognize this item?
- 20 A. You know, that's consistent with the metal fragment that I
- 21 found underneath the T-shirt.
- 22 Q. And 651?
- 23 A. Those are metal pellets also consistent with the ones that
- 24 | were removed from his body. I believe these were more than
- 25 likely removed from the body bag.

```
1
              MS. PELLEGRINI: Your Honor, I would offer now Exhibit
     648, 649, 650 and 651.
 2
 3
              MR. BRUCK: No objection.
              THE COURT: Okay.
 4
 5
              (Government Exhibit Nos. 648, 649, 650 and 651
     received into evidence.)
 6
 7
     BY MS. PELLEGRINI:
 8
        With respect to Exhibit 648 --
     Q.
 9
              MS. PELLEGRINI: May I have that on the screen,
10
     please, Mr. Bruemmer?
11
              May I approach, your Honor? And if I may stand here
     for a little bit.
12
13
          Dr. Nields, to make this a little bit easier now, showing
     Ο.
14
     you what's been marked for identification as Government Exhibit
15
     648-A, do you recognize this item and the markings?
          Yes. The markings certainly.
16
          They've already been opened prior to coming in today so
17
18
     you can remove them if you wish.
19
              (Pause.)
20
          These are nails similar to the ones found in the --
21
          You have to speak into the microphone.
22
     Α.
          I'm sorry. These are the small nails that -- some of
     which were embedded in the soft tissue of his left wrist.
23
24
          All right. And these are -- in fact, the items that are
25
     here are very small. And are these, in fact, the same items
```

- 1 that appear on the screen in Exhibit 648?
- 2 A. They certainly appear to be.
- 3 Q. And while I'm putting these away, I'm going to ask you to
- 4 look at --
- 5 MS. PELLEGRINI: May I have brought up, please, 649.
- 6 Q. And I'm not going to ask you to open that because it's a
- 7 little bit messy, but I'd ask you from looking at the outside
- 8 of that if that is, in fact, the items that we see here on the
- 9 screen.
- 10 A. It certainly is consistent with that.
- 11 Q. Do you need to open it to determine whether or not they
- 12 are the same as what you removed during the autopsy?
- 13 A. The way I would identify them as being the same is if
- 14 they're in these envelopes that I seal myself and label myself.
- 15 They're actually outside of the envelopes now, so the best I
- 16 can do is say that they're certainly consistent with that.
- 17 Q. Okay. But there are envelopes within here that have the
- 18 Office of the Medical Examiner notification in there -- or
- 19 notation in there, correct?
- 20 A. Yes. Yes.
- 21 Q. All right. And what type of items are we looking at here
- 22 at 649?
- 23 A. Well, the fragments of wood, the fragments of Styrofoam,
- 24 some fragments of cloth. I see at least one nail and fragments
- 25 of what appears to be the black plastic consistent with the

- same fragments of black plastic that I removed from Martin Richard.
- 3 Q. Dr. Nields, this screen is actually interactive if you
- 4 touch it. So the item that you were just referring to is the
- 5 items of black plastic. You can draw a circle, you can point
- 6 an arrow, if you just touch the pad of your finger to the
- 7 screen.
- 8 A. I believe it's these.
- 9 Q. Yup.
- 10 A. And these as well.
- 11 Q. So you've drawn a -- I can't really call it a circle, but
- 12 surrounding items slightly to the left of the center that are
- 13 | small grayish in color or black in color. Is that correct?
- 14 A. Yes.
- 15 Q. Dr. Nields, directing your attention to this little item
- 16 here, do you know what that is?
- 17 A. I do not.
- 18 Q. All right. Do you know where that was recovered from?
- 19 A. I don't know just from looking at this screen.
- 20 Q. All right.
- MS. PELLEGRINI: And may I have Exhibit 650, please.
- 22 Q. All right. I'm going to show you now what has been marked
- 23 for identification as Exhibit 650-A, and ask you if you
- 24 recognize, first, the envelope that is in?
- 25 A. Yes.

1 And ask you if you can open that? (Witness complies.) 2 Α. And, Dr. Nields, now that you have removed that from the 3 Q. envelope, which does have the identification of the Office of 5 the Medical Examiner, correct? Α. Yes. 7 Is that, in fact, the same piece that you found within Martin Richard's clothing during the course of the autopsy? 8 9 Α. Yes. 10 And is this the piece that you indicated was consistent with the exit wound on his back? 11 12 Α. Yes. 13 MS. PELLEGRINI: And if I may, your Honor, it being 14 very small, and although there's a picture, if I may exhibit 15 this to the jury, I would offer this now as Exhibit 650-A. MR. BRUCK: No objection. 16 THE COURT: All right. 17 (Government Exhibit No. 650A received into evidence.) 18 19 (Government Exhibit No. 650A displayed to the jury.) 20 MS. PELLEGRINI: And may I have Exhibit 651 up, 21 please, Mr. Bruemmer? 22 BY MS. PELLEGRINI: 23 And, Dr. Nields, showing you what I've marked for 24 identification as 651-A, which are now out of the little

envelope inside, are these, in fact, the same small metal

- 1 pellets that you observed during the course of the autopsy?
- 2 A. Yeah, they're certainly consistent with that. Yes.
- MS. PELLEGRINI: Your Honor, at this time to the
- 4 extent I haven't already done so, the government would offer
- 5 648-A, 649-A, I think -- I believe I offered 650, and 651-A.
- 6 MR. BRUCK: No objection.
- 7 THE COURT: All right. Those are admitted.
- 8 (Government Exhibit Nos. 648-A, 649-A and 651-A,
- 9 received into evidence.)
- 10 BY MS. PELLEGRINI:
- 11 Q. Dr. Nields, as a result of your autopsy, did you make
- 12 a -- did you come to a conclusion regarding the cause and the
- 13 manner of death of Martin Richard?
- 14 A. Yes.
- 15 Q. What were they?
- 16 A. Cause of death was blast injuries of torso and
- 17 extremities, the manner of death was homicide.
- 18 Q. Now, when you say the cause of death was blast injuries,
- 19 how did Martin Richard die?
- 20 A. Essentially from hypo- -- principally from hypovolemic
- 21 shock, or loss of blood.
- 22 Q. Loss of blood?
- 23 A. Yes.
- 24 Q. And with respect to the transection of the abdominal aorta
- 25 that you mentioned, would that have been a cause of the loss of

blood?

- 2 A. Yes.
- 3 Q. With respect to the transection of the pancreas and the
- 4 perforation of the spine and spinal cord and the transection of
- 5 the large bowel, would that have been a cause of death?
- 6 A. That certainly was part of the overall cause of death.
- 7 Q. Dr. Nields, starting first with some of the injuries that
- 8 you have explained to us, for example, the rupture of the
- 9 stomach and the transection of the large bowel, would that be
- 10 painful?
- 11 A. I believe that overall the injuries would have been
- 12 painful. The injury to the stomach and the intestine are a
- 13 little harder because the pain receptors in those organs are a
- 14 | little different from other organs. But I would say that
- 15 overall the injuries to his body would have been painful.
- 16 Q. With respect to the thermal burns and the contusions and
- 17 the lacerations, would those have been painful?
- 18 A. Yes.
- 19 Q. The fractured ribs, would those have been painful?
- 20 A. Yes.
- 21 Q. The injury to his left arm and the transection of the
- 22 | bones there, would that have been painful?
- 23 A. Yes.
- 24 Q. Dr. Nields, during the course of the autopsy did you, in
- 25 | fact, take photographs of the injuries that you have just told

- 1 us about here today?
- 2 A. Photographs were taken.
- 3 MS. PELLEGRINI: I would ask that the screens be --
- 4 THE COURT: All right. We'll prepare the screens.
- 5 (Pause.)
- 6 MS. PELLEGRINI: Just for the witness.
- 7 BY MS. PELLEGRINI:
- 8 Q. Dr. Nields, have you had occasion to review the
- 9 photographs -- some of the photographs of the autopsy prior to
- 10 your testifying this morning?
- 11 A. Yes.
- MS. PELLEGRINI: May I please have for the witness
- 13 only Exhibit 639 marked for identification.
- 14 Q. Dr. Nields, do you recognize this photo?
- 15 A. Yes.
- 16 Q. And what are we seeing here, just generally, please,
- 17 first?
- 18 A. It's a photograph of Martin Richard at the time of
- 19 autopsy.
- 20 MS. PELLEGRINI: May I also have Exhibit 638 for the
- 21 witness only.
- 22 Q. And this second photo, what does it show us?
- 23 A. This is also a picture of Martin Richard at the time of
- 24 the autopsy.
- 25 Q. Now, 639 shows you from the front. Is that correct?

```
1
          The previous one was from the front, yes. This is from
     the back.
 2
          This is from the back?
     Ο.
          And do both of these photographs fairly and accurately
 4
 5
     depict the condition of Martin Richard's body at the time of
     autopsy?
 7
     Α.
        Yes.
 8
              MS. PELLEGRINI: Your Honor, the government would move
 9
     these in and ask to publish them to the jury starting with
     Exhibit 638 first.
10
11
              MR. BRUCK: Your Honor --
              THE COURT: Subject to prior rulings, admitted.
12
              (Government Exhibit Nos. 638 and 639 received into
13
14
     evidence.)
15
              THE COURT: Starting with 638?
              MS. PELLEGRINI: Yes, please.
16
              And, your Honor, if I may approach because I find this
17
18
     difficult to see at an angle.
19
     BY MS. PELLEGRINI:
20
          Dr. Nields, with respect to the photograph that we see
21
     here now, can you tell us what we're looking at with respect to
22
     the injuries that you observed on Martin Richard?
23
         Well, looking at his back -- shall I point to any of them?
     Α.
24
         You can point and you can -- again, you can touch the
25
     screen.
```

A. This here...

- 2 | Q. The pad of the finger is best.
- 3 A. Sorry. I just circled, that's the perforation of the
- 4 metal fragment as it came out of his back on the left side.
- 5 These -- this area here on the back of his left leg is the area
- 6 of third-degree burn or thermal injury that I observed.
- 7 There's another area that's a little harder to make out because
- 8 it was more lateral, but this is also in the area of thermal
- 9 injury on the back of the right -- of his right leg.
- 10 We have two contusions to his left -- whoops. I
- just -- I'm sorry -- the left side of his back here and there.
- 12 There's an abrasion there, another small contusion here. This
- 13 is the abraded contusion to his right buttock here, this is one
- 14 of the thermal injuries to his left buttock there. The
- 15 abrasions to his left buttock are small.
- 16 Q. Before I clear -- and I'd just like to have this for the
- 17 record, so when you were talking first -- the first circle that
- 18 you drew was around -- what almost looks to be like a
- 19 crescent-shaped area of -- towards the middle of the back?
- 20 A. Yes.
- 21 Q. Is that correct?
- 22 A. Yes.
- 23 Q. And then you have four areas below that which you indicate
- 24 were abrasions?
- 25 A. These two on the left -- the two on the left were small

contusions --

- 2 Q. Contusions?
- A. -- the one that's smaller to the middle is an abrasion,
- 4 and the one on his lower right back was a small contusion.
- 5 Q. And again for the record, with the larger circle that you
- 6 drew on the leg, that is what area again?
- 7 A. That's the back of his left leg including much of the
- 8 calf, back of the knee and a portion of the back of his left
- 9 thigh.
- 10 Q. All right. And I'm just going to clear this for the
- 11 moment.
- 12 Dr. Nields, with respect to what we see here -- I've made
- 13 a circle here -- what are we looking at? I've made a circle on
- 14 the left side, the body being on the side. And right
- 15 underneath, what are we looking at here?
- 16 A. Well, within that circle you can see the two small
- 17 contusions to the left side of his back, and underneath the
- 18 arrow is where the abrasion is to his mid-back.
- 19 Q. Okay. And right above what appears to be the ruler, this
- 20 portion of the body?
- 21 A. Those are small -- loops of small intestine that were
- 22 | extruding from that open laceration on the left side of his
- abdomen.
- 24 Q. And moving down on the leg, these darker areas that appear
- 25 | just above the ankle, little arrows here, what are those?

- 1 A. It's difficult to see on the back. He had -- he had
- 2 perforations to the back or the medial aspect of his right
- 3 calf. It's just a little difficult to see in this posterior
- 4 photograph exactly which is which.
- 5 O. And, Dr. Nields, I want to go back to -- I'll clear this
- 6 again -- back to the perforation in the middle of the back to
- 7 indicate it was consistent with the metal fragment?
- 8 A. Yes.
- 9 Q. All right. And you said you couldn't tell because of the
- 10 nature of the wounds to the front, basically an entry wound?
- 11 A. Right.
- 12 Q. Could you tell a path of travel?
- 13 A. Well, only that it passed through the lateral part of his
- 14 lower vertebral column through the lateral part of vertebral
- 15 | body T-11 through the spinal -- unaligned spinal cord within
- 16 that spinal canal, that level, and then, of course, exited the
- 17 back where you see there.
- 18 Q. So that metal piece, 650, would have been responsible for
- 19 the transection of the spinal cord?
- 20 A. It was actually a partial transection of the spinal cord.
- 21 Q. Partial?
- 22 A. Yes.
- 23 Q. But that path of travel would have traveled across the
- 24 spinal cord?
- 25 A. Yes.

- 1 Q. Okay.
- MS. PELLEGRINI: May we have Exhibit 639, please.
- 3 Q. Dr. Nields, can you explain to the jury what we are
- 4 looking at here?
- 5 A. You can see the jagged laceration to the left side of his
- 6 abdomen here. The soft tissue protruding from that open
- 7 | laceration is the loops of small bowel that I referred to
- 8 previously. The other open laceration, the 4-1/2-by-2-1/4 inch
- 9 laceration, to the right side is what I just circled there.
- 10 And you can't make out the -- you can almost make out one of
- 11 the small lacerations just lateral to that. There are two that
- 12 are lateral to that laceration on the right side.
- This is the near transection of his left forearm, and this
- 14 here is that --
- 15 Q. Actually, I'm going to --
- 16 A. I don't know how to make an arrow but essentially --
- 17 Q. I'm going to ask Mr. Bruemmer if he can --
- 18 MS. PELLEGRINI: With the section that Dr. Nields has
- 19 circled on the arm, Mr. Bruemmer, are you able to enlarge that
- 20 | section, please?
- 21 Q. What are we looking at here, Dr. Nields?
- 22 A. So this is a near transection of his left forearm. And
- 23 you can see the strip of skin and soft tissue to which I
- 24 referred to earlier, that it is essentially holding the two
- 25 | sections together. You can see little dots on the back of his

- 1 left hand which are the areas of stippling, and there are
- 2 abrasions, or scrapes as well, and a single contusion also to
- 3 the back of his left hand.
- 4 Q. And the tourniquet that you described that the belt was
- 5 used for, where would that have been with respect to his
- 6 injury?
- 7 A. It's approximately up here. It's in the upper part of his
- 8 arm, above the elbow.
- 9 Q. And you're indicating that the strip of skin that
- 10 basically is holding these two pieces together is approximately
- 11 how big?
- 12 A. It's approximately an inch wide.
- 13 Q. And what are we looking at here, this section that I am
- 14 | now trying to circle?
- 15 A. Well, you're looking at fragments of soft tissue. And
- this is actually the end of one of the bones. I'm not 100
- 17 percent sure if that's the radius -- particularly in this view,
- 18 if that's the radius or the ulna, but it's one of the bones
- 19 that was transected.
- MS. PELLEGRINI: Can we go back, Mr. Bruemmer? And
- 21 can we have a focus on the left side, please, on the leg.
- 22 Q. And can you describe for us what we're looking at here?
- 23 A. Well, you can see these -- the little -- some are red and
- 24 | some are black dots, small pinpoint abrasions. That's the
- 25 stippling. Here I'm circling -- what I'm circling now is what

```
1
     was within that stippling, was the laceration to his thigh.
    mean, it also -- that circle also encompasses some of the
 2
     abrasions that were also present. And this here, I'm circling
 3
     now, is just the area -- includes that area of third-degree
 5
    burn to the lateral part of his calf, and actually, the side of
    his knee as well.
 7
         And his other leg?
     Ο.
          On the other leg, again, you'll see some red/some black
 8
     Α.
     pinpoint abrasions, or the stippling. That's the stippling on
10
     the calf. Then you'll also see larger -- I'll just draw a
11
     circle around some of them. There are some larger and
     some -- I'm sorry for not using this correctly. Some of the
12
13
     larger and more irregular defects in the skin. Those
14
     were -- there were at least nine I counted in the calf of these
15
     skin -- perforations of the skin. And there, again, were
    multiple fragments of black plastic that were removed from the
16
     soft tissue of his calf as well.
17
18
          Thank you, Dr. Nields.
     Q.
19
          Dr. Nields, did you also have occasion to review
20
     photographs of the Boylston Street scene after the bombing?
21
     Α.
          Yes.
22
     Q.
         All right.
23
              MS. PELLEGRINI: This can go back up, your Honor,
24
    because I'm going to ask that Exhibit 24, already in evidence,
25
    be shown.
```

```
1
              (Pause.)
        Dr. Nields, looking at the image on the screen in front of
 2
 3
     you --
              THE COURT: I just want to be sure we're all set.
 4
 5
              (Pause.)
 6
              THE COURT: All right. Exhibit 24 is now exhibited.
 7
              THE WITNESS: It's not on my screen but -- oh, there
 8
    we go.
     BY MS. PELLEGRINI:
10
        All right. Dr. Nields, looking at this exhibit, and
11
    particularly the area --
12
              MS. PELLEGRINI: Actually, can we go back,
13
    Mr. Bruemmer, to the large area?
14
     Q. -- that I'm enlarging here, do you see the debris on the
     sidewalk and the street?
15
16
    A. Yes.
        And do you also see a tree to the right-hand side of the
17
18
    screen?
19
    A. Yes.
20
         All right. And with respect to the items that you located
     and recovered during the autopsy of Martin Richard, is this
21
22
    scene consistent with what you observed during the course of
23
    your autopsy?
24
     A. It would be consistent with that.
25
     Q.
         Thank you.
```

```
Dr. Nields, during the course of an autopsy, do you obtain
 1
 2
     other identifying information about the individual upon whom
     you're performing the autopsy?
 3
          I'm not sure what you mean.
     Α.
 5
     Q.
          Do you obtain the age of the individual?
     Α.
         Yes.
 7
         How old was Martin Richard at the time you performed the
     Ο.
 8
     autopsy?
 9
          He was eight years old.
10
     Q.
         I'm sorry?
11
     A. He was eight years old.
              MS. PELLEGRINI: May I have a minute?
12
              (Counsel confer off the record.)
13
14
              MS. PELLEGRINI: I have nothing further, Dr. Nields.
15
     Thank you very much.
              MR. BRUCK: Thank you, Dr. Nields. We have no
16
     questions.
17
18
              THE COURT: All right. Thank you, sir. You may step
19
     down.
20
              THE WITNESS: Thank you.
21
              (The witness is excused.)
22
              MR. WEINREB: The government rests.
23
              THE COURT: Mr. Weinreb's announcement that the
24
     government rests completes the government's presentation of
25
     evidence in this part of the case. We'll take a short recess.
```

```
1
              Let me just emphasize for you again, as I have
     repeatedly, that you are not to discuss any of the evidence in
 2
     the case or make up your mind about any of the issues until
 3
     you've heard all the evidence in the case and until you've
 5
     heard my instructions about the principles of law. And there
     may be, obviously, some temptation to talk about things, but we
 7
     ask you to please resist it. The time will come and it is not
     now, okay? We'll take a short recess.
 8
 9
              THE CLERK: All rise for the Court and the jury. The
10
     Court will take a short recess.
              (The Court and jury exit the courtroom and there is a
11
     recess in the proceedings at 12:06 p.m.)
12
13
              THE CLERK: All rise for the Court.
14
              (The Court enters the courtroom at 12:27 p.m.)
15
              THE CLERK: Be seated.
16
              THE COURT: Let me see counsel briefly at the side.
17
              (Discussion at sidebar and out of the hearing of the
     public:)
18
19
              THE COURT: I have a motion from the defendant.
              MR. BRUCK: One quick matter before we take that up,
20
21
     your Honor, and that is to put on the record that with respect
22
     to Exhibit 639, to which we earlier objected, that was a front
23
     view of the little Richard boy, the record should reflect that
24
     the arm was greatly magnified and expanded when it was viewed,
25
     which we think increased the prejudicial effect. There was no
```

```
1
     ability to object to it since it was in evidence and the
 2
     government had the right -- and that was implicit in the
     decision admitting it -- but I think the record should reflect
 3
 4
     what the jury saw, was a close-up that was very graphic --
 5
              MR. WEINREB: I would dispute that the defense had no
 6
     opportunity to object. They could have just stood up and
 7
     objected but they chose not to.
 8
              THE COURT: Okay. Both points are noted.
              I have the motion. Under Rule 29(b), I reserve.
 9
10
              MS. CONRAD: We're filing electronically on that, your
11
     Honor, but we wanted to make sure we made the motion.
12
              THE COURT: It raises some interesting legal points
13
     and I'll hear from the government on it before I rule, but
14
     under Rule 29(b), I reserve.
15
              MS. CONRAD: On a housekeeping matter, I was going to
     re-call Agent Gamble at this point.
16
17
              THE COURT: It won't be too long?
18
              MS. CONRAD: I assume she's in the vicinity. It won't
19
    be too long. And I had asked the government to produce one of
20
     the items that -- I don't know what the status of that is now.
21
              MR. CHAKRAVARTY: They're going to grab it now.
22
              MS. CONRAD: Well, the question is how long it will
23
     take to get it here. I thought it was here earlier.
24
              THE COURT: Is it in the building?
25
              MR. CHAKRAVARTY: It is in the building. I just sent
```

```
1
     somebody up to get it.
 2
              THE COURT: So we'll probably do her and then break
     for lunch. And then what else? You have a cell phone person
 3
     or something?
 4
 5
              MS. CONRAD: Yes.
 6
              THE COURT: Cell tower.
 7
              MS. CONRAD: That's Mr. Watkins.
 8
              THE COURT: Then?
 9
              MS. CONRAD: It partly depends on the government's
10
     [sic] rulings on a number of pleadings.
11
              MS. CLARKE: I'm looking forward to a stipulation
12
     regarding fingerprint evidence to avoid having the fingerprint
13
     examiner from Washington, D.C. And I don't think we've reached
14
     a conclusion on that. It's sitting with Mr. Weinreb right now.
15
              THE COURT: What I want to know is will there be
     evidence tomorrow.
16
              MR. WEINREB: I think a lot of that depends on the
17
18
    motion in limine that the government filed.
19
              THE COURT: Right. So I think what we should do is do
20
     the two witnesses that were identified, let the jury go for the
     day, and then we can confer. But letting the jury go for the
21
22
     day, we'll instruct them to return tomorrow.
23
              MS. CONRAD: Okay.
24
              MS. CLARKE: Okay.
25
              MR. WEINREB: Okay.
```

```
1
              (In open court:)
              THE COURT: All right. You can get the jury.
 2
 3
              THE CLERK: All rise for the jury.
              (The jury enters the courtroom at 12:30 p.m.)
 4
 5
              THE CLERK: Be seated.
 6
              MS. CONRAD: Your Honor, at this time the defense
 7
     re-calls Agent Michelle Gamble.
 8
              THE COURT: Agent Gamble, of course you remain under
 9
     oath from this morning's testimony.
10
              THE WITNESS: Okay.
11
                        MICHELLE GAMBLE, re-called
12
                            DIRECT EXAMINATION
13
    BY MS. CONRAD:
14
     Q.
        Good afternoon.
15
     Α.
         Good afternoon.
         Agent Gamble, we heard from you a little bit earlier
16
     today. And you work for the FBI, correct?
17
18
     Α.
          I do.
19
          And as part of your responsibility in this case, did you
20
     participate in the search of 410 Norfolk Street on May 5, 2013?
21
          I did, yes.
     Α.
22
          And were you, in fact, the designated photographer for
     that, or one of the designated photographers?
23
24
     Α.
          I was the designated photographer, yes.
25
     Q.
         And during the course of that search -- I'm going to show
```

```
1
     you a photograph --
             MS. CONRAD: Just for the witness using the ELMO.
 2
         -- and ask you if you recognize that item.
 3
    A. I do not.
 5
     Q.
        You do not?
 6
    A. Nope.
 7
     Q. Okay.
 8
             MS. CONRAD: Mr. Watkins, could I please have Exhibit
     3132 for the witness only, please.
10
              THE COURT: Do you want the computer?
11
    BY MS. CONRAD:
         Now, are you familiar with this document?
12
13
    Α.
         I am.
     Q. And what is that document?
14
         It's an evidence recovery book.
15
    Α.
     Q. And drawing your attention to the last line, can you tell
16
    us what that says?
17
18
    A. Can you zoom in a little bit more?
19
             MS. CONRAD: Mr. Watkins, can you zoom in a little
20
    more?
21
             THE COURT: I couldn't hear the answer. I didn't hear
22
    the answer.
23
             MS. CONRAD: She asked if I could zoom in a little
24
    more.
25
             MR. CHAKRAVARTY: Your Honor, I would object to her
```

```
1
     reading from this. She can certainly look at it to refresh her
 2
    memory.
 3
             THE COURT: Let's back up a bit.
             THE WITNESS: It says "Wiring Book. Complete Book of
 4
 5
    Home Wiring."
             THE COURT: No, that's all right. That may stand.
             Go ahead. Next question.
 7
 8
    BY MS. CONRAD:
     Q. And was that an item that was seized on that day at that
    search?
10
11
    A. If it's on there, yes.
     O. And does that have a number in front of it?
12
    A. It's G28.
13
14
             MS. CONRAD: And may I approach the witness, your
15
    Honor?
       Do you recognize that?
16
     Q.
17
    Α.
        Yes.
    Q. And what is it?
18
19
    A. It's the evidence bag that the -- appears the book was in.
20
     Q.
         And when you say "the book," what book?
21
    A. It says a wiring book.
22
     Q.
         Okay.
23
             MS. CONRAD: I'd offer that.
24
             MR. CHAKRAVARTY: Your Honor, there hasn't been
     sufficient foundation.
25
```

```
1
              MS. CONRAD: I'm sorry.
              THE COURT: No, overruled. It may be admitted.
 2
              What's the number?
 3
              THE CLERK: You left off with 3132 in evidence.
 4
 5
              THE COURT: No, higher than that, I think.
 6
              MS. CONRAD: I would suggest 3150, maybe? I may have
 7
     skipped over --
 8
              THE COURT: I have a 3146 as a high number but --
 9
              MS. CONRAD: So 3147?
10
              THE COURT: If that hasn't otherwise been used.
              MS. CONRAD: 3148?
11
12
              THE COURT: Okay.
13
              MR. WATKINS: Mr. Watkins says no.
14
              MS. CONRAD: I would suggest 3150 just to be safe.
15
              THE COURT: Okay.
              (Defense Exhibit No. 3150 received into evidence.)
16
    BY MS. CONRAD:
17
18
         And I'd ask you to open that up, okay?
19
              (Pause.)
20
          And showing you again what's here on the ELMO, is that, in
     fact, a picture of that?
21
22
     Α.
          That appears to be a picture of this, yes.
23
              MS. CONRAD: I would offer the photograph as well as
     3151.
24
25
              THE COURT: And does it have a number? Does the
```

```
1
     photograph have a number?
 2
              MS. CONRAD: I just said 3151, if that's okay.
 3
              THE COURT: Okay.
              (Defense Exhibit No. 3151 received into evidence.)
 4
 5
    BY MS. CONRAD:
         And, Agent Gamble, do you know where that item was found?
 7
         I do not.
     Α.
         Looking at the -- looking at the envelope --
     Q.
         "Under the couch," it says "room," but the room number is
    cut off.
10
11
        And if I could direct your attention back to the evidence
12
     log --
13
             MS. CONRAD: We need to switch back to Mr. Watkins'
14
    computer.
15
     Q. -- does that refresh your recollection as to where it was
     found?
16
    A. It says "Room A under couch."
17
        So does that refresh your recollection as to where it was
18
     Q.
19
    found?
         I don't remember this book.
20
21
     Q.
        Well, is that your name on that document?
22
    Α.
         It is, yes.
23
              MS. CONRAD: Your Honor, I'd offer this as an exhibit.
24
              MR. CHAKRAVARTY: Objection, your Honor.
25
              THE COURT: You mean the list?
```

- 1 MS. CONRAD: It's going to be redacted, just to show this portion.
- THE COURT: No, the objection is sustained.
- 4 BY MS. CONRAD:
- 5 Q. Did you participate in compiling this list?
- 6 A. No, I did not.
- 7 Q. And you do see your name on there, right?
- 8 A. I do.
- 9 MR. CHAKRAVARTY: Objection, your Honor. To the
- 10 extent this was used to sort of refresh the witness's
- 11 recollection, counsel has done that.
- 12 THE COURT: Well, okay. Go ahead.
- 13 BY MS. CONRAD:
- 14 Q. Are you aware of whether this exhibit was submitted to the
- 15 FBI laboratory for fingerprints?
- 16 A. I believe it was, yes.
- 17 Q. And, in fact, the G28 number would have followed it,
- 18 | correct?
- 19 A. I don't know that.
- 20 Q. And with respect to the room number, did you prepare a
- 21 map, or participate in preparation of a map of where items were
- 22 found from that May 5th search?
- 23 A. Are you talking the sketch from the search or --
- 24 Q. Yes.
- 25 A. I did not prepare the sketch, no.

- 1 Q. But you're familiar with that?
- 2 A. Yes.
- MS. CONRAD: May I have the document camera just for
- 4 the witness, please?
- 5 Q. And do you recognize that?
- 6 A. Yes.
- 7 O. And what is that?
- 8 A. That's a sketch from the search.
- 9 Q. And drawing your attention to where I'm putting my finger,
- 10 do you see G28 on there?
- 11 A. Yes.
- 12 Q. And, in fact, that was found -- Room A was the living
- 13 room. Is that right?
- 14 A. Yes.
- 15 Q. So that was found under the couch in the living room?
- 16 A. Yes.
- 17 MR. CHAKRAVARTY: Objection, your Honor.
- 18 THE COURT: Well, it's already been said.
- 19 BY MS. CONRAD:
- 20 Q. Now, did you also participate in a search of
- 21 | Mr. Tsarnaev's property at UMass Dartmouth in July of 2013?
- 22 A. I was present at the search of the dorm room, yes.
- 23 Q. And you're aware -- and of the property, right?
- 24 A. What do you mean by "the property"?
- 25 Q. Well, there were items that had been removed from the dorm

- 1 room and were placed in a storage area by UMass Dartmouth? I don't believe I was involved in that. 2 MS. CONRAD: Well, if I can just have a moment, then. 3 (Pause.) 4 5 MS. CONRAD: May I have the document camera just for 6 the witness? 7 Do you recognize that? Q. I do, yes. 8 Α. 9 And the date -- that indicates that you were the 10 photographer on July 26th, 2013? 11 Yes. Α. 12 Ο. Correct? 13 Α. Yes. 14 Q. And that was a search of Mr. Tsarnaev's property, correct? That was a search of the dorm room. 15 Α. 16 Q. Actually, can I just show you --MS. CONRAD: Again just for the witness. 17 18 Does that refresh your recollection that that was a search 19 of his property? 20 Α. It says it is, yes. Does that refresh your recollection that it was a search 21 22 of his property? 23 MR. CHAKRAVARTY: Your Honor, there's no foundation
- THE COURT: Yeah, I don't think we have an adequate

for the witness's recollection.

24

- 1 foundation at this point.
- 2 BY MS. CONRAD:
- 3 Q. Okay. And during that search were vacuum samples taken?
- 4 A. Yes.
- 5 O. And were those submitted to the lab?
- 6 A. I don't know that. I believe they would be, but...
- 7 MS. CONRAD: I have nothing further.
- 8 CROSS-EXAMINATION
- 9 BY MR. CHAKRAVARTY:
- 10 Q. Just a -- first for clarification, Ms. Gamble, you're not
- 11 an FBI agent?
- 12 A. No, I am not. I'm a field photographer.
- 13 Q. You're a field photographer?
- 14 A. Yes.
- 15 Q. You don't carry a gun or a badge?
- 16 A. No.
- 17 Q. So your involvement in searches has been as a
- 18 photographer?
- 19 A. Yes.
- 20 Q. And so with regards to the search that was conducted at
- 21 | 410 Norfolk Street on May 5th, this was a second search done of
- 22 that apartment, correct?
- 23 A. Yes.
- 24 Q. And you went to a variety of different locations to take
- 25 photographs of different things?

```
1
    A. Yes.
     Q. And did you go into the defendant's room, the room
 2
    marked --
 3
             MS. CONRAD: Object to the characterization.
 4
 5
             THE COURT: Overruled.
 6
    BY MR. CHAKRAVARTY:
 7
        You can answer.
     Q.
 8
        Yes.
    Α.
     Q. And in that room, there's bunk beds?
10
    Α.
        Yes.
11
     Q. And were some photographs and other items taken from that
12
    room as well?
13
    A. Yes.
14
             MR. CHAKRAVARTY: Can we call up, just for the
    witness, Exhibit 12?
15
             THE COURT: If you're going to be extended, would you
16
17
    go to the podium?
18
             MR. CHAKRAVARTY: Sorry, your Honor. It won't be
19
     extended. I just want to authenticate one photo, your Honor.
     1222-7.
20
21
             THE COURT: All right. Is this in evidence?
22
             MR. CHAKRAVARTY: It's not yet.
    BY MR. CHAKRAVARTY:
23
24
     Q. Do you recognize it?
25
     Α.
        I don't have anything on the screen.
```

```
1
          That is the room, yeah.
        And is this the photo of how it appeared on May 5th, 2013,
 2
 3
     when you went in it?
     Α.
 4
        Yes.
 5
              MR. CHAKRAVARTY: I would now move 1222-07 into
 6
     evidence.
 7
              THE COURT: Admitted without objection.
 8
              MS. CONRAD: Your Honor, I'm going to object to scope
     on this.
 9
10
              THE COURT: No, overruled.
11
              (Government Exhibit No. 1222-07 received into
12
     evidence.)
13
    BY MR. CHAKRAVARTY:
14
     Q. In the lower left-hand corner of the photograph,
     Ms. Gamble, do you see a roll of red rosin paper?
15
              MS. CONRAD: Objection. Scope.
16
              THE COURT: Sustained.
17
18
              MR. CHAKRAVARTY: That's all I have, your Honor.
19
              MS. CONRAD: Your Honor, may we approach?
20
              THE COURT: Ms. Gamble, you may step down. Thank you.
21
              MS. CONRAD: It's with respect to this witness.
22
              THE COURT: All right.
              (Discussion at sidebar and out of the hearing of the
23
24
     jury:)
25
              MS. CONRAD: Your Honor, we filed a motion to admit
```

```
1
     the admission of a party from the defendant's docket 350.
 2
    Mr. Chakravarty just referred with this witness over objection
 3
     to the defendant's room. The government had taken the position
     previously that it is not the defendant's room, and I would
 5
     like to cross her on the government's statement and offer the
     statement.
 7
              THE COURT: No.
 8
              MS. CONRAD: Does that mean I can't cross her on it?
 9
              THE COURT: She's done.
10
              (In open court:)
              THE COURT: All right, Ms. Gamble. You may step down.
11
              THE WITNESS: Thank you.
12
              (The witness is excused.)
13
14
              THE COURT: We will take the lunch recess at this
15
     point.
              THE CLERK: All rise for the Court and the jury. The
     Court will take the lunch recess.
              (The Court and jury exit the courtroom and there is a
     recess in the proceedings at 12:44 p.m.)
              (The Court and jury entered the courtroom at 2:05
     p.m.)
              THE COURT: Mr. Watkins.
              MR. WATKINS: The defense calls Gerry Grant.
              THE CLERK: Sir, you want to step up here, please?
     Step up to the box, if you would. Remain standing. Raise your
```

right hand.

GERALD R. GRANT, JR., Sworn

THE CLERK: Have a seat. State your name. Spell your last name for the record. Keep your voice up and speak into the mic.

THE WITNESS: My full legal name is Gerald R. Grant, Jr. Would you like me to spell it? G-e-r-a-l-d, R., G-r-a-n-t, Jr.

DIRECT EXAMINATION BY MR. WATKINS:

- Q. Good afternoon, Mr. Grant.
- A. Good afternoon, sir.
- Q. How are you currently employed?
- A. I am a computer forensics investigator for the Federal Public Defender in the Western District of New York as well as do independent consulting in computer forensics on my own.
- Q. How long have you been working at the Federal Public Defender Office in New York?
- A. This is my 21st year, sir.
- Q. What office do you work at?
- A. Western District of New York, which has an office in Rochester, New York, which is the main office, and then Buffalo, New York, which is the branch.
- Q. And what is it that you do for the Federal Public Defender
 Office in the Western District of New York?
- A. I am currently a computer forensics investigator.

- Q. How long have you been doing that position?
- A. In that specific title, I have been doing that for five years.
- Q. Before that, what did you do for the Federal Public Defender Office?
- A. I was -- started out as what's called a computer systems administrator, so I handled all of the IT for both of the offices. I then moved into a national position and then became the investigator.
- Q. Now, you talked that in addition to working at the Federal Public Defender Office you also consult in a private capacity?
- A. Yes, sir.
- Q. Again, what kind of capacity is that? What kind of work do you do privately?
- A. That is also computer forensics as well.
- Q. How long have you been doing that for?
- A. Actually, that's -- my business has been around since 1990, so well over 30 years on that. And I've been doing forensics for a number of years, even prior to that.
- Q. Let's talk about your education and experience. Did you go to school after high school?
- A. I did, yes, sir.
- Q. Do you have a degree?
- A. An Associate's in computer programming.
- Q. After receiving your Associate's degree, where did you

begin working?

- A. I was with a family business after that but then became an employee with CompuAdd. Then I started my own consulting business and then was actually hired by the Federal Defender's Office in Rochester, which is how I became an employee of theirs.
- Q. When did you first start working for the Federal Public Defender in Rochester?
- A. As a consultant in 1992 when they first opened and 1994 as an employee.
- Q. What exactly is a computer forensics investigator?
- A. As a computer forensics investigator, I deal with any type of electronic equipment, whether it's analyzing, extracting data, performing the forensics, preparing for trial, working with the attorneys.
- Q. And these are largely digital devices that you work with?
- A. Everything digital, yes, sir.
- Q. Does some of the work you do require particular tools to be done?
- A. There's a number of different forensics tools on the market. Currently, AccessData FTK is one of the leading ones. Guidance Software, EnCase; CelleBrite; UFED, which stands for Universal Forensics Extraction Device. Then there's a number of other smaller utilities that are utilized on a regular basis.

- Q. Are you proficient in using all those tools?
- A. Yes. I have been trained in them, and I'm certified in the AccessData FTK as an AccessData certified examiner as well as the CelleBrite Mobile Forensics as a CelleBrite certified logical operator.
- Q. Now, those certifications, do those require any kind of ongoing efforts?
- A. Yes. There's always going to be continual training as well as I need to be recertified every two years to make sure that I am well-versed on the new operating systems, new techniques, anything that comes out within the next few years.
- Q. In addition to actually analyzing computers and telephones and other digital devices, do you also have experience with cell tower data and cell site locations?
- A. Yes. I've been working with cell site analysis or plotting of the cell tower locations with activity for over ten years. I started with the Federal Defenders with that, working on a number of cases, working with all of the major cell phone vendors: AT&T, Verizon, Sprint, T-Mobile. Worked directly with them. Also worked with a number of cell phone forensics companies to bring those all together. I have been trained on that. I've actually even developed my own training program for the whole Federal Defender organization as well. And I lecture across the country on that.
- Q. In addition to cell tower data and cell site location, do

you have experience in analyzing social media platforms?

- A. Yes. Most of the major ones: Facebook, Twitter, YouTube, Instagram, all of those.
- Q. You touched on this before. But in addition to your duties with the Federal Defender Office and the private consulting, do you also do training and lectures?
- A. All the time. I believe I'm currently over about 90 lectures that I do across the country, a number of them that I do on a yearly basis, to come back and train on all of the technology, including computer forensics, cell phone forensics and cell site analysis.
- Q. During your career as a computer forensics investigator, approximately how many cases have you consulted in?
- A. I've been consulting actually prior to becoming a computer forensics investigator because, as I was a CSA, I was also involved heavily in the cases. I would say well over 400 cases with the Federal Defender's Office and well over 2 to 300 privately.
- Q. Do you currently have cases that you're consulting on both with the Federal Defender Office and through your private --
- A. Yes, absolutely. I'm currently over a hundred active cases right now with my private consulting, and I'm about 75 to 80, I believe, in the Federal Defender Office.
- Q. With your private consulting, is that just criminal cases or criminal and civil?

- A. I do both criminal and civil on the private side.
- Q. How many times have you testified at trial?
- A. Sixteen times in court testifying as an expert.
- Q. On some of those occasions, has it been about cell site analysis and cell site location?
- A. Yes, it has.
- Q. And have you also consulted in preparation for trial about social media platforms?
- A. Yes, I have, sir.
- Q. Now, were you contacted by our office to review documents, records, and data extracted in regard to the *United States v*.

 Tsarnaev?
- A. I was.
- Q. More recently, were you asked to look at various documents, records, and data that were extracted from digital devices for dates connected to this case?
- A. I was, yes, sir.
- Q. I'm going to direct your attention first to April 16, 2012, which is the date of the running of the 2012 Marathon. I'm going to show you first what's already in evidence as Exhibit 3000. I'm just going to show you the first page and ask you if you recognize it.

MR. WATKINS: Hold on for one moment.

- Q. Do you recognize this -- what I've put before you?
- A. Yes. This is a Twitter account that I looked at, sir.

MR. WATKINS: Your Honor, this has been admitted, so it should be going to the jury.

THE COURT: Okay.

- Q. Whose Twitter account is this?
- A. It's one that's considered J tsar, J, underscore, t-s-a-r.
- Q. In your review of documents and other evidence in this case, do you understand that to be connected to Jahar Tsarnaev?
- A. I do.
- Q. Have you looked through the entirety of this document?
- A. Not the entirety, but I did look at specific messages, and I did connect to the actual live account.
- Q. I'm showing you Page 88 of that document, and I'm highlighting a series of tweets. Have you looked at those tweets on this document in the past?
- A. I have, sir.
- Q. On this document, the most recent tweets are at the top, and the oldest tweets are at the bottom, correct, as a general matter?
- A. That is correct, sir.
- Q. But none of these tweets has a particular date attached to it, is that correct?
- A. They have a date, sir, but --
- Q. I'm sorry. They do not have a specific time on the date that they are attached to, right?
- A. That is correct, yes, sir.

- Q. Is that consistent with your experience with Twitter?
- A. Correct. When you're looking at a Twitter wall, it just shows the dates.
- Q. Now, did you make efforts to determine the actual time that each of those posts was made?
- A. I did, sir.
- Q. How were you able to do that?
- A. There's two ways when you're on an actual live Twitter account. You can either hover your cursor from your mouse over the date, and it will display the actual time; or if you click on the message itself and it expands it, it will show the time in the bottom left.
- Q. Was there -- is there an additional way using data to determine -- strike that.

Was there at least one tweet in this expanded series here that you were not able to get through the live feed?

- A. Correct, there was one, sir.
- Q. Is there another way to get that if it no longer exists on the live feed?
- A. If it doesn't exist and there was some type of return from Twitter through a subpoena or a warrant, then that information could contain the actual message and the metadata, meaning the date and time that it was posted.
- Q. And did you do that for one of the tweets that we'll talk about in a moment?

- A. I did, yes, sir.
- Q. But the rest of them, you got them off of a live feed?
- A. Yes. I was able to open each one, yes, sir.

MR. WATKINS: Your Honor, this should only go to the witness.

Q. I'm going to show you that series of tweets now with the timestamp on them. I'm going to ask you if you recognize them, and then we'll seek to admit them.

So I'm showing you first Exhibit 3126A. Do you recognize that as one of the tweets that you determined a time for?

- A. I did, sir.
- Q. Once you determined the time, did you also pull it out -- or was it also pulled out in this form for presentation to the jury?
- A. Yes, it was.
- Q. And did you verify the timing on this?
- A. I did, sir, yes.
- Q. We'll talk a little more about the timing in a minute.

 But for each one of these you verified in a couple of different ways the actual time that it was posted?
- A. I did, sir.

MR. WATKINS: Your Honor, I'd move to admit Exhibit 3126A.

(Defendant's Exhibit No. 3126A received into evidence.)

MR. CHAKRAVARTY: No objection to time-verifying all

of these, your Honor.

THE COURT: Okay.

Q. Showing you 3126B, was that the same? Were you able to verify the time and then verify that this is the substance and the time from the Twitter feed?

A. Yes.

THE COURT: How many of these are there, Mr. Watkins?

MR. WATKINS: I'm sorry?

THE COURT: How many of these are there?

MR. WATKINS: There are seven.

THE COURT: I understand there's no objection to any of them. Can we just admit them all, shortcut things a little?

MR. CHAKRAVARTY: That will be fine, your Honor.

THE COURT: I don't know whether that applies to the one that was distinguished by a different way of determining.

MR. CHAKRAVARTY: I think we would want to hear testimony about that one.

THE COURT: So those that are this method can all be admitted, whatever the numbers are.

Q. I'm turning you now to 3126H.

MR. WATKINS: Just for the witness.

THE COURT: So this is the exception?

MR. WATKINS: This is the exception.

THE COURT: Okay. We'll get that done.

Q. Mr. Grant, this particular tweet has no timestamp of its

own in the lower left corner, is that accurate?

- A. That is correct.
- Q. You have put in a header on this particular tweet a specific time that it was posted in Eastern Daylight Time?
- A. I did, sir.
- Q. How were you able to determine when this particular post was posted?
- A. Even though I was unable to find the live posting on the Twitter to be able to open it, I associated this specific tweet with a return, a piece of discovery, that was turned over to us from the government that was either a return from Twitter. It contained all of the individual logged items that were posted on the Twitter account.

So what I did is I matched up the exact wording and phrasing to the actual Twitter log record, and then I was able to look at the date and time that it was posted on this particular tweet in that log. It was in what's considered UTC, or Greenwich Mean Time, if you've aware of that. And then I was able to bring that back to the time zone, the Eastern District time zone, along with the Daylight Savings at the time.

- Q. And that background data, that underlying data, does it include more than just the time that it was posted? Does it include other information about the post?
- A. Yes. It includes the Twitter number, other information,

if it's been forwarded or if it's been retweeted.

- Q. Does it also include whether it was posted by web or by a mobile device?
- A. Yes, it does.
- Q. To finish up, so this time that you put here you derived from the method that you just went -- took us through?
- A. Yes, I did, sir.

MR. WATKINS: So with that, your Honor, I'd move for admission of 3126H, along with 3126A through F.

MR. CHAKRAVARTY: No objection, your Honor.

THE COURT: Okay.

(Defendant's Exhibit Nos. 3126A-3126F and 3126H received into evidence.)

MR. WATKINS: So now if we may have it for the jury.

- Q. I'm going to put a couple of things up here. I want to show you what's been previously admitted as Government's Exhibit 1280. And I'm also going to, next to it, put 3126B, which is one of the tweets that you just talked about.
- A. Okay.
- Q. Now, do the substance of these two tweets -- are they identical?
- A. Yes, they are, sir.
- O. Is this time in the lower left-hand corner also identical?
- A. Yes, it is.
- Q. But these times, first on the government's and on the one

you created, are different. Can you tell me why that is?

A. Well, there's two things. The 3:42 a.m. that the government put up is an accurate time based on Pacific time.

What I did notice though is the showing that it was Pacific Standard Time, that was incorrect only because, at the time of April 16, 2012, the Pacific Coast as well as the East Coast, would be in what's called the Daylight Savings Time. So that would have actually offset it an hour. So the 3:42 is correct, but it's not Pacific Standard Time. It's actually Pacific Daylight Savings Time. Other than that, just for clarification.

What I did then is took that time and offset it from the UTC time showing the accurate Eastern Daylight Savings Time at that -- meaning that it's 6:42 a.m. so specifically three hours ahead of the Pacific time.

- Q. So if someone were posting tweets from the East Coast, why is it that it would show 3:42 in the bottom corner here?
- A. The 3:42 isn't necessarily from the poster. It's going to be associated with the setting of the actual Twitter account. You can set your Twitter account up as either being in Pacific, Central, Mountain, Eastern time. The actual time is stored at Twitter in UTC time. So it doesn't put an actual local time in there. It does the UTC. And then whoever is viewing these specific tweets, it would display in the time zone that that person is actually viewing the tweets. So somebody in the

Eastern District looking at the same tweet would see 6:42, but somebody in Pacific would look and see 3:42.

- Q. Now, just as the 3:42 Pacific time, did you take -- did you make efforts to verify that that truly was the date that it was -- the time that it was posted on that day?
- A. I did verify. What I did on the live actual tweet is I opened each one of them while my computer was set to Pacific Daylight -- or the Pacific time zone, and it then matched up to all of the 3:42's and the three hours that were behind.

I then reset my computer so that my Twitter account would reflect the Eastern Daylight Savings Time. And those then automatically adjusted the times on the tweets to 6:42 a.m. For purposes of demonstration here, we left them at the Pacific time, and I did the adjustment at the top.

- Q. Now, with all that, I want to go through those seven tweets that were made from April 15 to April 17. Showing you 3126A, what time in Eastern Daylight Time, was -- date and time was this posted?
- A. This tweet was posted on April 15, 2012, at 4:58 p.m.
- Q. What is the substance of that tweet?
- A. It says, "bout to sleep for like 20 hours."
- Q. Going to 3126B, what is the date that this is posted?
- A. Again, this is on April 16, so the next day, 2012, at 6:42 a.m.
- Q. So on April 16, 2012, the date of the running of the 2012

Boston Marathon?

- A. Yes, sir.
- Q. And this is the tweet we've seen as Government Exhibit 1280. This is 3126B with the Eastern Daylight Time stamp on it, correct?
- A. Yes, sir.
- Q. Again, what time was this posted, Eastern Daylight Time?
- A. It was posted at 6:42 a.m., Eastern Daylight Time.
- Q. Putting before us 3126C, what time was this posted?
- A. This was also posted on April 16, 2012, at 8:38 a.m., Eastern Daylight Time.
- Q. That's roughly two hours after the last tweet?
- A. Yes, sir.
- Q. What is the substance of this tweet?
- A. It states, "hhmmm, get breakfast or go back to sleep, this is always a tough one."
- Q. Showing you 3126D, what is the Eastern Daylight Time timing on this tweet?
- A. This is, again, on April 16, 2012, at 8:45 a.m., Eastern Daylight Time.
- Q. The last tweet we saw said, "get breakfast or go back to sleep." What does this tweet say?
- A. This says, "Sleep after breakfast is so much sweeter."
- Q. Showing you 3126E, what is the time on that?
- A. That is also April 16, 2012, at 8:45 a.m., Eastern

Daylight Time.

- Q. So that was within a minute of the last one, right?
- A. Correct. It would have been within the same minute.
- Q. The last one said, "sleep after breakfast is so much sweeter." What is the substance of this tweet?
- A. This states, "So breakfast it is."
- Q. I'm going to move away from the Twitter post for just a minute and put before you --

MR. WATKINS: This should only go to the witness, your Honor.

- Q. -- what I've marked as 3125. And I'm going to scroll through some pages here. Do you recognize what this document is?
- A. I do, sir.
- Q. What is it?
- A. It's a log record indicating the card access for admitting into buildings at the University of Massachusetts.
- O. Is there a specific building that this is in regard to?
- A. Yeah. It's the Maple Ridge Hall.
- Q. Turning to Page 8 of this document, I'm going to highlight an entry. Is that an entry that you looked at from April 16 of 2012?
- A. It is, sir.

MR. WATKINS: Your Honor, I'd move to admit so much of Exhibit 3125 as includes the page that we're seeing regarding a

swipe at April 16th.

MR. CHAKRAVARTY: No objection.

THE COURT: With the certification or not?

MR. WATKINS: I'm sorry?

THE COURT: With the first page certificate or not?

MR. WATKINS: The first page was a certificate.

THE COURT: Right. I'm just asking you if you want that part of the record or not.

MR. WATKINS: I don't believe we need that as part of the record.

MR. CHAKRAVARTY: I think, as a pattern, we haven't been introducing the certs, your Honor.

THE COURT: Fine. Okay. What's the page number?

MR. WATKINS: This is Page 8 of Exhibit 3125, and it will be the only page when it goes to the jury.

(Defendant's Exhibit No. 3125 received into evidence.)

MR. WATKINS: May we publish that to the jury? Before we go to that, I'm going to back up to the last tweet to remind us where we were here.

- Q. "So breakfast it is" at 8:45, Eastern Daylight Time, that was the last tweet that we saw?
- A. Correct, sir.
- Q. So, now, turning to Exhibit 3125 -- wrong one -- 3125, what is this entry here?
- A. This is a log entry from the University of Massachusetts

system that shows that somebody used a card to access the Maple Ridge Hall.

- Q. What time did that occur?
- A. At 10:56 a.m.
- Q. Nearly 11:00, Eastern Daylight Time?
- A. Correct, sir.
- Q. Now, of course, we know that swipes in and swipes -- swipes in are recorded; swipes out are not?
- A. Not on this document, no, sir.
- Q. I'm going to go next to 3126H. And what time was this tweet posted?
- A. With my translation, it was 12:46 p.m., Eastern Daylight Time, on April 16th.
- Q. What time do you understand runners are generally finishing the Marathon?

MR. CHAKRAVARTY: Objection, your Honor.

THE COURT: Overruled. You may answer it.

- Q. If you know, generally what time are people getting to the finish line of the Marathon?
- A. Typically, the Marathon starts off in sections with the females and the male sections in different stagings. But, typically, a little over two hours people will start rolling through. So if the men starts around 10:00 and then there's three stages, you'll see them 1:00, you know, 1:30, 2:00, somewhere in the early afternoon as well.

- Q. So looking here at this tweet, this is at 12:46 p.m.?
- A. Yes, it is, sir.
- Q. And through that data that you obtained, the backup data here, could you determine whether this was posted by a mobile device or through the web?
- A. It was posted through the web.
- Q. And what is the significance of the difference between a mobile device and a web to post tweets?
- A. It indicates that it was posted from a computer that was on an actual web browser versus the app that was on an iPhone or an Android.
- Q. So, now, with all that, can you read the substance of that tweet from April 16th at 12:46 p.m.?
- A. Yes, sir. It has the "@" symbol and then the name Enzo,
 E-n-z-o, underscore, U. And it says, "That's what's up glad to
 hear that, I'm all right and yea, summers gonna be amazing."
- Q. Is there any mention about the Boston Marathon in that tweet?
- A. No, sir.
- Q. Showing you 3126F, this is the next day?
- A. Correct, sir.
- Q. And at what time is this post?
- A. It translated to 3:15 a.m., Eastern Daylight Time.
- Q. What is the substance of this post?
- A. It states, "This was a great weekend."

- Q. And in that Twitter post, there's no mention of the Boston Marathon?
- A. No, sir.
- O. No retweets of the Boston Marathon?
- A. No, sir.
- Q. I'm going to fast-forward to a couple of dates in 2013.

 But first I want to do a little refresher about cell phones and cell data and cell towers. I'm going to put on the screen what's been admitted as Exhibits 1167-01 and 3002. So I'm going to put these side by side.

First I'm going to go to 1167-01. Do you recognize what this is?

- A. Yes, I do, sir.
- Q. What is it?
- A. It's the subscriber billing page for an AT&T call detail record.
- Q. I'm going to highlight the top portion of this. Does it indicate who the financially liable party -- the billing party is?
- A. It does. It has the name Dzhokhar Tsarnaev.
- O. Does it also mention how long he's been a customer?
- A. Yes, since December 1, 2012.
- Q. Does it indicate a phone number for both home and contact?
- A. It does have a home and work. They're both the same. The number is 857-247-5112.

- Q. Is that number consistent with the call detail records that are in Exhibit 3002?
- A. It is, sir.
- Q. I'm going to go to 3002 now. And is this the first page of the AT&T call detail records for Dzhokhar Tsarnaev's cell phone, with the last four digits 5112?
- A. It is, sir.
- Q. How long is this set of records when printed out in paper form?
- A. The particular set was 515 pages.
- Q. I want to focus on the last column here. And do you recognize that?
- A. I do, sir.
- O. What is that that's detailed in the last column?
- A. The last column is part of the individual records that shows the cell tower location that was utilized with that particular piece of activity. It starts out -- the first two numbers indicate basically the cell tower itself or the location that they've designated and then a specific antenna afterwards. Then it follows by two sets of coordinates, the first being the longitude for mapping and then the second being the latitude. They're a little bit backwards. Usually it's latitude/longitude. Finally, the last number would be what's called the azimuth, or the angle, that the sector of the antenna was pointed to.

- Q. Now, with that information -- does this column run through the entire set of records?
- A. It does, sir.
- Q. Are there some records where there is no cell tower information?
- A. Yes, correct.
- Q. And how would that happen?
- A. It could be the phone didn't register. It could have been a bad signal at the time. It could have been the phone was off. There's a number of different things that would make it not happen.
- Q. For the vast majority of the data in these call detail records, are there, in fact, latitude and longitude coordinates?
- A. Yes, there are, sir.
- Q. Using those latitude and longitude coordinates, are you able to, through this activity log, determine particular cell tower sites associated with the data?
- A. Yes. Basically, because you have the latitude and longitude, you're able to plot the location of where the tower and/or the antennas are physically located. From there, you can take those two coordinates and put them into a mapping program to show the exact location.
- Q. Now, you say "the exact location." That's not the exact location of the phone, is it?

- A. No. It's the location of the physical antenna which could reach out away from the antenna.
- Q. As a very general matter -- and I understand all cell towers are different. As a general matter, what is the range of a cell tower?
- A. The range can vary. It depends on the geographical area and how many other cell towers are nearby. In all of my experience, with hundreds of these things, I've seen them anywhere from a half a mile to four miles out.
- Q. Is it possible they could be 50 or 100 or 150 miles away?
- A. Physically, the capability of a GSM or an antenna really can't go beyond 26 miles, is what they've considered typical range with interference. It's normally not in an environment or a live environment because if an antenna reached out that far and crossed over other antennas, you would start dropping calls. It would be the equivalent of, if you had a radio station and you were between two cities and you heard the same radio station on that radio, the two different radio stations, you would hear two people talking and it would interfere. With a cell phone, if that happened, it would physically drop the call because there would be too much interference.
- Q. Before we move away from Exhibit 3002, when does the call detail records start?
- A. As far as the date?
- Q. The date that they began.

- A. The first date in this report is December 11, 2012.
- Q. And we've seen that there's an indication that this person had been a customer since December 1 of 2012, right?
- A. That is correct, yes, sir.
- Q. So we were talking a minute ago about April of 2012. Would these records have been any help to determine the geolocation of somebody in 2012?
- A. No, sir. They would not go back that far.
- Q. Going back to the latitude and longitude, once you've identified the particular cell towers that are involved, are you able to plot that onto a map?
- A. Yes, I was.
- Q. How does one go about doing that?
- A. Most of the normal mapping programs -- Google has one; there's Google Earth. There's the Google online. Microsoft has different types. They have maps and streets or streets and roads; also, Delorme. There's a number of different ones out there. As long as the mapping program itself will accept you entering the latitude and longitude in that order, it will plot that coordinate on the map.

For my work, I normally use Google Earth, which is a free program that you can download, and it will allow you to plot individual items and then use that as location information.

Q. Indeed, have you done that kind of plotting to a map before in cases?

- A. Almost every case that I do is through that, yes, sir.
- Q. Once you've plotted those cell towers, are you able to create an actual map that can be printed and used?
- A. Yes, sir.
- Q. In addition to putting on cell site locations, can you also put on points of interest on these maps?
- A. Oh, absolutely. You can key in addresses, or you can actually zoom down to an area and put a marker if you know exactly where that specific point is.
- Q. Now, for this case, did you locate particular times and dates for cell phone activity and plot them to maps?
- A. I did.
- Q. I want to turn first to January 31, 2013. The screen you see, Exhibit 11 --
- MR. WATKINS: This has already been admitted, your Honor.

THE COURT: It has, all right.

- Q. Showing you Exhibit 1159, which documents the purchase of two pressure cookers at the Macy's Square One Mall in Saugus, Massachusetts, have you looked at this document before?
- A. I have, sir, yes.
- Q. Let me see if I can get a -- does it indicate a specific time that the transaction occurred?
- A. Yes. The time is in military. 20:38 would indicate that it's 8:38 p.m.

- Q. On the other side of the screen, I want to show you Government's Exhibit 1152-06. Do you recognize, as a general matter, what this is?
- A. I do, sir.
- Q. What is it?
- A. This is a physical plotting of what's called GPS track points that were pulled from a GPS device. Those individual points, as the GPS is running, keeps track of its location plus the date and the time. And those are able to be imported into a mapping program to show the actual path of travel.
- Q. And you did not prepare this map, correct?
- A. No, I did not.
- Q. Did you actually go into the GPS to verify each point on this map that was plotted?
- A. I did not, sir, no.
- Q. But taking a look at the exhibit, what does it indicate in regard to the plots that the government did here?
- A. It indicates that the actual GPS device itself stopped at 8:13 p.m. near a particular address. In this case it was 1201 Broadway, which relates to the Square One Mall in Saugus. It also indicates that the travel then resumed at 8:42 p.m. So it knows when it stopped and then when it started back up again.
- Q. Is that consistent with what we saw over here, the purchase?
- A. Yes, sir. If you look, it's -- 8:38 was that purchase.

So that would have been when the transaction was completed.

And then, within four minutes, you see the device moving again.

- Q. So this GPS that was ultimately recovered from a Mercedes tracks this purchase?
- A. It appears to be.
- Q. Correlates to that purchase?
- A. It correlates, yes, sir.
- Q. Now, using those times, the 8:38 p.m., were you able to go through Exhibit 3002, the call detail records, to find cell phone activity around those times?
- A. Yes, sir, I did.
- Q. And did you find cell phone usage on January 31st in the evening?
- A. I did, sir.
- Q. Once you found data on -- from the call detail records, were you able to locate the cell towers that they were associated with?
- A. Yes, sir. I utilized that same latitude and longitude GPS information that was associated with the activity and plotted that location on Google Earth.
- Q. So this, again, is on January 31 of 2013 at the same time the Square One Mall purchase was being made?
- A. It was around that time, yes, sir, not exact time.

MR. WATKINS: This should just go to the witness, your Honor.

- Q. Showing you what's been marked Defendant's Exhibit 3127, do you recognize that?
- A. I do, sir.
- Q. How do you recognize it?
- A. This is an exhibit that I prepared in preparation of my testimony.
- Q. What does this exhibit document?
- A. It documents the location of the Macy's store at the Square One Mall as well as the location of the cell towers that were associated with the activity of the cell phone that ended in 5112.
- Q. In regard to the Square One Mall, just some housekeeping, how were you able to determine an address for the Square One Mall that you put on this map?
- A. There's two pieces of information to pull up location of a store. One, on the receipt itself or the actual transaction, it did show that it was the store name was Square One. More importantly, though, on the third column, it actually showed the store location number, which in this case was 226. I was able to utilize Google and do a search of the actual store website and was able to find the address of that particular store and the location based on that.

MR. WATKINS: Your Honor, I'd move Defendant's Exhibit 3127 into evidence.

MR. CHAKRAVARTY: No objection, your Honor.

THE COURT: Okay.

(Defendant's Exhibit No. 3127 received into evidence.)

MR. WATKINS: May it be published?

- Q. So, again, this is a map that you prepared?
- A. Yes, sir.
- Q. Can you circle where the Square One Mall is in relation to this map?
- A. Okay. Based on my plotting, I marked the location of the Square One Macy's up in the northern part of the map.
- Q. Can you circle where the activity on the -- Dzhokhar Tsarnaev's 5112 phone was?
- A. Yes, sir. That activity was down south around the location of the University of Massachusetts.
- Q. And how did you know that it was close to the University of Massachusetts?
- A. With the Google Earth program, once I plot those latitude and longitude information, I can zoom correctly right into an actual street level. So I was able to zoom right down, pull in and actually look right at the university.
- Q. Between those two spots in Saugus and in Dartmouth, at the University of Massachusetts, is Boston and Cambridge, correct?
- A. Yes, sir.
- Q. Now, during that period of around 8:38 in the evening, is there any indication that Dzhokhar Tsarnaev's 5112 telephone was in the Saugus area?

- A. No, sir.
- Q. Is there any indication that Dzhokhar Tsarnaev's 5112 telephone was -- ever left the Dartmouth/New Bedford area?

MR. CHAKRAVARTY: Objection to form, your Honor. This is leading.

THE COURT: Overruled.

- A. Could you repeat it just so I'm --
- Q. Yes. Is there any indication that Dzhokhar Tsarnaev's 5112 phone left the Dartmouth/New Bedford area on the evening of January 31, 20 --
- A. No, sir. All activity was related to cell towers around the University of Massachusetts.
- Q. You anticipated my next question, I think. You plotted some points. You have not plotted all of the points for that day?
- A. Not on this map, sir, no.
- Q. Indeed, you have all the plots for the entire call detail record, correct?
- A. I do, sir, yes.

MR. WATKINS: Your Honor, may I have just for the witness?

- Q. I'm putting before you another -- a page from a document that's been identified as Defendant's Exhibit 3130. Have you seen this before?
- A. I have, sir, yes.

- Q. I'm going to scroll through this. What is it called?
- A. It's called a patron history.
- Q. What do you understand this to be?
- A. This is the log file of when a person uses what's called a meal card and they go to participating restaurants, stores, patrons of that, and can swipe that card to purchase items.
- Q. Did you --

MR. WATKINS: Your Honor, I'd move for admission of this page of 3130.

MR. CHAKRAVARTY: No objection, your Honor.

THE COURT: It's Page 4?

MR. WATKINS: Page 4 of Exhibit 3130.

(Defendant's Exhibit No. 3130 received into evidence.)

THE COURT: All right. May it be published to the jury?

- Q. What does this indicate about what happened with Dzhokhar Tsarnaev's meal swipe card?
- A. The highlighted area shows two actual transactions on January 31, 2013. One is at 6:54 p.m., indicating that the participant, or Wendy's, was activated.
- Q. Just to circle around again, 6:54, purchase for lunch. A cell phone was around the area of UMass Dartmouth and a purchase in Saugus was being made at 8:38?
- A. Correct, sir.
- Q. I want to move next to March 6 of 2013. We've heard about

a trip to New Hampshire to buy BBs. I want to show you first Government's Exhibit 1161-02 and 1161 -- let's do it this way -- 1161-03. Have you seen these documents before?

- A. I have, sir.
- Q. And what are they?
- A. These are receipts from two specific stores, which would be Wal-Mart stores.
- Q. Turning first to 1161-02, what is the date and time of the purchase there?
- A. This is actually the terminal idle. The purchase is a little further down. But it's at March 6 -- I apologize for that. Yes. March 6th, at 15:22:11, military time, which would indicate 3:22 p.m.
- Q. Were you able to determine which Wal-Mart store this purchase took place at?
- A. Yes, I was. On the receipt itself -- and you can see it here -- the store itself, all of the receipts indicate a specific Wal-Mart store number, in this case 2399. You can go right to the internet, to the Wal-Mart.com, put in "/" store and then "2399," and it will actually take you to the address and everything of that store. So they're broken down on their website by store number.
- Q. Going to this other receipt, start from the end. First, were you able to determine what Wal-Mart store this was?
- A. Yes. As you can see up top here, this indicates that it's

Store 1796, which would be the Amherst, New Hampshire, store.

- Q. Can you determine the time of this particular purchase?
- A. Yes. Down below here, you can see, again, this was on March 6, 2013. Military time is 17:34:06, indicating at 5:34 p.m.
- Q. Next I'm going to show you Government's Exhibit 1152-07.

 This is a GPS recovered from a Honda Odyssey plot from March 6,
 2013, that same day that BBs were purchased. Have you looked
 at this exhibit before?
- A. I have, sir, yes.
- Q. Again, you did not prepare this. This is a government exhibit?
- A. That's correct, sir.
- Q. Having looked at it, are the times that have been plotted out consistent with the locations and the purchases that you saw?
- A. Yes, they are.
- Q. Using those dates and times from the government exhibit, were you able to go to Exhibit 3002 and determine where Dzhokhar Tsarnaev's 5112 cell phone was?
- A. Yes, I was.
- MR. WATKINS: This should only go to the witness, your Honor.
- Q. And did you plot those locations using Google Earth to a map?

- A. I did, sir.
- Q. And did you also put on the two Wal-Marts at issue?
- A. I did, sir, yes.
- Q. This map that you see before you is Defendant's Exhibit 3128. Is that accurate as to the Dzhokhar Tsarnaev 5112 cell phone and the two Wal-Marts?
- A. It is correct, sir, yes.

MR. WATKINS: Your Honor, I'd move for admission of Defendant's Exhibit 3128.

MR. CHAKRAVARTY: No objection.

THE COURT: Okay.

(Defendant's Exhibit No. 3128 received into evidence.)

MR. WATKINS: May we publish that to the jury?

- Q. So take us through this exhibit. What does this indicate about where Dzhokhar Tsarnaev's 5112 cell phone was while purchases were being made in New Hampshire?
- A. Again, I utilized the AT&T call detail records, and I took the specific items and the latitude and longitude of activity, plotted that on this map, which indicates the location of the cell towers that would have been the ones that were associated with the specific items.
- Q. And down at the bottom is the activity for that phone?
- A. Yes, it is. I can indicate it by circling it here.
- Q. And how does that compare to the purchases that were made at the Manchester and Amherst Wal-Mart stores?

- A. As you can see up at the top, we have the Manchester here and then the Amherst here, indicating the distance between the two.
- Q. Given your knowledge of cell phone and cell tower distances, is it at all possible that a phone could be up in the New Hampshire area at the time of those purchases given this data?
- A. It would not be -- no, it could not reach the towers.
- Q. During this time on March 6 of 2013, is there any indication that Dzhokhar Tsarnaev's 5112 phone was in the Cambridge or Saugus -- Cambridge area?
- A. No.
- Q. Is there any indication from March 6th data that Dzhokhar Tsarnaev's telephone ever left the Dartmouth/New Bedford area?
- A. There is no evidence, no, or indication.

MR. WATKINS: That's all I have, your Honor.

CROSS-EXAMINATION BY MR. CHAKRAVARTY:

- O. Good afternoon.
- A. Good afternoon, sir.
- Q. We haven't met, have we?
- A. No, we have not.
- Q. I just wanted to clarify the circumstances of your being here. You said that you work both for the Federal Defender's Office as well as you free-lance in your private company?
- A. Yes, sir.

- Q. Are you paid for your service in this case?
- A. I come here as a representative of the Federal Defender Office, so my regular salary would cover that.
- Q. So let's first start with some of the discussion that you were giving us with regard to tweets.
- A. Yes, sir.
- Q. Twitter. A lot of what you know about Twitter is from your own experience using the platform, is that right?
- A. Using it and working with, also, other discovery and returns from Twitter accounts.
- Q. Okay. But you don't have any specialized training in how to deal with Twitter, do you?
- A. Not specifically to Twitter or from Twitter, no, sir.
- Q. So you're just using your experience, your use of Twitter itself, as well as your review of materials that were provided by Twitter in this case with regards to the defendant's Twitter account?
- A. That is correct, sir.
- Q. And so Twitter provides the timing of its tweets in a form that's under the Universal time or UTC, which is about four hours greater -- further along -- it's Greenwich Mean Time, I should say?
- A. Right, yes, sir.
- Q. Like the time it would be in England compared to the time it would be here in Boston?

- A. Yes. And it's offset differently depending on Daylight Savings or not.
- Q. You really made the calculations from those times that the Twitter told you, and you created the exhibits that Mr. Watkins asked you to authenticate today?
- A. Yes. They were verified through UTC time, yes, sir.
- Q. So one of the tweets actually wasn't still existing on the Twitter feed. And that's the one you had to rely on the Twitter information for?
- A. Yes. The information that was returned, correct.
- Q. But the rest of the tweets you talked about were all tweets around the day, Patriots' Day 2012, the day of the Boston Marathon?
- A. Correct, sir.
- Q. So there was a tweet before, and then there were a few tweets the day before and then a few tweets the day after?
- A. Yes, sir.
- Q. Those tweets are, as they appear, except for that one, in the full Twitter listing that Mr. Watkins showed you, I think, 3001, I believe?
- A. Correct, sir.
- Q. So you don't know what the defendant was doing when he wasn't tweeting that day, right?
- A. You mean, like, in between the times?
- Q. Right.

- A. No, I have no idea, sir.
- Q. So you don't know that he actually did go to the Marathon later that day?
- A. I have no knowledge of that.
- Q. If he went in the afternoon and he hung out with his friend Steve Silva, you wouldn't know that unless there was a tweet at that time, right?

MR. WATKINS: Object.

THE COURT: Overruled.

- A. I would have no knowledge of that, no, sir.
- Q. Did he tweet during the Boston Marathon?
- A. There was a -- the one tweet was around 1:00. Yeah, there was. Let me see. I would have to look at the actual exhibit again, if I could.
- Q. Do you have those in front of you?
- A. I do if that's okay if I go through them.

MR. CHAKRAVARTY: Mr. Watkins, I might need your help in presenting your exhibits. 3126H, I think.

- A. Okay.
- Q. Is this the tweet, the one that just put up as 3126H, this is the tweet that you're referring to?
- A. I'm not seeing anything right now.

Correct. That is one, as you can see, based on the UTC time in the log. It was translated into 12:46 p.m. Eastern Daylight Time.

- Q. What you know about that tweet is that the user J_tsar tweeted this tweet using a web browser?
- A. Yes.
- Q. So a web browser is opposed to a mobile phone app, correct?
- A. It's a standard -- yes, like Internet Explorer or Safari or something like that.
- Q. That's what Twitter tells you, that he used a web browser versus an --
- A. An iPhone.
- O. Correct?
- A. Correct.
- O. Does it tell where that web browser was used?
- A. No, it does not.
- Q. So it doesn't tell you whether it was the browser on a phone, right?
- A. It could be if the phone was plugged in or logged in as the browser, yes, sir.
- Q. Well, if you have a smart phone, say you have an iPhone, you have an Safari browser on the iPhone, don't you?
- A. Correct.
- Q. You have an Android version. You might have Firefox. You might have the Android version of an internet browser. You might have Internet Explorer, right?
- A. Correct.

- Q. And so, in fact, if you log into Twitter on a browser using your mobile phone, it comes up as a browser tweet, doesn't it?
- A. Correct.
- Q. So this doesn't tell you much more than he tweeted at about 1:00 in the afternoon on April 16, 2012, right?
- A. Correct.

MR. CHAKRAVARTY: Now, can we go to 3126B, please?

- Q. Now, this was the tweet which you corrected the time for.

 This was also tweeted out on that Marathon Monday, correct?
- A. Yes, sir.
- Q. Early in the morning, right?
- A. Correct.
- Q. And it was a quote, in quotation marks, correct?
- A. Correct.
- Q. And I think you referred to the UMass Dartmouth swipe card records to show that Dzhokhar Tsarnaev swiped into a dorm room at Maple Ridge Hall a couple hours after this, I think three hours after this; is that fair to say?
- A. It's fair to say, yes, sir. I don't know exact time but, yes.
- Q. A little later that morning?
- A. Correct.
- Q. So you don't know at what time after this tweet Jahar Tsarnaev went up to Boston, the 45-or-minute-so ride, right?

MR. WATKINS: Object to the form of the question, your Honor.

THE COURT: Overruled.

- A. Can you repeat it, sir?
- Q. Is it about 45 minutes to get from UMass Dartmouth to Boston?
- A. I'm not familiar, but it appears about that time, yes, sir.
- Q. And so you don't know at what time he left UMass Dartmouth to go to Boston, do you?

MR. WATKINS: Objection.

THE COURT: Sustained.

Q. You don't know where he picked Steve Silva up, either at UMass Dartmouth or in Cambridge?

MR. WATKINS: Objection.

THE COURT: Sustained.

- Q. In fact, when was the next time that Jahar Tsarnaev swiped back into UMass Dartmouth?
- A. I would need to look at the records, if I could, sir.
- Q. Please do if we have the exhibit.
- A. So the next swipe after the 4/16 would have been on 4/17 at 1:38 a.m.
- O. 1:38 a.m.?
- A. Yes, sir.
- Q. So it's possible that Jahar Tsarnaev left UMass Dartmouth,

went to the Marathon with his friend Steve Silva, and came back in the early morning hours of the next day?

MR. WATKINS: Objection.

THE COURT: Rephrase it.

- Q. Based on the records that you just described, is it possible that Jahar Tsarnaev went to the Boston Marathon during Patriots' Day and returned early in the morning the next day?
- A. When you say "based on the records," you're talking about the swipe cards?
- Q. The swipe card.
- A. I do not know where he would be anywhere between those times based on this.
- Q. Let's say beyond the swipe card records, is there any other data that you're aware of that would contradict that?

MR. WATKINS: Objection, your Honor.

THE COURT: No. You may answer that.

- A. There's phone activity where the 5112 is in that area down by UMass.
- Q. At some point later in that day?
- A. Yes.
- Q. And then --

MR. WATKINS: Can we clarify which day, please?

- Q. On Patriots' Day on April 26th?
- A. On 4/16.
- Q. 4/16.

MR. WATKINS: What year?

- Q. 2012.
- A. 2012, yes, sir.
- Q. And you don't know whether he went to the Marathon that day or not, do you?
- A. I'm not aware of any of that information, no, sir.
- Q. Now, let's talk about the exhibit --

MR. BRUEMMER: Mr. Bruemmer, if you can call up 1167?

Q. Let's talk about some of those phone records you were just referring to.

MR. CHAKRAVARTY: Your Honor, if we could have the government's terminal?

- Q. Mr. Watkins showed you this exhibit, which is the subscriber information for that phone number, AT&T number ending with 5112, is that right?
- A. That is correct, sir.
- Q. And this shows that it's subscribed to Dzhokhar Tsarnaev, but it lists an address of 69 Carriage Drive, New Bedford, correct?
- A. It does, yes, sir.
- Q. You know that was the address of the defendant's friends,
 Dias Kadyrbayev and Azamat Tazhayakov, right?
- A. Actually, I wasn't aware. I just knew it as an address. I didn't know who it was.
- Q. Did you review the phone records?

- A. I reviewed the phone record. I knew that it was the Carriage Street, but I didn't know the details of that address.
- Q. You must have known that this was a family plan that involved both Dzhokhar Tsarnaev as well as his friends, Dias Kadyrbayev and Azamat Tazhayakov?
- A. I was aware there were other phones that were associated with this account, yes, sir.
- Q. In fact, the account had a balance that hadn't been paid, and the cell phone service had been deactivated at the time of the Boston Marathon, is that correct?
- MR. WATKINS: Objection, your Honor. It's far beyond the scope. I mean, he's not going to know.
- A. I -- I don't know. I mean, I can't say whether it was terminated or not. I wasn't -- where I see it says "suspended," I don't know when. I would assume at some point after 4/19.
- Q. Well, you suggested you had some familiarity with these records.
- A. Yes, sir.
- Q. Did you know -- did you review the records of the other phone numbers associated with this account?
- MR. WATKINS: I'm going to object, your Honor. Beyond the scope.

THE COURT: Overruled.

A. I did look at the other numbers, yes, sir.

- Q. Now, with respect to this phone, do you know what kind of a phone it was?
- A. The physical phone?
- Q. Physical phone.
- A. I'm not quite sure, but I think it may have been an iPhone. If not, I think it may have been an Android. I don't know the actual physical phone because I did not see them. I didn't have access.
- Q. None of the records that you reviewed from the telephone company told you whether it was an iPhone?
- A. I didn't see anything that indicated that, no.
- Q. You described earlier that you've been trained in cell site -- historical cell site location analysis, is that right?
- A. Correct, sir.
- Q. You received that training sometime back in 2008, 2009, is that right?
- A. The training has been ongoing. And then if other options are available for training, I take those as well as develop my own training and teaching, yes, sir.
- Q. You described that you went -- you were on the so-called lecture circuit before. Does that mean you were speaking?

MR. WATKINS: Objection, your Honor, please, the characterization.

THE COURT: Go ahead.

Q. Does that mean you were presenting; you were teaching

others or you were receiving trainings?

- A. Both. There were times that I went and heard lectures from others and got certificates as well as talked with the cell phone companies and also developed and taught it.
- Q. So you've gone to AT&T? You've received training from AT&T as to how to handle their cell phone records?
- A. Not from AT&T. I worked closely with a representative, an engineer, from T-Mobile on a couple of cases. And we went through all the plotting processes to make sure that we were actually the same.
- Q. You know that AT&T and T-Mobile actually do things differently, right?
- A. As far as what? I'm not quite sure what you mean.
- Q. In terms of the cell site location data that they present.
- A. The data looks differently, yes. It's going to be presented differently.
- Q. In fact, even the technology that they use, especially on a 4G system, with regard to figuring out which cell site and what the azimuth is for each cell site; you know that's different, too, right?
- A. Correct. Each one is going to have a different one depending on where the location of the antenna is.
- Q. So you actually haven't had training with AT&T on how to read their records specifically for purposes of historical cell site analysis?

- A. I'm aware of it, and it includes the actual latitude and longitude of the physical antenna. So there is nothing beyond -- if we're plotting just that location, that is the only information that would be needed.
- Q. So you haven't had any training specifically with regards to AT&T -- that AT&T has provided with regard to how to do cell site analysis on their records?
- A. Not specifically from AT&T, no, sir.
- Q. So if you had, you would have known that AT&T does not provide reliable data usage records that's useful for cell site analysis; did you know that?
- A. I'm aware that the data -- because it's in hour blocks.

 I'm aware of that, yes, sir.
- Q. You're aware that it's not a reliable indicator of where a phone is at a time that the record shows that data usage was used?
- A. I'm not aware of that, no.

MR. CHAKRAVARTY: So if we can call up 3127, please, your Honor, Mr. Watkins' computer?

- Q. So this was 3127A, a plot that you prepared that shows the defendant's phone down in Dartmouth on the evening of January 31 of 2013, is that right?
- A. Correct.
- Q. And you used, to show that the phone was down in Dartmouth at the time of a purchase of a pressure cooker in Macy's in

Saugus, you showed two entries. One is a 6:50 p.m. -- sorry -- 6:50 p.m. outbound text?

- A. Uh-huh.
- Q. And the other is a 9:03 p.m. data usage, correct?
- A. Correct.
- Q. And so if the data usage is not reliable from AT&T, then we really should be focusing on the text; would that be fair to say?
- A. It would be fair, yes, sir.
- Q. So the distance between Saugus and Dartmouth at about 7 or 8 p.m. on January 31st is less than an hour, isn't it?
- A. I do not know that, but I would have to refer to you on that.
- Q. Now, in addition to the fact that there was an outbound text from that phone number, from the 5112 number, did you happen to look at some of the -- you said, I think, you looked at all of the other call data, and you plotted it out for the 5112 phone, isn't that right?
- A. Previously, yes, sir.
- Q. And so you know that, in fact, this outbound text that he sent was a text to Tamerlan Tsarnaev, didn't you?
- A. I'm aware of that, yes, sir.
- Q. In fact, he had had a previous text with Tamerlan Tsarnaev and a text after this one with Tamerlan Tsarnaev that evening?
- A. I'm aware of the one previously. I'm not aware of the one

after, no, sir.

- Q. Are you aware that they spoke for over, I think, four minutes earlier that day --
- A. I did not look at that detail, no, sir.
- Q. -- on the phone?

That wouldn't surprise you if there was a call between the two on January 31st for about four minutes and 19 seconds?

- A. I can't say that it wouldn't surprise me, but I'm not aware of it.
- Q. Now, when you identify an entry from -- that you create a plot for, that tells you that there was some phone activity with a tower located where it's shown on the plot at a certain time, correct?
- A. Correct, sir.
- Q. It doesn't tell you who was using the phone, right?
- A. No, sir.
- Q. It doesn't tell you how far away that person was from the tower, right?
- A. Correct.
- Q. And it doesn't tell you what the location data is about the other person with whom they're communicating, correct?
- A. No, sir, it does not.
- Q. Now, did you do a similar analysis for Tamerlan Tsarnaev's phone?
- A. As far as -- what do you mean a similar --

Q. Plotting where his phone was at different times.

MR. WATKINS: Objection, your Honor.

THE COURT: Sustained.

MR. CHAKRAVARTY: One moment, your Honor.

- Q. You were asked several questions about the Boston Marathon in relation to the Twitter information. In fact, the last wave of the Boston Marathon starts at about 10:40 a.m., is that right?
- A. Yes. I am to believe that, yes, sir.

MR. WATKINS: Your Honor, I'm going to object. The government objected on this before.

MR. CHAKRAVARTY: I think the door was opened, your Honor.

THE COURT: Yeah. You can have it. Go ahead.

- Q. After the elite runners come in in about two hours, a little over that, the Marathon continues for several hours after that; isn't that fair to say?
- A. Yes, because the first runners are going to come in, and others are going to come in afterwards, yes, sir.
- Q. In fact, you know that around 2:49 in the afternoon the Marathon is still going, correct?
- A. I believe so, correct.
- Q. So if somebody attended the Marathon in the afternoon, they still would have been able to observe the runners as well as participate in the activities?

A. I would believe so, yes.

MR. CHAKRAVARTY: If we could go to 3128, please, Mr. Watkins?

- Q. This was the other plot that you did for March 6, 2013, correct?
- A. Yes, sir.
- Q. Again, you used the GPS data that was in a government exhibit, and then you plotted onto that where the defendant's cell phone was the evening of March 6th, correct?
- A. Correct.
- Q. Now, with regards to these purchases up at the Wal-Marts, they were of BBs, is that right?
- A. I believe so, yes.
- Q. You saw the receipts just a little while ago, and they matched up in time?
- A. Yes, sir.
- Q. You don't know whether -- or, rather, you do know that there was no video or anything else identifying Tamerlan Tsarnaev as the purchaser of those BBs, right?
- A. I'm not aware of, no.
- Q. You don't know where Tamerlan's phone was at that time, do you?

MR. WATKINS: Objection.

THE COURT: Sustained.

Q. And you don't know who then actually purchased those BBs,

do you?

MR. WATKINS: Objection.

THE COURT: Sustained.

Q. You don't know what vehicle was up there at that time, do you?

MR. WATKINS: Objection.

THE COURT: Sustained.

- Q. Is there anything in the data that you reviewed in your preparation for this case that shows that it was Tamerlan that made those purchases?
- A. No, I did not see anything that would corroborate that in any way.
- Q. With regard to the Macy's purchase, there was also no videotape for the Macy's pressure cooker purchase, correct?
- A. I'm aware of that, yes, sir.
- Q. You didn't review any videotape that --
- A. No, sir, no.
- Q. Now, the defendant and his brother communicated on other days that components of the bombs and other things were purchased, correct?
- A. I believe so. I didn't go through all of the detail of who contacted who. I was looking more of location information.
- Q. In fact, even on April 14th, the day before the Marathon bombing --

MR. WATKINS: I'm going to object, your Honor.

THE COURT: Sustained. Beyond the scope.

MR. CHAKRAVARTY: Just one moment, your Honor.

That's all I have, your Honor.

MR. WATKINS: Just a couple.

REDIRECT EXAMINATION BY MR. WATKINS:

- Q. Showing you Exhibit 3002 -- you have many years of experience as a computer forensic investigator, correct?
- A. Yes, sir.
- Q. You don't need to have several years of a computer forensic investigator to be able to plug in longitude and latitude into a Google Earth program, correct?
- A. No, sir. They're numbers, yes, sir.
- Q. They are just two numbers, and really anybody can do that, is that correct?
- A. That's correct, yes.
- Q. You were able to use some more sophisticated tools in order to map it, but anybody could punch these into Google Maps and come up with a location, right?

MR. CHAKRAVARTY: Objection, your Honor.

THE COURT: Overruled. Go ahead.

- Q. No training from AT&T, T-Mobile or anybody else is really necessary to get those coordinates?
- A. Correct.
- Q. 3127, 9:03 p.m. data usage for 5112, would it be possible for the Dzhokhar Tsarnaev 5112 phone to be anywhere else but

the UMass New Bedford area and hit off a cell phone tower at 9:03 p.m.?

- A. Based on the records that came from AT&T, it would put that tower there, yes, sir.
- Q. Mr. Chakravarty asked you about the distance in time between New Bedford -- or, I'm sorry, Dartmouth and Saugus; do you remember that?
- A. Yes, sir.
- Q. He suggested it was less than an hour, and you don't know?
- A. I'm not familiar with the area of the drive.
- Q. You're from Rochester. Why should you be?
- A. Correct.
- Q. But neither you nor Mr. Chakravarty knows exactly how long it takes to get to the Square One Mall?
- A. I wouldn't know that and any traffic could even make a difference.
- Q. One could do that by going to Google Maps, as we all do, and --

MR. CHAKRAVARTY: Objection, your Honor. Leading.
THE COURT: Sustained.

Q. For any place, one could determine the time it takes to go from one spot to another using Google Maps, correct?

MR. CHAKRAVARTY: Objection.

THE COURT: Go ahead. You may answer that.

A. Yes. You can take two points and Google Maps, Google

Earth, a beginning and ending, and it will map out an estimated time.

- Q. So if the government wanted to prepare an exhibit -MR. CHAKRAVARTY: Objection, your Honor.
- Q. -- to talk about how long it took, they could do that very easily?

THE COURT: The objection is sustained.

MR. WATKINS: I have no nothing further, your Honor.

THE COURT: Anything else?

All right, sir. Thank you. You may step down.

THE WITNESS: Thank you.

THE COURT: I think that's as far as we'll go today with the evidence, jurors. Another productive day. We'll moving along. Again, I urge you to avoid any conversations about the matters at issue among yourselves or anybody else. Avoid any investigations and of course any news reports. Have a good evening. We'll see you tomorrow morning.

(Whereupon, at 3:30 p.m. the trial recessed.)

CERTIFICATE

We, Marcia G. Patrisso, RMR, CRR, and Cheryl Dahlstrom, RMR, CRR, Official Reporters of the United States District Court, do hereby certify that the foregoing transcript constitutes, to the best of our skill and ability, a true and accurate transcription of our stenotype notes taken in the matter of Criminal Action No. 13-10200-GAO, United States of America v. Dzhokhar A. Tsarnaev.

/s/ Marcia G. Patrisso
MARCIA G. PATRISSO, RMR, CRR
Official Court Reporter

/s/ Cheryl Dahlstrom
CHERYL DAHLSTROM, RMR, CRR
Official Court Reporter

Date: 1/25/16