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UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

UNITED STATES OF AMERICA,)	
)	
Plaintiff,)	
)	Criminal Action
v.)	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

EXCERPT OF DAY FORTY-TWO OF JURY TRIAL

Testimony of Mark Spencer

John J. Moakley United States Courthouse
Courtroom No. 9
One Courthouse Way
Boston, Massachusetts 02210
Tuesday, March 31, 2015

Cheryl Dahlstrom, RMR, CRR
Official Court Reporter
John J. Moakley U.S. Courthouse
One Courthouse Way, Room 3510
Boston, Massachusetts 02210
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Mechanical Steno - Computer-Aided Transcript

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I N D E X

	<u>Direct</u>	<u>Cross</u>	<u>Redirect</u>	<u>Recross</u>
<u>WITNESSES FOR THE DEFENSE:</u>				
MARK SPENCER				
by Mr. Fick	5		70	
by Mr. Chakravarty		45		75

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E X H I B I T S

DEFENDANTS:

<u>No.</u>	<u>Description</u>	<u>In Evd.</u>
1433	Tamerlan Tsarnaev travel record from Customs	5
3308	Spencer summary of three computers analyzed	14
3303- 10	Spencer summary for Sony VAIO computer...	22
3301- 01	Summary of files and folders on 1W16.....	27
3310-1 and 3310-2	Copies of files from Laurel Street hard . drive	32
3312-1	Summary of file and folder listings.....	37
3312- 02	Summary of events re Complete Inspire....	40
3313- 03	Summary of Inspire files on Sony VAIO ... computer	43
3302- 04	Chart re removal devices.....	56
3300- 07	Summary of MFT for 1W16.....	57
3303- 06E	Thirteen pages of Samsung history.....	73

1 (EXCERPT AS FOLLOWS:

2 THE COURT: Good morning, jurors. Mr. Fick.

3 MR. FICK: Good morning, your Honor. The defense
4 calls Mark Spencer.

5 THE CLERK: Sir, will you please rise and raise your
6 right hand.

7 MARK SPENCER, Sworn

8 THE CLERK: Have a seat. State your name. Spell your
9 last name for the record. Keep your voice up and speak into
09:16 10 the mic so everyone can hear you.

11 THE WITNESS: Mark Spencer, M-a-r-k, S-p-e-n-c-e-r.

12 DIRECT EXAMINATION BY MR. FICK:

13 Q. Good morning, Mr. Spencer.

14 A. Good morning.

15 MR. FICK: I'm going to ask to pause for a minute and
16 just do a housekeeping thing we talked about with the Court. I
17 would move into evidence Government's Exhibit 1433, which is
18 the Tamerlan Tsarnaev certified travel record from Customs and
19 Border Protection.

09:16 20 THE COURT: That may be admitted.

21 (Defendant's Exhibit No. 1433 received into evidence.)

22 MR. FICK: May I just briefly publish it to the jury,
23 your Honor?

24 THE COURT: From your computer?

25 MR. FICK: From my computer, yes. Thank you. Turning

1 now to Page 2 of the document and highlighting the portion
2 reflecting Tamerlan Tsarnaev's departure from the United States
3 on January 21, 2012.

4 MR. CHAKRAVARTY: Your Honor, the government doesn't
5 have an objection with using this exhibit with the witness, but
6 Mr. Fick shouldn't be testifying to it.

7 THE COURT: Well, I think he was reading what it said
8 but fine.

9 MR. FICK: Thank you, your Honor. I will now commence
09:18 10 with my examination.

11 I'm going to display on the screen before I begin what
12 was used as a chalk with Mr. Swindon government's marked as
13 1557 if that's satisfactory.

14 THE COURT: This is a chalk?

15 MR. FICK: This is a chalk that was used -- shown to
16 everyone, though, with Mr. Swindon. And I will --

17 THE COURT: Does it have a number?

18 MR. FICK: 1557. I'm going to actually take it off
19 the screen for the moment anyway.

09:18 20 Q. Good morning again, Mr. Spencer.

21 A. Good morning.

22 Q. Could you please tell the jury where you work?

23 A. I work for Arsenal Consulting in Chelsea, Massachusetts.
24 I'm the president.

25 Q. What is Arsenal Consulting?

1 A. Arsenal Consulting is a digital forensic company. We
2 focus on digital forensics consulting and software development.

3 Q. When you say "digital forensics consulting," what is that?

4 A. Digital forensics involves the identification,
5 preservation, analysis and reporting on electronic evidence,
6 electronic data.

7 Q. How long have you been the president of Arsenal
8 Consulting?

9 A. Since mid-2009.

09:19 10 Q. What is your educational background?

11 A. I have a bachelor of arts from UMass Boston, which I
12 received in 2003.

13 Q. Do you have training in digital forensics specifically
14 apart from your education, your formal university education?

15 A. I do. I have attended approximately 50 courses in
16 training events, courses from Guidance Software, AccessData,
17 SANS, Cytech.

18 Q. And the companies you just mentioned, those are vendors of
19 digital forensic software, among other things?

09:20 20 A. Or training providers, yes.

21 Q. Do you have any certifications related to digital
22 forensics?

23 A. I do.

24 Q. Can you name a few of those?

25 A. EnCase certified examiner; ProDiscover certified examiner;

1 digital forensics certified practitioner.

2 Q. Are you familiar with an organization called the Digital
3 Forensics Certification Board?

4 A. Yes.

5 Q. What is that?

6 A. That's the organization that sponsors the digital
7 forensics certified practitioner, an organization started by
8 the National Institute of Justice.

9 Q. And so you are -- do you have a certification from that
09:20 10 board?

11 A. Yes.

12 Q. Do you lecture or teach on the subject of digital
13 forensics?

14 A. I do.

15 Q. How often?

16 A. Frequently, approximately a hundred presentations and
17 courses between teaching for organizations at the college level
18 or at legal events, law enforcement events.

19 Q. Have you given trainings or lectures for law enforcement?

09:21 20 A. I have.

21 Q. Can you give a few examples?

22 A. RCMP.

23 Q. RCMP, what is that?

24 A. That's Canadian law enforcement. Hong Kong Police
25 Department; Taiwan's MJIB.

1 Q. What sorts of cases does Arsenal Consulting typically work
2 on?

3 A. Typically civil cases, private sector matters,
4 intellectual property. Theft is by far the most common type of
5 case we work on, both on behalf of defendants and plaintiffs,
6 depending on the case.

7 Q. Have you also worked on criminal cases?

8 A. Yes.

9 Q. About how many cases do you work on in a given year?

09:21 10 A. Approximately 50.

11 Q. Can you give a ballpark estimate of how many digital
12 devices you've analyzed in the course of your career?

13 A. Over a thousand.

14 Q. Did you do computer forensic work prior to founding
15 Arsenal Consulting?

16 A. I did.

17 Q. Can you describe that history briefly?

18 A. Yes. Prior to founding Arsenal Consulting, I worked for
19 First Advantage Litigation Consulting from 2009 back to 2006.
09:22 20 Prior to 2006, I worked for Evident Data, from 2006 back to
21 2002, until Evident Data was acquired by First Advantage.
22 Prior to working in the private sector, I worked for the
23 Suffolk County District Attorney's Office in Boston.

24 Q. Do you have employees at Arsenal Consulting who assist you
25 with your work?

1 A. I do.

2 Q. Do those employees also have relevant training and
3 certifications in digital forensics?

4 A. Yes.

5 Q. Does one of your employees speak a foreign language
6 relevant to work on this case?

7 A. Yes.

8 Q. What language is that?

9 A. Russian.

09:22 10 Q. Is she a native speaker of Russian?

11 A. She is.

12 Q. Have you previously given sworn testimony in legal
13 proceedings of various kinds?

14 A. I have.

15 Q. Have you previously testified in this court, before this
16 judge, about digital forensics?

17 A. I have.

18 Q. Does your firm have a standard billing rate that you
19 charge clients?

09:23 20 A. We do.

21 Q. What is that rate today?

22 A. \$425 an hour.

23 Q. What is the rate at which you're being compensated for
24 this case?

25 A. 375.

1 Q. What is the institution or entity from which you receive
2 payment in this case?

3 A. The federal court.

4 Q. Approximately how many hours has your firm billed to date
5 for work on this case?

6 A. Approximately 400.

7 Q. So is that approximately --

8 A. Approximately 400 hours.

9 Q. Right. Is that approximately \$150,000 of fees?

09:23 10 A. Yes.

11 Q. What were you asked to do in this case?

12 A. We were asked to review electronic evidence and reports
13 related to that evidence.

14 Q. When you say "reports," whose reports?

15 A. The FBI's.

16 Q. When you say "electronic evidence," does that include
17 forensic images of various devices?

18 A. Yes.

19 Q. Can you remind the jury what a forensic image of a device
09:24 20 is?

21 A. A forensic image is essentially a copy of a storage device
22 or volume which includes deleted space. And a fairly important
23 matter is that at any time in the future, you can authenticate
24 that forensic image. You can authenticate that it's good data.

25 Q. Were you here last week when Agent Swindon of the FBI

1 testified?

2 A. Yes.

3 Q. I'm going to put up on the screen a chalk or a chart
4 listing a number of devices that he talked about in just a
5 moment.

6 Do you remember seeing that list last week?

7 A. Yes.

8 Q. Now, the items pulled out here, is that three computers
9 and four storage devices?

09:25 10 A. Three computers, three thumb drives, and an external hard
11 drive.

12 Q. Were those among the devices you analyzed in your work on
13 this case?

14 A. Yes.

15 Q. Did you analyze other devices in your work on this case?

16 A. Yes.

17 Q. Approximately how many?

18 A. Approximately 30.

19 Q. Across all of the devices you analyzed, can you give a
09:25 20 ballpark estimate of how many files existed on those devices,
21 discrete files?

22 A. In terms of active files, over five million, five million
23 files and folders. That does not include the contents of
24 containers, like zip files, or the contents of deleted space.

25 Q. Now, when you begin work on a case, do you do some

1 background workup on devices or images that you're going to
2 analyze?

3 A. We do.

4 Q. What does that initial workup include?

5 A. We refer to it as case initiation. But even if our own
6 clients give us a laptop, for example, we determine what users
7 exist on that laptop, when Windows was installed on that
8 laptop.

9 Q. Do you also investigate the manufacturing date of devices
09:26 10 if that information is available?

11 A. In some cases, yes.

12 Q. Why do you look for information or why do you compile the
13 information about the Windows installation and the
14 manufacturing date?

15 A. We -- in general, it's because it helps us with
16 connections between computers, between files, between data,
17 events. More specifically, in some cases, our clients will
18 give us a laptop and say, This is our employee's laptop. When
19 we look at it closer, we'll realize it's only been the
09:26 20 employee's laptop for three months. And we'll have to ask the
21 question, Well, where is the previous laptop?

22 Q. Now, did you do a workup in this case for the three
23 computers we've been hearing a lot about: the Samsung, the
24 Sony, and the Hewlett-Packard?

25 A. Yes.

1 MR. FICK: If I could get the screen, your Honor, just
2 for the witness?

3 Q. Do you recognize the document that's on the screen, which
4 has been previously marked as Exhibit 3308?

5 A. I do.

6 Q. What is that?

7 A. This is a summary of our findings related to the three
8 computers.

9 Q. Is this a chart you created?

09:27 10 A. Yes.

11 Q. Does this gather together and compile information from a
12 variety of different forensic sources?

13 A. It is.

14 MR. FICK: Your Honor, I'd move into evidence 3308 and
15 ask to publish.

16 MR. CHAKRAVARTY: The government's position is that
17 this should be a chalk.

18 THE COURT: I'll admit it as a summary.

19 MR. FICK: Thank you, your Honor.

09:27 20 (Defendant's Exhibit No. 3308 received into evidence.)

21 Q. Now, the Samsung computer, you heard testimony last week,
22 didn't you, that it was recovered on Laurel Street in
23 Watertown, and the FBI called it Tamerlan's laptop? Do you
24 recall that?

25 A. Yes.

1 Q. What was the Windows installation date on that computer?

2 A. December 21, 2011.

3 Q. And what is the principal user name on that computer?

4 A. Umar.

5 Q. And when was it manufactured?

6 A. September 2011.

7 Q. Now, the Hewlett-Packard, the second one there, HP 2R14,
8 you understand that was a computer seized from Norfolk Street
9 in Cambridge, correct?

09:28 10 A. Yes.

11 Q. What was the Windows installation date on that?

12 A. September 22, 2011.

13 Q. What was the principal user name on that computer?

14 A. Umar.

15 Q. Was that created on the same day?

16 A. Yes.

17 Q. And down at the bottom, the Sony 1R6, seized from an
18 apartment down south in the New Bedford area, what was the
19 Windows installation date on that computer?

09:28 20 A. February 26, 2011.

21 Q. And what is the principal user name on that computer?

22 A. Anzor.

23 Q. And that was created on the same day that Windows was
24 installed?

25 A. That's correct.

1 Q. Now, did you have occasion to extract the internet search
2 history on the Samsung computer, Tamerlan's laptop?

3 A. Yes.

4 Q. How did you go about doing that?

5 A. We used a combination of two tools: Internet Evidence
6 Finder and NetAnalysis.

7 Q. Why do you use two tools?

8 A. The tools aren't going to have the exact same criteria for
9 what constitutes a search, so we want to have as comprehensive
09:29 10 a set of potential searches as possible.

11 Q. Are these tools tools that are widely accepted and used in
12 the digital forensics field?

13 A. Yes.

14 MR. FICK: If I could get the monitor now just for the
15 witness again, your Honor, please?

16 Q. I'm going to show you a document on the monitor previously
17 marked as Exhibit 3303-6 and ask if you recognize it.

18 A. I do.

19 Q. What is it?

09:30 20 A. This is a spreadsheet. This is essentially output from
21 NetAnalysis and IEF related to searches.

22 Q. For the Samsung?

23 A. For the Samsung computer.

24 Q. Is this a document that you created using the tools that
25 you described?

1 A. Yes.

2 Q. I want to draw your attention now to a particular search
3 in this document from March -- first of all, before I do that,
4 time on computers is measured or stated in different formats in
5 different instances; is that fair to say?

6 A. Yes.

7 Q. What is UTC time?

8 A. UTC is Universal Time. No one is going to like this
9 explanation. Universal Time for forensic people, some
09:31 10 technical people, is the most accurate time. Computers,
11 generally speaking, store time either in Universal Time or in
12 local time. The problem with local time is that we may know
13 exactly when local time really was. It might be Eastern. It
14 might be Pacific. It might be some other time zone. There are
15 situations in which we won't know exactly what local time was,
16 and there's complications which include Daylight Savings and
17 Daylight Savings happening in different years, when it started,
18 when it stopped. So, generally speaking, Universal Time is
19 just a much simpler time for us to stay in.

09:31 20 Q. Is there a calculable relationship between UTC and Eastern
21 Time depending on whether we're in Daylight Savings or not?

22 A. Yes.

23 Q. What is that relationship?

24 A. When we are not in Daylight Savings, you would subtract
25 five hours from UTC.

1 Q. For Eastern?

2 A. For Eastern Time. When we are in Daylight Savings, you
3 would subtract four.

4 Q. Okay. Now I'm going to show you a portion of this search
5 history in just a moment if my computer will cooperate with me.

6 MR. FICK: Your Honor, I would ask to publish what is
7 now on the screen, a portion of the document as we discussed,
8 identifying it as Exhibit 3303-6A.

9 THE COURT: All right.

09:32 10 Q. Is this --

11 MR. FICK: I would ask to publish that to the jury, if
12 I could.

13 THE COURT: They should have it.

14 MR. FICK: Thank you.

15 Q. Mr. Spencer, is this a sort of blow-up of a particular
16 line entry on your search history spreadsheet?

17 A. Yes.

18 Q. Is this the date and time that the search was conducted in
19 UTC that I just circled there on the screen?

09:33 20 A. Yes.

21 Q. Can you read the search term that's there?

22 A. It says, "Ruger P95."

23 Q. Now, I'm going to show you another portion of the
24 document.

25 MR. FICK: If I could just get it for the witness

1 again, your Honor, briefly.

2 Q. Is this a portion of the document showing search terms on
3 or about April 6 and 7 of 2013?

4 A. Yes.

5 Q. Are the search terms various versions of words including
6 "transmitter" and "receiver" and "oscilloscope"?

7 A. Yes.

8 MR. FICK: Your Honor, I'd ask to publish this exhibit
9 to the jury as 3303-6B.

09:34 10 THE COURT: All right.

11 Q. The highlighted portions that should be coming up on the
12 screen now, are these the searches and terms from Tamerlan's
13 Samsung that we just talked about on or about April 7 of 2013?

14 A. Yes.

15 MR. FICK: If I could get the screen just for the
16 witness again back, your Honor?

17 Q. I'm going to page through the document for you, Mr.
18 Spencer, for a couple of other days on the screen here. The
19 prior page, April 7th, are there terms on this screen that
09:35 20 include the terms "fireworks," "firing system," and

21 "detonator"?

22 A. Yes.

23 MR. CHAKRAVARTY: Your Honor, object to the leading
24 for each page. I don't mind the signposts but just leading the
25 witness as to what to say.

1 MR. FICK: I can reframe and do it a different way.

2 THE COURT: Okay.

3 MR. FICK: I'd ask to publish this page to the jury,
4 your Honor, as 3306-6C [sic], I think we're at.

5 Q. Does this reflect certain search terms that were used on
6 Tamerlan's Samsung on April 7 of 2013?

7 A. Yes.

8 Q. Can you read the two search terms that are highlighted?

9 A. "Fireworks firing system" and "detonator."

09:36 10 MR. FICK: If I could get the screen back again just
11 for the witness, your Honor?

12 Q. Showing you a portion of the exhibit, does this page of
13 the exhibit reflect certain search terms and -- from the
14 Samsung computer on April 10 and 11 of 2013?

15 A. Yes.

16 MR. FICK: Your Honor, I'd ask to publish this page to
17 the jury as 3303-6D.

18 THE COURT: Okay.

19 Q. If I could just ask you, Mr. Spencer, to read each of the
09:37 20 highlighted search terms on this page at least until you hit
21 the foreign language at the bottom?

22 A. "Gun stores in N.H."; "gun stores in N.H., Salem"; "gun
23 stores in N.H.," "Boston Marathon."

24 Q. What's the date of the search for the term "Boston
25 Marathon"?

1 A. April 10, 2013.

2 Q. Now, did you also extract the web search history from the
3 Sony VAIO computer?

4 A. Yes.

5 Q. Did the search term "Ruger" appear anywhere in the search
6 history of the Sony VAIO computer?

7 A. No.

8 Q. Did the search term "gun store" appear anywhere in the
9 history of the Sony VAIO computer?

09:38 10 A. No.

11 Q. Did the terms "transmitter," "receiver," "firework" or
12 "detonator" appear anywhere in the search history of the Sony
13 VAIO computer?

14 A. No.

15 Q. Was the search term "Boston Marathon" evident in the
16 search history of the Sony VAIO computer prior to the bombings
17 on April 15th of 2013?

18 A. There were references to the Boston Marathon bombing on
19 the Sony. There were no references to the Boston Marathon
09:38 20 without the context of the bombing.

21 Q. In other words, there were no searches using the term
22 "Boston Marathon" prior to the bombing?

23 A. Correct.

24 MR. FICK: If I could get the screen, your Honor,
25 again just for the witness?

1 Q. I'm going to show you, Mr. Spencer, what we've previously
2 identified as Exhibit 3303-10. Do you recognize what this is?

3 A. Yes.

4 Q. What is it?

5 A. This is an output from the tool I referred to earlier
6 called NetAnalysis.

7 Q. What does it depict?

8 A. This is a visual representation of hits, the number of
9 times a domain name exists in the internet history, the web
09:39 10 browser history.

11 Q. How is it created?

12 A. The tool basically will look at the total number of
13 occurrences of the domain name in the internet history.

14 Q. Is this a tool that's widely used and accepted among
15 computer forensics examiners?

16 A. Yes.

17 MR. FICK: Your Honor, I'd move this exhibit into
18 evidence, 3303-10.

19 MR. CHAKRAVARTY: Your Honor, same position. I think
09:40 20 this should be a chalk.

21 THE COURT: All right. I'll admit it as an exhibit as
22 a summary.

23 (Defendant's Exhibit No. 3303-10 received into evidence.)

24 MR. FICK: And if I can publish it, please?

25 Q. What are the top two domains on this chart?

1 A. www.facebook.com and vk.com.

2 Q. Do you have an understanding of what vk.com is?

3 A. Yes.

4 Q. What is your understanding?

5 A. My understanding is it's a Russian social networking site.

6 Q. Kind of similar to Facebook?

7 A. As far as I know, yes.

8 Q. What is the total number of hits that the tool found for
9 facebook.com?

09:41 10 A. 1,378.

11 Q. And what's the total number of hits for vk.com?

12 A. 1,275.

13 Q. Now, last week there was -- do you recall hearing
14 testimony about an external hard drive recovered at Laurel
15 Street in Watertown?

16 A. Yes.

17 Q. This is a device identified as 1W16 by the FBI, is that
18 right?

19 A. Correct.

09:41 20 Q. What is an external hard drive as compared to, say, a
21 thumb drive?

22 A. Generally, an external hard drive is going to be a larger
23 device, both in terms of physical size and in terms of storage
24 capacity.

25 Q. Does the file system on an external hard drive frequently

1 differ from the file system on a thumb drive?

2 A. It many cases, yes. A thumb drive normally will have an
3 older type of file system known as FAT, or file allocation
4 table. External hard drives, being generally much larger
5 devices, will have a more advanced file system on them, either
6 NTFS or something known as HFS.

7 Q. Can you glean more forensic information from a hard drive
8 that has the NTFS file system on it?

9 A. Yes.

09:42 10 Q. What does it mean to format a hard drive, an external hard
11 drive?

12 A. From a laymen's perspective, format means to reset the
13 hard drive, start fresh. More specifically or more
14 technically, you're creating a new file system on that device.

15 Q. What is the consequence of that or an effect of that from
16 an end user's perspective?

17 A. A user who engages in a format isn't going to see the
18 previous files and folders that were on that drive.

19 Q. Is it possible to recover specific forensic information
09:43 20 about what computer and what user on that computer formatted an
21 external hard drive?

22 A. It is.

23 Q. How do you go about doing that?

24 A. Based on the way NTFS works, the file system, you can
25 identify the owner of files and folders that are on that drive,

1 including critical files and folders that allow the file system
2 to operate. That file system information includes security
3 information about not only the computer that, by default, was
4 responsible but the user.

5 Q. The user on that computer?

6 A. Correct.

7 Q. Can you also recover information about what computer
8 created individual files on an external hard drive?

9 A. Yes.

09:44 10 Q. Is that done in a similar manner to what you just
11 described for the format question?

12 A. It is.

13 Q. Now, you talked about security streams or security
14 identifiers, something like that. What is a security
15 identifier?

16 A. The actual information, the security information, stored
17 on the hard drive that contains the NTFS file system includes
18 things called security descriptors. Basically, these are
19 things that tell the operating system what access various users
09:44 20 should have to the various device and what types of auditing
21 are correct on that device. It's basically a big index, and it
22 says, This user can do this thing. This user can do that
23 thing. This user is the owner of a certain thing.

24 Q. So when you talk about the security identifier, what is it
25 exactly? What does it look like? How is it depicted?

1 A. It looks like a long string of numbers and letters. It's
2 a globally unique identifier designed by Microsoft. So it's a
3 long list.

4 Q. Essentially a lengthy stream of letters and numbers?

5 A. Yes.

6 Q. Do any two computers or users in the world have the same
7 security identifier?

8 A. Well, the intent of a global unique identifier is so that
9 they don't. You could force a collision but in practice, no,
09:45 10 in our experience, no.

11 Q. Did you make efforts to determine the security identifier
12 associated with various files on the 1W16 hard drive recovered
13 at Laurel Street in this case?

14 A. Yes.

15 Q. Were you able to associate the security identifiers on
16 that hard drive with another piece of evidence in this case?

17 A. We were.

18 Q. What association or relationship did you find?

19 A. The security identifier for the files and folders on the
09:46 20 Laurel Street hard drive was related to the Samsung laptop and
21 the Umar user.

22 Q. When you say "related to," what does that mean with
23 respect to the security identifier?

24 A. Specifically, the owner of the files and folders was the
25 Umar user on the Samsung laptop.

1 Q. Did you create a chart to summarize your review and the
2 results of the information that you took from various sources?

3 A. Yes.

4 MR. FICK: Your Honor, if I could get the screen for
5 the witness only?

6 Q. Do you recognize the document I've put on the screen here?

7 A. Yes.

8 Q. What is it?

9 A. This is a listing of the files and folders currently on
09:47 10 Laurel 1W16, the Laurel hard drive, which includes the SID
11 information, which user --

12 Q. Let me stop you. SID is?

13 A. Security identifier.

14 Q. Ownership information, which computer, which owner, is
15 associated with each file and folder in this list. And do we
16 know what that SID is? What does SID, security identifier,
17 relate to?

18 MR. FICK: Your Honor, I'd ask to admit and publish
19 this Exhibit 3301-01 as a summary.

09:47 20 THE COURT: Is this a single page?

21 MR. FICK: It's actually got a few pages. It's about
22 four or five pages.

23 MR. CHAKRAVARTY: No objection, your Honor.

24 (Defendant's Exhibit No. 3301-01 received into evidence.)

25 THE COURT: No. Do they all look like this since I'm

1 only seeing the first one?

2 MR. FICK: Yes. But they're all similar to that.

3 THE COURT: No objection?

4 MR. FICK: If we could publish this.

5 THE COURT: 3301.

6 MR. FICK: 3301-0 1, that's correct.

7 Q. What does the first column on the left here that I've
8 highlighted, what does that depict?

9 A. Those are objects related to the file system itself that a
09:48 10 -- a normal user would not see these.

11 Q. These are the names of files on the Laurel Street hard
12 drive?

13 A. Essentially, yes.

14 Q. Are there particular files that are associated with the
15 formatting of the hard drive?

16 A. There are.

17 Q. For example, what is -- I've just highlighted the file
18 name "\$MFT." What is that?

19 A. That stands for master file table. That's a critical
09:49 20 database that's used for the file system to function. It
21 tracks the files and folders on that device.

22 Q. What is the relationship of that file to the formatting
23 process of a hard disk? In other words, is that a file that is
24 associated with the process of formatting a hard disk?

25 A. Yes.

1 Q. Can you describe what you mean by that?

2 A. When you format a storage device, thumb drive or an
3 external hard drive, if you're using the NTFS file system,
4 there's going to be a suite of objects that have to be created
5 for it to function properly. This \$MFT is one of those objects
6 that is required for it to operate properly.

7 Q. This second column, the long string of a letter and some
8 numbers here that I've just circled, what is that?

9 A. That's the security identifier.

09:49 10 Q. In this particular line, does this reflect the security
11 identifier for this file we were just talking about?

12 A. Yes.

13 Q. And then were you able to associate that security
14 identifier with a particular item of evidence?

15 A. Yes.

16 Q. Is that what's reflected here in the third column?

17 A. It is.

18 Q. So, in other words, the file here, the security ID owner
19 of that file is the user Umar on the Samsung computer?

09:50 20 A. Correct.

21 Q. Now, in addition to system files, you undertook similar
22 analysis for sort of ordinary user files that a user would see
23 on this hard drive, is that right?

24 A. Yes.

25 Q. I'm going to page ahead. Up on the screen now from a

1 further page into this document, do you see file names on the
2 -- in the left column?

3 A. Yes.

4 Q. Are those various file names that have "Awlaki" in them?

5 A. Not all of them; minus two.

6 Q. Were you able to find the security identifier information
7 associated with those files?

8 A. Yes.

9 Q. Did that match another device in the case?

09:51 10 A. It did.

11 Q. Was that the Samsung?

12 A. Yes.

13 Q. And that's what's reflected here in the graph?

14 MR. CHAKRAVARTY: Objection to the leading, your
15 Honor.

16 MR. FICK: Just trying to be quick, but I'll refrain.

17 THE COURT: Go ahead.

18 MR. FICK: Thank you.

19 Q. Moving ahead to another page just as a few more examples,
09:51 20 for those files listed on the left side, did you similarly --
21 did you reach a similar conclusion about what computer and user
22 was the owner of those files on this hard drive?

23 A. Yes, the same conclusion.

24 Q. Were there any files on this hard drive that were not
25 owned by the security identifier associated with the Samsung?

1 A. Other than system files, which do not have traditional
2 security identifiers like this, no.

3 Q. Now, I'm going to show you a government exhibit already in
4 evidence, Exhibit 1475-02A, which is -- one moment.

5 Do you recognize this as being the blowup of the
6 government's exhibit which listed all the files on the Laurel
7 Street hard drive?

8 A. I really can't see much of that other than what you've
9 blown up, but it looks similar.

09:53 10 Q. The two file names highlighted there in Cyrillic letters,
11 did you have occasion to verify whether those two files, in
12 fact, exist on the Laurel Street hard drive?

13 A. Yes.

14 Q. Do those files exist on the Laurel Street hard drive?

15 A. They do.

16 Q. And the documents, were you able to verify that the
17 documents previously marked as Exhibits 3310-1 and 3310-2 are
18 correct copies of those two files?

19 A. Could you say that again?

09:53 20 Q. Did you verify whether the exhibits previously marked as
21 3310-1 and 3310-2 are true and accurate copies of those two
22 files off the Laurel Street hard drive?

23 A. Yes. We compared the actual files to make sure that the
24 content was the same.

25 MR. FICK: Your Honor, I would move into evidence

1 3310-1 and 3310-2 as well as the translations which I believe
2 are agreed upon.

3 THE COURT: Okay.

4 MR. CHAKRAVARTY: No objection, your Honor.

5 THE COURT: All right.

6 (Defendant's Exhibit Nos. 3310-1 and 3310-2 received into
7 evidence.)

8 Q. Now, first of all, as a general matter, do you have an
9 understanding of what the English meaning of those two file
09:54 10 names are from your employee's assistance?

11 A. I do.

12 MR. CHAKRAVARTY: Objection, your Honor.

13 THE COURT: Well, we have the translation, don't we?

14 MR. CHAKRAVARTY: We do have the files. I'm not sure
15 that the file names are also translated. It sounds like he's
16 getting it from his employee.

17 MR. FICK: I believe the government witness did the
18 same thing.

19 THE COURT: My point -- you're right, strictly
09:54 20 speaking. But is it inevitable that we're going to get it
21 anyway? The objection is sustained. Go ahead.

22 Q. I'm going to pull up on the screen what's now in evidence
23 two different items. On the left side of the screen is Exhibit
24 3310-01, a document in a foreign language; and on the right
25 side of the screen is 1475-21, a copy of *Complete Inspire*, a

1 particular page. Do you see that on the screen in front of
2 you?

3 A. I do.

4 MR. FICK: Oops. It's not the -- here we go.

5 MR. CHAKRAVARTY: Your Honor, the government doesn't
6 object to the authenticity of either of these documents, but
7 this witness is not -- it's not in his expertise to be
8 testifying about comparing those documents.

9 THE COURT: That seems to be right.

09:55 10 MR. FICK: I just want to show a few contents next to
11 each other, your Honor, on the screen. I'm not going to ask
12 him to analyze them.

13 MR. CHAKRAVARTY: This seems argumentative, your
14 Honor.

15 THE COURT: The exhibits are in evidence. Okay. Go
16 ahead. I guess what can be absorbed is the pictures, is that
17 it?

18 MR. FICK: For this particular purpose, yes, on the
19 screen.

09:56 20 THE COURT: Okay.

21 MR. FICK: And I'll move on.

22 Q. I'll now put up on the screen the translation of 3310-01A,
23 which is the translation of the first of those two files.

24 Can you just read this paragraph of the translation
25 that I highlighted there, the full paragraph?

1 A. "Your task is to make use of this material which is
2 translated into Russian from *Inspire*, the mujahideen magazine
3 of the Arabian Peninsula. The text was translated into Russian
4 so that our Russian brothers and sisters could make use of it.
5 And let Allah help you. Amen."

6 MR. FICK: I'm now going to put up on the screen the
7 translation, 3310-02A, the other of those two files. I'll move
8 ahead a page.

9 Q. Can I just ask you to read the first couple sentences of
09:57 10 this paragraph? You can skip, I guess, the foreign language in
11 the first clause if you'd like. "Good article."

12 A. "As-salaam aleikum Ali Abu (ph). Good article but novices
13 will not be able to understand. They were somewhere around
14 video lessons in three parts on how to make a bomb."

15 Q. Can you continue a little bit?

16 A. "And the refrigerator temperature should be between 3 and
17 5 degrees to make the powder."

18 Q. And one more sentence.

19 A. "And also, when you are making the bomb, get rid of all
09:58 20 metal things as they might detonate the powder. Work only with
21 wooden and plastic things."

22 Q. Now, did you have occasion to investigate whether -- first
23 of all, what kind of files were these original files, the two
24 that we just talked about and were entered into evidence, not
25 the translations but the originals?

1 A. These files were in Word document format.

2 Q. Did you have occasion to determine whether those files
3 were ever opened in Microsoft Word on any of the computers
4 available in evidence in this case?

5 A. We did.

6 Q. What did you find?

7 A. We found event log records. Windows event logs are
8 diagnostic logs kept by Microsoft in some applications. In
9 this particular case, Microsoft Office recorded some alerts
09:59 10 related to when files were saved, these files in particular.

11 Q. On what computer did you find those artifacts?

12 A. On the Samsung.

13 Q. The Samsung from Laurel Street identified as Tamerlan's?

14 A. Yes.

15 Q. Did you find any such artifacts on the Sony?

16 A. No.

17 Q. Now, I'm going to put up on the screen a couple of pages
18 of what is in evidence as 1475-21, which is a PDF document
19 called *Complete Inspire*. Do you recall seeing this PDF and
10:00 20 hearing testimony about it last week when you were observing
21 Mr. Swindon?

22 A. Yes.

23 Q. Did you undertake any analysis across the forensic devices
24 or the images available to you to trace the history and origin
25 of this file across those devices?

1 A. Yes.

2 Q. What did you do exactly? Can you describe a little bit
3 what you did?

4 A. At the most basic level, we looked to see where this
5 document existed, when it was created.

6 Q. Okay. And did you create a couple of charts to summarize
7 your findings?

8 A. Yes.

9 MR. FICK: If I could get the screen just for the
10:00 10 witness, your Honor?

11 Q. Mr. Spencer, do you recognize this chart?

12 A. Yes.

13 Q. What is it?

14 A. This is a summary of our findings related to the created
15 date and times of this document.

16 Q. Is it a summary of information taken from a variety of
17 different forensic sources across the images you had in your
18 possession?

19 A. Yes, essentially file and folder listings.

10:01 20 MR. FICK: Your Honor, I'd move this document into
21 evidence and ask to publish.

22 MR. CHAKRAVARTY: Same objection, your Honor.

23 THE COURT: Okay. All right. I'll admit it as an
24 exhibit.

25 MR. FICK: Thank you, your Honor.

1 THE COURT: The number?

2 MR. FICK: It's 3312-1.

3 (Defendant's Exhibit No. 3312-1 received into evidence.)

4 Q. So can you just describe briefly for the jury what the
5 different columns of this chart represent?

6 A. The first column represents the piece of evidence we were
7 referring to it. The second column, if the value is not in
8 italics, that's the Universal Time for the created date, for
9 that item. If it's in italics, then it's in local time.

10:02 10 Q. What is the -- what is the created date of a file on a
11 device? What does it mean? What's its significance?

12 A. The created date normally refers to when a file was
13 originally created in its current location. So that could mean
14 copied there. It could also mean originally created there, or
15 it could refer to when a file was moved there. The reference
16 would be to its creation time in its original location if it
17 was moved there.

18 Q. Now, some of these entries are in italic, which meant you
19 left them in local time. Why did you do that?

10:02 20 A. Again, that's because the local time in these cases, it's
21 -- that is how the value was stored by the operating system, by
22 the file system. In many cases we can assume that we're
23 referring to Eastern Time, and we can simply -- if we wanted to
24 go back to Universal Time, we could add hours. If we wanted to
25 come back from Universal Time, we would subtract them. But the

1 Eastern Time is an assumption. We know that laptops can
2 travel. Time zones can change. We may not know exactly when a
3 time zone was set one way versus another way.

4 Q. In other words, where your data was in local time, you
5 left it in local time? Is that essentially what you're saying?

6 A. If the data was originally stored by the file system or
7 the operating system in local time, we left it that way here,
8 yes.

9 Q. So across all the evidence you had available to you, did
10:03 10 you find any sign of or reference -- any evidence of the
11 *Complete Inspire* PDF being created prior to the circled date
12 here, December 21, 2011?

13 A. Creation time, no.

14 Q. And on the Samsung, Tamerlan's Samsung, documents TC, what
15 does that stand for?

16 A. That refers to an encrypted container, a TrueCrypt
17 container on the Samsung laptop.

18 Q. Was the name of the TrueCrypt container "documents"?
19 That's why that's in quotes?

10:04 20 A. Yes.

21 Q. And so that's among all -- across all of the evidence you
22 had available, that is the -- was that the first reference to
23 creation of *Complete Inspire* that you could find?

24 A. Yes.

25 Q. Now, the second reference here, this Patriot VSN, what is

1 that device?

2 A. That's a Patriot thumb drive. We do not have a forensic
3 image for it, so we refer to it with its known volume serial
4 number.

5 Q. Do you recall testimony from Agent Swindon where he also
6 referred to it or agreed with me referring to it as the missing
7 Patriot thumb drive?

8 A. Yes.

9 Q. And so the second reference -- so how do -- where did you
10:05 10 come up with the reference to the file being created on the
11 Patriot thumb drive on that date, the thumb drive itself?

12 A. This particular entry came from target information of a
13 jump list. A jump list is similar to a shortcut that you've
14 heard about before. It's data that points somewhere else.
15 This jump list data will contain specific information about the
16 thing it points at including the thing it points at, its
17 created time, its last access time, its last modified time.

18 In this case, a jump list on one of the computers
19 pointed at *Complete Inspire*, on this Patriot thumb drive, and
10:05 20 recorded at that time that its created date was as you see,
21 January 21, 2012.

22 Q. Again, that's the created date on the Patriot itself,
23 correct?

24 A. Correct.

25 Q. Did you undertake further analysis of exactly what may

1 have happened to *Complete Inspire* on January 21 of 2012?

2 A. Yes.

3 MR. FICK: If I could get the screen just for the
4 witness, your Honor?

5 Q. I'm going to put up on the screen what's previously been
6 marked as 3312-02. Do you recognize this document?

7 A. Yes.

8 Q. What is it?

9 A. This is a summary of events that are in some way related
10:06 10 to *Complete Inspire* on this particular day.

11 Q. Where is the information taken from that is put into this
12 summary?

13 A. This information comes from three sources: the jump list
14 information I mentioned, file system information; the file and
15 folder listings; and Windows registry information.

16 Q. Those are all -- fair to say those are all sort of sources
17 of forensic digital information in the various images you
18 looked at?

19 A. Yes. All of this information exists within the forensic
10:07 20 images.

21 MR. FICK: Your Honor, I'd move this into evidence as
22 3312-02.

23 THE COURT: All right. On the same basis, I will
24 allow it.

25 (Defendant's Exhibit No. 3312-02 received into evidence.)

1 MR. FICK: If we could publish that?

2 Q. Can you just explain for the jury what this slide depicts
3 and sort of go through step by step the events that are listed
4 here?

5 A. The first line indicates that we see an attachment event
6 of this Patriot, this particular Patriot, January 21, 2012,
7 6:22 a.m.

8 Q. I'm sorry. To what was the Patriot attached at that time?

9 A. The Samsung laptop.

10:08 10 Q. How do you know that? Where did that information come
11 from?

12 A. Windows registry information.

13 Q. Inside the Samsung?

14 A. That's correct.

15 Q. Now, the second line, January 21, 2012, about two seconds
16 or so later, explain what that is.

17 A. Two minutes later.

18 Q. I'm sorry, two minutes later. I apologize.

19 A. That is information from a jump list, which pointed at the
10:08 20 Patriot, actually pointed at completeinspire.pdf on the
21 Patriot, which indicates that that file was created in that
22 location, on that device, on January 21, 2012, 6:24:18.

23 Q. And then the next event, what is that?

24 A. That's an attachment event, which shows the attachment of
25 this Patriot to the Sony laptop.

1 Q. And that's about two minutes -- less than a minute later,
2 also on January 21 of 2012?

3 A. Correct, less than a minute later.

4 Q. And then the last line, what does that depict?

5 A. That's the file creation time on the Sony of
6 completeinspire.pdf.

7 Q. What, if anything, can you infer from this data about how
8 *Complete Inspire* wound up on the Sony?

9 A. The window is very, very tight here in terms of the
10:09 10 attachment of this device onto which we know this particular
11 file was copied and then its creation onto another device. So
12 this would appear to indicate that completeinspire.pdf was
13 copied from the Samsung laptop and then copied to the Sony
14 laptop. There's also the issue of evidence which does not
15 reflect anything else occurring. There was very, very little
16 activity around these times on either of these computers.

17 Q. So to put that another way, did you find, for example, any
18 indication whatsoever that *Complete Inspire* came off the
19 internet at this time?

10:10 20 MR. CHAKRAVARTY: Objection, your Honor. It's
21 argumentative.

22 THE COURT: No, overruled. You may answer that.

23 A. No.

24 Q. Did you find any information to suggest that *Complete*
25 *Inspire* was created at this time from any other source?

1 A. No.

2 Q. Now, did you have occasion to investigate whether other
3 copies of *Inspire* -- when they were created on the Sony, other
4 copies of *Inspire Magazine*?

5 A. Yes.

6 MR. FICK: If I could get the screen just for the
7 witness, your Honor?

8 Q. Showing to the witness what's been premarked as 3313-03,
9 what does this chart depict?

10:11 10 A. This chart is a little bit more general than the last one
11 in terms of file creation. This is the creation -- essentially
12 shows the creation of all issues of *Inspire* on the Sony on
13 January 21, 2012.

14 Q. Is it a summary compiled from other sources in the
15 forensic data you looked at?

16 A. Multiple sources from the forensic images, yes.

17 MR. FICK: Your Honor, I'd move this into evidence as
18 3313-03.

19 THE COURT: All right. Admitted.

10:11 20 (Defendant's Exhibit No. 3313-03 received into evidence.)

21 MR. FICK: And if we could publish that?

22 Q. Can you describe for the jury what this chart depicts?

23 A. The first line shows an attachment event on the Samsung
24 laptop of the Patriot that we've been discussing. The second
25 line shows a file creation of completeinspire.pdf on that

1 Patriot device. Third line shows an attachment of that Patriot
2 thumb drive to the Sony laptop. Then the next four lines
3 depict file creation date and times for multiple issues of
4 *Inspire* on the Sony laptop.

5 Q. What's the time window in which all those events occurred,
6 roughly speaking?

7 A. This was between 6:22:31, again, Universal Time, and
8 6:26:10.

9 Q. All within a couple of minutes?

10:13 10 A. A few minutes.

11 Q. Do you understand the date of January 21, 2012, to have
12 other significance in the case?

13 MR. CHAKRAVARTY: Objection, your Honor.

14 MR. FICK: Well --

15 THE COURT: Sustained.

16 Q. Do you recall at the beginning, right before I started
17 asking you questions, we put up a travel document showing
18 Tamerlan's departure from the United States on January 21,
19 2012?

10:13 20 MR. CHAKRAVARTY: Objection, your Honor.

21 THE COURT: Sustained.

22 Q. After January 21, 2012, is there any evidence across any
23 of the forensic images at your disposal to suggest or to show
24 the Patriot, the missing Patriot, ever being attached to a
25 device again that we're aware of?

1 A. No.

2 Q. So what was the last date in all the evidence that you
3 have available to you where we see indicia of the Patriot being
4 attached to something?

5 A. Later in the day on January 21, 2012.

6 MR. FICK: I have nothing further.

7 CROSS-EXAMINATION BY MR. CHAKRAVARTY:

8 Q. Good morning, Mr. Spencer.

9 A. Good morning.

10:15 10 Q. We've met before?

11 A. Yes.

12 Q. That other case that you testified in, I had the privilege
13 of cross-examining you in that case, correct?

14 A. Yes.

15 Q. That was another case where you testified for the defense,
16 right?

17 A. That's correct.

18 Q. Now, you said that you had spent about 400 hours so far on
19 this case?

10:15 20 A. That's correct.

21 Q. Is that how much you've billed for or how much your firm
22 has spent on the case?

23 A. That's how much we've billed for in this case.

24 Q. You still have another bill, I hope, to submit?

25 A. That's correct.

1 Q. About how much do you expect to be billing for it?

2 MR. FICK: Objection.

3 THE COURT: Overruled. You may answer.

4 A. I do not know, but I believe it will be higher than the
5 monthly bills prior because of the amount of time that we spent
6 this month.

7 Q. And that's getting ready for trial. And you digging into
8 each of these materials that Mr. Fick asked you about takes a
9 lot of time, right?

10:15 10 A. Yes.

11 Q. And that's both your time as well as the other people in
12 your firm?

13 A. Correct.

14 Q. Do you think it's going to be more than 400 hours
15 additional?

16 MR. FICK: Objection.

17 THE COURT: Overruled.

18 A. No.

19 Q. So just in terms of the limitations of your science, you
10:16 20 can't tell who is actually using a computer at any given time;
21 is that fair to say?

22 A. I think, generally speaking, that's fair to say.

23 Q. Unless you have a video camera or some other way to have
24 some extrinsic evidence saying that Mark Spencer is using a
25 computer, then you just have to infer it from the activity on

1 the computer, right?

2 A. Correct.

3 Q. And one of the ways that you do that is you check to see
4 if the person is logging into his email account, for example?

5 A. Yes.

6 Q. Or his Twitter account, that kind of thing, right?

7 A. (Nodding.)

8 Q. Having looked at the computers, you recognize that the
9 Sony VAIO computer, the 1R6, was the defendant's computer,

10:17 10 Dzhokhar Tsarnaev's, right?

11 A. Correct, yes.

12 Q. So the fact that the user account name was called Anzor
13 was simply what the user of the computer decided to name his
14 computer, correct?

15 A. Correct. That's arbitrary, yes.

16 Q. In fact, the full name on the Windows information was that
17 it was -- Jahar was the full name of the user?

18 A. Correct.

19 Q. Through similar analysis, you gleaned that the Samsung
10:17 20 computer that was found in Watertown, what was called the 1W3
21 today, that was Tamerlan's computer, correct?

22 A. That would be a portion of the analysis, yes.

23 Q. And some of the other devices, it's less clear, right?

24 A. Correct.

25 Q. Because those are not complete computer operating systems

1 in which one person was the exclusive user. There were
2 actually -- if it was a removable media, it was put into many
3 different devices?

4 A. Correct, right. Many of them are meant to be mobile
5 devices.

6 Q. And I think some of the exhibits you pointed to today
7 actually showed that there were migrating files between
8 devices, right?

9 A. Correct.

10:18 10 Q. And, in addition, there was a desktop computer found at
11 the 410 Norfolk Street residence in the defendant's room that
12 was used by a lot of different people, right?

13 MR. FICK: Objection to the characterization of the
14 room, which he has no knowledge of certainly.

15 THE COURT: Go ahead. You may answer it.

16 A. Multiple users, yes.

17 Q. There were some children's shows on that as well as some
18 jihad-related materials as well as innocuous materials,
19 correct?

10:18 20 MR. FICK: Objection to the generalizations.

21 THE COURT: Overruled.

22 A. I would agree that there was all kinds of material on that
23 computer, yes.

24 Q. Now, both the defendant's computer and his brother's
25 computer had searches for the Boston Marathon explosions after

1 the Boston Marathon, correct?

2 A. Correct.

3 Q. And both of them had the *Inspire* magazines, some of the
4 collection which you pointed out today as well as some
5 additional issues, correct?

6 A. Yes.

7 Q. Both of them had other radical Islamist extremist material
8 as well, correct?

9 MR. FICK: Again, objection to this witness'
10 foundation of what that means.

10:19

11 THE COURT: Overruled.

12 A. Material that I understand to be jihadi-related, yes.

13 Q. You pointed out that there was a search on Tamerlan's
14 computer in March of 2013 for a Ruger P95; do you remember
15 that?

16 A. Yes.

17 Q. And that was -- from the internet history, you saw that
18 somebody plugged into Google or something "Ruger P95," right?

19 A. Correct.

10:19

20 Q. And so do you also know that that is after the defendant
21 had already obtained the P95?

22 MR. FICK: Objection.

23 THE COURT: Sustained.

24 Q. Were there searches for other guns on Tamerlan's computer?

25 A. I do not recall. If you show me the internet history, I

1 can look through it.

2 Q. And the -- you also were shown a search on Tamerlan's
3 computer on April 7, 2013 -- this is about a week before the
4 Marathon -- for "fireworks" and "detonation" -- or "detonator,"
5 is that right?

6 A. Sounds correct.

7 Q. So that was only a week before the Marathon is when the
8 "detonator" and "fireworks" were sought, according to your
9 analysis?

10:20 10 A. That search term, correct.

11 Q. And do you know that the defendant had actually returned
12 to Cambridge the week before the Marathon?

13 MR. FICK: Objection.

14 THE COURT: Sustained.

15 Q. Now, on the Sony VAIO computer, the defendant's computer,
16 there were also some additional searches of interest; is that
17 fair to say? You looked at some of the searches on the Sony
18 VAIO computer?

19 A. Yes, yeah, many searches.

10:21 20 MR. CHAKRAVARTY: Mr. Bruemmer.

21 MR. FICK: I'm going to object to the scope grounds.

22 MR. CHAKRAVARTY: Your Honor, the witness was asked if
23 he had searched -- had found evidence --

24 THE COURT: Go ahead.

25 MR. CHAKRAVARTY: -- on all the things he looked at.

1 THE COURT: Go ahead.

2 Q. Now, Mr. Spencer, is it true that the defendant made some
3 searches just before the Boston Marathon, on April 11, 2013,
4 for the -- under the search term "the call of jihad"? Do you
5 remember that?

6 A. I see that, yes.

7 Q. And this is a -- I'm pulling up 3303-02, which is a parsed
8 web search from the Sony VAIO computer that you had created,
9 correct?

10:22 10 A. Correct.

11 MR. CHAKRAVARTY: Your Honor, if I could ask to
12 publish just that search entry, just this page?

13 THE COURT: All right. The whole page or the file?

14 MR. CHAKRAVARTY: I think just the file area. I'll
15 zoom in as much as I can.

16 MR. FICK: Again, note the objection on scope.
17 Frankly, if we're going -- I'd rather the whole page be in if
18 we're going to be -- to show --

19 MR. CHAKRAVARTY: I don't have objection to that.

10:23 20 THE COURT: All right. Okay. Are you set with it now
21 so I can --

22 MR. CHAKRAVARTY: Yes, please, your Honor.

23 Q. So this entry shows that the user of this device, the
24 weekend before the Boston Marathon bombing, searches for "the
25 call of jihad," correct?

1 A. Correct.

2 MR. CHAKRAVARTY: Your Honor, just for the witness
3 again, please.

4 Q. Again, sometime before the Marathon, back in February of
5 2013, the user of this device also searched for "Jannah al
6 Firdaus," is that accurate?

7 A. February 2, 2013?

8 Q. February 2.

9 A. Yes.

10:24 10 MR. CHAKRAVARTY: Again, your Honor, I would ask to
11 publish Page 29 of this exhibit.

12 THE COURT: All right.

13 Q. That's this entry here that I'm just circling.

14 A. Yes.

15 Q. And do you know what "Jannah al Firdaus" means?

16 A. I've seen the phrase. I don't recall.

17 MR. CHAKRAVARTY: Again, just for the witness, your
18 Honor.

19 Q. This is some of the internet search history for -- that
10:25 20 include references to the Boston Marathon explosions at the
21 finish line, is that accurate?

22 A. Yes.

23 Q. And there are a few different pages related to the
24 searches of the Boston Marathon, correct?

25 A. There's multiple entries related to searches of that type,

1 yes.

2 Q. And there are multiple entries related to searches related
3 to jihad as well, correct? We saw one of them. I'm just
4 asking are there others in addition to the "call of jihad"
5 search.

6 A. I believe so.

7 Q. Now, if we could turn to the 1W16, this was the hard drive
8 that was found on the street in Watertown. You had examined
9 that hard drive and recognized that there were a number of
10:26 10 files that were in what we call the unallocated space of that
11 hard drive; is that fair to say?

12 A. Yes.

13 Q. And so that means that there were -- I think there were
14 mostly MP3-type audio files, maybe somebody's song collection?

15 A. Yes.

16 Q. And amongst the maybe thousands of songs that had been on
17 that hard drive, there were also some files related to some
18 homework or school work of somebody named Giovanni, correct?

19 A. Correct.

10:26 20 Q. And all of that stuff was deleted, and it was replaced
21 with some of the files that Mr. Fick asked you about today,
22 right?

23 A. Correct.

24 Q. So the *Inspire* magazines, the Awlaki lectures, all that
25 stuff replaced this hard drive that had a lot of MP3 songs on

1 it and some homework assignments, correct?

2 A. Correct.

3 Q. And so the homework assignments, did you recognize were in
4 2012 for a UMass Dartmouth student?

5 MR. FICK: Objection.

6 THE COURT: Overruled. You may answer it.

7 A. I don't think I took note of the content.

8 Q. In any event, those were still -- you could still see
9 traces of those files on the computer. That's how you know it
10:27 10 was all on there?

11 A. Yes.

12 Q. And after the -- those files were placed on that hard
13 drive, that hard drive was then plugged into the defendant's
14 Sony laptop, right?

15 A. That's correct.

16 MR. FICK: Objection as to the temporal -- I'm not
17 sure I understood the temporal --

18 THE COURT: Maybe you could make that clear.

19 Q. So you said that the external hard drive was plugged into
10:28 20 Tamerlan's computer, I think, back in January of 2013, correct?

21 MR. FICK: I'm not sure there's any testimony about
22 when.

23 A. If you could show me a list of attachment dates.

24 Q. Sure. Let me go to some of your exhibits. You recognize
25 this? This is 3302-04.

1 A. Yes.

2 Q. And this is a list of various removable storage devices
3 that were plugged -- that the external hard drive that we're
4 talking about was plugged into various devices, right?

5 A. Computers that it was plugged into, yes.

6 Q. Sorry, plugged into various computers. In fact, there's
7 two computers it was plugged into, according to this chart:
8 Tamerlan's computer and the defendant's computer, right?

9 A. Yes.

10:29 10 Q. According to this chart, on January 21, 2013, there was a
11 file called setupapi.dev.log. That's a file that simply tells
12 you that this device is plugged into a computer, correct?

13 A. Basically, yeah. You can determine the first attachment
14 time.

15 Q. So this is the first time that this device was plugged
16 into the -- Tamerlan's computer?

17 A. Correct.

18 Q. So on January 21, 2013, it was first plugged in.

19 By the way, for the benefit of the jury, is this chart
10:29 20 helpful to explain what this -- the removable storage
21 attachment sequence was?

22 A. Yes.

23 MR. CHAKRAVARTY: Your Honor, I would move in evidence
24 3302-04.

25 MR. FICK: No objection.

1 THE COURT: Okay.

2 (Exhibit No. 3302-04 received into evidence.)

3 MR. CHAKRAVARTY: And ask to publish.

4 Q. So this shows that on January 21, 2013, this device, which
5 is the laptop -- excuse me, the external hard drive, was
6 plugged into Tamerlan's computer, the Samsung 1W3, right?

7 A. Right.

8 Q. And then this chart shows that in March, again, of 2013,
9 about a month before the Marathon, it was plugged in for the
10:30 10 first time, it looks like, into the Sony 1R6, which is the
11 defendant's computer, right?

12 A. Correct.

13 Q. And then a few minutes later, it goes back into Tamerlan's
14 computer, right?

15 A. Right.

16 Q. And then later, the next morning, it goes back into the
17 defendant's computer, right?

18 A. Right.

19 Q. And then it gets plugged in two more times, both times
10:31 20 into the defendant's computer, right?

21 A. Correct.

22 Q. In fact, the last time it goes in is about a week and a
23 half before the Marathon, correct?

24 A. Correct.

25 Q. And, in fact, the defendant's computer, the Sony 1R6,

1 actually accessed this Samsung -- excuse me, the 1W16, the
2 external hard drive, on March 18th. It watched some videos.
3 It did some other activity on that day, correct?

4 A. That sounds correct. In terms of exactly what it
5 accessed, I'd need to see the -- the shortcut or jump list
6 activity.

7 Q. Okay. So let's go to --

8 MR. CHAKRAVARTY: Thank you, your Honor.

9 Q. -- 3300. Now, I've just put up for you what you've
10:32 10 labeled as the live MFT record, Laurel 1W16. And that is the
11 master file table drawn from Windows for that device, correct?

12 A. Correct.

13 Q. And so this is a six-page document?

14 A. Yes.

15 Q. Again, is this an extraction that you had from the
16 external hard drive that was found on Laurel Street?

17 A. Yes.

18 MR. CHAKRAVARTY: I would move into evidence 3300-07,
19 your Honor.

10:32 20 MR. FICK: No objection.

21 THE COURT: All right.

22 (Exhibit No. 3300-07 received into evidence.)

23 Q. So this shows some of the files that were on that device,
24 correct?

25 A. Yes. This should be a complete listing of all the files

1 and folders on that -- currently on that device.

2 Q. And so we were just talking about the March 18, 2013, day
3 that this device was plugged into the Sony VAIO; do you
4 remember that?

5 A. Yes.

6 Q. And so this first column, is this the first -- this is the
7 name of the file, and then this is the creation date, correct?

8 A. Correct.

9 Q. So this entry -- let's use, for example, Entry 67 -- shows
10:33 10 that that file was created on this device on March 18, 2013,
11 right?

12 A. Correct.

13 Q. And it was accessed on April 6, 2013, correct?

14 A. Correct.

15 Q. And, again, we just looked at the earlier exhibit, which
16 showed that that access, April 18th and April 6th, were both on
17 the Sony VAIO, correct?

18 MR. FICK: Objection. That's not the only 18th.

19 THE COURT: The chart is --

10:34 20 MR. CHAKRAVARTY: The chart speaks for itself.

21 THE COURT: -- is plain, I think.

22 Q. This also shows that some of those files that you had
23 talked about before, the *Inspire* magazines, over in this
24 section, correct?

25 A. Correct.

1 Q. And, specifically, it shows -- I'll zoom in here -- the
2 *Complete Inspire* magazine that Mr. Fick asked you about, that
3 you heard a lot about when Agent Swindon testified, that's this
4 entry, Exhibit 38, right?

5 A. Yes.

6 Q. Now, you said that this device was first plugged into
7 Tamerlan's computer on January 21, 2013, is that right?

8 A. Correct.

9 Q. And so there's a creation date of December 27, 2012, on
10:35 10 this file list, right?

11 A. Right.

12 Q. And that means that on this computer this file existed on
13 December 27, 2012, is that accurate?

14 A. No, that is not accurate.

15 Q. So then why is this date, which predates the date that the
16 computer was plugged in -- the device was plugged into
17 Tamerlan's computer, how else can you explain this December 27,
18 2012?

19 A. Files and folders that are moved to a location as opposed
10:36 20 to having been copied or originally created in that location,
21 will retain the created date and time of the former location.

22 Q. So you're suggesting then that that's the date that it
23 existed on Tamerlan's computer or however the file got to this
24 hard drive, right? That date preexisted the existence --
25 creation date on this hard drive?

1 A. Correct.

2 Q. So that's inconsistent with what you described as the
3 creation date, right?

4 A. The creation date of?

5 Q. The creation date you said that was on this hard drive.
6 You described the creation date as -- you told Mr. Fick that it
7 was the date that the file was either created in a specific
8 location or it was moved to a specific location, right?

9 A. If the file or folder is moved to a location as opposed to
10:37 10 copied or originally created there, the date and time is from
11 its previous location, not its current location.

12 Q. Okay. So for all of these other files, January 25, 2013,
13 all of the other *Inspire* magazines were January 25, 2013,
14 right?

15 A. January 25, 2013?

16 Q. Yup. And all of these other files on the next page,
17 including the Awlaki lectures, were sometime in March of 2013,
18 right?

19 A. Right.

10:37 20 Q. In fact, there's no other entry for 2012 except for that
21 one entry, right? That's the only entry that shows a creation
22 date of 2012, correct?

23 A. Right.

24 Q. And so you analyzed all of the devices in this case, but
25 you only presented some charts from -- for some of those

1 devices, correct?

2 MR. FICK: Objection, especially given the limitations
3 on the scope.

4 THE COURT: Sustained.

5 Q. If this hard drive actually were not plugged into
6 Tamerlan's computer but was plugged into the Norfolk desktop
7 that also accessed *Complete Inspire* around that same time, then
8 you would expect to see a setup API log file on the desktop,
9 correct?

10:38 10 A. Correct. We would expect to see this device in that log.

11 Q. Right. And you didn't put that into your chart, did you?

12 MR. FICK: Objection. The absence of a direction.

13 MR. CHAKRAVARTY: It's the lack of completeness of the
14 chart that the defendant --

15 THE COURT: The objection is sustained.

16 Q. So this file could have come from any computer in which
17 the creation date that existed was December 27, 2012, correct?

18 A. No, that's not correct.

19 Q. So there's something on this file that tells you that it
10:39 20 had to have come from the Samsung?

21 A. This file, *completeinspire.pdf*, on the Laurel external
22 hard drive --

23 Q. Yes.

24 A. -- the owner SID relates specifically to the Samsung
25 computer and the Umar account on that computer.

1 Q. Which means that at some time that file, the origination
2 of that file, was on the Samsung computer, correct?

3 A. Correct.

4 Q. And then however -- wherever that files goes, that SID
5 follows it?

6 A. No.

7 Q. So if it goes then to the Norfolk computer, then the
8 Norfolk computer SID would be imparted into it?

9 A. On the Norfolk computer.

10:39 10 Q. On the Norfolk computer.

11 A. Correct.

12 Q. So you did recognize -- you do recognize that the Norfolk
13 computer did access on an external drive around the same time
14 the *Complete Inspire* magazine?

15 A. A time other than January 21st?

16 Q. On December 23rd and December 26th of 2012.

17 A. We have a -- that could be correct. We have a spreadsheet
18 which tracks the attachments of this device.

19 Q. You were here for Agent Swindon's testimony, right?

10:40 20 A. Yes.

21 Q. You were seated here at counsel table.

22 You saw some of the charts that showed that that file
23 was accessed on an external drive on the Norfolk Street
24 computer. You have no reason to question that, right?

25 A. No.

1 Q. Now, going back to -- I guess staying on this, there were
2 some other files on this external hard drive that included
3 appeared to be some movies. One of them was a *Django*
4 *Unchained*, right?

5 A. Are you --

6 Q. I'm sorry. I'm looking -- I'll move it up here a little
7 bit. Entry 74 and 75 and 76 appear to be records of the movie
8 *Django Unchained*. It appears from -- in a folder called --
9 that ends with -- not in a folder, excuse me -- that has a text
10:41 10 file that goes along with it called "torrent downloaded from
11 extratorrent.com," correct?

12 A. Correct.

13 Q. Is that all an indication that these are movies that were
14 downloaded through peer-to-peer network, some kind of torrent
15 program?

16 A. That's what it looks like, yes.

17 Q. Somebody downloaded those files onto this external hard
18 drive, right?

19 A. The word "downloaded" infers that it came directly from
10:42 20 the internet. But the files were created in a vacuum from this
21 spreadsheet. We know that the files were created on the drive
22 at that time.

23 Q. So they were created on the drive. They weren't created
24 on the 1W3?

25 A. We're looking at the spreadsheet related to Laurel 1W16.

1 These files were created on Laurel 1W16.

2 Q. Okay. So these were created -- I'm not following what you
3 mean in terms of whether a file was created on 1W16 or
4 transferred to 1W16 from another device. I thought you just
5 said that the *Inspire* magazines were transferred from
6 Tamerlan's computer.

7 MR. FICK: Objection. I don't think that's what --

8 A. I'll clarify. The device was plugged into the Samsung.
9 That's how the owner information is populated.

10:43 10 Q. But you don't know then whether it was downloaded from the
11 internet or downloaded from Tamerlan's computer?

12 A. I'm confused. It would come from -- the drive would be
13 connected to Tamerlan's computer either way.

14 Q. I understand that the drive was connected to the computer.
15 The drive was connected to Tamerlan's computer and to the
16 defendant's computer. I'm trying to figure out how these files
17 got onto this computer, onto this hard drive. I'm simply
18 asking you that -- there's a creation date for *Django Unchained*
19 on March 18th. It's fair to say that those were downloaded
10:43 20 from some source, either the internet or some computer,
21 correct?

22 A. Right. It came from somewhere via the computer that it
23 was attached to.

24 Q. And that's the same date as these Anwar Awlaki lectures,
25 right?

1 A. Correct.

2 Q. And so you can't say with any more specificity where any
3 of that stuff was downloaded from? All you can say is that
4 that's the date that they were created on this hard drive?

5 A. From this spreadsheet, that's correct.

6 Q. And then the use of that hard drive later was all on April
7 6th or on April 19th -- or March 19th, correct?

8 A. You can infer some type of use.

9 Q. But since this hard drive was not plugged into Tamerlan's
10:44 10 computer after March 18, 2013, it's a fair inference that any
11 access that postdates April -- March 18 of 2013 was done on the
12 defendant's computer?

13 MR. FICK: Objection.

14 THE COURT: You may answer it.

15 A. It's a -- you're asking me if it's a fair inference to say
16 that any activity post a certain date was related to the
17 defendant's computer?

18 Q. You showed us 3302-04, which shows the dates that this
19 device was plugged into the various computers, the two
10:45 20 computers particularly. It does not include the Norfolk drive.
21 It just includes the Sony laptop and the Samsung laptop, right?

22 A. Correct.

23 Q. And so these are the dates that those files -- that that
24 device was accessed on -- after March 18th, correct?

25 A. This chart shows you when this device, the Laurel Street

1 hard drive, was connected to different computers that we have,
2 that we have access to, forensic images.

3 Q. So on April 6, March 21, and March 19 of 2013, this device
4 was only plugged into the defendant's laptop?

5 A. As it relates to the forensic images that we have access
6 to. This information comes --

7 Q. Let me ask you a question.

8 MR. FICK: Let the witness finish, please.

9 MR. CHAKRAVARTY: I think he had answered my question.

10:46 10 THE COURT: I think he had answered it.

11 Q. So these accesses -- this was the simple question that I
12 was trying to get to you. These accesses correlate to the
13 accesses on the defendant's Sony laptop, correct?

14 A. Similar time frame. This is not normally how forensic
15 examiners will determine document or file activity.

16 Q. Right. But those are the dates that this file was
17 manipulated on this hard drive?

18 A. That's correct, some type of interaction, yes.

19 Q. And, in fact, there is a link file -- you're aware of what
10:47 20 a link file is?

21 A. Yes.

22 Q. And you heard Agent Swindon talk about link files?

23 A. Yes.

24 Q. And they show that some user uses an application to
25 actually access a file?

1 A. Yes.

2 Q. In fact, the *Django Unchained* video was watched on the
3 defendant's computer on March 19, 2013, as well as on another
4 date, a couple days later?

5 A. Yes. That's normally how we would look at file access.

6 Q. And that file was not accessed on Tamerlan's computer, the
7 Samsung? There was no such link file, right?

8 A. Not that I know of.

9 Q. Now, let's just get quickly to the idea of Tamerlan's
10:47 10 computer, the 1W3. Now, you said that you don't know whether
11 -- you can't make conclusions about what somebody is thinking
12 or who the person is that's actually accessing a particular
13 file, correct?

14 A. We can't say with specificity who is at that keyboard.

15 Q. So no matter what computer files are on somebody's
16 computer, you can't say, Oh, this person must have been
17 thinking something, right? That's beyond what a computer
18 forensic scientist can do?

19 A. Correct.

10:48 20 Q. So the 1W3, what you say is Tamerlan's computer, in fact,
21 other people used that computer as well, right?

22 A. My understanding is that that is correct, yes.

23 Q. In fact, the defendant used Tamerlan's computer, correct?

24 A. Yes.

25 Q. In fact, he logged onto his email on Tamerlan's computer?

1 A. I believe we know of one instance if you have the internet
2 history.

3 Q. All right. And I think right around the time that this --
4 several of these files -- I think you described January 21,
5 2013, being the date that the external hard drive was set up on
6 Tamerlan's computer, is that right? Let's go back to your
7 chart. January 21, 2013, is the date that --

8 A. Correct.

9 Q. -- the hard drive was set up?

10:49 10 This is the hard drive that had the homework
11 assignments on it. It was cleaned, and the new jihadi material
12 was put on it, right?

13 A. Correct.

14 Q. And so a few days before that, during Christmas break of
15 2013, the defendant was checking his email on Tamerlan's
16 computer, is that right?

17 MR. FICK: Objection to the time frame vagueness.

18 THE COURT: Overruled.

19 A. I don't know the exact date and time. If you can pull it
10:50 20 up, I will.

21 Q. Okay. The exact date and time, I think, is less important
22 than the fact that the defendant was actually using the
23 defendant's -- Tamerlan's computer.

24 MR. FICK: Objection to the commentary.

25 THE COURT: Overruled. You may answer it.

1 Q. The defendant was actually using Tamerlan's computer near
2 the time that this hard drive was set up?

3 MR. FICK: Objection.

4 THE COURT: Overruled.

5 A. We don't know that with the same certainty that we
6 discussed before, who's sitting in that chair, but that would
7 be consistent with another user.

8 Q. You don't know who made the decision to download these
9 files or where they got these files from, right?

10:50 10 A. Which files?

11 Q. Let's start with the *Complete Inspire* magazine. You don't
12 know -- all you know is that that first appears on the Tsarnaev
13 brothers echo system on January 21, 2012?

14 MR. FICK: Objection.

15 Q. Excuse me, 2011.

16 THE COURT: Overruled.

17 Q. December of 2011.

18 A. Correct, on the removable storage device.

19 Q. And that means that it could have been plugged into
10:51 20 another computer that nobody has ever found, right?

21 A. That's correct.

22 Q. In fact, do you know that the defendant purchased a
23 computer that nobody ever found?

24 MR. FICK: Objection.

25 THE COURT: Sustained.

1 MR. CHAKRAVARTY: I think that's all, your Honor.

2 MR. FICK: If I may have one moment briefly?

3 Can we actually take the break, your Honor? I may
4 have a little bit or I might not, but I'd -- I think we're
5 almost at 11:00.

6 THE COURT: All right. We'll take the morning recess.

7 (Recess taken at 10:51 a.m.)

8 (The Court and jury entered the courtroom at 11:24 a.m.)

9 MR. FICK: Very briefly, your Honor.

11:25 10 THE COURT: Okay.

11 REDIRECT EXAMINATION BY MR. FICK:

12 Q. Good morning again, Mr. Spencer.

13 A. Good morning.

14 Q. Mr. Chakravarty took you through a couple of entries from
15 Exhibit 3303-02, not in evidence but published them. That's
16 the search history from the Sony computer. Do you remember him
17 doing that with you?

18 A. Yes.

19 MR. FICK: Your Honor, if I could do the same, just to
11:25 20 publish without putting in evidence, the same sections that Mr.
21 Chakravarty talked about with the Court's permission?

22 THE COURT: What is it you wanted?

23 MR. FICK: I just want the screen. I want to put up
24 the same sections of this exhibit that are not moved into
25 evidence but that Mr. Chakravarty talked about in the jury's

1 presence.

2 THE COURT: You have them?

3 MR. CHAKRAVARTY: No objection.

4 MR. FICK: I have them up here. I'm going on the
5 screen right now.

6 Q. So, Mr. Spencer, do you remember Mr. Chakravarty showing
7 you some of these? These are like entries from the Sony search
8 entries?

9 A. Yes.

11:26 10 Q. Referring to the Boston Marathon.

11 Why are there no dates for those artifacts?

12 A. Web history remnants or artifacts may not have dates, one,
13 because they were never stored in the first place, by design,
14 depending on the browser and the particular action in question
15 or the date and time may no longer be available.

16 Q. While this information is captured by a search history
17 tool, does it actually mean that somebody sat at a keyboard and
18 typed all that in as their search?

19 A. No, that's not necessarily what that means.

11:27 20 Q. So is it fair to say that some of these tools will gather
21 as search history some information that's not actually a
22 search? That's just that the tool happens to gather it that
23 way?

24 MR. CHAKRAVARTY: Objection, your Honor.

25 THE COURT: Overruled. You may have it.

1 A. That's correct. The tools aren't perfect in terms of
2 extracting out what they feel represent search criteria.

3 Q. Now, if I could now put on the screen -- actually, I'll
4 just -- Exhibit 3303-006, which is the Samsung search history,
5 I would just request the Court's permission to publish a small
6 portion of it in the same manner if that's okay.

7 THE COURT: Okay.

8 Q. Do you recognize what this document is?

9 A. Yes.

11:28 10 Q. What is it?

11 A. This is a list of the web searches for the Samsung laptop.

12 Q. And just the top one here, I mean, does this actually
13 reflect the typing in of a search in Google with that term?

14 A. Yes. Well, you can plainly see the search question mark Q
15 equals, which is related to a Google search.

16 Q. What does that tell you about whoever was at the keyboard
17 of the Samsung actually typed in?

18 A. They're searching for this phrase.

19 Q. And I'm going to page through now. Is it fair to say that
11:28 20 there are multiple pages -- on the Samsung, multiple pages of
21 such searches over the course of several days and times?

22 A. There's multiple terms that are used that are similar.

23 Q. So we're on Page 11 now of the exhibit, 12, 13.

24 MR. FICK: If I may have one moment, your Honor?

25 I would just offer into evidence those 13 pages of

1 Exhibit 3303-06 as 3303-6 -- I think we're at E or F.

2 MR. CHAKRAVARTY: Object to that, your Honor. This is
3 beyond the scope of what -- certainly what the cross was. I
4 didn't refer to this history.

5 THE COURT: Overruled. You may admit it.

6 MR. FICK: Mr. Lyness, can you tell me what letter
7 that is? It's 3303-6.

8 THE CLERK: I believe the next one should be E.

9 MR. FICK: Okay. I will name it that then, 3303-6E.

11:29 10 (Defendant's Exhibit No. 3303-06E received into evidence.)

11 MR. FICK: With that, I have nothing further.

12 MR. CHAKRAVARTY: Just on that point.

13 RE-CROSS-EXAMINATION BY MR. CHAKRAVARTY:

14 Q. Mr. Spencer, the exhibit that Mr. Fick just showed you,
15 there were several searches on April 15 and April 16, 2013,
16 correct, for the Boston Marathon explosion?

17 A. That spreadsheet is related to the output from the tools,
18 would show that's their web search output, web-search-related
19 output.

11:30 20 Q. On those two dates, April 15 and April 16, the day of the
21 Marathon and the day after?

22 A. Correct.

23 Q. Those are dates where you don't know who the actual
24 searcher was for that information?

25 A. Correct.

1 Q. If the defendant and Tamerlan were together, you wouldn't
2 be able to tell which one of them made those searches?

3 A. Correct.

4 MR. CHAKRAVARTY: That's all I have.

5 THE COURT: All right, sir. You may step down.

6 . . . END OF EXCERPT.)

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C E R T I F I C A T E

I certify that the foregoing is a correct transcript of the record of proceedings in the above-entitled matter to the best of my skill and ability.

/s/Cheryl Dahlstrom

Cheryl Dahlstrom, RMR, CRR
Official Court Reporter

Dated