

Exhibit 2

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

```

-----x
WIKIMEDIA FOUNDATION,      :
                             :
                             :
                Plaintiff,   :
                             :
                             :
                vs.          :
                             :
                             :
NATIONAL SECURITY AGENCY,   :
et al.,                    :
                             :
                Defendants. :
-----x

```

Case No.
1:15-cv-00662-TSE

Deposition of REBECCA J. RICHARDS

Monday, April 16, 2018

Washington, D.C.

Reported by:

Dawn A. Jaques

Job no: 21368

1 Deposition of:

2 REBECCA J. RICHARDS,

3 the witness, was called for examination by counsel

4 for the Plaintiffs, pursuant to notice, commencing

5 at 9:12 a.m., at the offices of the Department of

6 Justice, Civil Division, Federal Programs Branch,

7 20 Massachusetts Avenue, Northwest, Washington,

8 D.C., before Dawn A. Jaques, CSR, CLR, and Notary

9 Public in and for the District of Columbia.

10

11

12

13

14

15

16

17

18

19

20

21

22

1 APPEARANCES:

2 On behalf of the Plaintiffs:

3 ALEX ABDO, ESQ.

4 Knight First Amendment Institute

5 535 West 116th Street

6 314 Low Library

7 New York, New York 10027

8 PHONE: (212) 854-1128

9 EMAIL: alex.abdo@knightcolumbia.org

10 - AND -

11 DEVON HANLEY COOK, ESQ.

12 Cooley LLP

13 101 California Street, 5th Floor

14 San Francisco, CA 94111-5800

15 PHONE: (415) 693-2116

16 EMAIL: dhanleycook@cooley.com

17

18 ALSO PRESENT on behalf of Plaintiffs:

19 Patrick Toomey, Esq., ACLU

20 Ashley Gorski, Esq., ACLU

21

22

1 APPEARANCES (Continued):

2 On behalf of the Defendants:

3 RODNEY PATTON, ESQ.

4 JAMES J. GILLIGAN, ESQ.

5 U.S. Department of Justice

6 Civil Division

7 Federal Programs Branch

8 20 Massachusetts Avenue, N.W.

9 Washington, D.C. 20530

10 PHONE: (202) 305-7919 (Mr. Patton)

11 (202) 514-3358 (Mr. Gilligan)

12 EMAIL: rodney.patton@usdoj.gov

13 james.gilligan@usdoj.gov

14

15 ALSO PRESENT FROM THE NATIONAL SECURITY AGENCY:

16 JASON PADGETT, ESQ.

17 KATHLEEN [REDACTED]

18 (443) 479-2613

19 [REDACTED]

20 MARY [REDACTED]

21 (301) 688-6054

22 [REDACTED]

1 I-N-D-E-X

2 WITNESS: PAGE:

3 REBECCA J. RICHARDS

4 Examination by Mr. Abdo 11

5 Examination by Mr. Toomey ... 257, 351

6 Examination by Ms. Hanley Cook ... 327

7

8 E-X-H-I-B-I-T-S

9 DEPOSITION EXHIBIT: PAGE:

10 Exhibit 41 Notice of Deposition 18

11 Exhibit 42 Objections and Responses by
12 Defendants to Plaintiff's
Interrogatories 43

13 Exhibit 43 July 2, 2014, Privacy and Civil
14 Liberties Oversight Board Report
15 Operated Pursuant to Section 702
of the Foreign Intelligence
Surveillance Act 94

16 Exhibit 44 April 16, 2014, NSA Director of
17 Civil Liberties and Privacy Office
18 Report, NSA's Implementation of
Foreign Intelligence Surveillance
Act Section 702 128

19 Exhibit 45 October 3, 2011, United States
20 Foreign Intelligence Surveillance
21 Court Memorandum Opinion by
Judge John B. Bates
NSA-WIKI 00149 - 00229 158

22

1 INDEX (Continued)

2 E-X-H-I-B-I-T-S

3 DEPOSITION EXHIBIT: PAGE:

4	Exhibit 46	March 19, 2014, transcript of PCLOB Public Hearing Regarding the Surveillance Program Operated Pursuant to Section 702 of the Foreign Intelligence Surveillance	209
7	Exhibit 47	Notice of Filing of Government's Response to the Court's Briefing Order of May 9, 2011 NSA-WIKI 00234 - 00277	219
10	Exhibit 48	The Comprehensive National Cybersecurity Initiative	249
11	Exhibit 49	April 19, 2013, Privacy Impact Assessment for EINSTEIN 3 - Accelerated (E3A)	250
13	Exhibit 50	March 26, 2018, Memorandum of Points and Authorities in Support of Defendants' Motion to Compel Discovery	278
16	Exhibit 51	April 26, 2017, United States Foreign Intelligence Surveillance Court Memorandum Opinion and Order of Judge Rosemary M. Collyer	311
18	Exhibit 52	April 28, 2017, NSA Press Release "NSA Stops Certain Foreign Intelligence Collection Activities Under Section 702"	316
21	Exhibit 53	April 28, 2017, Statement "NSA Stops Certain Section 702 'Upstream' Activities"	317
22			

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

INDEX (Continued)

E-X-H-I-B-I-T-S

DEPOSITION EXHIBIT:	PAGE:
Exhibit 54 Screenshot, "Why are we interested in HTTP?"	330
Exhibit 55 Screenshot, "Fingerprints and Appids" (2 pages)	330
Exhibit 56 January 9, 2009, Memorandum Opinion for the Counsel to the President	341
Exhibit 57 Notice of Filing of Government's Responses to FISC Questions RE: Amended 2011 Section 702 Certifications	353

1 P R O C E E D I N G S

2 MR. ABDO: Good morning, Ms. Richards.
3 My name is Alex Abdo, and I'm here with the Knight
4 First Amendment Institute and Columbia University,
5 representing the Plaintiff in this case, Wikimedia
6 Foundation.

7 I think you met everyone down the
8 line, but I'm joined by my colleagues, Patrick
9 Toomey from the American Civil Liberties Union;
10 Devon Hanley Cook from Cooley LLP; and Ashley
11 Gorski, also from the American Civil Liberties
12 Union.

13 Would you just start out by stating
14 your full name for the record and spelling it for
15 us?

16 MR. PATTON: Could we just before we
17 begin introduce the other attorneys here just for
18 the record?

19 MR. ABDO: Please, yeah.

20 MR. PATTON: I'm Rodney Patton with
21 the Department of Justice representing the NSA.

22 MR. PADGETT: Jason Padgett, the

1 Office of General Counsel at the National Security
2 Agency.

3 MR. GILLIGAN: James Gilligan with the
4 DOJ representing the defendants.

5 MS. [REDACTED] Mary [REDACTED] with the
6 Office of General Counsel at the National Security
7 Agency.

8 MS. [REDACTED] And Cathleen
9 [REDACTED], Office of General Counsel, National
10 Security Agency.

11 MR. ABDO: Great, I think we're done
12 with appearances.

13 Ms. Richards, would you just state
14 your full name and spell it for the record?

15 THE WITNESS: Rebecca Joan Richards,
16 R-E-B-E-C-C-A, J. Richards, R-I-C-H-A-R-D-S.

17 MR. PATTON: This is Rodney Patton on
18 behalf of Defendants in the case. The parties
19 have agreed to the following rules governing the
20 taking of this deposition.

21 One, counsel for the government may
22 make such objections as he deems in good faith to

1 be necessary to prevent the unauthorized
2 disclosure of protected, classified, or privileged
3 information.

4 Two, counsel for the government may at
5 any time direct the witness not to answer a
6 question or to stop responding to a question if he
7 deems it in good faith that it is necessary to
8 prevent the unauthorized disclosure of protected,
9 classified, or privileged information.

10 Number three, counsel for the
11 government or the witness may stop the deposition
12 at any time in order to confer privately in a
13 Secure Compartmented Information Facility, known
14 as a SCIF, for the purpose of preventing the
15 unauthorized disclosure of protected, classified,
16 or privileged information.

17 Four, nothing in the testimony of the
18 witness will constitute or be construed as a
19 waiver of the applicable protections or privileges
20 subject to the plaintiffs -- or subject to the NSA
21 reviewing the transcript.

22 Five, during the deposition, the

1 transcript may be displayed only on the court
2 reporter's laptop, and it will not be otherwise
3 transferred to or displayed on anyone else's
4 electronic device during the deposition.

5 Six, after the deposition, the
6 transcript will be transferred from the court
7 reporter's laptop to counsel for the NSA by a CD
8 or flash drive.

9 Seven, the transcript of the
10 deposition will not otherwise be copied, except as
11 appropriate by the NSA, or transmitted from the
12 court reporter's laptop until counsel for the NSA
13 provides the Agency's approval to do so.

14 Finally, in the meantime, the NSA will
15 conduct a review of the transcript for protected,
16 privileged, and classified information, and will
17 redact any such information prior to the release
18 of the transcript to plaintiff's counsel, or
19 anyone other than the NSA and the court reporter.

20 That's all the ground rules.

21 Thank you.

22 MR. ABDO: Ms. Jaques, have you sworn

1 Ms. Richards in? Would you mind doing so?

2 THE REPORTER: Raise your right hand,
3 ma'am.

4 (The witness was administered the oath.)

5 Whereupon,

6 REBECCA J. RICHARDS,
7 was called as a witness, after having been
8 first duly sworn by the Notary Public,
9 was examined and testified as follows:

10 EXAMINATION BY COUNSEL FOR PLAINTIFF

11 BY MR. ABDO:

12 Q Ms. Richards, you understand that
13 you're here today to give deposition testimony in
14 the lawsuit of Wikimedia Foundation versus NSA,
15 right?

16 A Yes.

17 Q And you understand that you're under
18 oath?

19 A Yes.

20 Q Have you been deposed before?

21 A No.

22 Q Okay. So you heard a portion of the

1 procedures described by your counsel, Mr. Patton.
2 I'll go over some other procedures for how the
3 deposition will take place.

4 So we'll be asking you questions. Our
5 questions and your answers will be recorded by
6 Ms. Jaques. For that reason, it's important that
7 you speak up and give your answers orally so that
8 Ms. Jaques can record them, transcribe them. She
9 won't be able to record a nod or a shake of the
10 head.

11 Now, I may on occasion ask you a
12 question that isn't clear, or that for some other
13 reason you don't understand. If you don't
14 understand one of my questions, let me know. It's
15 my job to ask you clear questions. So if you say
16 you don't understand one, I'll try to make it
17 clearer. Do you understand that?

18 A Yes, I do.

19 Q Good. Your counsel may object at
20 various points. If he does, please go ahead and
21 answer the question that has been objected to
22 unless your counsel specifically instructs you not

1 to answer. Do you understand that?

2 A Yes, I do.

3 Q We'll be taking periodic breaks during
4 the deposition, but if you need to take a break at
5 any other point, let us know. We will accommodate
6 you. And I think you see that there's some water
7 and coffee in the corner. If you need anything,
8 just help yourself at any point during the
9 deposition.

10 If at any point you realize that an
11 answer you've given is incomplete or inaccurate
12 and you'd like to supplement it or correct it in
13 any way, let me know right away and we'll take
14 care of it right then. Does that sound okay?

15 A Yes.

16 Q And if at any point in answering our
17 questions you think of a document that would be
18 helpful in refreshing your recollection, in
19 answering the question, or in recalling what has
20 been publicly disclosed and what hasn't about
21 upstream surveillance, please tell us. We likely
22 have many of those documents here today and would

1 be happy to provide you them. Is that okay?

2 A Yes, it is.

3 Q Great. So your counsel, Mr. Patton,
4 outlined the process that the parties have agreed
5 to for addressing objections based on information
6 the NSA believes to be subject to the state
7 secrets privilege or protected from disclosure
8 under 50 U.S.C. § 3024(i)(1) and/or
9 50 U.S.C. § 3605(a). We will adhere to that
10 process.

11 I'm going to use the term "classified"
12 to refer to information the NSA believes is
13 protected by any of those legal authorities. Is
14 that okay with you --

15 A Yes.

16 Q -- that shorthand?

17 MR. PATTON: Can we just state for the
18 record that not all of the information that will
19 be protected by 3605, for example, is necessarily
20 classified, but I understand your shorthand.

21 BY MR. ABDO:

22 Q Please take your time when answering

1 our questions. Our goal is not to trick you into
2 disclosing protected information. We have a
3 process in place to address those sorts of claims,
4 but for that process to work, we need to make a
5 clear record concerning any information the NSA
6 believes is classified.

7 There are at least three scenarios
8 that may arise. First, if you can answer a
9 question fully without disclosing information that
10 the NSA believes to be classified, you must do so.

11 Second, if you believe that a response
12 to a question would disclose information the NSA
13 considers classified, you should clearly state
14 that for the record.

15 And, third, if you believe that a
16 question calls for a response that is classified
17 in part and unclassified in part, please also
18 state that clearly for the record. You must
19 answer and provide the unclassified information
20 even if that does not constitute a complete
21 response because there is also unclassified
22 information.

1 Do you understand those three
2 scenarios?

3 A Yes, I do.

4 Q Now, this case concerns surveillance
5 that has taken place from 2015 to the present.
6 Unless I say otherwise, my questions will apply to
7 that full period.

8 If your answer would differ based on
9 what specific portion of that period we're talking
10 about, please say so, and please explain how it
11 would differ for the relevant time frames.

12 We will do our best to make clear what
13 time frame we're talking about, and then I'm sure
14 your counsel will make sure we're making clear
15 what time frame we're talking about, but if we
16 haven't specified, please do your best to answer
17 with respect to the full period.

18 Is there any reason you can think of
19 why you would not be able to answer our questions
20 fully and accurately today?

21 A No.

22 MR. PATTON: Other than that the

1 answers may be classified.

2 THE WITNESS: Yeah.

3 BY MR. ABDO:

4 Q Sorry, sorry. I mean are you taking
5 any medications or drugs that would make it
6 difficult for you to answer truthfully or
7 accurately?

8 A No.

9 Q There's nothing that is affecting your
10 memory today?

11 A No.

12 Q Okay. You stated before that you have
13 not been deposed before; is that correct?

14 A That's correct.

15 Q Have you ever given testimony in a
16 case?

17 A No, I have not.

18 Q Okay. You understand that you're
19 appearing here today as a designated
20 representative of the NSA, right?

21 A Yes.

22

1 (Deposition Exhibit 41 was
2 marked for identification.)

3 BY MR. ABDO:

4 Q So you have in front of you what's
5 been marked as Exhibit 41. Do you recognize that
6 document marked as 41?

7 A Yeah.

8 Q What is it?

9 A These are the topics for examination.
10 Do you want me to read more fully?

11 Q No, no, no.

12 A How detailed would you like me to be?

13 Q I'm asking whether that's the
14 deposition notice that the plaintiff served on the
15 defendants in this case.

16 A Oh, yes, it is. Sorry.

17 Q And you're appearing here today as a
18 designee of the NSA on topics 2, 3, 4a, 4d and 6
19 as set forth in Exhibit 41; is that correct?

20 A Yes, that is correct.

21 Q Are you prepared to testify today
22 about those topics?

1 A Yes, I am.

2 Q Can you tell us what you did to
3 prepare?

4 A Reviewed the documents submitted, as
5 well as a number of different documents that are
6 already in the unclassified realm, ranging from
7 previous minimization procedures, the NSA Civil
8 Liberties and Privacy Office Report, the Privacy
9 and Civil Liberties Oversight Board's report on
10 702, FISC opinions, as well as NSA's submissions
11 at different points to the FISC.

12 Q The FISC opinions that you reviewed,
13 are those all ones that have been disclosed
14 publicly?

15 A Yes. I only reviewed the unclassified
16 versions, so the redacted versions that are
17 readily available on ODNI's website.

18 Q Did you also review any classified
19 FISC opinions or other documents in preparing for
20 today's deposition?

21 A No. We met with a subject -- I met
22 with a subject matter expert. We discussed what

1 was classified and what was not classified, but
2 otherwise I didn't review any classified
3 documents.

4 Q So to the extent you talked about
5 classified information, it was with a subject
6 matter expert, but not reviewing any documents?

7 A Yes, that's correct.

8 Q Had you previously, unrelated to this
9 litigation, reviewed classified versions of any of
10 the documents that you reviewed in unclassified
11 form?

12 A Yes.

13 Q Are you generally familiar with the
14 classified portions of those documents?

15 A Yes, I am.

16 Q Did you meet with your counsel in
17 preparing?

18 A I did.

19 Q You mentioned that you met with a
20 subject matter expert. That's an NSA employee?

21 A Yes, it's an NSA employee.

22 Q What role does that individual have

1 within the NSA?

2 A An expert in upstream.

3 Q Is that the only subject matter expert
4 within the NSA you met with?

5 A Yes, it is.

6 Q What's the general nature of what you
7 talked about with that individual in unclassified
8 form?

9 A We reviewed what was in the classified
10 and in the unclassified to make sure we had a full
11 understanding of how upstream worked and we were
12 clear as to -- I was clear as to exactly where
13 those lines, in terms of classification versus
14 nonclassified information, could be discussed.

15 Q Okay. Was the primary purpose of that
16 meeting to discuss that line between classified
17 and unclassified information?

18 A It was more just to make sure that my
19 memory from all of the work we had done over the
20 last four years at NSA on upstream was current and
21 understanding, and that I wasn't mixing and
22 matching different activities.

1 So it was more of a verification that
2 I knew exactly what it was, and this is what was
3 classified and this wasn't.

4 Q Aside from preparing for this
5 deposition, have you been involved in this
6 litigation otherwise?

7 A No, I have not.

8 Q You've not reviewed any of the
9 government submissions in this case?

10 MR. PATTON: Objection, vague as to
11 time.

12 BY MR. ABDO:

13 Q You can answer the question.

14 A I reviewed all of the materials that
15 have been provided, most everything in the
16 binders. So, yes, I've read all of that material.

17 Q Did you review any documents before
18 they were filed by the government in this case?
19 Let me try that again.

20 Did you review any of the government
21 submissions in this case prior to their being
22 filed in court?

1 A I did not.

2 Q Have you been involved in any other
3 litigation concerning Section 702 of the Foreign
4 Intelligence Surveillance Act?

5 A No, I have not.

6 Q Are you familiar with other litigation
7 concerning Section 702?

8 A I am.

9 Q What other litigation are you familiar
10 with?

11 A There's at least one other lawsuit
12 having to do -- that goes back quite a few years,
13 sometimes referred to as the Jewel litigation.

14 Q Okay. So what's your current position
15 at the NSA?

16 A I'm the Director of the Civil
17 Liberties, Privacy, and Transparency Office.

18 Q How long have you been in that
19 position?

20 A A little over four years.

21 Q What are your roles and
22 responsibilities in that position?

1 A I set up the office four years ago,
2 and I report directly to the Director of NSA. I'm
3 an adviser on civil liberties, privacy,
4 transparency issues to both the Director, as well
5 as our Senior Leadership Team.

6 I review programs to identify civil
7 liberties and privacy risks. I identify ways to
8 mitigate them. I also work on transparency
9 issues, publishing reports, meeting with civil
10 society/non-governmental organizations, and then
11 also act as the privacy advocate for NSA agency
12 employees.

13 Q Are you responsible for that office's
14 oversight of upstream surveillance?

15 A Could you clarify? I'm not sure what
16 you mean by oversight of that.

17 Q Sure. Are you involved in your
18 position in reviewing the operation of upstream
19 surveillance as part of that office's mission?

20 MR. PATTON: Objection, vague.

21 You can answer.

22 THE WITNESS: My office reviews the

1 compliance incidents or other reports, oversight
2 reports, as part of our role as information goes
3 from NSA to ODNI.

4 BY MR. ABDO:

5 Q I just want to clarify that last
6 portion. You said as part of your role,
7 information goes from --

8 A ODNI. So -- sorry.

9 Our office is at a more strategic
10 level, so we do not review every single compliance
11 incident or every single activity specifically.
12 We have a compliance group that does those types
13 of functions.

14 My office is more strategic, so as
15 specific reports or assessments are conducted
16 either by ODNI or the Department of Justice, we're
17 in that review process.

18 I'm also the main interlocutor with
19 the Privacy and Civil Liberties Oversight Board,
20 so to the extent that there are compliance
21 incidences or changes to what -- any changes to
22 how NSA is conducting its mission as it relates to

1 counterterrorism, we provide that type of
2 information and those types of briefings to the
3 PCLOB.

4 Q So in that role, you're not involved
5 in the implementation of upstream surveillance?

6 MR. PATTON: Objection, vague.

7 THE WITNESS: So certainly at the --
8 there are decisions that are being made, we're
9 informed, we will help decide, help with providing
10 recommendations about whether it should go A or B
11 or C, depending on specific questions that arise.

12 I'm not sure I'm answering your -- I'm
13 not sure I'm fully understanding what you're
14 trying to get at.

15 BY MR. ABDO:

16 Q Let me try to be clear.

17 When the government applies for
18 authority from the Foreign Intelligence
19 Surveillance Court to conduct upstream
20 surveillance, is your office involved in that
21 process?

22 A Yes.

1 Q And what's the nature of your office's
2 involvement in that process?

3 A We review the minimum -- the
4 proposed -- we will review any of the procedures.
5 We will review any of the materials to ensure that
6 we think that privacy has been properly protected,
7 and civil liberties.

8 Q And that review happens prior to
9 submission of an application to the Foreign
10 Intelligence Surveillance Court?

11 MR. PATTON: Objection, vague.

12 You can answer.

13 THE WITNESS: Ask the question again.

14 BY MR. ABDO:

15 Q Sure. When the government is applying
16 for authority to conduct surveillance under
17 Section 702 of FISA -- are you familiar with the
18 shorthand FISA for Foreign Intelligence
19 Surveillance Act?

20 A I am.

21 MR. PATTON: Could I just interrupt?

22 I keep objecting to vague because

1 we're talking about 702, but there's PRISM and
2 Upstream, and so if you want to be more specific,
3 that's the nature of my objection.

4 MR. ABDO: That's helpful. Thanks,
5 Rodney.

6 BY MR. ABDO:

7 Q When the government is applying for
8 authority to conduct upstream surveillance from
9 the Foreign Intelligence Surveillance Court, does
10 your office review those applications prior to
11 their submission to the Foreign Intelligence
12 Surveillance Court?

13 A I understand. Hold on. Sorry, I'm
14 looking for something specific to make sure I'm --

15 MR. PATTON: Take your time.

16 THE WITNESS: Can I talk -- take a
17 break to make sure?

18 MR. PATTON: Sure.

19 BY MR. ABDO:

20 Q I just want to be clear. Just two
21 quick things. Could you please first identify
22 what you're looking at just for the record?

1 A I'm looking at the Objections and
2 Responses by Defendant National Security Agency
3 and Admiral Michael S. Rogers, Director,
4 Plaintiffs' First and Second Sets of Requests for
5 Admission.

6 Q And could you tell us whether you're
7 looking to take a break to discuss classified
8 versus unclassified information, or something
9 else? Are you looking to discuss with your
10 counsel the line between classified and
11 unclassified information?

12 A Yes.

13 Q Okay. I think let me actually just
14 withdraw that question. I don't think we need to
15 take the time to go there.

16 MR. PATTON: Just to be clear to
17 Mr. Abdo's point, the purpose of taking a break is
18 not to talk about whatever the response is if it's
19 not a subject of privilege.

20 The time to take a break and the need
21 to take a break is related to whether to assert
22 the privilege, and the nature and scope of the

1 privilege.

2 MR. ABDO: Thanks.

3 BY MR. ABDO:

4 Q You said that you had been in your
5 current position for four and a half years?

6 A Yes.

7 Q Before that, were you also with the
8 federal government?

9 A Yes.

10 Q And what position did you hold before
11 your current one?

12 A I was the Senior Director for Privacy
13 Compliance at the Department of Homeland Security
14 in the Privacy Office.

15 Q How long were you in that position?

16 A Just shy of ten years.

17 Q And what were your roles and
18 responsibilities there?

19 A I was in charge of developing the
20 Privacy Impact Assessment process, publishing
21 Privacy Act System of Records Notices, ensuring
22 that the review of all IT systems within the

1 Department of Homeland Security had been reviewed
2 for privacy considerations.

3 Q As part of that job, were you involved
4 in any way in upstream surveillance?

5 A No.

6 Q As far as you know, did your roles or
7 responsibilities in that job have any bearing on
8 this lawsuit?

9 A No, not to the best of my knowledge.

10 Q Can you just briefly explain what a
11 Privacy Impact Assessment is?

12 A Sure. It's a requirement of both the
13 E-Government Act of 2002, as well as the Homeland
14 Security Act, Section 222, which requires that the
15 chief privacy officer ensure technology sustains
16 and does not erode privacy.

17 It's the process by which the
18 Department of Homeland Security and other federal
19 agencies review technology to ensure they
20 understand what the impact would be on privacy and
21 how they might be able to mitigate it.

22 It's also a transparency document to

1 allow the public to know and understand what the
2 agency is doing with their information.

3 Q And you were involved in the issuance
4 of those sorts of assessments when you were at the
5 Department of Homeland Security?

6 A Yes.

7 Q Prior to holding that position, were
8 you also in the federal government?

9 A No. I worked for a small nonprofit
10 called TRUSTe, which at the time was a nonprofit
11 reviewing privacy policies and issuing seals of
12 approval at the bottom of websites -- or generally
13 seen at the bottom of websites, indicating that
14 the privacy policy can be trusted.

15 Q How long were you in that position?

16 A I think about three years, maybe a
17 little more, maybe a little less.

18 Q Were the two jobs within the federal
19 government that you've discussed so far the only
20 two jobs you've held in the federal government?

21 A No. Prior to working at TRUSTe, I
22 worked at the Department of Commerce in the

1 e-commerce task force helping to negotiate the
2 Safe Harbor Accord, which is the privacy agreement
3 between the European Commission and the Department
4 of Commerce for companies regulated by the Federal
5 Trade Commission or the Department of
6 Transportation to be able to transfer data from
7 the EU to the US if they've agreed to a set of
8 privacy policies.

9 Q What was your position then?

10 A I was the intern.

11 Q How long did you have that internship?

12 MR. PATTON: Don't knock it.

13 THE WITNESS: Don't knock it, man.

14 MR. ABDO: We all did.

15 THE WITNESS: I was there for a year.

16 During that time frame, I went from being there
17 called a co-op student, which means I was paid, to
18 a full-time employee.

19 BY MR. ABDO:

20 Q But the full time you were there was
21 one year?

22 A Yeah.

1 Q Okay. Is that the only other job
2 you've had in the federal government?

3 A Yes.

4 Q Did that job in any way concern
5 upstream surveillance?

6 A No. It was before upstream
7 surveillance existed.

8 Q Can you describe your training in the
9 areas of computer science, computer engineering,
10 telecommunications networks, or network
11 surveillance prior to joining the NSA?

12 A I do not have --

13 MR. PATTON: Object. Object to form,
14 relevance.

15 MR. ABDO: You can answer.

16 MR. PATTON: You can answer.

17 THE WITNESS: Okay. I don't have any
18 specific training on those four topics prior to
19 being at NSA.

20 BY MR. ABDO:

21 Q Do you have any formal technical
22 training from your -- let me try to be clear.

1 Do you have any training with respect
2 to those four topics through, you know, college or
3 any other graduate programs?

4 A No, I do not.

5 Q Do you have any familiarity with those
6 topics from your time prior to joining the NSA?

7 MR. PATTON: Objection, vague.

8 THE WITNESS: Certainly my experience
9 of working on Privacy Impact Assessments at the
10 Department of Homeland Security, as well as
11 working through different Internet activities, has
12 given me a great deal of on-the-job experience.

13 I have no formal training to speak of
14 in computer science or the other topics you've
15 mentioned.

16 BY MR. ABDO:

17 Q Can you describe the on-the-job
18 training you got in your position at the
19 Department of Homeland Security on those four
20 topics? And let me just be clear, on the topics
21 of computer science, computer engineering,
22 telecommunications networks, or network

1 surveillance.

2 A The first three are all part of the
3 process by which we were having to review
4 extensively the types of technology that DHS was
5 putting forward and better understanding them to
6 ensure we understood the privacy implications. So
7 how did the computer systems work? Sort of how
8 was the information being moved? Where was the
9 information being moved?

10 I have no formal experience beyond my
11 work at NSA on network surveillance.

12 Q For your time still at the Department
13 of Homeland Security, would you consult with
14 technologists to better understand how the conduct
15 that you were reviewing might impact privacy?

16 A Absolutely.

17 Q Was that a frequent part of your job?

18 A Yes. We worked very closely with the
19 chief information officer, the chief information
20 security officer.

21 We also had external experts to the
22 Department of Homeland Security who did have

1 experience in all of these different topics who
2 would provide external expertise as part of the
3 Federal Advisory Committee Act, or FACA.

4 All of those were available if we had
5 questions to ensure that both we were fully
6 understanding the privacy impact, that we had an
7 appreciation of the information we needed to, and
8 were getting those expertise from across --
9 wherever in DHS we needed.

10 Q You said that network surveillance was
11 not a topic on which you received on-the-job
12 training during your time at DHS?

13 A Correct.

14 Q Is that because there were no network
15 surveillance programs that your office was called
16 upon to review at your time at DHS?

17 MR. PATTON: Objection.

18 THE WITNESS: I need --

19 MR. PATTON: Just a second.

20 Objection. I'm not sure of the
21 relevance of that particular question, but besides
22 that, it is vague, ambiguous, but the witness can

1 answer.

2 THE WITNESS: We're now hitting into
3 an area of classification that I would need to go
4 and discuss any further conversation on this
5 having to do with DHS activities.

6 BY MR. ABDO:

7 Q Let me take a step back then.

8 You said before that you hadn't
9 received any on-the-job training with respect to
10 network surveillance during your time at DHS.

11 That's correct, right?

12 A Maybe a better way would be if you
13 could explain what you mean by "network
14 surveillance," and then I can better answer that
15 question.

16 Q Sure. I mean the use of computers to
17 monitor communications over a telecommunications
18 network.

19 A I think what I would like to do is
20 revise what my answer is to say that, yes, I did
21 have on-the-job training associated with that, and
22 to go any further into that likely is classified.

1 Q Okay. I don't think we need to go
2 further.

3 A Okay.

4 Q I just wanted to understand the nature
5 of your technical training prior to your joining
6 the NSA.

7 A Okay.

8 Q So now let's move to your time at the
9 NSA. Can you describe in unclassified terms your
10 on-the-job training with respect to those four
11 areas, which again are computer science, computer
12 engineering, telecommunications networks, or
13 network surveillance?

14 MR. PATTON: Objection to the question
15 to the extent it calls for source and methods of
16 the NSA, operational details of Upstream, which
17 are protected by the state secrets privilege and
18 50 U.S.C. § 3605(a), 50 U.S.C. § 3024(i)(1).

19 The witness can answer the question to
20 the extent that it's unclassified.

21 MR. ABDO: And to be clear here, I'm
22 asking just for unclassified information.

1 And, Rodney, can we agree on a short
2 form of your invocation of the state secrets
3 privilege and the other two statutory claims of
4 protection?

5 MR. PATTON: I will work on that. We
6 can maybe make a deal that you will shorten your
7 record and I'll shorten mine.

8 But my concern with in unclassified
9 terms is it may be very difficult for the witness
10 to separate out when it's a broad question like
11 that as opposed to a very specific question.

12 MR. ABDON: If instead of using the
13 term "classified" we used the term "protected,"
14 would that be clearer?

15 MR. PATTON: For me I think it's just
16 the tell me about everything nature of the
17 question, which is very difficult for her to come
18 up with what is classified and what is
19 unclassified on the spot, whereas specific
20 questions are much easier where she's -- you know,
21 her job is to know where the line is, and she
22 knows where the line is.

1 This is asking about her entire thing,
2 so that's my concern.

3 BY MR. ABDO:

4 Q Ms. Richards, do you think you can
5 answer my question without disclosing classified
6 information?

7 A I can answer. I'm not sure it will
8 give you what you're looking for, but ...

9 Q Why don't we start with what you can
10 do.

11 A My answer is I have extensive ability
12 to talk to and learn from anyone within NSA about
13 how we do our job. To the extent that it means
14 I'm interacting with people in all four of those
15 categories, that's what I do.

16 Q Do you consider yourself to be well
17 technically versed or conversant in those four
18 areas?

19 MR. PATTON: Object to the form.

20 MR. ABDO: You can answer.

21 THE WITNESS: I do.

22

1 BY MR. ABDO:

2 Q I think that's fine.

3 As part of your job at NSA, have you
4 ever been required to learn technical concepts
5 relating to the programs you were reviewing that
6 you felt unable to learn or understand?

7 MR. PATTON: Object to the form.

8 THE WITNESS: I don't understand your
9 question, so help me.

10 BY MR. ABDO:

11 Q Sure, yeah. Your job at NSA involves
12 reviewing NSA surveillance programs, correct?

13 A Correct.

14 MR. PATTON: Object to the form.

15 THE WITNESS: Correct.

16 BY MR. ABDO:

17 Q And as part of reviewing those
18 programs, you mentioned that you talk with NSA
19 employees about how those programs work; is that
20 right?

21 A Yes.

22 Q When talking with those employees

1 about NSA surveillance programs, have you ever
2 felt unable to comprehend technical detail that
3 you were being explained?

4 MR. PATTON: Object to the form,
5 vague. You can answer.

6 THE WITNESS: No, I have never felt
7 like I couldn't understand what they were saying,
8 or what the concepts that they were explaining to
9 me. Is that what you're asking me?

10 BY MR. ABDO:

11 Q Yeah, that's what I'm asking you.

12 A Okay. No, I've never had -- they have
13 all been able to fully explain it, both in concept
14 and in fact.

15 Q Okay, great.

16 (Deposition Exhibit 42 was
17 marked for identification.)

18 BY MR. ABDO:

19 Q Ms. Richards, you now have in front of
20 you what's been marked as Exhibit 42.

21 Do you recognize Exhibit 42?

22 A Yes, I do.

1 Q What is it?

2 A It is Objections and Responses by
3 Defendants National Security Agency and Admiral
4 Michael F. Rogers, Director, to Plaintiff's
5 Interrogatories.

6 Q Could you please turn to page 17 of
7 Exhibit 42 and read to yourself the question
8 identified on that page as Interrogatory No. 12?

9 A (Witness reviewing document.)

10 Q Have you had a chance, Ms. Richards,
11 to read just the interrogatory, the question
12 itself, No. 12 on page 17?

13 A I'm sorry. Yes, I have.

14 Q Could you turn to page 18 of the same
15 document, Exhibit 42, and read the paragraph on
16 that page identified as RESPONSE, which is the
17 response to Interrogatory No. 12 provided by the
18 NSA, and let me know when you're done.

19 A (Witness reviewing document.) Okay.

20 Q Did you have any role in drafting or
21 reviewing the NSA's response to Interrogatory
22 No. 12?

1 MR. PATTON: Object to the form, vague
2 as to time.

3 THE WITNESS: No, I did not.

4 BY MR. ABDO:

5 Q You didn't draft the response?

6 A I did not draft the response.

7 Q Did you see this response prior to its
8 having been filed in federal court -- sorry, prior
9 to this having been sent to the Plaintiffs in this
10 lawsuit?

11 A No.

12 Q Since this response was provided to
13 Plaintiff, have you reviewed this response?

14 A Yes.

15 Q And do you understand this response?

16 A Yes.

17 Q To your understanding, does the term
18 "Internet backbone" include high-speed, ultra-high
19 bandwidth data transmission lines between the
20 networks of major Internet service providers?

21 MR. PATTON: Objection, calls for
22 expert testimony of a telecommunications computer

1 expert. You can answer.

2 THE WITNESS: Certainly that is one
3 example of what might be included in the Internet
4 backbone.

5 BY MR. ABDO:

6 Q When you say -- what do you mean by
7 "might be"?

8 A Well, as is noted in the definition,
9 and as is actually when it first comes up in the
10 testimony to the PCLOB, Internet backbone is a --
11 sort of for want of a better word, there's not a
12 specific term that everyone turns to and says that
13 is the Internet backbone, but rather is a general
14 description.

15 And so there are a number of things,
16 as is described here, that could be included in
17 the Internet backbone. It's not yes or no.

18 Q But your understanding is that the
19 high-speed, ultra-high bandwidth data transmission
20 lines between the networks of major Internet
21 service providers are one such example?

22 A Those could be one such example.

1 Q And the Internet backbone also
2 includes high-speed, ultra-high bandwidth data
3 transmission lines within the networks of major
4 Internet service providers?

5 MR. PATTON: Objection to form, calls
6 for expert testimony. You can answer.

7 THE WITNESS: You're making a
8 distinction between within versus --

9 BY MR. ABDO:

10 Q Between, that's right.

11 A So with -- you're --

12 Q Sorry. My first set of questions
13 related to data transmission lines between the
14 networks of major Internet service providers -- in
15 other words, those connecting one major Internet
16 service provider to another -- and now I'm asking
17 about the high-speed, ultra-high bandwidth data
18 transmission lines within any given major Internet
19 service provider.

20 MR. PATTON: Objection, calls for
21 expert testimony. You can answer.

22 THE WITNESS: It certainly may be. I

1 wouldn't say -- it could be an example.

2 BY MR. ABDO:

3 Q Can you give other examples of
4 high-speed, high bandwidth data transmission lines
5 that would be part of the Internet backbone?

6 MR. PATTON: Objection, calls for
7 expert testimony. You can answer.

8 THE WITNESS: There's the terrestrial
9 and undersea circuits are other examples.

10 BY MR. ABDO:

11 Q Could you describe just a little bit
12 more what you mean by those?

13 MR. PATTON: Same objection.

14 THE WITNESS: So both with Internet
15 backbone, as well as terrestrial and undersea
16 circuits, NSA doesn't have a specific NSA
17 definition. It's what would be generally accepted
18 by a telecom expert. So there's nothing special
19 about what those are.

20 BY MR. ABDO:

21 Q And I'm not asking for a special
22 definition of Internet backbone. I'm asking

1 whether your understanding of that term would
2 encompass the sort of data transmission lines we
3 were just discussing.

4 MR. PATTON: Objection to form, vague,
5 and calls for expert opinion.

6 THE WITNESS: So I guess my answer
7 hasn't changed, and to go any further would put us
8 into classified information.

9 And so to the extent that the
10 information you have in the response -- there's no
11 additional information that is -- I can switch
12 words around, but in essence, those are different
13 types of examples that could be part of what the
14 Internet backbone is, but there's no additional
15 information I can provide to you that's not
16 classified.

17 BY MR. ABDO:

18 Q I understand that you may not be able
19 to provide an unclassified response to this
20 question, but could you state whether the NSA
21 considers high-speed, ultra-high bandwidth data
22 transmission lines between and within the networks

1 of major Internet service providers to be part of
2 the Internet backbone for purposes of upstream
3 surveillance?

4 MR. PATTON: Objection, asked and
5 answered. Objection, calls for expert testimony.
6 And also objection that it is calling for
7 classified information and information protected
8 by the previously mentioned statutes, so I'll
9 instruct the witness not to answer that question.

10 BY MR. ABDO:

11 Q Are you going to follow your lawyer's
12 instruction not to answer the question?

13 A Yes.

14 MR. ABDO: Rodney, can we agree that
15 every time you instruct Ms. Richards not to answer
16 a question on the basis of its classification, you
17 will consider us to have noted our objection to it
18 and we can move on?

19 MR. PATTON: Absolutely.

20 MR. ABDO: Okay.

21 MR. PATTON: I mean, there may be
22 other ways to ask the question to get around that.

1 That's part of the problem.

2 MR. PADGETT: Maybe we should take a
3 break because I think there is something that
4 could be said, but the question is throwing it
5 off.

6 MR. PATTON: Right, that's what I was
7 just saying. There may be an answer to the
8 question, depending on how it's phrased, that we
9 could provide an unclassified response, and so we
10 want to try and provide as much of an unclassified
11 response as possible, but the way the question is
12 framed leads us into a classified area.

13 MR. ABDO: Let me try to ask it one
14 other way.

15 BY MR. ABDO:

16 Q Is your understanding that
17 telecommunications networks experts would consider
18 the high-speed, high-bandwidth data transmission
19 lines between and within the networks of major
20 Internet service providers to be part of the
21 Internet backbone?

22 MR. PATTON: Just take a pause.

1 (Counsel conferring.)

2 MR. PATTON: Just object to the form
3 in terms of calling for expert testimony, but you
4 can answer that question.

5 Do you need the question read back?

6 MR. ABDON: We can do that if that's
7 easier.

8 THE WITNESS: Yeah, can you read the
9 question one more time? Sorry. Too many things.

10 (The reporter read back the question.)

11 THE WITNESS: I think generally
12 speaking, yes.

13 MR. ABDON: Rodney, if you want to take
14 a -- if there's more you think that can be
15 provided after a short break, we're happy to do
16 that now.

17 MR. PADGETT: It might be helpful.

18 MR. GILLIGAN: Actually, 30 seconds.

19 MR. ABDON: Go off the record.

20 (Off the record at 10:02 a.m.)

21 (Resume at 10:05 a.m.)

22 MR. PATTON: So we've clarified the

1 lines as to where the privileged information in
2 that line of questioning is, so you can ask your
3 next question, hopefully get a response.

4 BY MR. ABDO:

5 Q Sure. Is there a way that I could
6 have asked the last set of questions I was asking
7 in a way that you could answer with unclassified
8 information?

9 A To the extent the term "Internet
10 backbone" is what is generally understood, as
11 amorphous as that definition is, by a
12 telecommunications expert, that's how NSA would
13 describe it.

14 To the extent you are connecting it in
15 some way to upstream, that's where you get to
16 classified information.

17 So they're sort of differentiating
18 between those two, but NSA doesn't have a special
19 definition.

20 Q Right. And I think you answered the
21 question with respect to the term "Internet
22 backbone" as understood by telecommunications

1 networks professionals or experts, but just to be
2 clear, that term, as used by telecommunications
3 networks experts, includes the high-speed,
4 ultra-high bandwidth data transmission lines
5 between and within the networks of major Internet
6 service providers, right?

7 A Yes.

8 MR. PATTON: Objection to the extent
9 it calls for an expert opinion.

10 THE WITNESS: But generally yes, that
11 would be what I believe they would say, and so
12 that would be what NSA would say.

13 BY MR. ABDO:

14 Q Okay. Going back to the NSA's
15 response to Interrogatory 12, what does the term
16 "data transmission lines" refer to?

17 MR. PATTON: Objection, calls for
18 expert opinion.

19 THE WITNESS: Lines that transmit
20 data. I mean, beyond what a tele- -- so I'm not a
21 telecommunications expert, as we've noted. That
22 doesn't mean I don't understand how they work, but

1 there's no special definition here that is
2 distinct to what NSA does.

3 BY MR. ABDO:

4 Q What I'm getting at is does the term
5 "data transmission lines" refer to the physical
6 means of transmission of data, or something else?

7 MR. PATTON: Same objection.

8 THE WITNESS: I will go back to that
9 it has no special particular meaning beyond what a
10 telecommunications expert would expect.

11 BY MR. ABDO:

12 Q Is your understanding that a
13 telecommunications network expert will use that
14 term, "data transmission lines," to refer to a
15 physical means of transmission, such as, for
16 example, a cable or a wire or an optical fiber?

17 MR. PATTON: Object. Object to the
18 form, vague, and calls for expert testimony.

19 You can answer.

20 THE WITNESS: As opposed to?

21 BY MR. ABDO:

22 Q As opposed to logical or virtual

1 groupings of data transmitted from one point to
2 another.

3 MR. PATTON: Same objections.

4 BY MR. ABDO:

5 Q I'm really just trying to understand
6 the term that you've used in your response to
7 Interrogatory No. 12, and the term is "data
8 transmission lines," and what I'm trying to
9 understand is whether that refers to physical
10 lines of transmitting data, or other ways of
11 transmitting -- other ways of understanding the
12 transmission of data.

13 A Oh, okay.

14 Q Do you understand that question and
15 what I'm trying to understand?

16 A Do you want to go a little further?
17 What would be the -- I guess I'm tripping over
18 this seems to be logical on its face, and so I'm
19 not sure -- I'm having a hard time -- it sort of
20 defines itself, so ...

21 Q So in another interrogatory response,
22 the NSA uses the term "virtual circuit." I'm

1 trying to understand whether this term, "data
2 transmission lines," is limited to physical
3 transmission lines or something else, like virtual
4 circuits?

5 MR. PATTON: Object to the form, calls
6 for expert testimony.

7 THE WITNESS: Do you want to point to
8 where virtual circuits is so I can make sure I'm
9 not tripping up or -- I do remember seeing virtual
10 circuits, I just don't --

11 BY MR. ABDO:

12 Q Turn to page --

13 A I want to make sure I'm looking at the
14 same one that you're looking at.

15 Q If you turn to page 6 of Exhibit 42,
16 it's the response to Interrogatory No. 2,
17 designated on that page by the all caps word
18 RESPONSE.

19 Do you want to take a second to read
20 those two paragraphs to yourself?

21 A Yeah. (Witness reviewing document.)

22 Oh, okay.

1 Q Having read that, do you now
2 understand what I'm asking with respect to the
3 term "data transmission lines"?

4 A Yeah, it's physical data transmission
5 lines. There's nothing -- there's nothing virtual
6 or -- there's nothing -- it's a physical
7 transmission line.

8 Q Okay, okay. Would a fiberoptic cable
9 qualify as a data transmission line as that term
10 is understood by telecommunications network
11 experts?

12 MR. PATTON: Objection, calls for
13 testimony by a telecommunications expert.

14 You can answer.

15 THE WITNESS: Yes, it would. That
16 would be one example. I'm not saying that's the
17 only example, but it's certainly an example of
18 what might be included in that.

19 BY MR. ABDO:

20 Q Okay. Would it also include -- let me
21 phrase the question fully.

22 Would the term "data transmission

1 line" also include optical fibers within a
2 fiberoptic cable as that term is used by
3 telecommunications networks and network
4 professionals?

5 MR. PATTON: Objection to the extent
6 it calls for testimony by those telecommunications
7 experts. You can answer.

8 THE WITNESS: To the extent that's an
9 example of what might be included in that, yes.

10 BY MR. ABDO:

11 Q Would a fiberoptic cable be a data
12 transmission line as that term is understood by
13 the NSA?

14 MR. PATTON: Same objection.

15 THE WITNESS: Can you repeat the
16 question? I'm not sure I understood.

17 BY MR. ABDO:

18 Q Sure. Does the term "data
19 transmission line," as the NSA has used it in
20 response to Interrogatory 12, include fiberoptic
21 cables?

22 MR. PATTON: Objection to the extent

1 it calls for expert testimony. You can answer.

2 THE WITNESS: Yes.

3 BY MR. ABDO:

4 Q Okay. And the same is true of --

5 A It's an example. I mean, all of these
6 are examples. NSA doesn't have a special
7 definition for "Internet backbone" or these other
8 well-known telecom-like words that you're bringing
9 up, data transmission line or fiberoptic line.

10 Q Does the term "data transmission
11 line," again as used in the response to
12 Interrogatory 12, include individual wavelengths
13 of light carried over fiberoptic cables?

14 MR. PATTON: Object to the form to the
15 extent it calls for expert testimony.

16 You can answer.

17 THE WITNESS: Certainly it is an
18 example.

19 BY MR. ABDO:

20 Q Would the term include any
21 subdivisions of a wavelength of light carried over
22 a fiberoptic cable?

1 MR. PATTON: Same objections.

2 You can answer.

3 THE WITNESS: Would the subdivision of
4 the light?

5 BY MR. ABDO:

6 Q Would any subdivisions of a wavelength
7 of light carried over a fiberoptic cable
8 constitute a data transmission line as the NSA has
9 used that term in responding to Interrogatory 12?

10 MR. PATTON: Objection to the extent
11 it calls for expert testimony. You can answer.

12 THE WITNESS: So to the extent that
13 any of those are an example of what might be part
14 of the Internet backbone, in which case it's
15 providing high-speed, ultra-high bandwidth data
16 transmission lines, the answer would be yes.

17 MR. ABDO: Okay. Do you mind if we
18 take a five-minute break to use the restroom?

19 MR. PATTON: No.

20 (A break was taken at 10:15 a.m.)

21 (Resume at 10:25 a.m.)

22

1 BY MR. ABDO:

2 Q Ms. Richards, where do you acquire
3 your understanding of the term "Internet
4 backbone"?

5 A From both experts within NSA, as well
6 as talking to -- or actually reading what's, you
7 know, sort of been written on it in
8 telecommunications just sort of generally.

9 Q Did you talk to anyone at the NSA
10 about the meaning of the term "Internet backbone"
11 in preparing for this deposition?

12 MR. PATTON: Objection to the question
13 to the extent it calls for attorney-client
14 privilege or any classified information, but you
15 can answer to the extent that it is not
16 attorney-client privileged.

17 THE WITNESS: Certainly in preparation
18 for this we reviewed the definitions that have
19 been provided to ensure that I understood them and
20 that nothing had changed.

21 BY MR. ABDO:

22 Q Did you talk with any subject matter

1 experts at the NSA about the meaning of the term
2 "Internet backbone"?

3 A Yes, I did.

4 Q Did you talk to them about anything
5 beyond what was provided by the NSA in response to
6 Interrogatory 12 asking for the definition of
7 "Internet backbone"?

8 MR. PATTON: Object to the form,
9 vague.

10 THE WITNESS: We discussed the
11 definition and understood it to be the same as the
12 definition that a subject matter expert in the
13 telecommunications industry would use.

14 I'm not sure I'm understanding or
15 answering what you're asking me.

16 BY MR. ABDO:

17 Q Did you talk about the terms used in
18 the definition provided of the term "Internet
19 backbone"?

20 A Yes.

21 Q You understand that the definition of
22 the term "Internet backbone" is one of the terms

1 listed in topic 2 of the deposition notice of the
2 case?

3 A Yes.

4 Q And you understand that the NSA has an
5 obligation under the federal rules to provide
6 somebody for this deposition who knows the
7 Agency's understanding of that term?

8 A Yes.

9 MR. PATTON: Object to the extent it
10 calls for a legal conclusion.

11 Just wait for my objection --

12 THE WITNESS: Sorry.

13 MR. PATTON: -- or non-objection.

14 BY MR. ABDO:

15 Q So you understand what I'm asking
16 about? When I'm asking about the NSA's
17 understanding of certain terms, I'm asking for the
18 NSA's understanding, as you're a designee of the
19 NSA today.

20 A Yes.

21 Q Okay. I want to move to a different
22 term used in your definition.

1 The definition or use of the term
2 "large, strategically interconnected computer
3 network," what does that term mean?

4 MR. PATTON: Objection to the extent
5 it calls for expert testimony. You can answer.

6 THE WITNESS: The words have no
7 specific meaning beyond what you would expect from
8 a telecommunications expert.

9 They're large, they're strategically
10 connected, and they're computer networks. Perhaps
11 when we --

12 BY MR. ABDO:

13 Q Is that the -- well, let me ask by
14 example. Would that term, "large, strategically
15 interconnected computer networks," include the
16 networks of major Internet service providers
17 inside the United States?

18 MR. PATTON: Objection to the extent
19 it calls for expert testimony. You can answer.

20 THE WITNESS: To the extent that that
21 might be one example of what would be included in
22 the Internet backbone, yes, that's an example.

1 BY MR. ABDO:

2 Q I'm not sure I understood the first
3 part of your response. Is it or is it not --
4 sorry, let me start that over.

5 Would or would not a network of a
6 major Internet service provider constitute a
7 large, strategically interconnected computer
8 network as the NSA has used that term?

9 MR. PATTON: Object to the form to the
10 extent it calls for expert testimony.

11 You can answer.

12 THE WITNESS: Let me clarify what I
13 think you're asking to make sure I understand.

14 You're saying would a large --
15 I'm sorry, a communications provider in the
16 United States be considered a strategically
17 interconnected computer network?

18 BY MR. ABDO:

19 Q Yes.

20 A Yes.

21 Q Okay. Approximately how many data
22 transmission lines are there that satisfy the

1 definition of "Internet backbone" given by the
2 NSA?

3 MR. PATTON: Object to the form to the
4 extent it calls for expert testimony.

5 You can answer.

6 THE WITNESS: If you go back and look
7 at -- I believe it's the request for admission.

8 BY MR. ABDO:

9 Q You're welcome to refresh your
10 recollection using that document, but I'd like
11 your answer to that question.

12 A Okay, so could you ask your question
13 one more time?

14 Q Sure. Approximately how many data
15 transmission lines are there that satisfy the
16 definition of "Internet backbone" given by the
17 NSA?

18 MR. PATTON: Objection to the extent
19 it calls for expert testimony.

20 THE WITNESS: How many data
21 transmission lines meet the definition --
22 I'm sorry?

1 BY MR. ABDO:

2 Q Yeah, sorry, let me say it one more
3 time. Approximately how many data transmission
4 lines are there that satisfy the definition of
5 "Internet backbone" given by the NSA?

6 MR. PATTON: Just object, first again
7 to the extent it calls for expert testimony, and
8 second, to the extent it is beyond the 30(b)(6)
9 deposition notice.

10 Just to be clear, to the extent it's
11 beyond the deposition notice, she'll be answering
12 in her personal capacity as opposed to her
13 capacity as a 30(b)(6) NSA designee.

14 I'll shorten that next time.

15 MR. ABDO: Just for the record, would
16 you let us know what you're looking at?

17 THE WITNESS: I am looking at the
18 Request for Admission response -- Request for
19 Admission No. 1 and No. 2, just to try and make
20 sure I'm -- I don't think that this -- how many
21 data transmission lines are there that satisfy the
22 definition.

1 MR. PATTON: The definition is
2 Interrogatory Response 12; is that right?

3 THE WITNESS: Correct.

4 BY MR. ABDO:

5 Q If you don't know the answer, you
6 don't know the answer. I'm asking whether you
7 know the answer.

8 A I don't know the answer. I'm sorry.

9 Q Is there anyone at the NSA who would
10 know the answer to that question?

11 A So to the extent that the answer to
12 that question is available to the public -- so I
13 guess to the extent that that information may be
14 available in the public, we didn't -- I don't
15 know, I mean, actually.

16 Q Do you know whether anyone at the NSA
17 would know the answer to that question even if
18 based on information not available to the public?

19 MR. PATTON: Well, object.

20 THE WITNESS: So I think --

21 MR. PATTON: Object to the form to the
22 extent it calls for classified and otherwise

1 protected information.

2 The witness can answer the question if

3 she's confident that the answer is unclassified.

4 I'm not. I am not.

5 THE WITNESS: The answer to your
6 question, to the extent it's unclassified, and to
7 the extent it is known, would be in the public
8 sphere and not something specific to NSA's -- to
9 how NSA functions or what NSA does.

10 BY MR. ABDO:

11 Q Just so I understand it, is your
12 response then that there's a further answer you
13 could give, but will refuse to on the basis of its
14 classification?

15 In other words, is there more you
16 would say but for your belief that answering my
17 question would disclose classified information or
18 protected information?

19 MR. PATTON: Objection. The answer I
20 believe calls for classified information and
21 information otherwise protected by the statutory
22 privileges, and I instruct the witness not to

1 answer.

2 BY MR. ABDO:

3 Q Are you going to follow your --

4 A I am going to follow my lawyer's --

5 Q -- instruction not to answer?

6 A -- instruction not to answer.

7 Q Is your understanding then that even
8 answering my question of whether providing an
9 answer to my question would disclose classified
10 information is itself classified?

11 MR. PATTON: Same objection.

12 Just a second.

13 (Counsel conferring.)

14 THE WITNESS: I think it would --

15 MR. PATTON: Just a second.

16 MR. PADGETT: Could you read back the
17 question?

18 THE WITNESS: I just wanted to read
19 back the question, yeah, or you can restate the
20 question.

21 BY MR. ABDO:

22 Q Let me restate the question. I'll go

1 back to what I think started us down this path.

2 I originally asked whether there's
3 somebody at the NSA who knows how many data
4 transmission lines there are that satisfy the
5 definition of "Internet backbone" provided by the
6 NSA. I believe you said you don't know the
7 answer, so I asked whether somebody at the NSA
8 would know the answer to that question.

9 Then I believe you said, please
10 correct me if I'm wrong, that to the extent
11 there's an answer that you can provide publicly to
12 that question, it was provided in the NSA's
13 responses to our requests for admission.

14 A Can we go out on a classified -- could
15 we take a --

16 Q Sure.

17 MR. PATTON: Yes. I just want to say
18 before we go off the record that object to the
19 extent it misstates the prior testimony, and that
20 she also said that it doesn't mean anything
21 different in an unclassified sense than what
22 telecommunications experts would say.

1 BY MR. ABDO:

2 Q Okay. You understand that I was
3 asking about knowledge that the NSA has
4 irrespective of whether that information is
5 available to the general public.

6 A I did understand. What I said was I
7 was not answering about what NSA knew or didn't
8 know because there's a classification issue, but
9 to the extent there was an answer to your
10 question, it would be whatever you could find in
11 the public.

12 And so similar to what you see in
13 response to RFA 1, where we give the information
14 that TeleGeography publishes, to the extent they
15 have information that would say -- provide the
16 answer to this question, but I don't think that
17 the answer to RFA 1 was the same as what you were
18 asking.

19 MR. PATTON: And so we'll go off the
20 record and see if there's more information that
21 can be provided unclassified.

22 MR. ABDO: That's fine, although I'm

1 also trying to establish whether there's somebody
2 at the NSA who would be able to provide a
3 classified response, even if not here today,
4 whether there's somebody who could provide that
5 response if we were to move to compel that
6 response.

7 It sounds as though you're not that
8 person from what you're saying. I'm trying to
9 understand if there's somebody else who is that
10 person.

11 THE WITNESS: And so could we
12 please --

13 MR. PATTON: Wait a second.

14 And we're trying to figure out whether
15 we can tell you that.

16 THE WITNESS: Yes, so let us go have
17 that --

18 MR. ABDO: We'll go off the record for
19 a few minutes.

20 (Off the record at 10:38 a.m.)

21 (Resume at 10:47 a.m.)

22 MR. PATTON: Have we got a question

1 pending?

2 MR. ABDO: Yes, we have a question
3 pending, and as I understand it, Ms. Richards, you
4 went out to consult with counsel about whether you
5 could respond to my question without disclosing
6 classified information.

7 Have you arrived at a conclusion?

8 MR. PATTON: Yes. It's like a jury,
9 we have arrived at a verdict.

10 So just to put my objections on the
11 record, one is that it calls for expert testimony;
12 two, it is beyond the 30(b)(6) notice, and
13 therefore the witness's answer, if she were to
14 give one, would be in her personal capacity as
15 opposed to her capacity as a 30(b)(6) witness.

16 And if I understand the question
17 correctly, anything beyond the unclassified
18 information that's already been provided in the
19 RFA, we can neither confirm nor deny whether or
20 not --

21 MR. PADGETT: I'm sorry.

22 (Counsel conferring.)

1 MR. PATTON: So striking the last
2 part, whether NSA has any nonpublic information
3 going beyond what's already in the RFA we can
4 neither confirm nor deny, so on that basis,
5 instruct the witness not to answer the pending
6 question.

7 BY MR. ABDO:

8 Q And you'll follow your lawyer's
9 instruction not to answer?

10 A I will follow my lawyer's advice not
11 to answer.

12 Q Okay. Could you please turn to page 5
13 of Exhibit 42 -- sorry, page 6 of Exhibit 42. You
14 were here a moment ago, but if you need to, would
15 you please re-read the two paragraphs designated
16 as "RESPONSE" on that page.

17 A I'm sorry, to clarify, we're on the
18 interrogatories?

19 Q Yes. Exhibit 42 are the NSA's
20 Responses and Objections to Plaintiff's First Set
21 of Interrogatories, page 6.

22 A Page 6, yes.

1 Q If you need to, just refresh your
2 memory of that response.

3 A Yes.

4 Q Is an international submarine cable
5 that connects two stations a circuit as the NSA
6 has defined that term in response to Interrogatory
7 No. 2?

8 MR. PATTON: Objection to the extent
9 it calls for expert testimony.

10 THE WITNESS: As with Internet
11 backbone, "circuit" has no specific NSA meaning.
12 It is the meaning that a telecommunications expert
13 would expect it to mean. There's nothing
14 something special. So I just want to make sure
15 that that's clear, there's not some other
16 definition out there.

17 To the extent that you asked whether
18 two submarine cables would be -- I'm sorry, I just
19 want to make sure.

20 BY MR. ABDO:

21 Q Whether an international submarine
22 cable that connects two stations is a circuit.

1 A Yeah.

2 MR. PATTON: Same objection.

3 THE WITNESS: Yes.

4 BY MR. ABDO:

5 Q Okay. Is an international submarine
6 cable that connects two stations a circuit on the
7 Internet backbone?

8 MR. PATTON: Object to the form,
9 vague. Objection to the extent it calls for
10 expert testimony.

11 THE WITNESS: Say it one more time.

12 BY MR. ABDO:

13 Q Do you want me to repeat that?

14 A Yes, please.

15 Q Sure. Is an international submarine
16 cable that connects two stations a circuit on the
17 Internet backbone?

18 MR. PATTON: Objection to the extent
19 it calls for expert testimony.

20 THE WITNESS: Yes.

21 BY MR. ABDO:

22 Q Okay. Is each optical fiber within an

1 international submarine cable that connects two
2 stations a circuit?

3 MR. PATTON: Objection. Same
4 objection as before.

5 THE WITNESS: Each of these is an
6 example of what might be a circuit and what might
7 be considered the Internet backbone.

8 So to the extent an optical fiber is
9 given as an example of a circuit, then the answer
10 would be yes, but they're an example.

11 BY MR. ABDO:

12 Q That's right. I'm not asking -- let
13 me try to be clear.

14 A Okay.

15 Q Each of these questions is asking
16 whether a particular data transmission line
17 connecting two stations constitutes a circuit.
18 I'm not asking for you to confirm that that's the
19 only sort of circuit out there.

20 A Okay.

21 Q So I am asking whether these are
22 examples of a circuit, not whether they are the

1 sum total of what might be a circuit.

2 A Okay.

3 Q With that understanding, is your
4 answer to my last question -- what is your answer
5 to my last question, which was is each optical
6 fiber within an international submarine cable that
7 connect two stations a circuit?

8 MR. PATTON: Objection to the extent
9 it mischaracterizes the prior testimony.
10 Objection, calls for expert testimony.

11 THE WITNESS: Circuit could -- the
12 definition of "circuit" being two stations,
13 instruments transmitting information, could be an
14 example of -- could be an example. So it could
15 be, yes.

16 BY MR. ABDO:

17 Q When you say it could be, you're
18 referring again to an optical fiber within an
19 international submarine cable?

20 A Yes, it could be.

21 Q If an optical fiber within an
22 international submarine cable has been

1 multiplexed, would each of the subdivisions
2 created by that multiplexing be a circuit?

3 MR. PATTON: Objection to the extent
4 it calls for expert testimony. You can answer.

5 THE WITNESS: It could be.

6 BY MR. ABDO:

7 Q In what circumstance would it be, and
8 in what circumstance would it not be?

9 A I'm trying to think if there's an
10 example where it wouldn't be. I think the
11 definition --

12 MR. PATTON: Same objection to that
13 question and this line of questioning.

14 THE WITNESS: Yeah. So a
15 telecommunications expert would undoubtedly
16 consider it to be a circuit.

17 BY MR. ABDO:

18 Q Would the NSA also consider it to be a
19 circuit?

20 A To the extent that there's no --

21 MR. PATTON: Object. Objection to the
22 form to the extent it calls for expert testimony.

1 THE WITNESS: To the extent that
2 there's no difference in the definition that NSA
3 takes versus what a telecommunications expert
4 takes, there's no special meaning to the word
5 "circuit." So if they would consider it to be a
6 circuit, then NSA would consider it to be a
7 circuit.

8 BY MR. ABDO:

9 Q Okay. Can a single circuit span
10 multiple physical paths between two stations?

11 MR. PATTON: Objection, vague.
12 Objection, calls for expert testimony.

13 THE WITNESS: Can a single --

14 BY MR. ABDO:

15 Q Can a single circuit span multiple
16 physical paths between two stations?

17 And I understand you'll make the same
18 objections.

19 MR. PATTON: Same objections. And I
20 would just add beyond the scope of 30(b)(6), and
21 therefore the witness will be testifying in her
22 personal capacity as opposed to her 30(b)(6)

1 designee capacity.

2 MR. ABDO: Rodney, if it's okay with
3 you, can we shorten that objection to it's beyond
4 the scope?

5 MR. PATTON: As long as you understand
6 that what that means here is that she's testifying
7 as Becky Richards and not testifying as a 30(b)(6)
8 witness for the NSA.

9 MR. ABDO: Thanks. I will so
10 understand it.

11 THE WITNESS: And I will --

12 BY MR. ABDO:

13 Q Let me restate the question.

14 A I've now lost what the question is as
15 Becky answering.

16 Q Let me restate it, okay?

17 Can a single circuit span multiple
18 physical paths between two stations?

19 MR. PATTON: Objection, calls for
20 expert testimony. Objection, beyond the scope of
21 30(b)(6).

22 THE WITNESS: I'm going to answer I

1 don't know.

2 BY MR. ABDO:

3 Q Do you know whether there's anybody
4 else at the NSA who would know the answer to that
5 question?

6 MR. PATTON: You can answer if you
7 have an unclassified --

8 THE WITNESS: I don't know.

9 BY MR. ABDO:

10 Q You don't know whether there's
11 somebody else at the NSA who would know the answer
12 to that question?

13 A Correct.

14 Q Did you talk to any subject matter
15 experts at the NSA about the meaning of the term
16 "circuit" prior to this deposition?

17 A I did.

18 Q As part of that conversation, did you
19 do anything beyond reviewing the definition of
20 "circuit" provided by the NSA in response to our
21 Interrogatory No. 2?

22 MR. PATTON: Objection, vague.

1 THE WITNESS: We discussed generally
2 what is meant by "circuit" in the context of a
3 telecommunications expert.

4 We did not get to the specific
5 whatever you just asked of a single circuit having
6 multiple physical paths.

7 BY MR. ABDO:

8 Q Okay. What's your understanding of
9 the term "virtual circuit"?

10 MR. PATTON: Object to the form, calls
11 for expert testimony, and beyond the scope of
12 30(b)(6).

13 THE WITNESS: As described in the --
14 are we still on the interrogatories on page 6 in
15 response to No. 2?

16 BY MR. ABDO:

17 Q Yes. Let me try to be clear.

18 What is your understanding of the term
19 "virtual circuit" as used by the NSA in its
20 response to Interrogatory No. 2?

21 A My understanding is that there's a way
22 in which to use different techniques to divide the

1 circuits so that you have more than one --
2 multiple circuits on one circuit.

3 Q Let me just try to understand that.

4 Do virtual circuits -- let me start
5 over. Can a virtual circuit traverse multiple
6 physical circuits?

7 MR. PATTON: Objection to the extent
8 it calls for expert testimony, and beyond the
9 scope of 30(b)(6).

10 THE WITNESS: I'll respond I don't
11 know.

12 BY MR. ABDO:

13 Q Is there anyone at the NSA who would
14 know the answer to that question?

15 A I don't know.

16 Q Did you talk with any subject matter
17 experts at the NSA about the definition of or the
18 meaning of the term "virtual circuit" as used in
19 the NSA's response to Interrogatory No. 2?

20 A I did.

21 Q Is there anything about the meaning of
22 the term "virtual circuit" that you can provide

1 beyond what is in the NSA's response to
2 Interrogatory No. 2?

3 A Since I'm not the telecommunications
4 subject matter expert, my answer is confined to
5 what you see on the piece of paper.

6 Q Is there a telecommunications subject
7 matter expert at the NSA who could more fully
8 answer that question?

9 Let me restate the question.

10 Is there anyone at the NSA who could
11 more fully define what the term "virtual circuit"
12 means as used by the NSA in response to
13 Interrogatory No. 2?

14 MR. PATTON: To the extent that the
15 answer is yes or no, she can answer, but I'll note
16 for the record that she's testified multiple times
17 that the NSA does not mean anything different by
18 the term "virtual circuit" other than what is
19 understood within the telecommunications industry.

20 BY MR. ABDO:

21 Q What is the meaning of "virtual
22 circuit" as understood within the

1 telecommunications industry?

2 MR. PATTON: I'm going to object to
3 the question to the extent it calls for expert
4 testimony, and beyond the scope of 30(b)(6).

5 BY MR. ABDO:

6 Q You can answer.

7 A I don't have anything further to
8 define for you.

9 Q Is there anyone at the NSA who better
10 understands the definition of "virtual circuit" as
11 used by those in the telecommunications industry?

12 MR. PATTON: You can answer the
13 question if it's unclassified.

14 THE WITNESS: I don't know.

15 MR. PATTON: You can't provide a name.

16 THE WITNESS: I don't know.

17 BY MR. ABDO:

18 Q You don't know whether there's anyone
19 at the NSA?

20 A Correct.

21 Q It's true -- well, let me ask you.

22 Is it true that each Internet protocol

1 packet sent on the Internet is routed to its
2 destination independently?

3 MR. PATTON: Object to the form of the
4 question to the extent it calls for expert
5 testimony, and outside the scope of 30(b)(6).

6 You can answer.

7 THE WITNESS: I'm sorry, can you ask
8 the question again?

9 BY MR. ABDO:

10 Q Sure. Is it true that each Internet
11 protocol packet sent on the Internet is routed to
12 its destination independently?

13 MR. PATTON: Same objections.

14 THE WITNESS: Generally speaking, yes,
15 that is my understanding.

16 BY MR. ABDO:

17 Q Are there circumstances you can think
18 of where Internet protocol packets would not be
19 routed independently on the Internet?

20 MR. PATTON: Object to the form to the
21 extent it calls for expert testimony, and beyond
22 the scope of 30(b)(6). You can answer.

1 THE WITNESS: Not off the top of my
2 head, but I'm sure there are examples.

3 BY MR. ABDO:

4 Q Why are you sure there are examples?

5 A Just because every rule seems to have
6 some sort of exception to it, so to say something
7 is hard and fast to be always the case is not
8 something I would like to do.

9 Q Okay. When Internet packets that
10 constitute a single communication take different
11 paths to a common destination, are those packets
12 traversing different circuits or the same circuit?

13 MR. PATTON: Object to the form, lacks
14 foundation, object to the vagueness of the term
15 "single communication." Object that it calls for
16 expert testimony, and it is beyond the scope of
17 30(b)(6). You can answer.

18 THE WITNESS: The question was if
19 packets take a different path, are they on
20 different circuits?

21 BY MR. ABDO:

22 Q Yes.

1 A I would say it depends. There's not,
2 again, a hard and fast rule. Depending, it might
3 be on the same circuit, it might be on a different
4 circuit.

5 Q What does it depend on?

6 MR. PATTON: Same set of objections.

7 THE WITNESS: I guess it would depend
8 on how -- what would it depend on?

9 It would depend on the nature of the
10 circuit.

11 BY MR. ABDO:

12 Q What do you mean by the nature of the
13 circuit?

14 MR. PATTON: Same objections.

15 THE WITNESS: Depending on how the
16 packets were going and how you -- how is it
17 routed? Do they take different paths, or are they
18 on the same circuit?

19 So to the extent the circuit can be
20 meant in a big sense or in a small sense, it's
21 going to decide whether it's on the same circuit
22 or not.

1 So you asked in a separate set of
2 line, had a whole bunch of distinctions as to what
3 was data transmission line and what were they, and
4 was it a wavelength, or something further into
5 that. So it will depend on how you define
6 "circuit," which is why you were asking me to
7 define "circuit."

8 BY MR. ABDO:

9 Q Let me just try to understand.

10 Does the answer to my question depend
11 on whether the separate paths being taken by
12 packets are being routed over one physical circuit
13 or not?

14 MR. PATTON: Same set of objections.

15 THE WITNESS: One physical circuit?

16 BY MR. ABDO:

17 Q Suppose two packets that are part of
18 the same communication traverse different optical
19 fibers.

20 A Okay. Are those different circuits?

21 Q Yes, that's my question.

22 MR. PATTON: Object to the extent it

1 calls for expert testimony in a hypothetical, and
2 also beyond the scope of 30(b)(6).

3 THE WITNESS: So --

4 MR. PATTON: Also asked and answered.

5 THE WITNESS: So if it's on two
6 different circuits, then it's on two different
7 circuits. I feel like I'm having a circular
8 conversation, so I'm not sure. Can two packets be
9 on the same circuit and take different paths?

10 MR. PATTON: I don't think that's the
11 question.

12 THE WITNESS: Is that --

13 BY MR. ABDO:

14 Q My original question was whether
15 packets that are traversing different paths to
16 their common destination are traversing different
17 circuits. And I believe, please correct me if I'm
18 wrong, you said, generally, yes.

19 MR. PATTON: That's a misstatement of
20 her prior testimony.

21 BY MR. ABDO:

22 Q Could you please tell us what your

1 answer is to that original question?

2 MR. PATTON: Do you want the question
3 to be read back?

4 MR. ABDO: No. I mean, let's move on.
5 Would you mind, Ms. Jaques, marking
6 this as Exhibit 43?

7 (Deposition Exhibit 43 was
8 marked for identification.)

9 BY MR. ABDO:

10 Q So you have in front of you what's
11 been marked as Exhibit 43.

12 Do you recognize that document?

13 A Absolutely.

14 Q And what is Exhibit 43?

15 A Privacy and Civil Liberties Oversight
16 Board, Report on the Surveillance Program Operated
17 Pursuant to Section 702 of the Foreign
18 Intelligence Surveillance Act, July 2nd, 2014.

19 Q What was the NSA's relationship to the
20 drafting or review of the report marked
21 Exhibit 43?

22 MR. PATTON: Objection as vague, and

1 objection to the extent it may call for
2 deliberative process privilege that might be
3 invoked by the PCLOB that we don't represent. So
4 maybe if you could ask a more narrow question, we
5 can avoid most of the deliberative process.

6 She can speak in general terms on
7 that, that would be good, in answer to your
8 question, but I don't want to too broadly object
9 on deliberative process grounds to protect PCLOB's
10 privilege.

11 BY MR. ABDO:

12 Q Let me ask a different related
13 question. Was the NSA involved in the drafting of
14 Exhibit 43?

15 MR. PATTON: Objection, vague.

16 THE WITNESS: NSA provided expert
17 testimony to the Board as is described on page 4
18 of the report. We provided documentation, we
19 provided presentations, and we answered questions
20 throughout their process.

21 We then for the fact section
22 reviewed -- we reviewed the document for factual

1 accuracy, as well as we reviewed the entire
2 document for classification to ensure there was no
3 classified material in it.

4 BY MR. ABDO:

5 Q So I believe that you said that the
6 NSA provided testimony, documentation, and
7 presentations to the members of the PCLOB in
8 drafting Exhibit 43, right?

9 A That is correct.

10 Q Do you know how many sessions the NSA
11 provided testimony about the subject matter of the
12 report that's marked Exhibit 43?

13 A It was a handful. I don't remember
14 the exact number, but certainly they came to NSA,
15 and we went to the PCLOB a number of times, both
16 ways. We had conference calls, and we had email
17 exchanges.

18 Q And did that testimony involve both
19 classified and unclassified information?

20 A Yes, it did.

21 Q Is the same true of the documentation
22 that the NSA provided to the PCLOB?

1 A Yes, it was both classified and
2 unclassified.

3 Q And is that also true of the
4 presentations provided?

5 A Yes, all was classified and
6 unclassified.

7 Q And you say that the NSA reviewed the
8 factual section of the report marked Exhibit 43
9 for accuracy; is that correct?

10 A That is correct.

11 Q When you say "fact section," what
12 specific pages are you referring to, or page range
13 are you referring to?

14 A Page 16 to 79. In essence, Part 3,
15 Description and History.

16 Q Did the NSA review any other portion
17 of the report marked Exhibit 43 for factual
18 accuracy?

19 MR. PATTON: Objection to the form,
20 vague as to time.

21 THE WITNESS: NSA otherwise did a
22 classification review of the document.

1 To the extent these documents have the
2 opinions of the various board members, NSA was not
3 reviewing that information beyond ensuring there
4 was no classified material in it.

5 BY MR. ABDO:

6 Q If the NSA, during its classification
7 review of the portions of the report, other than
8 Part 3, noticed a factual inaccuracy, would the
9 NSA have notified the PCLOB of that inaccuracy?

10 A NSA conducted a classification review
11 of the document. As part of that classification
12 review, to the extent that something would be
13 described in some of the other pieces of the
14 document that was not not, we would notify them as
15 part of that, as is noted again on page 4.

16 Q Let me just make sure I understand.

17 A Yeah.

18 Q The NSA reviewed Part 3 of the report
19 marked Exhibit 43 for accuracy, right?

20 A That is correct.

21 Q It reviewed the entire document for
22 classification, right?

1 A Correct.

2 Q And if in the process of reviewing the
3 entire document for classification it noticed an
4 inaccuracy outside the portion that it reviewed
5 solely for accuracy -- sorry, outside the portion
6 that it reviewed when it was conducting its review
7 for accuracy, your testimony is that the NSA would
8 have notified the PCLOB of that inaccuracy?

9 A Correct.

10 Q Was the NSA's review for accuracy of
11 the factual section of the report thorough?

12 MR. PATTON: Objection, vague.

13 THE WITNESS: Yes.

14 BY MR. ABDO:

15 Q The NSA would have reviewed every
16 sentence?

17 A Absolutely.

18 Q And what would the NSA have done if it
19 noticed an inaccuracy in any portion of the
20 report?

21 MR. PATTON: Objection, vague.

22 THE WITNESS: NSA would provide a

1 response explaining either why it was inaccurate
2 or why the information in the classification
3 review was classified, and there was -- as is
4 important to remember in the Upstream, large
5 portions of that program remain classified, and so
6 necessarily with this report, with this NSA Civil
7 Liberties and Privacy Office Report, the
8 information is incomplete.

9 And so a lot of the conversation was a
10 mixture of how do you provide an accurate
11 representation of how Upstream works while keeping
12 the sources and methods classified? And so a lot
13 of the conversation, particularly around the
14 accuracy and the classification, were tied
15 together because of those reasons.

16 And so this gives, as does our report,
17 and continues to, a broad accurate description of
18 the outline of how the program runs, but does not
19 get into some of the much more specific aspects to
20 it.

21 BY MR. ABDO:

22 Q In the course of the review for

1 accuracy of the report, did the NSA notice
2 inaccuracies and make recommendations to the PCLOB
3 about how to fix those inaccuracies in what's now
4 marked Exhibit 43?

5 A Yes.

6 Q Are you aware -- sorry, strike that.

7 Did the PCLOB generally accept those
8 recommendations?

9 MR. PATTON: Just a second.

10 (Counsel conferring.)

11 MR. PATTON: Could you read the
12 question back?

13 (The reporter read back the question.)

14 MR. PATTON: Just object to beyond the
15 scope of the 30(b)(6).

16 And if the answer to that question is
17 yes or no, you can answer. If the answer to that
18 question is going to be a narrative description of
19 what the PCLOB did or did not accept, then we're
20 concerned that we might be in the deliberative
21 process.

22 MR. ABDON: I just want to state for

1 the record, Rodney, you don't represent the PCLOB,
2 correct?

3 MR. PATTON: I do not, but I am with
4 the Department of Justice, and we do represent the
5 United States, so here we would be preserving
6 their ability to later assert that privilege if
7 need be. I certainly am not in a capacity to
8 waive it on their behalf.

9 MR. ABDO: I'm just not sure you're in
10 a position to assert it though. I'm not sure
11 we're asking for anything that's going to reveal
12 the deliberations anyway, but I note that we
13 object to your quasi-invocation of the PCLOB's
14 deliberative process.

15 MR. PATTON: I can rephrase it as a
16 preservation of their right to assert the
17 deliberative process privilege, since they are not
18 here to invoke that themselves.

19 MR. GILLIGAN: I would add that our
20 function as Department of Justice attorneys is to
21 represent the interests of the United States in
22 this proceeding, and PCLOB is an independent

1 establishment of the United States government, but
2 I understand your objection.

3 MR. ABDO: Sure, but you also know
4 that we had -- you know, Topic 6 very clearly
5 included this report as a subject of this
6 deposition.

7 MR. PATTON: I doubt, again, that you
8 will be delving into the details of that. There's
9 an awful lot --

10 MR. GILLIGAN: The facts, not
11 recommendations.

12 MR. PATTON: There's an awful lot of
13 questions that the witness is perfectly capable of
14 answering, so I don't think we're going to be in
15 any --

16 BY MR. ABDO:

17 Q Ms. Richards, can you answer the
18 question?

19 A Yes, I'll answer the question.

20 What I would do is point you to,
21 again, page 4 that specifically says that they
22 considered the Intelligence Community's comments

1 regarding the operation of the program to ensure
2 accuracy. None of the changes resulting from that
3 process affected the Board's substantive analysis
4 and recommendations.

5 So I would point you to that to avoid
6 this whole conversation about what is or isn't
7 sort of privileged between it to say that they
8 accepted our changes, they didn't change
9 substantively what they were doing. We went
10 through a back-and-forth to ensure that everybody
11 understood how the program worked, what was
12 classified.

13 In some instances, they asked for
14 information to be declassified in order to make
15 the record full, and that didn't change. So we
16 went through that process.

17 Q Let me ask my question again because I
18 don't think that answered it.

19 A Sure, okay.

20 Q If the NSA identified an inaccuracy in
21 the report marked as Exhibit 43 to the PCLOB,
22 would the PCLOB generally fix that factual

1 inaccuracy, generally have fixed it?

2 MR. PATTON: Object to the form,

3 vague.

4 THE WITNESS: Yes. The PCLOB was not

5 interested in having an inaccurate description of

6 how Section 702 -- it was not within -- they

7 didn't want to have that, and so they worked

8 closely with us to ensure that they -- I don't

9 know if "closely" is the right word, but they

10 worked with us extensively in order to ensure that

11 they had an accurate representation that could be

12 made unclassified, which was -- up until -- there

13 had -- the record had been not as extensive.

14 BY MR. ABDO:

15 Q Okay. Are you aware of any

16 inaccuracies, factual inaccuracies, in the report

17 marked as Exhibit 43?

18 MR. PATTON: Object to form, vague.

19 THE WITNESS: If there's particular

20 sentences you would like me to look at or there's

21 particular questions that you have, I'd be happy

22 to look at those and walk through.

1 As a general matter, the information
2 in here is accurate as a description, but
3 necessarily, as I mentioned before, not a full
4 description of the program because many of those
5 facts still remain unclassified. But if there's
6 particular sentences that you would like to point
7 me to, I'm happy to review.

8 I would also note that, as of 2017,
9 NSA changed one of the ways it was doing its
10 collection, so it was no longer getting "abouts"
11 collection. And so to the extent the material in
12 here accurately reflects what was happening in
13 2014, the general matter, there may be, you know,
14 slight, slight differences, but this is true.

15 That information has changed, so we
16 are no longer doing a collection that gets the,
17 quote, "abouts" collection in upstream. So to the
18 extent that that's no longer accurate, that would
19 be the case.

20 BY MR. ABDO:

21 Q But at least as the NSA was conducting
22 upstream surveillance as of July 2nd, 2014, which

1 is the date of that report, you're not aware of
2 inaccuracies in the report?

3 A Again, I would ask --

4 MR. PATTON: Sorry, just object to
5 asked and answered. Go ahead, you can answer.

6 THE WITNESS: Again, if there are
7 specific sentences you would like me to go to that
8 you think maybe are not accurate, I'm happy to
9 talk about those particular sentences. It's a
10 191-page document.

11 As a general matter, NSA considers
12 this to be an accurate outline of the unclassified
13 portions of Upstream. There may be particular
14 sentences as they describe them, but the facts we
15 believe to be accurate.

16 BY MR. ABDO:

17 Q Okay. I want to turn your attention
18 to page 36 of the report marked Exhibit 43. Could
19 you please read the first sentence of the very
20 last paragraph that starts on that page? It
21 begins "once tasked." Again, that's at the bottom
22 of page 36 of Exhibit 43, and that sentence ends

1 on the next page, 37.

2 A Okay, yes.

3 Q Is that sentence factually accurate?

4 MR. PATTON: Object to the form,
5 vague.

6 BY MR. ABDO:

7 Q As of the time -- let me start over.

8 Is the sentence that I just asked you
9 to read at the bottom of page 36, carrying over
10 onto page 37 of Exhibit 43, an accurate
11 description of how upstream surveillance operated
12 as of July 2nd, 2014?

13 A Well, what I would do is I would point
14 you, rather than to the sentence that's on page 36
15 of the PCLOB report, and instead suggest that the
16 RFA, Request for Admission, on page 9, in response
17 to RFA for No. 8, that describes how this is --
18 how the government describes it.

19 The other place I would suggest, which
20 is the government's description, is also in the
21 NSA Civil Liberties and Privacy Office Report at
22 page 5.

1 Those are both more accurate
2 descriptions of how we would talk about Upstream.
3 The description on page 36 is necessarily vague.

4 Q What's inaccurate about the sentence
5 at the bottom of page 36, carrying over onto
6 page 37, in Exhibit 43?

7 MR. PATTON: Objection,
8 mischaracterizes prior testimony. And just a
9 second, there might be a classified response.

10 We will need to find out what her
11 answer is going to be on this to determine whether
12 the answer is partially classified, fully
13 classified, or wholly unclassified. At this
14 point, I don't know what her answer is going to
15 be.

16 MS. HANLEY COOK: Why don't we take a
17 five-minute break.

18 MR. ABDO: Go off the record, Dawn,
19 please.

20 (Off the record at 11:30 a.m.)

21 (Resume at 11:56 a.m.)

22 MR. ABDO: Ms. Jaques, do you mind

1 reading back the last question before we broke?

2 (The reporter read back the question.)

3 MR. PATTON: Objection to the extent
4 it misstates prior testimony, and objection to the
5 extent that the answer calls for classified
6 information and information subject to the
7 statutory privileges.

8 You can answer to the extent your
9 answer is unclassified.

10 THE WITNESS: Okay. So this sentence,
11 as I mentioned about the entire document and the
12 sort of public description of Upstream, is
13 necessarily incomplete because of the
14 classification of information.

15 This sentence is accurate as of 2014,
16 but I would point you to the description that's
17 provided in the RFA, Request for Admission No. 8,
18 in the response. That provides an accurate
19 description of how upstream Internet collection
20 works today, with, again, the understanding that
21 it's necessarily incomplete.

22 To provide you a description of what

1 is different between those two and why necessarily
2 gets into the classified realm, and so I can't go
3 any further into that.

4 BY MR. ABDO:

5 Q Let me just make sure I understand.

6 A Yep.

7 Q Is it true that the sentence we've
8 been focusing on, the carryover sentence between
9 pages 36 and 37 of Exhibit 43, is accurate as of
10 2014?

11 MR. PATTON: Objection,
12 mischaracterizes prior testimony.

13 THE WITNESS: It is accurate, but
14 incomplete, and that's a very important fact.

15 BY MR. ABDO:

16 Q And the reasons why it is incomplete
17 you are saying are classified; is that correct?

18 A That is correct.

19 Q Is it incomplete because it omits
20 additional information about the operation of
21 upstream surveillance that is classified?

22 MR. PATTON: Let me just check to find

1 out whether the answer is yes or no.

2 (Counsel conferring.)

3 THE WITNESS: Ask your question one

4 more -- can you repeat the question for me?

5 BY MR. ABDO:

6 Q I can ask it again.

7 Is the sentence that carries over
8 between pages 36 and 37 of Exhibit 43 incomplete,

9 which is the word you used --

10 A Correct.

11 Q -- because it omits information about
12 the operation of upstream surveillance that is
13 classified?

14 MR. PATTON: Just a second.

15 You can answer yes or no.

16 THE WITNESS: Okay, yes.

17 BY MR. ABDO:

18 Q Is it incomplete for any other reason
19 other than that it omits additional information
20 that is classified about the operation of upstream
21 surveillance?

22 MR. PATTON: Object to form, but you

1 can answer.

2 THE WITNESS: It is incomplete because
3 it omits classified information.

4 I'm not sure I understood your second
5 question, what you were trying to -- what my
6 other -- what other options you're providing for.

7 BY MR. ABDO:

8 Q A statement could be incomplete for a
9 number of reasons. It could be incomplete because
10 it omits relevant information, it could be
11 incomplete because it includes information that is
12 inaccurate or misleading, and I'm trying to
13 understand why the NSA believes this sentence is
14 incomplete?

15 A It's incomplete because it omits the
16 classified information.

17 Q And for no other reason?

18 A Not that I can think of. I'm pausing
19 because I can't -- I guess maybe you can be more
20 specific, but I guess you said I could have added
21 more information in -- they could have added more
22 information into it and that's what makes it

1 incomplete? I'm not sure I understand. I guess I
2 don't understand beyond omitting.

3 I'm willing say to say it's incomplete
4 because it's omitting information. I'm not sure I
5 understand the remainder of what you're trying to
6 get at, so maybe you can rephrase it.

7 Q Let me ask it another way.

8 Is any of the information included in
9 this sentence -- again, the sentence carrying over
10 from pages 36 to 37 of Exhibit 43 -- inaccurate?

11 MR. PATTON: Objection, vague as to
12 time.

13 MR. ABDO: As to the operation of
14 upstream surveillance in 2014.

15 THE WITNESS: As I've said, it's
16 incomplete.

17 BY MR. ABDO:

18 Q I'm asking if it's inaccurate.

19 A No. I've stated it's accurate. It's
20 just incomplete.

21 Q Is it inaccurate as to the operation
22 of upstream surveillance today?

1 MR. PATTON: Objection, calls for
2 information that is classified and subject to the
3 state secrets privilege, the other statutory
4 privileges. I instruct the witness not to answer
5 the question.

6 BY MR. ABDO:

7 Q Are you going to follow your lawyer's
8 instruction not to answer?

9 A I'm going to follow my lawyer's
10 direction not to answer.

11 Q Do you know the answer to the question
12 that I asked? In other words, if you were to
13 answer, could you?

14 A It would be classified, so I can't
15 answer it because it's classified.

16 Q But do you know the information that
17 you would provide in response but for --

18 A The classification?

19 Q Yes.

20 A Yes.

21 Q Is there anything you can say in
22 response to the question without revealing

1 information you've been instructed not to provide?

2 A I would point you to the answer to the
3 response that's on page 9 of the RFA, which
4 accurately, to the extent possible given the
5 classified nature, describes the current way
6 Upstream works. And so I would -- that's how I
7 would answer.

8 Q But specifically with respect to this
9 sentence, is there anything you can say in
10 response to my question, which was is the sentence
11 accurate as to the operation of upstream
12 surveillance today?

13 Is there anything you can say, aside
14 from pointing me to other testimony or other
15 information, that would not require you to
16 disclose classified information?

17 A No.

18 Q Can you describe -- well, let me ask
19 you this. Do you agree with your lawyer's
20 instruction that answering the question would harm
21 national security?

22 MR. PATTON: I'm going to object to

1 the form of the question as it seeks a legal
2 conclusion, and as my colleagues just pointed out,
3 beyond the scope of 30(b)(6).

4 MR. ABDO: You should take a look at
5 guideline 7 of Appendix A of the local rules,
6 which clearly contemplates counsel asking for the
7 basis of assertions of privilege.

8 So my question is --

9 MR. PATTON: Same objection. That
10 calls for a legal conclusion.

11 BY MR. ABDO:

12 Q Do you believe that answering the
13 question would result in harm to national
14 security?

15 A Yes.

16 Q Can you describe that harm?

17 MR. PATTON: No. I'm going to object
18 to that question, as it would call for classified
19 information and information subject to the
20 statutory privileges, and I'll instruct her not to
21 answer the question.

22

1 BY MR. ABDO:

2 Q Do you agree that describing the harm
3 would itself result in harm to national security?

4 A Yes.

5 Q Have you discussed the invocation of
6 the state secrets privilege with respect to this
7 question with Admiral Michael Rogers?

8 MR. PATTON: With respect to this
9 particular question?

10 MR. ABDO: Yes.

11 THE WITNESS: The question being --
12 I'm sorry, so just explain to me. The question is
13 whether describing the difference between the
14 sentence on page 36 and the interrogatory -- or
15 the Request for Admission on page 9, whether
16 describing what is different between those two
17 would be a national security harm with him
18 specifically?

19 BY MR. ABDO:

20 Q No. The original question was whether
21 the carryover sentence from page 36 to 37 of
22 Exhibit 43 is accurate with respect to upstream

1 surveillance as it is conducted today.

2 Have you discussed with Admiral Rogers
3 whether answering a question seeking that
4 information requires invocation of the state
5 secrets privilege?

6 MR. PATTON: You can answer the
7 question.

8 THE WITNESS: No, I have not.

9 BY MR. ABDO:

10 Q Have you more generally discussed the
11 invocation of the state secrets privilege in this
12 deposition with Admiral Rogers?

13 A I spoke to him extensively prior to
14 the issuance of both the NSA Civil Liberties and
15 Privacy Office Report, as well as the PCLOB
16 Report, for him to understand what information was
17 going to be in that.

18 So whether for today's testimony -- I
19 did not go back to him and ask him specifically
20 about any of this information, as that had largely
21 been covered when we were issuing those reports
22 back in 2014.

1 Q Okay. Is there anything else you can
2 tell us about this assertion of the state secrets
3 privilege?

4 MR. PATTON: Objection, vague.

5 THE WITNESS: I don't know what you're
6 asking me.

7 BY MR. ABDO:

8 Q Is there anything that you can say
9 that would be unclassified about the nature of the
10 state secrets privilege invocation, or the reason
11 for it, or the harm that would come about by
12 answering the question?

13 A No, other than to say that this is
14 sources and methods. You're getting into sources
15 and methods, which is what we have -- we protect
16 extensively.

17 Q Okay. As of 2014, did the NSA conduct
18 upstream surveillance on at least one Internet
19 backbone circuit?

20 MR. PATTON: Object to the question to
21 the extent it calls for a classified answer,
22 subject to the state secrets privilege, prior

1 statutory privileges.

2 You can answer the question to the
3 extent not classified.

4 THE WITNESS: The question is at least
5 one?

6 BY MR. ABDO:

7 Q Internet backbone circuit.

8 A One Internet backbone circuit.

9 MR. PATTON: This is probably another
10 one of those questions where a yes-or-no answer
11 would be unclassified, but --

12 MR. ABDO: That's what I'm looking
13 for, a yes or no.

14 MR. PATTON: Any narrative answer we
15 would have to break for.

16 THE WITNESS: At least one Internet --

17 BY MR. ABDO:

18 Q Let me restate the question.

19 A Okay.

20 Q As of 2014, did the NSA conduct
21 upstream surveillance on at least one Internet
22 backbone circuit? Yes or no.

1 MR. PATTON: Same classified
2 objections to the extent that the question seeks
3 classified information. To the extent it's yes or
4 no, you can answer the question.

5 THE WITNESS: Yes.

6 BY MR. ABDO:

7 Q As of 2014, did the NSA conduct
8 upstream surveillance on more than one Internet
9 backbone circuit?

10 MR. PATTON: Object to that question
11 to the extent it calls for classified information
12 protected by the state secrets privilege,
13 statutory privilege.

14 Instruct the witness not to answer the
15 question.

16 THE WITNESS: I will follow my
17 lawyer's direction.

18 BY MR. ABDO:

19 Q Your view is that stating a yes in
20 response to that question or a no in response to
21 that question would disclose state secrets?

22 MR. PATTON: Same objection, same

1 instruction.

2 THE WITNESS: Still following my
3 lawyer's description -- direction.

4 BY MR. ABDO:

5 Q Is --

6 MR. GILLIGAN: Excuse me, Counsel,
7 just one moment.

8 MR. ABDO: Yeah, sorry.

9 (Counsel conferring.)

10 BY MR. ABDO:

11 Q Is your view that the sentence we've
12 been discussing between pages 36 and 37 of
13 Exhibit 43 discloses any classified facts or facts
14 protected by the statutory authorities your
15 counsel has cited?

16 A The sentence is unclassified.

17 Q Is that true notwithstanding the fact
18 that the sentence states that upstream
19 surveillance involves the acquisition of
20 communications transiting through circuits --
21 that's a quote -- on the Internet backbone?

22 MR. PATTON: Object to the form of the

1 question, vague as to time.

2 MR. ABDO: As of 2014.

3 MR. PATTON: Same objections, vague as
4 to time.

5 THE WITNESS: My answer remains the
6 same.

7 BY MR. ABDO:

8 Q What's your answer?

9 A That the fact that the word "circuits"
10 is plural does not change any of my previous
11 answers.

12 Q You don't view that as inconsistent
13 with the assertion of the state secrets privilege
14 in response to my question of whether, as of 2014,
15 upstream surveillance involved more than one
16 Internet backbone circuit?

17 MR. PATTON: Objection, asked and
18 answered, argumentative. Go ahead.

19 THE WITNESS: I don't see that as
20 inconsistent.

21 BY MR. ABDO:

22 Q Why not?

1 MR. PATTON: Same objections.

2 THE WITNESS: As we've stated, we've
3 stated that we were on at least one, and the fact
4 that there's a plural there isn't dispositive one
5 way or the other.

6 BY MR. ABDO:

7 Q As of 2014, were multiple electronic
8 communication service providers compelled to
9 assist the NSA in the operation of upstream
10 surveillance?

11 MR. PATTON: Objection, calls for
12 classified information, sources and methods,
13 operational details, and subject to state secrets
14 and statutory privileges.

15 I instruct the witness not to answer
16 the question.

17 THE WITNESS: I will follow my
18 lawyer's --

19 BY MR. ABDO:

20 Q Can you please turn to page 12 of
21 what's marked Exhibit 43 and read, if you would,
22 what is marked as Recommendation 6, which is the

1 final paragraph of page 12.

2 MR. PATTON: Read it to herself or out
3 loud?

4 MR. ABDO: To yourself, yeah.

5 THE WITNESS: Yes.

6 BY MR. ABDO:

7 Q Do you understand -- well, strike
8 that.

9 Is it true that in the operation of
10 upstream surveillance in 2014, there were -- and
11 I'm quoting from this recommendation -- affected
12 telecommunication service providers?

13 MR. PADGETT: Could you read back the
14 question?

15 (The reporter read back the question.)

16 MR. PATTON: I'm going to object to
17 vagueness in terms of time, and object to the
18 question to the extent it calls for classified
19 information, sources and methods information
20 protected by the statutory privileges.

21 The witness can answer the question to
22 the extent unclassified.

1 BY MR. ABDO:

2 Q Let me specify with respect to time
3 that I'm talking about July 2nd, 2014, the date of
4 this report.

5 MR. PATTON: Same objections.

6 THE WITNESS: I'd like to go in the
7 SCIF before I answer this question.

8 MR. PATTON: Okay.

9 MR. ABDO: Take a break.

10 (Off the record at 12:16 p.m.)

11 (Resume at 12:19 p.m.)

12 MR. PATTON: Same objections.

13 THE WITNESS: So as I said earlier,
14 providing any information as to the number of
15 telecommunication service provider beyond one is
16 classified. Because this is temporally at one
17 point, we can neither confirm nor deny that
18 information, whether it was more than one. To the
19 extent there was more than -- to the extent there
20 is a program, there must be one.

21 BY MR. ABDO:

22 Q Can you tell us whether there have

1 been more than one provider involved, even if not
2 more than one at the same time?

3 MR. PATTON: Objection, calls for
4 classified information pursuant to the state
5 secrets privilege. Instruct the witness not to
6 answer, and to the statutory privileges.

7 THE WITNESS: I will follow my
8 lawyer's direction.

9 MR. ABDO: Rodney, are you okay
10 shortening that objection to something?

11 MR. PATTON: I'm trying.

12 MR. ABDO: Okay.

13 Ms. Jaques, do you mind marking this
14 as Exhibit 44?

15 (Deposition Exhibit 44 was
16 marked for identification.)

17 BY MR. ABDO:

18 Q Ms. Richards, you have in front of you
19 what's been marked as Exhibit 44. Do you
20 recognize that document?

21 A Yes, I do.

22 Q Did you draft this document?

1 A I did.

2 Q What is the document?

3 A The document is the NSA Director of
4 Civil Liberties and Privacy Office Report, NSA's
5 Implementation of Foreign Intelligence
6 Surveillance Act, Section 702, dated April 16th,
7 2014. It's exactly four years old.

8 Q Did the NSA review this document for
9 accuracy and classification?

10 A Did the NSA?

11 Q Yes.

12 A Yes, it did.

13 Q Was that review thorough?

14 A Yes, it was.

15 MR. PATTON: Objection, vague.

16 THE WITNESS: Sorry, too fast.

17 BY MR. ABDO:

18 Q What was the purpose of issuing this
19 report?

20 A The purpose of issuing the report was
21 to put on the public record a description from
22 NSA's perspective of what the privacy protections

1 were in place as it relates to Section 702.

2 Q Was it important to the NSA in issuing
3 Exhibit 44 that the report be accurate?

4 A Absolutely.

5 Q And why is that?

6 A Because this was submitted to the
7 Privacy and Civil Liberties Oversight Board as
8 part of their request for comment as part of their
9 report on Section 702, and we wanted to put on the
10 record an unclassified description that NSA stood
11 behind as to how the program worked.

12 Q And was it also important that the
13 report, to the extent publicly disclosed, not
14 reveal classified information?

15 A Yes.

16 Q Could you turn to page 5 of the
17 report, again what's marked as Exhibit 44? I want
18 to direct your attention to the first sentence of
19 the last paragraph of the page, which starts, "In
20 the second."

21 A Mm-hmm.

22 Q Could you read that sentence to

1 yourself, please, and let me know when you're
2 done.

3 A (Witness reviewing document.) Okay.

4 Q Is this sentence referring to upstream
5 surveillance as it operated as of April 16, 2014?

6 A Yes, it is.

7 Q Does this sentence confirm that
8 service providers, plural, are compelled to assist
9 the NSA in the lawful interception of electronic
10 communications to, from, or about task selectors
11 as of April 16th, 2014?

12 MR. PATTON: Just a moment.

13 (Counsel conferring.)

14 MR. PADGETT: Can you read back the
15 question?

16 (The reporter read back the question.)

17 BY MR. ABDO:

18 Q Let me ask it differently.

19 Is this sentence accurate as of
20 April 16, 2014?

21 A To the extent, as with the PCLOB
22 report, it's necessarily incomplete. It is

1 accurate to the outline of how the program works.

2 Q When you say it's incomplete, is it
3 incomplete because it omits classified information
4 about the operation of upstream surveillance as of
5 April 16, 2014?

6 A Yes.

7 Q Is it incomplete for any other reason?

8 A No.

9 Q Do you understand this sentence to
10 confirm that service providers are compelled to
11 assist NSA in the lawful interception of
12 electronic communications to, from, or about task
13 selectors as of April 16th, 2014?

14 MR. PATTON: Just a moment.

15 (Counsel conferring.)

16 MR. PATTON: We need to take just, I
17 promise, a very short break to make sure the
18 answer is unclassified. Thanks.

19 (Off the record at 12:26 p.m.)

20 (Resume at 12:40 p.m.)

21 MR. ABDO: Do you mind reading back
22 the last question to us, Ms. Jaques?

1 (The reporter read back the question.)

2 MR. PATTON: Objection, vague as to
3 time, and objection to the extent it seeks
4 classified and otherwise statutorily privileged
5 information.

6 You can answer to the extent it's
7 unclassified.

8 THE WITNESS: So this sentence --
9 here's the thing. Would it have been clearer if
10 we had put parens between the S? Yes. But we're
11 not here -- we can't confirm or deny whether --
12 we've said that there was one service provider, at
13 least one service provider in Upstream. The fact
14 that this is plural does not -- is not an
15 indication that it was more than one at that point
16 in time or less than one at that point in time.

17 And so this is just -- it probably
18 would have been clearer if we had put the parens.
19 We didn't put the parens, so you've found the S's
20 in our report, but it's not meant to have provided
21 classified information, the fact that the numbers
22 are classified.

1 BY MR. ABDO:

2 Q You understand that at the time that
3 this report was issued -- and for the record,
4 we're talking about Exhibit 44 -- there was a
5 relatively small amount of unclassified
6 information available from the government about
7 the operation of upstream surveillance, right?

8 MR. PATTON: Objection, vague.

9 THE WITNESS: Yes, that's why I wrote
10 the report.

11 BY MR. ABDO:

12 Q And you understand that the public and
13 the PCLOB, which received this report, would
14 regard it as an authoritative source of public
15 information from the government about the
16 operation of upstream surveillance?

17 MR. PATTON: Objection, calls for
18 speculation about others and their thought
19 processes.

20 THE WITNESS: Yes.

21 BY MR. ABDO:

22 Q And that was precisely one of the

1 reasons that you drafted it and disclosed the
2 report, right?

3 A Correct.

4 MR. PATTON: Objection.

5 BY MR. ABDO:

6 Q Were you careful throughout to ensure
7 that the factual assertions in this report were
8 accurate?

9 MR. PATTON: Objection, vague.

10 THE WITNESS: Yes.

11 BY MR. ABDO:

12 Q And was that in part at least so as
13 not to mislead the public or the PCLOB as to the
14 operation of upstream surveillance at the time the
15 report was issued?

16 A Yes.

17 Q Did you take great care throughout the
18 rest of the report in every word used to ensure
19 that what the words conveyed were accurate and
20 unclassified?

21 MR. PATTON: Objection, vague.

22 THE WITNESS: Yes.

1 BY MR. ABDO:

2 Q Was this sentence reviewed with that
3 same level of care?

4 MR. PATTON: Objection, vague.

5 THE WITNESS: Yes.

6 BY MR. ABDO:

7 Q Are you aware of any factually
8 incorrect statements in Exhibit 44 as to the
9 operation of upstream surveillance at the time
10 that the report purports to describe the operation
11 of upstream surveillance?

12 MR. PATTON: Objection, ambiguous.

13 MR. ABDO: I'm sorry, I didn't hear.

14 MR. PATTON: Objection, ambiguous.

15 THE WITNESS: Again, to the extent
16 that the information in here is unclassified, and
17 therefore is necessarily incomplete, yes, this is
18 an accurate description.

19 This was also really one of the first
20 times that the NSA had written, so to the extent
21 we've gotten better at this as we've gone along,
22 the first time is always -- we were doing our

1 best.

2 BY MR. ABDO:

3 Q Setting aside the question of
4 incomplete information, are you aware of any
5 factual inaccuracies in Exhibit 44 as to the
6 operation of upstream surveillance at the relevant
7 time periods described in the report?

8 MR. PATTON: Just a moment.

9 (Counsel conferring.)

10 MR. PATTON: Go ahead.

11 THE WITNESS: No, I'm not.

12 BY MR. ABDO:

13 Q Also setting aside the question of
14 incompleteness, are you aware of any factual
15 inaccuracies in Exhibit 43, the report of the
16 PCLOB, as to the operation of upstream
17 surveillance for the periods of time described in
18 that report?

19 MR. PATTON: Objection, vague.

20 THE WITNESS: As I said earlier, and
21 as we just then described going through these
22 different sentences, the answer is I am not

1 generally aware of any inaccuracies.

2 To the extent you have a question
3 about a particular sentence, I'm happy to, as we
4 did on page 36, walk you through and understand
5 whether there was classified information that
6 makes that sentence more or less complete.

7 BY MR. ABDO:

8 Q I appreciate that, and we may do that
9 for a few more sentences, but my question is
10 whether, as you sit here today, you are aware of
11 any inaccuracies, factual inaccuracies, in
12 Exhibit 43 with regard to the operation of
13 upstream surveillance as the report describes?

14 MR. PATTON: Objection, asked and
15 answered.

16 THE WITNESS: My answer is still the
17 same. You know, the information in it is,
18 generally speaking, accurate.

19 If there's a particular sentence you
20 want to discuss -- it's necessarily incomplete,
21 and describing Upstream, which is classified, in
22 an unclassified sentence is difficult, as you're

1 seeing with us having to walk back and forth and
2 make sure that we're hitting those lines so that
3 we are providing an accurate general description
4 of the program without going into the classified
5 sources and methods of the program.

6 So, you know, it still remains
7 accurate to the extent that it was true in 2014.
8 I'll just re-remind you that we are no longer do
9 the "abouts" collection as it was described
10 starting in 2017, and so that piece of this report
11 is not accurate.

12 BY MR. ABDO:

13 Q The report doesn't purport to describe
14 surveillances operated years later, correct?

15 A Correct. I'm just re-reminding that
16 to the extent that we've changed certain aspects
17 of the program, that's no longer accurate.

18 Q Okay. I'm going to ask you similar
19 questions that I just asked you about Exhibit 44,
20 but about Exhibit 43.

21 Did the NSA, as it did with
22 Exhibit 44, also review each and every factual

1 disclosure in Exhibit 43 to ensure that it was
2 accurate?

3 MR. PATTON: Object to the form,
4 vague, asked and answered.

5 THE WITNESS: To the extent that NSA
6 scrubbed through the facts provided in the
7 historical, as we mentioned, section from 16 to
8 roughly 79, and also looked at from a
9 classification purpose, yes.

10 We were, again, doing our best to try
11 and help provide an unclassified description of a
12 classified program, and so it was necessarily
13 incomplete.

14 BY MR. ABDO:

15 Q And at the time that report was
16 issued, is it also fair to say that there was
17 relatively little public information from the
18 government describing the operation of upstream
19 surveillance?

20 MR. PATTON: Object to the form,
21 vague.

22 THE WITNESS: I'm pausing because I

1 don't exactly remember when a number of the
2 different FISC opinions were declassified. So I
3 believe that there were a number of -- they were
4 actually issued -- that they were declassified
5 prior to -- or they were reviewed and redacted.

6 So Judge Bates -- which are mentioned.
7 There are a number of reports that are footnoted
8 in here that are -- that were declassified. I
9 just -- some of the timing.

10 BY MR. ABDO:

11 Q Is it fair to say that at the time
12 this report was issued, it was the most
13 comprehensive description from the government of
14 how upstream surveillance operated at the time the
15 report was issued?

16 MR. PATTON: Objection, vague.

17 THE WITNESS: Yes, to the extent,
18 though -- I would just offer that to the extent
19 that these are the words of an independent
20 executive agency with oversight over the
21 Intelligence Community as it relates to CT
22 functions, you know, these are their words.

1 They're not NSA's words. They're not NSA
2 submissions.

3 And so sometimes they may describe
4 things slightly differently than we may have
5 chosen to do so, and so I would refer you back to
6 the NSA or the government submissions on the
7 descriptions of the programs.

8 BY MR. ABDO:

9 Q Okay. Is it fair to describe the
10 report marked Exhibit 43 as an exhaustive
11 description of upstream surveillance as it
12 operated in 2014?

13 MR. PATTON: Objection, vague.

14 THE WITNESS: I suppose that's one.
15 I'm guessing that you have something over there
16 that -- are you referring to a specific document
17 where NSA may have said that?

18 BY MR. ABDO:

19 Q Well, I'm asking you first whether
20 that's fair, setting aside what the NSA has
21 otherwise said?

22 A Yes, I think it's fair.

1 MR. PATTON: In unclassified terms.

2 THE WITNESS: In unclassified terms.

3 MR. PATTON: I guess that's probably
4 what that's talking about, right?

5 MR. ABDO: Yeah, no, I think -- let me
6 ask the question clearly.

7 Is the PCLOB's description of the
8 operation of upstream surveillance exhaustive?

9 MR. PATTON: Same objection.

10 THE WITNESS: So, again, I think what
11 I would say is I think that their study was
12 exhaustive. To the extent that there's classified
13 information, they had access to that information,
14 which makes the study probably exhaustive, but to
15 the extent that the report is necessarily
16 incomplete, it's as much information as possible
17 without going into the classified material.

18 BY MR. ABDO:

19 Q Okay. I want to ask you a question
20 that I've tried different versions of, so forgive
21 the repetition. I'm asking it multiple ways
22 because I'm looking for what I think you ought to

1 be able to provide, which is a clean yes or no.

2 Setting aside the incompleteness of
3 the report marked Exhibit 43, are you aware now of
4 any factual inaccuracies in the report and its
5 description of upstream surveillance as Upstream
6 was conducted at the time the report was issued?

7 MR. PATTON: Objection, asked and
8 answered. Go ahead.

9 THE WITNESS: I am not aware of any
10 inaccurate -- known inaccuracies in the document
11 as described other than the fact that there's
12 classified information that has been omitted.

13 BY MR. ABDO:

14 Q What is the number, or approximate
15 number, of Internet backbone circuits on which
16 upstream surveillance is conducted --

17 MR. PATTON: Objection.

18 MR. ABDO: -- as of June 2015?

19 MR. PATTON: Objection, calls for
20 classified information, sources and methods,
21 operational details subject to state secrets and
22 the statutory privilege.

1 Instruct the witness not to answer.

2 THE WITNESS: I will follow my

3 lawyer's direction.

4 MR. ABDO: Rodney, I think it might be

5 in our interest to come up with a shortened

6 version of that, at least for the next few

7 minutes.

8 MR. PATTON: Yes, you have my word.

9 BY MR. ABDO:

10 Q What is the number, or approximate

11 number, of Internet backbone circuits on which

12 upstream surveillance is conducted today?

13 MR. PATTON: Same objection, same

14 instruction.

15 THE WITNESS: Still following those

16 directions.

17 BY MR. ABDO:

18 Q Okay. What is the average bandwidth

19 of the Internet backbone circuits on which

20 upstream surveillance was conducted in June 2015?

21 MR. PATTON: Same objections, same

22 instruction.

1 THE WITNESS: Following the
2 instruction.

3 BY MR. ABDO:

4 Q What is the average bandwidth of the
5 Internet backbone circuits on which upstream
6 surveillance is conducted today?

7 MR. PATTON: Same objections, same
8 instruction.

9 THE WITNESS: Still following the
10 instructions.

11 BY MR. ABDO:

12 Q What is the approximate combined
13 bandwidth of the Internet backbone circuits on
14 which upstream surveillance was conducted in June
15 of 2015?

16 MR. PATTON: Same objections, same
17 instruction.

18 THE WITNESS: Still following
19 instructions.

20 BY MR. ABDO:

21 Q What is the approximate combined
22 bandwidth of the Internet backbone circuits on

1 which upstream surveillance is conducted today?

2 MR. PATTON: Same objections, same
3 instruction.

4 THE WITNESS: Following instruction.

5 BY MR. ABDO:

6 Q What are the categories of circuits
7 that were subject to upstream surveillance in
8 June 2015?

9 MR. PATTON: Same objection, same
10 instruction.

11 THE WITNESS: Following instruction.

12 BY MR. ABDO:

13 Q What are the categories of circuits
14 that are subject to upstream surveillance today?

15 MR. PATTON: Same objections, same
16 instruction.

17 THE WITNESS: Following instruction.

18 BY MR. ABDO:

19 Q Were any individual optical fibers on
20 the Internet backbone subjected to upstream
21 surveillance in June 2015 and/or any individual
22 optical fibers on the Internet backbone subjected

1 to upstream surveillance today?

2 MR. PATTON: Just a second.

3 MR. PADGETT: Could you read back the
4 question?

5 MR. ABDO: Sure. Let me --

6 MR. PATTON: I really am listening to
7 your questions.

8 BY MR. ABDO:

9 Q I appreciate that. In the interest of
10 speed, I was combining two, but let me be clear.

11 Are any individual optical fibers on
12 the Internet backbone subjected to upstream
13 surveillance today?

14 MR. PATTON: Same objection, same
15 instruction.

16 THE WITNESS: Following instruction.

17 BY MR. ABDO:

18 Q Were any individual optical fibers on
19 the Internet backbone subjected to upstream
20 surveillance as of June 2015?

21 MR. PATTON: Same objection, same
22 instruction.

1 THE WITNESS: Following instruction.

2 BY MR. ABDO:

3 Q Are any subdivisions of optical fibers
4 on the Internet backbone subjected to upstream
5 surveillance today?

6 MR. PATTON: Same objection, same
7 instruction.

8 THE WITNESS: Following instruction.

9 BY MR. ABDO:

10 Q Were any subdivisions of optical
11 fibers on the Internet backbone subjected to
12 upstream surveillance in June 2015?

13 MR. PATTON: Same objection, same
14 instruction.

15 THE WITNESS: Following instruction.

16 BY MR. ABDO:

17 Q Are any wavelengths of light carried
18 on optical fibers on the Internet backbone
19 subjected to upstream surveillance today?

20 MR. PATTON: Same objection, same
21 instruction.

22 THE WITNESS: Following instruction.

1 BY MR. ABDO:

2 Q Were any wavelengths of light carried
3 on optical fibers on the Internet backbone
4 subjected to upstream surveillance in June 2015?

5 MR. PATTON: Same objection, same
6 instruction.

7 THE WITNESS: Following instruction.

8 BY MR. ABDO:

9 Q What is the smallest subdivision by
10 bandwidth of an optical fiber on the Internet
11 backbone that was subjected to upstream
12 surveillance in June 2015 and that is subjected to
13 upstream surveillance today?

14 MR. PATTON: Objection, compound.
15 Objection, same as before, classified.

16 MR. ABDO: We might go quicker if you
17 would withdraw the compound objection.

18 MR. GILLIGAN: I like this pace,
19 actually.

20 BY MR. ABDO:

21 Q Let me rephrase the question.

22 What is the smallest subdivision by

1 bandwidth of an optical fiber on the Internet
2 backbone subjected to upstream surveillance today?

3 MR. PATTON: Same objection, same
4 instruction.

5 THE WITNESS: Following instruction.

6 BY MR. ABDO:

7 Q What was the smallest subdivision by
8 bandwidth of an optical fiber on the Internet
9 backbone subjected to upstream surveillance in
10 June 2015?

11 MR. PATTON: Same instruction, same
12 instruction.

13 THE WITNESS: Following instruction.

14 BY MR. ABDO:

15 Q What was the largest circuit by
16 bandwidth on the Internet backbone subjected to
17 upstream surveillance in June 2015?

18 MR. PATTON: Same objection, same
19 instruction.

20 THE WITNESS: Following instruction.

21 BY MR. ABDO:

22 Q What is the largest circuit by

1 bandwidth on the Internet backbone subjected to
2 upstream surveillance today?

3 MR. PATTON: Same objection, same
4 instruction.

5 THE WITNESS: Following instruction.

6 BY MR. ABDO:

7 Q Is now a good time for you to break,
8 Ms. Richards?

9 A Sure.

10 Q Okay, why don't we take a lunch break
11 and go off the record, Dawn.

12 (Lunch break taken at 12:59 p.m.)

13 (Resume at 2:06 p.m.)

14 BY MR. ABDO:

15 Q We're back from lunch.

16 Ms. Richards, what does the term
17 "Internet link" refer to?

18 MR. PATTON: Objection, vague.

19 THE WITNESS: Is there a specific
20 place where you want me to look for "Internet
21 link," or are you looking for the general
22 telecommunications definition?

1 BY MR. ABDO:

2 Q That's right, the general definition.

3 A So it's similar to a circuit, and
4 there's no special NSA meaning.

5 Q So the NSA's understanding of that
6 term is consistent with the general understanding
7 of the term within the telecommunications
8 industry?

9 A That is correct.

10 Q Okay. What does the term
11 "international Internet link" refer to?

12 MR. PATTON: Objection, vague, calls
13 for expert opinion.

14 THE WITNESS: I'm sorry,
15 international --

16 BY MR. ABDO:

17 Q International Internet link.

18 A Is there, again, something specific?
19 I'm not sure of it.

20 Q The question is whether that term has
21 a meaning to the NSA.

22 MR. PATTON: Just a second.

1 I'm just going to object to the extent
2 that any response might call for a classified
3 answer, subject to state secrets, statutory
4 privileges.

5 If the witness has an unclassified
6 answer, she can provide it.

7 THE WITNESS: I'm just going to take a
8 minute to make sure I --

9 (Witness reviewing document.)

10 So just for clarification, you're
11 looking for the definition of "international
12 Internet link" --

13 BY MR. ABDO:

14 Q That's right.

15 A -- as was originally described in
16 Judge Bates' order?

17 Q I'm asking for your understanding of
18 it, not for Judge Bates' understanding.

19 A Okay, I just want to make sure.

20 So I'll say there's no special NSA
21 meaning.

22 Q What is the meaning of it though, even

1 if there's not a special NSA one?

2 MR. PATTON: Objection to the extent
3 it calls for expert opinion, and to the extent it
4 may call for classified information and statutory
5 privileges.

6 The witness can answer if the answer
7 is unclassified.

8 Are you concerned that there's --

9 THE WITNESS: I'm concerned whether
10 I'm going into classified. I'm just trying
11 to under- -- I'm clicking through my head as to
12 what's classified and what's not classified, so
13 I'm sorry I'm taking a little bit more, and so
14 maybe --

15 MR. PATTON: Do you need to talk about
16 that?

17 THE WITNESS: Maybe we should just
18 take a quick minute, go off the record.

19 MR. ABDO: Okay.

20 (Off the record at 2:11 p.m.)

21 (Resume at 2:28 p.m.)

22 MR. ABDO: Ms. Jaques, do you mind

1 re-reading the last question asked?

2 (The reporter read back the question.)

3 MR. PATTON: Object to the question to
4 the extent it calls for expert testimony.

5 THE WITNESS: I'm going to clarify my
6 answer, which is the logical definition of an
7 international Internet link would be an Internet
8 link between two countries, but it's not I think a
9 well -- it's not a telecommunications -- unlike
10 some of the other descriptions that we provided in
11 terms of "circuit" or "cable" or "Internet
12 backbone," this is not a commonly understood
13 telecommunications word -- or set of three words,
14 I guess.

15 BY MR. ABDO:

16 Q Okay. But your understanding of it is
17 a link between two countries essentially?

18 MR. PATTON: Same objection.

19 THE WITNESS: Yes, in the broad
20 context of those three words, not in the context
21 of anything specific.

22

1 BY MR. ABDO:

2 Q Okay. I want to go back for a moment
3 to Internet link -- not international Internet
4 link, just Internet link.

5 You said, I believe, and please
6 correct me if I'm wrong, that it is similar to a
7 circuit. Is that correct? Am I characterizing
8 your previous testimony accurately?

9 MR. PATTON: Object to the extent it
10 calls for expert opinion.

11 THE WITNESS: Yes.

12 BY MR. ABDO:

13 Q When you say "similar" -- or when you
14 said "similar," did you mean analogous to, or did
15 you mean identical to? I'm trying to understand,
16 if there are differences between an Internet link
17 and a circuit, what you believe those differences
18 to be.

19 MR. PATTON: Same objection.

20 THE WITNESS: I don't see them -- I
21 see them as being analogous. So sometimes you use
22 "circuit," sometimes you use "link." I don't see

1 them as having any real difference between them.

2 BY MR. ABDO:

3 Q Okay. Would "interchangeable" be a
4 better word than "analogous" then?

5 A Yeah.

6 MR. ABDO: Ms. Jaques, would you mind
7 marking this Exhibit 45?

8 (Deposition Exhibit 45 was
9 marked for identification.)

10 BY MR. ABDO:

11 Q Ms. Richards, you have in front of you
12 what's been marked as Exhibit 45.

13 Do you recognize that document?

14 A I do.

15 Q What is it? I should say, sorry, it's
16 marked Exhibit 45, and it is Bates numbered

17 NSA-WIKI 149 to NSA-WIKI 229. Wiki is spelled

18 W-I-K-I. What is this document, Ms. Richards?

19 A This is the Judge Bates' Memorandum
20 Opinion from October 3rd, 2011.

21 Q Could you turn to page 45, or

22 NSA-WIKI 193 of Exhibit 45, and read the sentence

1 that begins, "Indeed, the government readily
2 concedes." It is about halfway down the page.

3 A Got it.

4 Q "Indeed, the government readily
5 concedes that NSA will acquire a wholly domestic
6 'about' communication if the transaction
7 containing the communication is routed through an
8 international Internet link being monitored by NSA
9 or is routed through a foreign server."

10 Is that sentence true?

11 Let me rephrase that. Was that
12 sentence true at the time Judge Bates issued this
13 opinion?

14 MR. PATTON: Just a moment.

15 You can answer.

16 THE WITNESS: Okay. Yes, that
17 sentence is accurate.

18 BY MR. ABDO:

19 Q What do you understand the Foreign
20 Intelligence Surveillance Court to mean in its use
21 of the term "international Internet link" in that
22 sentence?

1 MR. PATTON: Objection, the question
2 calls for classified information, information
3 subject to the state secrets and the statutory
4 privileges previously mentioned.

5 I instruct the witness not to answer
6 the question.

7 BY MR. ABDO:

8 Q Do you --

9 A Hold on.

10 MR. PATTON: Do you have an
11 unclassified response?

12 THE WITNESS: I have an unclassified
13 response, at least in part.

14 MR. PATTON: So long as you're
15 comfortable and it's unclassified.

16 THE WITNESS: NSA -- so unlike the
17 other words that you had me go through in terms of
18 definitions that were telecom provider -- you
19 know, sort of generally what a teleco expert would
20 be, NSA has an understanding of this term that is
21 specific to how Judge Bates described it, but it's
22 classified to provide any further information.

1 BY MR. ABDO:

2 Q I understand. Is the NSA's
3 understanding of the term different from the
4 general meaning of the term you described in
5 response to an earlier question as a link between
6 two countries?

7 MR. PATTON: Objection, calls for
8 information subject to the statutory privilege,
9 and instruct the witness not to answer the
10 question.

11 THE WITNESS: I will follow
12 instructions.

13 BY MR. ABDO:

14 Q Is it your understanding that in using
15 the term "international Internet link," the
16 Foreign Intelligence Surveillance Court meant an
17 Internet link that terminates in a foreign
18 country?

19 MR. PATTON: Same objection, same
20 instruction.

21 THE WITNESS: Following instruction.

22

1 BY MR. ABDO:

2 Q Is it your understanding that an
3 international Internet link is an Internet
4 backbone circuit with one end in the United States
5 and the other end in a foreign country?

6 MR. PATTON: Same objection, same
7 instruction.

8 THE WITNESS: Following instruction.

9 BY MR. ABDO:

10 Q Is there anything you can tell us
11 unclassified about the nature of the harm that
12 would arise were you to provide an answer to the
13 question of what the term "international Internet
14 link" means as used by the Foreign Intelligence
15 Surveillance Court in Exhibit 45?

16 MR. PATTON: Object to the question.
17 The witness is not an official classification
18 authority, nor is she the Director of the NSA or
19 the Director of National Intelligence, who would
20 invoke and assert the state secrets privilege to
21 that.

22 You can answer the question to the

1 extent it's unclassified.

2 THE WITNESS: Sources and methods.

3 BY MR. ABDO:

4 Q Do you believe that disclosing the
5 NSA's understanding of that term would harm
6 national security?

7 MR. PATTON: Same objection, same
8 instruction.

9 THE WITNESS: Which was to not answer,
10 or to answer to the extent --

11 MR. PATTON: To answer to the extent
12 that you're able. You're not a classification
13 authority, you're not asserting the state secrets.

14 THE WITNESS: So the question is
15 whether I believe it would harm national security?

16 BY MR. ABDO:

17 Q Yes.

18 A Yes.

19 Q Do you believe it would substantially
20 harm national security?

21 MR. PATTON: Same objection, same
22 instruction.

1 THE WITNESS: Yes.

2 BY MR. ABDO:

3 Q Are you familiar with the process
4 through which the government seeks approval from
5 the Foreign Intelligence Surveillance Court to
6 conduct upstream surveillance?

7 MR. PATTON: Object to the form of
8 that question as vague, and objection, beyond the
9 scope of 30(b)(6).

10 THE WITNESS: Yes.

11 BY MR. ABDO:

12 Q Does the NSA provide information to
13 the Foreign Intelligence Surveillance Court about
14 the operation of upstream surveillance in support
15 of the government's applications to that court to
16 conduct upstream surveillance?

17 MR. PATTON: Same objections.

18 THE WITNESS: Yes.

19 BY MR. ABDO:

20 Q Is the information that the NSA
21 provides in support of the government's
22 applications to the Foreign Intelligence

1 Surveillance Court supposed to be accurate?

2 MR. PATTON: Objection. Same

3 objections.

4 THE WITNESS: Yes.

5 BY MR. ABDO:

6 Q Is that information, in fact,

7 accurate?

8 MR. PATTON: Objection, calls for

9 speculation.

10 THE WITNESS: To the extent the

11 government's job is to provide the Court with as

12 accurate as information as possible at the time,

13 that is what the NSA does.

14 BY MR. ABDO:

15 Q Does the NSA verify, under penalty of

16 perjury, that its submissions to the Foreign

17 Intelligence Surveillance Court are true and

18 correct?

19 MR. PATTON: Same objections.

20 THE WITNESS: Yes.

21 BY MR. ABDO:

22 Q Does the NSA review the Department of

1 Justice's submissions to the Foreign Intelligence
2 Surveillance Court seeking authority to conduct
3 upstream surveillance?

4 MR. PATTON: Same objections.

5 THE WITNESS: Yes.

6 BY MR. ABDO:

7 Q Does it review the technical
8 explanations of the way that upstream surveillance
9 operates and drafts of those submissions before
10 they are filed with the Foreign Intelligence
11 Surveillance Court?

12 MR. PATTON: Same objections.

13 MR. PADGETT: Excuse me, could you
14 read back the question?

15 (The reporter read back the record.)

16 THE WITNESS: Okay, yes.

17 BY MR. ABDO:

18 Q If there are mistakes in the drafts of
19 the Department of Justice's submissions to the
20 Foreign Intelligence Surveillance Court, would the
21 NSA identify those mistakes to the Department of
22 Justice?

1 MR. PATTON: Objection, vague.

2 THE WITNESS: Yes.

3 BY MR. ABDO:

4 Q Would it identify any inaccuracies in
5 the explanations of the technical operation or
6 implementation of upstream surveillance to the
7 Department of Justice?

8 A Yes.

9 MR. PATTON: Objection, vague and
10 ambiguous, and also beyond the scope of 30(b)(6).

11 THE WITNESS: Yes.

12 BY MR. ABDO:

13 Q To your knowledge, does the Foreign
14 Intelligence Surveillance Court acquire
15 information about the operation of upstream
16 surveillance from anyone aside from
17 representatives of the NSA or the Department of
18 Justice?

19 MR. PATTON: Objection, calls for
20 speculation. Objection, beyond the scope of
21 30(b)(6).

22 THE WITNESS: What time frame would

1 you be asking about? Just in general? Over a
2 specific time frame?

3 BY MR. ABDO:

4 Q Why don't we -- if you can answer in
5 general, please do. If you can't, let me know.

6 MR. PATTON: Are you asking --
7 I'm sorry, does this include just Upstream?

8 MR. ABDO: Just Upstream.

9 MR. PATTON: Same objections.

10 THE WITNESS: To the extent that the
11 new law that was passed, and actually some
12 previous ones over the last couple years, allow
13 for an Amicus, there's certainly that opportunity
14 for the Court to include that type of additional
15 expert outside advice. Similarly -- yeah.

16 BY MR. ABDO:

17 Q The new law you're referring to is the
18 USA Freedom Act?

19 A Yes. I'm sorry, yes, USA Freedom Act,
20 and then the --

21 Q The reauthorization --

22 A -- reauthorization for 702 also has

1 the Amicus portion of it.

2 Q Is there anyone else, to your
3 knowledge, from whom the Foreign Intelligence
4 Surveillance Court might acquire information about
5 the operation of upstream surveillance?

6 MR. PATTON: Same. Hold on.

7 (Counsel conferring.)

8 MR. PATTON: So same objections as
9 before. There are, as you know, some ex parte
10 communications, and while I'm a Department of
11 Justice Civil Division attorney, I'm not a
12 Department of Justice national Security Division
13 attorney, and so there may be other things that
14 the witness is not aware of.

15 Again, I'd objected before to the fact
16 that the it was beyond the scope of 30(b)(6), so
17 she may not be aware of certain other things that
18 may go on that I'm not aware of as well. I don't
19 want the record to be unclear. That's potentially
20 beyond her personal knowledge.

21 MR. ABDO: Understood. To the extent
22 you know the answer --

1 THE WITNESS: So his answer was
2 exactly what I was about to say before we --
3 before my lawyer said that, which is fantastic, so
4 I've given you the information I know.

5 I don't work for the FISC, I don't do
6 anything before the FISC, so what the FISC -- what
7 else the FISC has at their disposal is up to the
8 FISC.

9 BY MR. ABDO:

10 Q Do you know whether the NSA reviews or
11 participates in any review of opinions of the
12 Foreign Intelligence Surveillance Court concerning
13 upstream surveillance before those opinions are
14 signed or issued?

15 MR. PATTON: Just a moment.

16 (Counsel conferring.)

17 MR. PATTON: Would you just read that
18 back? I think it's fine, but I just want to be
19 double sure.

20 (The reporter read back the question.)

21 MR. PATTON: Object as beyond the
22 scope of 30(b)(6), but if you have personal

1 knowledge, you can give it.

2 THE WITNESS: To the best of my
3 knowledge, no.

4 BY MR. ABDO:

5 Q If the NSA identifies an inaccuracy in
6 an opinion of the Foreign Intelligence
7 Surveillance Court concerning upstream
8 surveillance after that opinion is issued, would
9 the NSA notify the Foreign Intelligence
10 Surveillance Court of that inaccuracy?

11 MR. PATTON: Objection. Same as
12 before, beyond the scope of 30(b)(6).

13 You can answer if you know.

14 THE WITNESS: I think that's when you
15 would go to the FISC Review Board. You would do
16 an appeal.

17 BY MR. ABDO:

18 Q What if it were not a judgment that
19 the Department of Justice or the NSA disagreed
20 with, but a factual misstatement in the opinion
21 that would not give rise to or necessitate an
22 appeal?

1 MR. PATTON: Same objection.

2 THE WITNESS: It would be fact
3 specific. I can't speak to one way or another.

4 BY MR. ABDO:

5 Q Okay. Do you imagine that it would be
6 good practice for the NSA to correct factual
7 misstatements in the Foreign Intelligence
8 Surveillance Court's opinions if and when they
9 identify them?

10 MR. PATTON: Objection, calls for a
11 legal conclusion, opinion, speculation, and beyond
12 the scope of 30(b)(6).

13 THE WITNESS: Again, I think it would
14 have to be very fact specific -- you know, the
15 sort of situation and fact specific would have to
16 decide what to do next, but, I mean, it's an
17 Article III judge signing something. We're not
18 really one part of the government saying something
19 to the other part of the government. You may want
20 to be thoughtful about how to do that.

21 BY MR. ABDO:

22 Q Understood. Are there any

1 inaccuracies that you're aware of relating to the
2 operation of upstream surveillance in Exhibit 45,
3 October 3rd, 2011, Foreign Intelligence
4 Surveillance Court opinion?

5 MR. PATTON: Objection, vague as to
6 time, and object to the extent it calls for
7 classified information or statutory privileges
8 information.

9 The witness can answer to the extent
10 unclassified.

11 THE WITNESS: So you're asking if
12 there's any information as of October 3rd, 2011,
13 that we believe would have been inaccurate in
14 Judge Bates' Memorandum and Opinion?

15 BY MR. ABDO:

16 Q Yes.

17 A To the extent that there are certain
18 opinions that the judge makes as it relates to
19 different aspects of this, those are the opinions
20 of the Court and not necessarily those of NSA.

21 To the extent that there are facts in
22 here, I believe we stand behind those facts, as

1 they're based off of the submission from June 1st
2 that the government made in the subsequent
3 submissions.

4 Q Okay. Did the NSA conduct a
5 declassification review of Exhibit 45?

6 A Yes.

7 Q I assume that was a thorough review?

8 A Yes.

9 Q And anything that would disclose
10 classified information, the NSA would identify as
11 classified to the FISC so as not to release it to
12 the public?

13 MR. PATTON: Just a second.

14 (Counsel conferring.)

15 MR. PATTON: I'm sorry, could you read
16 that question back?

17 BY MR. ABDO:

18 Q Let me rephrase it. That's all right.

19 Did the NSA -- sorry.

20 If the NSA identified classified
21 information -- let me -- sorry, let me start over.

22 Who actually disclosed Exhibit 45 to

1 the public?

2 MR. PATTON: Objection, vague.

3 THE WITNESS: It's a FISC document, so
4 while the government has -- while the Executive
5 Branch reviews it for classification, I believe
6 the FISC issues it, although I know that the
7 documents actually sit on ODNI's website.

8 BY MR. ABDO:

9 Q Are the redactions in this opinion in
10 Exhibit 45 the government's redactions or the
11 FISC's redactions?

12 A So the process is with all these
13 documents that the government -- the Executive
14 Branch will review them for classification and
15 suggest redactions, and then the FISC has the
16 opportunity to say no, I think these should be put
17 out, and there was a conversation. But as a
18 general matter, I guess they're really the FISC's
19 document.

20 Q Do you know whether there's any
21 dispute between the NSA or the Department of
22 Justice with the FISC relating to the

1 classifications in Exhibit 45?

2 MR. PATTON: Just a second.

3 (Counsel conferring.)

4 MR. PATTON: My colleague was just
5 getting warm. You can keep answering the
6 question.

7 THE WITNESS: Okay.

8 MR. PATTON: I think there's some
9 confusion back and forth as to this particular
10 document, when it was declassified, and then the
11 standard way that it's now under USA Freedom Act
12 taken care of.

13 But this was, as you know,
14 declassified prior to USA Freedom Act, and so I
15 want to make sure the witness's answers are both
16 accurate and reflective of what occurred.

17 BY MR. ABDO:

18 Q Right. I'm asking specifically about
19 this opinion, Exhibit 45.

20 A And to which I don't know. I was not
21 working at NSA. This I believe was declassified
22 in 2013, and I was not working at NSA at that

1 point, so I don't have any specific knowledge on
2 that fact.

3 Q Is there somebody at NSA who would
4 know the answer to that question?

5 A I imagine the answer is that there
6 wasn't any disagreement, that this is the document
7 that went out.

8 Q Just to confirm though, you say you
9 imagine that. Is that a guess, or is that --

10 A No, that's a statement. I mean, this
11 is the document that went out. If there were any
12 disagreements, those were resolved.

13 Q Okay.

14 A There's no further information that
15 can be provided as to what those would be or not
16 be.

17 Q Okay. Would the NSA treat statements
18 in a FISC opinion as classifiable if they revealed
19 information that the government considered
20 classified?

21 MR. PATTON: Objection to the
22 question. It calls for the expertise of an

1 original classification authority, and it's beyond
2 the scope of 30(b)(6). You can answer.

3 THE WITNESS: I'm not sure I
4 understand your question, so ...

5 BY MR. ABDO:

6 Q Let me ask it a slightly different
7 way.

8 Would the NSA treat a statement in a
9 FISC opinion as classifiable if it revealed
10 information the government considered classified
11 even if the FISC were not quoting a statement made
12 by an Executive Branch agent?

13 MR. PATTON: Objection.

14 BY MR. ABDO:

15 Q In other words, if the FISC were to
16 make a factual statement using its own words about
17 the operation of upstream surveillance, and the
18 NSA believed that statement revealed classified
19 information, would the NSA consider that statement
20 to be classifiable?

21 MR. PATTON: Same objections.

22 THE WITNESS: Yes.

1 BY MR. ABDO:

2 Q Okay. Does the NSA conduct upstream
3 surveillance on one or more international Internet
4 links? I'm looking for a yes or no, not a
5 specific number.

6 (Counsel conferring.)

7 MR. PADGETT: Could you read it back?

8 (The reporter read back the question.)

9 MR. PATTON: I misheard, so object to
10 that as seeking classified information, subject to
11 state secrets and statutory privileges.

12 Instruct the witness not to answer the
13 question.

14 THE WITNESS: I'll follow the --

15 BY MR. ABDO:

16 Q Did the NSA conduct upstream
17 surveillance on one or more international Internet
18 links in 2015?

19 MR. PATTON: Same objection, same
20 instruction.

21 THE WITNESS: Will follow instruction.

22

1 BY MR. ABDO:

2 Q Does the NSA conduct upstream
3 surveillance today on more than one international
4 Internet links?

5 MR. PATTON: Same objection, same
6 instruction.

7 THE WITNESS: Will follow the
8 instruction.

9 BY MR. ABDO:

10 Q Did the NSA conduct upstream
11 surveillance on more than one international
12 Internet links in June of 2015?

13 MR. PATTON: Same objection, same
14 instruction.

15 THE WITNESS: Follow the instruction.

16 BY MR. ABDO:

17 Q What is the number or approximate
18 number of international Internet links on which
19 the NSA conducted upstream surveillance in June of
20 2015?

21 MR. PATTON: Same objection, same
22 instruction.

1 THE WITNESS: Will follow the
2 direction.

3 BY MR. ABDO:

4 Q What is the approximate number of
5 international Internet links on which the NSA
6 today conducts upstream surveillance?

7 MR. PATTON: Same objection, same
8 instruction.

9 THE WITNESS: Will follow instruction.

10 BY MR. ABDO:

11 Q Okay. Is upstream surveillance
12 conducted on any international submarine cables?

13 MR. PATTON: Same objection, same
14 instruction.

15 THE WITNESS: Will follow
16 instructions.

17 BY MR. ABDO:

18 Q Was upstream surveillance conducted on
19 any international submarine cables in June of
20 2015?

21 MR. PATTON: Same objection, same
22 instruction.

1 THE WITNESS: Will follow instruction.

2 BY MR. ABDO:

3 Q What is the number or approximate
4 number of cables on which the NSA conducted
5 upstream surveillance in June 2015?

6 MR. PATTON: Same objection, same
7 instruction.

8 THE WITNESS: Will follow instruction.

9 BY MR. ABDO:

10 Q What is the number or approximate
11 number of cables on which the NSA today conducts
12 upstream surveillance?

13 MR. PATTON: Same objection, same
14 instruction.

15 THE WITNESS: Will follow instruction.

16 BY MR. ABDO:

17 Q Okay. In the context of upstream
18 surveillance, can you tell me what an
19 international chokepoint is?

20 MR. PATTON: Just a second.

21 Will you just read it back, please?

22 (The reporter read back the question.)

1 MR. PATTON: Same objection, same
2 instruction.

3 THE WITNESS: Will follow the
4 instruction.

5 BY MR. ABDO:

6 Q Is upstream surveillance today
7 conducted at one or more international
8 chokepoints?

9 MR. PATTON: Same objection, same
10 instruction.

11 THE WITNESS: Will follow instruction.

12 BY MR. ABDO:

13 Q Was upstream surveillance in June 2015
14 conducted at one or more international
15 chokepoints?

16 MR. PATTON: Same objection, same
17 instruction.

18 THE WITNESS: Will follow the
19 instruction.

20 BY MR. ABDO:

21 Q What number, approximate number, of
22 international chokepoints was upstream

1 surveillance conducted on in June 2015?

2 MR. PATTON: Same objection, same
3 instruction.

4 THE WITNESS: Will follow instruction.

5 BY MR. ABDO:

6 Q What number, approximate number, of
7 international chokepoints is upstream surveillance
8 conducted on today?

9 MR. PATTON: Same objection, same
10 instruction.

11 THE WITNESS: Will follow instruction.

12 BY MR. ABDO:

13 Q I want to go back to page 45 very
14 briefly of Exhibit 45, the sentence we were
15 talking about before, the one that begins,
16 "Indeed, the government readily concedes."

17 A Yes, okay.

18 Q Is there a term -- well, let me
19 scratch that for a moment.

20 A moment ago I asked you whether the
21 government conducts upstream surveillance on one
22 or more international Internet links in 2015, then

1 I asked about today.

2 Is there a way I could phrase that
3 question that would allow you to respond with an
4 unclassified response more fully than you've
5 responded so far?

6 MR. PATTON: For any given time
7 period?

8 MR. ABDO: For June 2015 to today, and
9 in 2011, at the time of -- let me try rephrasing
10 one thing.

11 As of October 3rd, 2011, did the NSA
12 conduct upstream surveillance on one or more
13 international Internet links?

14 MR. PATTON: Same objection, same
15 instruction.

16 BY MR. ABDO:

17 Q Is there a way that I could rephrase
18 that question to use a term other than
19 "international Internet link" that would allow you
20 to provide an unclassified response?

21 (Counsel conferring.)

22 MR. PATTON: We don't think she can.

1 This is Rodney Patton, counsel for government.

2 We don't think she can answer that as
3 to specific time periods for anything related to
4 international Internet link. There may be a more
5 general statement that she can make, but I feel
6 like she's probably already provided that to you.

7 MR. ABDO: Okay.

8 MR. PATTON: Perhaps if we could go
9 out and check, we might be able to come up with --

10 MR. ABDO: Maybe at the next break.

11 You can add this to --

12 MR. PATTON: That's fine.

13 BY MR. ABDO:

14 Q So back to page 45 very briefly of
15 Exhibit 45. Do you understand the sentence we've
16 been discussing, the one that begins, "Indeed, the
17 government readily concedes," to confirm that, as
18 of October 3rd, 2011, that the government in fact
19 conducted upstream surveillance at at least one
20 international Internet link?

21 MR. PATTON: Objection,
22 mischaracterizes the language of page 45 of

1 Exhibit 45.

2 BY MR. ABDO:

3 Q You can answer.

4 A Do you want me to answer?

5 MR. PATTON: Not as it's phrased, no,
6 she can not answer that question. It would call
7 for a classified answer.

8 MR. ABDO: I'm sorry, I didn't hear
9 that. So you're instructing the witness not to
10 answer?

11 THE WITNESS: Yeah, that's classified.

12 BY MR. ABDO:

13 Q Okay. Do you understand the sentence
14 to confirm that if a transaction -- that as of
15 October 3rd, 2011, the NSA would in fact acquire a
16 wholly domestic -- sorry, would in fact acquire a
17 wholly domestic "about" communication if the
18 transaction containing the communication were
19 routed through an international Internet link
20 being monitored by the NSA?

21 MR. PATTON: Objection as not exactly
22 what the language of the sentence said. Let me

1 see if she can answer that question.

2 To avoid us having to go out to the
3 SCIF and come back again, she can answer whether
4 or not the statement in this, as exactly written,
5 is correct as of October 3rd, 2011, in a yes-or-no
6 answer. I believe she's already answered that,
7 but --

8 MR. ABDO: I think you did already
9 answer that this sentence, as written, is true as
10 of October 3rd, 2011.

11 MR. PATTON: That she can answer.

12 MR. ABDO: Okay.

13 THE WITNESS: Do you want me to say it
14 again?

15 BY MR. ABDO:

16 Q Sure.

17 A Yes, that sentence is accurate as of
18 October 3rd, 2011.

19 Q Okay. Let me go back to Exhibit 42.

20 A Which one is 42?

21 Q The NSA's Responses and Objections to
22 Plaintiffs' First Set of Interrogatories.

1 I direct your attention to page 7 to
2 8.

3 A 7 to 8, oh, yes.

4 Q The paragraph that carries over
5 between the two, which is labeled "RESPONSE."

6 Would you mind just reading that to
7 yourself?

8 MR. ABDO: Why don't we take a break
9 right now. Can we go off the record for a minute?

10 (A break was taken at 3:06 p.m.)

11 (Resume at 3:15 p.m.)

12 BY MR. ABDO:

13 Q Ms. Richards, have you had a chance to
14 look at page 6 of Exhibit -- sorry, page 7 to 8 of
15 the carryover paragraph on pages 7 to 8 of
16 Exhibit 42, the NSA's response to Interrogatory
17 No. 3?

18 A Yes.

19 Q Is there anything beyond that response
20 in Exhibit 42 that isn't classified that you could
21 provide us about the NSA's understanding of the
22 term "filtering mechanism," both in June 2015 and

1 today?

2 A Those are pretty good definitions
3 you've got right there. I don't have anything
4 else to add.

5 Q Does that mean that there isn't
6 anything unclassified that you could add to those
7 definitions?

8 A There's nothing unclassified I can add
9 to those descriptions.

10 Q Okay. With respect to upstream
11 surveillance as it operated in 2015, did the term
12 "filtering mechanism" include the use of, quote,
13 an Internet protocol filter to ensure that the
14 person from whom the NSA seeks to obtain foreign
15 intelligence information is located overseas?

16 A In 2015, filtering mechanism would
17 have -- one of the examples that was used --
18 I'm sorry.

19 An example of a filtering mechanism
20 was an IP address -- sorry. (Reviewing document.)

21 Okay, let me revise -- I'm sorry, let
22 me just revise my answer.

1 Q Sure.

2 A So I would actually add from the Civil
3 Liberties and Privacy Office Report, which is
4 Exhibit 44, on page 5, where we give an example
5 that, in certain circumstances, NSA's procedures
6 require that it employ an Internet protocol filter
7 to ensure that the target is located overseas.

8 Q Does that mean the answer to my
9 question is yes, that the filter you just
10 described is part of the filtering mechanism
11 described in the NSA's response to Interrogatory
12 No. 3?

13 A Yes, and so I was correcting the fact
14 that when I said that was everything you could say
15 in an unclassified.

16 What I'm saying is I'm correcting the
17 record to say I could have additionally added the
18 fact that that would include the IP -- that could
19 include -- could include --

20 Q Could include, understood.

21 A -- as an example of what the filtering
22 mechanisms are, so ...

1 Q In June of 2015, did the term
2 "filtering mechanism" include the use of an
3 Internet protocol filter? I'm trying to
4 understand "did" versus "could" include.

5 MR. PATTON: Just a second.

6 (Counsel conferring.)

7 MR. PATTON: Object to form, vague.
8 You can answer.

9 THE WITNESS: Okay. To the extent
10 that the information is classified -- to the
11 extent that how this exactly works is classified,
12 I use the term "could" as one of the examples of
13 what a filtering mechanism is.

14 I can neither confirm nor deny exactly
15 what was happening in 2015 as it relates to the
16 specificity of the filtering mechanism. I can
17 just tell you that it could include that as an
18 example.

19 BY MR. ABDO:

20 Q Can you confirm whether it did include
21 an Internet protocol filter as of the date of
22 Exhibit 44, April 16th, 2014?

1 A As is specifically stated on page 5,
2 it's a "could." It's not a "did."

3 Q Just for the record, could you tell us
4 where you're reading from on page 5?

5 A Sure. It's the very last sentence on
6 page 5 of Exhibit 44 that begins with "for
7 example."

8 Q "In certain circumstances, NSA's
9 procedures require that it employ an Internet
10 protocol filter to ensure that the target is
11 located overseas."

12 So in certain circumstances, they're
13 required to.

14 A Mm-hmm.

15 Q Can you tell us what those certain
16 circumstances would be in unclassified terms?

17 MR. PATTON: No, she can't. Object to
18 the question to the extent it calls for classified
19 information --

20 THE WITNESS: The information -- oh.

21 MR. PATTON: -- subject to the state
22 secrets and statutory privileges, and instruct the

1 witness not to answer.

2 THE WITNESS: I'll follow.

3 BY MR. ABDO:

4 Q With respect to upstream surveillance
5 as it operated in 2015, did the term "filtering
6 mechanism" include, quote, the use of a screening
7 device in the upstream Internet collection process
8 to acquire only Internet transactions containing
9 at least one task selector?

10 A It appears you're reading from
11 something. Could you just refer me to where those
12 words exactly are to make sure I have the full
13 context?

14 Q Sure. The last portion of my question
15 was a direct quote from the NSA's response to
16 Interrogatory No. 5 in Exhibit 42 on page 10, the
17 text marked "RESPONSE."

18 A Okay. And so could you read your
19 question once more?

20 Q With respect to upstream surveillance
21 as it operated in 2015, did the term "filtering
22 mechanism" include, quote, the use of a screening

1 device in the upstream Internet collection process
2 to acquire only Internet transactions containing
3 at least one task selector?

4 A So I would look at Interrogatory 4. I
5 understand you pointed me to the response to
6 Interrogatory 5, but the process is we filter for
7 wholly domestic communications, and then we do the
8 scanning to ensure that we're only -- we're doing
9 a scan using a screening device designed to
10 identify for acquisition Internet transactions.

11 And in 2015, it would have been to,
12 from, or about persons targeted; today, it's to or
13 from persons targeted, in parens, with our
14 targeting procedures.

15 Q Okay. What I'm trying to understand
16 is whether the use of a screening device is part
17 of the filtering mechanism process described in
18 NSA's response to Interrogatory 3?

19 MR. PATTON: Objection, calls for
20 information that's classified, subject to state
21 secrets and statutory privileges.

22 Instruct the witness not to answer.

1 THE WITNESS: Follow instruction.

2 BY MR. ABDO:

3 Q Would you be able to answer the
4 question if I asked whether the use of a screening
5 device could be part of the filtering mechanism
6 described in the NSA's response to Interrogatory 3
7 on pages 7 to 8 of Exhibit 42?

8 MR. PATTON: Just a second.

9 Can you read back that question?

10 BY MR. ABDO:

11 Q Let me state it more clearly because
12 that's a bit fragmentary.

13 With respect to upstream surveillance
14 as it operated in 2015, could the term "filtering
15 mechanism" include, quote, the use of a screening
16 device in the upstream Internet collection process
17 to acquire only Internet transactions containing
18 at least one task selector?

19 MR. PADGETT: I'm sorry, I need to
20 hear that one more time.

21 (The reporter read back the question.)

22 MR. PADGETT: I guess I would ask,

1 before we instruct the witness whether they can
2 answer or not, are you referring to filtering
3 mechanism as used in the document that's referred
4 to by Interrogatory No. 3?

5 MR. ABDO: Yes.

6 MR. PADGETT: So can we see?

7 MR. ABDO: It's one of your briefs
8 from the Fourth Circuit.

9 MR. PATTON: Let's go off the record.

10 (Off the record at 3:26 p.m.)

11 (Resume at 3:38 p.m.)

12 (The reporter read back the question.)

13 MR. PATTON: Objection, vague.

14 You can answer.

15 THE WITNESS: Okay. So I think the
16 best description for how the process works in the
17 unclassified realm is going to be on page 37 of
18 the PCLOB Report, which is Exhibit 43.

19 To the extent that the -- so where it
20 says -- the sentence starting, "The provider is
21 compelled to assist the government in acquiring
22 communications across these circuits, to identify

1 and acquire Internet transactions associated with
2 the Section 702 task selectors on the Internet
3 backbone. Internet transactions are first
4 filtered to eliminate potential domestic
5 transactions, and then are screened to capture
6 only transactions containing a task selector."

7 Now, my understanding is that there's
8 this other brief that comes up with a new term
9 called "filtering mechanisms"; that's not meant to
10 be something special or otherwise different from
11 the process that was described in PCLOB.

12 To the extent that you have specifics
13 about the how and the when and the what, that
14 would be classified, but those were not designed
15 to be somehow describing something different.

16 BY MR. ABDO:

17 Q Okay. And for the record, you're
18 reading from the top of page 37 of Exhibit 43,
19 correct?

20 A That is correct.

21 Q The sentence beginning, "To identify
22 and acquire"?

1 A That is correct.

2 Q So would the use of an IP filter fall
3 within the description of that sentence in which
4 it says, "Internet transactions are first filtered
5 to eliminate potential domestic transactions"? Is
6 that where an IP filter could be used?

7 A Yes, that is an example of where -- an
8 IP filter is an example of something that could be
9 used to do that filter.

10 Q Okay. And is the use of a screening
11 device described in the NSA's response to
12 Interrogatory 5 in Exhibit 42, is that use of a
13 screening device what could be used to accomplish
14 what is described in the second portion of the
15 sentence that you were reading from page 37 of
16 Exhibit 43, that second part saying, quote, then
17 our screened capture only transactions containing
18 a task selector?

19 A Yes.

20 Q Okay. And with respect to upstream
21 surveillance as it operated in 2015, what else
22 could the term -- sorry, what else -- what other

1 processes could be used to accomplish either the
2 filtering or the screening described in the
3 sentence you were reading from page 37 of
4 Exhibit 43?

5 MR. PATTON: Objection, calls for
6 classified information, information subject to the
7 statutory privileges.

8 Instruct the witness not to answer.

9 THE WITNESS: I will follow the
10 instructions.

11 BY MR. ABDO:

12 Q Okay. Are all transactions that were
13 subject to upstream surveillance in June 2015
14 subjected to Internet protocol filtering --

15 MR. PATTON: Objection.

16 BY MR. ABDO:

17 Q Sorry, let me just finish the question
18 real quick.

19 -- to eliminate potential domestic
20 transactions from upstream surveillance?

21 MR. PATTON: Objection, calls for
22 classified information, information subject to the

1 statutory privileges.

2 Instruction not to answer the
3 question.

4 THE WITNESS: I will follow the
5 instructions.

6 BY MR. ABDO:

7 Q Can you please describe all the ways
8 in which the NSA could determine in 2015 or could
9 determine today whether a transaction is wholly
10 domestic in order to filter it out from upstream
11 surveillance?

12 MR. PATTON: Just a moment.

13 (Counsel conferring.)

14 MR. PATTON: Could you break that down
15 into 2015 to 2017 to make it clear?

16 BY MR. ABDO:

17 Q Could you please describe all the ways
18 in which the NSA could determine in 2015, as part
19 of upstream surveillance, whether a transaction is
20 wholly domestic so as to filter it out?

21 MR. PATTON: Objection, calls for
22 classified information in order to respond fully

1 to that question.

2 There may be an unclassified response
3 to that question, but without knowing what the
4 witness's answer would be, I'm not comfortable
5 just turning that over to her, but I believe there
6 is an unclassified response, but it's also one
7 that she has given you already.

8 BY MR. ABDO:

9 Q Okay. If there's nothing more that
10 you could say that's unclassified, let me know
11 that you'll follow your counsel's instruction not
12 to provide any further information.

13 A There's no additional information that
14 can be provided. What you see here is as much
15 unclassified information as available.

16 Q And by "here," you're referring to
17 Exhibit 43, page 37?

18 A Page 37, or the interrogatories.

19 Q The responses we've been discussing?

20 A The responses, yeah. There's no
21 additional information to be provided.

22 Q Okay. What does it mean to say, as

1 the NSA's response to Interrogatory 3 does, that
2 wholly domestic Internet transactions are, quote,
3 eliminated? And that's in Exhibit 42, I think at
4 page 7 to 8.

5 MR. PATTON: Object to the extent it
6 calls for classified information and information
7 protected by the statutory privileges.

8 There is an unclassified answer that
9 the witness can give.

10 THE WITNESS: So you're asking what
11 does it mean to eliminate?

12 BY MR. ABDO:

13 Q Yes.

14 A So I think if you look at the
15 response, it's important to understand that it
16 starts with -- the sentence is that the devices
17 utilized in the upstream Internet collection
18 process that were designed to eliminate wholly
19 domestic transactions.

20 So they were -- it's important to
21 recognize it was designed, not that it was
22 actually done.

1 Q Understood. So let me then be clear.

2 What does it mean to say -- what were
3 they designed to do in eliminating wholly
4 domestic --

5 A So that they wouldn't --

6 Q -- transactions?

7 MR. PATTON: Same objection, same
8 instruction.

9 THE WITNESS: They're designed so that
10 they don't make it through to being ingested by
11 NSA's -- into NSA's repository. That's what it
12 means to be designed to eliminate.

13 BY MR. ABDO:

14 Q And the repository is what holds
15 communications that contain a selector and are not
16 wholly domestic as of June 2015?

17 MR. PATTON: Object to the extent it
18 calls for classified information and statutory
19 privileges. You can answer to the extent
20 unclassified.

21 THE WITNESS: So --

22

1 BY MR. ABDO:

2 Q I'm just trying to understand.

3 When you say "ingested," you're
4 referring to the databases or the places in which
5 the NSA stores communications that are ultimately
6 authorized by Section 702 to collect?

7 A Yes, yes. It's when NSA collects it.

8 MR. PATTON: Same objections.

9 THE WITNESS: Yes. NSA collects,
10 acquires, ingests. It's the point at which NSA
11 now has it.

12 BY MR. ABDO:

13 Q Understood. Can an e-mail address be
14 a selector under upstream surveillance?

15 A Yes.

16 Q Can a phone number be a selector under
17 upstream surveillance?

18 A Yes.

19 Q Can an Internet protocol address be a
20 selector under upstream surveillance?

21 MR. PATTON: Objection, calls for
22 classified information and privileged information

1 pursuant to the statutes aforementioned, and
2 instruct the witness not to answer the question.

3 THE WITNESS: I will follow the
4 instructions.

5 BY MR. ABDO:

6 Q Can a URL, or uniform resource
7 locator, be a selector under upstream
8 surveillance?

9 MR. PATTON: Same objection, same
10 instruction.

11 THE WITNESS: Will follow the
12 instruction.

13 MR. PATTON: Just a moment.

14 MR. PADGETT: Let's go off the record
15 to discuss.

16 (Off the record at 3:49 p.m.)

17 (Resume at 3:53 p.m.)

18 BY MR. ABDO:

19 Q We're back from break, and the
20 question was can a URL be a selector under
21 upstream surveillance?

22 MR. PATTON: Objection, calls for

1 classified information and information protected
2 by the statutory privileges.

3 Instruct the witness not to answer.

4 THE WITNESS: I will not answer.

5 BY MR. ABDO:

6 Q Could a URL be a selector under
7 upstream surveillance as of June 2015?

8 MR. PATTON: Same objection, same
9 instruction.

10 THE WITNESS: Will follow the
11 instruction.

12 BY MR. ABDO:

13 Q Are the selectors used for upstream
14 surveillance the same as those used for PRISM
15 surveillance as of June 2015?

16 MR. PATTON: Same objection, same
17 instruction.

18 THE WITNESS: Wait, I'm sorry. Can
19 you ask the question again?

20 BY MR. ABDO:

21 Q Sure. I'll modify it slightly to make
22 it grammatically correct.

1 Were the selectors used for upstream
2 surveillance the same as those used for PRISM
3 surveillance in June 2015?

4 MR. PATTON: Same objection, same
5 instructions.

6 THE WITNESS: Can you just --

7 MR. ABDO: Ms. Jaques, would you mind
8 marking this as Exhibit -- you're still looking at
9 something for this question?

10 THE WITNESS: Yes, I am.

11 The only thing I would state which is
12 definitely not classified is on page 6 of the
13 Civil Liberties and Privacy Office Report,
14 Exhibit 44. At the very top of page 6 it says,
15 "The process for approving the selectors for
16 tasking is the same for both PRISM and upstream
17 collection."

18 I realize that's not exactly the
19 question you were asking, but I just wanted to
20 make sure you had that piece of information.

21 BY MR. ABDO:

22 Q Thank you. Ms. Jaques, would you mind

1 marking this 46? And it's the entire folder.

2 (Deposition Exhibit 46 was
3 marked for identification.)

4 BY MR. ABDO:

5 Q Ms. Richards --

6 A Oh, this is fabulous, okay.

7 Q You have in front of you what's marked
8 as Exhibit 46. Do you recognize that document?

9 A I do.

10 Q And what is that document?

11 A This is the Privacy and Civil
12 Liberties Oversight Board Public Hearing Regarding
13 the Surveillance Program Operated Pursuant to
14 Section 702 of the Foreign Intelligence
15 Surveillance Act, March 19, 2014.

16 Q Did employees of the NSA testify at
17 that hearing?

18 A Yes.

19 Q And they were testifying in their
20 official capacity as NSA employees?

21 A Yes.

22 Q Could you turn to page 57 of the

1 transcript? Do you see at lines 17 to 20 there's
2 a statement that's labeled as coming from Mr. De,
3 spelled D-E?

4 Do you understand that to be -- who do
5 you understand that to be?

6 A I'm sorry, we're at line?

7 Q Lines 17 to 20 of page 57.

8 A 17 to 20, okay.

9 Q Of Exhibit 46.

10 A Mr. De. Oh, let me just --

11 Q Before getting to the substance of
12 that sentence, which we'll give you a chance to
13 read in a second, do you know who this Mr. De is
14 who is being referred to?

15 A Yes. He was the general counsel at
16 the time of NSA.

17 Q And for the record, his full name is
18 Rajesh De?

19 A Yes.

20 Q Could you now read those two lines --
21 those four lines, 17 to 20 on page 57, to
22 yourself?

1 A (Witness reviewing document.) Okay.

2 Q What do you understand Mr. De to have
3 been communicating in this first sentence? And
4 the first sentence was, quote, "And it's the same
5 selectors that are used for the PRISM program that
6 are also used for upstream collection."

7 MR. PATTON: Objection to form, vague.

8 MR. ABDO: You can answer.

9 THE WITNESS: I think similar to what
10 I just read to you, the words on the face of it
11 seem accurate.

12 I'm not sure what you're trying to ask
13 me. Maybe you can help clarify.

14 BY MR. ABDO:

15 Q What I'm trying to understand is
16 whether the selectors that are used for PRISM are
17 also used for Upstream collection, and that seems
18 to be on the face of the statement what Mr. De
19 said at the hearing transcribed in Exhibit 46, but
20 I understood you to refuse to answer the question
21 of whether the selectors that are used for the
22 PRISM program are also used for Upstream

1 collection, so I'm trying to understand what the
2 difference is between my question and this
3 statement.

4 A I think I need to go -- sorry.

5 MR. PADGETT: Can I ask a clarifying
6 question? Because it might involve an
7 instruction.

8 MR. PATTON: Right. There's also a
9 difference of what we're talking about here, so I
10 don't know whether the witness is aware of that,
11 the differences.

12 MR. ABDO: Are you saying you need to
13 talk in the SCIF?

14 MR. PATTON: I don't know that we need
15 time to talk in the SCIF, but the objection was to
16 something A, and this is meaning something B, if
17 you know what I mean, and therefore I want to get
18 you that answer because I think that answer is
19 unclassified.

20 MR. ABDO: Is there an answer that the
21 witness --

22 MR. PATTON: Because I can understand

1 why you're having this question, but I'm trying to
2 figure out the best way to get you that
3 unclassified answer.

4 BY MR. ABDO:

5 Q Ms. Richards, do you understand the
6 distinction your counsel is drawing between this
7 statement by Mr. De at the hearing transcribed in
8 Exhibit 46 and the question that I asked a few
9 moments ago about whether selectors used for
10 Upstream are the same as those used for PRISM
11 surveillance?

12 If you know the answer to my question,
13 could you please answer it?

14 A So let me see if I can restate the two
15 different questions, and maybe I need to have you
16 read back to me what you asked before and we
17 objected to on classified, which is this statement
18 states, "it's the same selectors that are used for
19 the PRISM program that are also used for upstream
20 collection."

21 A few minutes ago, you had asked
22 whether this was true, and I declined to comment

1 for classified purposes.

2 Q Right.

3 A That's the --

4 Q Well, let me phrase it this way.

5 Is the statement that Mr. De made at
6 this hearing in March of 2014 true, or was it true
7 at that time that, quote, it's the same selectors
8 that are used for the PRISM program that are also
9 used for upstream collection?

10 A I would like to confer in the SCIF
11 before I give you the answer to both of those
12 questions.

13 MR. PATTON: I just want to seek
14 clarification for the record.

15 Are you concerned that there's a
16 privilege issue, a classification issue? Is that
17 your concern?

18 THE WITNESS: Yes.

19 MR. PATTON: Okay.

20 THE WITNESS: Not with this sentence.

21 MR. PATTON: Not with the sentence,
22 but whether or not you can answer --

1 THE WITNESS: With the other question
2 that was asked.

3 BY MR. ABDO:

4 Q I see. If I were to rephrase my
5 previous question to be were the selectors used
6 for PRISM surveillance in June 2015 the same as
7 those used for Upstream surveillance?

8 MR. PATTON: I have to object to the
9 question as to its vagueness. There is an
10 unclassified answer and there's a classified
11 answer, and --

12 THE WITNESS: And I'm tripping over
13 which one, so I just need to go --

14 MR. PATTON: -- and I want to get you
15 the unclassified answer.

16 MR. ABDO: Okay. Can we take a break
17 and go off the record while you guys confer in the
18 SCIF?

19 (Off the record at 4:03 p.m.)

20 (Resume at 4:13 p.m.)

21 BY MR. ABDO:

22 Q We're back on the record.

1 The question we left with,
2 Ms. Richards, was what Mr. De meant in the hearing
3 in March 2014, transcribed in Exhibit 46, when he
4 said, "And it's the same selectors that are used
5 for the PRISM program that are also used for
6 upstream collection."

7 MR. PATTON: Objection to the extent
8 it calls for classified information and
9 information protected by the statutory privileges.

10 You can answer to the extent
11 unclassified.

12 THE WITNESS: Okay. So in looking at
13 page 57, it's important to roll back to roughly
14 around page 55 and understand what they were
15 talking about at this point. And, specifically, I
16 would bring you to -- okay, I'm sorry, go back to
17 54. Where did the language just go? Okay,
18 I'm sorry, page 56.

19 So Mr. Wiegmann says, "About that
20 selector, correct."

21 And then Mr. De says, "It is always
22 focused on that account, so I think the key is,

1 the misperception that some may have that 'about'
2 collection is somehow about a key word or about
3 the person that may be behind that account.

4 "But all collections under
5 Section 702, whether it's upstream abouts, which
6 is a subset of upstream, or PRISM is all based on
7 the selectors at issue."

8 Then we have Ms. Brand says, "Just to
9 follow-up on that because that's a good line of
10 inquiry, just to make sure that everyone
11 understands. So you're saying that if someone is
12 emailing about Rachel Brand or about explosives
13 that would not be a permissible about query under
14 your explanation?"

15 And Mr. De goes on, and what he's
16 explaining then, when we get down to lines 17 to
17 20, is the type of selectors is the context for
18 this exchange back and forth, which is then
19 how this is -- in talking about the types of
20 selectors, as opposed to "bomb" or "explosive" or
21 a name, he's explaining that these are the same
22 types of selectors.

1 That is what's the unclassified fact,
2 and then it's furthered by the sentence I
3 mentioned in the Civil Liberties and Privacy
4 Office Report, as opposed to your question you
5 asked earlier where we said that's classified.

6 BY MR. ABDO:

7 Q I think I understand.

8 A Okay.

9 Q Moving on a bit.

10 As of 2015, did the procedures
11 approved by the FISC for upstream surveillance
12 permit the NSA to collect an international HTTP
13 transmission of a website if the text of that
14 website contained a selector?

15 MR. PATTON: Objection, calls for
16 classified information and information subject to
17 the statutory privileges.

18 Instruct not to answer the question.

19 THE WITNESS: I will follow the
20 instruction.

21 BY MR. ABDO:

22 Q Okay. Sorry, just one second.

1 (Deposition Exhibit 47 was
2 marked for identification.)

3 BY MR. ABDO:

4 Q Ms. Richards, you have in front of you
5 what's been marked as Exhibit 47.

6 Do you recognize this document?

7 A Yes.

8 Q What is it?

9 A This is the government's response to
10 the Court's briefing order of May 9th, 2011.

11 Q With the Court being the Foreign
12 Intelligence Surveillance Court?

13 A Yes.

14 Q Do you know which agency of government
15 authored this document?

16 A It's submitted by the National --

17 MR. PATTON: Objection to form, vague.

18 THE WITNESS: -- National Security

19 Division of the Department of Justice, and

20 verified by National Security Agency.

21 BY MR. ABDO:

22 Q Okay. When you say "verified," you

1 mean verified as to the accuracy of the statements
2 within it?

3 A Yes, to the best of the knowledge of
4 the individual doing it.

5 Q Would you mind turning to page 30 of
6 Exhibit 47? And I should have mentioned at the
7 outset, Exhibit 47 is Bates stamped
8 NSA-WIKI 237 -- sorry, I may not have the full
9 version in mine. Sorry, NSA-WIKI 234 to 277.

10 Okay, if you turn to page 30, which is
11 marked NSA-WIKI 266, toward the bottom there's a
12 sentence that begins "this figure," and I'll read
13 it. "This figure was then compared to the total
14 take of Section 702 upstream collection of web
15 activity for the month."

16 Do you know the context in which this
17 sentence was written in unclassified terms?

18 A Can you clarify your question? I'm
19 not sure I know what you're asking.

20 Q Was the context of this sentence an
21 effort to respond to the FISC's inquiry of the NSA
22 about the volume of certain forms of the NSA's

1 upstream collection?

2 A Can you repeat?

3 Q I'll repeat that.

4 Does this sentence come in a paragraph
5 responding to the FISC's inquiry of the NSA about
6 the volume of certain forms of the NSA's upstream
7 collection activity?

8 A Yes.

9 Q And was this sentence explaining how
10 the Department of Justice and the NSA arrived at
11 certain figures it was relaying to the FISC in
12 responding to the question?

13 A Yes.

14 Q What does "web activity" mean in the
15 context of Internet communications?

16 MR. PATTON: Object to the form of the
17 question to the extent it calls for a classified
18 answer or an answer that would be subject to the
19 statutory privileges.

20 The witness can answer if there's an
21 unclassified answer.

22 THE WITNESS: I'm going to read this

1 answer over once more before I give you --

2 BY MR. ABDO:

3 Q Please. Maybe I can rephrase the
4 question for you.

5 A Sure.

6 Q Do you understand "web activity" to
7 refer to activity of the World Wide Web -- or
8 activity on the World Wide Web?

9 MR. PATTON: Just a second.

10 (Counsel conferring.)

11 MR. PATTON: I'm just going to object
12 to the vagueness.

13 THE WITNESS: I would refer that to
14 meaning as a way of generally talking about the
15 collection of discrete Internet communications.

16 BY MR. ABDO:

17 Q Would you understand it to refer to
18 collection -- let me ask this.

19 Would Internet web browsing constitute
20 web activity?

21 MR. PATTON: Objection, calls for
22 classified information to the extent that it's

1 being asked in the context of upstream collection
2 in this particular document, and subject to that
3 objection and to the statutory privileges that
4 would protect that.

5 I instruct the witness not to answer
6 the question.

7 THE WITNESS: I will follow the
8 instruction.

9 BY MR. ABDO:

10 Q Do you understand the meaning of the
11 term "web activity" generally, not with regard to
12 this document?

13 A Yes.

14 MR. PATTON: Object. Object that it's
15 beyond the scope of the 30(b)(6), but the witness
16 can answer.

17 BY MR. ABDO:

18 Q What does it mean generally beyond --
19 you know, outside of the context of this document,
20 Exhibit 47?

21 MR. PATTON: Same objection.

22 THE WITNESS: You say activity on the

1 Internet?

2 BY MR. ABDO:

3 Q Any activity on the Internet. You
4 don't understand "web activity" to be distinct
5 from "Internet activity"?

6 MR. PATTON: Same objection.

7 THE WITNESS: I think it's a vague
8 enough term it could be meant any number of
9 different things.

10 BY MR. ABDO:

11 Q You don't understand it to mean
12 specifically the protocol referred to as the World
13 Wide Web, which encompasses HTTP and HTTPS
14 communications? That's not how you understand an
15 Internet professional would understand that term?

16 MR. PATTON: Same objection, adding
17 objection that it calls for expert opinion, and
18 also object that it's asked and answered.

19 THE WITNESS: I don't think there's a
20 set definition for "web activity." I think it
21 could mean Internet activity, it could mean World
22 Wide Web activity. It could mean any of those

1 different -- those particular different ones.

2 I think you have to look at the
3 context for the sentence, and then make a decision
4 accordingly.

5 BY MR. ABDO:

6 Q Do you have any reason to believe that
7 this sentence was inaccurate, "this sentence"
8 again in Exhibit 47 beginning, "This figure was
9 then compared"?

10 A No.

11 Q Does it disclose classified
12 information?

13 MR. PATTON: As redacted?

14 MR. ABDO: As it appears in
15 Exhibit 47.

16 THE WITNESS: I don't think so.

17 BY MR. ABDO:

18 Q To your knowledge, is the term
19 "web activity" ever otherwise used by the NSA in
20 publicly disclosed documents interchangeably with
21 "Internet activity" at large?

22 MR. PATTON: Object to the form,

1 vague.

2 THE WITNESS: I don't know that I've
3 seen "web activity" used in other documents that
4 are unclassified -- that have been declassified.
5 To the extent you're going to show me one next --

6 BY MR. ABDO:

7 Q I don't have one. I'm asking.

8 A So if this is the only instance of
9 this and you're -- you know, I don't have -- I
10 haven't seen it in any of the other documents I've
11 read in the last few weeks, or since we've been
12 prepping for this, so --

13 Q I'm not trying to play a game of
14 gotcha. I'm asking because your answer suggested
15 that you believe "web activity" to be essentially
16 used interchangeably with the very generic term
17 "Internet traffic" or "Internet communications,"
18 and I would assume, if that were the case, then
19 the NSA would in fact use that term
20 interchangeably, but I don't believe that to be
21 the case. I'm asking why that is.

22 MR. PATTON: Object to the extent it

1 mischaracterizes prior testimony.

2 THE WITNESS: I don't have any
3 specific further information that would help
4 elucidate this conversation.

5 Anything further I might say would go
6 into a classified discussion, and so I can't give
7 you any further explanation as to the use of the
8 word "web" there.

9 BY MR. ABDO:

10 Q Under upstream surveillance, as
11 conducted in June 2015, was the NSA permitted to
12 collect the communications of a foreign target
13 with a website in the United States?

14 MR. PATTON: Just a second.

15 (Counsel conferring.)

16 MR. PATTON: Object to the form, vague
17 and ambiguous, and also object that it could call
18 for classified information and information
19 protected by the statutory privileges.

20 Depending on what the question means,
21 there might be an unclassified answer.

22

1 BY MR. ABDO:

2 Q Do you have an unclassified answer,
3 Ms. Richards?

4 MR. PATTON: And if she does, I'd like
5 to hear it before she gives it to make sure that
6 it is unclassified.

7 BY MR. ABDO:

8 Q Let me give you another question to
9 consider.

10 A I was just going to say, do you have a
11 whole bunch of them, and then we can go and confer
12 on what those might be?

13 Q I have one other.

14 A Okay, but could you repeat that one
15 again?

16 Q Let me repeat that one, and I'll tell
17 you the other one.

18 A Yeah.

19 Q The first one is, under upstream
20 surveillance as approved as of June 2015, was the
21 NSA permitted to collect the communications of a
22 foreign target -- that is, somebody who is a

1 foreign target of upstream surveillance -- abroad
2 with a website in the United States?

3 Do you understand my question?

4 A I do understand.

5 I don't think there's an unclassified
6 answer, but to the extent --

7 Q Okay. The second question that I hope
8 you'll consider in the SCIF, under upstream
9 surveillance as it was implemented in June 2015,
10 was the NSA permitted to collect the transactions
11 or communications of a non-targeted foreigner
12 abroad with a website in the United States if the
13 website contained a selector tasked for
14 collection?

15 A A non-targeted foreigner abroad on a
16 U.S. --

17 Q With a website in the United States.

18 A With a website in U.S.

19 Q If the website contained a selector
20 task for collection. You're generally --

21 MR. GILLIGAN: I'm baffled by the
22 question.

1 MR. ABDO: A non-foreign target -- I'm
2 sorry, a non-targeted foreigner abroad
3 communicating with a website in the United States,
4 and the website contains a selector.

5 MR. GILLIGAN: You mean communicating
6 with a website?

7 MR. ABDO: Yeah. They visit the
8 website, for example. They're communicating with
9 a website.

10 MR. GILLIGAN: Yeah, that's what was
11 baffling, what you meant by "with."

12 MR. ABDO: Communications to and from.

13 THE WITNESS: So the selector is
14 looking at the website?

15 BY MR. ABDO:

16 Q Suppose a non-targeted foreigner
17 abroad is viewing a website, and the website is
18 stored on a web server in the United States, and
19 it contains a task selector --

20 A The website?

21 Q The website. And that task selector
22 is being communicated back to this non-targeted

1 foreigner abroad, and it passes through something
2 being monitored by the NSA in upstream
3 surveillance, did the NSA have the authority in
4 2015 to collect that communication?

5 MS. HANLEY COOK: Should we go off the
6 record now?

7 MR. ABDO: Okay, thanks.

8 MR. PATTON: Thank you.

9 (Off the record at 4:30 p.m.)

10 (Resume at 4:46 p.m.)

11 MR. PATTON: The witness has reviewed
12 in the interim the applicable targeting
13 procedures, the declassified public version of
14 those, and is prepared to make a statement on that
15 particular point, but we don't believe that
16 anything beyond what she's going to say can be
17 said on the public record.

18 So to the extent not covered by what
19 she's about to say, we object to the questions to
20 the extent they call for a classified response
21 subject to state secrets and subject to the
22 statutory privileges.

1 THE WITNESS: The examples you
2 provided are classified. How the targeting might
3 or might not occur is all classified on page 5.
4 It's all black, so we can't go any further into
5 that information.

6 If you would like to -- I'm sorry.
7 I'm looking at Exhibit A, the procedures used by
8 the National Security Agency for targeting
9 non-United States persons reasonably believed to
10 be located outside the United States to acquire
11 foreign intelligence information pursuant to
12 Section 702 of the Foreign Intelligence
13 Surveillance Act of 1978 as amended. These are
14 dated June 2014.

15 BY MR. ABDO:

16 Q What page were you looking at of
17 those?

18 A 5.

19 Q If I understand, page 5 relates to the
20 NSA's method for assessing whether there would be
21 a foreign intelligence purpose for collecting
22 certain Internet communications, right?

1 A Yes.

2 Q My question didn't deal with whether
3 the NSA in fact had reason to or would want to
4 collect Internet communications.

5 My question was, did the NSA, in June
6 of 2015, have the authority to collect the
7 communications of a foreign target abroad with a
8 website in the United States?

9 MR. PATTON: The answer to that
10 question is classified and subject to statutory
11 privileges.

12 Instruct the witness not to answer the
13 question.

14 THE WITNESS: I'll follow the
15 instructions.

16 BY MR. ABDO:

17 Q And under upstream surveillance as
18 conducted in 2015, did the NSA have the authority
19 to collect the transactions of a foreigner abroad
20 with a website in the United States if the website
21 contained a selector task for collection?

22 MR. PATTON: Same objection, same

1 instruction.

2 THE WITNESS: I'll follow the
3 instruction.

4 BY MR. ABDO:

5 Q Are you aware that the Office of
6 Director of National Intelligence has acknowledged
7 that there was a time when overcollection of
8 webmail in-boxes had contributed to the -- had
9 occurred under upstream collection?

10 MR. PATTON: Just a second.

11 (Counsel conferring.)

12 THE WITNESS: Can you point to the
13 document or provide whatever that is?

14 BY MR. ABDO:

15 Q I'm asking whether you're aware that
16 that's the case.

17 A I would want to see where exactly ODNI
18 had said that information to make sure that I
19 wasn't somehow going into some sort of classified
20 discussion.

21 Without the context of what you're
22 saying, as we've seen a few times, sometimes the

1 information on its face looks like it says one
2 thing, as we just went through with Raj De's back
3 and forth. So without seeing the context of
4 whatever that is, I don't know how to answer.

5 Q Let me ask a different question then.

6 Do you know the answer to the question
7 I asked? Well, let me ask that. Do you know the
8 answer to the question I asked?

9 MR. PATTON: Objection, vague as to
10 which question.

11 MR. ABDO: The question being whether
12 you're aware that the Office of Director of
13 National Intelligence has acknowledged that one of
14 the overcollection problems that the NSA had with
15 upstream surveillance involved the collection of
16 webmail in-boxes? Do you know the answer to that
17 question?

18 THE WITNESS: Again, without
19 confirming or denying, I need to see the document
20 you're referring to to better understand. I'm
21 just concerned I'm in classified territory.

22

1 BY MR. ABDO:

2 Q I'm not asking you for an answer to
3 that question. I'm asking whether you know the
4 answer to that question first.

5 A I'm sorry, I don't know how to answer
6 what you're saying.

7 MR. GILLIGAN: It's circular. The
8 question is whether she knows, so I don't know
9 whether she knows the answer to that question is
10 the same question.

11 MR. ABDO: If forced to answer that
12 question, do you know whether you would say yes or
13 no? I'm not asking you to say yes or no, I'm
14 asking whether you know which one you would say if
15 you were forced to answer the question?

16 THE WITNESS: And so I'm sorry, I
17 don't know what document you're referring to. I
18 assume you're referring to some document somewhere
19 that ODNI published, and if I could see that so
20 that I could look at it, I would be able to tell
21 you whether I know the answer or not.

22 But in the abstract question of, "Do

1 you know this?," I can't answer one way or the
2 other. So without sort of having some basis in
3 what we're looking at, I'm having a hard time
4 answering.

5 BY MR. ABDO:

6 Q Okay. Was the collection of webmail
7 in-boxes in fact one of the overcollection
8 problems the NSA had with upstream surveillance
9 specifically with regard to multi-communications
10 transactions?

11 MR. PATTON: Just a moment.

12 (Counsel conferring.)

13 MR. PATTON: I just want to state for
14 the record that neither the witness nor I are
15 trying to be difficult here. We are concerned
16 about providing responses to information that we
17 haven't seen, and so I don't want to instruct the
18 witness not to answer the question if there's a
19 public document out there.

20 I think it would be better if you show
21 it to her. It will either refresh her
22 recollection and she'll be able to explain whether

1 she's seen it before or anything like that, but at
2 this point, she's not wanting to answer the
3 question, and I'm concerned that the answer may be
4 classified.

5 MR. ABDON: Are you able to determine
6 whether the answer is classified without knowing
7 whether there's a physical document in the world
8 that contains the information? Is that the
9 definition of "classified"?

10 MR. PATTON: No, it really gets to, at
11 this particular point, we don't know what it is
12 that you're referring to, and it may be an
13 unclassified document that the Director of
14 National Intelligence has said X, Y or Z. If
15 that's it, it provides the context and some form
16 of comfort for the witness, who is being asked to
17 determine what's on one side of the classified
18 line and what's not on the other.

19 She signed a Non-Disclosure Agreement
20 and is -- I mean, her responses to you so far have
21 tried to give you as much unclassified information
22 as possible. She's evidently concerned that if

1 she provides a response to this outside of any
2 context that she might be violating that NDA.

3 BY MR. ABDO:

4 Q Are you aware that the Office of
5 Director of National Intelligence, on August 21st
6 of 2013, held a conference call with reporters in
7 which the Office of Director of National
8 Intelligence described the overcollection of
9 webmail in-boxes as an example of the
10 overcollection problem the NSA experienced under
11 upstream surveillance with regard to
12 multi-communication transactions?

13 MR. PATTON: Again, that may have
14 occurred on August 21st, 2013. It may be a
15 document that is a newspaper article that may or
16 may not be accurately depicting what ODNI said at
17 that time. And so our concern again, in the
18 abstract, is whether or not the information you're
19 providing is both accurate and unclassified.

20 MR. ABDO: Okay. So can I confirm, at
21 least for the time being, are you instructing the
22 witness not to answer the question?

1 MR. PATTON: At the moment, I don't
2 think the witness is in a position to answer the
3 question. Factually, I don't know what it is that
4 you're referring to. And given the amount of
5 information that has been provided through
6 unofficial sources, our concern, and my duty here,
7 and the witness's duty, is to protect classified
8 information, and we want to provide as much
9 unclassified information as we can --

10 MR. ABDO: I understand. I'm just
11 asking a simple question, Rodney. Are you
12 instructing the witness not to answer?

13 MR. GILLIGAN: Tell you what, if we
14 step outside, I might be able to suggest a way
15 around this.

16 MR. ABDO: Can we go off the record?

17 (Off the record at 4:57 p.m.)

18 (Resume 5:04 p.m.)

19 THE WITNESS: Is there an outstanding
20 question? Where are we?

21 BY MR. ABDO:

22 Q There was. Let me start with the

1 question outstanding, which was are you aware that
2 the Office of Director of National Intelligence
3 has acknowledged that the NSA has collected
4 webmail in-boxes under upstream surveillance?

5 MR. PATTON: Object to the form as
6 beyond the scope of the 30(b)(6) notice, and the
7 witness can answer in her personal capacity.

8 THE WITNESS: I'm not aware.

9 BY MR. ABDO:

10 Q Has the NSA collected webmail in-boxes
11 as part of upstream surveillance?

12 MR. PATTON: Object to the question,
13 calls for classified information and information
14 protected by the statutory privileges, and
15 instruct the witness not to answer the question.

16 THE WITNESS: I will follow the
17 instructions.

18 BY MR. ABDO:

19 Q Okay. Are you familiar with the fact
20 that the contents of Internet communications are
21 transported in what is known as the application
22 layer of Internet packets?

1 MR. PATTON: Object to the question to
2 the extent it calls for classified -- I'm sorry,
3 I'm so used to that -- to the extent it calls for
4 expert opinion, and that it's beyond the scope of
5 30 (b) (6) .

6 THE WITNESS: Yes.

7 BY MR. ABDO:

8 Q Okay. Are you aware of the fact that
9 the contents of an email communication are
10 transported within the application layer of
11 Internet packets?

12 MR. PATTON: Same objections.

13 THE WITNESS: Yes.

14 Isn't that what you just asked me?

15 BY MR. ABDO:

16 Q The first question was with respect to
17 Internet communications generally, and the second
18 question was with respect to email communications
19 specifically.

20 A Okay.

21 Q Is your answer to both yes?

22 A Yes. It sounded like the same one,

1 and I worried I was missing something.

2 Q And are you aware of the fact that the
3 contents of a website are transported within the
4 application layer of Internet packets?

5 MR. PATTON: Same objections.

6 THE WITNESS: Yes.

7 BY MR. ABDO:

8 Q Are the filtering or screening
9 processes that you've described with respect to
10 upstream collection as it operates -- or
11 excuse me, upstream surveillance as it operated in
12 June 2015 -- forms of deep packet inspection?

13 MR. PATTON: Objection.

14 (Counsel conferring.)

15 MR. PATTON: I'm sorry, could you read
16 that back?

17 BY MR. ABDO:

18 Q Sure. Are the filtering or screening
19 processes that you've described under upstream
20 surveillance as conducted in June 2015 forms of
21 deep packet inspection?

22 MR. PADGETT: I'm sorry, one key thing

1 I didn't get. Could you read that back?

2 (The reporter read back the question.)

3 MR. PATTON: Object to the question
4 because it calls for classified information and
5 information protected by the statutory privileges.

6 Instruct the witness not to answer.

7 THE WITNESS: I will follow the
8 instructions.

9 BY MR. ABDO:

10 Q Are you familiar with the term "deep
11 packet inspection"?

12 MR. PATTON: Object to that question,
13 beyond the scope of 30(b)(6), and it calls for an
14 expert opinion.

15 THE WITNESS: In the general sense of
16 the word, as in not specific to anything in
17 particular, but known as the outside world?

18 BY MR. ABDO:

19 Q Not specific to upstream surveillance,
20 but --

21 A Yes.

22 Q You are familiar with it?

1 A Yes.

2 Q What does it mean?

3 MR. PATTON: Same objections.

4 THE WITNESS: It's the concept of --
5 I'm sorry, I'm --

6 BY MR. ABDO:

7 Q Is it the process of examining or
8 analyzing the application layer of packets
9 traversing the network?

10 MR. PATTON: Same objections.

11 THE WITNESS: Yeah, I'm -- yes. Yes,
12 that's a fine description.

13 BY MR. ABDO:

14 Q Tell me again your position at the
15 Department of Homeland Security.

16 A I was the Senior Director for Privacy
17 Compliance in the Privacy Office.

18 Q And you participated in the drafting
19 of Privacy Impact Assessments?

20 A I did.

21 Q Were you involved in the Privacy
22 Impact Assessments conducted for the Einstein 2 or

1 Einstein 3 programs?

2 A Yes, which is why I changed the answer
3 when you asked about the four types of sort of --

4 Q Ah, got it.

5 A When I rechanged it, I realized that
6 would probably constitute what you were
7 considering to be surveillance.

8 Q Network surveillance?

9 A Network surveillance.

10 Q Did Einstein 2 involve deep packet
11 inspection?

12 A I honestly don't remember.

13 MR. PATTON: Just object to that
14 question as beyond the scope of 30(b)(6). I'm not
15 sure whether the answer is unclassified or not
16 since I have not consulted with the Department of
17 Homeland Security, but if the witness knows of an
18 unclassified answer, the witness can give an
19 unclassified answer.

20 BY MR. ABDO:

21 Q Sorry, please go ahead.

22 A I apologize, but I don't remember what

1 is classified or unclassified about the Einstein 2
2 PIA, so unless you have a copy of what was
3 published, I can't speak to the specifics of what
4 was in it.

5 Q Okay. Are you familiar with
6 Einstein 3? Generally, not anything specific, but
7 are you aware of the Department of Homeland
8 Security's intrusion detection and intrusion
9 prevention program known as Einstein 3
10 Accelerated?

11 MR. PATTON: Objection to beyond the
12 scope of 30(b)(6), potentially classified. I'll
13 have to rely on the witness, who may be more
14 familiar with the DHS program certainly than me.
15 If there's a unclassified answer, you can give it
16 in your personal capacity.

17 MR. ABDO: Surely the existence of
18 this program is unclassified, but --

19 MR. PATTON: I'm not willing to take
20 the risk.

21 BY MR. ABDO:

22 Q Did you work on the Privacy Impact

1 Assessment for Einstein 3?

2 MR. PATTON: Same set of objections.

3 THE WITNESS: Generally speaking, yes,
4 because every PIA that was approved by the
5 Department of Homeland Security at that point was
6 reviewed by me.

7 BY MR. ABDO:

8 Q Okay. Are you aware that Einstein 3
9 was part of the comprehensive cybersecurity
10 initiative announced by the Obama administration?

11 A Yes.

12 MR. PATTON: Same objections.

13 THE WITNESS: Oh, sorry.

14 BY MR. ABDO:

15 Q And are you aware that, in announcing
16 that, the administration also made clear that
17 Einstein 3 was implemented with the technological
18 support of the NSA?

19 MR. PATTON: Same objections.

20 THE WITNESS: Do you have a document
21 that provides that information?

22 MR. ABDO: Sure.

1 (Deposition Exhibit 48 was
2 marked for identification.)

3 BY MR. ABDO:

4 Q You have what's been marked as
5 Exhibit 48 in front of you, Ms. Richards.

6 Do you recognize this document?

7 MR. PATTON: Object to this document
8 as beyond the scope of 30(b)(6), but the witness
9 can answer this and any other series of questions
10 you have that have unclassified answers and are
11 within her personal knowledge.

12 THE WITNESS: Yes, I've seen this
13 document before. It's been quite some time.

14 BY MR. ABDO:

15 Q Can you tell us what it is?

16 A It's the Comprehensive National
17 Cybersecurity Initiative.

18 There it is. Look at that.

19 Q Would you turn to page 3 of it, about
20 halfway down, two-thirds of the way down, the
21 sentence beginning, "DHS is currently conducting
22 a[n] exercise" -- I think they meant an

1 exercise -- "to pilot the EINSTEIN 3 capabilities
2 described in this initiative based on technology
3 developed by NSA to solidify processes for
4 managing and protecting information gleaned from
5 observed cyber intrusions."

6 A Yes.

7 Q So is it true that the Einstein 3
8 program was piloted based on technology developed
9 by the NSA?

10 MR. PATTON: Just a moment.

11 (Counsel conferring.)

12 THE WITNESS: Do you have the date of
13 this document?

14 BY MR. ABDO:

15 Q I believe it's 2010, but I don't know
16 off the top of my head.

17 A Could I see your Einstein 3 PIA?

18 Q We've got another copy of it. Can we
19 mark this too, Dawn?

20 (Deposition Exhibit 49 was
21 marked for identification.)

22

1 BY MR. ABDO:

2 Q So just for the record, you're now
3 looking at what's been marked as Exhibit 49.

4 Do you recognize that?

5 A Yes.

6 Q What is that document?

7 A The Privacy Impact Assessment for the
8 National Protection and Programs Directorate,
9 Department of Homeland Security, Einstein 3
10 Accelerated (E3A), dated April 19th, 2013.

11 Q Okay. And for the record, you
12 participated in the drafting of that assessment?

13 A I reviewed it.

14 Q Okay. If you're not quickly familiar
15 with the answer to a question, that's fine, we can
16 move on. I was just asking whether the
17 Comprehensive National Cybersecurity Initiative --

18 A So my answer to you --

19 MR. PATTON: Just a second.

20 THE WITNESS: I'm sorry.

21 MR. PATTON: Just preserving my
22 objection that both Exhibit 48 and Exhibit 49,

1 that series of questions are outside the scope of
2 30(b)(6), and the witness is answering in her
3 personal capacity.

4 THE WITNESS: To the extent that the
5 CNCI information is from 2010, stating something
6 specific about NSA-developed technology, and not
7 having reviewed this in almost five years, I would
8 have to look at those and really understand
9 whether what was described in 2010 actually got
10 implemented in 2013.

11 MR. ABDO: Understood. Okay.

12 MR. GILLIGAN: Sorry, is that 49
13 there?

14 MR. ABDO: 49, yeah.

15 THE WITNESS: I can read it if you
16 would like me to, but --

17 BY MR. ABDO:

18 Q No, that's okay.

19 Is it correct that in upstream
20 collection that NSA obtains what it calls
21 transactions?

22 A Internet transactions.

1 Q Internet transactions. Sorry, yes,
2 internet transactions.

3 A Yes.

4 Q Do the Internet packets that
5 constitute a single Internet transaction have a
6 common destination?

7 MR. PATTON: Objection. Just a
8 second.

9 (Counsel conferring.)

10 MR. PATTON: We're just trying to see
11 if there's an unclassified response to that.

12 THE WITNESS: Uh-uh.

13 MR. PATTON: Objection, calls for a
14 classified response and information subject to the
15 statutory privileges.

16 Instruct the witness not to answer.

17 THE WITNESS: Instructions will be
18 followed.

19 BY MR. ABDO:

20 Q Okay. Do the Internet packets that
21 constitute a single Internet transaction have a
22 common source?

1 MR. PATTON: Same objection, same
2 instruction.

3 THE WITNESS: Will follow the
4 instructions.

5 BY MR. ABDO:

6 Q Are you familiar with the term "flow"
7 or "network flow" as used in the context of
8 Internet communications?

9 MR. PATTON: Objection, it's beyond
10 the scope of 30(b)(6), and it's calling for an
11 expert opinion.

12 THE WITNESS: I am, but don't make me
13 define them.

14 BY MR. ABDO:

15 Q Is an Internet transaction, as
16 understood by the NSA, the same as a flow or
17 network flow as used in the context of Internet
18 communications?

19 MR. PATTON: Just a moment. I don't
20 think she can answer that.

21 THE WITNESS: Uh-uh, no. No, I can't
22 answer that.

1 (Counsel conferring.)

2 MR. PATTON: Same objection, same
3 instruction.

4 THE WITNESS: And will follow the
5 instruction.

6 BY MR. ABDO:

7 Q And the reason you can't answer is
8 because it would disclose classified information?

9 A No.

10 Q Not because you're not familiar with
11 the definition of "flow"?

12 A No, not because -- no, that is
13 correct. I know what flow is, I just don't --
14 that's classified.

15 Q Okay. Is the definition of "flow"
16 classified?

17 MR. PATTON: Objection, beyond the
18 scope.

19 BY MR. ABDO:

20 Q In general as that term is commonly
21 used in the network communications industry?

22 MR. PATTON: Objection, it's beyond

1 the scope, and calling for telecommunications
2 expert opinion.

3 THE WITNESS: As you've just
4 described, it's the general meaning. There's no
5 specific definition. Internet transaction is an
6 NSA definition. It's not a commonly understood
7 telecommunications one.

8 So it, like -- there was one another
9 we had earlier today. So there's sort of
10 different groups of NSA-specific versus the
11 outside world would know what they are. "Internet
12 transaction" is one of those.

13 BY MR. ABDO:

14 Q What about network flow, flow or
15 network flow?

16 A Those would be the normal everyday use
17 of the words.

18 Q In other words, the NSA doesn't have a
19 special definition of that term?

20 A Correct.

21 Q Okay. Can we take a five-minute
22 break?

1 MR. PATTON: Sure.

2 (A break was taken at 5:21 p.m.)

3 (Resume at 5:35 p.m.)

4 EXAMINATION BY COUNSEL FOR

5 WIKIMEDIA FOUNDATION AND THE ACLU

6 BY MR. TOOMEY:

7 Q Ms. Richards, so I'm going to be
8 asking some --

9 MR. ABDO: Why don't you introduce
10 yourself.

11 BY MR. TOOMEY:

12 Q I'm Patrick Toomey. I'm counsel for
13 Wikimedia Foundation from the American Civil
14 Liberties Union.

15 So carrying on, in the course of
16 upstream surveillance, does the NSA review the
17 contents of communications as they are in transit
18 on the Internet backbone?

19 MR. PATTON: Objection, calls for
20 information that's classified, subject to state
21 secrets, and the other statutory privileges.

22 Instruct the witness not to answer.

1 THE WITNESS: I will follow the
2 instructions.

3 BY MR. TOOMEY:

4 Q Let's focus on the period of June 2015
5 for the questions that follow.

6 In the course of upstream surveillance
7 in June 2015, did the NSA review the contents of
8 communications as they were in transit on the
9 Internet backbone?

10 MR. PATTON: Same objections, same
11 instructions.

12 THE WITNESS: Will follow the -- oh.

13 MR. PATTON: There are unclassified
14 facts that could come out with different
15 questions, but for that particular phrasing,
16 instruct her not to answer.

17 THE WITNESS: Will follow the
18 instructions.

19 BY MR. TOOMEY:

20 Q In the course of upstream surveillance
21 in June 2015, did the NSA scan the contents of
22 communications as they were in transit on the

1 Internet backbone?

2 MR. PATTON: Let me just confer,
3 because there's a specific phrase that you're
4 using that I think is causing both NSA counsel and
5 I as a basis to object on classified information.
6 So I don't want to appear we're overclassifying
7 Einstein 3.

8 MR. GILLIGAN: So we can go off the
9 record.

10 MR. TOOMEY: Let's go off the record
11 for a minute.

12 (Off the record at 5:37 p.m.)

13 (Resume at 6:23 p.m.)

14 MR. PATTON: Can remind us of where we
15 were?

16 MR. TOOMEY: Yes. We're going back on
17 the record, and, Ms. Jaques, if you could read
18 back the previous question, please.

19 (The reporter read back the question.)

20 MR. PATTON: Objection to the question
21 to the extent it calls for classified information
22 and information protected by the statutory

1 privileges. The witness can answer the question
2 to the extent unclassified.

3 THE WITNESS: So I think what you're
4 asking is sort of a two-part question, and so I
5 wanted to unpack and provide the unclassified
6 aspects of it, and then sort of acknowledge that
7 we've got the classified.

8 So as part of the upstream, we scan
9 the content of the Internet transactions, and we
10 did that in 2015.

11 As to the question of basically the in
12 transit or the location, that piece is classified.

13 BY MR. TOOMEY:

14 Q Thank you. In June of 2015, in the
15 course of upstream surveillance, did the NSA scan
16 the application layer data of communications that
17 transit the Internet backbone?

18 MR. PATTON: I'm just listening to
19 your question. There's a slight difference in
20 that that I just need to consult.

21 (Counsel conferring.)

22 MR. PADGETT: Could you read the

1 question?

2 (The reporter read back the question.)

3 THE WITNESS: It's classified.

4 MR. PATTON: There's something

5 unclassified.

6 MR. PADGETT: Can we just go off the

7 record for a second?

8 (Off the record at 6:26 p.m.)

9 (Resume at 6:28 p.m.)

10 MR. PATTON: And there may be a lot of

11 these back and forth on this, so ...

12 THE WITNESS: Can you repeat the

13 question, please?

14 (The reporter read back the question.)

15 MR. PATTON: Objection to the extent

16 it calls for classified information or information

17 protected by the statutory privileges.

18 The witness can answer to the extent

19 unclassified about June 2015.

20 THE WITNESS: So to make sure I'm

21 accurately -- I want to make sure I'm

22 understanding the question and making the

1 distinction.

2 So what you're saying is what I just
3 said was part of upstream in 2015, we scanned the
4 content of Internet transactions.

5 Your next question is are we -- is NSA
6 scanning the application layer of the Internet --
7 of the Internet -- that doesn't make sense -- if
8 we're scanning the Internet -- I'm sorry, the
9 application layer?

10 BY MR. TOOMEY:

11 Q Yes. The question is, in June 2015,
12 did the NSA scan the application layer data of
13 communications that transit the Internet backbone?

14 MR. PATTON: Same objection, same
15 instruction.

16 THE WITNESS: The answer is yes for
17 2015, that we scan certain application data of
18 communications that transit the Internet backbone.

19 BY MR. TOOMEY:

20 Q When you say certain --

21 A Mm-hmm, that's important.

22 Q -- application layer data, what you

1 mean by "certain"?

2 MR. PATTON: Objection, misstates
3 prior testimony. Same objections as before, same
4 instruction.

5 THE WITNESS: I can't go any further.
6 It's classified.

7 BY MR. TOOMEY:

8 Q In unclassified terms, in June 2015,
9 how did the NSA determine whether an Internet
10 transaction contained a selector?

11 MR. PATTON: Object to the extent it
12 calls for -- the whole answer would be classified.
13 The witness can answer to the extent unclassified.

14 THE WITNESS: I just want to refer to
15 see if there's any additional information I can
16 provide to you beyond what we've already given to
17 you.

18 There's no additional information
19 beyond what was provided in the Interrogatories 3,
20 4 and 5, so there's no additional unclassified
21 information beyond the fact that that's conducted.

22

1 BY MR. TOOMEY:

2 Q Is there any classified information
3 that would be responsive to that question?

4 A Yes. This is necessarily incomplete
5 because of the classified nature of the program.

6 Q And you're --

7 MR. PATTON: We're still talking about
8 June 2015?

9 MR. TOOMEY: That's correct, yes.

10 THE WITNESS: Still June 2015, yes.

11 BY MR. TOOMEY:

12 Q And you're refusing to provide that
13 information on the basis of an instruction from
14 your lawyer?

15 MR. PATTON: I haven't instructed her
16 on that, but her answer did indicate what was
17 unclassified, which was the interrogatory
18 responses to 3, 4 and 5, I believe she said, and I
19 believe she also said that anything else beyond
20 that was classified.

21 And there wasn't a pending question,
22 but to the extent that you asked her a question

1 such as tell me what that classified information
2 is, I would instruct her not to answer.

3 BY MR. TOOMEY:

4 Q Understood. Thank you.

5 Today does the NSA scan the
6 application layer data of communications that
7 transit the Internet backbone?

8 MR. PATTON: Objection, calls for
9 information that's classified, subject to the
10 statutory privileges before mentioned, and
11 instruct the witness not to answer.

12 THE WITNESS: I follow those
13 instructions.

14 BY MR. TOOMEY:

15 Q In June of 2015, if a transaction was
16 scanned by the NSA in the course of upstream
17 surveillance, and the NSA determined that it did
18 not contain a selector, was the communication
19 eliminated?

20 MR. PATTON: Just a moment.

21 (Counsel conferring.)

22 MR. PADGETT: Can you read the

1 question back?

2 (The reporter read back the question.)

3 MR. PATTON: Can we just go off the
4 record for a second?

5 MR. TOOMEY: Can we go off the record?

6 (Off the record at 6:34 p.m.)

7 (Resume at 6:37 p.m.)

8 (The reporter read back the question.)

9 MR. PATTON: Object to that question
10 to the extent it calls for classified information
11 or otherwise privileged information.

12 The witness can answer to the extent
13 unclassified.

14 THE WITNESS: So the process by which
15 Internet transaction is filtered, and then
16 scanned, if it doesn't have a test selector or
17 isn't about the target, then that means that
18 information will not be ingested into the NSA
19 repository.

20 BY MR. TOOMEY:

21 Q And is that communication eliminated?

22 MR. PATTON: Objection. The question

1 calls for a classified answer, as well as an
2 unclassified one, which the witness has already
3 given.

4 The witness can answer again and
5 provide the unclassified answer.

6 THE WITNESS: I have nothing
7 additional beyond. If you'd like me to repeat
8 what I said, I'd be happy to.

9 BY MR. TOOMEY:

10 Q No need to repeat.

11 And to the extent there is -- is there
12 classified information that you are not providing
13 in response?

14 A Yes.

15 Q Today, does the NSA seek to acquire
16 email communications to and from its targets using
17 upstream surveillance?

18 MR. PATTON: Object to the question.
19 It calls for classified information and
20 information protected by the statutory privileges.

21 I instruct the witness not to answer.

22 THE WITNESS: I will follow

1 instructions.

2 BY MR. TOOMEY:

3 Q Could you please describe as fully as
4 possible how, in June 2015, the NSA determined
5 whether an Internet transaction contained a
6 selector?

7 MR. PATTON: Objection to the extent
8 it calls for classified information, or
9 information otherwise protected by the statutory
10 privileges.

11 The witness can answer if she can
12 regarding the unclassified response to that
13 question.

14 THE WITNESS: There's no additional
15 unclassified information beyond what I've already
16 said.

17 BY MR. TOOMEY:

18 Q Thank you. Beyond what you've already
19 said or what appears in the NSA's discovery
20 responses, could you please describe as fully as
21 possible how the NSA today determines whether an
22 Internet transaction contains a selector?

1 MR. PATTON: Objection. The question
2 calls for classified information and information
3 protected by the statutory privileges, and
4 instruct the witness not to answer.

5 THE WITNESS: I will --

6 MR. ABDO: Rodney, can we just try to
7 compress if it's the same objection? Thanks.

8 MR. PATTON: If you ask the same --
9 exactly those kind of questions, I will do my
10 best. Thank you.

11 THE WITNESS: I will follow the
12 instructions.

13 BY MR. TOOMEY:

14 Q In the course of upstream surveillance
15 in June 2015, did the NSA scan communications in
16 bulk?

17 MR. PATTON: Objection, calls for
18 classified information. Just check and see if
19 there's a --

20 (Counsel conferring.)

21 MR. PATTON: Just a second. Can we go
22 off the record?

1 (Off the record at 6:40 p.m.)

2 (Resume at 6:43 p.m.)

3 MR. TOOMEY: Can you please repeat the
4 question?

5 (The reporter read back the question.)

6 MR. PATTON: Objection. We'd need to
7 go into the SCIF to discuss whether or not there's
8 an unclassified response to this.

9 THE WITNESS: But before we do that,
10 can you give a definition of what you mean by
11 "bulk," scanning communications in bulk?

12 BY MR. TOOMEY:

13 Q Does the NSA ever use the term "bulk"
14 in connection with surveillance activities?

15 A Yes.

16 Q And what do you understand the NSA to
17 mean by the term "bulk"?

18 A To do collection without -- let's see,
19 the definition is in Presidential Policy Directive
20 No. 28, which I don't have with me, but it's
21 something roughly along the lines of collection
22 without discriminates.

1 Q That document describes bulk
2 collection to the best of your recollection?

3 A Yeah.

4 Q Yes?

5 A Or it has a general description of it,
6 and then carries on to provide when NSA can
7 conduct bulk -- for what purposes the information
8 can be used.

9 Q And so my question here is about
10 whether in June 2015, in the course of upstream
11 surveillance, the NSA scanned communications in
12 bulk?

13 MR. PATTON: Go off the record.

14 (Off the record at 6:45 p.m.)

15 (Resume at 6:57 p.m.)

16 (The reporter read back the question.)

17 MR. PATTON: Objection to the extent
18 it calls for classified information and
19 information protected by the statutory privileges.

20 Instruct the witness to answer the
21 question to the extent able in unclassified terms.

22 THE WITNESS: So in terms of

1 unclassified, the best information I can give to
2 you is in the PCLOB report, which is Deposition
3 Exhibit 43, page 103. The last line of the first
4 paragraph that states the program does not operate
5 by collecting communications in bulk.

6 BY MR. TOOMEY:

7 Q Could you please answer my question
8 about whether in June 2015 the NSA scanned
9 communications in bulk?

10 MR. PATTON: Objection. The answer to
11 that question, to the extent not already provided
12 by the witness, is classified and subject to
13 statutory privileges.

14 Instruct the witness not to answer.

15 MR. GILLIGAN: And state secrets. Did
16 you say state secrets?

17 MR. PATTON: I said classified. I'm
18 trying to shorten it.

19 MR. GILLIGAN: Oh, okay. We're all
20 for that.

21 MR. PATTON: Also subject to the state
22 secrets privilege.

1 THE WITNESS: I will follow the
2 instructions of my counsel.

3 BY MR. TOOMEY:

4 Q In the context of upstream
5 surveillance, is scanning a communication
6 different from collecting a communication?

7 A Yes.

8 Q In the course of upstream surveillance
9 today, does the NSA scan communications in bulk?

10 MR. PATTON: Objection. The question
11 calls for information that's classified, subject
12 to the state secrets, and to the statutory
13 privileges. Instruct the witness not to answer.

14 THE WITNESS: I will not answer.

15 BY MR. TOOMEY:

16 Q In the course of upstream surveillance
17 today, does the NSA scan the metadata of
18 communications in bulk?

19 MR. PATTON: Same objections, same
20 instruction.

21 THE WITNESS: Will follow the
22 instruction.

1 BY MR. TOOMEY:

2 Q In the course of upstream surveillance
3 in 2015, did the NSA copy communications in bulk?

4 MR. PATTON: Same objection, same
5 instructions.

6 THE WITNESS: Follow instructions.

7 BY MR. TOOMEY:

8 Q In the course of upstream surveillance
9 today, does the NSA copy communications in bulk?

10 MR. PATTON: Same objection, same
11 instruction.

12 THE WITNESS: Follow the instructions.

13 BY MR. TOOMEY:

14 Q In the course of upstream surveillance
15 in June of 2015, did the NSA deliberately attempt
16 to filter out any of Wikimedia's international
17 communications?

18 MR. PATTON: Objection. Same
19 objection, same instruction.

20 THE WITNESS: Will follow the
21 instruction.

22

1 BY MR. TOOMEY:

2 Q In the course of upstream surveillance
3 today, does the NSA deliberately attempt to filter
4 out any of Wikimedia's international
5 communications?

6 MR. PATTON: Same instruction, same
7 objections.

8 THE WITNESS: Will follow instruction.

9 BY MR. TOOMEY:

10 Q In the course of upstream surveillance
11 in June of 2015, did the NSA deliberately attempt
12 to filter out all of Wikimedia's communications?

13 MR. PATTON: Same objection, same
14 instruction.

15 THE WITNESS: Will follow instruction.

16 BY MR. TOOMEY:

17 Q In the course of upstream surveillance
18 today, does the NSA deliberately attempt to filter
19 out all Wikimedia communications?

20 MR. PATTON: Same objection, same
21 instruction.

22 THE WITNESS: Will follow

1 instructions.

2 BY MR. TOOMEY:

3 Q Does the NSA contend as a factual
4 matter in this case that it deliberately filters
5 out all Wikimedia communications?

6 MR. PATTON: Just a moment.

7 (Counsel conferring.)

8 MR. PATTON: Could you go off the
9 record?

10 (Off the record at 7:01 p.m.)

11 (Resume at 7:08 p.m.)

12 MR. TOOMEY: Could you read back the
13 last question?

14 (The reporter read back the question.)

15 MR. PATTON: Object to the question as
16 beyond the scope of 30(b)(6), improper 30(b)(6)
17 question. The witness can answer in her personal
18 capacity.

19 THE WITNESS: In my personal capacity,
20 I have no idea, but to the extent that we do or do
21 not filter something out would be classified in
22 any event.

1 BY MR. TOOMEY:

2 Q Does anyone at the NSA know whether
3 the NSA contends in this case, as a factual
4 matter, that it deliberately filters out all
5 Wikimedia communications?

6 MR. PATTON: Same objections, same
7 instruction.

8 THE WITNESS: It's classified. I
9 mean --

10 MR. PATTON: That's not the question
11 he's asking.

12 THE WITNESS: That's not the question.

13 MR. PATTON: That's not the question
14 he's asking.

15 THE WITNESS: So same answer, which I
16 have no idea, and to the extent it is or isn't
17 would be classified.

18 BY MR. TOOMEY:

19 Q To the extent it is or isn't what?

20 A Filtering out Wikimedia, as you were
21 contending in your question.

22 Q My question is whether the NSA

1 contends that it is filtering out Wikimedia's
2 communications. Do you know the answer to that
3 question?

4 MR. PATTON: Objection. Same
5 objections as before, and adding asked and
6 answered.

7 THE WITNESS: I have nothing else to
8 say on the topic.

9 MR. TOOMEY: Ms. Jaques, could you
10 mark as the next exhibit this document, please?

11 (Deposition Exhibit 50 was
12 marked for identification.)

13 BY MR. TOOMEY:

14 Q So the court reporter has handed
15 Ms. Richards Exhibit 50, which is titled
16 Memorandum of Points and Authorities in Support of
17 Defendant's Motion to Compel Discovery. Sorry, we
18 don't have as many copies of this one, sorry.

19 Could you please tell me what this
20 document is?

21 MR. PATTON: Objection, lacks
22 foundation.

1 BY MR. TOOMEY:

2 Q You can answer.

3 Have you seen this document before?

4 A I have not seen this document before.

5 Q Can you read the title of the
6 document, please?

7 A Sure. Memorandum of Points and
8 Authorities in Support of Defendant's Motion to
9 Compel Discovery, dated March 26, 2018.

10 Q Thank you. Could you please turn to
11 page 11 --

12 A Sure.

13 Q -- of Exhibit 50?

14 I'm going to read a sentence from the
15 document in the last paragraph toward the bottom
16 of the page.

17 "An entity seeking to conduct
18 surveillance on the Internet that lacks the
19 ability to decipher encrypted HTTPS communications
20 may well decide to program its surveillance
21 equipment to disregard such communications
22 altogether."

1 Has the NSA programmed its
2 surveillance equipment to disregard HTTPS
3 communications altogether?

4 MR. PATTON: Objection, the question
5 calls for classified information protected by the
6 state secrets privilege and information protected
7 by the statutory privileges.

8 Instruct the witness not to answer the
9 question.

10 THE WITNESS: I'll follow the
11 instructions.

12 BY MR. TOOMEY:

13 Q Can we now turn to page 12 of
14 Exhibit 50. I'm going to read a passage from the
15 first paragraph toward the top of the page.

16 "If the NSA lacked the ability to
17 decipher HTTPS communications," dot dot dot, "then
18 nothing --

19 MR. PATTON: It's an important dot dot
20 dot.

21 MR. TOOMEY: We'll get there. I'm
22 going to start again. I'm going to read the

1 passage again.

2 "If the NSA lacked the ability to
3 decipher HTTPS communications ... then nothing in
4 the 'technical rules of how the Internet
5 works' ... would prevent the configuration of
6 devices used in connection with Upstream
7 surveillance to exclude HTTPS communications."

8 Does the NSA have the ability to
9 decipher HTTPS communications?

10 MR. PATTON: Objection, outside the
11 scope of 30(b)(6), and the question calls for
12 classified information protected by the state
13 secrets privilege, statutory privileges.

14 Instruct the witness not to answer.

15 THE WITNESS: I will follow the
16 instructions.

17 BY MR. TOOMEY:

18 Q I'm going to read a passage now from
19 page 12 of Exhibit 50 in the second paragraph
20 toward the bottom of the page.

21 "If the NSA deemed communications to
22 and from Wikimedia's websites to be of low

1 foreign-intelligence value, then nothing in the
2 technical rules of the Internet would prevent the
3 configuration of equipment used in connection with
4 Upstream surveillance to ignore all communications
5 having source or destination IP addresses
6 associated with Wikimedia."

7 Has the NSA configured its
8 surveillance equipment to ignore all
9 communications having source or destination
10 IP addresses associated with Wikimedia?

11 MR. PATTON: Objection, beyond the
12 scope of 30(b)(6), and objection, it calls for
13 classified information, subject to state secrets,
14 statutory privileges.

15 Instruct the witness not to answer.

16 THE WITNESS: Will follow the
17 instructions.

18 BY MR. TOOMEY:

19 Q Does the NSA deem communications to
20 and from Wikimedia's websites to be of low foreign
21 intelligence value?

22 MR. PATTON: Same objection, same

1 instruction.

2 THE WITNESS: Will follow instruction.

3 BY MR. TOOMEY:

4 Q Would the NSA be permitted under
5 upstream surveillance today to collect a targets
6 communications with a U.S.-based website?

7 A How is this question different than
8 the last one?

9 MR. PATTON: I'm not sure it is.

10 THE WITNESS: Okay.

11 MR. PATTON: Can we go off the record?

12 (Off the record at 7:16 p.m.)

13 (Resume at 7:23 p.m.)

14 BY MR. TOOMEY:

15 Q Back on the record.

16 Ms. Jaques, could you please read back
17 the prior question?

18 (The reporter read back the question.)

19 MR. PATTON: We object to that
20 question. It calls for a classified answer.

21 The witness has reviewed during the
22 break the currently applicable declassified and

1 public targeting procedures, and there's no
2 unclassified answer we can give. So as a result,
3 we object to the question, it calls for classified
4 information, subject to the state secrets and
5 subject to the statutory privileges, and instruct
6 the witness not to answer.

7 THE WITNESS: I'll follow the
8 instructions.

9 BY MR. TOOMEY:

10 Q Is it possible that a targets
11 communications with Wikimedia could contain
12 foreign intelligence information that would be of
13 interest to the NSA?

14 (Counsel conferring.)

15 MR. PATTON: You'll like this one.

16 Object as beyond the scope of 30(b)(6)
17 and speculative. The witness can answer in her
18 own capacity to the extent the answer is
19 unclassified.

20 THE WITNESS: It's speculative. I
21 can't speak to who would or wouldn't be, what
22 particular individual might be targeted. If an

1 analyst decides a particular selector or person
2 meets the targeting standards, then that would be
3 appropriate.

4 BY MR. TOOMEY:

5 Q Could the term "foreign intelligence
6 information" encompass information that a person
7 surveilled using upstream surveillance is reading
8 on one of Wikimedia's websites?

9 MR. PADGETT: Could I get that read
10 back?

11 (The reporter read back the question.)

12 MR. PADGETT: Do you want to talk
13 about it? Let's go off the record.

14 (Off the record at 7:26 p.m.)

15 (Resume at 7:28 p.m.)

16 MR. TOOMEY: Ms. Jaques, could you
17 please read back the last question?

18 (The reporter read back the question.)

19 MR. PATTON: Objection, beyond the
20 scope of 30(b)(6), speculative, and calls for
21 legal conclusion. The witness can answer in her
22 personal capacity.

1 THE WITNESS: I'm sorry, can you read
2 that question one more time?

3 (The reporter read back the question.)

4 MR. PATTON: Same objections.

5 THE WITNESS: Can we go off the
6 record? Sorry.

7 (Off the record at 7:30 p.m.)

8 (Resume at 7:32 p.m.)

9 MR. PATTON: Same objections, same
10 instruction.

11 THE WITNESS: So you have a couple of
12 different things, which is why we kept having to
13 walk outside to unpack that, and so I want to
14 unpack what's classified and what's unclassified.

15 So the first part of your question
16 would be is there possibly foreign intelligence
17 information on the Wikimedia sites, to which the
18 answer, from my perspective, is there could be. I
19 don't actually know. I haven't trolled through
20 the Wikimedia websites, but it's possible.

21 The second part of that question had
22 to do with how it would function in the upstream

1 context, and that piece of it is what's
2 classified.

3 BY MR. TOOMEY:

4 Q Similar question, could the term
5 "foreign intelligence information" encompass
6 information that a person surveilled using
7 upstream surveillance is contributing to one of
8 Wikimedia's websites?

9 MR. PATTON: Same objections, same
10 instruction.

11 THE WITNESS: I would give the same
12 answer, which is I would separate those two pieces
13 to say it's possible that somebody at one of your
14 contributors is creating foreign intelligence
15 information in a hypothetical. I don't actually
16 know.

17 To the extent it has anything to do
18 with upstream, any piece of that would be
19 classified.

20 BY MR. TOOMEY:

21 Q And you're not answering that portion
22 to that aspect of the question based on your

1 lawyer's instruction?

2 A Correct.

3 MR. PATTON: Not based on my
4 instruction. When we broke the last time, the
5 witness had a question as to what aspect of this
6 that she could talk about. She provided the
7 information that she could talk about and
8 indicated to you there's another classified
9 component, and the nature of that classified
10 information, and she declined to answer based on
11 that.

12 Had you asked her a follow-up question
13 as to the content of that classified information,
14 I would have instructed her not to answer.

15 BY MR. TOOMEY:

16 Q Could you please provide any
17 classified information that you believe my
18 question calls for?

19 MR. PATTON: I respect that question.
20 It keeps our record clean.

21 Object to the question to the extent
22 it calls for classified information, information

1 subject to the statutory privileges, and instruct
2 the witness not to answer.

3 THE WITNESS: I will follow those
4 instructions.

5 BY MR. TOOMEY:

6 Q Today, does the NSA intentionally
7 attempt to filter out all HTTPS communications
8 from upstream surveillance?

9 MR. PATTON: Objection, the question
10 calls for classified information, subject to the
11 state secrets and to the statutory privileges.

12 Instruct not to answer.

13 THE WITNESS: Will follow the
14 instruction.

15 BY MR. TOOMEY:

16 Q Same question, but for June 2015. Did
17 the NSA at that time intentionally attempt to
18 filter out all HTTPS communications from upstream
19 surveillance?

20 MR. PATTON: Same objections, same
21 instruction.

22 THE WITNESS: Will follow the

1 instruction.

2 BY MR. TOOMEY:

3 Q Today, does the NSA intentionally
4 attempt to filter out all Internet communications
5 that use TCP port 443?

6 MR. PATTON: Same objections, same
7 instruction.

8 THE WITNESS: Follow the instruction.

9 BY MR. TOOMEY:

10 Q In June 2015, did the NSA
11 intentionally attempt to filter out all Internet
12 communications that used TCP port 443?

13 MR. PATTON: Same objections, same
14 instruction.

15 THE WITNESS: Follow the instruction.

16 BY MR. TOOMEY:

17 Q Today, does the NSA intentionally
18 filter out all encrypted VPN communications?

19 MR. PATTON: Same objection, same
20 instruction.

21 THE WITNESS: Will follow the
22 instruction.

1 BY MR. TOOMEY:

2 Q In June 2015, did the NSA
3 intentionally filter out all encrypted VPN
4 communications?

5 MR. PATTON: Same objection, same
6 instruction.

7 THE WITNESS: Follow the instruction.

8 BY MR. TOOMEY:

9 Q Today, does the NSA intentionally
10 filter out all open VPN communications?

11 MR. PATTON: Same objection, same
12 instruction.

13 THE WITNESS: Follow the instruction.

14 BY MR. TOOMEY:

15 Q In June 2015, did the NSA
16 intentionally filter out all open VPN
17 communications?

18 MR. PATTON: Same objection, same
19 instruction.

20 THE WITNESS: Will follow the
21 instruction.

22

1 BY MR. TOOMEY:

2 Q Today does the NSA intentionally
3 filter out Wikimedia's encrypted VPN
4 communications?

5 MR. PATTON: Same objection, same
6 instruction.

7 THE WITNESS: Will follow the
8 instruction.

9 BY MR. TOOMEY:

10 Q In June 2015, did the NSA
11 intentionally filter out Wikimedia's
12 encrypted VPN communications?

13 MR. PATTON: Same objection, same
14 instruction.

15 THE WITNESS: Will follow the
16 instruction.

17 BY MR. TOOMEY:

18 Q Can you please describe in as much
19 detail as necessary to provide a complete answer
20 how the NSA implemented any changes to "about"
21 collection during or after April 2017?

22 MR. PATTON: Just a moment.

1 (Counsel conferring.)

2 MR. PATTON: Object to the question to
3 the extent it calls for classified information and
4 information protected by the statutory privileges.

5 If there is an unclassified response,
6 the witness can provide it.

7 MR. TOOMEY: Rodney, to be clear, just
8 so we can try to consolidate things, are you also
9 instructing the witness not to provide any
10 unclassified information?

11 MR. PATTON: No. I'm instructing --

12 MR. TOOMEY: Sorry, any classified
13 information, just so --

14 MR. PATTON: I would love her to
15 provide any unclassified information, but if
16 there's any classified information, I'm
17 instructing her not to answer.

18 There may be some unclassified
19 information that she can provide, and that's what
20 I'm authorizing her to do.

21 THE WITNESS: As of 2017, April 2017,
22 NSA changed the way it did its upstream collection

1 so that it no longer collected the "abouts"
2 collection.

3 There's not any additional information
4 beyond the information that was either in the 2017
5 opinion or our associated unclassified information
6 that NSA put out on its website.

7 MR. PATTON: That's the April 2017
8 FISC opinion?

9 THE WITNESS: Sorry, yes, the
10 April 2017 FISC opinion.

11 BY MR. TOOMEY:

12 Q Besides the information you just
13 identified, is there any other unclassified
14 information that you could provide to this
15 question?

16 MR. PATTON: Same objection, same
17 instruction.

18 THE WITNESS: Not that I'm aware of.

19 BY MR. TOOMEY:

20 Q Is there classified information that
21 would answer the question that you are not
22 providing at the instruction of your attorney?

1 MR. PATTON: Objection to the extent
2 it calls for classified information.

3 If the witness's answer is yes or no,
4 she can provide that information.

5 THE WITNESS: Yes.

6 BY MR. TOOMEY:

7 Q Apart from the information you
8 identified in response to my last question, could
9 you please describe how the NSA attempts to avoid
10 collecting communications that are solely about a
11 selector?

12 MR. PATTON: Object to the form of the
13 question, vague as to time. Potentially
14 classified.

15 (Counsel conferring.)

16 MR. PATTON: Would you mind rephrasing
17 to specify the time period?

18 MR. TOOMEY: Sure, I'll rephrase.

19 MR. PATTON: Thanks.

20 BY MR. TOOMEY:

21 Q Apart from the unclassified
22 information that you provided in response to my

1 last question, could you please describe in as
2 much detail as necessary to provide a complete
3 answer how, after April 2017, the NSA attempts to
4 avoid collecting communications that are solely
5 about a selector?

6 (Counsel conferring.)

7 MR. PATTON: Can we go off the record?

8 (Off the record at 7:42 p.m.)

9 (Resume at 7:43 p.m.)

10 MR. PATTON: Would you mind reading
11 back the question, please?

12 (The reporter read back the question.)

13 MR. PATTON: Object to the question to
14 the extent it calls for classified information.

15 If the witness's answer is yes or no,
16 she can answer that.

17 THE WITNESS: There's no additional
18 information beyond what I've pointed to. I have
19 no additional --

20 BY MR. TOOMEY:

21 Q There's no additional unclassified
22 information?

1 A No additional unclassified
2 information.

3 Q And is there classified information
4 that you're not providing at the instruction of
5 your counsel?

6 A Yes.

7 Q Apart from the unclassified
8 information that you provided in response to my
9 question, my previous question, please describe in
10 as much detail as necessary to provide a complete
11 answer how the change in April 2017 affected the
12 filtering of communications subject to upstream
13 surveillance?

14 (Counsel conferring.)

15 MR. PATTON: Can we go off the record?

16 (Off the record at 7:45 p.m.)

17 (Resume at 7:59 p.m.)

18 MR. TOOMEY: Could you please read
19 back the last question?

20 (The reporter read back the question.)

21 MR. PATTON: Objection to the question
22 to the extent it calls for classified information

1 and information subject to the statutory
2 privileges.

3 To the extent the witness is aware of
4 an unclassified answer, she may provide a
5 response.

6 THE WITNESS: The only point I would
7 provide to you on this, which is not necessarily
8 anything new, but we still stand behind the
9 information about how the filtering works in our
10 Civil Liberties and Privacy Office Report, and
11 that remains true today as it did in 2014, when we
12 wrote the report.

13 BY MR. TOOMEY:

14 Q Is there classified information you're
15 not providing in response to my question at the
16 instruction of your lawyer?

17 A Yes.

18 Q Thank you. Similar question, apart
19 from the unclassified information that you've
20 already provided today, could you please describe
21 in as much detail as necessary to give a complete
22 answer how the change in April 2017 affected the

1 scanning of communications subject to upstream
2 surveillance?

3 MR. PATTON: Object to the question,
4 calls for classified information and information
5 subject to statutory privileges, and instruct the
6 witness not to answer the question.

7 THE WITNESS: I will not answer.

8 BY MR. TOOMEY:

9 Q Apart from the unclassified
10 information you've already provided today, please
11 describe in as much detail as necessary to give a
12 complete answer which portions of an Internet
13 transaction are scanned for selectors after
14 April 2017?

15 MR. PATTON: Same objection, same
16 instruction.

17 THE WITNESS: Will follow the
18 instruction.

19 BY MR. TOOMEY:

20 Q Since April 2017, does the NSA first
21 scan the contents of communications for selectors,
22 and then discard those that are solely about a

1 selector?

2 MR. PATTON: Just a moment.

3 (Counsel conferring.)

4 MR. PATTON: Same objection, same
5 instruction.

6 THE WITNESS: Will follow the
7 instruction.

8 BY MR. TOOMEY:

9 Q Since April 2017, does the NSA copy
10 the contents of communications prior to scanning
11 those communications?

12 MR. PATTON: Same objection, same
13 instruction.

14 THE WITNESS: Will follow the
15 instruction.

16 BY MR. TOOMEY:

17 Q Since April 2017, does the NSA copy
18 the application layer data of packets prior to
19 scanning the communications to which they belong?

20 MR. PATTON: Same objection, same
21 instruction.

22 THE WITNESS: Will follow the

1 instruction.

2 BY MR. TOOMEY:

3 Q Since April 2017, does the NSA review
4 any portion of the contents of communications for
5 selectors?

6 MR. PATTON: Object to the form, vague
7 as to "review," and object to the question as
8 seeking classified information, subject to the
9 state secrets and statutory privileges, and
10 instruct the witness not to answer.

11 THE WITNESS: Will follow the
12 directions.

13 BY MR. TOOMEY:

14 Q Would your answer have been the same
15 if I had said does the NSA scan any portion of the
16 contents of communications for selectors --

17 MR. PATTON: One moment.

18 MR. TOOMEY: -- since April 2017?

19 MR. PATTON: Just a moment.

20 (Counsel conferring.)

21 MR. PATTON: Could you rephrase the
22 question in terms of an Internet transaction?

1 It's fine if you don't, but that might take care
2 of something.

3 MR. TOOMEY: Sure, let me rephrase.

4 BY MR. TOOMEY:

5 Q Since April 2017, does the NSA scan
6 any portion of the contents of Internet
7 transactions for selectors?

8 (Counsel conferring.)

9 MR. PATTON: I think we need to go off
10 the record.

11 MR. TOOMEY: Let's go off the record.

12 (Off the record at 8:04 p.m.)

13 (Resume at 8:18 p.m.)

14 MR. TOOMEY: Could you please read
15 back the prior question?

16 (The reporter read back the question.)

17 MR. PATTON: Objection to the question
18 to the extent it seeks classified information and
19 information protected by the statutory privileges.

20 The witness can answer the question to
21 the extent that it's unclassified.

22 THE WITNESS: So NSA scans a portion

1 of the Internet transaction to identify the task
2 selector in order to acquire the Internet
3 transaction that is to or from the target.

4 To go any further in terms of whether
5 it's in the content or the metadata, or any of
6 those further things, is classified.

7 MR. PATTON: And I instruct her not to
8 answer beyond that unclassified answer.

9 BY MR. TOOMEY:

10 Q And you're following your counsel's
11 instruction?

12 A I am.

13 Q So just to confirm, what portions of
14 the contents of Internet transactions are scanned
15 for selectors since April 2017?

16 MR. PATTON: I was waiting for you to
17 finish.

18 Objection to the extent that it
19 mischaracterizes the prior testimony. The witness
20 can answer the question to the extent it's
21 unclassified. Any classified answer, I instruct
22 her not to provide.

1 THE WITNESS: You're asking me what
2 portion of the Internet transaction we're
3 scanning, just so I'm clarifying?

4 BY MR. TOOMEY:

5 Q Correct, after April 2017.

6 A After April 2017?

7 I am not able to answer that question.
8 The answer to that question is classified.

9 Q Since April 2017, does the NSA review
10 the entire contents of communication of
11 Internet -- let me strike that. I'll restate the
12 question.

13 Since April 2017, does the NSA scan
14 the entire contents of Internet transactions for
15 selectors?

16 MR. PATTON: Objection, calls for
17 classified information, information protected by
18 the statutory privileges, and instruct the witness
19 not to answer.

20 THE WITNESS: I will follow the
21 instructions.

22

1 BY MR. TOOMEY:

2 Q Since April 2017, does the NSA scan
3 any portion of the application layer data of
4 Internet transactions for selectors?

5 MR. PATTON: Same objection, same
6 instructions.

7 THE WITNESS: Will follow the
8 instruction.

9 BY MR. TOOMEY:

10 Q And if I were to ask what portions of
11 Internet transaction the NSA scans for selectors,
12 would your answer be the same?

13 MR. PATTON: Are we talking about post
14 April 2017?

15 MR. TOOMEY: Yes, post April 2017.

16 MR. PATTON: Same objection, same
17 instruction.

18 THE WITNESS: Yes, my answer would be
19 the same.

20 BY MR. TOOMEY:

21 Q And since April 2017, does the NSA
22 scan the entire application layer of Internet

1 transactions for selectors?

2 MR. PATTON: Same objection, same
3 instruction.

4 THE WITNESS: Will follow the
5 instructions.

6 BY MR. TOOMEY:

7 Q Are there any barriers to the NSA
8 restarting "about" collection today?

9 MR. PATTON: Objection, beyond the
10 scope of 30(b)(6) notice, calls for a legal
11 conclusion.

12 THE WITNESS: NSA --

13 MR. PATTON: Just a second. There may
14 be an additional objection.

15 (Counsel conferring.)

16 MR. PATTON: I would just add that to
17 the extent that the question calls for a
18 classified answer, I object to that based on the
19 state secrets privilege and the statutory
20 privileges. If there's an unclassified answer,
21 the witness can provide.

22 And my colleague let's me know that

1 there's also a vagueness objection.

2 BY MR. TOOMEY:

3 Q You can answer to the extent --

4 A Sure. With the passage of the 702 FAA
5 Reauthorization, there is a requirement for once
6 the FISC has approved us going back to "abouts,"
7 that we have to give a 30-day notice to Congress
8 before we can move forward with any type of
9 collection.

10 MR. PATTON: Any type of "abouts"
11 collection.

12 THE WITNESS: Any type of "abouts"
13 collection. Apologies for not being clear.

14 BY MR. TOOMEY:

15 Q Do you consider that statutory
16 requirement a barrier to the NSA restarting
17 "about" collection?

18 MR. PATTON: Objection, beyond the
19 scope of 30(b)(6), vague as to what a barrier is,
20 calls for a legal conclusion.

21 The witness can answer in her own
22 capacity.

1 THE WITNESS: Can you explain what you
2 mean by barrier? I mean, to the extent -- yeah.

3 BY MR. TOOMEY:

4 Q I mean by barrier any obstacle,
5 impediment to restarting "about" collection.

6 MR. PATTON: Same set of objections,
7 and add in the one that to the extent there's any
8 classified response to that, the witness should
9 not answer as to classified information. You can
10 otherwise provide an unclassified answer in your
11 personal capacity.

12 THE WITNESS: Certainly getting FISC
13 approval and notifying Congress are additional
14 barriers beyond just being able to turn it on
15 tomorrow.

16 BY MR. TOOMEY:

17 Q And could you please state whether
18 there is any -- first of all, are there any other
19 barriers besides the two that you just described?

20 MR. PATTON: Just a moment.

21 (Counsel conferring.)

22 MR. PATTON: Go off the record.

1 (Off the record at 8:25 p.m.)

2 (Resume at 8:36 p.m.)

3 MR. TOOMEY: All right, let's go back
4 on the record.

5 THE WITNESS: Can you read it back?

6 (The reporter read back the question.)

7 THE WITNESS: Are you answering first
8 or am I?

9 MR. PATTON: Sorry, putting this away.
10 Object to the question to the extent
11 it calls for classified information and
12 information protected by the statutory privileges.

13 The witness can answer the question to
14 the extent unclassified.

15 THE WITNESS: So as noted, the FISC
16 would have to approve us going back to doing
17 "abouts," so we would have to address any of the
18 underlying issues as it relates to getting the
19 FISC approval, as were described in the 2017
20 Memorandum Opinion.

21 BY MR. TOOMEY:

22 Q What are those underlying issues?

1 MR. PATTON: Object to the question to
2 the extent it calls for classified information and
3 information protected by the statutory privileges.

4 The witness can answer the question to
5 the extent unclassified.

6 THE WITNESS: So the two unclassified
7 descriptions that were provided in the 2017
8 Memorandum Opinion indicated there were both
9 technological issues, as well as human error
10 issues.

11 BY MR. TOOMEY:

12 Q And what were those issues?

13 MR. PATTON: Objection to the extent
14 it calls for classified information and
15 information protected by the statutory privileges.

16 The witness can answer to the extent
17 unclassified.

18 THE WITNESS: Could I have the 2017 so
19 I can point you to those sections? Do you want to
20 introduce that in? Is that what's coming next?

21 MR. TOOMEY: Could you please mark
22 that?

1 (Deposition Exhibit 51 was
2 marked for identification.)

3 BY MR. TOOMEY:

4 Q Please take a look at Exhibit 51 which
5 the court reporter has just handed you.

6 Could you tell me, are you familiar
7 with this document and what it is?

8 A Yes. This is the Memorandum Opinion
9 and Order of the Foreign Intelligence Surveillance
10 Court dated April 26, 2017.

11 So I will start with page 14 to 15 --

12 MR. GILLIGAN: Sorry, did we mark
13 this?

14 THE WITNESS: Yes, it's 51.

15 So the first indication of this
16 discussion is starting at the bottom of page 14.
17 The sentence begins, "The October 26, 2016 Notice
18 disclosed that an NSA Inspector General review and
19 report and NSA Office of Compliance for Operation
20 verification activities indicated that, with
21 greater frequency than previously disclosed to the
22 Court, NSA analysts had used U.S.-person

1 identifiers to query the results of Internet
2 'upstream' collection, even though NSA's
3 Section 702 minimization procedures prohibited
4 such queries."

5 BY MR. TOOMEY:

6 Q So if I could stop you there.

7 A Sure.

8 Q Is it accurate to say that the
9 technical and human error issues that the FISC
10 identified related to queries of the results of
11 Internet upstream collection?

12 (Counsel conferring.)

13 MR. PATTON: If the answer is yes or
14 no, the witness can answer the question.

15 THE WITNESS: Yes.

16 BY MR. TOOMEY:

17 Q Besides the barriers you already
18 identified and what's described in Exhibit 51, are
19 there any other barriers to the NSA restarting
20 "about" collection?

21 MR. PATTON: Objection to the extent
22 that it calls for classified information and

1 information protected by the statutory privileges.

2 If there's an unclassified answer the
3 witness can provide, she can provide it.

4 THE WITNESS: I'm sorry, can we go off
5 the record?

6 (Off the record at 8:42 p.m.)

7 (Resume at 8:43 p.m.)

8 THE WITNESS: To the extent that NSA
9 considers budget, time, intelligence needs, risk
10 to the agency, privacy and civil liberties impact,
11 all of those will also be considered as NSA
12 decides whether or not to spend its next
13 intelligence needs to go into "abouts."

14 Whether that's a particular barrier or
15 not, those are all considerations that NSA will
16 take into consideration as it thinks about whether
17 or not it should go forward with "abouts."

18 BY MR. TOOMEY:

19 Q Okay. Is there any other barrier you
20 haven't already described?

21 A No.

22 Q Has the NSA disavowed any intention of

1 resuming "about" collection in the future?

2 MR. PATTON: Just a second.

3 (Counsel conferring.)

4 MR. PATTON: Just object to beyond the
5 scope of 30(b)(6). The witness can answer if she
6 knows.

7 THE WITNESS: No.

8 BY MR. TOOMEY:

9 Q Has the NSA indicated to any member of
10 Congress any interest in resuming "about"
11 collection in the future?

12 MR. PATTON: Just a second.

13 (Counsel conferring.)

14 MR. PATTON: Same objection as beyond
15 the scope of 30(b)(6). The witness can answer if
16 she's aware.

17 THE WITNESS: Admiral Rogers testified
18 that he would consider going back up on "abouts"
19 collection if he could make it through all the --
20 you know, if it met the needs -- met intelligence
21 needs, and they were in a position to meet all the
22 needs of the FISC and notification to Congress.

1 BY MR. TOOMEY:

2 Q Do you know when Admiral Rogers
3 provided that testimony?

4 A I want to say roughly October time
5 frame 2018 -- I'm sorry, sorry 2017 -- in the
6 future. Somewhere in the September/October 2017.
7 It might have been part of one of the threat
8 briefings.

9 Q Do you know to whom he provided that
10 testimony? Which congressional committee or --

11 A I believe it was SSCI, Senate Select
12 Committee on Intelligence. I'm pretty certain
13 that's who it was.

14 Q Thank you.

15 A It could have been part of an
16 appropriations hearing, but ...

17 Q And was that testimony public
18 testimony?

19 A Yes, it was.

20 Q Has the NSA indicated to the FISC any
21 interest in resuming "about" collection in the
22 future?

1 MR. PATTON: Objection.

2 (Counsel conferring.)

3 MR. PATTON: The objection is twofold.
4 One, beyond the scope of 30(b)(6) and, two, object
5 to the extent it calls for a classified answer,
6 and also one subject to statutory privileges. But
7 if the witness is personally aware of that fact
8 and it's unclassified, she can answer.

9 THE WITNESS: The answer is
10 classified, and I'm following the instructions of
11 my lawyer.

12 BY MR. TOOMEY:

13 Q Has the NSA indicated to the FISC that
14 it intends to resume "about" collection in the
15 future?

16 MR. PATTON: Same objection, same
17 instruction.

18 THE WITNESS: Same answer.

19 MR. TOOMEY: Can we mark as the next
20 exhibit, please, this document?

21 (Deposition Exhibit 52 was
22 marked for identification.)

1 BY MR. TOOMEY:

2 Q Could you please take a look at
3 Exhibit 52 and tell me if you recognize this
4 document and what it is?

5 A I recognize this document. It is the
6 NSA press release dated April 28, 2017, stating,
7 "NSA Stops Certain Foreign Intelligence Collection
8 Activities Under Section 702."

9 Q Thank you. Let me move to a
10 different -- can we please mark this document as
11 Exhibit 53?

12 (Deposition Exhibit 53 was
13 marked for identification.)

14 BY MR. TOOMEY:

15 Q Could you please take a look at this
16 document, state whether you're familiar with it,
17 and describe it.

18 A Yes, I am familiar with it. It is the
19 statement from April 28th, 2017, stating, "NSA
20 Stops Certain Section 702 'Upstream' Activities."

21 Q And I'm going to read a short passage
22 from the first paragraph at the end, which says,

1 "After a comprehensive review of mission needs,
2 current technological constraints, United States
3 person privacy interests, and certain difficulties
4 in implementation, NSA has decided to stop some of
5 its activities conducted under Section 702."

6 Is that sentence accurate?

7 A Yes.

8 Q Did any court order the NSA to stop
9 "about" collection?

10 MR. PATTON: One second.

11 (Counsel conferring.)

12 MR. PATTON: My only objection is to
13 vagueness as to the term "stop" in the context of
14 a court order.

15 MR. GILLIGAN: Beyond the scope.

16 MR. PATTON: It's also beyond the
17 scope then.

18 MR. TOOMEY: You can answer.

19 THE WITNESS: Actually, I would just
20 like more specificity. What are you -- I'm not
21 sure I entirely understand.

22 If you read -- maybe I'll give a

1 little bit more answer. If you read on the second
2 page of Exhibit 53, it states, "After considerable
3 evaluation of the program and available
4 technology, NSA has decided that its Section 702
5 foreign intelligence surveillance activities will
6 no longer include any upstream internet
7 communications that are solely 'about' a foreign
8 intelligence target."

9 So could you be clearer of the
10 particular court?

11 BY MR. TOOMEY:

12 Q Could you read me the title of
13 Exhibit 53?

14 A Sure. NSA statement, "NSA Stops
15 Certain Section 702 'Upstream' Activities,"
16 dated April 28th, 2017.

17 Q And my question is did any court order
18 the NSA to stop "about" collection?

19 MR. PATTON: Same objections.

20 THE WITNESS: Can you describe what
21 court you're talking about?

22

1 BY MR. TOOMEY:

2 Q I'm asking about any court.

3 A Any court?

4 Q But any court would include the FISC.

5 MR. PATTON: Same objections. Also,
6 this particular one calls for a legal conclusion
7 too. You can answer.

8 THE WITNESS: Okay.

9 So the Attorney General and the DNI
10 put forward a set of targeting procedures to the
11 FISC, and the FISC agreed with those procedures.
12 There was no FISC ordering us to stop.

13 BY MR. TOOMEY:

14 Q Did Congress prohibit the NSA from
15 conducting "about" collection in April of 2017?

16 MR. PATTON: Objection, vague as to
17 April 2017. Same set of objections as before,
18 beyond the scope of 30(b)(6), calls for a legal
19 conclusion, vague.

20 THE WITNESS: No.

21 BY MR. TOOMEY:

22 Q Congress hasn't since prohibited the

1 NSA from restarting "about" collection, correct?

2 MR. PATTON: Objection, beyond the
3 scope, calls for a legal conclusion.

4 THE WITNESS: With the passage of the
5 702 FAA Reauthorization, it puts in place a
6 requirement for notification 30 days between when
7 the FISC approves it and when we could start,
8 unless there's extenuating circumstances.

9 BY MR. TOOMEY:

10 Q So that statute doesn't contain a
11 prohibition on restarting "about" collection?

12 A Correct.

13 MR. PATTON: Same set of objections.

14 THE WITNESS: Correct.

15 BY MR. TOOMEY:

16 Q Today, does upstream surveillance
17 involve the scanning of all international
18 text-based communications on individual circuit or
19 circuits the NSA is monitoring?

20 MR. PATTON: Objection, calls for
21 classified information and information protected
22 by the statutory privileges.

1 Instruct the witness not to answer.

2 THE WITNESS: I will follow

3 instructions.

4 MR. GILLIGAN: Could I hear the

5 question again, please?

6 (The reporter read back the question.)

7 MR. GILLIGAN: Can we go talk, please?

8 Off the record.

9 (Off the record at 8:57 p.m.)

10 (Resume at 9:22 p.m.)

11 BY MR. TOOMEY:

12 Q Let's go back on the record.

13 Ms. Jaques, could you please read back

14 the last question?

15 (The reporter read back the question.)

16 MR. PATTON: Objection to the

17 question, that calls for a classified answer, and

18 also an answer that seeks information protected by

19 the statutory provisions.

20 Instruct the witness not to answer.

21 THE WITNESS: I will follow the

22 instructions.

1 MR. TOOMEY: So going forward, can we
2 shorten that to assert state secrets and statutory
3 privileges?

4 MR. PATTON: I will shorten it as fast
5 as I can.

6 BY MR. TOOMEY:

7 Q In June 2015, did upstream
8 surveillance involve the scanning of all
9 international text-based communications on the
10 individual circuit or circuits the NSA was
11 monitoring?

12 MR. PATTON: Same objection, same
13 instruction.

14 THE WITNESS: Will follow the
15 instructions.

16 BY MR. TOOMEY:

17 Q Today, if some international
18 text-based communications on a given circuit are
19 not scanned, please explain in as much detail as
20 necessary to completely answer why those
21 communications are not scanned.

22 MR. PATTON: Please repeat the

1 question.

2 (The reporter read back the question.)

3 MR. PATTON: Object to the question to
4 the extent it calls for classified information and
5 information protected by the statutory privileges.

6 The witness can answer the question to
7 the extent that she is aware of an unclassified
8 answer to that question.

9 THE WITNESS: Can you read the
10 question one more time to make sure I have it
11 entirely accurate?

12 (The reporter read back the question.)

13 THE WITNESS: As we were discussing in
14 the existing Civil Liberties and Privacy Report,
15 the process is that there's filtering, and then
16 there's scanning. So to the extent that we have
17 filtered wholly domestic communications out as
18 part of that, those would not be scanned.

19 BY MR. TOOMEY:

20 Q Beyond that response and beyond the
21 unclassified information you've already provided
22 today, can you please fully explain in as much

1 detail as necessary why some communications are
2 not scanned?

3 MR. PATTON: Object to the question,
4 calls for classified information, information
5 protected by the statutory privileges.

6 Instruct not to answer.

7 THE WITNESS: Will follow the
8 instructions.

9 BY MR. TOOMEY:

10 Q Same question as of June 2015. If you
11 need me to restate the question, I can.

12 A Can you restate the question?

13 Q Apart from the unclassified
14 information you've already provided today, as of
15 June 2015, if some international text-based
16 communications on a given circuit were not
17 scanned, please explain in as much detail as
18 necessary to fully answer why those communications
19 are not scanned.

20 MR. PATTON: Just a moment.

21 (Counsel conferring.)

22 MR. PATTON: Object to the question,

1 calls for classified information and information
2 protected by the statutory privileges.

3 If there's any information that the
4 witness is aware of that has not already been
5 provided either in the interrogatory responses or
6 in the prior testimony that would answer that
7 question, she can go ahead and give it.

8 If not, I would instruct her not to
9 answer the question based on those privileges.

10 THE WITNESS: There's no additional
11 information, so I'll follow counsel's directions.

12 BY MR. TOOMEY:

13 Q There's no additional unclassified
14 information?

15 A There's no additional unclassified
16 information that I can provide you beyond what
17 we've already provided you.

18 Q And there is classified information
19 which you're not providing based on your counsel's
20 instruction?

21 MR. PATTON: To the extent that the
22 answer to that question is yes or no, you can

1 answer the question.

2 THE WITNESS: Yes, that's correct.

3 MR. TOOMEY: Thank you. Let's go off
4 record.

5 (Off the record at 9:29 p.m.)

6 (Resume at 9:39 p.m.)

7 EXAMINATION BY COUNSEL FOR PLAINTIFFS

8 BY MS. HANLEY COOK:

9 Q Hi, I'm Devon Hanley Cook. We spent
10 the day together, but nice to meet you. I want to
11 thank you for your patience and for putting up
12 with all our questions and going so late today. I
13 also want to thank you, Dawn. I know it's been a
14 really long day for everybody.

15 Does NSA now scan Wikimedia's
16 communications in the course of upstream
17 surveillance?

18 MR. PATTON: Objection, calls for
19 classified information, subject to state secrets
20 privilege and to statutory privileges.

21 Instruct the witness not to answer.

22 THE WITNESS: I will follow the

1 instructions.

2 BY MS. HANLEY COOK:

3 Q In 2015, did NSA scan Wikimedia
4 communications in the course of upstream
5 surveillance?

6 MR. PATTON: Same objection, same
7 instruction.

8 THE WITNESS: Will follow the
9 instruction.

10 BY MS. HANLEY COOK:

11 Q Does NSA now copy Wikimedia
12 communications in the course of upstream
13 surveillance?

14 MR. PATTON: Same objection, same
15 instruction.

16 THE WITNESS: Will follow the
17 instruction.

18 BY MS. HANLEY COOK:

19 Q In June 2015, did NSA copy Wikimedia
20 communications in the course of upstream
21 surveillance?

22 MR. PATTON: Same objection, same

1 instruction.

2 THE WITNESS: Will follow the

3 instruction.

4 BY MS. HANLEY COOK:

5 Q Has NSA acquired Wikimedia

6 communications as a result of upstream

7 surveillance now?

8 MR. PATTON: Same objection, same

9 instruction.

10 THE WITNESS: Will follow the

11 instruction.

12 BY MS. HANLEY COOK:

13 Q As of June 2015, had NSA acquired

14 Wikimedia communications as a result of upstream

15 surveillance?

16 MR. PATTON: Same objection, same

17 instruction.

18 THE WITNESS: Will follow the

19 instructions.

20 BY MS. HANLEY COOK:

21 Q Can I have Tab X, please? Let's save

22 time, let's do X and Y, please.

1 MR. GILLIGAN: 54 and 55 then?

2 THE REPORTER: Yes, 54 and 55.

3 (Deposition Exhibits 54 and 55
4 were marked for identification.)

5 BY MS. HANLEY COOK:

6 Q Let's start with Exhibit 54.

7 Have you seen Exhibit 54 before?

8 MR. PATTON: Just a second.

9 (Counsel conferring.)

10 MR. PATTON: Object to the question as
11 beyond 30(b)(6). The witness can answer yes or no
12 if she has personally seen this Exhibit 54 before.

13 THE WITNESS: No.

14 BY MS. HANLEY COOK:

15 Q If you assumed that Exhibit 54 related
16 to upstream surveillance, it would indicate,
17 wouldn't it, that the NSA had an intelligence
18 interest in Wikimedia's communications, wouldn't
19 it?

20 MR. PATTON: Object to the question,
21 calls for a classified answer, subject to the
22 state secrets privilege and to the statutory

1 privileges.

2 Instruct the witness not to answer the
3 question.

4 THE WITNESS: Will follow those
5 instructions.

6 BY MS. HANLEY COOK:

7 Q Turning to Exhibit 55, have you seen
8 this document before? Actually, let me --
9 Exhibit 54. Recognizing that you have not seen
10 the document before, what do you think it is?

11 MR. PATTON: Objection. Same
12 objection as before, same instruction.

13 THE WITNESS: Which instruction was
14 that? Classified?

15 MR. PATTON: Classified, subject to
16 the state secrets privilege and to statutory
17 privileges.

18 The witness is instructed not to
19 answer the question.

20 THE WITNESS: I will follow those
21 instructions. I just had to make sure I knew what
22 the instructions were.

1 BY MS. HANLEY COOK:

2 Q Makes sense.

3 Exhibit 55, have you seen this
4 document before?

5 MR. PATTON: Object to the question to
6 the extent it's beyond 30(b)(6). The witness can
7 answer yes or no if she has seen this document in
8 her personal capacity.

9 THE WITNESS: Yes.

10 BY MS. HANLEY COOK:

11 Q What is it?

12 MR. PATTON: Object to the question,
13 calls for a classified answer, subject to the
14 state secrets and to statutory privileges.

15 Instruct the witness not to answer.

16 THE WITNESS: I will follow those
17 instructions.

18 BY MS. HANLEY COOK:

19 Q If you assumed that Exhibit 55 related
20 to upstream surveillance, it would indicate,
21 wouldn't it, particularly on the second page in
22 the first bullet point, that the NSA has an

1 intelligence interest in Wikimedia's HTTP
2 communications, wouldn't it?

3 MR. PATTON: Same objection, same
4 instruction.

5 THE WITNESS: Will follow those
6 instructions.

7 BY MS. HANLEY COOK:

8 Q Do Exhibits 54 or 55 relate to
9 upstream surveillance?

10 MR. PATTON: Same objection, same
11 instruction.

12 THE WITNESS: Will follow those
13 instructions.

14 BY MS. HANLEY COOK:

15 Q At this time, HTTP communications are
16 scanned for selectors in the course of upstream
17 surveillance, aren't they?

18 MR. PATTON: Just a second.

19 (Counsel conferring.)

20 MR. PATTON: Same objection, same
21 instructions. Do you need a reminder on the --

22 THE WITNESS: I just need to remind

1 what --

2 MR. PATTON: Do you need the question
3 read back?

4 THE WITNESS: Could you read the
5 question again?

6 (The reporter read back the question.)

7 MR. PATTON: Object to the question,
8 calls for classified information, information
9 protected by the statutory privileges, and
10 instruct the witness not to answer.

11 THE WITNESS: I will follow those
12 instructions.

13 BY MS. HANLEY COOK:

14 Q As of June 2015, HTTP communications
15 were scanned for selectors in the course of
16 upstream surveillance, right?

17 MR. PATTON: Same objection, same
18 instruction.

19 THE WITNESS: Will follow the
20 instructions.

21 BY MS. HANLEY COOK:

22 Q At this time, HTTPS communications are

1 scanned for selectors in the course of upstream
2 surveillance, aren't they?

3 MR. PATTON: Same objection, same
4 instruction.

5 THE WITNESS: Will follow the
6 instruction.

7 BY MS. HANLEY COOK:

8 Q Same question as to the June 2015 time
9 frame.

10 MR. PATTON: Same objection, same
11 instruction.

12 THE WITNESS: Will follow the
13 instruction.

14 BY MS. HANLEY COOK:

15 Q Are Apache Kafka communications
16 scanned for selectors in the course of upstream
17 surveillance?

18 MR. PATTON: Same objection, same
19 instruction.

20 THE WITNESS: Will follow the
21 instruction.

22

1 BY MS. HANLEY COOK:

2 Q Do you know what Apache Kafka
3 communications are?

4 MR. PATTON: Object to the question,
5 beyond the scope, calls for expert testimony.

6 The witness can answer in her personal
7 capacity.

8 THE WITNESS: Not well enough to
9 describe to you.

10 BY MS. HANLEY COOK:

11 Q Open VPN communications are scanned
12 for selectors in the course of upstream
13 surveillance, aren't they?

14 MR. PATTON: Objection, vague as to
15 time period, calls for classified information and
16 information protected by the statutory privileges.

17 Instruct the witness not to answer.

18 THE WITNESS: Will follow the
19 instruction.

20 BY MS. HANLEY COOK:

21 Q As of June 2015, were open VPN
22 communications scanned for selectors in the course

1 of upstream surveillance?

2 MR. PATTON: Same objection without
3 the vague as to time.

4 Same instruction not to answer.

5 THE WITNESS: Will follow the
6 instruction.

7 BY MS. HANLEY COOK:

8 Q Other than public documents, public
9 documents at large, hearing testimony that is
10 transcribed, public documents you reviewed,
11 documents that have been filed or served in this
12 case, or your testimony today, what can you tell
13 me about the volume of communications subject to
14 upstream surveillance at this time using any unit
15 of measurement you want to discuss volume of
16 communications?

17 MR. PATTON: Just one moment.

18 Can we go off the record?

19 (Off the record at the 9:49 p.m.)

20 (Resume at 9:49 p.m.)

21 MR. PATTON: Could you read back the
22 question, please?

1 (The reporter read back the question.)

2 MR. PATTON: Other than the officially
3 disclosed government statements, whether they be
4 publicly by ODNI or by NSA or filed in this
5 particular case or filed in the FISC and
6 declassified, any other information that the
7 witness would have would be classified, and so I
8 would instruct her not to answer the question
9 based on the state secrets privilege and statutory
10 privileges.

11 THE WITNESS: I'll follow the
12 instructions.

13 BY MS. HANLEY COOK:

14 Q Okay. How many communications -- and
15 you can use any unit of measurement you want --
16 did NSA retain as a result of upstream
17 surveillance in each of the last three years?

18 MR. PATTON: Objection, vague as to
19 the term "communication," and classified, subject
20 to the state secrets privilege and statutory
21 privileges, and instruct not to answer.

22 THE WITNESS: Will follow the

1 instruction.

2 BY MS. HANLEY COOK:

3 Q Same question as to transactions.

4 MR. PATTON: Same objections except
5 for vagueness, same instruction.

6 THE WITNESS: I will follow the
7 instructions.

8 BY MS. HANLEY COOK:

9 Q What is the volume of communications
10 copied in the course of upstream surveillance in
11 each of the last three years?

12 MR. PATTON: Objection, vague.
13 Objection, seeks classified information protected
14 by the state secrets privilege, statutory
15 privileges, instruct not to answer.

16 THE WITNESS: I will follow the
17 instructions.

18 BY MS. HANLEY COOK:

19 Q Same question as to transactions.

20 MR. PATTON: Same objections with
21 exception of vagueness, same instruction.

22 THE WITNESS: Following the

1 instructions.

2 BY MS. HANLEY COOK:

3 Q What is the volume of communications
4 or transactions that are subject to filtering in
5 the course of upstream surveillance in the last
6 three years?

7 MR. PATTON: I'm sorry, did you use
8 the term "Internet transactions"?

9 MS. HANLEY COOK: No.

10 MR. PATTON: I'm sorry, could you read
11 the question back?

12 (The reporter read back the question.)

13 MR. PATTON: Objection, vague as to
14 communications, and objection to the rest for the
15 same reasons set forth before, instruct not to
16 answer.

17 THE WITNESS: Will follow the
18 instructions.

19 BY MS. HANLEY COOK:

20 Q Would the answer be the same if I used
21 the term "Internet transactions"?

22 MR. PATTON: The instruction not to

1 answer would be the same, but there would be no
2 vagueness objection, if that helps, or deemed
3 compound since it was previous communications or
4 transactions, but the instruction not to answer
5 would remain the same, yes.

6 (Deposition Exhibit 56 was
7 marked for identification.)

8 BY MS. HANLEY COOK:

9 Q Please take a look at Exhibit 56.
10 Have you seen this document before?

11 MR. PATTON: We need to go off the
12 record.

13 MS. HANLEY COOK: Okay.

14 (Off the record at 9:53 p.m.)

15 (Resume at 9:59 p.m.)

16 BY MS. HANLEY COOK:

17 Q The question was have you seen this
18 document before?

19 MR. PATTON: Objection as beyond the
20 scope of 30(b)(6). The witness can answer in her
21 personal capacity if she's seen the document
22 before.

1 THE WITNESS: I've certainly seen
2 portions of it. I'm not sure I saw it in its
3 entirety when I was working at DHS. I don't know
4 that I saw it all in its entirety.

5 BY MS. HANLEY COOK:

6 Q What is it?

7 MR. PATTON: Same objection.

8 THE WITNESS: Memorandum Opinion for
9 the Counsel to the President on legal issues
10 relating to the testing, use, and deployment of an
11 intrusion detection system (Einstein 2.0) to
12 protect unclassified computer networks in the
13 Executive Branch, dated January 9, 2009.

14 BY MS. HANLEY COOK:

15 Q Thank you. Please turn to page 4 of
16 Exhibit 56, the second paragraph that begins
17 "EINSTEIN 2.0."

18 A Mm-hmm.

19 Q I'd like you to read the first two
20 sentences to yourself, and tell me when you're
21 done.

22 A (Witness reviewing document.) Yeah.

1 Q Exhibit 56 says that Einstein 2.0
2 sensors will scan a temporary copy of traffic,
3 right?

4 MR. PATTON: Same objections.

5 THE WITNESS: That's what the sentence
6 says, yes.

7 BY MS. HANLEY COOK:

8 Q Is that sentence containing "temporary
9 copy" accurate to the best of your knowledge?

10 MR. PATTON: Same objection, lack of
11 foundation as well.

12 THE WITNESS: To the extent that I at
13 some point reviewed a Privacy Impact Assessment
14 associated with Einstein 1 or Einstein 2, it was
15 many years ago, so I can't speak to whether the
16 specificity -- I didn't review this document in
17 advance of any of this conversation, so I would
18 want to go back and look at all those materials
19 before I gave you an answer one way or the other.

20 I have no reason to say it's not, but
21 I have no reason to know whether that was exactly
22 how it was implemented, or whether it remains true

1 today.

2 BY MS. HANLEY COOK:

3 Q But this document at least says that
4 it will create a temporary copy, right?

5 MR. PATTON: Objection, the document
6 speaks for itself.

7 THE WITNESS: Yes, that's what the
8 sentence says.

9 BY MS. HANLEY COOK:

10 Q The next sentence that I had you read
11 says that, "Einstein 2.0 operations will not
12 disrupt the normal operations of federal systems."

13 Did I read that right?

14 A Yes, you did.

15 Q Do you know why Einstein 2 involves
16 the creation of a temporary copy of the traffic
17 being scanned?

18 MR. PATTON: Objection, beyond the
19 scope of 30(b)(6), calls for -- it also -- it also
20 indicates I'm getting tired -- beyond the scope
21 and lacks foundation.

22 THE WITNESS: Well, you can read the

1 words that are on the page.

2 BY MS. HANLEY COOK:

3 Q Do the words on this page indicate to
4 you why Einstein 2 involves the creation of a
5 temporary copy of the traffic being scanned?

6 MR. PATTON: Same objections.

7 THE WITNESS: Well, it says it's for
8 the purpose of scanning by the sensors. I guess
9 that's not the why.

10 BY MS. HANLEY COOK:

11 Q Doesn't Einstein 2 create a temporary
12 copy of the traffic being scanned so that it will
13 not disrupt the normal operations of federal
14 systems?

15 MR. PATTON: Same objections,
16 including lack of foundation.

17 THE WITNESS: I'm not -- again, in my
18 personal capacity, having done work on this in
19 previous positions, without having reviewed all
20 those documents, I'm not willing to expound one
21 way or the other on the particular information
22 provided here beyond what you see on the piece of

1 paper.

2 BY MS. HANLEY COOK:

3 Q In June 2015, did upstream
4 surveillance involve the scanning of a temporary
5 copy of the transactions scanned?

6 MR. PATTON: Objection, calls for
7 classified information, information subject to the
8 statutory privileges, and instruct the witness not
9 to answer.

10 THE WITNESS: I will follow the
11 instructions.

12 BY MS. HANLEY COOK:

13 Q Going back several hours now --

14 A Awesome.

15 Q -- you testified I think, but correct
16 me if I'm wrong, that as of June 2015, the NSA
17 scanned at least some portions of the application
18 layer of Internet transactions as part of upstream
19 collection, right?

20 MR. PATTON: Just a second.

21 (Counsel conferring.)

22 MR. PADGETT: Can you read the

1 question?

2 (The reporter read back the question.)

3 THE WITNESS: Can we go off the

4 record?

5 MS. HANLEY COOK: Yeah, thank you.

6 (Off the record at 10:06 p.m.)

7 (Resume at 10:11 p.m.)

8 THE WITNESS: Can you repeat your

9 sentence one more time to make sure I was

10 accurately -- or can you repeat what you --

11 MS. HANLEY COOK: Dawn, do you mind

12 reading it? Thanks.

13 (The reporter read back the question.)

14 THE WITNESS: Yes, that's correct.

15 BY MS. HANLEY COOK:

16 Q You also testified that deep packet

17 inspection refers to the scanning of the

18 application layer of Internet packets, right?

19 A In the general -- oh.

20 MR. PATTON: Object to the extent it

21 may mischaracterize the testimony, and beyond the

22 scope, but the witness can answer.

1 THE WITNESS: In the general sense, as
2 is traditionally understood for what deep packet
3 inspection means, not specific to upstream.

4 BY MS. HANLEY COOK:

5 Q But it's accurate then to say that
6 upstream surveillance, as of June 2015, involved
7 deep packet inspection, right?

8 MR. PATTON: Just a moment.

9 (Counsel conferring.)

10 MR. PATTON: Objection as to vague,
11 beyond the scope of 30(b)(6), and to the extent
12 there's any classified information, instruct the
13 witness not to answer.

14 If there's an unclassified answer that
15 she can provide, she can provide that now.

16 THE WITNESS: I have no further
17 information. I will take the instructions and not
18 provide classified information.

19 BY MS. HANLEY COOK:

20 Q Today, how many targets does NSA have
21 for upstream surveillance?

22 MR. PATTON: Objection, calls for

1 classified information, and information protected
2 by the statutory privileges, instruct not to
3 answer.

4 THE WITNESS: Could you ask the
5 question again, please?

6 BY MS. HANLEY COOK:

7 Q Sure. Today how many targets does NSA
8 have for upstream surveillance?

9 MR. PATTON: Same objection. If the
10 witness is aware of any unclassified answer, we
11 should probably talk about that.

12 THE WITNESS: Okay, why don't we go
13 talk about that.

14 MR. PATTON: Off the record.

15 (Off the record at 10:14 p.m.)

16 (Resume at 10:14 p.m.)

17 MR. PATTON: Read the question back,
18 please.

19 (The reporter read back the question.)

20 MR. PATTON: Same objections, same
21 instructions.

22 THE WITNESS: I will follow the

1 instructions.

2 BY MS. HANLEY COOK:

3 Q In June 2015, how many targets did NSA
4 have for upstream surveillance?

5 MR. PATTON: Same objection, same
6 instruction.

7 THE WITNESS: I'll follow the
8 instructions.

9 BY MS. HANLEY COOK:

10 Q Without revealing the -- you good?

11 MR. PATTON: Yeah.

12 BY MS. HANLEY COOK:

13 Q Without revealing the contents of any
14 conversations that you had with your attorneys
15 outside this room today, and with the exception of
16 conversations related to determining whether
17 classified information was responsive to a
18 question, where the line was properly drawn on
19 classified information, state secret
20 classifications, during breaks in the deposition
21 today, did you discuss with anyone the substance
22 of your testimony during the deposition?

1 MR. PATTON: Subject to those caveats
2 you said, plus the statutory privileges, the
3 witness can answer.

4 THE WITNESS: No.

5 MS. HANLEY COOK: I have no further
6 questions.

7 MR. TOOMEY: Can we take a break?

8 MS. HANLEY COOK: Strike that I said
9 that. Take a break for five minutes to be sure,
10 just go back through the outline.

11 (Off the record at 10:16 p.m.)

12 (Resume at 10:26 p.m.)

13 FURTHER EXAMINATION

14 BY MR. TOOMEY:

15 Q When a communication is encrypted
16 using HTTPS, does some of the communication's
17 metadata remain unencrypted?

18 MR. PATTON: One second.

19 (Counsel conferring.)

20 MR. PATTON: Object to the question as
21 beyond the scope of 30(b)(6), calling for an
22 expert opinion. The witness can answer in her

1 personal capacity to the extent that she is aware
2 of the answer.

3 THE WITNESS: In the general sense, it
4 will depend on the type of encryption that's being
5 used, and it will depend on the nature of how it's
6 being transmitted, so there's not one answer that
7 fits all.

8 BY MR. TOOMEY:

9 Q So when a communication is encrypted
10 using HTTPS, does some of the communication's
11 metadata remain unencrypted?

12 MR. PATTON: Object to the term
13 "communication" as vague, and same prior
14 objections and instruction to the witness.

15 THE WITNESS: To the extent that the
16 question is somewhat vague, I'll say generally
17 speaking, yes, but I think there are different
18 ways you could do things that might change that
19 answer.

20 BY MR. TOOMEY:

21 Q When a communication is encrypted
22 using HTTPS, are the senders and recipients'

1 IP addresses unencrypted?

2 MR. PATTON: Same objection, same
3 instruction.

4 THE WITNESS: Generally speaking, they
5 will -- I'm sorry, say the question one more time.

6 (The reporter read back the question.)

7 MR. PATTON: Same objection, same
8 instruction.

9 THE WITNESS: Again, the question is
10 somewhat vague, and so I would answer generally
11 that is true, but there are undoubtedly a number
12 of exceptions that also could make that untrue.

13 MR. TOOMEY: Could you please mark
14 this document as 57.

15 (Deposition Exhibit 57 was
16 marked for identification.)

17 BY MR. TOOMEY:

18 Q Could you please take a look at the
19 document, describe what it is, and tell me if
20 you're familiar with it.

21 A This is the Notice of Filing of
22 Government's Responses to FISC Questions Regarding

1 the Amended 2011 Section 702 Certifications, dated
2 November 15th, 2011.

3 Q Thank you.

4 A Yes, I am familiar with these
5 documents.

6 Q Could you please turn to page 9?

7 A Sure.

8 Q I'm going to read from about the third
9 paragraph down in the middle of the personal
10 knowledge, which says, "Metadata that has been
11 extracted from Internet transactions consistent
12 with Section 3(b)(5)(b)(4) is subject to the
13 two-year retention limit set forth in Section 3(c)
14 of the amended NSA minimization procedures."

15 Was that statement accurate at the
16 time this document was filed with the FISC on
17 November 15th, 2011?

18 A Yes.

19 Q So the NSA extracts metadata from
20 communications collected in the course of upstream
21 surveillance, correct?

22 MR. PATTON: Just a moment.

1 (Counsel conferring.)

2 MR. PATTON: Objection, vague as to
3 time period, but the witness can answer.

4 THE WITNESS: Could you ask the
5 question again?

6 (The reporter read back the question.)

7 MR. PATTON: Objection, vague as to
8 time.

9 THE WITNESS: So I would just offer
10 that the answer to your question is metadata has
11 been extracted from the Internet transactions. I
12 believe that the question said communications, in
13 which case that would be consistent with the
14 information that was provided here.

15 BY MR. TOOMEY:

16 Q So I'll rephrase.

17 The NSA extracts metadata from
18 Internet transactions collected in the course of
19 upstream surveillance, correct?

20 MR. PATTON: Objection, vague as to
21 time.

22 THE WITNESS: Consistent with 2011,

1 what's written here at 2011, yes, that is true.

2 BY MR. TOOMEY:

3 Q Today, the NSA retains metadata
4 associated with its targets' communications in the
5 course of upstream surveillance, correct?

6 MR. PATTON: Hold on.

7 (Counsel conferring.)

8 MR. PATTON: Sorry, could you read the
9 question back, please?

10 (The reporter read back the question.)

11 MR. PATTON: Object to the question to
12 the extent it calls for classified information or
13 otherwise privileged pursuant to the
14 aforementioned statutes.

15 If there is an unclassified answer,
16 the witness can provide it.

17 THE WITNESS: Could you read the
18 question one more time?

19 (The reporter read back the question.)

20 MR. PATTON: Same objection, same
21 instruction.

22 THE WITNESS: NSA retains -- I would

1 again go back to, instead of saying
2 "communications," I would say "Internet
3 transaction." I would say generally, yes, this is
4 true.

5 BY MR. TOOMEY:

6 Q Sorry, I didn't hear you. Could you
7 say that again?

8 A Sure. NSA retains metadata -- may
9 retain metadata associated with Internet
10 transactions in the course of upstream.

11 Q The NSA has an interest in the
12 metadata of its targets' communications or
13 Internet transactions, correct?

14 MR. PATTON: Objection as vague,
15 beyond the scope of 30(b)(6).

16 The witness can answer.

17 THE WITNESS: NSA is interested in the
18 metadata associated with the Internet transactions
19 of a targeted selector -- to or from a targeted
20 selector.

21 BY MR. TOOMEY:

22 Q So just to be clear, just to make sure

1 I understood your answer, the NSA has an interest
2 in the metadata of communications to and from a
3 targeted selector?

4 MR. PATTON: Objection, beyond the
5 scope. The witness can answer.

6 THE WITNESS: Could you repeat the
7 question?

8 (The reporter read back the question.)

9 THE WITNESS: I would not use the word
10 "communications." I would use the word "Internet
11 transactions."

12 BY MR. TOOMEY:

13 Q So just to be clear, the NSA has an
14 interest in the metadata of Internet transactions
15 to and from a targeted selector?

16 MR. PATTON: Objection, beyond the
17 scope, asked and answered.

18 THE WITNESS: Yes.

19 MR. TOOMEY: Thank you. All right, we
20 do not have any further questions right now.

21 MR. PATTON: Before we get off the
22 record, the government is going to invoke Federal

1 Rule of Civil Procedure 30(e) to reserve the right
2 to review and signature of the witness.

3 (Whereupon, at 10:36 p.m., the taking
4 of the deposition was concluded.

5 Reading and signature were reserved.)

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

1			
2			
3	-----X	:	
4	WIKIMEDIA FOUNDATION,	:	
5		:	
6	Plaintiff,	:	Case No.
7	vs.	:	
8		:	1:15-cv-00662-TSE
9	NATIONAL SECURITY AGENCY,	:	
10	et al.,	:	
11		:	
12	Defendants.	:	
13	-----X	:	

ACKNOWLEDGMENT OF DEPONENT

I, REBECCA J. RICHARDS, do hereby acknowledge
that I have read and examined pages ~~11~~⁹ through ~~239~~³⁵⁹
of the transcript of my deposition taken on Monday,
April 16, 2018, and that:



(Check appropriate box):

() the same is a true, correct and complete
transcription of the answers given by me to the
questions therein recorded.

(X) except for the changes noted in the attached
errata sheet, the same is a true, correct and
complete transcription of the answers given by
me to the questions therein recorded.

5/15/18
DATE


SIGNATURE

Wikimedia Foundation v. NSA, et al., 15-cv-00662-TSE (D. Md.)**ERRATA SHEET of REBECCA J. RICHARDS**

<u>Page</u>	<u>Line</u>	<u>To</u>	<u>From</u>	<u>Justification</u>
9	8	Kathleen	Cathleen	Spelling Error
45	4	Michael S. Rogers	Michael F. Rogers	Spelling Error
161	19	telecom	teleco	Spelling Error
169	19	USA FREEDOM Act	USA Freedom Act	Capitalization
192	6	Protocol	protocol	Capitalization
196	13	(with our targeting procedures)	in parens	Transcription Error
263	17	scanned	scan	Clarification

1 CERTIFICATE OF NOTARY PUBLIC

2 I, DAWN A. JAQUES, a Notary Public in and for
3 the District of Columbia, before whom the foregoing
4 deposition was taken, do hereby certify that witness
5 whose testimony appears in the foregoing pages was
6 duly sworn by me; that the testimony of said witness
7 was taken by me in shorthand at the time and place
8 mentioned in the caption hereof and thereafter
9 reduced to typewriting under my supervision; that
10 said deposition is a true record of the testimony
11 given by said witness; that I am neither counsel
12 for, related to, nor employed by any of the parties
13 to the action in which this deposition is taken;
14 and, further, that I am not a relative or employee
15 of any attorney or counsel employed by the parties
16 thereto, nor financially or otherwise interested in
17 the outcome of the actions.

18
19 
20 Dawn A. Jaques, CSR, CLR
21 Notary Public in and for
22 District of Columbia

My commission expires:
January 14, 2020

*** ERRATA SHEET ***
TRANSPERFECT DEPOSITION SERVICES
216 E. 45th Street, Suite #903
NEW YORK, NEW YORK 10017
(212) 400-8845

CASE: WIKIMEDIA FOUNDATION v. NATIONAL SECURITY AGENCY, et al.
DATE: APRIL 16, 2018
WITNESS: REBECCA J. RICHARDS REF: 21368

PAGE	LINE	FROM	TO
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

REBECCA J. RICHARDS

Subscribed and sworn to before me
this ____ day of _____, 20__.

Notary Public

A	126:6,19 127:4,6 128:1,9,21 129:9 129:12,17 130:17 132:17 133:21 135:1,11,21 136:5 136:11 137:1,6,13 138:2,12 139:7 140:12 141:14 142:10 143:8,18 144:5,18 145:13 145:18 146:4,9,17 147:3,11,20 148:5 148:12,18 149:5,8 149:17 150:2,9,16 151:1,8,16,20 152:6,14,21 153:6 153:14 154:1,16 155:13 156:19,22 157:15 158:1,12 159:2,6,10 160:18 161:7 162:1,13 163:1,9 164:3,16 165:2,11,19 166:5 166:14,21 167:6 167:17 168:3,12 169:3,8,16 170:21 171:9 172:4,17 173:4,21 174:15 175:17 176:8 177:17 179:5,14 180:1,15 181:1,9 181:16 182:3,10 182:17 183:2,9,16 184:5,12,20 185:5 185:12 186:8,16 187:7,10,13 188:2 188:8,12 189:8,12 189:15 190:8,12 193:19 195:3 197:2,10 198:5,7 199:16 201:11,16 202:6,16 203:8 204:12 205:13 206:1,12 207:5,18 208:5,12,20 209:7 209:21 210:4 212:8,14 213:12	213:20 214:4 216:3,16,21 219:6 219:21 220:3,21 223:2,16 224:9,17 225:2,10 226:5,14 226:17 227:6 228:9 229:1,7 231:1,7,12,15 232:7 233:15 234:16 235:4,14 236:11 237:1,11 238:5 239:5 240:3 240:20 241:10,16 241:21 242:9,18 243:7,15 244:7,17 245:9,18 246:6,13 247:20 248:17,21 249:7,14,22 250:3 250:14 251:14 252:1 253:11,14 253:17 254:19 255:5,14 256:6,19 257:13 258:9 270:6 Abdo's 30:17 ability 42:11 103:6 280:19 281:16 282:2,8 able 13:9 17:19 32:21 34:6 44:13 50:18 75:2 145:1 164:12 187:9 197:3 237:20 238:22 239:5 241:14 272:21 305:7 309:14 abouts 107:10,17 140:9 218:5 295:1 308:6,10,12 310:17 314:13,17 315:18 abroad 230:1,12,15 231:2,17 232:1 234:7,19 Absolutely 37:16 51:19 95:13 100:17 131:4	abstract 237:22 240:18 Accelerated 6:12 248:10 252:10 accept 102:7,19 accepted 49:17 105:8 access 144:13 accommodate 14:5 accomplish 200:13 201:1 Accord 34:2 account 217:22 218:3 accuracy 97:1 98:9 98:18 99:19 100:5 100:7,10 101:14 102:1 105:2 130:9 221:1 accurate 101:10,17 106:11 107:2,18 108:8,12,15 109:3 109:10 110:1 111:15,18 112:9 112:13 115:19 117:11 119:22 131:3 132:19 133:1 136:8,19 137:18 139:18 140:3,7,11,17 141:2 160:17 166:1,7,12 177:16 189:17 212:11 240:19 313:8 319:6 325:11 344:9 349:5 355:15 accurately 17:20 18:7 107:12 117:4 158:8 240:16 262:21 348:10 acknowledge 261:6 361:10 acknowledged 235:6 236:13 242:3 ACKNOWLED...	361:9 ACLU 3:19,20 258:5 acquire 63:2 160:5 168:14 170:4 188:15,16 195:8 196:2 197:17 199:1,22 233:10 268:15 304:2 acquired 330:5,13 acquires 206:10 acquiring 198:21 acquisition 124:19 196:10 act 5:15,18 24:4 25:11 28:19 31:21 32:13,14 38:3 95:18 130:6 169:18,19 177:11 177:14 210:15 233:13 action 362:13 actions 362:17 activities 6:19,21 22:22 36:11 39:5 271:14 312:20 318:8,20 319:5 320:5,15 activity 26:11 221:15 222:7,14 223:6,7,8,20 224:11,22 225:3,4 225:5,20,21,22 226:19,21 227:3 227:15 add 83:20 103:19 187:11 191:4,6,8 192:2 307:16 309:7 added 114:20,21 192:17 adding 225:16 279:5 additional 50:11,14 112:20 113:19 169:14 203:13,21 264:15,18,20
----------	--	--	--	--

268:7 269:14 295:3 297:17,19 297:21 298:1 307:14 309:13 327:10,13,15 additionally 192:17 address 16:3 191:20 206:13,19 310:17 addresses 283:5,10 354:1 addressing 15:5 adhere 15:9 administered 12:4 administration 249:10,16 Admiral 30:3 45:3 119:7 120:2,12 315:17 316:2 admission 30:5 68:7 69:18,19 73:13 109:16 111:17 119:15 advance 344:17 advice 77:10 169:15 adviser 25:3 Advisory 38:3 advocate 25:11 aforementioned 207:1 357:14 agencies 32:19 agency 1:7 4:15 9:2 9:7,10 25:11 30:2 33:2 45:3 142:20 220:14,20 233:8 314:10 361:5 363:4 Agency's 11:13 65:7 agent 179:12 ago 25:1 77:14 185:20 214:9,21 344:15 agree 41:1 51:14 117:19 119:2 agreed 9:19 15:4	34:7 321:11 agreement 34:2 239:19 Ah 247:4 ahead 13:20 108:5 125:18 138:10 145:8 247:21 327:7 al 1:7 361:6 363:4 Alex 3:3 8:3 alex.abdo@knig... 3:9 allow 33:1 169:12 186:3,19 altogether 280:22 281:3 ambiguous 38:22 137:12,14 168:10 228:17 amended 7:10 233:13 355:1,14 Amendment 3:4 8:4 American 8:9,11 258:13 Amicus 169:13 170:1 amorphous 54:11 amount 135:5 241:4 analogous 158:14 158:21 159:4 analysis 105:3 analyst 286:1 analysts 312:22 analyzing 246:8 and/or 15:8 148:21 announced 249:10 announcing 249:15 answer 10:5 13:21 14:1,11 16:8,19 17:8,16,19 18:6 23:13 25:21 28:12 35:15,16 39:1,14 39:20 40:19 42:5 42:7,11,20 44:5 47:1 48:6,21 49:7	50:6 51:9,12,15 52:7 53:4 54:7 56:19 59:14 60:7 61:1,16 62:2,11 62:16 63:15 66:5 66:19 67:11 68:5 68:11 70:5,6,7,8 70:10,11,17 71:2 71:3,5,12,19 72:1 72:5,6,9 73:7,8,11 74:9,16,17 76:13 77:5,9,11 80:9 81:4,4 82:4 84:22 85:4,6,11 87:14 88:4,8,15,15 89:6 89:12 90:6,22 91:17 93:10 95:1 96:7 102:16,17,17 104:17,19 108:5 110:11,12,14 111:5,8,9 113:1 113:15 114:1 116:4,8,10,11,13 116:15 117:2,7 118:21 120:6 121:21 122:2,10 122:14 123:4,14 125:5,8 126:15 127:21 128:7 129:6 133:18 134:6 138:22 139:16 146:1 155:3,6 156:6,6 157:6 160:15 161:5 162:9 163:12,22 164:9 164:10,11 169:4 170:22 171:1 172:13 174:9 178:4,5 179:2 180:12 187:2 188:3,4,6,7,10 189:1,3,6,9,11 191:22 192:8 193:8 195:1 196:22 197:3 198:2,14 201:8	202:2 203:4 204:8 205:19 207:2 208:3,4 212:8,20 213:18,18,20 214:3,12,13 215:11,22 216:10 216:11,15 217:10 219:18 222:18,18 222:20,21 223:1 224:5,16 227:14 228:21 229:2 230:6 234:9,12 236:4,6,8,16 237:2,4,5,9,11,15 237:21 238:1,18 239:2,3,6 240:22 241:2,12 242:7,15 243:21 245:6 247:2,15,18,19 248:15 250:9 252:15,18 254:16 255:20,22 256:7 258:22 259:16 261:1 262:18 263:16 264:12,13 265:16 266:2,11 267:12 268:1,4,5 268:21 269:11 270:4 272:20 273:7,10,14 274:13,14 277:17 278:15 279:2 280:2 281:8 282:14 283:15 284:20 285:2,6,17 285:18 286:21 287:18 288:12 289:10,14 290:2 290:12 293:19 294:17 295:21 296:3 297:3,15,16 298:11 299:4,22 300:6,7,12 302:10 302:14 303:20 304:8,8,20,21 305:7,8,19 306:12 306:18 307:18,20	308:3,21 309:9,10 310:13 311:4,16 313:13,14 314:2 315:5,15 317:5,8 317:9,18 319:18 320:1 321:7 323:1 323:17,18,20 324:20 325:6,8 326:6,18 327:6,9 327:22 328:1,21 331:11,21 332:2 332:19 333:7,13 333:15 335:10 337:6,17 338:4 339:8,21 340:15 341:16,20 342:1,4 342:20 344:19 347:9 348:22 349:13,14 350:3 350:10 352:3,22 353:2,6,19 354:10 356:3,10 357:15 358:16 359:1,5 answered 51:5 54:20 94:4 96:19 105:18 108:5 125:18 139:15 141:4 145:8 189:6 225:18 279:6 359:17 answering 14:16,19 15:22 27:12 64:15 69:11 71:16 72:8 74:7 84:15 104:14 117:20 118:12 120:3 121:12 177:5 238:4 253:2 288:21 310:7 answers 13:5,7 18:1 125:11 177:15 250:10 361:16,19 anybody 85:3 anyway 103:12 Apache 336:15 337:2 apart 296:7,21
---	--	--	--	--

298:7 299:18 300:9 326:13 Apologies 308:13 apologize 247:22 appeal 172:16,22 appear 260:6 appearances 3:1 4:1 9:12 appearing 18:19 19:17 appears 195:10 226:14 269:19 362:5 Appendix 118:5 Appids 7:6 applicable 10:19 232:12 284:22 application 28:9 242:21 243:10 244:4 246:8 261:16 263:6,9,12 263:17,22 266:6 301:18 306:3,22 347:17 348:18 applications 29:10 165:15,22 applies 27:17 apply 17:6 applying 28:15 29:7 appreciate 139:8 149:9 appreciation 38:7 appropriate 11:11 286:3 361:15 appropriations 316:16 approval 11:13 33:12 165:4 309:13 310:19 approve 310:16 approved 219:11 229:20 249:4 308:6 approves 322:7 approving 209:15 approximate	145:14 146:10 147:12,21 181:17 182:4 183:3,10 184:21 185:6 Approximately 67:21 68:14 69:3 April 1:13 5:16 6:11,15,18,20 130:6 132:5,11,20 133:5,13 193:22 252:10 293:21 294:21 295:7,10 297:3 298:11 299:22 300:14,20 301:9,17 302:3,18 303:5 304:15 305:5,6,9,13 306:2,14,15,21 312:10 318:6,19 320:16 321:15,17 361:13 363:4 area 39:3 52:12 areas 35:9 40:11 42:18 argumentative 125:18 arrived 76:7,9 222:10 article 173:17 240:15 Ashley 3:20 8:10 aside 23:4 117:13 138:3,13 143:20 145:2 168:16 asked 51:4 54:6 73:2,7 78:17 86:5 93:1 94:4 105:13 108:5 109:8 116:12 125:17 139:14 140:19 141:4 145:7 157:1 185:20 186:1 197:4 214:8,16,21 216:2 219:5 224:1 225:18 236:7,8 239:16 243:14 247:3 265:22	279:5 289:12 359:17 asking 13:4 19:13 40:22 42:1 44:9 44:11 48:16 49:21 49:22 54:6 59:2 64:6,15 65:15,16 65:17 67:13 70:6 74:3,18 80:12,15 80:18,21 93:6 103:11 115:18 118:6 121:6 143:19 144:21 155:17 169:1,6 174:11 177:18 204:10 209:19 221:19 227:7,14 227:21 235:15 237:2,3,13,14 241:11 252:16 258:8 261:4 278:11,14 305:1 321:2 aspect 288:22 289:5 aspects 101:19 140:16 174:19 261:6 assert 30:21 103:6 103:10,16 163:20 324:2 asserting 164:13 assertion 121:2 125:13 assertions 118:7 136:7 assessing 233:20 assessment 6:11 31:20 32:11 249:1 252:7,12 344:13 assessments 26:15 33:4 36:9 246:19 246:22 assist 126:9 132:8 133:11 198:21 associated 39:21 199:1 283:6,10	295:5 344:14 357:4 358:9,18 assume 175:7 227:18 237:18 assumed 331:15 333:19 attached 361:18 attempt 275:15 276:3,11,18 290:7 290:17 291:4,11 attempts 296:9 297:3 attention 108:17 131:18 190:1 attorney 170:11,13 295:22 321:9 362:15 attorneys 8:17 103:20 351:14 attorney-client 63:13,16 August 240:5,14 authored 220:15 authoritative 135:14 authorities 6:13 15:13 124:14 279:16 280:8 authority 27:18 28:16 29:8 163:18 164:13 167:2 179:1 232:3 234:6 234:18 authorized 206:6 authorizing 294:20 available 20:17 38:4 70:12,14,18 74:5 135:6 203:15 320:3 Avenue 2:7 4:8 average 146:18 147:4 avoid 96:5 105:5 189:2 296:9 297:4 aware 102:6 106:15 108:1 137:7 138:4 138:14 139:1,10	145:3,9 170:14,17 170:18 174:1 213:10 235:5,15 236:12 240:4 242:1,8 243:8 244:2 248:7 249:8 249:15 295:18 299:3 315:16 317:7 325:7 327:4 350:10 353:1 Awesome 347:14 awful 104:9,12 a.m 2:5 53:20,21 62:20,21 75:20,21 110:20,21 a[n 250:22 <hr/> B B 5:21 27:10 213:16 back 24:12 39:7 53:5,10 55:14 56:8 68:6 72:16 72:19 73:1 95:3 102:12,13 111:1,2 120:19,22 127:13 127:15 132:14,16 133:21 134:1 140:1 143:5 149:3 153:15 157:2 158:2 167:14,15 171:18,20 175:16 177:9 180:7,8 183:21,22 185:13 187:14 189:3,19 197:9,21 198:12 207:19 214:16 216:22 217:13,16 218:18 231:22 236:2 244:16 245:1,2 260:16,18 260:19 262:2,11 262:14 267:1,2,8 271:5 272:16 277:12,14 284:15 284:16,18 286:10 286:11,17,18
---	--	---	---	--

287:3 297:11,12 298:19,20 303:15 303:16 308:6 310:3,5,6,16 315:18 323:6,12 323:13,15 325:2 325:12 335:3,6 338:21 339:1 341:11,12 344:18 347:13 348:2,13 350:17,19 352:10 354:6 356:6 357:9 357:10,19 358:1 359:8 backbone 46:18 47:4,10,13,17 48:1 49:5,15,22 50:14 51:2 52:21 54:10,22 61:7 62:14 63:4,10 64:2,7,19,22 66:22 68:1,16 69:5 73:5 78:11 79:7,17 80:7 121:19 122:7,8,22 123:9 124:21 125:16 145:15 146:11,19 147:5 147:13,22 148:20 148:22 149:12,19 150:4,11,18 151:3 151:11 152:2,9,16 153:1 157:12 163:4 199:3 258:18 259:9 260:1 261:17 263:13,18 266:7 back-and-forth 105:10 baffled 230:21 baffling 231:11 bandwidth 46:19 47:19 48:2,17 49:4 50:21 55:4 62:15 146:18 147:4,13,22 151:10 152:1,8,16	153:1 barrier 308:16,19 309:2,4 314:14,19 barriers 307:7 309:14,19 313:17 313:19 based 15:5 17:8 70:18 175:1 218:6 251:2,8 284:6 288:22 289:3,10 307:18 327:9,19 339:9 basically 261:11 basis 51:16 71:13 77:4 118:7 238:2 260:5 265:13 Bates 5:21 142:6 155:16,18 159:16 159:19 160:12 161:21 174:14 221:7 bearing 32:7 Becky 84:7,15 beginning 199:21 226:8 250:21 begins 108:21 160:1 185:15 187:16 194:6 221:12 312:17 343:16 behalf 3:2,18 4:2 9:18 103:8 belief 71:16 believe 16:11,15 55:11 68:7 71:20 73:6,9 94:17 97:5 108:15 118:12 142:3 158:5,17 164:4,15,19 174:13,22 176:5 177:21 189:6 203:5 226:6 227:15,20 232:15 251:15 265:18,19 289:17 316:11 356:12 believed 179:18	233:9 believes 15:6,12 16:6,10 114:13 belong 301:19 best 17:12,16 32:9 138:1 141:10 172:2 198:16 214:2 221:3 270:10 272:2 273:1 344:9 better 37:5,14 39:12,14 47:11 89:9 137:21 159:4 236:20 238:20 beyond 37:10 55:20 56:9 64:5 66:7 69:8,11 76:12,17 77:3 83:20 84:3,20 85:19 86:11 87:8 88:1 89:4 90:21 91:16 94:2 99:3 102:14 115:2 118:3 128:15 165:8 168:10,20 170:16,20 171:21 172:12 173:11 179:1 190:19 224:15,18 232:16 242:6 243:4 245:13 247:14 248:11 250:8 255:9 256:17,22 264:16,19,21 265:19 268:7 269:15,18 277:16 283:11 285:16 286:19 295:4 297:18 304:8 307:9 308:18 309:14 315:4,14 317:4 319:15,16 321:18 322:2 325:20,20 327:16 331:11 333:6 337:5 342:19 345:18,20 346:22	348:21 349:11 352:21 358:15 359:4,16 big 92:20 binders 23:16 bit 49:11 156:13 197:12 219:9 320:1 black 233:4 board 5:13 26:19 95:16 96:17 99:2 131:7 172:15 210:12 Board's 20:9 105:3 bomb 218:20 bottom 33:12,13 108:21 109:9 110:5 221:11 280:15 282:20 312:16 box 361:15 Branch 2:6 4:7 176:5,14 179:12 343:13 Brand 218:8,12 break 14:4 29:17 30:7,17,20,21 52:3 53:15 62:18 62:20 110:17 122:15 128:9 133:17 153:7,10 153:12 187:10 190:8,10 202:14 207:19 216:16 257:22 258:2 284:22 352:7,9 breaks 14:3 351:20 brief 199:8 briefing 6:7 220:10 briefings 27:2 316:8 briefly 32:10 185:14 187:14 briefs 198:7 bring 217:16 bringing 61:8 broad 41:10 101:17	157:19 broadly 96:8 broke 111:1 289:4 browsing 223:19 budget 314:9 bulk 270:16 271:11 271:11,13,17 272:1,7,12 273:5 273:9 274:9,18 275:3,9 bullet 333:22 bunch 93:2 229:11 <hr/> C C 8:1 27:11 CA 3:14 cable 56:16 59:8 60:2,11 61:22 62:7 78:4,22 79:6 79:16 80:1 81:6 81:19,22 157:11 cables 60:21 61:13 78:18 182:12,19 183:4,11 California 3:13 call 96:1 118:18 155:2 156:4 188:6 228:17 232:20 240:6 called 2:3 12:7 33:10 34:17 38:15 199:9 calling 51:6 53:3 255:10 257:1 352:21 calls 16:16 40:15 46:21 48:5,20 49:6 50:5 51:5 55:9,17 56:18 58:5 59:12 60:6 61:1,15 62:11 63:13 65:10 66:5 66:19 67:10 68:4 68:19 69:7 70:22 71:20 76:11 78:9 79:9,19 81:10 82:4,22 83:12
---	--	--	--	---

84:19 86:10 87:8 89:3 90:4,21 91:15 94:1 97:16 111:5 116:1 118:10 121:21 123:11 126:11 127:18 129:3 135:17 145:19 154:12 156:3 157:4 158:10 161:2 162:7 166:8 168:19 173:10 174:6 178:22 194:18 196:19 201:5,21 202:21 204:6 205:18 206:21 207:22 217:8 219:15 222:17 223:21 225:17 242:13 243:2,3 245:4,13 253:20 254:13 258:19 260:21 262:16 264:12 266:8 267:10 268:1,19 269:8 270:2,17 272:18 274:11 281:5 282:11 283:12 284:20 285:3 286:20 289:18,22 290:10 294:3 296:2 297:14 298:22 300:4 305:16 307:10,17 308:20 310:11 311:2,14 313:22 317:5 321:6,18 322:3,20 323:17 325:4 326:4 327:1 328:18 331:21 333:13 335:8 337:5,15 345:19 347:6 349:22 357:12 capabilities 251:1 capable 104:13	capacity 69:12,13 76:14,15 83:22 84:1 103:7 210:20 242:7 248:16 253:3 277:18,19 285:18 286:22 308:22 309:11 333:8 337:7 342:21 346:18 353:1 caps 58:17 caption 362:8 capture 199:5 200:17 care 14:14 136:17 137:3 177:12 303:1 careful 136:6 carried 61:13,21 62:7 150:17 151:2 carries 113:7 190:4 272:6 carrying 109:9 110:5 115:9 258:15 carryover 112:8 119:21 190:15 case 1:5 8:5 9:18 17:4 18:16 19:15 23:9,18,21 62:14 65:2 91:7 107:19 227:18,21 235:16 277:4 278:3 338:12 339:5 356:13 361:4 363:4 categories 42:15 148:6,13 Cathleen 9:8 causing 260:4 caveats 352:1 CD 11:7 certain 6:18,21 65:17 140:16 170:17 174:17 192:5 194:8,12,15 221:22 222:6,11	233:22 263:17,20 264:1 316:12 318:7,20 319:3 320:15 certainly 27:7 36:8 47:2 48:22 59:17 61:17 63:17 97:14 103:7 169:13 248:14 309:12 343:1 CERTIFICATE 362:1 Certifications 7:10 355:1 certify 362:4 chance 45:10 190:13 211:12 change 105:8,15 125:10 298:11 299:22 353:18 changed 50:7 63:20 107:9,15 140:16 247:2 294:22 changes 26:21,21 105:2,8 293:20 361:18 characterizing 158:7 charge 31:19 check 112:22 187:9 270:18 361:15 chief 32:15 37:19 37:19 chokepoint 183:19 chokepoints 184:8 184:15,22 185:7 chosen 143:5 circuit 57:22 78:5 78:11,22 79:6,16 80:2,6,9,17,19,22 81:1,7,11,12 82:2 82:16,19 83:5,6,7 83:9,15 84:17 85:16,20 86:2,5,9 86:19 87:2,5,18 87:22 88:11,18,22 89:10 91:12 92:3	92:4,10,13,18,19 92:21 93:6,7,12 93:15 94:9 121:19 122:7,8,22 123:9 125:16 152:15,22 154:3 157:11 158:7,17,22 163:4 198:8 322:18 324:10,18 326:16 circuits 49:9,16 58:4,8,10 87:1,2,4 87:6 91:12,20 93:20 94:6,7,17 124:20 125:9 145:15 146:11,19 147:5,13,22 148:6 148:13 198:22 322:19 324:10 circular 94:7 237:7 circumstance 82:7 82:8 circumstances 90:17 192:5 194:8 194:12,16 322:8 cited 124:15 civil 2:6 4:6 5:13,17 8:9,11 20:7,9 24:16 25:3,6,9 26:19 28:7 95:15 101:6 109:21 120:14 130:4 131:7 170:11 192:2 209:13 210:11 219:3 258:13 299:10 314:10 325:14 360:1 claims 16:3 41:3 clarification 155:10 215:14 clarified 53:22 clarify 25:15 26:5 67:12 77:17 157:5 212:13 221:18 clarifying 213:5 305:3 classifiable 178:18	179:9,20 classification 22:13 39:3 51:16 71:14 74:8 97:2 98:22 99:6,10,11,22 100:3 101:2,14 111:14 116:18 130:9 141:9 163:17 164:12 176:5,14 179:1 215:16 classifications 177:1 351:20 classified 10:2,9,15 11:16 15:11,20 16:6,10,13,16 18:1 20:18 21:1,1 21:2,5,9,14 22:9 22:16 23:3 30:7 30:10 39:22 41:13 41:18 42:5 50:8 50:16 51:7 52:12 54:16 63:14 70:22 71:17,20 72:9,10 73:14 75:3 76:6 97:3,19 98:1,5 99:4 101:3,5,12 105:12 110:9,12 110:13 111:5 112:2,17,21 113:13,20 114:3 114:16 116:2,14 116:15 117:5,16 118:18 121:21 122:3 123:1,3,11 124:13 126:12 127:18 128:16 129:4 131:14 133:3 134:4,21,22 139:5,21 140:4 141:12 144:12,17 145:12,20 151:15 155:2 156:4,10,12 156:12 161:2,22 174:7 175:10,11 175:20 178:20 179:10,18 180:10
--	--	--	---	--

188:7,11 190:20 193:10,11 194:18 196:20 199:14 201:6,22 202:22 204:6 205:18 206:22 208:1 209:12 214:17 215:1 216:10 217:8 219:5,16 222:17 223:22 226:11 228:6,18 232:20 233:2,3 234:10 235:19 236:21 239:4,6,9 239:17 241:7 242:13 243:2 245:4 248:1,12 254:14 256:8,14 256:16 258:20 260:5,21 261:7,12 262:3,16 264:6,12 265:2,5,20 266:1 266:9 267:10 268:1,12,19 269:8 270:2,18 272:18 273:12,17 274:11 277:21 278:8,17 281:5 282:12 283:13 284:20 285:3 287:14 288:2,19 289:8,9 289:13,17,22 290:10 294:3,12 294:16 295:20 296:2,14 297:14 298:3,22 299:14 300:4 302:8 303:18 304:6,21 305:8,17 307:18 309:8,9 310:11 311:2,14 313:22 317:5,10 322:21 323:17 325:4 326:4 327:1,18 328:19 331:21 332:14,15 333:13 335:8 337:15	339:7,19 340:13 347:7 349:12,18 350:1 351:17,19 357:12 clean 145:1 289:20 clear 13:12,15 16:5 17:12,14 22:12,12 27:16 29:20 30:16 35:22 36:20 40:21 55:2 69:10 78:15 80:13 86:17 149:10 202:15 205:1 249:16 294:7 308:13 358:22 359:13 clearer 13:17 41:14 134:9,18 320:9 clearly 16:13,18 104:4 118:6 144:6 197:11 clicking 156:11 closely 37:18 106:8 106:9 CLR 2:8 362:19 CNCI 253:5 coffee 14:7 colleague 177:4 307:22 colleagues 8:8 118:2 collect 206:6 219:12 228:12 229:21 230:10 232:4 234:4,6,19 284:5 collected 242:3,10 295:1 355:20 356:18 collecting 233:21 273:5 274:6 296:10 297:4 collection 6:19 107:10,11,16,17 111:19 140:9 195:7 196:1 197:16 204:17 209:17 212:6,17	213:1 214:20 215:9 217:6 218:2 221:14 222:1,7 223:15,18 224:1 230:14,20 234:21 235:9 236:15 238:6 244:10 253:20 271:18,21 272:2 293:21 294:22 295:2 307:8 308:9,11,13 308:17 309:5 313:2,11,20 315:1 315:11,19 316:21 317:14 318:7 319:9 320:18 321:15 322:1,11 347:19 collections 218:4 collects 206:7,9 college 36:2 Collyer 6:17 Columbia 2:9 8:4 362:3,20 combined 147:12 147:21 combining 149:10 come 41:17 121:11 146:5 187:9 189:3 222:4 259:14 comes 47:9 199:8 comfort 239:16 comfortable 161:15 203:4 coming 211:2 311:20 commencing 2:4 comment 131:8 214:22 comments 104:22 Commerce 33:22 34:4 commission 34:3,5 362:21 committee 38:3 316:10,12 common 91:11	94:16 254:6,22 commonly 157:12 256:20 257:6 communicated 231:22 communicating 212:3 231:3,5,8 communication 91:10,15 93:18 126:8 160:6,7 188:17,18 232:4 243:9 266:18 267:21 274:5,6 305:10 339:19 352:15 353:9,13 353:21 communications 39:17 67:15 124:20 132:10 133:12 170:10 196:7 198:22 205:15 206:5 222:15 223:15 225:14 227:17 228:12 229:21 230:11 231:12 233:22 234:4,7 242:20 243:17,18 255:8,18 256:21 258:17 259:8,22 261:16 263:13,18 266:6 268:16 270:15 271:11 272:11 273:5,9 274:9,18 275:3,9 275:17 276:5,12 276:19 277:5 278:5 279:2 280:19,21 281:3 281:17 282:3,7,9 282:21 283:4,9,19 284:6 285:11 290:7,18 291:4,12 291:18 292:4,10 292:17 293:4,12 296:10 297:4 298:12 300:1,21	301:10,11,19 302:4,16 320:7 322:18 324:9,18 324:21 325:17 326:1,16,18 328:16 329:4,12 329:20 330:6,14 331:18 334:2,15 335:14,22 336:15 337:3,11,22 338:13,16 339:14 340:9 341:3,14 342:3 355:20 356:12 357:4 358:2,12 359:2,10 communication's 352:16 353:10 Community 142:21 Community's 104:22 companies 34:4 compared 221:13 226:9 Compartmented 10:13 compel 6:14 75:5 279:17 280:9 compelled 126:8 132:8 133:10 198:21 complete 16:20 139:6 293:19 297:2 298:10 299:21 300:12 361:16,19 completely 324:20 compliance 26:1,10 26:12,20 31:13 246:17 312:19 component 289:9 compound 151:14 151:17 342:3 comprehend 44:2 comprehensive 6:9 142:13 249:9 250:16 252:17 319:1
---	--	---	---	---

<p>compress 270:7 computer 35:9,9 36:14,21,21 37:7 40:11,11 46:22 66:2,10,15 67:7 67:17 343:12 computers 39:16 concedes 160:2,5 185:16 187:17 concept 44:13 246:4 concepts 43:4 44:8 concern 35:4 41:8 42:2 215:17 240:17 241:6 concerned 102:20 156:8,9 215:15 236:21 238:15 239:3,22 concerning 16:5 24:3,7 171:12 172:7 concerns 17:4 concluded 360:4 conclusion 65:10 76:7 118:2,10 173:11 286:21 307:11 308:20 321:6,19 322:3 conduct 11:15 27:19 28:16 29:8 37:14 121:17 122:20 123:7 165:6,16 167:2 175:4 180:2,16 181:2,10 186:12 272:7 280:17 conducted 26:15 99:10 120:1 145:6 145:16 146:12,20 147:6,14 148:1 181:19 182:12,18 183:4 184:7,14 185:1,8 187:19 228:11 234:18 244:20 246:22 264:21 319:5</p>	<p>conducting 26:22 100:6 107:21 250:21 321:15 conducts 182:6 183:11 185:21 confer 10:12 215:10 216:17 229:11 260:2 conference 97:16 240:6 conferring 53:1 72:13 76:22 102:10 113:2 124:9 132:13 133:15 138:9 170:7 171:16 175:14 177:3 180:6 186:21 193:6 202:13 223:10 228:15 235:11 238:12 244:14 251:11 254:9 256:1 261:21 266:21 270:20 277:7 285:14 294:1 296:15 297:6 298:14 301:3 302:20 303:8 307:15 309:21 313:12 315:3,13 317:2 319:11 326:21 331:9 334:19 347:21 349:9 352:19 356:1 357:7 confident 71:3 configuration 282:5 283:3 configured 283:7 confined 88:4 confirm 76:19 77:4 80:18 128:17 132:7 133:10 134:11 178:8 187:17 188:14 193:14,20 240:20</p>	<p>304:13 confirming 236:19 confusion 177:9 Congress 308:7 309:13 315:10,22 321:14,22 congressional 316:10 connect 81:7 connected 66:10 connecting 48:15 54:14 80:17 connection 271:14 282:6 283:3 connects 78:5,22 79:6,16 80:1 consider 42:16 51:17 52:17 82:16 82:18 83:5,6 179:19 229:9 230:8 308:15 315:18 considerable 320:2 consideration 314:16 considerations 32:2 314:15 considered 67:16 80:7 104:22 178:19 179:10 314:11 considering 247:7 considers 16:13 50:21 108:11 314:9 consistent 154:6 355:11 356:13,22 consolidate 294:8 constitute 10:18 16:20 62:8 67:6 91:10 223:19 247:6 254:5,21 constitutes 80:17 constraints 319:2 construed 10:18 consult 37:13 76:4 261:20</p>	<p>consulted 247:16 contain 205:15 266:18 285:11 322:10 contained 219:14 230:13,19 234:21 264:10 269:5 containing 160:7 188:18 195:8 196:2 197:17 199:6 200:17 344:8 contains 231:4,19 239:8 269:22 contemplates 118:6 contend 277:3 contending 278:21 contends 278:3 279:1 content 261:9 263:4 289:13 304:5 contents 242:20 243:9 244:3 258:17 259:7,21 300:21 301:10 302:4,16 303:6 304:14 305:10,14 351:13 context 86:2 157:20,20 183:17 195:13 218:17 221:16,20 222:15 224:1,19 226:3 235:21 236:3 239:15 240:2 255:7,17 274:4 288:1 319:13 Continued 4:1 6:1 7:1 continues 101:17 contributed 235:8 contributing 288:7 contributors 288:14 conversant 42:17 conversation 39:4</p>	<p>85:18 94:8 101:9 101:13 105:6 176:17 228:4 344:17 conversations 351:14,16 conveyed 136:19 Cook 3:11 5:6 8:10 110:16 232:5 328:8,9 329:2,10 329:18 330:4,12 330:20 331:5,14 332:6 333:1,10,18 334:7,14 335:13 335:21 336:7,14 337:1,10,20 338:7 339:13 340:2,8,18 341:2,9,19 342:8 342:13,16 343:5 343:14 344:7 345:2,9 346:2,10 347:2,12 348:5,11 348:15 349:4,19 350:6 351:2,9,12 352:5,8 Cooley 3:12 8:10 copied 11:10 340:10 copies 279:18 copy 248:2 251:18 275:3,9 301:9,17 329:11,19 344:2,9 345:4,16 346:5,12 347:5 corner 14:7 correct 14:12 18:13 18:14 19:19,20 21:7 38:13 39:11 43:12,13,15 70:3 73:10 85:13 89:20 94:17 97:9 98:9 98:10 99:20 100:1 100:9 103:2 112:17,18 113:10 136:3 140:14,15 154:9 158:6,7 166:18 173:6</p>
--	--	---	---	---

189:5 199:19,20 200:1 208:22 217:20 253:19 256:13 257:20 265:9 289:2 305:5 322:1,12,14 328:2 347:15 348:14 355:21 356:19 357:5 358:13 361:16,18 correcting 192:13 192:16 correctly 76:17 counsel 2:3 7:7 9:1 9:6,9,21 10:4,10 11:7,12,18 12:10 13:1,19,22 15:3 17:14 21:16 30:10 53:1 72:13 76:4 76:22 102:10 113:2 118:6 124:6 124:9,15 132:13 133:15 138:9 170:7 171:16 175:14 177:3 180:6 186:21 187:1 193:6 202:13 211:15 214:6 223:10 228:15 235:11 238:12 244:14 251:11 254:9 256:1 258:4,12 260:4 261:21 266:21 270:20 274:2 277:7 285:14 294:1 296:15 297:6 298:5,14 301:3 302:20 303:8 307:15 309:21 313:12 315:3,13 317:2 319:11 326:21 328:7 331:9 334:19 343:9 347:21 349:9 352:19	356:1 357:7 362:11,15 counsel's 203:11 304:10 327:11,19 counterterrorism 27:1 countries 157:8,17 162:6 country 162:18 163:5 couple 169:12 287:11 course 101:22 258:15 259:6,20 261:15 266:16 270:14 272:10 274:8,16 275:2,8 275:14 276:2,10 276:17 328:16 329:4,12,20 334:16 335:15 336:1,16 337:12 337:22 340:10 341:5 355:20 356:18 357:5 358:10 court 1:1 5:20 6:16 11:1,6,12,19 23:22 27:19 28:10 29:9,12 46:8 160:20 162:16 163:15 165:5,13 165:15 166:1,11 166:17 167:2,11 167:20 168:14 169:14 170:4 171:12 172:7,10 174:4,20 220:11 220:12 279:14 312:5,10,22 319:8 319:14 320:10,17 320:21 321:2,3,4 361:1 Court's 6:7 173:8 220:10 covered 120:21 232:18	co-op 34:17 create 345:4 346:11 created 82:2 creating 288:14 creation 345:16 346:4 CSR 2:8 362:19 CT 142:21 current 22:20 24:14 31:5,11 117:5 319:2 currently 250:21 284:22 cyber 251:5 cybersecurity 6:10 249:9 250:17 252:17 <hr/> D <hr/> D 8:1 data 34:6 46:19 47:19 48:2,13,17 49:4 50:2,21 52:18 55:4,16,20 56:5,6,14 57:1,7 57:10,12 58:1 59:3,4,9,22 60:11 60:18 61:9,10 62:8,15 67:21 68:14,20 69:3,21 73:3 80:16 93:3 261:16 263:12,17 263:22 266:6 301:18 306:3 databases 206:4 date 108:1 128:3 193:21 251:12 361:22 363:4 dated 130:6 233:14 252:10 280:9 312:10 318:6 320:16 343:13 355:1 Dawn 1:21 2:8 110:18 153:11 251:19 328:13	348:11 362:2,19 day 328:10,14 363:19 days 322:6 De 211:2,10,13,18 212:2,18 214:7 215:5 217:2,21 218:15 deal 36:12 41:6 234:2 decide 27:9 92:21 173:16 280:20 decided 319:4 320:4 decides 286:1 314:12 decipher 280:19 281:17 282:3,9 decision 226:3 decisions 27:8 declassification 175:5 declassified 105:14 142:2,4,8 177:10 177:14,21 227:4 232:13 284:22 339:6 declined 214:22 289:10 deem 283:19 deemed 282:21 342:2 deems 9:22 10:7 deep 244:12,21 245:10 247:10 348:16 349:2,7 Defendant 30:2 defendants 1:8 4:2 5:11 6:14 9:4,18 19:15 45:3 361:7 Defendant's 279:17 280:8 define 88:11 89:8 93:5,7 255:13 defined 78:6 defines 57:20 definitely 209:12	definition 47:8 49:17,22 54:11,19 56:1 61:7 64:6,11 64:12,18,21 65:22 66:1 68:1,16,21 69:4,22 70:1 73:5 78:16 81:12 82:11 83:2 85:19 87:17 89:10 153:22 154:2 155:11 157:6 225:20 239:9 256:11,15 257:5,6,19 271:10 271:19 definitions 63:18 161:18 191:2,7 deliberately 275:15 276:3,11,18 277:4 278:4 deliberations 103:12 deliberative 96:2,5 96:9 102:20 103:14,17 delving 104:8 deny 76:19 77:4 128:17 134:11 193:14 denying 236:19 Department 2:5 4:5 8:21 26:16 31:13 32:1,18 33:5,22 34:3,5 36:10,19 37:12,22 103:4,20 166:22 167:19,21 168:7 168:17 170:10,12 172:19 176:21 220:19 222:10 246:15 247:16 248:7 249:5 252:9 depend 92:5,7,8,9 93:5,10 353:4,5 depending 27:11 52:8 92:2,15 228:20 depends 92:1
---	---	---	---	---

depicting 240:16	313:18 314:20	determines 269:21	difficult 18:6 41:9	271:22
deployment 343:10	describes 109:17	determining	41:17 139:22	discuss 22:16 30:7
DEPONENT 361:9	109:18 117:5	351:16	238:15	30:9 39:4 139:20
deposed 12:20	139:13 272:1	developed 251:3,8	difficulties 319:3	207:15 271:7
18:13	describing 119:2	developing 31:19	direct 10:5 131:18	338:15 351:21
deposition 1:12 2:1	119:13,16 139:21	device 11:4 195:7	190:1 195:15	discussed 20:22
5:9,10 6:3 7:3	141:18 199:15	196:1,9,16 197:5	direction 116:10	22:14 33:19 64:10
9:20 10:11,22	description 47:14	197:16 200:11,13	123:17 124:3	86:1 119:5 120:2
11:4,5,10 12:13	98:15 101:17	devices 204:16	129:8 146:3 182:2	120:10
13:3 14:4,9 19:1	102:18 106:5	282:6	directions 146:16	discussing 50:3
19:14 20:20 23:5	107:2,4 109:11,20	Devon 3:11 8:10	302:12 327:11	124:12 187:16
44:16 63:11 65:1	110:3 111:12,16	328:9	Directive 271:19	203:19 325:13
65:6 69:9,11	111:19,22 124:3	De's 236:2	directly 25:2	discussion 228:6
85:16 95:7 104:6	130:21 131:10	dhanleycook@co...	Director 5:16	235:20 312:16
120:12 129:15	137:18 140:3	3:16	24:16 25:2,4 30:3	displayed 11:1,3
159:8 210:2 220:1	141:11 142:13	DHS 37:4 38:9,12	31:12 45:4 130:3	disposal 171:7
250:1 251:20	143:11 144:7	38:16 39:5,10	163:18,19 235:6	dispositive 126:4
273:2 279:11	145:5 198:16	248:14 250:21	236:12 239:13	dispute 176:21
312:1 317:21	200:3 246:12	343:3	240:5,7 242:2	disregard 280:21
318:12 331:3	272:5	differ 17:8,11	246:16	281:2
342:6 351:20,22	descriptions 110:2	difference 83:2	Directorate 252:8	disrupt 345:12
354:15 360:4	143:7 157:10	119:13 159:1	disagreed 172:19	346:13
361:12 362:4,10	191:9 311:7	213:2,9 261:19	disagreement	distinct 56:2 225:4
362:13 363:1	designated 18:19	differences 107:14	178:6	distinction 48:8
describe 35:8 36:17	58:17 77:15	158:16,17 213:11	disagreements	214:6 263:1
40:9 49:11 54:13	designed 196:9	different 20:5,11	178:12	distinctions 93:2
108:14 117:18	199:14 204:18,21	22:22 36:11 38:1	disavowed 314:22	District 1:1,2 2:9
118:16 137:10	205:3,9,12	50:12 65:21 73:21	discard 300:22	361:1,1 362:3,20
140:13 143:3,9	designee 19:18	86:22 88:17 91:10	disclose 16:12	divide 86:22
202:7,17 269:3,20	65:18 69:13 84:1	91:12,19,20 92:3	71:17 72:9 117:16	Division 2:6 4:6
293:18 296:9	destination 90:2,12	92:17 93:18,20	123:21 175:9	170:11,12 220:19
297:1 298:9	91:11 94:16 254:6	94:6,6,9,15,16	226:11 256:8	DNI 321:9
299:20 300:11	283:5,9	96:12 112:1	disclosed 14:20	document 14:17
318:17 320:20	detail 44:2 293:19	119:16 138:22	20:13 131:13	19:6 32:22 45:9
337:9 354:19	297:2 298:10	142:2 144:20	136:1 175:22	45:15,19 58:21
described 13:1	299:21 300:11	162:3 174:19	226:20 312:18,21	68:10 95:12 96:22
47:16 86:13 96:17	324:19 326:1,17	179:6 199:10,15	339:3	97:2 98:22 99:11
99:13 138:7,17,21	detailed 19:12	214:15 225:9	discloses 124:13	99:14,21 100:3
140:9 145:11	details 40:16 104:8	226:1,1 236:5	disclosing 16:2,9	108:10 111:11
155:15 161:21	126:13 145:21	257:10 259:14	42:5 76:5 164:4	129:20,22 130:2,3
162:4 192:10,11	detection 248:8	274:6 284:7	disclosure 10:2,8	130:8 132:3
196:17 197:6	343:11	287:12 318:10	10:15 15:7 141:1	143:16 145:10
199:11 200:11,14	determine 110:11	353:17	discovery 6:14	155:9 159:13,18
201:2 240:8 244:9	202:8,9,18 239:5	differentiating	269:19 279:17	176:3,19 177:10
244:19 251:2	239:17 264:9	54:17	280:9	178:6,11 191:20
253:9 257:4	determined 266:17	differently 132:18	discrete 223:15	198:3 210:8,10
309:19 310:19	269:4	143:4	discriminates	212:1 220:6,15

224:2,12,19 235:13 236:19 237:17,18 238:19 239:7,13 240:15 249:20 250:6,7,13 251:13 252:6 272:1 279:10,20 280:3,4,6,15 312:7 317:20 318:4,5,10,16 332:8,10 333:4,7 342:10,18,21 343:22 344:16 345:3,5 354:14,19 355:16	drawn 351:18 drive 11:8 drugs 18:5 duly 12:8 362:6 duty 241:6,7 D-E 211:3 D.C 1:14 2:8 4:9	employees 25:12 43:19,22 210:16 210:20 encompass 50:2 286:6 288:5 encompasses 225:13 encrypted 280:19 291:18 292:3 293:3,12 352:15 353:9,21 encryption 353:4 ends 108:22 engineering 35:9 36:21 40:12 ensure 28:5 32:15 32:19 37:6 38:5 63:19 97:2 105:1 105:10 106:8,10 136:6,18 141:1 191:13 192:7 194:10 196:8 ensuring 31:21 99:3 entire 42:1 97:1 99:21 100:3 111:11 210:1 305:10,14 306:22 entirely 319:21 325:11 entirety 343:3,4 entity 280:17 equipment 280:21 281:2 283:3,8 erode 32:16 errata 361:18 363:1 error 311:9 313:9 Esq 3:3,11,19,20 4:3,4,16,17,20 essence 50:12 98:14 essentially 157:17 227:15 establish 75:1 establishment 104:1	et 1:7 361:6 363:4 EU 34:7 European 34:3 evaluation 320:3 event 277:22 everybody 105:10 328:14 everyday 257:16 evidently 239:22 ex 170:9 exact 97:14 exactly 22:12 23:2 130:7 142:1 171:2 188:21 189:4 193:11,14 195:12 209:18 235:17 270:9 344:21 examination 2:3 5:4,5,6 12:10 19:9 258:4 328:7 352:13 examined 12:9 361:11 examining 246:7 example 15:19 47:3 47:21,22 49:1 56:16 59:16,17,17 60:9 61:5,18 62:13 66:14,21,22 80:6,9,10 81:14 81:14 82:10 191:19 192:4,21 193:18 194:7 200:7,8 231:8 240:9 examples 49:3,9 50:13 61:6 80:22 91:2,4 191:17 193:12 233:1 exception 91:6 340:21 351:15 exceptions 354:12 exchange 218:18 exchanges 97:17 exclude 282:7 excuse 124:6 167:13 244:11	executive 142:20 176:4,13 179:12 343:13 exercise 250:22 251:1 exhaustive 143:10 144:8,12,14 exhibit 5:9,10,11 5:13,16,19 6:3,4,7 6:9,11,13,15,18 6:20 7:3,4,5,7,9 19:1,5,19 44:16 44:20,21 45:7,15 58:15 77:13,13,19 95:6,7,11,14,21 96:14 97:8,12 98:8,17 99:19 102:4 105:21 106:17 108:18,22 109:10 110:6 112:9 113:8 115:10 119:22 124:13 126:21 129:14,15,19 131:3,17 135:4 137:8 138:5,15 139:12 140:19,20 140:22 141:1 143:10 145:3 159:7,8,12,16,22 163:15 174:2 175:5,22 176:10 177:1,19 185:14 187:15 188:1 189:19 190:14,16 190:20 192:4 193:22 194:6 195:16 197:7 198:18 199:18 200:12,16 201:4 203:17 204:3 209:8,14 210:2,8 211:9 212:19 214:8 217:3 220:1 220:5 221:6,7 224:20 226:8,15 233:7 250:1,5
	E			
documentation 96:18 97:6,21 documents 14:22 20:4,5,19 21:3,6 21:10,14 23:17 99:1 176:7,13 226:20 227:3,10 338:8,9,10,11 346:20 355:5 doing 12:1 33:2 105:9 107:9,16 137:22 141:10 196:8 221:4 310:16 DOJ 9:4 domestic 160:5 188:16,17 196:7 199:4 200:5 201:19 202:10,20 204:2,19 205:4,16 325:17 dot 281:17,17,17 281:19,19,20 double 171:19 doubt 104:7 draft 46:5,6 129:22 drafted 136:1 drafting 45:20 95:20 96:13 97:8 246:18 252:12 drafts 167:9,18 drawing 214:6	E 8:1,1 363:2 earlier 128:13 138:20 162:5 219:5 257:9 easier 41:20 53:7 effort 221:21 Einstein 6:11 246:22 247:1,10 248:1,6,9 249:1,8 249:17 251:1,7,17 252:9 260:7 343:11,17 344:1 344:14,14 345:11 345:15 346:4,11 either 26:16 101:1 201:1 238:21 295:4 327:5 electronic 11:4 126:7 132:9 133:12 eliminate 199:4 200:5 201:19 204:11,18 205:12 eliminated 204:3 266:19 267:21 eliminating 205:3 else's 11:3 elucidate 228:4 email 3:9,16 4:12 97:16 243:9,18 268:16 emailing 218:12 employ 192:6 194:9 employed 362:12 362:15 employee 21:20,21 34:18 362:14			

251:20 252:3,22 252:22 273:3 279:10,11,15 280:13 281:14 282:19 312:1,4 313:18 317:20,21 318:3,11,12 320:2 320:13 331:6,7,12 331:15 332:7,9 333:3,19 342:6,9 343:16 344:1 354:15 Exhibits 331:3 334:8 existed 35:7 existence 248:17 existing 325:14 expect 56:10 66:7 78:13 experience 36:8,12 37:10 38:1 experienced 240:10 expert 20:22 21:6 21:20 22:2,3 46:22 47:1 48:6 48:21 49:7,18 50:5 51:5 53:3 54:12 55:9,18,21 56:10,13,18 58:6 59:13 61:1,15 62:11 64:12 66:5 66:8,19 67:10 68:4,19 69:7 76:11 78:9,12 79:10,19 81:10 82:4,15,22 83:3 83:12 84:20 86:3 86:11 87:8 88:4,7 89:3 90:4,21 91:16 94:1 96:16 154:13 156:3 157:4 158:10 161:19 169:15 225:17 243:4 245:14 255:11 257:2 337:5 352:22	expertise 38:2,8 178:22 experts 37:21 52:17 55:1,3 59:11 60:7 63:5 64:1 73:22 85:15 87:17 expires 362:21 explain 17:10 32:10 39:13 44:13 119:12 238:22 309:1 324:19 325:22 326:17 explained 44:3 explaining 44:8 101:1 218:16,21 222:9 explanation 218:14 228:7 explanations 167:8 168:5 explosive 218:20 explosives 218:12 expound 346:20 extensive 42:11 106:13 extensively 37:4 106:10 120:13 121:16 extent 21:4 26:20 40:15,20 42:13 50:9 54:9,14 55:8 60:5,8,22 61:15 62:10,12 63:13,15 65:9 66:4,18,20 67:10 68:4,18 69:7,8,10 70:11 70:13,22 71:6,7 73:10,19 74:9,14 78:8,17 79:9,18 80:8 81:8 82:3,20 82:22 83:1 87:7 88:14 89:3 90:4 90:21 92:19 93:22 96:1 99:1,12 107:11,18 111:3,5 111:8 117:4	121:21 122:3 123:2,3,11 127:18 127:22 128:19,19 131:13 132:21 134:3,6 137:15,20 139:2 140:7,16 141:5 142:17,18 144:12,15 155:1 156:2,3 157:4 158:9 164:1,10,11 166:10 169:10 170:21 174:6,9,17 174:21 193:9,11 194:18 198:19 199:12 204:5 205:17,19 217:7 217:10 222:17 223:22 227:5,22 230:6 232:18,20 243:2,3 253:4 260:21 261:2 262:15,18 264:11 264:13 265:22 267:10,12 268:11 269:7 272:17,21 273:11 277:20 278:16,19 285:18 288:17 289:21 294:3 296:1 297:14 298:22 299:3 303:18,21 304:18,20 307:17 308:3 309:2,7 310:10,14 311:2,5 311:13,16 313:21 314:8 317:5 325:4 325:7,16 327:21 333:6 344:12 348:20 349:11 353:1,15 357:12 extenuating 322:8 external 37:21 38:2 extracted 355:11 356:11 extracts 355:19 356:17 e-commerce 34:1	E-Government 32:13 e-mail 206:13 E-X-H-I-B-I-T-S 5:8 6:2 7:2 E3A 6:12 252:10 <hr/> F <hr/> F 45:4 FAA 308:4 322:5 fabulous 210:6 FACA 38:3 face 57:18 212:10 212:18 236:1 Facility 10:13 fact 44:14 96:21 98:11 112:14 124:17 125:9 126:3 134:13,21 145:11 166:6 170:15 173:2,14 173:15 178:2 187:18 188:15,16 192:13,18 219:1 227:19 234:3 238:7 242:19 243:8 244:2 264:21 317:7 facts 104:10 107:5 108:14 124:13,13 141:6 174:21,22 259:14 factual 96:22 98:8 98:17 99:8 100:11 105:22 106:16 136:7 138:5,14 139:11 140:22 145:4 172:20 173:6 179:16 277:3 278:3 factually 109:3 137:7 241:3 fair 141:16 142:11 143:9,20,22 faith 9:22 10:7 fall 200:2 familiar 21:13 24:6	24:9 28:17 165:3 242:19 245:10,22 248:5,14 252:14 255:6 256:10 312:6 318:16,18 354:20 355:4 familiarity 36:5 fantastic 171:3 far 32:6 33:19 186:5 239:20 fast 91:7 92:2 130:16 324:4 federal 2:6 4:7 31:8 32:18 33:8,18,20 34:4 35:2 38:3 46:8 65:5 345:12 346:13 359:22 feel 94:7 187:5 felt 43:6 44:2,6 fiber 56:16 79:22 80:8 81:6,18,21 151:10 152:1,8 fiberoptic 59:8 60:2,11,20 61:9 61:13,22 62:7 fibers 60:1 93:19 148:19,22 149:11 149:18 150:3,11 150:18 151:3 figure 75:14 214:2 221:12,13 226:8 figures 222:11 filed 23:18,22 46:8 167:10 338:11 339:4,5 355:16 Filing 6:7 7:9 354:21 filter 191:13 192:6 192:9 193:3,21 194:10 196:6 200:2,6,8,9 202:10,20 275:16 276:3,12,18 277:21 290:7,18 291:4,11,18 292:3 292:10,16 293:3 293:11
---	--	--	---	--

filtered 199:4 200:4 267:15 325:17	176:3,6,15,22 178:18 179:9,11 179:15 219:11	275:6,12,20 276:8 276:15,22 281:10 282:15 283:16	165:22 166:16 167:1,10,20 168:13 170:3	324:1
filtering 190:22 191:12,16,19 192:10,21 193:2 193:13,16 195:5 195:21 196:17 197:5,14 198:2 199:9 201:2,14 244:8,18 278:20 279:1 298:12 299:9 325:15 341:4	222:11 295:8,10 308:6 309:12 310:15,19 313:9 315:22 316:20 317:13 321:4,11 321:11,12 322:7 339:5 354:22 355:16	284:2 285:7 290:3 290:13,22 291:8 291:15,21 292:7 292:13,20 293:7 293:15 300:17 301:6,14,22 302:11 305:20 306:7 307:4 323:2 323:21 324:14 326:7 327:11 328:22 329:8,16 330:2,10,18 332:4 332:20 333:16 334:5,12 335:11 335:19 336:5,12 336:20 337:18 338:5 339:11,22 340:6,16 341:17 347:10 350:22 351:7	171:12 172:6,9 173:7 174:3 191:14 210:14 220:11 228:12 229:22 230:1 233:11,12,21 234:7 283:20 285:12 286:5 287:16 288:5,14 312:9 318:7 320:5 320:7	found 134:19 foundation 1:4 8:6 12:14 91:14 258:5 258:13 279:22 344:11 345:21 346:16 361:3 363:4
filters 277:4 278:4 final 127:1 Finally 11:14 financially 362:16 find 74:10 110:10 112:22 fine 43:2 74:22 171:18 187:12 246:12 252:15 303:1	FISC's 176:11,18 221:21 222:5 fits 353:7 five 10:22 253:7 352:9 five-minute 62:18 110:17 257:21 fix 102:3 105:22 fixed 106:1 flash 11:8 Floor 3:13 flow 255:6,7,16,17 256:11,13,15 257:14,14,15	followed 254:18 following 9:19 124:2 146:15 147:1,9,18 148:4 148:11,17 149:16 150:1,8,15,22 151:7 152:5,13,20 153:5 162:21 163:8 304:10 317:10 340:22	foreigner 230:11 230:15 231:2,16 232:1 234:19 foreign-intelligen... 283:1 forgive 144:20 form 21:11 22:8 35:13 41:2 42:19 43:7,14 44:4 46:1 48:5 50:4 53:2 56:18 58:5 61:14 64:8 67:9 68:3 70:21 79:8 82:22 86:10 90:3,20 91:13 98:19 106:2 106:18 109:4 113:22 118:1 124:22 141:3,20 165:7 193:7 212:7 220:17 222:16 226:22 228:16 239:15 242:5 296:12 302:6	four 10:17 22:20 24:20 25:1 31:5 35:18 36:2,19 40:10 42:14,17 130:7 211:21 247:3 Fourth 198:8 fragmentary 197:12 frame 17:13,15 34:16 168:22 169:2 316:5 336:9 framed 52:12 frames 17:11 Francisco 3:14 Freedom 169:18,19 177:11,14 frequency 312:21 frequent 37:17 front 19:4 44:19 95:10 129:18 159:11 210:7 220:4 250:5
Fingerprints 7:5 finish 201:17 304:17 first 3:4 8:4 12:8 16:8 29:21 30:4 37:2 47:9 48:12 67:2 69:6 77:20 108:19 131:18 137:19,22 143:19 189:22 199:3 200:4 212:3,4 229:19 237:4 243:16 273:3 281:15 287:15 300:20 309:18 310:7 312:15 318:22 333:22 343:19	flow 255:6,7,16,17 256:11,13,15 257:14,14,15 focus 259:4 focused 217:22 focusing 112:8 folder 210:1 follow 51:11 72:3,4 77:8,10 116:7,9 123:16 126:17 129:7 146:2 162:11 180:14,21 181:7,15 182:1,9 182:15 183:1,8,15 184:3,11,18 185:4 185:11 195:2 197:1 201:9 202:4 203:11 207:3,11 208:10 219:19 224:7 234:14 235:2 242:16 245:7 255:3 256:4 259:1,5,12,17 266:12 268:22 270:11 274:1,21	follows 12:9 follow-up 218:9 289:12 footnoted 142:7 force 34:1 forced 237:11,15 foregoing 362:3,5 foreign 5:15,18,20 6:6,16,18 24:3 27:18 28:9,18 29:9,11 95:17 130:5 160:9,19 162:16,17 163:5 163:14 165:5,13	124:22 141:3,20 165:7 193:7 212:7 220:17 222:16 226:22 228:16 239:15 242:5 296:12 302:6 formal 35:21 36:13 37:10 forms 221:22 222:6 244:12,20 forth 19:19 140:1 177:9 218:18 236:3 262:11 341:15 355:13 forward 37:5 308:8 314:17 321:10	full 8:14 9:14 17:7 17:17 22:10 34:20 105:15 107:3 195:12 211:17 221:8 fully 16:9 17:20 19:10 27:13 38:5 44:13 59:21 88:7 88:11 110:12 186:4 202:22 269:3,20 325:22 326:18 full-time 34:18 function 103:20 287:22 functions 26:13
FISA 28:17,18 FISC 7:9 20:10,11 20:12,19 142:2 171:5,6,6,7,8 172:15 175:11				

71:9 142:22 further 39:4,22 40:2 50:7 57:16 71:12 89:7 93:4 112:3 161:22 178:14 203:12 228:3,5,7 233:4 264:5 304:4,6 349:16 352:5,13 359:20 362:14 furthered 219:2 future 315:1,11 316:6,22 317:15	Gilligan 4:4,11 9:3 9:3 53:18 103:19 104:10 124:6 151:18 230:21 231:5,10 237:7 241:13 253:12 260:8 273:15,19 312:12 319:15 323:4,7 331:1 give 12:13 13:7 42:8 49:3 71:13 74:13 76:14 172:1 172:21 192:4 204:9 211:12 215:11 223:1 228:6 229:8 239:21 247:18 248:15 271:10 273:1 285:2 288:11 299:21 300:11 308:7 319:22 327:7 given 14:11 18:15 36:12 48:18 68:1 68:16 69:5 80:9 117:4 171:4 186:6 203:7 241:4 264:16 268:3 324:18 326:16 361:16,19 362:11 gives 101:16 229:5 gleaned 251:4 go 13:2,20 27:10 30:15 39:3,22 40:1 50:7 53:19 56:8 57:16 68:6 72:22 73:14,18 74:19 75:16,18 108:5,7 110:18 112:2 120:19 125:18 128:6 138:10 145:8 151:16 153:11 156:18 158:2 161:17 170:18 172:15 185:13 187:8 189:2,19	190:9 198:9 207:14 213:4 216:13,17 217:16 217:17 228:5 229:11 232:5 233:4 241:16 247:21 260:8,10 262:6 264:5 267:3 267:5 270:21 271:7 272:13 277:8 284:11 286:13 287:5 297:7 298:15 303:9,11 304:4 309:22 310:3 314:4,13,17 323:7 323:12 327:7 328:3 338:18 342:11 344:18 348:3 350:12 352:10 358:1 goal 16:1 goes 24:12 26:2,7 218:15 going 15:11 51:11 55:14 72:3,4 77:3 84:22 89:2 92:16 92:21 102:18 103:11 104:14 110:11,14 116:7,9 117:22 118:17 120:17 127:16 138:21 140:4,18 144:17 155:1,7 156:10 157:5 198:17 222:22 223:11 227:5 229:10 232:16 235:19 258:7 260:16 280:14 281:14,22,22 282:18 308:6 310:16 315:18 318:21 324:1 328:12 347:13 355:8 359:22 good 8:2 9:22 10:7	13:19 96:7 153:7 173:6 191:2 218:9 351:10 Gorski 3:20 8:11 gotcha 227:14 gotten 137:21 governing 9:19 government 9:21 10:4,11 23:9,18 23:20 27:17 28:15 29:7 31:8 33:8,19 33:20 35:2 104:1 109:18 135:6,15 141:18 142:13 143:6 160:1,4 165:4 173:18,19 175:2 176:4,13 178:19 179:10 185:16,21 187:1 187:17,18 198:21 220:14 339:3 359:22 government's 6:7 7:9 109:20 165:15 165:21 166:11 176:10 220:9 354:22 graduate 36:3 grammatically 208:22 great 9:11 15:3 36:12 44:15 136:17 greater 312:21 ground 11:20 grounds 96:9 group 26:12 groupings 57:1 groups 257:10 guess 50:6 57:17 70:13 92:7 114:19 114:20 115:1 144:3 157:14 176:18 178:9 197:22 346:8 guessing 143:15 guideline 118:5	guys 216:17 <hr/> H <hr/> half 31:5 halfway 160:2 250:20 hand 12:2 handed 279:14 312:5 handful 97:13 Hanley 3:11 5:6 8:10 110:16 232:5 328:8,9 329:2,10 329:18 330:4,12 330:20 331:5,14 332:6 333:1,10,18 334:7,14 335:13 335:21 336:7,14 337:1,10,20 338:7 339:13 340:2,8,18 341:2,9,19 342:8 342:13,16 343:5 343:14 344:7 345:2,9 346:2,10 347:2,12 348:5,11 348:15 349:4,19 350:6 351:2,9,12 352:5,8 happening 107:12 193:15 happens 28:8 happy 15:1 53:15 106:21 107:7 108:8 139:3 268:8 Harbor 34:2 hard 57:19 91:7 92:2 238:3 harm 117:20 118:13,16 119:2,3 119:17 121:11 163:11 164:5,15 164:20 head 13:10 91:2 156:11 251:16 hear 137:13 188:8 197:20 229:5 323:4 358:6
<hr/> G <hr/> G 8:1 game 227:13 general 9:1,6,9 22:6 47:13 74:5 96:6 107:1,13 108:11 140:3 153:21 154:2,6 162:4 169:1,5 176:18 187:5 211:15 245:15 256:20 257:4 272:5 312:18 321:9 348:19 349:1 353:3 generally 21:13 33:12 49:17 53:11 54:10 55:10 63:8 86:1 90:14 94:18 102:7 105:22 106:1 120:10 139:1,18 161:19 223:14 224:11,18 230:20 243:17 248:6 249:3 353:16 354:4,10 358:3 generic 227:16 getting 38:8 56:4 107:10 121:14 177:5 211:11 309:12 310:18 345:20				

heard 12:22	hypothetical 94:1 288:15	101:4 112:14 131:2,12 204:15 204:20 217:13 263:21 281:19	138:14 145:2	113:11,19 114:3 114:10,11,16,21 114:22 115:4,8 116:2,16 117:1,15 117:16 118:19,19 120:4,16,20 123:3 123:11 126:12 127:19,19 128:14 128:18 129:4 131:14 133:3 134:5,21 135:6,15 137:16 138:4 139:5,17 141:17 144:13,13,16 145:12,20 156:4 161:2,2,22 162:8 165:12,20 166:6 166:12 168:15 170:4 171:4 174:7 174:8,12 175:10 175:21 178:14,19 179:10,19 180:10 191:15 193:10 194:19,20 196:20 201:6,6,22,22 202:22 203:12,13 203:15,21 204:6,6 205:18 206:22,22 208:1,1 209:20 217:8,9 219:16,16 223:22 226:12 228:3,18,18 233:5 233:11 235:18 236:1 238:16 239:8,21 240:18 241:5,8,9 242:13 242:13 245:4,5 249:21 251:4 253:5 254:14 256:8 258:20 260:5,21,22 262:16,16 264:15 264:18,21 265:2 265:13 266:1,9 267:10,11,18 268:12,19,20 269:8,9,15 270:2
hearing 6:4 210:12 210:17 212:19 214:7 215:6 217:2 316:16 338:9	I	improper 277:16	incorrect 137:8	
held 33:20 240:6	idea 277:20 278:16	inaccuracies 102:2 102:3 106:16,16 108:2 138:5,15 139:1,11,11 145:4 145:10 168:4 174:1	inconsistent 125:12 125:20	
help 14:8 27:9,9 43:9 141:11 212:13 228:3	identical 158:15	inaccuracy 99:8,9 100:4,8,19 105:20 106:1 172:5,10	independently 90:2 90:12,19	
helpful 14:18 29:4 53:17	identification 19:2 44:17 95:8 129:16 159:9 210:3 220:2 250:2 251:21 279:12 312:2 317:22 318:13 331:4 342:7 354:16	inaccurate 14:11 101:1 106:5 110:4 114:12 115:10,18 115:21 145:10 174:13 226:7	INDEX 6:1 7:1	
helping 34:1	identified 45:8,16 105:20 175:20 295:13 296:8 313:10,18	incidences 26:21	indicate 265:16 331:16 333:20 346:3	
helps 342:2	identifiers 313:1	incident 26:11	indicated 289:8 311:8 312:20 315:9 316:20 317:13	
hereof 362:8	identifies 172:5	incidents 26:1	indicates 345:20	
Hi 328:9	identify 25:6,7 29:21 167:21 168:4 173:9 175:10 196:10 198:22 199:21 304:1	include 46:18 59:20 60:1,20 61:12,20 66:15 169:7,14 191:12 192:18,19,19,20 193:2,4,17,20 195:6,22 197:15 320:6 321:4	indicating 33:13	
high 49:4	ignore 283:4,8	included 47:3,16 59:18 60:9 66:21 104:5 115:8	indication 134:15 312:15	
high-bandwidth 52:18	III 173:17	includes 48:2 55:3 114:11	individual 21:22 22:7 61:12 148:19 148:21 149:11,18 221:4 285:22 322:18 324:10	
high-speed 46:18 47:19 48:2,17 49:4 50:21 52:18 55:3 62:15	imagine 173:5 178:5,9 ██████████ 4:17 9:8 9:9	including 346:16	industry 64:13 88:19 89:1,11 154:8 256:21	
historical 141:7	impact 6:11 31:20 32:11,20 36:9 37:15 38:6 246:19 246:22 248:22 252:7 314:10 344:13	incomplete 14:11 101:8 111:13,21 112:14,16,19 113:8,18 114:2,8 114:9,11,14,15 115:1,3,16,20 132:22 133:2,3,7 137:17 138:4 139:20 141:13 144:16 265:4	information 10:3,9 10:13,16 11:16,17 15:5,12,18 16:2,5 16:9,12,19,22 21:5 22:14,17 26:2,7 27:2 30:8 30:11 33:2 37:8,9 37:19,19 38:7 40:22 42:6 50:8 50:10,11,15 51:7 51:7 54:1,8,16 63:14 70:13,18 71:1,17,18,20,21 72:10 74:4,13,15 74:20 76:6,18 77:2 81:13 97:19 99:3 101:2,8 105:14 107:1,15 111:6,6,14 112:20	
History 98:15	impediment 309:5	incompleteness		
hitting 39:2 140:2	implementation 5:17 27:5 130:5 168:6 319:4			
hold 29:13 31:10 161:9 170:6 357:6	implemented 230:9 249:17 253:10 293:20 344:22			
holding 33:7	implications 37:6			
holds 205:14	important 13:6			
Homeland 31:13 32:1,13,18 33:5 36:10,19 37:13,22 246:15 247:17 248:7 249:5 252:9				
honestly 247:12				
hope 230:7				
hopefully 54:3				
hours 347:13				
HTTP 7:4 219:12 225:13 334:1,15 335:14				
HTTPS 225:13 280:19 281:2,17 282:3,7,9 290:7 290:18 335:22 352:16 353:10,22				
human 311:9 313:9				

270:2,18 272:7,18 272:19 273:1 274:11 281:5,6 282:12 283:13 285:4,12 286:6,6 287:17 288:5,6,15 289:7,10,13,17,22 289:22 290:10 294:3,4,10,13,15 294:16,19 295:3,4 295:5,12,14,20 296:2,4,7,22 297:14,18,22 298:2,3,8,22 299:1,9,14,19 300:4,4,10 302:8 303:18,19 305:17 305:17 309:9 310:11,12 311:2,3 311:14,15 313:22 314:1 322:21,21 323:18 325:4,5,21 326:4,4,14 327:1 327:1,3,11,14,16 327:18 328:19 335:8,8 337:15,16 339:6 340:13 346:21 347:7,7 349:12,17,18 350:1,1 351:17,19 356:14 357:12	instances 105:13 Institute 3:4 8:4 instruct 51:9,15 71:22 77:5 116:4 118:20 123:14 126:15 129:5 146:1 161:5 162:9 180:12 194:22 196:22 198:1 201:8 207:2 208:3 219:18 224:5 234:12 238:17 242:15 245:6 254:16 258:22 259:16 266:2,11 268:21 270:4 272:20 273:14 274:13 281:8 282:14 283:15 285:5 290:1,12 300:5 302:10 304:7,21 305:18 323:1,20 326:6 327:8 328:21 332:2 333:15 335:10 337:17 339:8,21 340:15 341:15 347:8 349:12 350:2	164:8,22 180:20 180:21 181:6,8,14 181:15,22 182:8,9 182:14,22 183:1,7 183:8,14,15 184:2 184:4,10,11,17,19 185:3,4,10,11 186:15 197:1 202:2 203:11 205:8 207:10,12 208:9,11,17 213:7 219:20 224:8 235:1,3 255:2 256:3,5 263:15 264:4 265:13 274:20,22 275:11 275:19,21 276:6,8 276:14,15,21 278:7 284:1,2 287:10 288:10 289:1,4 290:14,21 291:1,7,8,14,15 291:20,22 292:6,7 292:12,13,19,21 293:6,8,14,16 295:17,22 298:4 299:16 300:16,18 301:5,7,13,15,21 302:1 304:11 306:8,17 307:3 317:17 324:13 327:20 329:7,9,15 329:17 330:1,3,9 330:11,17 332:12 332:13 334:4,11 335:18 336:4,6,11 336:13,19,21 337:19 338:4,6 340:1,5,21 341:22 342:4 351:6 353:14 354:3,8 357:21	245:8 254:17 255:4 259:2,11,18 266:13 269:1 270:12 274:2 275:5,6,12 277:1 281:11 282:16 283:17 285:8 290:4 305:21 306:6 307:5 317:10 323:3,22 324:15 326:8 329:1 330:19 332:5,21,22 333:17 334:6,13 334:21 335:12,20 339:12 340:7,17 341:1,18 347:11 349:17 350:21 351:1,8	intention 314:22 intentionally 290:6 290:17 291:3,11 291:17 292:3,9,16 293:2,11 interacting 42:14 interception 132:9 133:11 interchangeable 159:3 interchangeably 226:20 227:16,20 interconnected 66:2,15 67:7,17 interest 146:5 149:9 285:13 315:10 316:21 331:18 334:1 358:11 359:1,14 interested 7:4 106:5 358:17 362:16 interests 103:21 319:3 interim 232:12 interlocutor 26:18 intern 34:10 international 78:4 78:21 79:5,15 80:1 81:6,19,22 154:11,15,17 155:11 157:7 158:3 160:8,21 162:15 163:3,13 180:3,17 181:3,11 181:18 182:5,12 182:19 183:19 184:7,14,22 185:7 185:22 186:13,19 187:4,20 188:19 219:12 275:16 276:4 322:17 324:9,17 326:15
informed 27:9 ingested 205:10 206:3 267:18 ingests 206:10 initiative 6:10 249:10 250:17 251:2 252:17 inquiry 218:10 221:21 222:5 inside 66:17 inspection 244:12 244:21 245:11 247:11 348:17 349:3,7 Inspector 312:18 instance 227:8	instructed 117:1 265:15 289:14 332:18 instructing 188:9 240:21 241:12 294:9,11,17 instruction 51:12 72:5,6 77:9 116:8 117:20 124:1 146:14,22 147:2,8 147:17 148:3,4,10 148:11,16,17 149:15,16,22 150:1,7,8,14,15 150:21,22 151:6,7 152:4,5,11,12,13 152:19,20 153:4,5 162:20,21 163:7,8	357:21 instructions 147:10 147:19 162:12 182:16 201:10 202:5 207:4 209:5 234:15 242:17	instructs 13:22 instruments 81:13 intelligence 5:15,18 5:20 6:6,16,19 24:4 27:18 28:10 28:18 29:9,11 95:18 104:22 130:5 142:21 160:20 162:16 163:14,19 165:5 165:13,22 166:17 167:1,10,20 168:14 170:3 171:12 172:6,9 173:7 174:3 191:15 210:14 220:12 233:11,12 233:21 235:6 236:13 239:14 240:5,8 242:2 283:21 285:12 286:5 287:16 288:5,14 312:9 314:9,13 315:20 316:12 318:7 320:5,8 331:17 334:1 intends 317:14	internet 36:11 46:18,20 47:3,10 47:13,17,20 48:1 48:4,14,15,18

49:5,14,22 50:14 51:1,2 52:20,21 54:9,21 55:5 61:7 62:14 63:3,10 64:2,7,18,22 66:16,22 67:6 68:1,16 69:5 73:5 78:10 79:7,17 80:7 89:22 90:1 90:10,11,18,19 91:9 111:19 121:18 122:7,8,16 122:21 123:8 124:21 125:16 145:15 146:11,19 147:5,13,22 148:20,22 149:12 149:19 150:4,11 150:18 151:3,10 152:1,8,16 153:1 153:17,20 154:11 154:17 155:12 157:7,7,11 158:3 158:3,4,16 160:8 160:21 162:15,17 163:3,3,13 180:3 180:17 181:4,12 181:18 182:5 185:22 186:13,19 187:4,20 188:19 191:13 192:6 193:3,21 194:9 195:7,8 196:1,2 196:10 197:16,17 199:1,2,3 200:4 201:14 204:2,17 206:19 222:15 223:15,19 225:1,3 225:5,15,21 226:21 227:17,17 233:22 234:4 242:20,22 243:11 243:17 244:4 253:22 254:1,2,4 254:5,20,21 255:8 255:15,17 257:5 257:11 258:18	259:9 260:1 261:9 261:17 263:4,6,7 263:8,13,18 264:9 266:7 267:15 269:5,22 280:18 282:4 283:2 291:4 291:11 300:12 302:22 303:6 304:1,2,14 305:2 305:11,14 306:4 306:11,22 313:1 313:11 320:6 341:8,21 347:18 348:18 355:11 356:11,18 358:2,9 358:13,18 359:10 359:14 internship 34:11 interrogatories 5:12 45:5 77:18 77:21 86:14 189:22 203:18 264:19 interrogatory 45:8 45:11,17,21 55:15 57:7,21 58:16 60:20 61:12 62:9 64:6 70:2 78:6 85:21 86:20 87:19 88:2,13 119:14 190:16 192:11 195:16 196:4,6,18 197:6 198:4 200:12 204:1 265:17 327:5 interrupt 28:21 introduce 8:17 258:9 311:20 intrusion 248:8,8 343:11 intrusions 251:5 invocation 41:2 119:5 120:4,11 121:10 invoke 103:18 163:20 359:22 invoked 96:3	involve 97:18 213:6 247:10 322:17 324:8 347:4 involved 23:5 24:2 25:17 27:4,20 32:3 33:3 96:13 125:15 129:1 236:15 246:21 349:6 involvement 28:2 involves 43:11 124:19 345:15 346:4 in-boxes 235:8 236:16 238:7 240:9 242:4,10 IP 191:20 192:18 200:2,6,8 283:5 283:10 354:1 irrespective 74:4 issuance 33:3 120:14 issue 74:8 215:16 215:16 218:7 issued 135:3 136:15 141:16 142:4,12,15 145:6 160:12 171:14 172:8 issues 25:4,9 176:6 310:18,22 311:9 311:10,12 313:9 343:9 issuing 33:11 120:21 130:18,20 131:2 I-N-D-E-X 5:1	Jaques 1:21 2:8 11:22 13:6,8 95:5 110:22 129:13 133:22 156:22 159:6 209:7,22 260:17 279:9 284:16 286:16 323:13 362:2,19 Jason 4:16 8:22 Jewel 24:13 Joan 9:15 job 1:22 13:15 32:3 32:7 35:1,4 37:17 41:21 42:13 43:3 43:11 166:11 jobs 33:18,20 John 5:21 ██████████ 4:20 9:5 9:5 joined 8:8 joining 35:11 36:6 40:5 judge 5:21 6:17 142:6 155:16,18 159:19 160:12 161:21 173:17 174:14,18 judgment 172:18 July 5:13 95:18 107:22 109:12 128:3 June 145:18 146:20 147:14 148:8,21 149:20 150:12 151:4,12 152:10 152:17 175:1 181:12,19 182:19 183:5 184:13 185:1 186:8 190:22 193:1 201:13 205:16 208:7,15 209:3 216:6 228:11 229:20 230:9 233:14 234:5 244:12,20 259:4,7 259:21 261:14	262:19 263:11 264:8 265:8,10 266:15 269:4 270:15 272:10 273:8 275:15 276:11 290:16 291:10 292:2,15 293:10 324:7 326:10,15 329:19 330:13 335:14 336:8 337:21 347:3,16 349:6 351:3 jury 76:8 Justice 2:6 4:5 8:21 26:16 103:4,20 167:22 168:7,18 170:11,12 172:19 176:22 220:19 222:10 Justice's 167:1,19
K				
Kafka 336:15 337:2 KATHLEEN 4:17 keep 28:22 177:5 keeping 101:11 keeps 289:20 keimbri@nsa.gov 4:19 kept 287:12 key 217:22 218:2 244:22 kind 270:9 knew 23:2 74:7 332:21 Knight 3:4 8:3 knock 34:12,13 know 13:14 14:5,13 32:6 33:1 36:2 41:20,21 45:18 63:7 69:16 70:5,6 70:7,8,10,15,16 70:17 73:6,8 74:8 85:1,3,4,8,10,11 87:11,14,15 89:14				

89:16,18 97:10 104:3,4 106:9 107:13 110:14 116:11,16 121:5 132:1 139:17 140:6 142:22 161:19 169:5 170:9,22 171:4,10 172:13 173:14 176:6,20 177:13 177:20 178:4 203:10 211:13 213:10,14,17 214:12 220:14 221:16,19 224:19 227:2,9 236:4,6,7 236:16 237:3,5,8 237:12,14,17,21 238:1 239:11 241:3 251:15 256:13 257:11 278:2 279:2 287:19 288:16 307:22 315:20 316:2,9 328:13 337:2 343:3 344:21 345:15 knowing 203:3 239:6 knowledge 32:9 74:3 168:13 170:3 170:20 172:1,3 178:1 221:3 226:18 250:11 344:9 355:10 known 10:13 71:7 145:10 242:21 245:17 248:9 knows 41:22 65:6 73:3 237:8,9 247:17 315:6	lacks 91:13 279:21 280:18 345:21 language 187:22 188:22 217:17 laptop 11:2,7,12 large 66:2,9,14 67:7,14 101:4 226:21 338:9 largely 120:20 largest 152:15,22 late 328:12 law 169:11,17 lawful 132:9 133:11 lawsuit 12:14 24:11 32:8 46:10 lawyer 171:3 265:14 299:16 317:11 lawyer's 51:11 72:4 77:8,10 116:7,9 117:19 123:17 124:3 126:18 129:8 146:3 289:1 layer 242:22 243:10 244:4 246:8 261:16 263:6,9,12,22 266:6 301:18 306:3,22 347:18 348:18 Leadership 25:5 leads 52:12 learn 42:12 43:4,6 left 217:1 legal 15:13 65:10 118:1,10 173:11 286:21 307:10 308:20 321:6,18 322:3 343:9 let's 40:8 95:4 198:9 207:14 259:4 260:10 271:18 286:13 303:11 307:22 310:3 323:12 328:3 330:21,22	331:6 level 26:10 137:3 liberties 5:13,17 8:9,11 20:8,9 24:17 25:3,7 26:19 28:7 95:15 101:7 109:21 120:14 130:4 131:7 192:3 209:13 210:12 219:3 258:14 299:10 314:10 325:14 Library 3:6 light 61:13,21 62:4 62:7 150:17 151:2 limit 355:13 limited 58:2 line 8:8 22:16 30:10 41:21,22 54:2 59:7,9 60:1,12,19 61:9,9,11 62:8 80:16 82:13 93:2 93:3 211:6 218:9 239:18 273:3 351:18 363:6 lines 22:13 46:19 47:20 48:3,13,18 49:4 50:2,22 52:19 54:1 55:4 55:16,19 56:5,14 57:8,10 58:2,3 59:3,5 62:16 67:22 68:15,21 69:4,21 73:4 140:2 211:1,7,20 211:21 218:16 271:21 link 153:17,21 154:11,17 155:12 157:7,8,17 158:3 158:4,4,16,22 160:8,21 162:5,15 162:17 163:3,14 186:19 187:4,20 188:19 links 180:4,18	181:4,12,18 182:5 185:22 186:13 listed 65:1 listening 149:6 261:18 litigation 21:9 23:6 24:3,6,9,13 little 24:20 33:17 33:17 49:11 57:16 141:17 156:13 320:1 LLP 3:12 8:10 local 118:5 located 191:15 192:7 194:11 233:10 location 261:12 locator 207:7 logical 56:22 57:18 157:6 long 24:18 31:15 33:15 34:11 84:5 161:14 328:14 longer 107:10,16 107:18 140:8,17 295:1 320:6 look 68:6 106:20,22 118:4 153:20 190:14 196:4 204:14 226:2 237:20 250:18 253:8 312:4 318:2 318:15 342:9 344:18 354:18 looked 141:8 looking 29:14,22 30:1,7,9 42:8 58:13,14 69:16,17 122:12 144:22 153:21 155:11 180:4 209:8 217:12 231:14 233:7,16 238:3 252:3 looks 236:1 lost 84:14 lot 101:9,12 104:9	104:12 262:10 loud 127:3 love 294:14 low 3:6 282:22 283:20 lunch 153:10,12,15 <hr/> M <hr/> M 6:17 main 26:18 major 46:20 47:20 48:3,14,15,18 51:1 52:19 55:5 66:16 67:6 making 17:14 48:7 262:22 man 34:13 managing 251:4 March 6:4,13 210:15 215:6 217:3 280:9 mark 251:19 279:10 311:21 312:12 317:19 318:10 354:13 marked 19:2,5,6 44:17,20 95:8,11 95:20 97:12 98:8 98:17 99:19 102:4 105:21 106:17 108:18 126:21,22 129:16,19 131:17 143:10 145:3 159:9,12,16 195:17 210:3,7 220:2,5 221:11 250:2,4 251:21 252:3 279:12 312:2 317:22 318:13 331:4 342:7 354:16 marking 95:5 129:13 159:7 209:8 210:1 Mary 4:20 9:5 MARYLAND 1:2 361:1
--	--	---	---	--

Massachusetts 2:7 4:8	134:20 162:16 199:9 217:2 225:8 231:11 250:22	101:12 121:14,15 126:12 127:19 140:5 145:20 164:2	mixture 101:10 Mm-hmm 131:21 194:14 263:21 343:18	N
matching 22:22	measurement 338:15 339:15	Michael 30:3 45:4 119:7	modify 208:21 moment 77:14 124:7 132:12 133:14 138:8 158:2 160:14 171:15 185:19,20 202:12 207:13 238:11 241:1 251:10 255:19 266:20 277:6 293:22 301:2 302:17,19 309:20 326:20 338:17 349:8 355:22	N 8:1 name 8:3,14 9:14 89:15 211:17 218:21 narrative 102:18 122:14 narrow 96:4 national 1:7 4:15 6:9 9:1,6,9 30:2 45:3 117:21 118:13 119:3,17 163:19 164:6,15 164:20 170:12 220:16,18,20 233:8 235:6 236:13 239:14 240:5,7 242:2 250:16 252:8,17 361:5 363:4 nature 22:6 28:1 29:3 30:22 40:4 41:16 92:9,12 117:5 121:9 163:11 265:5 289:9 353:5 NDA 240:2 necessarily 15:19 101:6 107:3 110:3 111:13,21 112:1 132:22 137:17 139:20 141:12 144:15 174:20 265:4 299:7 necessary 10:1,7 293:19 297:2 298:10 299:21 300:11 324:20 326:1,18 necessitate 172:21 need 14:4,7 16:4 30:14,20 38:18 39:3 40:1 53:5 77:14 78:1 103:7 110:10 133:16 156:15 197:19 213:4,12,14
material 23:16 97:3 99:4 107:11 144:17	mechanism 190:22 191:12,16,19 192:10 193:2,13 193:16 195:6,22 196:17 197:5,15 198:3	middle 355:9 mind 12:1 62:17 95:5 110:22 129:13 133:21 156:22 159:6 190:6 209:7,22 221:5 296:16 297:10 348:11	moment 77:14 124:7 132:12 133:14 138:8 158:2 160:14 171:15 185:19,20 202:12 207:13 238:11 241:1 251:10 255:19 266:20 277:6 293:22 301:2 302:17,19 309:20 326:20 338:17 349:8 355:22	
materials 23:14 28:5 344:18	mechanisms 192:22 199:9	mine 41:7 221:9 minimization 20:7 313:3 355:14	moments 214:9 Monday 1:13 361:12	
matter 20:22 21:6 21:20 22:3 63:22 64:12 85:14 87:16 88:4,7 97:11 107:1,13 108:11 176:18 277:4 278:4	medications 18:5 meet 21:16 68:21 315:21 328:10	minute 155:8 156:18 190:9 260:11	Monday 1:13 361:12	
ma'am 12:3	meetings 22:16 25:9 meets 286:2 mejoh18@nsa.gov 4:22	minutes 75:19 146:7 214:21 352:9	Monday 1:13 361:12	
mean 18:4 25:16 39:13,16 47:6 49:12 51:21 55:20 55:22 61:5 66:3 70:15 73:20 78:13 88:17 92:12 95:4 158:14,15 160:20 173:16 178:10 191:5 192:8 203:22 204:11 205:2 213:17 221:1 222:14 224:18 225:11,21 225:21,22 231:5 239:20 246:2 264:1 271:10,17 278:9 309:2,2,4	member 315:9 members 97:7 99:2 Memorandum 5:20 6:13,16 7:7 159:19 174:14 279:16 280:7 310:20 311:8 312:8 343:8	mischaracterize 348:21 mischaracterizes 81:9 110:8 112:12 187:22 228:1 304:19	Monday 1:13 361:12	
meaning 56:9 63:10 64:1 66:7 78:11,12 83:4 85:15 87:18,21 88:21 154:4,21 155:21,22 162:4 213:16 223:14 224:10 257:4	memory 18:10 22:19 78:2 mentioned 21:19 36:15 43:18 51:8 107:3 111:11 141:7 142:6 161:4 219:3 221:6 266:10 362:8	misheard 180:9 mislead 136:13 misleading 114:12 misperception 218:1 missing 244:1 mission 25:19 26:22 319:1 misstatement 94:19 172:20 misstatements 173:7 misstates 73:19 111:4 264:2 mistakes 167:18,21 mitigate 25:8 32:21 mixing 22:21	Monday 1:13 361:12	
means 34:17 42:13 56:6,15 84:6 88:12 163:14 205:12 228:20 267:17 349:3	met 8:7 20:21,21 21:19 22:4 315:20 315:20 metadata 274:17 304:5 352:17 353:11 355:10,19 356:10,17 357:3 358:8,9,12,18 359:2,14 method 233:20 methods 40:15	misheard 180:9 mislead 136:13 misleading 114:12 misperception 218:1 missing 244:1 mission 25:19 26:22 319:1 misstatement 94:19 172:20 misstatements 173:7 misstates 73:19 111:4 264:2 mistakes 167:18,21 mitigate 25:8 32:21 mixing 22:21	Monday 1:13 361:12	
meant 86:2 92:20			Monday 1:13 361:12	

214:15 216:13 236:19 261:20 268:10 271:6 303:9 326:11 334:21,22 335:2 342:11 needed 38:7,9 needs 314:9,13 315:20,21,22 319:1 negotiate 34:1 neither 76:19 77:4 128:17 193:14 238:14 362:11 network 35:10 36:22 37:11 38:10 38:14 39:10,13,18 40:13 56:13 59:10 60:3 66:3 67:5,8 67:17 246:9 247:8 247:9 255:7,17 256:21 257:14,15 networks 35:10 36:22 40:12 46:20 47:20 48:3,14 50:22 52:17,19 55:1,3,5 60:3 66:10,15,16 343:12 never 44:6,12 new 3:7,7 169:11 169:17 199:8 299:8 363:2,2 newspaper 240:15 nice 328:10 nod 13:9 nonclassified 22:14 nonprofit 33:9,10 nonpublic 77:2 Non-Disclosure 239:19 non-foreign 231:1 non-objection 65:13 non-targeted 230:11,15 231:2 231:16,22	non-United 233:9 normal 257:16 345:12 346:13 Northwest 2:7 Notary 2:8 12:8 362:1,2,20 363:21 note 88:15 103:12 107:8 noted 47:8 51:17 55:21 99:15 310:15 361:18 notice 2:4 5:10 6:7 7:9 19:14 65:1 69:9,11 76:12 102:1 242:6 307:10 308:7 312:17 354:21 noticed 99:8 100:3 100:19 Notices 31:21 notification 315:22 322:6 notified 99:9 100:8 notify 99:14 172:9 notifying 309:13 notwithstanding 124:17 November 355:2 355:17 NSA 5:16 6:18,18 6:21 8:21 10:20 11:7,11,12,14,19 12:14 15:6,12 16:5,10,12 18:20 19:18 20:7 21:20 21:21 22:1,4,20 24:15 25:2,11 26:3,22 35:11,19 36:6 37:11 40:6,9 40:16 42:12 43:3 43:11,12,18 44:1 45:18 49:16,16 50:20 54:12,18 55:12 56:2 57:22 60:13,19 61:6 62:8 63:5,9 64:1,5 65:4,19 67:8 68:2	68:17 69:5,13 70:9,16 71:9,9 73:3,6,7 74:3,7 75:2 77:2 78:5,11 82:18 83:2,6 84:8 85:4,11,15,20 86:19 87:13,17 88:7,10,12,17 89:9,19 96:13,16 97:6,10,14,22 98:7,16,21 99:2,6 99:9,10,18 100:7 100:15,18,22 101:6 102:1 105:20 107:9,21 108:11 109:21 114:13 120:14 121:17 122:20 123:7 126:9 130:3 130:8,10 131:2,10 132:9 133:11 137:20 140:21 141:5 143:1,6,17 143:20 154:4,21 155:20 156:1 160:5,8 161:16,20 163:18 165:12,20 166:13,15,22 167:21 168:17 171:10 172:5,9,19 173:6 174:20 175:4,10,19,20 176:21 177:21,22 178:3,17 179:8,18 179:19 180:2,16 181:2,10,19 182:5 183:4,11 186:11 188:15,20 191:14 202:8,18 206:5,7 206:9,10 210:16 210:20 211:16 219:12 221:21 222:5,10 226:19 227:19 228:11 229:21 230:10 232:2,3 234:3,5 234:18 236:14	238:8 240:10 242:3,10 249:18 251:3,9 253:20 255:16 257:6,18 258:16 259:7,21 260:4 261:15 263:5,12 264:9 266:5,16,17 267:18 268:15 269:4,21 270:15 271:13,16 272:6 272:11 273:8 274:9,17 275:3,9 275:15 276:3,11 276:18 277:3 278:2,3,22 281:1 281:16 282:2,8,21 283:7,19 284:4 285:13 290:6,17 291:3,10,17 292:2 292:9,15 293:2,10 293:20 294:22 295:6 296:9 297:3 300:20 301:9,17 302:3,15 303:5,22 305:9,13 306:2,11 306:21 307:7,12 308:16 312:18,19 312:22 313:19 314:8,11,15,22 315:9 316:20 317:13 318:6,7,19 319:4,8 320:4,14 320:14,18 321:14 322:1,19 324:10 328:15 329:3,11 329:19 330:5,13 331:17 333:22 339:4,16 347:16 349:20 350:7 351:3 355:14,19 356:17 357:3,22 358:8,11,17 359:1 359:13 NSA's 5:17 20:10 45:21 55:14 65:16 65:18 71:8 73:12	77:19 87:19 88:1 95:19 100:10 130:4,22 143:1 154:5 162:2 164:5 189:21 190:16,21 192:5,11 194:8 195:15 196:18 197:6 200:11 204:1 205:11,11 221:22 222:6 233:20 269:19 313:2 NSA-developed 253:6 NSA-specific 257:10 NSA-WIKI 5:21 6:8 159:17,17,22 221:8,9,11 number 10:10 20:5 47:15 97:14,15 114:9 128:14 142:1,3,7 145:14 145:15 146:10,11 180:5 181:17,18 182:4 183:3,4,10 183:11 184:21,21 185:6,6 206:16 225:8 354:11 numbered 159:16 numbers 134:21 N.W 4:8 <hr/> O <hr/> O 8:1 oath 12:4,18 Obama 249:10 object 13:19 35:13 35:13 42:19 43:7 43:14 44:4 46:1 53:2 56:17,17 58:5 61:14 64:8 65:9 67:9 68:3 69:6 70:19,21 73:18 79:8 82:21 86:10 89:2 90:3 90:20 91:13,14,15
--	---	--	--	--

93:22 96:8 102:14	66:4,18 68:18	217:7 219:15	359:4,16	office 5:17 9:1,6,9
103:13 106:2,18	71:19 72:11 78:8	220:17 223:21	objections 5:11	20:8 24:17 25:1
108:4 109:4	79:2,9,18 80:3,4	224:3,21 225:6,16	9:22 15:5 30:1	25:22 26:9,14
113:22 117:22	81:8,10 82:3,12	225:17 234:22	45:2 57:3 62:1	27:20 29:10 31:14
118:17 121:20	82:21 83:11,12	236:9 244:13	76:10 77:20 83:18	38:15 101:7
123:10 124:22	84:3,19,20 85:22	248:11 252:22	83:19 90:13 92:6	109:21 120:15
127:16,17 141:3	87:7 95:22 96:1	254:7,13 255:1,9	92:14 93:14 123:2	130:4 192:3
141:20 155:1	96:15 98:19	256:2,17,22	125:3 126:1 128:5	209:13 219:4
157:3 158:9	100:12,21 104:2	258:19 260:20	128:12 146:21	235:5 236:12
163:16 165:7	110:7 111:3,4	262:15 263:14	147:7,16 148:2,15	240:4,7 242:2
171:21 174:6	112:11 115:11	264:2 266:8	165:17 166:3,19	246:17 299:10
180:9 193:7	116:1 118:9 121:4	267:22 269:7	167:4,12 169:9	312:19
194:17 204:5	123:22 125:17	270:1,7,17 271:6	170:8 179:21	officer 32:15 37:19
205:17 216:8	126:11 129:3,10	272:17 273:10	189:21 206:8	37:20
222:16 223:11	130:15 134:2,3	274:10 275:4,10	243:12 244:5	offices 2:5
224:14,14 225:18	135:8,17 136:4,9	275:18,19 276:13	246:3,10 249:2,12	office's 25:13,19
226:22 227:22	136:21 137:4,12	276:20 279:4,21	249:19 259:10	28:1
228:16,17 232:19	137:14 138:19	281:4 282:10	264:3 274:19	official 163:17
242:5,12 243:1	139:14 142:16	283:11,12,22	276:7 278:6 279:5	210:20
245:3,12 247:13	143:13 144:9	286:19 290:9	287:4,9 288:9	officially 339:2
250:7 260:5	145:7,17,19	291:19 292:5,11	290:20 291:6,13	oh 19:16 57:13
264:11 267:9	146:13 148:9	292:18 293:5,13	309:6 320:19	58:22 190:3
268:18 277:15	149:14,21 150:6	295:16 296:1	321:5,17 322:13	194:20 210:6
284:19 285:3,16	150:13,20 151:5	298:21 300:15	340:4,20 344:4	211:10 249:13
289:21 294:2	151:14,15,17	301:4,12,20	346:6,15 350:20	259:12 273:19
296:12 297:13	152:3,18 153:3,18	303:17 304:18	353:14	348:19
300:3 302:6,7	154:12 156:2	305:16 306:5,16	obligation 65:5	okay 12:22 14:14
307:18 310:10	157:18 158:19	307:2,9,14 308:1	observed 251:5	15:1,14 18:12,18
311:1 315:4 317:4	161:1 162:7,19	308:18 311:13	obstacle 309:4	22:15 24:14 30:13
325:3 326:3,22	163:6 164:7,21	313:21 315:14	obtain 191:14	35:1,17 40:1,3,7
331:10,20 333:5	165:8 166:2,8	317:1,3,16 319:12	obtains 253:20	44:12,15 45:19
333:12 335:7	168:1,9,19,20	321:16 322:2,20	occasion 13:11	51:20 55:14 57:13
337:4 348:20	172:11 173:1,10	323:16 324:12	occur 233:3	58:22 59:8,8,20
352:20 353:12	174:5 176:2	328:18 329:6,14	occurred 177:16	61:4 62:17 65:21
357:11	178:21 179:13	329:22 330:8,16	235:9 240:14	67:21 68:12 74:2
objected 13:21	180:19 181:5,13	332:11,12 334:3	October 5:19	77:12 79:5,22
170:15 214:17	181:21 182:7,13	334:10,20 335:17	159:20 174:3,12	80:14,20 81:2
objecting 28:22	182:21 183:6,13	336:3,10,18	186:11 187:18	83:9 84:2,16 86:8
objection 23:10	184:1,9,16 185:2	337:14 338:2	188:15 189:5,10	91:9 93:20 105:19
25:20 27:6 28:11	185:9 186:14	339:18 340:12,13	189:18 312:17	106:15 108:17
29:3 36:7 38:17	187:21 188:21	341:13,14 342:2	316:4	109:2 111:10
38:20 40:14 46:21	196:19 198:13	342:19 343:7	ODNI 26:3,8,16	113:16 121:1,17
48:5,20 49:6,13	201:5,15,21	344:10 345:5,18	235:17 237:19	122:19 128:8
50:4 51:4,5,6,17	202:21 205:7	347:6 349:10,22	240:16 339:4	129:9,12 132:3
55:8,17 56:7	206:21 207:9,22	350:9 351:5 354:2	ODNI's 20:17	140:18 143:9
59:12 60:5,14,22	208:8,16 209:4	354:7 356:2,7,20	176:7	144:19 146:18
62:10 63:12 65:11	212:7 213:15	357:20 358:14	offer 142:18 356:9	153:10 154:10

155:19 156:19	132:5 140:14	optical 56:16 60:1	95:15 131:7	203:17,18 204:4
157:16 158:2	142:14 143:12	79:22 80:8 81:5	142:20 210:12	209:12,14 210:22
159:3 160:16	191:11 195:5,21	81:18,21 93:18		211:7,21 217:13
167:16 173:5	197:14 200:21	148:19,22 149:11	P	217:14,18 221:5
175:4 177:7	210:13 244:11	149:18 150:3,10	P 8:1	221:10 233:3,16
178:13,17 180:2	operates 167:9	150:18 151:3,10	pace 151:18	233:19 250:19
182:11 183:17	244:10	152:1,8	packet 90:1,11	273:3 280:11,16
185:17 187:7	operation 25:18	options 114:6	244:12,21 245:11	281:13,15 282:19
188:13 189:12,19	105:1 112:20	orally 13:7	247:10 348:16	282:20 312:11,16
191:10,21 193:9	113:12,20 115:13	order 6:8,16 10:12	349:2,7	320:2 333:21
195:18 196:15	115:21 117:11	105:14 106:10	packets 90:18 91:9	343:15 346:1,3
198:15 199:17	126:9 127:9 133:4	155:16 202:10,22	91:11,19 92:16	355:6 363:6
200:10,20 201:12	135:7,16 136:14	220:10 304:2	93:12,17 94:8,15	pages 7:6 98:12
203:9,22 210:6	137:9,10 138:6,16	312:9 319:8,14	242:22 243:11	112:9 113:8
211:8 212:1	139:12 141:18	320:17	244:4 246:8 254:4	115:10 124:12
215:19 216:16	144:8 165:14	ordering 321:12	254:20 301:18	190:15 197:7
217:12,16,17	168:5,15 170:5	organizations	348:18	361:11 362:5
219:8,22 220:22	174:2 179:17	25:10	Padgett 4:16 8:22	paid 34:17
221:10 229:14	312:19	original 94:14 95:1	8:22 52:2 53:17	paper 88:5 347:1
230:7 232:7 238:6	operational 40:16	119:20 179:1	72:16 76:21	paragraph 45:15
240:20 242:19	126:13 145:21	originally 73:2	127:13 132:14	108:20 127:1
243:8,20 248:5	operations 345:11	155:15	149:3 167:13	131:19 190:4,15
249:8 252:11,14	345:12 346:13	ought 144:22	180:7 197:19,22	222:4 273:4
253:11,18 254:20	opinion 5:20 6:16	outcome 362:17	198:6 207:14	280:15 281:15
256:15 257:21	7:7 50:5 55:9,18	outline 101:18	213:5 244:22	282:19 318:22
273:19 284:10	154:13 156:3	108:12 133:1	261:22 262:6	343:16 355:9
314:19 321:8	158:10 159:20	352:10	266:22 286:9,12	paragraphs 58:20
339:14 342:13	160:13 172:6,8,20	outlined 15:4	347:22	77:15
350:12	173:11 174:4,14	outset 221:7	page 5:2,9 6:3 7:3	parens 134:10,18
old 130:7	176:9 177:19	outside 90:5 100:4	45:6,8,12,14,16	134:19 196:13
omits 112:19	178:18 179:9	100:5 169:15	58:12,15,17 77:12	part 16:17,17 25:19
113:11,19 114:3	225:17 243:4	224:19 233:10	77:13,16,21,22	26:2,6 32:3 37:2
114:10,15 133:3	245:14 255:11	240:1 241:14	86:14 96:17 98:12	37:17 38:2 43:3
omitted 145:12	257:2 295:5,8,10	245:17 253:1	98:14 99:15	43:17 49:5 50:13
omitting 115:2,4	310:20 311:8	257:11 282:10	104:21 108:18,20	51:1 52:1,20
once 108:21 195:19	312:8 343:8	287:13 351:15	108:22 109:1,9,10	62:13 67:3 77:2
223:1 308:5	352:22	outstanding 241:19	109:14,16,22	85:18 93:17 98:14
ones 20:13 169:12	opinions 20:10,12	242:1	110:3,5,6 117:3	99:8,11,15,18
226:1	20:19 99:2 142:2	overclassifying	119:14,15,21	131:8,8 136:12
on-the-job 36:12	171:11,13 173:8	260:6	126:20 127:1	161:13 173:18,19
36:17 38:11 39:9	174:18,19	overcollection	131:16,19 139:4	192:10 196:16
39:21 40:10	opportunity 169:13	235:7 236:14	159:21 160:2	197:5 200:16
open 292:10,16	176:16	238:7 240:8,10	185:13 187:14,22	202:18 242:11
337:11,21	opposed 41:11	overseas 191:15	190:1,14,14 192:4	249:9 261:8 263:3
operate 273:4	56:20,22 69:12	192:7 194:11	194:1,4,6 195:16	287:15,21 316:7
operated 5:14 6:5	76:15 83:22	oversight 5:13 20:9	198:17 199:18	316:15 325:18
95:16 109:11	218:20 219:4	25:14,16 26:1,19	200:15 201:3	347:18

parte 170:9	52:6,22 53:2,22	147:16 148:2,9,15	238:11,13 239:10	313:21 315:2,4,12
partially 110:12	55:8,17 56:7,17	149:2,6,14,21	240:13 241:1	315:14 317:1,3,16
participated	57:3 58:5 59:12	150:6,13,20 151:5	242:5,12 243:1,12	319:10,12,16
246:18 252:12	60:5,14,22 61:14	151:14 152:3,11	244:5,13,15 245:3	320:19 321:5,16
participates 171:11	62:1,10,19 63:12	152:18 153:3,18	245:12 246:3,10	322:2,13,20
particular 38:21	64:8 65:9,13 66:4	154:12,22 156:2	247:13 248:11,19	323:16 324:4,12
56:9 80:16 106:19	66:18 67:9 68:3	156:15 157:3,18	249:2,12,19 250:7	324:22 325:3
106:21 107:6	68:18 69:6 70:1	158:9,19 160:14	251:10 252:19,21	326:3,20,22
108:9,13 119:9	70:19,21 71:19	161:1,10,14 162:7	254:7,10,13 255:1	327:21 328:18
139:3,19 177:9	72:11,15 73:17	162:19 163:6,16	255:9,19 256:2,17	329:6,14,22 330:8
224:2 226:1	74:19 75:13,22	164:7,11,21 165:7	256:22 258:1,19	330:16 331:8,10
232:15 239:11	76:8 77:1 78:8	165:17 166:2,8,19	259:10,13 260:2	331:20 332:11,15
245:17 259:15	79:2,8,18 80:3	167:4,12 168:1,9	260:14,20 261:18	333:5,12 334:3,10
285:22 286:1	81:8 82:3,12,21	168:19 169:6,9	262:4,10,15	334:18,20 335:2,7
314:14 320:10	83:11,19 84:5,19	170:6,8 171:15,17	263:14 264:2,11	335:17 336:3,10
321:6 339:5	85:6,22 86:10	171:21 172:11	265:7,15 266:8,20	336:18 337:4,14
346:21	87:7 88:14 89:2	173:1,10 174:5	267:3,9,22 268:18	338:2,17,21 339:2
particularly 101:13	89:12,15 90:3,13	175:13,15 176:2	269:7 270:1,8,17	339:18 340:4,12
333:21	90:20 91:13 92:6	177:2,4,8 178:21	270:21 271:6	340:20 341:7,10
parties 9:18 15:4	92:14 93:14,22	179:13,21 180:9	272:13,17 273:10	341:13,22 342:11
362:12,15	94:4,10,19 95:2	180:19 181:5,13	273:17,21 274:10	342:19 343:7
passage 281:14	95:22 96:15 98:19	181:21 182:7,13	274:19 275:4,10	344:4,10 345:5,18
282:1,18 308:4	100:12,21 102:9	182:21 183:6,13	275:18 276:6,13	346:6,15 347:6,20
318:21 322:4	102:11,14 103:3	183:20 184:1,9,16	276:20 277:6,8,15	348:20 349:8,10
passed 169:11	103:15 104:7,12	185:2,9 186:6,14	278:6,10,13 279:4	349:22 350:9,14
passes 232:1	106:2,18 108:4	186:22 187:1,8,12	279:21 281:4,19	350:17,20 351:5
path 73:1 91:19	109:4 110:7 111:3	187:21 188:5,21	282:10 283:11,22	351:11 352:1,18
paths 83:10,16	112:11,22 113:14	189:11 193:5,7	284:9,11,19	352:20 353:12
84:18 86:6 91:11	113:22 115:11	194:17,21 196:19	285:15 286:19	354:2,7 355:22
92:17 93:11 94:9	116:1 117:22	197:8 198:9,13	287:4,9 288:9	356:2,7,20 357:6
94:15	118:9,17 119:8	201:5,15,21	289:3,19 290:9,20	357:8,11,20
patience 328:11	120:6 121:4,20	202:12,14,21	291:6,13,19 292:5	358:14 359:4,16
Patrick 3:19 8:8	122:9,14 123:1,10	204:5 205:7,17	292:11,18 293:5	359:21
258:12	123:22 124:22	206:8,21 207:9,13	293:13,22 294:2	pause 52:22
Patton 4:3,10 8:16	125:3,17 126:1,11	207:22 208:8,16	294:11,14 295:7	pausing 114:18
8:20,20 9:17,17	127:2,16 128:5,8	209:4 212:7 213:8	295:16 296:1,12	141:22
13:1 15:3,17	128:12 129:3,11	213:14,22 215:13	296:16,19 297:7	PCLOB 6:4 27:3
17:22 23:10 25:20	130:15 132:12	215:19,21 216:8	297:10,13 298:15	47:10 96:3 97:7
27:6 28:11,21	133:14,16 134:2	216:14 217:7	298:21 300:3,15	97:15,22 99:9
29:15,18 30:16	135:8,17 136:4,9	219:15 220:17	301:2,4,12,20	100:8 102:2,7,19
34:12 35:13,16	136:21 137:4,12	222:16 223:9,11	302:6,17,19,21	103:1,22 105:21
36:7 38:17,19	137:14 138:8,10	223:21 224:14,21	303:9,17 304:7,16	105:22 106:4
40:14 41:5,15	138:19 139:14	225:6,16 226:13	305:16 306:5,13	109:15 120:15
42:19 43:7,14	141:3,20 142:16	226:22 227:22	306:16 307:2,9,13	132:21 135:13
44:4 46:1,21 48:5	143:13 144:1,3,9	228:14,16 229:4	307:16 308:10,18	136:13 138:16
48:20 49:6,13	145:7,17,19 146:8	232:8,11 234:9,22	309:6,20,22 310:9	198:18 199:11
50:4 51:4,19,21	146:13,21 147:7	235:10 236:9	311:1,13 313:13	273:2

PCLOB's 96:9 103:13 144:7	57:9 58:2 59:4,6 83:10,16 84:18	317:20 318:2,10 318:15 323:5,7,13	31:10,15 33:7,15 34:9 36:18 103:10	previously 21:8 51:8 161:4 312:21
penalty 166:15	86:6 87:6 93:12	324:19,22 325:22	241:2 246:14	primary 22:15
pending 76:1,3 77:5 265:21	93:15 239:7	326:17 330:21,22	315:21	prior 11:17 23:21 28:8 29:10 33:7
people 42:14	PIA 248:2 249:4 251:17	338:22 342:9	positions 346:19	33:21 35:11,18
perfectly 104:13	piece 88:5 140:10 209:20 261:12	343:15 350:5,18	possible 52:11 117:4 144:16	36:6 40:5 46:7,8
period 17:7,9,17 186:7 259:4	288:1,18 346:22	354:13,18 355:6 357:9	166:12 239:22	73:19 81:9 85:16
296:17 337:15 356:3	pieces 99:13 288:12	plural 125:10 126:4 132:8	269:4,21 285:10	94:20 110:8 111:4
periodic 14:3	pilot 251:1	134:14	287:20 288:13	112:12 120:13
periods 138:7,17 187:3	piloted 251:8	plus 352:2	possibly 287:16	121:22 142:5
perjury 166:16	place 13:3 16:3 17:5 109:19 131:1	point 14:5,8,10,16 30:17 57:1 58:7	post 306:13,15	177:14 228:1
permissible 218:13	153:20 322:5 362:7	104:20 105:5	potential 199:4 200:5 201:19	264:3 284:17
permit 219:12	places 206:4	107:6 109:13	potentially 170:19 248:12 296:13	301:10,18 303:15
permitted 228:11 229:21 230:10 284:4	plaintiff 1:5 8:5 12:10 19:14 46:13 361:4	110:14 111:16	248:12 296:13	304:19 327:6 353:13
person 75:8,10 191:14 218:3	plaintiffs 2:4 3:2,18 10:20 30:4 46:9	117:2 128:17	practice 173:6	PRISM 29:1 208:14 209:2,16
286:1,6 288:6	189:22 328:7	134:15,16 178:1	precisely 135:22	212:5,16,22
312:22 319:3	plaintiff's 5:11 11:18 45:4 77:20	206:10 217:15	preparation 63:17	214:10,19 215:8
personal 69:12 76:14 83:22	play 227:13	232:15 235:12	prepare 20:3	216:6 217:5 218:6
170:20 171:22	please 8:19 13:20 14:21 15:22 16:17	239:2,11 249:5	prepared 19:21 232:14	privacy 5:13,17 6:11 20:8,8 24:17
242:7 248:16	17:10,10,16 29:21	299:6 311:19	21:17 23:4 63:11	25:3,7,11 26:19
250:11 253:3	45:6 73:9 75:12	333:22 344:13	prepping 227:12	28:6 31:12,14,20
277:17,19 286:22	77:12,15 79:14	pointed 118:2 196:5 297:18	present 3:18 4:15 17:5	31:21 32:2,11,15
309:11 333:8	94:17,22 108:19	pointing 117:14	presentations 96:19 97:7 98:4	32:16,20 33:11,14
337:6 342:21	110:19 126:20	points 6:13 13:20 20:11 279:16 280:7	preservation 103:16	34:2,8 36:9 37:6
346:18 353:1 355:9	132:1 158:5 169:5	policies 33:11 34:8	preserving 103:5 252:21	37:15 38:6 95:15
personally 317:7 331:12	183:21 202:7,17	policy 33:14 271:19	President 7:8 343:9	101:7 109:21
persons 196:12,13 233:9	214:13 223:3	port 291:5,12	Presidential 271:19	120:15 130:4,22
perspective 130:22 287:18	247:21 260:18	portion 12:22 17:9 26:6 98:16 100:4	press 6:18 318:6	131:7 192:3
phone 3:8,15 4:10 206:16	262:13 269:3,20	100:5,19 170:1	pretty 191:2 316:12	209:13 210:11
phrase 59:21 186:2 215:4 260:3	271:3 273:7	195:14 200:14	prevent 10:1,8 282:5 283:2	219:3 246:16,17
phrased 52:8 188:5	279:10,19 280:6	288:21 302:4,15	preventing 10:14	246:19,21 248:22
phrasing 259:15	280:10 284:16	303:6,22 305:2 306:3	prevention 248:9	252:7 299:10
physical 56:5,15	286:17 289:16	portions 21:14 99:7 101:5 108:13	previous 20:7 125:10 158:8	314:10 319:3
	293:18 296:9	300:12 304:13	169:12 216:5	325:14 344:13
	297:1,11 298:9,18	306:10 343:2 347:17	260:18 298:9	privately 10:12
	299:20 300:10	position 24:14,19 24:22 25:18 31:5	342:3 346:19	privilege 15:7 30:19,22 31:1
	303:14 309:17			40:17 41:3 63:14
	311:21 312:4			96:2,10 103:6,17
				116:3 118:7 119:6
				120:5,11 121:3,10
				121:22 123:12,13
				125:13 129:5

145:22 162:8 163:20 215:16 273:22 281:6 282:13 307:19 328:20 331:22 332:16 339:9,20 340:14 privileged 10:2,9 10:16 11:16 54:1 63:16 105:7 134:4 206:22 267:11 357:13 privileges 10:19 71:22 111:7 116:4 118:20 122:1 126:14 127:20 129:6 155:4 156:5 161:4 174:7 180:11 194:22 196:21 201:7 202:1 204:7 205:19 208:2 217:9 219:17 222:19 224:3 228:19 232:22 234:11 242:14 245:5 254:15 258:21 261:1 262:17 266:10 268:20 269:10 270:3 272:19 273:13 274:13 281:7 282:13 283:14 285:5 290:1,11 294:4 299:2 300:5 302:9 303:19 305:18 307:20 310:12 311:3,15 314:1 317:6 322:22 324:3 325:5 326:5 327:2,9 328:20 332:1,17 333:14 335:9 337:16 339:10,21 340:15 347:8 350:2 352:2 probably 122:9	134:17 144:3,14 187:6 247:6 350:11 problem 52:1 240:10 problems 236:14 238:8 Procedure 360:1 procedures 13:1,2 20:7 28:4 192:5 194:9 196:14 219:10 232:13 233:7 285:1 313:3 321:10,11 355:14 proceeding 103:22 process 15:4,10 16:3,4 26:17 27:21 28:2 31:20 32:17 37:3 96:2,5 96:9,20 100:2 102:21 103:14,17 105:3,16 165:3 176:12 195:7 196:1,6,17 197:16 198:16 199:11 204:18 209:15 246:7 267:14 325:15 processes 135:19 201:1 244:9,19 251:3 professional 225:15 professionals 55:1 60:4 program 5:14 6:5 95:16 101:5,18 105:1,11 107:4 128:20 131:11 133:1 140:4,5,17 141:12 210:13 212:5,22 214:19 215:8 217:5 248:9 248:14,18 251:8 265:5 273:4 280:20 320:3 programmed 281:1	programs 2:6 4:7 25:6 36:3 38:15 43:5,12,18,19 44:1 143:7 247:1 252:8 prohibit 321:14 prohibited 313:3 321:22 prohibition 322:11 promise 133:17 properly 28:6 351:18 proposed 28:4 protect 96:9 121:15 224:4 241:7 343:12 protected 10:2,8,15 11:15 15:7,13,19 16:2 28:6 40:17 41:13 51:7 71:1 71:18,21 123:12 124:14 127:20 204:7 208:1 217:9 228:19 242:14 245:5 260:22 262:17 268:20 269:9 270:3 272:19 281:5,6 282:12 294:4 303:19 305:17 310:12 311:3,15 314:1 322:21 323:18 325:5 326:5 327:2 335:9 337:16 340:13 350:1 protecting 251:4 protection 41:4 252:8 protections 10:19 130:22 protocol 89:22 90:11,18 191:13 192:6 193:3,21 194:10 201:14 206:19 225:12 provide 15:1 16:19	27:1 38:2 50:15 50:19 52:9,10 65:5 73:11 74:15 75:2,4 87:22 89:15 100:22 101:10 111:22 116:17 117:1 141:11 145:1 155:6 161:22 163:12 165:12 166:11 186:20 190:21 203:12 235:13 241:8 261:5 264:16 265:12 268:5 272:6 289:16 293:19 294:6,9,15 294:19 295:14 296:4 297:2 298:10 299:4,7 304:22 307:21 309:10 314:3,3 327:16 349:15,15 349:18 357:16 provided 23:15 45:17 46:12 53:15 63:19 64:5,18 73:5,12 74:21 76:18 85:20 96:16 96:18,19 97:6,11 97:22 98:4 111:17 134:20 141:6 157:10 178:15 187:6 203:14,21 233:2 241:5 264:19 273:11 289:6 296:22 298:8 299:20 300:10 311:7 316:3,9 325:21 326:14 327:5,17 346:22 356:14 provider 48:16,19 67:6,15 128:15 129:1 134:12,13 161:18 198:20 providers 46:20	47:21 48:4,14 51:1 52:20 55:6 66:16 126:8 127:12 132:8 133:10 provides 11:13 111:18 165:21 239:15 240:1 249:21 providing 27:9 62:15 72:8 114:6 128:14 140:3 238:16 240:19 268:12 295:22 298:4 299:15 327:19 provisions 323:19 public 2:9 6:4 12:8 33:1 70:12,14,18 71:7 74:5,11 111:12 130:21 135:12,14 136:13 141:17 175:12 176:1 210:12 232:13,17 238:19 285:1 316:17 338:8,8,10 362:1 362:2,20 363:21 publicly 14:20 20:14 73:11 131:13 226:20 339:4 published 237:19 248:3 publishes 74:14 publishing 25:9 31:20 purport 140:13 purports 137:10 purpose 10:14 22:15 30:17 130:18,20 141:9 233:21 346:8 purposes 51:2 215:1 272:7 pursuant 2:4 5:14 6:5 95:17 129:4
---	--	--	---	---

207:1 210:13 233:11 357:13 put 50:7 76:10 130:21 131:9 134:10,18,19 176:16 295:6 321:10 puts 322:5 putting 37:5 310:9 328:11 p.m 128:10,11 133:19,20 153:12 153:13 156:20,21 190:10,11 198:10 198:11 207:16,17 216:19,20 232:9 232:10 241:17,18 258:2,3 260:12,13 262:8,9 267:6,7 271:1,2 272:14,15 277:10,11 284:12 284:13 286:14,15 287:7,8 297:8,9 298:16,17 303:12 303:13 310:1,2 314:6,7 323:9,10 328:5,6 338:19,20 342:14,15 348:6,7 350:15,16 352:11 352:12 360:3	54:21 57:14 59:21 60:16 63:12 68:11 68:12 70:10,12,17 71:2,6,17 72:8,9 72:17,19,20,22 73:8,12 74:10,16 75:22 76:2,5,16 77:6 81:4,5 82:13 84:13,14 85:5,12 87:14 88:8,9 89:3 89:13 90:4,8 91:18 93:10,21 94:11,14 95:1,2 96:4,8,13 102:12 102:13,16,18 104:18,19 105:17 111:1,2 113:3,4 114:5 116:5,11,22 117:10,20 118:1,8 118:13,18,21 119:7,9,11,12,20 120:3,7 121:12,20 122:2,4,18 123:2 123:4,10,15,20,21 125:1,14 126:16 127:14,15,18,21 128:7 132:15,16 133:22 134:1 138:3,13 139:2,9 144:6,19 149:4 151:21 154:20 157:1,2,3 161:1,6 162:5,10 163:13 163:16,22 164:14 165:8 167:14 171:20 175:16 177:6 178:4,22 179:4 180:8,13 183:22 186:3,18 188:6 189:1 192:9 194:18 195:14,19 197:4,9,21 198:12 201:17 202:3 203:1,3 207:2,20 208:19 209:9,19 212:20 213:2,6 214:1,8,12 216:1	216:5,9 217:1 219:4,18 221:18 222:12,17 223:4 224:6 228:20 229:8 230:3,7,22 234:2,5,10,13 236:5,6,8,10,11 236:17 237:3,4,8 237:9,10,12,15,22 238:18 239:3 240:22 241:3,11 241:20 242:1,12 242:15 243:1,16 243:18 245:2,3,12 247:14 252:15 260:18,19,20 261:1,4,11,19 262:1,2,13,14,22 263:5,11 265:3,21 265:22 267:1,2,8 267:9,22 268:18 269:13 270:1 271:4,5 272:9,16 272:21 273:7,11 274:10 277:13,14 277:15,17 278:10 278:12,13,21,22 279:3 281:4,9 282:11 284:7,17 284:18,20 285:3 286:11,17,18 287:2,3,15,21 288:4,22 289:5,12 289:18,19,21 290:9,16 294:2 295:15,21 296:8 296:13 297:1,11 297:12,13 298:9,9 298:19,20,21 299:15,18 300:3,6 302:7,22 303:15 303:16,17,20 304:20 305:7,8,12 307:17 310:6,10 310:13 311:1,4 313:14 320:17 323:5,6,14,15,17	325:1,2,3,6,8,10 325:12 326:3,10 326:11,12,22 327:7,9,22 328:1 331:10,20 332:3 332:19 333:5,12 335:2,5,6,7 336:8 337:4 338:22 339:1,8 340:3,19 341:11,12 342:17 348:1,2,13 350:5 350:17,19 351:18 352:20 353:16 354:5,6,9 356:5,6 356:10,12 357:9 357:10,11,18,19 359:7,8 questioning 54:2 82:13 questions 7:9 13:4 13:5,14,15 14:17 16:1 17:6,19 27:11 38:5 41:20 48:12 54:6 80:15 96:19 104:13 106:21 122:10 140:19 149:7 214:15 215:12 232:19 250:9 253:1 259:5,15 270:9 328:12 352:6 354:22 359:20 361:17,19 quick 29:21 156:18 201:18 quicker 151:16 quickly 252:14 quite 24:12 250:13 quote 107:17 124:21 191:12 195:6,15,22 197:15 200:16 204:2 212:4 215:7 quoting 127:11 179:11	R 8:1 Rachel 218:12 Raise 12:2 Raj 236:2 Rajesh 211:18 range 98:12 ranging 20:6 read 19:10 23:16 45:7,11,15 53:5,8 53:10 58:19 59:1 72:16,18 95:3 102:11,13 108:19 109:9 111:2 126:21 127:2,13 127:15 131:22 132:14,16 134:1 149:3 157:2 159:22 167:14,15 171:17,20 175:15 180:7,8 183:21,22 195:18 197:9,21 198:12 211:13,20 212:10 214:16 221:12 222:22 227:11 244:15 245:1,2 253:15 260:17,19 261:22 262:2,14 266:22 267:2,8 271:5 272:16 277:12,14 280:5,14 281:14 281:22 282:18 284:16,18 286:9 286:11,17,18 287:1,3 297:12 298:18,20 303:14 303:16 310:5,6 318:21 319:22 320:1,12 323:6,13 323:15 325:2,9,12 335:3,4,6 338:21 339:1 341:10,12 343:19 345:10,13 345:22 347:22 348:2,13 350:17 350:19 354:6 355:8 356:6 357:8
<hr/> Q <hr/> qualify 59:9 quasi-invocation 103:13 queries 313:4,10 query 218:13 313:1 question 10:6,6 13:12,21 14:19 16:9,12,16 23:13 28:13 30:14 38:21 39:15 40:14,19 41:10,11,17 42:5 43:9 45:7,11 50:20 51:9,12,16 51:22 52:4,8,11 53:4,5,9,10 54:3				
			<hr/> R <hr/>	

357:10,17,19 359:8 361:11 readily 20:17 160:1 160:4 185:16 187:17 reading 63:6 111:1 133:21 190:6 194:4 195:10 199:18 200:15 201:3 286:7 297:10 348:12 360:5 real 159:1 201:18 realize 14:10 209:18 realized 247:5 really 57:5 137:19 149:6 173:18 176:18 239:10 253:8 328:14 realm 20:6 112:2 198:17 reason 13:6,13 17:18 113:18 114:17 121:10 133:7 226:6 234:3 256:7 344:20,21 reasonably 233:9 reasons 101:15 112:16 114:9 136:1 341:15 reauthorization 169:21,22 308:5 322:5 Rebecca 1:12 2:2 5:3 9:15 12:6 361:10 363:5,17 recalling 14:19 received 38:11 39:9 135:13 recharged 247:5 recipients 353:22 recognize 19:5 44:21 95:12 129:20 159:13 204:21 210:8 220:6 250:6 252:4	318:3,5 Recognizing 332:9 recollection 14:18 68:10 238:22 272:2 recommendation 126:22 127:11 recommendations 27:10 102:2,8 104:11 105:4 record 8:14,18 9:14 13:8,9 15:18 16:5 16:14,18 29:22 41:7 53:19,20 69:15 73:18 74:20 75:18,20 76:11 88:16 103:1 105:15 106:13 110:18,20 128:10 130:21 131:10 133:19 135:3 153:11 156:18,20 167:15 170:19 190:9 192:17 194:3 198:9,10 199:17 207:14,16 211:17 215:14 216:17,19,22 232:6,9,17 238:14 241:16,17 252:2 252:11 260:9,10 260:12,17 262:7,8 267:4,5,6 270:22 271:1 272:13,14 277:9,10 284:11 284:12,15 286:13 286:14 287:6,7 289:20 297:7,8 298:15,16 303:10 303:11,12 309:22 310:1,4 314:5,6 323:8,9,12 328:4 328:5 338:18,19 342:12,14 348:4,6 350:14,15 352:11 359:22 362:10 recorded 13:5	361:17,19 Records 31:21 redact 11:17 redacted 20:16 142:5 226:13 redactions 176:9 176:10,11,15 reduced 362:9 REF 363:5 refer 15:12 55:16 56:5,14 143:5 153:17 154:11 195:11 223:7,13 223:17 264:14 referred 24:13 198:3 211:14 225:12 referring 81:18 98:12,13 132:4 143:16 169:17 198:2 203:16 206:4 236:20 237:17,18 239:12 241:4 refers 57:9 348:17 reflective 177:16 reflects 107:12 refresh 68:9 78:1 238:21 refreshing 14:18 refuse 71:13 212:20 refusing 265:12 regard 135:14 139:12 224:11 238:9 240:11 regarding 6:4 105:1 210:12 269:12 354:22 regulated 34:4 relate 334:8 related 30:21 48:13 96:12 187:3 313:10 331:15 333:19 351:16 362:12 relates 26:22 131:1	142:21 174:18 193:15 233:19 310:18 relating 43:5 174:1 176:22 343:10 relationship 95:19 relative 362:14 relatively 135:5 141:17 relaying 222:11 release 6:18 11:17 175:11 318:6 relevance 35:14 38:21 relevant 17:11 114:10 138:6 rely 248:13 remain 101:5 107:5 342:5 352:17 353:11 remainder 115:5 remains 125:5 140:6 299:11 344:22 remember 58:9 97:13 101:4 142:1 247:12,22 remind 260:14 334:22 reminder 334:21 repeat 60:15 79:13 113:4 222:2,3 229:14,16 262:12 268:7,10 271:3 324:22 348:8,10 359:6 repetition 144:21 rephrase 103:15 115:6 151:21 160:11 175:18 186:17 216:4 223:3 296:18 302:21 303:3 356:16 rephrasing 186:9 296:16 report 5:13,17 20:8	20:9 25:2 95:16 95:20 96:18 97:12 98:8,17 99:7,18 100:11,20 101:6,7 101:16 102:1 104:5 105:21 106:16 108:1,2,18 109:15,21 120:15 120:16 128:4 130:4,19,20 131:3 131:9,13,17 132:22 134:20 135:3,10,13 136:2 136:7,15,18 137:10 138:7,15 138:18 139:13 140:10,13 141:15 142:12,15 143:10 144:15 145:3,4,6 192:3 198:18 209:13 219:4 273:2 299:10,12 312:19 325:14 Reported 1:20 reporter 11:19 12:2 53:10 102:13 111:2 127:15 132:16 134:1 157:2 167:15 171:20 180:8 183:22 197:21 198:12 245:2 260:19 262:2,14 267:2,8 271:5 272:16 277:14 279:14 284:18 286:11,18 287:3 297:12 298:20 303:16 310:6 312:5 323:6,15 325:2,12 331:2 335:6 339:1 341:12 348:2,13 350:19 354:6 356:6 357:10,19 359:8 reporters 240:6
--	--	---	---	---

reporter's 11:2,7 11:12	62:9 222:5,12	313:19 322:1,11	38:16 95:20 98:16	12:1,6,12 42:4
reports 25:9 26:1,2 26:15 120:21 142:7	response 6:7 16:11 16:16,21 30:18 45:16,17,21 46:5 46:6,7,12,13,15 50:10,19 52:9,11 54:3 55:15 57:6 57:21 58:16,18 60:20 61:11 64:5 67:3 69:18 70:2 71:12 74:13 75:3 75:5,6 77:16 78:2 78:6 85:20 86:15 86:20 87:19 88:1 88:12 101:1 109:16 110:9 111:18 116:17,22 117:3,10 123:20 123:20 125:14 155:2 161:11,13 162:5 186:4,20 190:5,16,19 192:11 195:15,17 196:5,18 197:6 200:11 203:2,6 204:1,15 220:9 232:20 240:1 254:11,14 268:13 269:12 271:8 294:5 296:8,22 298:8 299:5,15 309:8 325:20	restate 72:19,22 84:13,16 88:9 122:18 214:14 305:11 326:11,12 restroom 62:18 result 118:13 119:3 285:2 330:6,14 339:16 resulting 105:2 results 313:1,10 resume 53:21 62:21 75:21 110:21 128:11 133:20 153:13 156:21 190:11 198:11 207:17 216:20 232:10 241:18 258:3 260:13 262:9 267:7 271:2 272:15 277:11 284:13 286:15 287:8 297:9 298:17 303:13 310:2 314:7 317:14 323:10 328:6 338:20 342:15 348:7 350:16 352:12 resuming 315:1,10 316:21 retain 339:16 358:9 retains 357:3,22 358:8 retention 355:13 reveal 103:11 131:14 revealed 178:18 179:9,18 revealing 116:22 351:10,13 review 11:15 20:18 21:2 23:17,20 25:6 26:10,17 28:3,4,5,8 29:10 31:22 32:19 37:3	98:22 99:7,10,12 100:6,10 101:3,22 107:7 130:8,13 140:22 166:22 167:7 171:11 172:15 175:5,7 176:14 258:16 259:7 302:3,7 305:9 312:18 319:1 344:16 360:2 reviewed 20:4,12 20:15 21:9,10 22:9 23:8,14 32:1 46:13 63:18 96:22 96:22 97:1 98:7 99:18,21 100:4,6 100:15 137:2 142:5 232:11 249:6 252:13 253:7 284:21 338:10 344:13 346:19 reviewing 10:21 21:6 25:18 33:11 37:15 43:5,12,17 45:9,19,21 58:21 85:19 99:3 100:2 132:3 155:9 191:20 212:1 343:22 reviews 25:22 171:10 176:5 revise 39:20 191:21 191:22 re-read 77:15 re-reading 157:1 re-remind 140:8 re-reminding 140:15 RFA 74:13,17 76:19 77:3 109:16 109:17 111:17 117:3 Richards 1:12 2:2 5:3 8:2 9:13,15,16	44:19 45:10 51:15 63:2 76:3 84:7 104:17 129:18 153:8,16 159:11 159:18 190:13 210:5 214:5 217:2 220:4 229:3 250:5 258:7 279:15 361:10 363:5,17 right 12:2,15 14:13 14:14 18:20 39:11 43:20 48:10 52:6 54:20 55:6 70:2 80:12 97:8 99:19 99:22 103:16 106:9 135:7 136:2 144:4 154:2 155:14 175:18 177:18 190:9 191:3 213:8 215:2 233:22 310:3 335:16 344:3 345:4,13 347:19 348:18 349:7 359:19,20 360:1 rise 172:21 risk 248:20 314:9 risks 25:7 Rodney 4:3 8:20 9:17 29:5 41:1 51:14 53:13 84:2 103:1 129:9 146:4 187:1 241:11 270:6 294:7 rodney.patton@... 4:12 Rogers 30:3 45:4 119:7 120:2,12 315:17 316:2 role 21:22 26:2,6 27:4 45:20 roles 24:21 31:17 32:6 roll 217:13 room 351:15 Rosemary 6:17

roughly 141:8 217:13 271:21 316:4	scanned 263:3 266:16 267:16 272:11 273:8	348:22 349:11 352:21 358:15 359:5,17	258:21 273:15,16 273:22 274:12 281:6 282:13	346:22 seeing 58:9 140:1 236:3
routed 90:1,11,19 92:17 93:12 160:7 160:9 188:19	300:13 304:14 324:19,21 325:18 326:2,17,19	scratch 185:19 screened 199:5 200:17	283:13 285:4 290:11 302:9 307:19 324:2	seek 215:13 268:15 seeking 120:3 167:2 180:10 280:17 302:8
rule 91:5 92:2 360:1	334:16 335:15 336:1,16 337:11 337:22 345:17	screening 195:6,22 196:9,16 197:4,15 200:10,13 201:2 244:8,18	328:19 331:22 332:16 333:14 339:9,20 340:14	seeks 118:1 123:2 134:3 165:4 191:14 303:18 323:18 340:13
rules 9:19 11:20 65:5 118:5 282:4 283:2	346:5,12 347:5,17 scanning 196:8 263:6,8 271:11	Screenshot 7:4,5 scrubbed 141:6 seals 33:11	section 5:14,18 6:5 6:19,21 7:10 24:3 24:7 28:17 32:14 95:17 96:21 98:8 98:11 100:11	seen 33:13 227:3,10 235:22 238:17 239:1 250:12 280:3,4 331:7,12 332:7,9 333:3,7 342:10,17,21 343:1
R-E-B-E-C-C-A 9:16	274:5 300:1 301:10,19 305:3 322:17 324:8	second 16:11 30:4 38:19 58:19 69:8 72:12,15 75:13 102:9 110:9 113:14 114:4 131:20 149:2	106:6 130:6 131:1 131:9 141:7 199:2 206:6 210:14 218:5 221:14 233:12 313:3 318:8,20 319:5 320:4,15 355:1,12 355:13	select 316:11 selector 195:9 196:3 197:18 199:6 200:18 205:15 206:14,16 206:20 207:7,20 208:6 217:20 219:14 230:13,19 231:4,13,19,21 234:21 264:10 266:18 267:16 269:6,22 286:1 296:11 297:5 301:1 304:2 358:19,20 359:3 359:15
R-I-C-H-A-R-D-S 9:16	325:16 346:8 347:4 348:17 scans 303:22 306:11	second 16:11 30:4 38:19 58:19 69:8 72:12,15 75:13 102:9 110:9 113:14 114:4 131:20 149:2 154:22 175:13 177:2 183:20 193:5 197:8 200:14,16 211:13 219:22 223:9 228:14 230:7 235:10 243:17 252:19 254:8 262:7 267:4 270:21 282:19 287:21 307:13 315:2,12 319:10 320:1 331:8 333:21 334:18 343:16 347:20 352:18	206:6 210:14 218:5 221:14 233:12 313:3 318:8,20 319:5 320:4,15 355:1,12 355:13	sections 311:19 Secure 10:13 security 1:7 4:15 9:1,6,10 30:2 31:13 32:1,14,18 33:5 36:10,19 37:13,20,22 45:3 117:21 118:14 119:3,17 164:6,15 164:20 170:12 220:18,20 233:8 246:15 247:17 249:5 252:9 361:5 363:4
S	scans 303:22 306:11	seconds 53:18 secret 351:19 secrets 15:7 40:17 41:2 116:3 119:6 120:5,11 121:2,10 121:22 123:12,21 125:13 126:13 129:5 145:21 155:3 161:3 163:20 164:13 180:11 194:22 196:21 232:21	sections 311:19 Secure 10:13 security 1:7 4:15 9:1,6,10 30:2 31:13 32:1,14,18 33:5 36:10,19 37:13,20,22 45:3 117:21 118:14 119:3,17 164:6,15 164:20 170:12 220:18,20 233:8 246:15 247:17 249:5 252:9 361:5 363:4	Select 316:11 selector 195:9 196:3 197:18 199:6 200:18 205:15 206:14,16 206:20 207:7,20 208:6 217:20 219:14 230:13,19 231:4,13,19,21 234:21 264:10 266:18 267:16 269:6,22 286:1 296:11 297:5 301:1 304:2 358:19,20 359:3 359:15
S 8:1 30:3 134:10 Safe 34:2 San 3:14 satisfy 67:22 68:15 69:4,21 73:4 save 330:21 saw 343:2,4 saying 44:7 52:7 59:16 67:14 75:8 112:17 173:18 192:16 200:16 213:12 218:11 235:22 237:6 263:2 358:1 says 47:12 104:21 198:20 200:4 209:14 217:19,21 218:8 236:1 318:22 344:1,6 345:3,8,11 346:7 355:10 scan 196:9 259:21 261:8,15 263:12 263:17 266:5 270:15 274:9,17 300:21 302:15 303:5 305:13 306:2,22 328:15 329:3 344:2	scenarios 16:7 17:2 science 35:9 36:14 36:21 40:11 SCIF 10:14 128:7 189:3 213:13,15 215:10 216:18 230:8 271:7 scope 30:22 83:20 84:4,20 86:11 87:9 89:4 90:5,22 91:16 94:2 102:15 118:3 165:9 168:10,20 170:16 171:22 172:12 173:12 179:2 224:15 242:6 243:4 245:13 247:14 248:12 250:8 253:1 255:10 256:18 257:1 277:16 282:11 283:12 285:16 286:20 307:10 308:19 315:5,15 317:4 319:15,17 321:18 322:3 337:5 342:20 345:19,20	seconds 53:18 secret 351:19 secrets 15:7 40:17 41:2 116:3 119:6 120:5,11 121:2,10 121:22 123:12,21 125:13 126:13 129:5 145:21 155:3 161:3 163:20 164:13 180:11 194:22 196:21 232:21	206:6 210:14 218:5 221:14 233:12 313:3 318:8,20 319:5 320:4,15 355:1,12 355:13	selectors 132:10 133:13 199:2 208:13 209:1,15 212:5,16,21 214:9 214:18 215:7 216:5 217:4 218:7 218:17,20,22 300:13,21 302:5 302:16 303:7 304:15 305:15 306:4,11 307:1 334:16 335:15 336:1,16 337:12

337:22 Senate 316:11 senders 353:22 Senior 25:5 31:12 246:16 sense 73:21 92:20 92:20 245:15 263:7 333:2 349:1 353:3 sensors 344:2 346:8 sent 46:9 90:1,11 sentence 100:16 108:19,22 109:3,8 109:14 110:4 111:10,15 112:7,8 113:7 114:13 115:9,9 117:9,10 119:14,21 124:11 124:16,18 131:18 131:22 132:4,7,19 133:9 134:8 137:2 139:3,6,19,22 159:22 160:10,12 160:17,22 185:14 187:15 188:13,22 189:9,17 194:5 198:20 199:21 200:3,15 201:3 204:16 211:12 212:3,4 215:20,21 219:2 221:12,17 221:20 222:4,9 226:3,7,7 250:21 280:14 312:17 319:6 344:5,8 345:8,10 348:9 sentences 106:20 107:6 108:7,9,14 138:22 139:9 343:20 separate 41:10 93:1,11 288:12 September/Octo... 316:6 series 250:9 253:1 served 19:14	338:11 server 160:9 231:18 service 46:20 47:21 48:4,14,16,19 51:1 52:20 55:6 66:16 67:6 126:8 127:12 128:15 132:8 133:10 134:12,13 SERVICES 363:1 sessions 97:10 set 19:19 25:1 34:7 48:12 54:6 77:20 92:6 93:1,14 157:13 189:22 225:20 249:2 309:6 321:10,17 322:13 341:15 355:13 Sets 30:4 setting 138:3,13 143:20 145:2 Seven 11:9 shake 13:9 sheet 361:18 363:1 she'll 69:11 238:22 short 41:1 53:15 133:17 318:21 shorten 41:6,7 69:14 84:3 273:18 324:2,4 shortened 146:5 shortening 129:10 shorthand 15:16 15:20 28:18 362:7 show 227:5 238:20 shy 31:16 side 239:17 signature 360:2,5 361:22 signed 171:14 239:19 signing 173:17 similar 74:12 140:18 154:3 158:6,13,14 212:9	288:4 299:18 Similarly 169:15 simple 241:11 single 26:10,11 83:9,13,15 84:17 86:5 91:10,15 254:5,21 sit 139:10 176:7 sites 287:17 situation 173:15 Six 11:5 slight 107:14,14 261:19 slightly 143:4 179:6 208:21 small 33:9 92:20 135:5 smallest 151:9,22 152:7 society/non-gove... 25:10 solely 100:5 296:10 297:4 300:22 320:7 solidify 251:3 somebody 65:6 73:3,7 75:1,4,9 85:11 178:3 229:22 288:13 somewhat 353:16 354:10 sorry 18:4,4 19:16 26:8 29:13 45:13 46:8 48:12 53:9 65:12 67:4,15 68:22 69:2 70:8 76:21 77:13,17 78:18 90:7 100:5 102:6 108:4 119:12 124:8 130:16 137:13 154:14 156:13 159:15 169:7,19 175:15,19,21 188:8,16 190:14 191:18,20,21 197:19 200:22	201:17 208:18 211:6 213:4 217:16,18 219:22 221:8,9 231:2 233:6 237:5,16 243:2 244:15,22 246:5 247:21 249:13 252:20 253:12 254:1 263:8 279:17,18 287:1,6 294:12 295:9 310:9 312:12 314:4 316:5,5 341:7,10 354:5 357:8 358:6 sort 37:7 47:11 50:2 54:17 57:19 63:7,8 80:19 91:6 105:7 111:12 161:19 173:15 235:19 238:2 247:3 257:9 261:4 261:6 sorts 16:3 33:4 sound 14:14 sounded 243:22 sounds 75:7 source 40:15 135:14 254:22 283:5,9 sources 101:12 121:14,14 126:12 127:19 140:5 145:20 164:2 241:6 span 83:9,15 84:17 speak 13:7 36:13 96:6 173:3 248:3 285:21 344:15 speaking 53:12 90:14 139:18 249:3 353:17 354:4 speaks 345:6 special 49:18,21 54:18 56:1,9 61:6 78:14 83:4 154:4	155:20 156:1 199:10 257:19 specific 17:9 26:15 27:11 29:2,14 35:18 41:11,19 47:12 49:16 66:7 71:8 78:11 86:4 98:12 101:19 108:7 114:20 143:16 153:19 154:18 157:21 161:21 169:2 173:3,14,15 178:1 180:5 187:3 228:3 245:16,19 248:6 253:6 257:5 260:3 349:3 specifically 13:22 26:11 104:21 117:8 119:18 120:19 177:18 194:1 217:15 225:12 238:9 243:19 specificity 193:16 319:20 344:16 specifics 199:12 248:3 specified 17:16 specify 128:2 296:17 speculation 135:18 166:9 168:20 173:11 speculative 285:17 285:20 286:20 speed 149:10 spell 9:14 spelled 159:17 211:3 spelling 8:14 spend 314:12 spent 328:9 sphere 71:8 spoke 120:13 spot 41:19 SSCI 316:11
--	--	---	--	--

<p>stamped 221:7 stand 174:22 299:8 standard 177:11 standards 286:2 start 8:13 42:9 67:4 87:4 109:7 175:21 241:22 281:22 312:11 322:7 331:6 started 73:1 starting 140:10 198:20 312:16 starts 108:20 131:19 204:16 state 9:13 15:6,17 16:13,18 40:17 41:2 50:20 102:22 116:3 119:6 120:4 120:11 121:2,10 121:22 123:12,21 125:13 126:13 129:4 145:21 155:3 161:3 163:20 164:13 180:11 194:21 196:20 197:11 209:11 232:21 238:13 258:20 273:15,16,21 274:12 281:6 282:12 283:13 285:4 290:11 302:9 307:19 309:17 318:16 324:2 328:19 331:22 332:16 333:14 339:9,20 340:14 351:19 stated 18:12 115:19 126:2,3 194:1 statement 6:20 114:8 178:10 179:8,11,16,18,19 187:5 189:4 211:2 212:18 213:3 214:7,17 215:5 232:14 318:19</p>	<p>320:14 355:15 statements 137:8 178:17 221:1 339:3 states 1:1 5:19 6:15 66:17 67:16 103:5 103:21 104:1 124:18 163:4 214:18 228:13 230:2,12,17 231:3 231:18 233:9,10 234:8,20 273:4 319:2 320:2 361:1 stating 8:13 123:19 253:5 318:6,19 stations 78:5,22 79:6,16 80:2,17 81:7,12 83:10,16 84:18 statute 322:10 statutes 51:8 207:1 357:14 statutorily 134:4 statutory 41:3 71:21 111:7 116:3 118:20 122:1 123:13 124:14 126:14 127:20 129:6 145:22 155:3 156:4 161:3 162:8 174:7 180:11 194:22 196:21 201:7 202:1 204:7 205:18 208:2 217:9 219:17 222:19 224:3 228:19 232:22 234:10 242:14 245:5 254:15 258:21 260:22 262:17 266:10 268:20 269:9 270:3 272:19 273:13 274:12 281:7 282:13 283:14 285:5</p>	<p>290:1,11 294:4 299:1 300:5 302:9 303:19 305:18 307:19 308:15 310:12 311:3,15 314:1 317:6 322:22 323:19 324:2 325:5 326:5 327:2 328:20 331:22 332:16 333:14 335:9 337:16 339:9,20 340:14 347:8 350:2 352:2 step 39:7 241:14 stood 131:10 stop 10:6,11 313:6 319:4,8,13 320:18 321:12 Stops 6:18,21 318:7 318:20 320:14 stored 231:18 stores 206:5 strategic 26:9,14 strategically 66:2,9 66:14 67:7,16 Street 3:5,13 363:2 strike 102:6 127:7 305:11 352:8 striking 77:1 student 34:17 study 144:11,14 subdivision 62:3 151:9,22 152:7 subdivisions 61:21 62:6 82:1 150:3 150:10 subject 10:20,20 15:6 20:21,22 21:5,20 22:3 30:19 63:22 64:12 85:14 87:16 88:4 88:6 97:11 104:5 111:6 116:2 118:19 121:22 126:13 145:21 148:7,14 155:3</p>	<p>161:3 162:8 180:10 194:21 196:20 201:6,13 201:22 219:16 222:18 224:2 232:21,21 234:10 254:14 258:20 266:9 273:12,21 274:11 283:13 285:4,5 290:1,10 298:12 299:1 300:1,5 302:8 317:6 328:19 331:21 332:15 333:13 338:13 339:19 341:4 347:7 352:1 355:12 subjected 148:20 148:22 149:12,19 150:4,11,19 151:4 151:11,12 152:2,9 152:16 153:1 201:14 submarine 78:4,18 78:21 79:5,15 80:1 81:6,19,22 182:12,19 submission 28:9 29:11 175:1 submissions 20:10 23:9,21 143:2,6 166:16 167:1,9,19 175:3 submitted 20:4 131:6 220:16 Subscribed 363:18 subsequent 175:2 subset 218:6 substance 211:11 351:21 substantially 164:19 substantive 105:3 substantively 105:9 suggest 109:15,19 176:15 241:14</p>	<p>suggested 227:14 Suite 363:2 sum 81:1 supervision 362:9 supplement 14:12 support 6:14 165:14,21 249:18 279:16 280:8 suppose 93:17 143:14 231:16 supposed 166:1 sure 17:13,14 22:10 22:18 25:15,17 27:12,13 28:15 29:14,17,18 32:12 38:20 39:16 42:7 43:11 54:5 57:19 58:8,13 60:16,18 64:14 67:2,13 68:14 69:20 73:16 78:14,19 79:15 90:10 91:2,4 94:8 99:16 103:9,10 104:3 105:19 112:5 114:4 115:1 115:4 133:17 140:2 149:5 153:9 154:19 155:8,19 171:19 177:15 179:3 189:16 192:1 194:5 195:12,14 208:21 209:20 212:12 218:10 221:19 223:5 229:5 235:18 244:18 247:15 249:22 258:1 262:20,21 280:7,12 284:9 296:18 303:3 308:4 313:7 319:21 320:14 325:10 332:21 343:2 348:9 350:7 352:9 355:7 358:8 358:22 Surely 248:17</p>
--	---	---	---	---

surveillance 5:14 5:15,18,20 6:5,6 6:16 14:21 17:4 24:4 25:14,19 27:5,19,20 28:10 28:16,19 29:8,9 29:12 32:4 35:5,7 35:11 37:1,11 38:10,15 39:10,14 40:13 43:12 44:1 51:3 95:16,18 107:22 109:11 112:21 113:12,21 115:14,22 117:12 120:1 121:18 122:21 123:8 124:19 125:15 126:10 127:10 130:6 132:5 133:4 135:7,16 136:14 137:9,11 138:6,17 139:13 141:19 142:14 143:11 144:8 145:5,16 146:12,20 147:6 147:14 148:1,7,14 148:21 149:1,13 149:20 150:5,12 150:19 151:4,12 151:13 152:2,9,17 153:2 160:20 162:16 163:15 165:5,6,13,14,16 166:1,17 167:2,3 167:8,11,20 168:6 168:14,16 170:4,5 171:12,13 172:7,8 172:10 173:8 174:2,4 179:17 180:3,17 181:3,11 181:19 182:6,11 182:18 183:5,12 183:18 184:6,13 185:1,7,21 186:12 187:19 191:11 195:4,20 197:13 200:21 201:13,20	202:11,19 206:14 206:17,20 207:8 207:21 208:7,14 208:15 209:2,3 210:13,15 214:11 216:6,7 219:11 220:12 228:10 229:20 230:1,9 232:3 233:13 234:17 236:15 238:8 240:11 242:4,11 244:11 244:20 245:19 247:7,8,9 258:16 259:6,20 261:15 266:17 268:17 270:14 271:14 272:11 274:5,8,16 275:2,8,14 276:2 276:10,17 280:18 280:20 281:2 282:7 283:4,8 284:5 286:7 288:7 290:8,19 298:13 300:2 312:9 320:5 322:16 324:8 328:17 329:5,13 329:21 330:7,15 331:16 333:20 334:9,17 335:16 336:2,17 337:13 338:1,14 339:17 340:10 341:5 347:4 349:6,21 350:8 351:4 355:21 356:19 357:5 surveillances 140:14 surveilled 286:7 288:6 sustains 32:15 switch 50:11 sworn 11:22 12:8 362:6 363:18 system 31:21 343:11	systems 31:22 37:7 345:12 346:14 S's 134:19 <hr/> T <hr/> Tab 330:21 take 13:3 14:4,13 15:22 29:15,16 30:7,15,20,21 39:7 52:2,22 53:13 58:19 62:18 73:15 91:10,19 92:17 94:9 110:16 118:4 128:9 133:16 136:17 153:10 155:7 156:18 190:8 216:16 221:14 248:19 257:21 303:1 312:4 314:16 318:2,15 342:9 349:17 352:7,9 354:18 taken 17:5 62:20 93:11 153:12 177:12 190:10 258:2 361:12 362:4,7,13 takes 83:3,4 talk 29:16 30:18 42:12 43:18 63:9 63:22 64:4,17 85:14 87:16 108:9 110:2 156:15 213:13,15 286:12 289:6,7 323:7 350:11,13 talked 21:4 22:7 talking 17:9,13,15 29:1 43:22 63:6 128:3 135:4 144:4 185:15 213:9 217:15 218:19 223:14 265:7 306:13 320:21 target 192:7 194:10 228:12 229:22	230:1 231:1 234:7 267:17 304:3 320:8 targeted 196:12,13 285:22 358:19,19 359:3,15 targeting 196:14 232:12 233:2,8 285:1 286:2 321:10 targets 268:16 284:5 285:10 349:20 350:7 351:3 357:4 358:12 task 34:1 132:10 133:12 195:9 196:3 197:18 199:2,6 200:18 230:20 231:19,21 234:21 304:1 tasked 108:21 230:13 tasking 209:16 TCP 291:5,12 Team 25:5 technical 35:21 40:5 43:4 44:2 167:7 168:5 282:4 283:2 313:9 technically 42:17 techniques 86:22 technological 249:17 311:9 319:2 technologists 37:14 technology 32:15 32:19 37:4 251:2 251:8 253:6 320:4 tele 55:20 teleco 161:19 telecom 49:18 161:18 telecommunicati... 127:12 128:15 telecommunicati... 35:10 36:22 39:17	40:12 46:22 52:17 54:12,22 55:2,21 56:10,13 59:10,13 60:3,6 63:8 64:13 66:8 73:22 78:12 82:15 83:3 86:3 88:3,6,19 89:1,11 153:22 154:7 157:9,13 257:1,7 telecom-like 61:8 TeleGeography 74:14 tell 14:21 20:2 30:6 41:16 75:15 94:22 121:2 128:22 163:10 183:18 193:17 194:3,15 229:16 237:20 241:13 246:14 250:15 266:1 279:19 312:6 318:3 338:12 343:20 354:19 temporally 128:16 temporary 344:2,8 345:4,16 346:5,11 347:4 ten 31:16 term 15:11 41:13 41:13 46:17 47:12 50:1 54:9,21 55:2 55:15 56:4,14 57:6,7,22 58:1 59:3,9,22 60:2,12 60:18 61:10,20 62:9 63:3,10 64:1 64:18,22 65:7,22 66:1,3,14 67:8 78:6 85:15 86:9 86:18 87:18,22 88:11,18 91:14 153:16 154:6,7,10 154:20 160:21 161:20 162:3,4,15 163:13 164:5 185:18 186:18 190:22 191:11
--	---	--	---	---

193:1,12 195:5,21 197:14 199:8 200:22 224:11 225:8,15 226:18 227:16,19 245:10 255:6 256:20 257:19 271:13,17 286:5 288:4 319:13 339:19 341:8,21 353:12 terminates 162:17 terms 22:13 40:9 41:9 53:3 64:17 64:22 65:17 96:6 127:17 144:1,2 157:11 161:17 194:16 221:17 264:8 272:21,22 302:22 304:4 terrestrial 49:8,15 territory 236:21 test 267:16 testified 12:9 88:16 315:17 347:15 348:16 testify 19:21 210:16 testifying 83:21 84:6,7 210:19 testimony 10:17 12:13 18:15 46:22 47:10 48:6,21 49:7 51:5 53:3 56:18 58:6 59:13 60:6 61:1,15 62:11 66:5,19 67:10 68:4,19 69:7 73:19 76:11 78:9 79:10,19 81:9,10 82:4,22 83:12 84:20 86:11 87:8 89:4 90:5,21 91:16 94:1,20 96:17 97:6,11,18 100:7 110:8 111:4 112:12 117:14 120:18 157:4	158:8 228:1 264:3 304:19 316:3,10 316:17,18 327:6 337:5 338:9,12 348:21 351:22 362:5,6,10 testing 343:10 text 195:17 219:13 text-based 322:18 324:9,18 326:15 thank 11:21 209:22 232:8 261:14 266:4 269:18 270:10 280:10 299:18 316:14 318:9 328:3,11,13 343:15 348:5 355:3 359:19 thanks 29:4 31:2 84:9 133:18 232:7 270:7 296:19 348:12 thereto 362:16 thing 42:1 134:9 186:10 209:11 236:2 244:22 things 29:21 47:15 53:9 143:4 170:13 170:17 225:9 287:12 294:8 304:6 353:18 think 8:7 9:11 14:6 14:17 17:18 28:6 30:13,14 33:16 39:19 40:1 41:15 42:4 43:2 52:3 53:11,14 54:20 67:13 69:20 70:20 72:14 73:1 74:16 82:9,10 90:17 94:10 104:14 105:18 108:8 114:18 143:22 144:5,10,11,22 146:4 157:8 171:18 172:14 173:13 176:16	177:8 186:22 187:2 189:8 198:15 204:3,14 212:9 213:4,18 217:22 219:7 225:7,19,20 226:2 226:16 230:5 238:20 241:2 250:22 255:20 260:4 261:3 303:9 332:10 347:15 353:17 thinks 314:16 third 16:15 355:8 thorough 100:11 130:13 175:7 thought 135:18 thoughtful 173:20 threat 316:7 three 10:10 16:7 17:1 33:16 37:2 157:13,20 339:17 340:11 341:6 throwing 52:4 tied 101:14 time 10:5,12 15:22 17:11,13,15 23:11 29:15 30:15,20 33:10 34:16,20 36:6 37:12 38:12 38:16 39:10 40:8 46:2 51:15 53:9 57:19 68:13 69:3 69:14 79:11 98:20 109:7 115:12 125:1,4 127:17 128:2 129:2 134:3 134:16,16 135:2 136:14 137:9,22 138:7,17 141:15 142:11,14 145:6 153:7 160:12 166:12 168:22 169:2 174:6 186:6 186:9 187:3 197:20 211:16 213:15 215:7	235:7 238:3 240:17,21 250:13 287:2 289:4 290:17 296:13,17 314:9 316:4 325:10 330:22 334:15 335:22 336:8 337:15 338:3,14 348:9 354:5 355:16 356:3,8,21 357:18 362:7 times 88:16 97:15 137:20 235:22 timing 142:9 tired 345:20 title 280:5 320:12 titled 279:15 today 12:13 14:22 17:20 18:10,19 19:17,21 65:19 75:3 111:20 115:22 117:12 120:1 139:10 146:12 147:6 148:1,14 149:1,13 150:5,19 151:13 152:2 153:2 181:3 182:6 183:11 184:6 185:8 186:1 186:8 191:1 196:12 202:9 257:9 266:5 268:15 269:21 274:9,17 275:9 276:3,18 284:5 290:6 291:3,17 292:9 293:2 299:11,20 300:10 307:8 322:16 324:17 325:22 326:14 328:12 338:12 345:1 349:20 350:7 351:15,21 357:3 today's 20:20 120:18	tomorrow 309:15 Toomey 3:19 5:5 8:9 258:6,11,12 259:3,19 260:10 260:16 261:13 263:10,19 264:7 265:1,9,11 266:3 266:14 267:5,20 268:9 269:2,17 270:13 271:3,12 273:6 274:3,15 275:1,7,13 276:1 276:9,16 277:2,12 278:1,18 279:9,13 280:1 281:12,21 282:17 283:18 284:3,14 285:9 286:4,16 288:3,20 289:15 290:5,15 291:2,9,16 292:1 292:8,14 293:1,9 293:17 294:7,12 295:11,19 296:6 296:18,20 297:20 298:18 299:13 300:8,19 301:8,16 302:2,13,18 303:3 303:4,11,14 304:9 305:4 306:1,9,15 306:20 307:6 308:2,14 309:3,16 310:3,21 311:11 311:21 312:3 313:5,16 314:18 315:8 316:1 317:12,19 318:1 318:14 319:18 320:11 321:1,13 321:21 322:9,15 323:11 324:1,6,16 325:19 326:9 327:12 328:3 352:7,14 353:8,20 354:13,17 356:15 357:2 358:5,21 359:12,19 top 91:1 199:18
---	--	---	--	---

209:14 251:16 281:15 topic 38:11 65:1 104:4 279:8 topics 19:9,18,22 35:18 36:2,6,14 36:20,20 38:1 total 81:1 221:13 Trade 34:5 traditionally 349:2 traffic 227:17 344:2 345:16 346:5,12 training 35:8,18,22 36:1,13,18 38:12 39:9,21 40:5,10 transaction 160:6 188:14,18 202:9 202:19 254:5,21 255:15 257:5,12 264:10 266:15 267:15 269:5,22 300:13 302:22 304:1,3 305:2 306:11 358:3 transactions 195:8 196:2,10 197:17 199:1,3,5,6 200:4 200:5,17 201:12 201:20 204:2,19 205:6 230:10 234:19 238:10 240:12 253:21,22 254:1,2 261:9 263:4 303:7 304:14 305:14 306:4 307:1 340:3 340:19 341:4,8,21 342:4 347:5,18 355:11 356:11,18 358:10,13,18 359:11,14 transcribe 13:8 transcribed 212:19 214:7 217:3 338:10 transcript 6:4	10:21 11:1,6,9,15 11:18 211:1 361:12 transcription 361:16,19 transfer 34:6 transferred 11:3,6 transit 258:17 259:8,22 261:12 261:17 263:13,18 266:7 transiting 124:20 transmission 46:19 47:19 48:3,13,18 49:4 50:2,22 52:18 55:4,16 56:5,6,14,15 57:8 57:12 58:2,3 59:3 59:4,7,9,22 60:12 60:19 61:9,10 62:8,16 67:22 68:15,21 69:3,21 73:4 80:16 93:3 219:13 transmit 55:19 transmitted 11:11 57:1 353:6 transmitting 57:10 57:11 81:13 transparency 24:17 25:4,8 32:22 TRANSPERFECT 363:1 Transportation 34:6 transported 242:21 243:10 244:3 traverse 87:5 93:18 traversing 91:12 94:15,16 246:9 treat 178:17 179:8 trick 16:1 tried 144:20 239:21 tripping 57:17 58:9 216:12 trolled 287:19	true 61:4 89:21,22 90:10 97:21 98:3 107:14 112:7 124:17 127:9 140:7 160:10,12 166:17 189:9 214:22 215:6,6 251:7 299:11 344:22 354:11 357:1 358:4 361:16,18 362:10 TRUSTe 33:10,21 trusted 33:14 truthfully 18:6 try 13:16 23:19 27:16 35:22 52:10 52:13 69:19 80:13 86:17 87:3 93:9 141:10 186:9 270:6 294:8 trying 27:14 57:5,8 57:15 58:1 75:1,8 75:14 82:9 114:5 114:12 115:5 129:11 156:10 158:15 193:3 196:15 206:2 212:12,15 213:1 214:1 227:13 238:15 254:10 273:18 turn 45:6,14 58:12 58:15 77:12 108:17 126:20 131:16 159:21 210:22 221:10 250:19 280:10 281:13 309:14 343:15 355:6 turning 203:5 221:5 332:7 turns 47:12 two 10:4 29:20 33:18,20 41:3 54:18 58:20 76:12 77:15 78:5,18,22 79:6,16 80:1,17	81:7,12 83:10,16 84:18 93:17 94:5 94:6,8 112:1 119:16 149:10 157:8,17 162:6 190:5 211:20 214:14 288:12 309:19 311:6 317:4 343:19 twofold 317:3 two-part 261:4 two-thirds 250:20 two-year 355:13 type 27:1 169:14 218:17 308:8,10 308:12 353:4 types 26:12 27:2 37:4 50:13 218:19 218:22 247:3 typewriting 362:9	137:16 139:22 141:11 144:1,2 155:5 156:7 161:11,12,15 163:11 164:1 174:10 186:4,20 191:6,8 192:15 194:16 198:17 203:2,6,10,15 204:8 205:20 213:19 214:3 216:10,15 217:11 219:1 221:17 222:21 227:4 228:21 229:2,6 230:5 239:13,21 240:19 241:9 247:15,18,19 248:1,15,18 250:10 254:11 259:13 261:2,5 262:5,19 264:8,13 264:20 265:17 267:13 268:2,5 269:12,15 271:8 272:21 273:1 285:2,19 287:14 294:5,10,15,18 295:5,13 296:21 297:21 298:1,7 299:4,19 300:9 303:21 304:8,21 307:20 309:10 310:14 311:5,6,17 314:2 317:8 325:7 325:21 326:13 327:13,15 343:12 349:14 350:10 357:15 unclear 170:19 underlying 310:18 310:22 undersea 49:9,15 understand 12:12 12:17 13:13,14,16 13:17 14:1 15:20 17:1 18:18 29:13
--	--	--	---	---

32:20 33:1 37:14 40:4 43:6,8 44:7 46:15 50:18 55:22 57:5,9,14,15 58:1 59:2 64:21 65:4 65:15 67:13 71:11 74:2,6 75:9 76:3 76:16 83:17 84:5 84:10 87:3 93:9 99:16 104:2 112:5 114:13 115:1,2,5 120:16 127:7 133:9 135:2,12 139:4 158:15 160:19 162:2 179:4 187:15 188:13 193:4 196:5,15 204:15 206:2 211:4,5 212:2,15 213:1,22 214:5 217:14 219:7 223:6,17 224:10 225:4,11 225:14,15 230:3,4 233:19 236:20 241:10 253:8 271:16 319:21 understanding 22:11,21 27:13 37:5 38:6 46:17 47:18 50:1 52:16 56:12 57:11 63:3 64:14 65:7,17,18 72:7 81:3 86:8,18 86:21 90:15 111:20 154:5,6 155:17,18 157:16 161:20 162:3,14 163:2 164:5 190:21 199:7 262:22 understands 89:10 218:11 understood 37:6 54:10,22 59:10 60:12,16 63:19 64:11 67:2 88:19	88:22 105:11 114:4 157:12 170:21 173:22 192:20 205:1 206:13 212:20 253:11 255:16 257:6 266:4 349:2 359:1 undoubtedly 82:15 354:11 unencrypted 352:17 353:11 354:1 uniform 207:6 Union 8:9,12 258:14 unit 338:14 339:15 United 1:1 5:19 6:15 66:17 67:16 103:5,21 104:1 163:4 228:13 230:2,12,17 231:3 231:18 233:10 234:8,20 319:2 361:1 University 8:4 unofficial 241:6 unpack 261:5 287:13,14 unrelated 21:8 untrue 354:12 upstream 6:21 14:21 22:2,11,20 25:14,18 27:5,19 29:2,8 32:4 35:5,6 40:16 51:2 54:15 101:4,11 107:17 107:22 108:13 109:11 110:2 111:12,19 112:21 113:12,20 115:14 115:22 117:6,11 119:22 121:18 122:21 123:8 124:18 125:15 126:9 127:10 132:4 133:4	134:13 135:7,16 136:14 137:9,11 138:6,16 139:13 139:21 141:18 142:14 143:11 144:8 145:5,5,16 146:12,20 147:5 147:14 148:1,7,14 148:20 149:1,12 149:19 150:4,12 150:19 151:4,11 151:13 152:2,9,17 153:2 165:6,14,16 167:3,8 168:6,15 169:7,8 170:5 171:13 172:7 174:2 179:17 180:2,16 181:2,10 181:19 182:6,11 182:18 183:5,12 183:17 184:6,13 184:22 185:7,21 186:12 187:19 191:10 195:4,7,20 196:1 197:13,16 200:20 201:13,20 202:10,19 204:17 206:14,17,20 207:7,21 208:7,13 209:1,16 212:6,17 212:22 214:10,19 215:9 216:7 217:6 218:5,6 219:11 221:14 222:1,6 224:1 228:10 229:19 230:1,8 232:2 234:17 235:9 236:15 238:8 240:11 242:4,11 244:10 244:11,19 245:19 253:19 258:16 259:6,20 261:8,15 263:3 266:16 268:17 270:14 272:10 274:4,8,16 275:2,8,14 276:2	276:10,17 282:6 283:4 284:5 286:7 287:22 288:7,18 290:8,18 294:22 298:12 300:1 313:2,11 318:20 320:6,15 322:16 324:7 328:16 329:4,12,20 330:6 330:14 331:16 333:20 334:9,16 335:16 336:1,16 337:12 338:1,14 339:16 340:10 341:5 347:3,18 349:3,6,21 350:8 351:4 355:20 356:19 357:5 358:10 URL 207:6,20 208:6 USA 169:18,19 177:11,14 use 15:11 39:16 56:13 62:18 64:13 66:1 86:22 158:21 158:22 160:20 186:18 191:12 193:2,12 195:6,22 196:16 197:4,15 200:2,10,12 227:19 228:7 257:16 271:13 291:5 339:15 341:7 343:10 359:9,10 uses 57:22 utilized 204:17 U.S 4:5 230:16,18 284:6 312:22 U.S.C 15:8,9 40:18 40:18 <hr/> V <hr/> v 363:4 vague 23:10 25:20 27:6 28:11,22	36:7 38:22 44:5 46:1 50:4 56:18 64:9 79:9 83:11 85:22 95:22 96:15 98:20 100:12,21 106:3,18 109:5 110:3 115:11 121:4 125:1,3 130:15 134:2 135:8 136:9,21 137:4 138:19 141:4,21 142:16 143:13 153:18 154:12 165:8 168:1,9 174:5 176:2 193:7 198:13 212:7 220:17 225:7 227:1 228:16 236:9 296:13 302:6 308:19 321:16,19 337:14 338:3 339:18 340:12 341:13 349:10 353:13,16 354:10 356:2,7,20 358:14 vagueness 91:14 127:17 216:9 223:12 308:1 319:13 340:5,21 342:2 value 283:1,21 various 13:20 99:2 verdict 76:9 verification 23:1 312:20 verified 220:20,22 221:1 verify 166:15 versed 42:17 version 146:6 221:9 232:13 versions 20:16,16 21:9 144:20 versus 12:14 22:13 30:8 48:8 83:3
--	---	---	--	--

193:4 257:10	311:19 316:4	231:17,17,20,21	Wiki 159:17	89:14,16 90:7,14
view 123:19 124:11	328:10,13 338:15	234:8,20,20 244:3	Wikimedia 1:4 8:5	91:1,18 92:7,15
125:12	339:15 344:18	284:6 295:6	12:14 258:5,13	93:15 94:3,5,12
viewing 231:17	wanted 40:4 72:18	websites 33:12,13	276:19 277:5	96:16 98:21
violating 240:2	131:9 209:19	282:22 283:20	278:5,20 283:6,10	100:13,22 104:13
virtual 56:22 57:22	261:5	286:8 287:20	285:11 287:17,20	106:4,19 108:6
58:3,8,9 59:5 86:9	wanting 239:2	288:8	329:3,11,19 330:5	111:10 112:13
86:19 87:4,5,18	warm 177:5	weeks 227:11	330:14 361:3	113:3,16 114:2
87:22 88:11,18,21	Washington 1:14	welcome 68:9	363:4	115:15 116:4
89:10	2:7 4:9	well-known 61:8	Wikimedia's	119:11 120:8
visit 231:7	wasn't 22:21 23:3	went 34:16 76:4	275:16 276:4,12	121:5 122:4,16
volume 221:22	178:6 235:19	97:15 105:9,16	279:1 282:22	123:5,14,16 124:2
222:6 338:13,15	265:21	178:7,11 236:2	283:20 286:8	125:5,19 126:2,15
340:9 341:3	water 14:6	West 3:5	288:8 293:3,11	126:17 127:5,21
VPN 291:18 292:3	wavelength 61:21	we'll 13:4 14:3,13	328:15 331:18	128:6,13 129:5,7
292:10,16 293:3	62:6 93:4	74:19 75:18	334:1	130:16 132:3
293:12 337:11,21	wavelengths 61:12	211:12 281:21	willing 115:3	134:8 135:9,20
vs 1:6 361:4	150:17 151:2	we're 9:11 17:9,13	248:19 346:20	136:10,22 137:5
	way 14:13 32:4	17:14,15 26:16	wire 56:16	137:15 138:11,20
W	35:4 39:12 52:11	27:8 29:1 39:2	withdraw 30:14	139:16 141:5,22
wait 65:11 75:13	52:14 54:5,7,15	53:15 75:14 77:17	151:17	142:17 143:14
208:18	86:21 115:7 117:5	102:19 103:11	witness 2:3 5:2	144:2,10 145:9
waiting 304:16	126:5 167:8 173:3	104:14 134:10	9:15 10:5,11,18	146:1,2,15 147:1
waive 103:8	177:11 179:7	135:4 140:2	12:4,7 18:2 25:22	147:9,18 148:4,11
waiver 10:19	186:2,17 214:2	153:15 173:17	27:7 28:13 29:16	148:17 149:16
walk 106:22 139:4	215:4 223:14	196:8,8 207:19	34:13,15 35:17	150:1,8,15,22
140:1 287:13	238:1 241:14	211:6 213:9	36:8 38:18,22	151:7 152:5,13,20
want 19:10 26:5	250:20 294:22	216:22 238:3	39:2 40:19 41:9	153:5,19 154:14
29:2,20 47:11	344:19 346:21	254:10 260:6,16	42:21 43:8,15	155:5,7,9 156:6,9
52:10 53:13 57:16	ways 25:7 51:22	263:8 265:7	44:6 45:9,19 46:3	156:17 157:5,19
58:7,13,19 65:21	57:10,11 97:16	273:19 305:2	47:2 48:7,22 49:8	158:11,20 160:16
73:17 78:14,19	107:9 144:21	we've 53:22 55:21	49:14 50:6 51:9	161:5,12,16 162:9
79:13 95:2 96:8	202:7,17 353:18	112:7 124:11	53:8,11 55:10,19	162:11,21 163:8
102:22 106:7	web 221:14 222:14	126:2,2 134:12	56:8,20 58:7,21	163:17 164:2,9,14
108:17 131:17	223:6,7,8,19,20	137:21,21 140:16	59:15 60:8,15	165:1,10,18 166:4
139:20 144:19	224:11 225:4,13	187:15 203:19	61:2,17 62:3,12	166:10,20 167:5
153:20 155:19	225:20,22 226:19	227:11 235:22	63:17 64:10 65:12	167:16 168:2,11
158:2 170:19	227:3,15 228:8	251:18 261:7	66:6,20 67:12	168:22 169:10
171:18 173:19	231:18	264:16 327:17	68:6,20 69:17	170:14 171:1
177:15 185:13	webmail 235:8	wholly 110:13	70:3,20 71:2,5,22	172:2,14 173:2,13
188:4 189:13	236:16 238:6	160:5 188:16,17	72:14,18 75:11,16	174:9,11 176:3
213:17 215:13	240:9 242:4,10	196:7 202:9,20	76:15 77:5 78:10	177:7 179:3,22
216:14 234:3	website 20:17	204:2,18 205:3,16	79:3,11,20 80:5	180:12,14,21
235:17 238:13,17	176:7 219:13,14	325:17	81:11 82:5,14	181:7,15 182:1,9
241:8 260:6	228:13 230:2,12	Wide 223:7,8	83:1,13,21 84:8	182:15 183:1,8,15
262:21 264:14	230:13,17,18,19	225:13,22	84:11,22 85:8	184:3,11,18 185:4
286:12 287:13	231:3,4,6,8,9,14	Wiegmann 217:19	86:1,13 87:10	185:11 188:9,11

189:13 193:9	276:15,22 277:17	348:3,8,14,22	245:17 257:11	#
194:20 195:1,2	277:19 278:8,12	349:1,13,16 350:4	worried 244:1	#903 363:2
196:22 197:1	278:15 279:7	350:10,12,22	wouldn't 49:1	
198:1,15 201:8,9	281:8,10 282:14	351:7 352:3,4,22	82:10 205:5	0
202:4 204:9,10	282:15 283:15,16	353:3,14,15 354:4	285:21 331:17,18	00149 5:21
205:9,21 206:9	284:2,10,21 285:6	354:9 356:3,4,9	333:21 334:2	00229 5:21
207:2,3,11 208:3	285:7,17,20	356:22 357:16,17	written 63:7	00234 6:8
208:4,10,18 209:6	286:21 287:1,5,11	357:22 358:16,17	137:20 189:4,9	00277 6:8
209:10 212:1,9	288:11 289:5	359:5,6,9,18	221:17 357:1	
213:10,21 215:18	290:2,3,13,22	360:2 362:4,6,11	wrong 73:10 94:18	1
215:20 216:1,12	291:8,15,21 292:7	363:5	158:6 347:16	1 69:19 74:13,17
217:12 219:19	292:13,20 293:7	witness's 76:13	wrote 135:9 299:12	344:14
220:18 222:20,22	293:15 294:6,9,21	177:15 203:4	W-I-K-I 159:18	1st 175:1
223:13 224:5,7,15	295:9,18 296:5	241:7 296:3		1:15-cv-00662-T...
224:22 225:7,19	297:17 299:3,6	297:15	X	1:6 361:5
226:16 227:2	300:6,7,17 301:6	word 47:11 58:17	x 1:3,9 239:14	10 195:16
228:2 231:13	301:14,22 302:10	83:4 106:9 113:9	330:21,22 361:2,7	10:02 53:20
232:11 233:1	302:11 303:20,22	125:9 136:18		10:05 53:21
234:12,14 235:2	304:19 305:1,18	146:8 157:13	Y	10:06 348:6
235:12 236:18	305:20 306:7,18	159:4 218:2 228:8	Y 239:14 330:22	10:11 348:7
237:16 238:14,18	307:4,12,21	245:16 359:9,10	yeah 8:19 18:2 19:7	10:14 350:15,16
239:16 240:22	308:12,21 309:1,8	words 48:15 50:12	34:22 43:11 44:11	10:15 62:20
241:2,12,19 242:7	309:12 310:5,7,13	61:8 66:6 71:15	53:8 58:21 59:4	10:16 352:11
242:8,15,16 243:6	310:15 311:4,6,16	116:12 136:19	69:2 72:19 79:1	10:25 62:21
243:13 244:6	311:18 312:14	142:19,22 143:1	82:14 99:17 124:8	10:26 352:12
245:6,7,15 246:4	313:14,15 314:3,4	157:13,20 161:17	127:4 144:5 159:5	10:36 360:3
246:11 247:17,18	314:8 315:5,7,15	179:15,16 195:12	169:15 188:11	10:38 75:20
248:13 249:3,13	315:17 317:7,9,18	212:10 257:17,18	203:20 229:18	10:47 75:21
249:20 250:8,12	319:19 320:20	346:1,3	231:7,10 246:11	10017 363:2
251:12 252:20	321:8,20 322:4,14	work 16:4 22:19	253:14 272:3	10027 3:7
253:2,4,15 254:12	323:1,2,20,21	25:8 37:7,11 41:5	309:2 343:22	101 3:13
254:16,17 255:3	324:14 325:6,9,13	43:19 55:22 171:5	348:5 351:11	103 273:3
255:12,21 256:4	326:7 327:4,10	248:22 346:18	year 34:15,21	11 5:4 280:11
257:3 258:22	328:2,21,22 329:8	worked 22:11 33:9	years 22:20 24:12	361:11
259:1,12,17 261:1	329:16 330:2,10	33:22 37:18	24:20 25:1 31:5	11:30 110:20
261:3 262:3,12,18	330:18 331:11,13	105:11 106:7,10	31:16 33:16 130:7	11:56 110:21
262:20 263:16	332:2,4,13,18,20	131:11	140:14 169:12	116th 3:5
264:5,13,14	333:6,9,15,16	working 33:21 36:9	253:7 339:17	12 45:8,12,17,22
265:10 266:11,12	334:5,12,22 335:4	36:11 177:21,22	340:11 341:6	55:15 57:7 60:20
267:12,14 268:2,4	335:10,11,19	343:3	344:15	61:12 62:9 64:6
268:6,21,22	336:5,12,20 337:6	works 101:11	Yep 112:6	70:2 126:20 127:1
269:11,14 270:4,5	337:8,17,18 338:5	111:20 117:6	yes-or-no 122:10	281:13 282:19
270:11 271:9	339:7,11,22 340:6	133:1 193:11	189:5	12:16 128:10
272:20,22 273:12	340:16,22 341:17	198:16 282:5	York 3:7,7 363:2,2	12:19 128:11
273:14 274:1,13	342:20 343:1,8,22	299:9		12:26 133:19
274:14,21 275:6	344:5,12 345:7,22	world 223:7,8	Z	12:40 133:20
275:12,20 276:8	346:7,17 347:8,10	225:12,21 239:7	Z 239:14	12:59 153:12

128 5:18	186:9,11 187:18	275:3,15 276:11	277 221:9	285:16 286:20
14 312:11,16	188:15 189:5,10	290:16 291:10	278 6:14	307:10 308:19
362:22	189:18 220:10	292:2,15 293:10	28 6:18,20 271:20	315:5,15 317:4
149 159:17	355:1,2,17 356:22	324:7 326:10,15	318:6	321:18 331:11
15 312:11	357:1	329:3,19 330:13	28th 318:19 320:16	333:6 342:20
15th 355:2,17	2013 6:11 177:22	335:14 336:8		345:19 349:11
158 5:21	240:6,14 252:10	337:21 347:3,16	3	352:21 358:15
16 1:13 5:16 98:14	253:10	349:6 351:3	3 5:19 6:11 19:18	30(e) 360:1
132:5,20 133:5	2014 5:13,16 6:4	2016 312:17	98:14 99:8,18	30-day 308:7
141:7 361:13	95:18 107:13,22	2017 6:15,18,20	190:17 192:12	301 4:21
363:4	109:12 111:15	107:8 140:10	196:18 197:6	3024(i)(1) 15:8
16th 130:6 132:11	112:10 115:14	202:15 293:21	198:4 204:1 247:1	40:18
133:13 193:22	120:22 121:17	294:21,21 295:4,7	248:6,9 249:1,8	305-7919 4:10
17 45:6,12 211:1,7	122:20 123:7	295:10 297:3	249:17 250:19	311 6:17
211:8,21 218:16	125:2,14 126:7	298:11 299:22	251:1,7,17 252:9	314 3:6
18 5:10 45:14	127:10 128:3	300:14,20 301:9	260:7 264:19	316 6:19
19 6:4,11 210:15	130:7 132:5,11,20	301:17 302:3,18	265:18	317 6:21
19th 252:10	133:5,13 140:7	303:5 304:15	3rd 159:20 174:3	327 5:6
191-page 108:10	143:12 193:22	305:5,6,9,13	174:12 186:11	330 7:4,6
193 159:22	210:15 215:6	306:2,14,15,21	187:18 188:15	341 7:8
1978 233:13	217:3 233:14	310:19 311:7,18	189:5,10,18	351 5:5
2	299:11	312:10 316:5,6	3(b)(5)(b)(4)	353 7:10
2 5:13 7:6 19:18	2015 17:5 145:18	318:6,19 320:16	355:12	36 108:18,22 109:9
58:16 65:1 69:19	146:20 147:15	321:15,17	3(c) 355:13	109:14 110:3,5
78:7 85:21 86:15	148:8,21 149:20	2018 1:13 6:13	3:06 190:10	112:9 113:8
86:20 87:19 88:2	150:12 151:4,12	280:9 316:5	3:15 190:11	115:10 119:14,21
88:13 246:22	152:10,17 180:18	361:13 363:4	3:26 198:10	124:12 139:4
247:10 248:1	181:12,20 182:20	202 4:10,11	3:38 198:11	3605 15:19
344:14 345:15	183:5 184:13	2020 362:22	3:49 207:16	3605(a) 15:9 40:18
346:4,11	185:1,22 186:8	20530 4:9	3:53 207:17	37 109:1,10 110:6
2nd 95:18 107:22	190:22 191:11,16	209 6:6	30 53:18 221:5,10	112:9 113:8
109:12 128:3	193:1,15 195:5,21	21st 240:5,14	322:6	115:10 119:21
2.0 343:11,17 344:1	196:11 197:14	212 3:8 363:3	30(b)(6) 69:8,13	124:12 198:17
345:11	200:21 201:13	21368 1:22 363:5	76:12,15 83:20,22	199:18 200:15
2:06 153:13	202:8,15,18	216 363:2	84:7,21 86:12	201:3 203:17,18
2:11 156:20	205:16 208:7,15	219 6:8	87:9 89:4 90:5,22	
2:28 156:21	209:3 216:6	222 32:14	91:17 94:2 102:15	4
20 2:7 4:8 211:1,7,8	219:10 228:11	229 159:17	118:3 165:9	4 96:17 99:15
211:21 218:17	229:20 230:9	234 221:9	168:10,21 170:16	104:21 196:4
363:19	232:4 234:6,18	237 221:8	171:22 172:12	264:20 265:18
2002 32:13	244:12,20 259:4,7	239 361:11	173:12 179:2	343:15
2009 7:7 343:13	259:21 261:10,14	249 6:10	224:15 242:6	4a 19:18
2010 251:15 253:5	262:19 263:3,11	250 6:12	243:5 245:13	4d 19:18
253:9	263:17 264:8	257 5:5	247:14 248:12	4:03 216:19
2011 5:19 6:8 7:10	265:8,10 266:15	26 6:13,15 280:9	250:8 253:2	4:13 216:20
159:20 174:3,12	269:4 270:15	312:10,17	255:10 277:16,16	4:30 232:9
	272:10 273:8	266 221:11	282:11 283:12	4:46 232:10

4:57 241:17	479-2613 4:18	190:14 209:12,14	8:18 303:13
400-8845 363:3	48 6:9 250:1,5	6:23 260:13	8:25 310:1
41 5:10 19:1,5,6,19	252:22	6:26 262:8	8:36 310:2
415 3:15	49 6:11 251:20	6:28 262:9	8:42 314:6
42 5:11 44:16,20,21	252:3,22 253:12	6:34 267:6	8:43 314:7
45:7,15 58:15	253:14	6:37 267:7	8:57 323:9
77:13,13,19		6:40 271:1	854-1128 3:8
189:19,20 190:16	5	6:43 271:2	
190:20 195:16	5 77:12 109:22	6:45 272:14	9
197:7 200:12	131:16 192:4	6:57 272:15	9 6:8 7:7 109:16
204:3	194:1,4,6 195:16	688-6054 4:21	117:3 119:15
43 5:12,13 95:6,7	196:6 200:12	693-2116 3:15	343:13 355:6
95:11,14,21 96:14	233:3,18,19		9th 220:10
97:8,12 98:8,17	264:20 265:18	7	9:12 2:5
99:19 102:4	5th 3:13	7 118:5 190:1,3,14	9:22 323:10
105:21 106:17	5:04 241:18	190:15 197:7	9:29 328:5
108:18,22 109:10	5:21 258:2	204:4	9:39 328:6
110:6 112:9 113:8	5:35 258:3	7:01 277:10	9:49 338:19,20
115:10 119:22	5:37 260:12	7:08 277:11	9:53 342:14
124:13 126:21	50 6:13 15:8,9	7:16 284:12	9:59 342:15
138:15 139:12	40:18,18 279:11	7:23 284:13	94 5:15
140:20 141:1	279:15 280:13	7:26 286:14	94111-5800 3:14
143:10 145:3	281:14 282:19	7:28 286:15	
198:18 199:18	51 6:15 312:1,4,14	7:30 287:7	
200:16 201:4	313:18	7:32 287:8	
203:17 273:3	514-3358 4:11	7:42 297:8	
44 5:16 129:14,15	52 6:18 317:21	7:43 297:9	
129:19 131:3,17	318:3	7:45 298:16	
135:4 137:8 138:5	53 6:20 318:11,12	7:59 298:17	
140:19,22 192:4	320:2,13	702 5:14,18 6:5,19	
193:22 194:6	535 3:5	6:21 7:10 20:10	
209:14	54 7:4 217:17 331:1	24:3,7 28:17 29:1	
443 4:18 291:5,12	331:2,3,6,7,12,15	95:17 106:6 130:6	
45 5:19 159:7,8,12	332:9 334:8	131:1,9 169:22	
159:16,21,22	55 7:5 217:14 331:1	199:2 206:6	
163:15 174:2	331:2,3 332:7	210:14 218:5	
175:5,22 176:10	333:3,19 334:8	221:14 233:12	
177:1,19 185:13	56 7:7 217:18 342:6	308:4 313:3 318:8	
185:14 187:14,15	342:9 343:16	318:20 319:5	
187:22 188:1	344:1	320:4,15 322:5	
45th 363:2	57 7:9 210:22 211:7	355:1	
46 6:4 210:1,2,8	211:21 217:13	79 98:14 141:8	
211:9 212:19	354:14,15		
214:8 217:3	6	8	
47 6:7 220:1,5	6 19:18 58:15 77:13	8 109:17 111:17	
221:6,7 224:20	77:21,22 86:14	190:2,3,14,15	
226:8,15	104:4 126:22	197:7 204:4	
		8:04 303:12	