

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
HONORABLE DAVID O. CARTER, JUDGE PRESIDING

- - - - -

ECHOSTAR SATELLITE CORP., et)	
al.,)	
)	
Plaintiffs,)	
)	
vs.)	No. SACV 03-950 DOC
)	Day 13, Volume III
NDS GROUP PLC, et al.,)	
)	
Defendants.)	
_____)	

REPORTER'S TRANSCRIPT OF PROCEEDINGS

Jury Trial

Santa Ana, California

Wednesday, April 30, 2008

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Federal Official Court Reporter
United States District Court
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EchoStar 2008-04-30 D13V3

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WITNESSES	DIRECT	CROSS	REDIRECT	RE CROSS
EMERSON, James				
By Ms. Willetts		14		46
By Mr. Eberhart			41	
KUMER, David A.				
By Mr. Snyder	49			

EXHIBITS

EXHIBIT NO.	IDENTIFICATION	IN EVIDENCE
39	Admin control panel view	27
1692	Dump from Swiss Cheese Productions rev 313	71
1694	Document marked "Confidential"	69
2055	Pirate Base document	25

1 SANTA ANA, CALIFORNIA, WEDNESDAY, APRIL 30, 2008

2 Day 13, Volume III

3 (1:04 p.m.)

4 (Outside the presence of the jury.)

5 THE COURT: We're on the record. The jury's not
6 present.

7 MR. HAGAN: Our concern is this: Early in the
8 case, I subpoenaed documents from ICG as soon as we found
9 out about that report linking Tarnovsky to the Nipper alias.

10 They resisted production of those documents.
11 Ultimately I had to file a Motion to Compel. We had a
12 hearing. They were not represented by the defendant's
13 lawyers at that time. They were represented by the same
14 lawyers representing DirectTV, who I was also moving to
15 compel.

16 We had an informal discussion with you, and you
17 told them that you were prepared to issue an order
18 compelling those documents if they didn't work something out
19 with me.

20 I had limited knowledge about the case at that
21 time. I gave them a list of words for them to search
22 through their database.

23 THE COURT: What year was this?

24 MR. HAGAN: This was in two thousand and -- I
25 believe it was the end of '06.

1 Now, they complained and said, "We can't produce
2 our whole database, you know, it's proprietary" -- blah,
3 blah, blah -- "but we'll give you some selective word
4 searches." And they demanded we pay a hundred thousand
5 dollars for that, which we refused to do.

6 They gave us the limited documents. Then they
7 retained this witness from ICG as an expert, and his entire
8 testimony revolves around his selective searching of that
9 database and producing documents and showing them in front
10 of the jury from that database. Some of those documents we
11 got for the first time this morning.

12 Now, we believe that we can still make effective
13 points in cross-examination, but we believe we're
14 entitled -- since he's an expert, since he relied on that
15 database -- to a copy of that database so that we can search
16 it ourselves.

17 Otherwise, we're going to have to move to strike
18 portions of his testimony.

19 MR. EBERHART: Your Honor, may I be heard for a
20 moment?

21 THE COURT: Certainly.

22 MR. EBERHART: First, the plaintiffs entered into
23 a stipulation regarding their subpoena that they served on
24 ICG in 2006. That was entered as an order by this Court,
25 and I can provide a copy of that order to you.

1 Pursuant to that order, ICG conducted keyword
2 searches and provided those searches to the plaintiffs.

3 THE COURT: But I recall that order being a
4 tentative order to keep the two of you moving with
5 information at that time. That was never meant to be a
6 preclusive order, if you're relying upon a database.

7 As I put EchoStar through the process in terms of
8 our hearing concerning Mr. Shelton, I'm about to put you
9 through the same process as well concerning your database.

10 MR. EBERHART: May I be heard for a moment,
11 Your Honor?

12 Mr. Emerson's report was provided a year ago. At
13 no time did plaintiffs say they needed additional searches
14 of the databases. And it is not true that they were only
15 provided this morning with additional data.

16 THE COURT: So if I compared his report and
17 there's nothing new in terms of his testimony, then we would
18 wonder why plaintiffs' counsel sat idly on their hands.

19 MR. EBERHART: That's correct, Your Honor.

20 THE COURT: So we should be able to compare what's
21 in that report with the gentleman's testimony today.

22 MR. EBERHART: Yes, Your Honor.

23 THE COURT: We'll do that at 5:00 o'clock.

24 Now, if you don't wish to proceed with
25 cross-examination, you can reserve that.

1 MS. WILLETTS: I'd like to proceed, Your Honor.

2 THE COURT: Well, wait a minute.

3 MR. HAGAN: We're prepared to proceed, Your Honor,
4 without waiving our right to compel a full image of this
5 database so that we can --

6 THE COURT: I don't know if it's full images yet.
7 You're presuming too much. I haven't made that ruling. All
8 I've said is that you have the option of delaying
9 cross-examination. That's your choice.

10 Number 2, how wide the search of that database is
11 depends upon my reading the expert report, knowing what you
12 have had in your possession, and seeing if this gentleman's
13 strayed outside what would normally be the expectation of
14 the data you need.

15 We can do that between 5:00 and 12:00.

16 MR. HAGAN: Thank you, Your Honor.

17 THE COURT: Now, do you want to proceed or not?

18 MS. WILLETTS: Yes, Your Honor.

19 MR. HAGAN: Yes, Your Honor.

20 THE COURT: Okay. We're off the record.

21 (Brief discussion off the record.)

22 (Proceedings resumed outside the presence of
23 the jury.)

24 THE COURT: We're back on the record. As far as
25 the cost constraints are concerned, I'm not concerned. In

1 other words, if I think you're entitled to the database, I'm
2 going to order that, and we'll worry about the cost.

3 But once an expert's put on the stand, then that
4 party becomes liable for that expert's testimony. So if I
5 believe that you haven't got the adequate testimony, NDS is
6 going to be paying for that. It will come out of their
7 pocket.

8 But if, in fact -- if this hasn't been a straying
9 from what counsel represents, Mr. Eberhart, this report
10 said, then you sat on your hands. That's your
11 responsibility. So I'll look at the report this evening.

12 Now, the only thing I heard that I was concerned
13 about was that broad general statement about relying on the
14 database, and that database was probably pretty extensive,
15 but I don't know how long it takes to get that.

16 So let's just assume that you prevail, the worst
17 situation in terms of CGI and NDS for a moment. How long
18 would it take to get all of that information? I would
19 assume some period of time. And how long would it take you
20 to look at it? Some period of time.

21 Well, give me an estimate.

22 MR. HAGAN: I think we could do searches that he
23 testified about relatively quickly. We just want to expand
24 them out with the aliases that Chris Tarnovsky admitted to
25 using.

1 THE COURT: Okay. Because you had a limited
2 number of aliases at that time. Now, you'd have more
3 aliases in the last couple years.

4 MR. HAGAN: Yes, sir.

5 THE COURT: And he's testifying to which aliases
6 you're concerned about.

7 MR. HAGAN: Well, he's just testifying, as I
8 understand the testimony, about one particular search and
9 one particular alias. But we want to see if any of those --

10 THE COURT: Which alias?

11 MR. HAGAN: That's the NiPpEr2000 alias.

12 THE COURT: And which alias are you interested in?

13 MR. HAGAN: All of the ones that Chris Tarnovsky
14 admitted in his depo 'cause I want to find --

15 THE COURT: Write them down for me.

16 MS. WILLETTS: Your Honor, if I may.

17 While we're writing these down, there's one other
18 issue related to this witness, and that is Exhibit 39, which
19 was previously addressed in a motion in limine.

20 This is the NiPpEr2000 user information that
21 relates to ChrisVon@s4.interpass. The defendants offered an
22 exhibit produced by EchoStar that was the user information
23 that only had the IP address. We would also like to offer
24 the related document that includes the user name which was
25 previously unruled on by this Court.

1 THE COURT: And that's because it had come from
2 NagraVision.

3 MS. WILLETTS: It comes from EchoStar's
4 production.

5 THE COURT: EchoStar. Nobody knew where that came
6 from.

7 MS. WILLETTS: Right. And they've now used a
8 similar document that has the IP address on it, and this
9 witness has relied and testified to that.

10 MR. EBERHART: Your Honor, I believe it's already
11 been admitted, actually -- Exhibit 39.

12 MS. WILLETTS: It has not.

13 THE COURT: No, it has not.

14 Now he's qualified as an expert, Counsel, and
15 you're going to be allowed to do so. It was either
16 partially or actually nonauthenticated in the past. Now it
17 takes on new meaning in light of NDS qualifying him as an
18 expert.

19 Now, what was your prior request? Just to run
20 what?

21 MR. HAGAN: There was certain terms -- and I don't
22 have them -- but I'll pull them up for our hearing this
23 evening.

24 THE COURT: Write them down. In other words, I'm
25 not going to have him rerun duplicate terms if I decide to

1 do that, so you need to tell me which terms he doesn't have
2 to rerun.

3 MR. HAGAN: Can we do that for this evening,
4 'cause it's going to take some time.

5 THE COURT: You can do that now.

6 In fact, I'll give you this back, and you can draw
7 a pencil through the terms that you've already asked.

8 Now, if I decide to do this, you're on warning as
9 follows: And that is, be careful what you ask for. You may
10 run a database and find out it's not only just exactly what
11 he believes it is at the present time, but there's nothing
12 else. And that puts the gentleman in even a stronger
13 position.

14 So while you're setting your record, I may be more
15 than pleased to make that order, and you may find your
16 position significantly undermined. Or it may be beneficial.

17 Certainly NDS is going to be able to come back and
18 ask if that order and request wasn't made on Wednesday,
19 April 30th, and he went back to double check and found
20 nothing else.

21 But I do agree from my notes just tentatively that
22 that order's probably going to be made -- or some portion
23 thereof.

24 The gentleman testified that he compared the
25 aliases from the Fourth Amended Complaint. He took mirror

1 images of the hard drive seized from pirate websites, he
2 searched a Pirate Base concerning NiPpEr2000 postings, he
3 ran searches for Nipper on this Pirate Base, then concerning
4 NiPpEr2000 he found the user name and the database,
5 et cetera.

6 So his testimony is rather expansive, and I think
7 tentatively, you're probably going to have a right to this
8 information.

9 MR. EBERHART: To be clear, Your Honor, the
10 materials that he searched --

11 THE COURT: Thank you very much, Mr. Eberhart.

12 So if that's the case, then you have to make a
13 decision -- if that's simply a tentative feeling on my part,
14 without getting into this further at this time so we can
15 keep the jury moving -- if you really wanted to
16 cross-examine the witness at this time or bring him back.
17 And, of course, if I don't rule and make that a final
18 ruling, then he's back on the stand tomorrow or the next
19 day.

20 Make sure your group collectively makes a
21 collective decision.

22 Do you want to proceed now or not?

23 MR. HAGAN: We have decided, Your Honor, after
24 speaking with the client, that we're prepared to go forward
25 with our cross now. And if we believe that we've gotten

1 sufficient points made with our cross, we can withdraw our
2 request for additional searches of the database so that we
3 don't have to delay the trial.

4 THE COURT: That's correct?

5 MR. WELCH: It's what the client agreed to, yes,
6 sir.

7 THE COURT: Is that correct?

8 MR. MOSKOWITZ: If we do this and we would like
9 the additional -- or does this preclude us from asking for
10 the additional --

11 THE COURT: No.

12 MR. MOSKOWITZ: Then I think that's absolutely
13 correct, Your Honor.

14 THE COURT: Then you can tell me at the end of
15 this limited direct examination, if you believe you've been
16 limited, if there's something else. But I'm not going to
17 cause NDS to do a needless act.

18 MR. MOSKOWITZ: That's entirely --

19 THE COURT: It's time consuming and costly, yes.
20 Kristee, would you be kind enough to get the jury,
21 then.

22 Mr. Eberhart, why don't you give me that expert
23 report from this gentleman. Just make it available to me
24 this evening.

25 (In the presence of the jury.)

1 THE COURT: We're back in session.

2 All parties are present.

3 If you would have a seat. Thank you for your
4 courtesy.

5 JAMES EMERSON, DEFENSE WITNESS, PREVIOUSLY SWORN

6 RESUMED THE STAND

7 THE COURT: This is cross-examination by

8 Ms. Willetts on behalf of EchoStar/NagraStar.

9 Counsel.

10 CROSS-EXAMINATION

11 BY MS. WILLETTS:

12 Q. Good afternoon, Mr. Emerson.

13 A. Good afternoon.

14 Q. Now, you were at some point retained by counsel for the
15 defendants to give opinions in this case; is that correct?

16 A. That's correct.

17 Q. And before you were ever actually retained as an expert
18 witness, Counsel, Mr. Eberhart, spoke to you; is that right?

19 A. I don't believe I spoke to Mr. Eberhart until we had
20 actually been retained.

21 Q. Did -- I thought you testified earlier in your
22 deposition that the contact was made by counsel for
23 defendants, perhaps not Mr. Eberhart. I could be wrong on
24 that, but they contacted you to see if you had information
25 within ICG's possession that would be relevant to this case

1 or Chris Tarnovsky; is that correct?

2 A. I think you characterized my testimony correctly.

3 However, I meant that that was part of the post-retention
4 activity.

5 Q. Are you aware that EchoStar also subpoenaed ICG's
6 records related to Christopher Tarnovsky and the
7 December 2000 posts?

8 A. I am.

9 Q. And ICG objected to that subpoena; isn't that correct?

10 A. I was not party to the legal discussion between
11 Mr. Bedser, DirecTV, and Weston Benshoof, our counsel. So
12 from the standpoint of what was ultimately discussed, how it
13 was worked out, I don't have personal knowledge of how that
14 decision was reached between counsel.

15 Q. But you do have knowledge that ICG required EchoStar to
16 file a motion in order to get relevant information from your
17 business related to this case; isn't that right?

18 A. I'm not sure how it was characterized, whether
19 DirecTV's motion to do that or ICG's motion to do that,
20 because there's information here that's the intellectual
21 property of DirecTV in the midst of this matter. And the
22 evidence that -- the original evidence is DirecTV's evidence
23 in this matter. They were the party to the legal actions
24 that resulted in this evidence.

25 So from the standpoint of the legal discussion that

1 occurred between counsel for Echo and our counsel, which was
2 also DirectTV's counsel, I don't know how it was
3 characterized, whether it was ICG's initiative that did
4 that. I wasn't party to that.

5 Q. So the jury's clear on it, DirectTV's counsel also
6 represented ICG for purposes of that document?

7 A. That's correct.

8 Q. And once finally ICG was ordered to produce those
9 relevant documents, isn't it also true that ICG demanded a
10 hundred thousand dollars from EchoStar before they would
11 produce those?

12 A. I don't have any knowledge of a price, no.

13 Q. Now, you're also aware that within those records that
14 EchoStar was seeking were several ICG reports linking
15 Christopher Tarnovsky to the alias NiPpEr2000 and the
16 ChrisVon@s4.interpass.com e-mail address; isn't that right?

17 A. I found a single post related to NiPpEr2000.

18 Q. Now, let's be clear. We're talking about posts, and
19 there's also separate reports generated by ICG; isn't that
20 correct?

21 A. The Pirate Base exports data in a number of ways, as I
22 described during my deposition. So I'm not sure. We need
23 to be specific, I think, about the format so that I can be
24 accurate.

25 Q. Okay. Well, in your expert report that you submitted

1 in this case, you state: "I further investigated whether
2 any of the user names alleged by EchoStar to be associated
3 with Mr. Tarnovsky were, in fact, associated with him. My
4 examination failed to find any evidence linking
5 Mr. Tarnovsky to those user names."

6 Do you still stand by that statement in your expert
7 report?

8 A. I do.

9 Q. And when you prepared your expert report and the
10 statements contained therein, did you exhaust all evidence
11 that was available to you?

12 A. I did exactly what's in the report. I used the
13 information that was in the Fourth Amended Complaint for
14 those searches.

15 Q. Did you care to look at any of the ICG's reports that
16 it prepared prior to this litigation?

17 A. What specific reports? I mean, I've seen a lot of data
18 at ICG. Can you be more specific? I'm sorry.

19 Q. Sure. Let's take a look at Exhibit 27.

20 (Document displayed.)

21 BY MS. WILLETTS:

22 Q. Have you ever seen this report before, Mr. Emerson?

23 A. I believe so.

24 THE COURT: Just a moment. Words like "I believe
25 so," "could have been," "might have been," "the best of my

1 recollection" -- those are hedge words.

2 Did you or not?

3 THE WITNESS: Your Honor, I don't know if it's the
4 exact report, but I've seen similar material.

5 THE COURT: Did you or not, or you don't know.

6 THE WITNESS: I don't know by the -- I don't know.

7 THE COURT: Okay.

8 Counsel.

9 BY MS. WILLETTS:

10 Q. Was this one of the reports you reviewed when you
11 conducted an exhaustive analysis to determine whether or not
12 Chris Tarnovsky had any association with aliases alleged in
13 EchoStar's complaint?

14 A. No.

15 Q. Why not?

16 A. This was not a report that I referred to. It was not
17 part of the evidence set that I relied upon, and I'm not
18 sure why this particular exhibit is associated with my
19 report. It -- I did not have this report to use.

20 Q. Well, it's an ICG report, and you work for ICG; isn't
21 that correct?

22 A. This appears to be a report that's inclusive in a set
23 of investigative work that was done called "trap door." And
24 I had nothing to do with that project historically.

25 Q. So you decided to omit this information when you

1 decided -- when you were retained by defendants to give an
2 expert analysis in this case?

3 A. I don't think it was my intent to omit anything. I
4 believe that, just as I've stated in my report, what I
5 attempted to do was to use the evidence that we had that I
6 could validate forensically and to look at the entire body
7 of that evidence as it related to the NiPpEr2000 post. And
8 I did not utilize this particular report because it wasn't
9 something that I could authenticate.

10 Q. Do you believe it's inaccurate in any way or forged, or
11 is this not an authentic document, in your opinion?

12 A. The reason I said I don't know whether I've seen it
13 before is because I don't know where it came from, I'm not
14 clear who produced it, and I'm not clear whether the data
15 that's here is factually correct or not.

16 Q. Let's go back to the statement that you made in your
17 expert report in this case.

18 Your examination didn't find any evidence linking
19 Mr. Tarnovsky to the user names identified in EchoStar's
20 complaint. That's your statement in your report, right?

21 A. Correct, yes.

22 Q. Are you aware that Mr. -- EchoStar alleged in this
23 lawsuit that Mr. Tarnovsky used the alias "Von"?

24 A. I am, yes, I'm aware.

25 Q. "Vonrola"?

1 A. I think I've seen that alias, yes.

2 Q. "VonRat"?

3 A. Yes.

4 Q. "Biggun?"

5 A. Yes.

6 Q. "BG"?

7 A. Yes.

8 Q. "Shrimp"?

9 A. Yes.

10 Q. "Arthur Von Neumann"?

11 A. Yes.

12 Q. We've also alleged "NiPpEr."

13 A. Yes.

14 Q. And "NiPpEr2000"?

15 A. Yes.

16 Q. But you see no evidence linking Tarnovsky to any of
17 those. Is that your opinion in this case?

18 A. That is my opinion, yes.

19 Q. Are you aware that Mr. Tarnovsky's admitted to using
20 the aliases Von, Vonrola, VonRat, Biggun, BG, Shrimp, and
21 Arthur Von Neumann?

22 A. I was not aware that he admitted to those aliases.

23 Q. Would that be something that you would think would be
24 important in reaching your opinion that there's no evidence
25 linking Tarnovsky to the aliases listed in EchoStar's

1 complaint?

2 A. I think that I reviewed those aliases in the process of
3 preparing my report. I ran searches against those aliases
4 to create my conclusions in the report.

5 Q. Would it not be important for you to find out whether
6 or not Tarnovsky had in fact admitted to any of those?

7 A. It certainly adds to confirm things based on his
8 testimony at this point. However, it wouldn't change the
9 process involved in my report.

10 Q. And you, in fact, never spoke to Chris Tarnovsky?

11 A. That's correct.

12 Q. You never spoke with anyone from NDS; isn't that right?

13 A. Not in relation to this case.

14 Q. And now as a forensic expert, which I believe you
15 testified to earlier; is that correct? -- you're a forensic
16 expert?

17 A. I said that I've been entered into testimony as an
18 expert to present forensic evidence historically, yes.

19 Q. And you've done that in connection with a lot of
20 clients, right? Forensically analyzed computer data to link
21 up information; is that correct?

22 A. I'm only aware of being accepted by a court as an
23 expert prior to this date in one other instance.

24 Q. And that was in a DirectTV case; isn't that right?

25 A. Yes, that's correct.

1 Q. Now, as someone who's been involved in the industry
2 with experience in forensic analysis, wouldn't you agree
3 that the best place to look for hard evidence linking a
4 person to a post would be the person's hard drive?

5 A. That's a fair characterization of where we -- one of
6 the places we would look if -- when it's available, yes.

7 Q. In this case, that would be Chris Tarnovsky's hard
8 drive; isn't that correct?

9 A. Based on the complaint, it should be relevant.

10 Q. But you've never been provided any forensic computer
11 data from Mr. Tarnovsky's hard drive; isn't that correct?

12 A. My understanding from outside counsel for NDS is that
13 it was forensically examined by another party and that that
14 information was provided.

15 Q. It wasn't provided to you, was it?

16 A. No, it has not been provided to me.

17 Q. And you're the expert in this case; isn't that right?
18 They've retained you as an expert?

19 A. They have, yes.

20 Q. And in the other cases you've worked on, you were
21 provided with forensic computer analysis; isn't that right?

22 A. In some cases we've had hard drives. In other cases,
23 we've just had the websites.

24 Q. Now, you understand that the allegations in this case
25 is that Mr. Tarnovsky posted the Nipper post on Mr. Menard's

1 dr7 website; isn't that right?

2 A. I understand that from review of testimony and the
3 complaint.

4 Q. And I think you testified earlier that one of the best
5 places to look for forensic analysis or data relating to
6 this Nipper post would be dr7's records; isn't that right?

7 A. I don't recall my testimony precisely as you've just
8 restated it.

9 I don't object to the fact that there could be value in
10 looking at the DRC evidence. I agree with that.

11 Q. But you weren't provided that evidence?

12 A. We've never had the DRC evidence.

13 Q. Were you aware that the defendants actually hired
14 Mr. Menard in 2003?

15 A. No, I was not.

16 Q. Were you aware that the reason they wanted to retain
17 Mr. Menard was because he had thousands and thousands of web
18 page dumps and information on his website and other
19 websites?

20 A. I have no knowledge of the relationship of Menard to
21 any of the parties here.

22 Q. You've never been provided with any of the information
23 from the dr7 servers that defendants had access to, were
24 you?

25 A. With the exception of that screen print that I've been

1 shown earlier today, no.

2 Q. And wouldn't you agree that that would be one of the
3 first places as a forensic analyst that you would want to
4 look for information related to the NiPpEr2000 post?

5 A. I think that that particular information could be
6 probative. There might be something there that we would
7 want to look at, yes. I don't -- I have no idea what that
8 would be or whether it would have value at the end of the
9 day.

10 Q. Now, you testified earlier regarding what you called a
11 MySQL?

12 A. Correct.

13 Q. And that's a database, apparently a well-known database
14 related to forums; is that correct? Or websites?

15 A. It's used for many purposes where database is required,
16 not just forums. But it tends to be common with regard to
17 these particular forums because it's free, and it can handle
18 a great deal of information.

19 Q. And in this case, that was actually the MySQL database
20 is where you pulled all the information from relating to the
21 NiPpEr2000 posts and the IP addresses that you testified to
22 earlier; isn't that right?

23 A. That's true.

24 Q. And I believe you also testified that the MySQL
25 database also reveals evidence relating to a registered

1 user's corresponding user records or the activities, user
2 name, e-mail addresses; is that correct?

3 A. Yes.

4 Q. And ICG obtained all that information in connection
5 with the NiPpEr2000 posts; isn't that right?

6 A. With regard -- in a broader sense with regard to
7 PiratEden.

8 Q. Okay. Let's take a look at Exhibit 2055.
9 Do you recognize this document?

10 A. Yes, ma'am.

11 Q. Can you read what the first -- the title page says?

12 A. ChrisVon@s4.interpass.com.

13 Q. And is this one of the documents that comes from your
14 Pirate Base database?

15 A. This is a report. The format is produced in PDF format
16 from Pirate Base, yes.

17 MS. WILLETTS: Your Honor, at this time defendants
18 would offer Exhibit 2055 into evidence.

19 MR. EBERHART: No objection.

20 THE COURT: Received.

21 (Exhibit 2055 received in evidence.)

22 (Document displayed.)

23 BY MS. WILLETTS:

24 Q. So this is another one of the documents that was
25 created using the MySQL database files obtained by ICG from

1 PiratesDen, correct?

2 A. Yes.

3 Q. If you look at the fourth page of the exhibit -- I'm
4 sorry, the fifth page of the exhibit -- it's NDS153183 --
5 can you explain what this page represents here?

6 A. The Pirate Base database has a function that was
7 designed for a specific litigation requirement for DirectTV
8 that creates a grouping of information from critical fields
9 in the database and puts it into a viewable form that the
10 attorneys that supported DirectTV could very quickly utilize
11 for the purposes of planning litigation.

12 Q. So if you'll look at the e-mail address associated with
13 the NiPpEr2000 post, can you read that for us?

14 A. The e-mail address on the left side of the page is
15 ChrisVon@s4.interpass.com.

16 Q. And do you agree that that e-mail address,
17 ChrisVon@s4.interpass.com, was the e-mail address used to
18 register the NiPpEr2000 alias?

19 A. It was the e-mail address related to NiPpEr2000 in the
20 user table for dsschat in 2003 when we forensically acquired
21 it.

22 Q. That's the same user table that you used to come up
23 with the IP address; isn't that right?

24 A. This came from the active database. The IP address
25 came from a database file that was not part of the active

1 database.

2 Q. Do you have any reason to believe that the
3 ChrisVon@s4.interpass.com e-mail address is not associated
4 with the NiPpEr2000 post?

5 A. No.

6 Q. Take a look at Exhibit 39.

7 A. Thank you.

8 Q. Have you seen this document?

9 A. Counsel for NDS showed it to me.

10 Q. Can you tell us what Exhibit 39 is?

11 A. It appears to be much like the other exhibit that I
12 described as an admin control panel view. This appears that
13 it might be an admin control panel view for the database
14 through a browser.

15 Q. And you are referring to the admin control panel for
16 the IP address, a document that the defendants asked you
17 about earlier; isn't that right?

18 A. It's the same NiPpEr2000, yes.

19 Q. And this is showing the actual user e-mail address
20 that's also associated with NiPpEr2000; isn't that correct?

21 A. Yes. This was in the user table, correct.

22 MS. WILLETTS: At this time plaintiffs would offer
23 Exhibit 39 into evidence.

24 THE COURT: Any objection?

25 MR. EBERHART: No objection, Your Honor.

1 THE COURT: Received.

2 (Exhibit No. 39 received in evidence.)

3 (Document displayed.)

4 BY MS. WILLETTS:

5 Q. So this document, Exhibit 39, is that consistent with
6 the database that ICG maintains, the Pirate Base database in
7 that ChrisVon@s4.interpass.com e-mail address?

8 A. The information is, not the format.

9 Q. The information, the e-mail address is consistent --

10 A. Yes.

11 Q. -- with ICG's database?

12 A. Yes.

13 Q. Counsel for the defendants spent a great deal of time
14 talking to you about IP addresses and in particular the IP
15 address associated with the NiPpEr2000 post. In fact,
16 that's why you were retained, isn't that correct? -- to give
17 an opinion on that issue?

18 A. That was part of the reason, yes.

19 Q. Now, as an expert in forensics, you would agree that
20 it's possible for individuals posting information to conceal
21 their location with proxies, anonymizers and those sort of
22 techniques; isn't that correct?

23 A. Yes.

24 Q. In fact, it's something that's fairly common in the
25 piracy industry. And you know that because you've dealt

1 with a lot of issues relating to piracy with DirecTV; isn't
2 that right?

3 A. That's correct.

4 Q. Are you aware that Chris Tarnovsky has admitted in this
5 case to using proxies, anonymizers and other methods of
6 concealing his location or identity when posting?

7 MR. EBERHART: Objection. Vague as to time.

8 THE COURT: No. Overruled.

9 You can answer that question.

10 THE WITNESS: I was shown part of Mr. Tarnovsky's
11 testimony indicating that he used an ISDN dial-up line with
12 an ISP in Virginia, and that's all I know about
13 Mr. Tarnovsky's testimony.

14 BY MS. WILLETTS:

15 Q. Okay. And let's look -- take a look at one of the
16 exhibits that defendants' counsel showed you. Exhibit 206.

17 And we established earlier that this is an e-mail sent
18 from Peter Kuykendall, a NagraStar employee, forwarding a
19 post that was made relating to the December 2000, NiPpEr2000
20 post. I don't think it's clear to the jury exactly what
21 this e-mail actually is, though.

22 Can you read for us the second sentence after "see
23 attached file," beginning with "I also"?

24 A. "I also did a Usenet search on the poster
25 dr7_al@my-deja.com" -- that address being in parentheses --

1 "at www.deja.com, and came up with a couple of hits that
2 returned the same thing" in parentheses "(see below)."

3 Q. So the Usenet search that's being done here isn't
4 actually on the NiPpEr2000 post. It's on this post made by
5 dr7_al@my-deja.com; isn't that right?

6 A. Yes, sir.

7 Q. I believe you testified and the document indicates that
8 that address resolved to Ontario?

9 A. That's what's said in the e-mail from Mr. Kuykendall.

10 Q. Now, with your experience relating to piracy, you've
11 heard of dr7; isn't that right?

12 A. I never worked any investigations related to dr7. I
13 entered the satellite piracy services for DirecTV at a point
14 where they were not an active target.

15 Q. So you've heard of dr7?

16 A. Yes.

17 Q. And it's your understanding that that operation was run
18 by Allen Menard; isn't that right?

19 A. I've seen information that suggests that's the case,
20 yes.

21 Q. And Mr. Menard never lived in Ontario; isn't that
22 right?

23 A. I have no idea where Mr. Menard lived. I'm sorry.

24 Q. I'll represent to you that he testified at his
25 deposition in this case and it was played to the jury that

1 he lived in Edmonton his entire life but for two years that
2 he lived in Vancouver.

3 Do you have any reason -- or do you know why
4 Mr. Menard's e-mail address or address associated with him
5 would resolve to Barrie, Ontario?

6 MR. EBERHART: Objection. Mischaracterizes the
7 evidence. No foundation.

8 THE COURT: Overruled. But I can take a recess.
9 Each of you can show him the transcripts from the depo if
10 you would like to. Do you want to take a recess?

11 MR. EBERHART: My objection, Your Honor, is only
12 to the claim that there is an association between this
13 e-mail address and Mr. Menard. There's been no evidence of
14 that.

15 THE COURT: No, she's asking, I believe -- is that
16 correct? Just restate the question. Maybe I didn't hear it
17 correctly.

18 BY MS. WILLETTS:

19 Q. Do you know why any post being made by dr7 or Allen
20 Menard would resolve to Barrie, Ontario? Or do you have any
21 reason -- let me rephrase.

22 How could a post made by dr7 resolve to Barrie,
23 Ontario? How could that happen?

24 MR. EBERHART: Objection. Lacks foundation.

25 THE COURT: Overruled.

1 You can answer the question.

2 THE WITNESS: The header reflects that the poster,
3 the source end of that connection to Usenet was from Vianet
4 in Barrie, Ontario. Determining who was at the keyboard for
5 that particular transaction is not substantively defined by
6 dr7 in the same way that ChrisVon@interpass does not
7 substantively define who was responsible for creating that
8 e-mail account.

9 BY MS. WILLETTS:

10 Q. Is it fair to say, though, that just because something
11 resolves -- a post or whatnot resolves to Barrie, Ontario
12 doesn't mean that's where that person actually resides?

13 A. That's possible, yes.

14 Q. Let's take a look at Exhibit 726-D. It's an exhibit
15 that your counsel questioned you over a little earlier.

16 Do you have that exhibit in front of you?

17 A. Yes, ma'am, I do.

18 Q. And I believe you testified that the information --

19 MS. WILLETTS: We can put it up on the screen,
20 Clint.

21 (Document displayed.)

22 BY MS. WILLETTS:

23 Q. The information contained in 726-D was additional
24 information you relied on in order to reach your opinions in
25 this case; isn't that right?

1 A. Something to that effect, yes.

2 Q. Well, was it relied on by you or was it not relied on
3 by you?

4 A. I used the data. I think -- I'm not sure what my exact
5 testimony was, but my intent, as depicted in my report, was
6 to run all the keywords that were attributed to
7 Mr. Tarnovsky in the complaint in a way to be able to
8 analyze the other information about those user accounts
9 across the entire set of websites.

10 Q. And if I understood defense counsel correctly, the
11 point he was trying to make with you and the point you
12 testified to was that the IP address is the most reliable
13 way of tracing a post back to a particular individual.

14 A. I think I said it's the most reliable piece of
15 information we have here.

16 Q. Okay. And you believe that's more reliable than an
17 e-mail address that would be associated?

18 A. Standard practice for any hacking incident, incident
19 response process, a criminal event that involves the
20 Internet, starts with a subpoena for the IP address.

21 Q. Let's take a look at some of the entries on 726-D. If
22 you'll look at the first page, about a little more than
23 halfway down, we have an entry with user names "bg." There
24 are two in a row.

25 A. I see.

1 MS. WILLETTS: Clint, can we blow that up? It's
2 on the 726-D-001, bg. It's towards the middle of the page.

3 (Document displayed.)

4 BY MS. WILLETTS:

5 Q. Were you aware that "bg" was one of the aliases Chris
6 Tarnovsky admitted to using in this case?

7 A. I think that you may have just told me that.

8 Q. The defendants' counsel never bothered to tell you that
9 wasn't (sic) one of the aliases he admitted to using?

10 A. That was not a part of Mr. Tarnovsky's testimony that I
11 was able to review. I don't know that other than you
12 telling me that today.

13 Q. Did they just give you select portions of his
14 testimony?

15 A. Yes. That would be the case.

16 Q. Were you aware from that testimony that you reviewed
17 that Mr. Tarnovsky resided in California?

18 A. I think I know that for a different reason.

19 Q. Now, if you'll look at the location or the IP geo
20 location for the alias "bg," where does that alias and IP
21 resolve to?

22 A. Chicago.

23 Q. Are you aware of any instance where Mr. Tarnovsky
24 resided in Chicago, Illinois?

25 A. I am not, no.

1 Q. Okay. Let's turn to the next page, 726-D-002 -- I'm
2 sorry, 003 -- the following page.

3 And again about halfway down the page there's the alias
4 "shrimp."

5 A. I see it.

6 MS. WILLETTS: Can we highlight that, Clint?

7 (Document displayed.)

8 BY MS. WILLETTS:

9 Q. Are you aware that "shrimp" was one of the aliases
10 Mr. Tarnovsky admitted to using in this case?

11 A. I was not.

12 Q. It's another alias that the defendants' counsel didn't
13 bother to tell you he had admitted to?

14 A. This is the first time I've heard it.

15 Q. Where does that alias -- where is the geo location
16 associated with the alias "shrimp"?

17 A. Anchorage, Alaska.

18 Q. Do you have any knowledge that Mr. Tarnovsky ever lived
19 in Alaska?

20 A. I had none, no.

21 Q. If you go about four lines down, there's several
22 entries for the alias "BIGGUN." That's about five in a row.

23 Were you aware that "BIGGUN" was one of the aliases
24 Mr. Tarnovsky's admitted to using in this case?

25 A. Again, I heard that here from you, I believe.

1 Q. Where does the alias "BIGGUN" resolve to?

2 A. In each case it's Pittsburgh, Pennsylvania.

3 Q. Let's go about two more lines down. We see the alias
4 "Von." Were you aware that "Von" was one of the aliases
5 Mr. Tarnovsky admitted to using in this case?

6 A. The same response. I heard it from you today.

7 Q. And where is the geo location associated with the alias
8 "Von"?

9 A. New York, New York.

10 Q. Do you have any evidence that Mr. Tarnovsky ever
11 resided in New York?

12 A. No, I do not.

13 THE COURT: Now, just one moment, Counsel.

14 All right. Thank you. Please continue.

15 BY MS. WILLETTS:

16 Q. And let's just continue going down that page. Below
17 "Von" there's an entry for to "ripper" and below that an
18 entry for "mike."

19 Were you aware that "mike" was one of the aliases used
20 by Christopher Tarnovsky?

21 A. I'm sorry, where are we on the page?

22 Q. Two entries down from the "Von" that we just discussed.

23 A. Okay.

24 Q. There's an entry for "mike"; is that correct?

25 A. Yes, I see it.

1 Q. Were you aware that "mike" was one of the aliases Chris
2 Tarnovsky's admitted to using?

3 A. I'm learning that from you.

4 Q. And where does the alias "mike" resolve to, according
5 to this document?

6 A. Washington, DC.

7 Q. Now let's turn back in the same exhibit to the first
8 page, 726-D-001. About 11 lines down from the top, there's
9 an alias "shrimp."

10 A. I see it.

11 Q. Were you aware that "shrimp" was one of the aliases
12 Mr. Tarnovsky admitted to using in this case?

13 A. Again, I'm learning that from you today.

14 Q. And according to this document, "shrimp," the geo
15 location for "shrimp" resolves to Kingston, Ontario; is that
16 correct?

17 A. It does, yes.

18 THE COURT: Just a moment, Counsel. I don't see
19 that, Counsel.

20 MS. WILLETTS: It's 626-D-001 (sic).

21 THE COURT: 626-D-001?

22 MS. WILLETTS: That's correct, Your Honor.

23 THE COURT: I may have had the wrong page.

24 Thank you.

25

1 BY MS. WILLETTS:

2 Q. And that one is -- eight lines down from the top, I
3 believe.

4 And going down the same page, the first page, a little
5 over halfway down that page, below "bg" there's three
6 entries in a row with the alias "scatman."

7 Do you see that?

8 A. I do, yes.

9 Q. Were you aware that Mr. Tarnovsky admitted in this case
10 to using the alias "scatman"?

11 MR. EBERHART: Objection. Mischaracterizes the
12 evidence.

13 THE COURT: I don't recall. I'm going to allow
14 the answer. I'm just not certain, looking back, if
15 Mr. Tarnovsky did or not. But we've got a transcript, and
16 if you need that to be read -- your memory will prevail. If
17 you need testimony read back -- if this is important to you,
18 you can request it --

19 MS. WILLETTS: I can read this from his depo
20 transcript, if you'd like, Your Honor. I have the entry.

21 THE COURT: Oh, this wasn't in trial. This is
22 what may be confusing to the jury. I don't know if that was
23 in front of the jury at trial or not. I just can't
24 remember.

25 MS. WILLETTS: If you'd like, I could read the two

1 lines.

2 THE COURT: Is this the trial testimony?

3 MS. WILLETTS: This is from his deposition, Your
4 Honor.

5 THE COURT: Okay. You may do so.

6 MS. WILLETTS: Okay.

7 "QUESTION: Did you admit to using "scatman"
8 S-C-A-T-M-A-N?

9 "ANSWER: I believe I did use that as well. This
10 would be very early on in time. All the "BIGGUN" nics,
11 n-i-c-s. To clarify this, "BIGGUN/scatman" should have been
12 in the '96 to '97 era of time, no longer afterwards."

13 THE COURT: And your question is?

14 BY MS. WILLETTS:

15 Q. Were you aware that Mr. Tarnovsky had admitted to using
16 the alias "scatman"?

17 A. I'm just learning that now.

18 Q. That's another one of the aliases that defense counsel
19 did not disclose to you; is that correct?

20 A. I've heard the alias because of the complaints but not
21 in the context of his admission.

22 Q. And can you tell us where the alias "scatman" resolves
23 to based on the IP address that's in Exhibit 726-D?

24 A. I may be looking at the wrong "scatman." There's a
25 "scatman" that doesn't have an IP address.

1 Q. If you look at your screen.

2 A. What you've got highlighted on the screen is obviously
3 resolving to Ottawa, Ontario.

4 Q. And Ontario is where the NiPpEr2000 post resolved to,
5 based on your IP research?

6 A. That's correct.

7 Q. If you'll look at the second page, Exhibit 726-D-002,
8 eight entries down there starts a "mike" beginning with IP
9 address 3497. Do you see that entry?

10 A. Yes.

11 Q. And there's three of 'em, two more below that or
12 several more below that. And there's another -- were you
13 aware that "mike" was an alias used by Christopher
14 Tarnovsky?

15 A. I was not.

16 Q. And there are three "mikes" there, based on the IP
17 research done as shown in Exhibit 726-D, that resolve to
18 Ottawa, Ontario; isn't that right?

19 A. That's correct.

20 Q. And again, Ontario, that's the location where the
21 NiPpEr2000 post resolved to, based on your IP research;
22 isn't that right?

23 A. That's right.

24 MS. WILLETTS: No further questions, Your Honor.

25 THE COURT: Redirect?

1 MR. EBERHART: Yes.

2 THE COURT: Mr. Eberhart on behalf of NDS.

3 REDIRECT EXAMINATION

4 BY MR. EBERHART:

5 Q. Mr. Emerson, looking at Exhibit 726-D for a moment that
6 you just had in front of you.

7 A. Yes, sir.

8 Q. Does the fact that Mr. Tarnovsky admitted using the
9 alias "mike," for instance, at one point in time mean that
10 he is the only person who ever used the alias "mike"?

11 A. No.

12 Q. Why not?

13 A. Because, as I mentioned earlier in testimony, when you
14 register for one of these sites, you chose the user name
15 that you want to have.

16 Q. Does the fact that Chris Tarnovsky admitted using
17 "scatman" in 1996 or 1997 mean that he's the only person who
18 used "scatman" at any time -- at any point in time --

19 THE COURT: Let me pay the same courtesy to both
20 sides. This must be coming in through a deposition. I
21 don't recall, unless the jury does, hearing "scatman" when
22 we were here. So you both can do that, but each of you are
23 assuming something.

24 So across the board, can you stipulate to the
25 testimony at the time of the deposition, and can you also

1 stipulate to the time period so you make your point as well?
2 'Cause right now there's no 1996, 1997 in front of the jury.

3 So each of you have those pages for a moment?

4 So apparently, ladies and gentlemen, at a
5 deposition -- we're about to find out -- and counsel's read
6 a portion in, but let's find out also if this is 1996 or
7 1997. Maybe they can just read that in, agree that this is
8 the depositional testimony without calling Mr. Tarnovsky
9 back.

10 Counsel, otherwise, we can get Mr. Tarnovsky back.

11 MR. EBERHART: I think, Your Honor, we can
12 stipulate to what he testified to at his deposition.

13 THE COURT: Why don't you read that portion in
14 also so you're certain you covered that time period --

15 MR. EBERHART: Sure.

16 THE COURT: -- you know, to make your point.

17 MR. EBERHART: "QUESTION: Do you admit to using
18 "scatman," S-C-A-T-M-A-N?

19 "ANSWER: I believe I did use that as well. This
20 would be very early on in time. All the 'BIGGUN' nics -- to
21 clarify this, 'BIGGUN/scatman' should have been in the
22 '96-'97 era of time, no longer afterwards."

23 THE COURT: All right.

24 BY MR. EBERHART:

25 Q. Now, sir, does the fact Mr. Tarnovsky testified at his

1 deposition that he used -- he believed he used "scatman" in
2 1996 or 1997 mean that he was the only person to ever use
3 the alias "scatman"?

4 A. First of all, a large percentage of the sites that are
5 being queried in these searches did not exist in 1996 or
6 '97. Only a very few of them were old enough to have
7 evidence from that period of time.

8 The second part of my response would be that this
9 speaks back to the issue of a user name again and the
10 ability of anyone to be able to choose that user name if
11 it's available on that particular site.

12 Q. Does the fact that Mr. Tarnovsky said that he used "bg"
13 or "BIGGUN" as an alias at some point in time mean that he's
14 the only person who could have ever used "bg" or "BIGGUN"?

15 A. No.

16 Q. Now, did you search every alias that was listed for
17 Mr. Tarnovsky in the Fourth Amended Complaint?

18 A. Yes, sir.

19 Q. And you searched all of those aliases against your
20 Pirate Base database, correct?

21 A. That's correct.

22 Q. And you reported all of those results, correct?

23 A. I did, yes.

24 Q. And you searched those names. Whether or not you
25 believed that Mr. Tarnovsky said he used those names or not,

1 you just based it on the plaintiffs' allegations, correct?

2 A. That's correct.

3 Q. Do any of the IP addresses listed in Exhibit 726-D come
4 even close to matching the IP address that is used -- was
5 used for the NiPpEr2000 posting?

6 A. None.

7 Q. And how do you make a determination as to whether those
8 IP addresses are close or not to the NiPpEr2000 IP address?

9 A. Relationship within a block of IP addresses, proximity.

10 Q. Do any of the IP addresses listed in Exhibit 726-D fall
11 within the IP address block that was assigned to Vianet?

12 A. None.

13 Q. Now, in response to the subpoena that Ms. Willetts
14 referred to, you conducted searches of Pirate Base, didn't
15 you?

16 A. I did.

17 Q. And you provided those searches to counsel to be
18 provided to the plaintiffs?

19 A. I did.

20 Q. And those searches were based on keywords that the
21 plaintiffs selected, correct?

22 A. As they were provided by counsel.

23 Q. And when you did those searches, had you been retained
24 by NDS?

25 A. No.

1 Q. Had you and I ever spoken when you did those searches?

2 A. No.

3 Q. Didn't you also give a forensic copy of the Darryl Gray
4 hard drives to the plaintiffs?

5 A. We did.

6 Q. And the Darryl Gray hard drives are the location where
7 you found the IP address associated with the NiPpEr2000
8 posting, correct?

9 A. That's correct.

10 Q. Ms. Willetts asked you about the
11 ChrisVon@s4.interpass.com e-mail address. Do you remember
12 that?

13 A. Yes, sir.

14 Q. Could that be a fake e-mail address?

15 A. Could you clarify what you mean by "fake"?

16 Q. Sure. Could someone sign up for that e-mail address
17 whose name wasn't Chris Von?

18 A. We do it all the time.

19 Q. Could Ron Ereiser sign up for an e-mail address like
20 ChrisVon@s4.interpass.com?

21 A. I have no actions -- I have no knowledge about his
22 actions, but it's possible.

23 MR. EBERHART: Nothing further.

24 THE COURT: Recross.

25 This is Ms. Willetts on behalf of EchoStar.

1 MS. WILLETTS: Thank you, Your Honor.

2 RE-CROSS-EXAMINATION

3 BY MS. WILLETTS:

4 Q. Counsel for defendants just asked you about the IP
5 addresses contained in Exhibit 726-D that we just went over
6 extensively, many of which resolve back to Ontario. And he
7 asked you whether or not any of those resolved to a Vianet
8 host or provider, and they did not. Is that your testimony?

9 A. Yes, ma'am.

10 Q. But we did see another post that resolved to Vianet,
11 didn't we?

12 A. Are you referring to the Usenet exhibit?

13 Q. Correct.

14 A. Yes, ma'am.

15 Q. And that was the post that was made by
16 dr7_al@my-deja.com?

17 A. As I recall, that's correct.

18 Q. Now, you're an expert in forensics. And, as an expert,
19 if you wanted to post something where it can never be traced
20 back to you, conceal your identity so no one ever knew that
21 it was you who was posting the information, what would you
22 do?

23 A. I can speculate about what the best way would be for
24 the year 2008. I don't know personally what the best way
25 would have been in the year 2000, as I wasn't trying to do

1 it in the year 2000.

2 But the best way would be to mix in with the
3 masses -- to use a public, a very public anonymous proxy in
4 a co-location facility somewhere where there's so much
5 anonymized traffic coming through that box that there's not
6 any chance that the logging or any other documentation
7 normal for an ISP is ever going to be recovered so that I
8 can be identified.

9 A public shell -- I mean, the deep web -- pirates
10 in the deep web use shells in foreign countries. They're
11 always in co-location facilities, and they generally host
12 tens to hundreds to thousands of people's traffic.

13 Q. So you would conceal your IP address if you didn't want
14 someone to know where you were posting from?

15 A. I would.

16 MS. WILLETTS: No further questions, Your Honor.

17 THE COURT: All right. Do we need the gentleman
18 back at 5:00 o'clock, Counsel? 5:00 o'clock? Counsel, do
19 we need the gentleman back at 5:00 o'clock?

20 Better yet, I'm going to order you back at
21 5:00 o'clock, but if you would also meet us at 3:00 o'clock
22 for just a moment, we'll see if you need to return. That
23 way you won't be inconvenienced if you don't have to return
24 at 5:00. If you do, you'll be here until midnight.

25 THE WITNESS: Thank you, Your Honor.

1 THE COURT: I'm going to place you on 48 hours'
2 call, though, in case you're needed back or expected to be
3 back in court, but we'll see you back at 3:00 o'clock.

4 (Witness steps down subject to recall.)

5 THE COURT: Counsel, your next witness, please.

6 MR. SNYDER: Thank you, Your Honor.

7 The defendants call David Kummer.

8 THE COURT: Thank you.

9 And I was just kidding about midnight. You can
10 put that on the record. Although, Counsel, you can share
11 how late we've been together.

12 MR. STONE: 1:15.

13 THE COURT: 1:15 in the morning, so they're
14 working hard.

15 MR. SNYDER: On a Saturday, no less.

16 THE COURT: Mr. Kummer, if you would be kind
17 enough, sir, to raise your right hand.

18 DAVID A. KUMMER, DEFENSE WITNESS, SWORN

19 THE COURT: Have a seat in the witness box.

20 Sir, would you state your full name for the jury,
21 please.

22 THE WITNESS: My name is David A. Kummer.

23 THE COURT: And Mr. Kummer, would you spell your
24 last name, please.

25 THE WITNESS: It's K-U-M-M-E-R.

1 THE COURT: Thank you very much.

2 And this is Mr. Snyder on behalf of NDS on direct
3 examination.

4 MR. SNYDER: Thank you, Your Honor.

5 DIRECT EXAMINATION

6 BY MR. SNYDER:

7 Q. Good afternoon, Mr. Kummer.

8 Are you currently the senior vice president of
9 engineering and systems for EchoStar?

10 A. Yes, I am.

11 Q. And you've held that position since about 2000?

12 A. Yes, I have.

13 Q. And before being the senior vice president of
14 engineering and systems for EchoStar, you were the vice
15 president of engineering and systems for EchoStar?

16 A. Yes, I was.

17 Q. And you held that position from about 1998 to 2000?

18 A. Yes. About that.

19 Q. Would it be accurate to say, Mr. Kummer, that from 1998
20 to the present that you have been responsible for the whole
21 satellite system, from end to end?

22 A. I was responsible for the systems group, but we didn't
23 do, for instance, the uplink sender and the compression
24 equipment. We tested new equipment that would be used
25 there, but we didn't -- weren't responsible for that

1 portion. But for the design of the system in the satellite
2 set-top boxes, that would be accurate.

3 Q. Okay. And part of your responsibility as either the
4 vice president or senior vice president of systems and
5 engineering was responsibility for the piracy group; is that
6 right?

7 A. Well, for the EchoStar signal integrity group. But
8 there were other groups within NagraVision and NagraStar.

9 Q. Well, within EchoStar there were also other groups that
10 were involved in antipiracy efforts; is that right?

11 A. Within EchoStar there was a signal integrity group
12 which reported up through me.

13 Q. And there were portions of the hardware group that also
14 had an antipiracy function?

15 A. Yes, there were.

16 Q. Had those reported to you?

17 A. Yes, they did.

18 Q. And there were portions of the software group that had
19 an antipiracy function?

20 A. Yes.

21 Q. And those also reported to you?

22 A. Yes.

23 Q. So the portion of the hardware group responsible for
24 antipiracy and the position of the software group for
25 antipiracy and the signal integrity group, they all reported

1 to you?

2 A. Yes.

3 Q. Were there any other parts of EchoStar that were
4 responsible for antipiracy?

5 A. No.

6 Q. Okay. So all of the antipiracy functions at EchoStar
7 reported to you?

8 A. Yes.

9 Q. Is it accurate that one of the responsibilities of the
10 signal integrity group was to monitor the Internet to gain
11 intelligence?

12 A. Yes.

13 Q. And one of their responsibilities was to monitor
14 chatrooms to gain intelligence?

15 A. Yes.

16 Q. And one of their responsibilities was to monitor hacker
17 communities to gain intelligence?

18 A. Yes.

19 Q. And EchoStar started doing that sometime around 1998?

20 A. '98, '99 type of time frame, yes.

21 Q. Was one of their responsibilities to look for account
22 packing?

23 A. Yes, it was.

24 Q. What is account packing?

25 A. Account packing would be where if you had, for

1 instance, a brother or sister and that you both received a
2 set-top box from EchoStar, but you kept them on the same
3 account, but you actually had them in two physically
4 different locations, that would be considered account
5 packing because you should really have two separate
6 accounts. And so you were saving the cost by only paying a
7 small additional fee for the second set-top box, but you
8 weren't paying for a full other subscription.

9 Q. Mr. Kummer, is one of the things that the signal
10 integrity group is charged with investigating is gray market
11 piracy?

12 A. Are you referring, then, from the Canadian side?

13 Q. Yes.

14 A. Well, there was some responsibility to investigate
15 piracy that the Canadians were able to get boxes within the
16 United States and activate them and watch United States
17 programming within Canada, yes.

18 Q. And wouldn't it be part of looking for account packing
19 to look for multiple accounts being sent to a single
20 address?

21 A. Typically what we looked for was just having a lot of
22 set-top boxes on one account 'cause typically they would
23 only have the bill sent to one of those entities. For
24 instance, if I was sharing with my sister, I would get the
25 bill and pay it, but she would pay me for half of it. So

1 typically they just looked for a lot of receivers on a
2 single account.

3 Q. But isn't one of the other things they looked for
4 having multiple accounts at a single address?

5 A. I don't remember that specifically.

6 Q. Did part -- did the signal integrity group ever
7 investigate an address at 600 North Main Street in
8 Tonawanda, New York?

9 A. I'm not aware of that, no.

10 Q. Was it ever reported to you that there was an
11 investigation of M and M Freight Forwarding?

12 A. I don't recall that name, no.

13 Q. Did your group ever investigate Dawn Branton?

14 A. I don't recall that name either, no.

15 Q. Did your group ever investigate Margaret Coops
16 (phonetic)?

17 A. Again, they may have investigated them, but I was not
18 familiar with it, no.

19 Q. If they did, it wasn't something that was reported to
20 you?

21 A. Correct.

22 Q. Now, one of the things that the signal integrity group
23 does is recommend that law enforcement go after certain
24 pirates that they identify?

25 A. Yes.

1 Q. And ultimately that decision rests with you?

2 A. In some cases they would do that on their own, and I
3 wasn't involved. But in some cases when we got the FBI
4 involved, they did ask for -- if I felt that we should
5 pursue some of that piracy with the FBI.

6 Q. Okay. And do you also coordinate with Canadian law
7 enforcement in determining whether to chase pirates?

8 A. I didn't specifically myself, but I know that my group
9 did.

10 Q. Okay. Has your group ever pursued Ron Ereiser?

11 A. The name is familiar, and I believe we did, but I don't
12 know the specifics of that.

13 Q. Is the name familiar because your group chased
14 Ron Ereiser or because he became a NagraStar consultant?

15 A. I don't remember where I saw the name. We had an ECM
16 report that had a lot of these names in it, and I read those
17 reports on a regular basis. And his name may have been in
18 one of those reports, but I don't remember where I saw it.

19 Q. Are you familiar with the name Charles Perlman,
20 Mr. Kummer?

21 A. That name doesn't ring a bell to me.

22 Q. You don't know whether or not he was someone who was
23 pursued by EchoStar?

24 A. I do not know.

25 Q. You do not know whether or not he became a NagraStar

1 consultant?

2 A. I don't know that.

3 Q. Are you familiar with someone named Dean Love?

4 A. I've heard that name before.

5 Q. Was he pursued by EchoStar?

6 A. I don't know.

7 Q. Do you know whether or not he was being compensated by
8 NagraStar as an informant or consultant?

9 A. I don't know.

10 Q. Okay. Are you familiar with the name Jan Saggiori?

11 A. No.

12 Q. Was Mr. Saggiori someone who was pursued by your
13 group -- or antipiracy group?

14 A. Well, I'm not familiar with him, so --

15 THE COURT: Excuse me, sir. Who would know, then?
16 You're in charge of this division. In other words, who
17 knows?

18 THE WITNESS: Well, some of the people who worked
19 in that that looked at that level of detail may know those
20 people. Renee Coltharp, for instance, was someone who was
21 intimately involved in that. My job was mainly to look at
22 what the pirates were doing and try to figure out --

23 THE COURT: But you've got reports you can go back
24 and look at, et cetera, to find these answers; is that
25 correct?

1 THE WITNESS: Like I mentioned, we had the
2 electronic countermeasure reports, and these names --

3 THE COURT: Counsel, that's up to you. If you
4 want to continue, you may. If not, I can excuse him, and he
5 can find the answers.

6 MR. SNYDER: We'll continue, Your Honor.

7 BY MR. SNYDER:

8 Q. Mr. Kummer, are you aware of any investigation into a
9 piracy group in Barrie, Ontario done by EchoStar?

10 A. I've heard the name and the location before, but I
11 don't remember specifically any raids or anything we may
12 have done there. I know we did raids in Canada. And that
13 may be one of them, but I don't specifically remember.

14 Q. Let me just ask you two more names. Are you familiar
15 with the name Jim Waters?

16 A. No.

17 Q. Are you familiar with the name Mike Manieri?

18 A. No.

19 Q. I take that back. I'm going to ask you one more.

20 Are you familiar with the name Mike Maldonado?

21 A. No.

22 Q. Any information that anyone in the antipiracy group
23 from EchoStar or NagraStar ever spoke with Mr. Maldonado?

24 A. Not that I recall, no.

25 Q. Now, as part of your work in antipiracy, you would hold

1 meetings with the various groups that were responsible for
2 antipiracy?

3 A. Yes. We would hold a meeting and try to discuss the
4 status of piracy and what it looked like they were learning,
5 and if there was ways that we could craft electronic
6 countermeasures to combat piracy. And that was my main
7 focus for chairing that meeting.

8 Q. Was focusing on countermeasures?

9 A. Yes.

10 Q. You know, I'm sorry, Mr. Kummer -- I need to go back
11 for just a moment. I misspoke.

12 Do you recognize the name Anthony Maldonado? It's not
13 Mike Maldonado. It's Anthony Maldonado.

14 A. No, I do not.

15 Q. Tony Maldonado?

16 A. No.

17 MR. SNYDER: Could you show the witness, please,
18 Exhibit 1260.

19 BY MR. SNYDER:

20 Q. Mr. Kummer, I believe you just testified that one of
21 the things you were focused on was ECMS.

22 A. Yes.

23 Q. If you'd look at the last page of Exhibit 1260, which
24 is in evidence. It's titled, "EchoStar ECM History." Do
25 you see that?

1 A. Yes.

2 Q. Have you seen this before today?

3 A. I don't know if I've seen this specific one, but I have
4 seen a document that is similar to this. It may be later in
5 time with additional ECMs on it, but I have seen something
6 in this format before and had at least some of these ECMs
7 listed on them.

8 Q. When was the first ECM for the EchoStar system?

9 A. I believe it was in the '99 kind of time frame.

10 Q. And was that ECM successful?

11 A. Well, if an ECM would stop piracy for some short period
12 of time, it would deem to be successful. And if it maybe
13 took some of the pirate devices out of the field, then that
14 would be deemed successful.

15 But ECMs had a typical lifetime, and sometimes they
16 would last longer, and then the pirates would figure out a
17 way to pirate the system again, or not.

18 So successful is -- we would deem it successful if it
19 at least took the pirates down for some period of time and
20 also maybe rendered some pirate devices inoperable.

21 Q. Mr. Kummer, this list starts with ECM No. 4, and we
22 don't have anything that lists the first three ECMs, which
23 is why I'm so interested in 'em.

24 When was ECM No. 2?

25 A. I don't remember the dates of when the other ECMs

1 were --

2 Q. Well, --

3 A. -- were done.

4 Q. -- when was ECM No. 3?

5 A. I think it was in the '99 time frame, but I don't
6 remember.

7 Q. What did ECM No. 1 target?

8 A. Initially in 1999, the pirate device was more of a
9 hobbist-type device. They had some blockers that would,
10 for instance, try to block entitlement messages to the
11 cards. And one of the ways that they would exploit that was
12 to authorize their card on the system and then try to make
13 it that we couldn't deauthorize it. So they actually became
14 a subscriber, and then they would call back up a month later
15 and say, "Well, I don't want to be a subscriber anymore,"
16 but they would block those messages from the card. So I
17 vaguely remember one of the ECMs was targeting that type of
18 an attack, but I don't remember exactly.

19 Q. Was ECM No. 1 targeted at ROM 2 cards?

20 A. Again, I don't remember specifically what ECM 2 was.

21 Q. Was ECM No. 2 targeted at ROM 2 cards?

22 A. I don't remember specifically.

23 Q. Was ECM No. 3 targeted at ROM 2 cards?

24 A. I don't remember specifically.

25 Q. If you look at the last page of Exhibit 1260, it says

1 that ECM No. 4 was targeting all pirate commercial DNASP-III
2 cards.

3 A. I see that.

4 Q. Is it consistent with your recollection that in
5 November of 2000 there were commercial DNASP-III cards?

6 A. I believe there was a small number of cards that were
7 available through some pirate websites, but at that point in
8 time, we didn't know how they were modifying those DNASP-III
9 cards. So that was referring to actually modified DNASP-III
10 cards.

11 Q. Well, it says "commercial DNASP-III cards," doesn't it?

12 A. Yes.

13 Q. And there were enough of them out there that you issued
14 an ECM?

15 A. Yes.

16 Q. And that ECM was listed as very successful, correct?

17 A. Yes. Again, for the cards that were in the field, it
18 says it looped the cards, which would make them where they
19 would no longer operate in the system.

20 Q. And it lists the ECM as very successful?

21 A. That's what it says, yes.

22 Q. Okay. Let's look at ECM No. 5. That was the next
23 month, in December 2000, correct?

24 A. Yes.

25 Q. And it targeted DNASP-II cards. That's ROM 2 cards?

1 A. Yes.

2 Q. And that -- the note for that ECM is that the kill of
3 the cards was successful; is that correct?

4 A. Yes.

5 Q. And then ECM 6 was the very next month; is that right?

6 A. Yes.

7 Q. And that was also targeting ROM 3 cards?

8 A. Yes. It was targeting modified DNASP-III cards, and it
9 says it was also targeting cards that had an E3M fix, 2 and
10 3 cards from a new group, so it was also targeting that as
11 well.

12 Q. And that was also a successful ECM?

13 A. Again, at the time, it looped those particular cards
14 that were in the stream, but there were a lot of cards that
15 probably weren't in the stream that didn't receive this
16 looping command because they hadn't been in the stream at
17 that time.

18 Q. Hadn't been in the stream or maybe were behind blockers
19 or something?

20 A. Correct.

21 Q. Okay. Let's look at ECM No. 7. That's in April of
22 2001, right?

23 A. Yes.

24 Q. And that one targets all the IRDs, which is set-top
25 boxes?

1 A. Yes.

2 Q. That -- "containing any card that blocks Run EMMs or
3 that are behind a blocker device"; is that right?

4 A. Yes.

5 Q. And that one is noted as a successful ECM, correct?

6 A. Yes. Again, that was the -- it says also it's the
7 first ECM that was targeting IRDs, so this was a
8 countermeasure that we had done that tried to identify that
9 you had a pirate device in your system and actually tried to
10 kill your set-top box rather than kill your Smart Card.

11 Q. And it was listed as a successful ECM; isn't that
12 right, Mr. Kummer?

13 A. Yes. Again, for boxes that had pirate devices in 'em.
14 There were a lot of boxes that didn't have pirate devices in
15 'em --

16 Q. So you don't --

17 THE COURT: Strike the answer and strike the
18 question.

19 All right. Counsel, once again, please.

20 BY MR. SNYDER:

21 Q. With an ECM, you don't want to kill set-top boxes that
22 have legitimate cards in them, do you?

23 A. That's correct.

24 Q. You only want to kill set-top boxes with pirate cards?

25 A. Correct.

1 Q. Let's jump down to the bottom of the page, ECM No. 10.
2 That was July 25th, 2001?

3 A. Yes.

4 Q. And it was targeting all ROM 2 and ROM 3 cards that had
5 illegal rights and that do not block the run EMMs, correct?

6 A. Correct.

7 Q. And it was a very successful ECM; is that right?

8 A. Yes. Again, at the time, it killed those cards that
9 were in the stream.

10 Q. Now, Mr. Kummer, the ROM 2 and ROM 3 cards were both
11 based on the same chip; isn't that right?

12 A. The same ST microprocessor Smart Card, yes.

13 Q. And the ROM 10 and 11 were also based on the same Smart
14 Card?

15 A. It's my understanding that there were some differences
16 between the 10 and 11 as it related to anti-glitch
17 capabilities, but they used the same family of
18 microprocessor.

19 Q. And the first generation of the Aladdin card, which was
20 sometimes called the 101 card, also used -- was based on the
21 same family, wasn't it?

22 A. Yes. And my understanding was it was the same silicone
23 that was used for ROM 11.

24 Q. Okay. So the same silicone was used for ROM 2 and for
25 ROM 3, right?

1 A. Yes.

2 Q. And the same silicone was used for ROM 11 and for
3 ROM 101, the first generation of the Aladdin card, correct?

4 A. That's my understanding, yes.

5 Q. And you would agree, wouldn't you, that that was a poor
6 design choice?

7 A. In 20/20 hindsight as we look back on it, we would say
8 that that was a mistake, yes.

9 Q. And the same silicone that EchoStar used for the
10 ROM 2 and ROM 3 cards was also used in other systems around
11 the world; isn't that right?

12 A. By "other systems," do you mean other pay television
13 systems?

14 Q. I'm sorry. Yes, other pay television systems.

15 A. Yes, that is correct.

16 Q. So it was used by a system in Canada?

17 A. Yes.

18 Q. And it was used by a system in Spain?

19 A. Yes.

20 Q. And you would agree that that, too, was a design
21 mistake, wouldn't you?

22 A. Again, in 20/20 hindsight, we probably wouldn't make
23 that mistake again, yes.

24 Q. In fact, the reason that that's a mistake is because it
25 can cause the domino effect; hacking or piracy of one system

1 can lead to hacking or piracy of the other?

2 A. Yes.

3 Q. In fact, I think you described that as putting the
4 dominoes a little too close together?

5 A. Yes, I did.

6 Q. Now, Mr. Kummer, you learned in 1999 that the EchoStar
7 system was first hacked?

8 A. In that time frame, yes.

9 Q. And I believe that you just testified that in late --
10 even as late as 2000 or the end of 2000, you thought it was
11 still at essentially the hobbyist level?

12 A. Well, I believe after the code and the techniques were
13 put onto the Internet, that it became more than the hobbyist
14 level, that enough people started to be able to get the ROM
15 code and the EEPROM data from the cards, were able to craft
16 a lot more devices at that point. So it began to
17 proliferate after that occurrence of showing up on the
18 Internet.

19 Q. Well, isn't it true, Mr. Kummer, that you knew that
20 once the pirates had the code, that they would be able to
21 further pirate the EchoStar system?

22 A. Well, once they had all of the ROM code in the
23 system -- that was the secret element that was in the
24 system. And once all those secrets were out, then that's
25 what allowed piracy to flourish.

1 Q. And you knew long before the end of 2000 that that ROM
2 code was out, didn't you?

3 A. We knew that portions of it were out. But we hadn't
4 seen that they had all of the ROM code until after 2000.

5 Q. Well, let's follow up on that, Mr. Kummer. You had
6 actually put a secret phrase inside the code so you would
7 know when the pirates had that code, correct?

8 A. That was not the reason we put it in there, but it was
9 certainly an indication that they had portions of the code,
10 yes.

11 Q. Well, the jury's heard the phrase that "Nipper is a
12 butt licker." And that was in the EEPROM code, correct?

13 A. Yes.

14 Q. And, in fact, you came up with that phrase?

15 A. Yes, I did.

16 Q. And you said that it wasn't to find out whether the
17 pirates had it. Why did you put the phrase in there?

18 A. The phrase was put in because we were building a
19 standard satellite system under a set of standards called
20 DVB. And we were subsidizing those set-top boxes, and we
21 didn't want someone else to be able to use our subsidized
22 box and say, "Here, here's a new Smart Card that you can
23 plug into EchoStar's box and repoint the dish and you can
24 get this new satellite programming from a new service" that
25 they could offer cheaper because they weren't subsidizing

1 the box.

2 And so we had placed that phrase in there so that there
3 was a challenge response between the system and the Smart
4 Card to make sure that if you didn't know that phrase, that
5 you wouldn't be able to use our set-top box to run on a
6 different service.

7 Q. And the test phrase that you chose was "Nipper is a
8 butt licker"?

9 A. Yes, that's correct.

10 Q. And once that phrase -- once you saw that phrase on the
11 Internet, you knew that pirates had at least access to that
12 portion of the code?

13 A. Yes, that's correct.

14 Q. And that actually occurred sometime in 1998; isn't that
15 right?

16 A. I don't remember the exact time frame, but in the
17 '98-'99 time frame.

18 MR. SNYDER: Could you please show the witness
19 Exhibit 1694?

20 BY MR. SNYDER:

21 Q. Mr. Kummer, could you look, please, at the very bottom.
22 If you turn the exhibit sideways so it's in landscape view.

23 A. Yes.

24 Q. You'll see a printout or a web address across the
25 bottom, and it indicates that this is from archive.org?

1 A. I see where it says www.dr7.com/echostarnews.

2 Oh, on the last page it has archive.org.

3 Q. And you're familiar with archive.org, aren't you?

4 A. Uh, no.

5 Q. It is a website that archives historical websites?

6 A. I'm not familiar with it, no.

7 Q. Are you familiar with dr7?

8 A. Yes.

9 Q. dr7 was a very popular piracy source during the -- or
10 at least source for files and information during the late
11 '90s?

12 A. Yes.

13 Q. Are you aware -- did EchoStar ever try to shut dr7
14 down?

15 A. I believe we did, but I'm not specifically sure.

16 Q. Are you aware that NDS and DirectTV succeeded in
17 shutting dr7 down?

18 A. I was not aware of that, no.

19 Q. Do you recognize this -- although it doesn't have the
20 graphics, do you recognize this as a posting from dr7?

21 A. I actually never went to the dr7 site, so I don't
22 recognize it myself, no.

23 Q. Okay. Would you look at the bottom of the first page,
24 please, where it says "Monday, October 26th, 1998."

25 A. Yes.

1 Q. And then if you'd look at the second page, which is
2 some of the text underneath it -- it just has the print on
3 multiple pages -- the third paragraph says "Today I have
4 added a new .zip file, rev 313, which is more valuable info
5 coming from the Swiss cheese boys." Do you see that?

6 MR. WELCH: Your Honor, I'm going to object. He's
7 reading from a document that's not in evidence right now.

8 THE COURT: Well, sustained.

9 MR. SNYDER: I'll move 1694, Your Honor.

10 THE COURT: Any objection?

11 MR. WELCH: Objection, Your Honor. Hearsay. No
12 foundation.

13 THE COURT: Well, first I'm going to need to know
14 where this document came from.

15 MR. SNYDER: This document was produced from
16 EchoStar's files, Your Honor.

17 THE COURT: Was this produced from EchoStar?

18 MR. WELCH: Yes, Your Honor. It has an EchoStar
19 Bates number on it.

20 THE COURT: What's the "confidential" down at the
21 bottom?

22 MR. SNYDER: That's the designation under the
23 protective order that EchoStar affixed.

24 THE COURT: Objection is overruled. It's
25 received.

1 (Exhibit No. 1694 received in evidence.)

2 (Document displayed.)

3 MR. SNYDER: Could you hand the witness, please,
4 Exhibit 1692.

5 THE COURT: Now, Counsel, are you done with 1694?

6 MR. SNYDER: I am, Your Honor.

7 1692, the next exhibit, I believe, is the dump
8 from the Swiss Cheese Productions rev 313, which is why
9 we're going to it next.

10 BY MR. SNYDER:

11 Q. Mr. Kummer, have you seen Exhibit 1692 before today?

12 A. Um, no, I haven't.

13 Q. In your responsibility as head of the antipiracy
14 function at EchoStar, would they forward to you a dump of an
15 EchoStar card?

16 A. No. I relied -- at EchoStar we didn't even know what
17 was in the card. We didn't want to know what was in the
18 card. That was really NagraVision's responsibility. So we
19 relied on NagraVision to look at these dumps and determine
20 whether they were from a card or were they authentic or, you
21 know, what they could get out of 'em.

22 Q. Okay. If you'd look at the bottom of the first page,
23 that's marked 1692-1, you see a number above that that
24 starts with NVNC046851?

25 A. Yes.

1 Q. And do you know whether or not that indicates that this
2 was produced by NagraVision/NagraCard for this litigation?

3 A. I do not know, no.

4 MR. SNYDER: Your Honor, I move Exhibit 1692.

5 THE COURT: Any objection?

6 MR. WELCH: No objection, Your Honor.

7 THE COURT: Received.

8 (Exhibit 1692 received in evidence.)

9 (Document displayed.)

10 BY MR. SNYDER:

11 Q. If you would look at the first page, please, under the
12 heading "read me."

13 A. Yes.

14 Q. It says, "Dump from running CAM rev 3.13." Do you see
15 that?

16 A. Yes.

17 Q. And that's the same revision number that we saw in
18 Exhibit 1694?

19 A. Where it said, "Today I've added a new zip file,
20 rev 3.13," yes.

21 Q. Okay. And then if you look a couple lines down -- I'm
22 still looking at Exhibit 1692 -- it says, "Copyright 1998,
23 Swiss Cheese Productions." Do you see that?

24 A. Yes, I do.

25 Q. And then if you'll turn to the next page, please, and

1 at the very top it's headed Rev 3.13. And then it has a
2 whole bunch of numbers and letters underneath. And everyone
3 in this courtroom's gotten a bit of education. That's
4 hexadecimal code, right?

5 A. Yes, that's correct.

6 Q. And on the far right-hand side of that is the same
7 hexadecimal code represented in ASCII?

8 A. Correct.

9 Q. So when the hexadecimal code translates into regular
10 characters, it's then human-readable?

11 A. Yes.

12 Q. And if you look down to the fourth line, it says
13 "rev 3.13" -- you go up a little bit more. The fourth line
14 from the top, it says "rev 3.13"?

15 A. Yes, I see that.

16 Q. And then if you go to the seventh and eighth lines,
17 you've got your target phrase?

18 A. Yes, I see it there. It says "Nipper is a butt
19 licker."

20 Q. And this code was copyrighted by the Swiss cheese
21 productions in 1998; isn't that right?

22 A. Yeah. That's what it says on the front page.

23 Q. And it was posted on the dr7 website, according to
24 Exhibit 1694, on October 26th, 1998; isn't that right?

25 A. Again that's, yes, what the document says.

1 Q. Now, isn't it true, Mr. Kummer, that you were aware of
2 enough piracy of the EchoStar system in 1998 and 1999 that
3 EchoStar actually requested a card swap?

4 A. I'm not familiar that we had requested a card swap.

5 Q. Could you take a look, please, at Exhibit 812. I'm
6 sorry, that's not the right exhibit. 828.

7 MR. SNYDER: And I believe it's already in
8 evidence, Your Honor.

9 THE COURT: Thank you.

10 (Document displayed.)

11 BY MR. SNYDER:

12 Q. This is a letter that was sent by Mr. Sayeedi?

13 A. I've not seen this before, but I know of a Mr. Sayeedi,
14 yes.

15 Q. But in 1999 you were responsible for the antipiracy
16 function at EchoStar?

17 A. I was involved in the antipiracy. I think in 2000 was
18 actually where I took over the systems group where they
19 actually reported to me, but...

20 Q. Well, in 1998 to 2000 you were vice president of the
21 systems group, correct?

22 A. Yes.

23 Q. And during that period the signal integrity group
24 reported to you?

25 A. Yes. That's right.

1 Q. And the antipiracy portion of the hardware group
2 reported to you?

3 A. Yes.

4 Q. And the antipiracy portion of the software group
5 reported to you?

6 A. Well, again, the hardware and software group as it
7 related to the set-top box, not to the card.

8 Q. The signal integrity group wasn't focused just on the
9 set-top box, was it, Mr. Kummer?

10 A. When you say "the hardware and software group," they
11 were just set-top box hardware and software groups. The
12 signal integrity group, who monitored the chat rooms, was a
13 different function. So the hardware and the software were
14 set-top box hardware and software.

15 Q. And the signal integrity group was the entire system,
16 correct?

17 A. Signal integrity group, again, that EchoStar had
18 monitored the chat rooms and tried to find out what piracy
19 was available, tried to order piracy devices and verify
20 whether they could actually work on our system.

21 Q. And it wasn't focused -- that group was not focused
22 just on set-top box piracy, was it, Mr. Kummer?

23 A. That's correct.

24 Q. It was any kind of piracy of the EchoStar system?

25 A. Yes.

1 Q. But when EchoStar made the decision to demand a card
2 swap in 1999, you weren't told about it?

3 A. I may have been told. I don't remember. I didn't see
4 this letter, and I don't remember us actually asking for
5 that.

6 Q. Isn't it also true that in -- that piracy was
7 sufficiently severe in 1999 that EchoStar actually included
8 in its SEC filings that it may need to engage in a card
9 swap?

10 A. I believe that's true, yes.

11 Q. Okay. Let's make sure. Could you take a look at
12 Exhibit 1378, please.

13 This is a copy of EchoStar's 10-K for the period ending
14 December 31st, 1999. Do you see that near the top of the
15 first page, Mr. Kummer?

16 A. I'm seeing the --

17 Q. Under the check to the first box.

18 A. Yes, I see that.

19 Q. It says, "Annual Report Pursuant to Section 13 or 15-D
20 of the Securities Exchange Act of 1934 for the fiscal year
21 Ended December 31st, 1999."

22 A. Yes, I see that.

23 Q. If you could turn, please, to page 5.

24 THE COURT: Is that 1378-000 or 005 or is it
25 page 5?

1 MR. SNYDER: 1378-005, Your Honor.

2 THE COURT: Okay.

3 BY MR. SNYDER:

4 Q. There's a section near the top that says "conditional
5 access system"?

6 A. Yes.

7 Q. If you could look, please, at the second paragraph.
8 Starting at the third line of that paragraph, it says
9 "However, theft of cable and satellite programming has been
10 widely reported, and our signal encryption has been pirated
11 and could be further compromised in the future.

12 "We continue to respond to compromises of our
13 encryption system with measures intended to make signal
14 theft of our programming commercially uneconomical. We
15 utilize a variety of tools to continue to accomplish this
16 goal.

17 "Ultimately, if other measures are not successful, it
18 could be necessary to replace the credit card-size card that
19 controls the security of each consumer set-top box at a
20 material cost to us."

21 Did I read that correctly, Mr. Kummer?

22 A. Yes.

23 Q. And that was the disclosure to the American investing
24 public under the rules of the Securities and Exchange
25 Commission for the year ended 1999; isn't that right?

1 A. Yes. But it wasn't put out until March, so it may have
2 also included events that occurred between the end of '99
3 and March of 2000.

4 Q. But that was certainly long before the end of 2000,
5 wasn't it, Mr. Kummer?

6 A. Yes.

7 Q. But it's your testimony that by -- near the end of
8 2000, piracy had been driven back to the hobbyist level; is
9 that right?

10 A. Well, we were aware that there were some hacks on our
11 system, and we were trying to do countermeasures to contain
12 that. We thought that we could contain that using
13 electronic countermeasures. But we were alerting the public
14 that if we weren't successful at that, that it might be
15 required to do a full card swap.

16 Q. Okay. Mr. Kummer, you would agree, wouldn't you, that
17 it's just a guess to estimate the number of pirates of a
18 system? Isn't that right?

19 A. In a system such as ours, which is a one-way
20 deployment, yes, that's a very difficult thing to get a
21 handle on.

22 Q. In fact, it's so difficult that you actually said it
23 was a guess?

24 A. Yes. Everyone has their own guess, their own multiple
25 guesses. We try to put some intelligence behind them. But

1 we would look at the devices and how easy they were to use
2 and how easy they were to obtain and try to make a guess as
3 to how much piracy there was.

4 Q. But ultimately it was always just a guess, wasn't it,
5 Mr. Kummer?

6 A. Yes.

7 Q. Now, going back to your testimony, then, in late 2000
8 piracy had been driven back to the hobbyist level. That was
9 actually true again in early 2001, wasn't it?

10 A. I believe that we were making good progress at that
11 time with our countermeasures, and we thought that we
12 were -- we were keeping the piracy at a low enough level.

13 Q. Right. Between countermeasures and patches, piracy was
14 essentially under control?

15 A. We would like to see no piracy, but we didn't feel it
16 was at a level that would require us to go through the
17 expense and the hassle to our customers to do a full card
18 swap.

19 Q. In fact, isn't it true that you were actually
20 congratulated by the president of EchoStar for having driven
21 piracy back to the hobbyist level?

22 A. I don't specifically remember that, but you obviously
23 have something that says that I was congratulated.

24 Q. Well, I'm not trying to be tricky, Mr. Kummer. Why
25 don't we look at Exhibit 812.

1 MR. SNYDER: And I believe this is also already in
2 evidence, Your Honor.

3 (Document displayed.)

4 BY MR. SNYDER:

5 Q. There are two e-mails on the first page. Mr. Kummer,
6 I'd like you to look at the one that begins in the middle of
7 the first page, from Mike Dugan.

8 A. Yes.

9 Q. And Mr. Dugan was the president of EchoStar?

10 A. Yes.

11 Q. And this is to Kranti Kilaru and Alan Guggenheim?

12 A. Yes.

13 Q. And you are one of the cc's, along with Mark Jackson,
14 on this e-mail; isn't that right?

15 A. Yes, I was.

16 Q. If you would look at the fourth paragraph that starts
17 "We need 100 percent focus on this stuff."

18 A. Yes.

19 Q. Just to be clear, this e-mail is dated January 31st,
20 2001?

21 A. Yes.

22 Q. And Mr. Dugan writes in that third -- fourth paragraph
23 of the e-mail, "We have made great progress. We have
24 destroyed the commercial aspect of stealing. We have made
25 it clear this is not commercial and driven back to the

1 hobbyist"; is that right?

2 A. Yes.

3 Q. And that's what your president, Mr. Dugan, wrote to you
4 and others at the end of January 2001?

5 A. Yes.

6 Q. Now, later EchoStar did decide to do a card swap; isn't
7 that right?

8 A. Yes. Ultimately we did swap all of the ROM 2, 3, 10
9 and 11 cards.

10 Q. But that was actually much after -- long after
11 Mr. Dugan's January 31st, 2001 e-mail, correct?

12 A. It was -- when we finally completed the card swap, I
13 believe, was in 2004 or 2005.

14 Q. So in 2000 you essentially thought that piracy was at a
15 nuisance level; is that accurate?

16 A. It hadn't risen to an intolerable level where we felt
17 we needed to go through the expense of replacing all the
18 cards.

19 Q. Well, didn't you say at your deposition, Mr. Kummer,
20 that, "I would say in early 2000 it was at a nuisance
21 level"?

22 A. Yes, I believe I said that. I think I also said that
23 it was not at an intolerable level at that point, that we
24 knew in 2000 that the secrets had gotten out and that we may
25 eventually have to do a card swap, but we were going to wait

1 until it was at an intolerable level.

2 I may have said it was at a nuisance level at that
3 point in time. But certainly, since we weren't actually
4 swapping cards then, it wasn't at an intolerable level.

5 Q. In fact, in 2001 it remained at a nuisance level; isn't
6 that right?

7 A. In the beginning of 2001, at least here it was at a
8 nuisance level, I believe --

9 Q. It had not risen to an intolerable level?

10 A. Well, in -- in order to do the card swap, we had to do
11 a lot of things to get an alternate card system in place.
12 So in 2001 we actually did start that process with
13 NagraVision to design in our Aladdin card system. And we
14 had to do a lot of preparation work in order to get this
15 parallel system in place before we could actually do a card
16 swap. So we actually had started the process.

17 Q. Well, let me be clear, Mr. Kummer, because I don't want
18 there to be any confusion. EchoStar's CEO, Mr. Ergen, came
19 here and testified that the decision to do a card swap was
20 in 2002. Are you suggesting that the decision was earlier
21 than that?

22 A. I don't remember exactly when we decided that we were
23 gonna start putting new cards on. But as soon as we knew
24 that the card was compromised, we knew that we were gonna
25 have to work towards a new card system. And we started

1 that, as I recall, in the 2001 time frame.

2 Q. But you knew that back in 1998 the card was
3 compromised?

4 A. Again, we knew that some portions of the card was
5 available, but we didn't think that all of the secrets had
6 been compromised at that point.

7 Q. Well, let's try and roll time forward a little bit.
8 When piracy got to an intolerable level, it was because of
9 the introduction of free-to-air piracy; isn't that right,
10 Mr. Kummer?

11 A. Well, I would say that that was the culmination of the
12 piracy and that's when it got to that level, but there was a
13 lot of piracy devices in the interim. And so that's when it
14 got to the level where we no longer felt that we could do
15 electronic countermeasures and we could control it. So it
16 happened to be at the same time that the free-to-air devices
17 were becoming popular as a way to hack our system.

18 Q. Right. When free-to-air receivers became popular as a
19 way to hack your system, that's when you determined that
20 piracy had reached an intolerable level; isn't that right?

21 A. That's correct. That's when we decided we had to
22 complete the card swap.

23 Q. And, Mr. Kummer, free-to-air devices started to become
24 available or popular in 2002; isn't that right?

25 A. My recollection is more the 2003 time frame.

1 Q. And isn't it true that when free-to-air boxes became
2 introduced, you could see the writing on the wall a little
3 bit where this was headed, and that's when it became an
4 intolerable level? Isn't that right?

5 A. That's correct.

6 Q. Okay. And you're referring to the introduction of
7 free-to-air devices?

8 A. Yes. That's when we could no longer do the
9 countermeasures that we were doing on the set-top box.

10 Q. And that's because free-to-air devices don't use the
11 EchoStar set-top box; is that right?

12 A. That's correct.

13 Q. And that's because free-to-air devices don't use the
14 Smart Card?

15 A. That's correct.

16 Q. And because free-to-air devices don't use the EchoStar
17 set-top box or Smart Card, you could not control them with
18 ECM's or patches, correct?

19 A. We still had some ECM's that we could do against the
20 free-to-air boxes, but they were not as effective.

21 Q. And it was because you could not do effective ECM's and
22 effective patches against free-to-air receivers that
23 EchoStar decided to do a card swap; isn't that right,
24 Mr. Kummer?

25 A. Again, it was a culmination of all the hacking devices

1 at that point where we decided that we needed to do the card
2 swap.

3 Q. But, Mr. Kummer, I'm asking you a very specific and I
4 don't think very difficult question. When FTA receivers
5 became popular, because you could no longer do ECM's and
6 patches, that is when EchoStar decided to do a card swap;
7 isn't that right?

8 A. No. That's not the only reason.

9 Q. It's not because they -- because the free-to-air
10 devices became popular?

11 A. It was at that time, but it's not the only devices that
12 were available still at that time frame.

13 MR. SNYDER: Your Honor, I'd like permission to
14 play Mr. Kummer's deposition at page 196, lines 13 to 23.

15 THE COURT: You may.

16 (Videotape played as follows.)

17 "QUESTION: Was it at a nuisance level in 2001, in
18 your opinion?

19 "ANSWER: As I remember" --

20 THE COURT: Well, Counsel --

21 MR. SNYDER: Just cut it, please.

22 (Video discontinued due to technical
23 difficulty.)

24 BY MR. SNYDER:

25 Q. Mr. Kummer, in your deposition were you asked this

1 question, and did you give this answer?

2 "QUESTION: Was it at a nuisance level in 2001, in your
3 opinion?

4 "ANSWER: As I remember, like I said, until the
5 free-to-air boxes became available, which I believe was in
6 the 2002 time frame -- and even then it was -- you know, it
7 kind of started up at a small ramp. It took them awhile to
8 get to be at a popular level. But that's when they started
9 to become introduced. And when they started to become
10 introduced, we could see the writing on the wall a little
11 bit where this was headed. So that's really where I would
12 say it became an intolerable level."

13 That was your testimony, wasn't it, Mr. Kummer?

14 A. Yes, it was.

15 Q. And when it got to an intolerable level, that was when
16 EchoStar decided to do a card swap; isn't that right?

17 A. Yes. That's when the piracy had reached a level of
18 intolerance. It happened to coincide when the free-to-air
19 boxes had become available.

20 Q. Is it your testimony now, Mr. Kummer, that that's just
21 a coincidence?

22 A. It's my testimony that the free-to-air boxes were the
23 culmination of all the hacking devices that occurred over
24 time. And because the pirates had compromised the secret
25 element of the system, they were able to improve the piracy

1 devices over time. And free-to-air was just another
2 improvement on piracy devices.

3 Q. Mr. Kummer, you're aware, aren't you, that the
4 plaintiffs have agreed in this case that NDS is not
5 responsible for FTA piracy?

6 A. No, I wasn't aware of that.

7 Q. You don't know that?

8 A. I was not aware of that, no.

9 Q. And it was the introduction of FTA piracy that could
10 not be controlled by ECM's and patches that pushed piracy of
11 the EchoStar system from a tolerable level to an intolerable
12 level; isn't that right?

13 MR. WELCH: Your Honor, I'm going to object. He
14 misstated what the parties were going to stipulate to, which
15 hasn't been done yet, as it relates to free-to-air. We'd
16 move to strike his question and the testimony.

17 THE COURT: Just reask the question.

18 BY MR. SNYDER:

19 Q. Okay. Mr. Kummer, isn't it true that the introduction
20 of free-to-air boxes, which are not susceptible to ECM's and
21 which are not susceptible to patches in the same way as
22 Smart Card piracy, is what moved piracy from a tolerable
23 level to an intolerable level?

24 A. That's when the piracy became an intolerable level for
25 us and we had to complete the card swap.

1 MR. SNYDER: No more questions.

2 THE COURT: Why don't we take a recess for a
3 moment.

4 You're admonished not to discuss this matter
5 amongst yourselves nor to form or express any opinion
6 concerning the case.

7 We'll see you in about 20 minutes.

8 (Jury recesses.)

9 (Outside the presence of the jury.)

10 THE COURT: All right. We're on the record. The
11 jury's no longer present.

12 The gentleman who testified, Mr. Emerson, do you
13 need him back, Counsel? And if so, we'll have him come back
14 at 5:00. Do you need Mr. Emerson back?

15 MR. HAGAN: We do not need him back, Your Honor.
16 We are fine with the cross-examination as it stands.

17 THE COURT: You don't need any further discovery.
18 Are you requesting discovery that you have previously
19 requested at 1:00 o'clock?

20 MR. HAGAN: We do not feel that we need any
21 further discovery, Your Honor.

22 THE COURT: All right. Thank you very much.

23 Then, Mr. Emerson, 48 hours' call. Thank you,
24 sir.

25 (Witness excused subject to recall.)

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(Recess held at 3:05 p.m.)

(Further proceedings reported by Sharon
Seffens in Volume IV.)

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2
3 CERTIFICATE

4
5 I hereby certify that pursuant to Section 753,
6 Title 28, United States Code, the foregoing is a true and
7 correct transcript of the stenographically reported
8 proceedings held in the above-entitled matter and that the
9 transcript page format is in conformance with the
10 regulations of the Judicial Conference of the United States.

11
12 Date: May 1, 2008

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16 DEBBIE GALE, U.S. COURT REPORTER

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