

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

- - - - -

ECHOSTAR SATELLITE)	
CORPORATION, et al.,)	
)	
Plaintiffs,)	
)	
vs.)	No. SACV 03-0950-DOC
)	
NDS GROUP PLC, et al.,)	
)	Day 13, Volume I
Defendants.)	
_____)	

REPORTER'S TRANSCRIPT OF PROCEEDINGS

Jury Trial

Santa Ana, California

Wednesday, April 30, 2008

Jane C.S. Rule, CSR 9316
Federal Official Court Reporter
United States District Court
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Santa Ana, California 92701
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08-04-30 EchoStarD13V1

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I N D E X

EXAMINATION

Witness Name	Direct	Cross	Redirect	Recross
DALLA, CHRISTOPHER				
By Mr. Snyder	5		81	
By Ms. Willetts		64		86

EXHIBITS

Exhibit	Identification	Evidence
Defendants' No. 786		57
Defendants' No. 1350		16
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1 SANTA ANA, CALIFORNIA, WEDNESDAY, APRIL 30, 2008

2 DAY 13 - VOLUME I

3 (8:00 a.m.)

4 (The following proceedings is taken in the
5 presence of the jury.)

6 THE COURT: Good morning. The jury is present.
7 All counsel are present. The parties are present.

8 If you'd have a seat, Counsel. Thank you for your
9 courtesy.

10 On behalf of NDS, would you like to call your next
11 witness, please.

12 MR. SNYDER: Thank you, your Honor. Darin Snyder
13 on behalf of the Defendants NDS.

14 We call as our next witness Christopher Dalla.

15 THE COURT: Thank you.

16 Mr. Dalla, would you be kind enough to step
17 forward, sir.

18 And Mr. Dalla, will you raise your right hand.

19 CHRISTOPHER DALLA, DEFENDANTS' WITNESS, SWORN

20 THE WITNESS: I do.

21 THE COURT: Thank you, sir. If you'd please be
22 seated in the witness box to my left, and would you state
23 your full name for the jury, please.

24 THE WITNESS: My full name is Christopher Charles
25 Dalla.

1 THE COURT: And would you spell your last name for
2 the jury, please.

3 THE WITNESS: "D," as in David, a-l-l-a.

4 THE COURT: Thank you. And this is direct
5 examination by Mr. Snyder on behalf of NDS.

6 MR. SNYDER: Thank you, your Honor.

7 DIRECT EXAMINATION

8 BY MR. SNYDER:

9 Q Good morning, Mr. Dalla.

10 A Good morning.

11 Q Are you "StuntGuy"?

12 A I am.

13 Q How are you currently employed?

14 A I am employed as a hardware designer, software engineer
15 at a company called Tendril Networks in Boulder, Colorado.

16 Q What do you do for Tendril Networks?

17 A I design products that are going to be used as a --
18 part of a residential energy management system.

19 Q What is the highest level of formal education that you
20 received?

21 A I was enrolled in college for a year, but after that
22 time, the university implied that perhaps my money would be
23 better spent elsewhere and the desk would be better used by
24 someone who actually cared about going to class.

25 (Laughter.)

1 BY MR. SNYDER:

2 Q Nobody is trying to embarrass anybody, but I take it
3 from that that you mean you didn't graduate?

4 A I did not graduate college.

5 Q Do you have any formal analysis -- formal education,
6 Mr. Dalla, in the analysis of Smart Cards?

7 A No.

8 Q Do you have any formal training in reverse engineering
9 Smart Cards?

10 A No.

11 Q Do you have any formal training in the analysis of the
12 code or software that's inside Smart Cards?

13 A No.

14 Q Do you know a fair amount about Smart Cards?

15 A Yes.

16 Q How did you learn that?

17 A By experimenting with them, looking at -- at code and
18 information I could find on the internet.

19 Q Was it basically a hobby?

20 A Yes.

21 Q At some point, did you get involved in satellite
22 security systems?

23 A Well, yeah, I mean, that's how I sort of came to be
24 involved with looking at Smart Cards, as they were involved
25 with satellite security systems.

1 Q And when did you first get involved with satellite
2 security systems?

3 A I don't remember. It would have been maybe '97, '98,
4 something like that, is when I started looking at them.

5 Q Okay. And what about satellite security systems
6 garnered your interest or captured your interest?

7 A It just seemed like an interesting problem that -- it
8 was a complex problem that I was interested in seeing how --
9 how it was solved, how the -- the problem of -- of
10 implementing a security system for satellite television
11 was -- was handled.

12 Q Now, as part of your interest in satellite security
13 systems, did you get involved in hacking those systems?

14 A When you say "hacking," what do you mean, specifically?
15 There -- there are a lot of definitions of hacking.

16 Q Well, that's a -- that's a great question. Well, what
17 do you understand hacking to mean?

18 A To me, hacking is taking a look at -- is taking an
19 established product or process or device and taking it apart
20 to look at it, to see how it works, and yes, I did that with
21 satellite security systems.

22 Q Mr. Dalla, do you distinguish in your mind between
23 hacking and piracy?

24 A Yes.

25 Q Were you ever involved in piracy of satellite systems?

1 A No.

2 Q But you were involved in hacking them?

3 A Yes.

4 Q Taking them apart and seeing how they worked?

5 A Yes.

6 Q As part of your activities in hacking satellite
7 security systems, did you post information on the internet?

8 A Yes.

9 Q And did you consistently do that under an alias?

10 A Yes.

11 Q What alias did you use?

12 A StuntGuy.

13 Q Was "StuntGuy" pretty well known on the internet?

14 A I'm -- you know, at the time, I really wasn't paying
15 attention to how well known, but I'm sort of gathering by
16 the way everybody introduces me as "StuntGuy" ever since
17 this whole trial thing came up, that yeah, I apparently did
18 achieve a fair degree of notoriety.

19 (Laughter.)

20 BY MR. SNYDER:

21 Q How did you pick the name "StuntGuy," Mr. Dalla?

22 A I don't recall.

23 Q When did you start posting information on the internet?

24 A About satellite information or --

25 Q No, that's -- I'm sorry. I asked a very poor question.

1 I'll withdraw it.

2 When did you start posting on the internet information
3 about satellite security systems?

4 A I -- I don't remember exactly, but it probably would
5 have been, you know, sometime after I got involved in
6 looking at them, so it would have been '98, '99 maybe.

7 Q Now, are you familiar with a company called NDS,
8 Mr. Dalla?

9 A Yes.

10 Q And how are you familiar with NDS?

11 A Well, NDS -- I knew at the time that I was involved
12 in -- in -- in hacking satellite stuff, I was aware that NDS
13 was the company that did the -- the Smart Cards that the
14 DirecTV system used, and at this point, NDS also is -- you
15 guys approached me about being a witness in this case.

16 Q And when were you first approached by someone about
17 being a witness in this case?

18 A It was, I don't know, February 1st, February 2nd of
19 this year, perhaps.

20 Q And before that, had -- had anybody from NDS ever
21 contacted you?

22 A No.

23 Q Before that, had anybody from EchoStar ever contacted
24 you?

25 A Not in relation to satellite piracy.

1 Q Now, during the time that you were involved in hacking
2 satellite security systems, were you ever contacted by
3 anybody from NDS?

4 A No.

5 Q Do you have an agreement with NDS now?

6 A I do.

7 Q Do you have a general understanding of the terms of
8 that agreement?

9 A I do.

10 Q What are they?

11 A The terms of that agreement are that I am to --
12 basically, I was to cooperate in NDS's defense in that they
13 wanted to depose me as to any knowledge that I might have
14 had about satellite hacking, in particular, hacking about --
15 of the EchoStar system. And in addition to that, if they
16 wanted to call me as a witness, that I was to agree to -- to
17 come and -- and appear as a witness. Basically, I was to
18 cooperate with them, and in return for that, they were to
19 indemnify me against any possible actions they might have
20 for things that I might have done related to hacking NDS's
21 cards, and in addition, to pay my travel expenses and legal
22 fees associated with appearing here and in the deposition.

23 Q Okay. Was one of the conditions of that agreement,
24 Mr. Dalla, that you tell the truth?

25 A Absolutely.

1 Q Is NDS paying you any money other than your expenses?

2 A No.

3 Q Has NDS promised you anything other than it would pay
4 your expenses?

5 A No.

6 Q Have you been hired by NDS as a consultant?

7 A No, I have not.

8 Q Have you been hired as an NDS -- as an informant?

9 A No.

10 Q Have you been hired by NDS in any way whatsoever?

11 A No, I have not.

12 Q Just so we're clear, other than paying your expenses,
13 you are not getting a nickel from NDS?

14 A Correct.

15 Q Now, you'd mentioned before that you were involved in
16 hacking satellite security systems. Was -- was your
17 attention focused on any particular system?

18 A At first, I was looking at the DirectTV, the NDS cards,
19 because they were the most prevalent and the most heavily
20 talked about at the time, but eventually there came a point
21 when I -- you know, those cards were not interesting, and
22 there began to become more talk about EchoStar cards, so I
23 started looking at those.

24 Q And when did you -- approximately when did you start
25 looking at EchoStar cards?

1 A I -- I don't recall exactly, but it would have been in
2 '98, 99, somewhere in there.

3 Q And after you started looking at EchoStar cards, is
4 that really the focus of your attention in satellite
5 security?

6 A Yes.

7 Q And how long did you participate or were you involved
8 in hacking the EchoStar security satellite system?

9 A Oh, you know, again, it's tough for me to say exactly.
10 I -- you know, I -- basically, my interest in that waned in
11 early 2000, so you know, from some point in '98, '99 to
12 early 2000.

13 Q During that entire time --

14 A Or actually, maybe it was early 2001. I think it was
15 early 2001.

16 Q So for about three years or so?

17 A Yeah.

18 Q During those -- and you posted information on the
19 internet regularly during those years?

20 A Well, I mean, "regularly" sort of implies that on a
21 weekly basis or something like that. You know, I -- I would
22 post information as it -- as I had information to post, but
23 it was not necessarily -- I did not necessarily have
24 information to post regularly.

25 Q When you posted information on the internet about the

1 EchoStar system, did it stay on the internet? And what I'm
2 trying to -- what I'm trying to clarify, were -- were these
3 messages that you'd send to somebody and then disappear, or
4 was it information that was put on a website and then would
5 be available, unless somebody happened to take it down?

6 A Both. There were some messages that I posted to
7 forums, and I also authored an FAQ, which went into the --
8 the workings of the EchoStar security system.

9 Q And did that -- was that FAQ available for anybody to
10 access?

11 A As far as I know, yes.

12 Q Now, during the three years that you were involved in
13 hacking the EchoStar system, did anyone from EchoStar ever
14 contact you?

15 A Again, not in relation to hacking. I was a subscriber
16 to EchoStar at the time.

17 Q And so how did EchoStar contact you?

18 A And so -- well, I mean, they would occasionally -- you
19 know, we'd get calls from the CSR saying, "Hey, you want to
20 subscribe to the Starz channel," things like that, but, you
21 know, outside of that, no.

22 Q Did they ever contact you about your FAQ?

23 A No.

24 Q Did they ever contact you about hacking?

25 A No.

1 Q Did anybody from NagraStar ever contact you about your
2 FAQ?

3 A No.

4 Q Did anybody from NagraStar ever contact you about
5 hacking the EchoStar system?

6 A No.

7 Q Did -- have you ever heard of a gentleman named Alan
8 Guggenheim?

9 A No.

10 Q Did Mr. Guggenheim ever contact you?

11 A No.

12 Q Have you ever heard of JJ Gee?

13 A I've heard of JJ Gee now, because JJ Gee was at my
14 deposition in March, but before that, no.

15 Q So before March of this year, you'd never met or heard
16 of or been contacted by Mr. Gee?

17 A No.

18 Q Since you stopped participating in -- in EchoStar
19 hacking, until you were contacted by NDS in connection with
20 testifying for this lawsuit, had anybody from EchoStar
21 contacted you?

22 A Again, not in connection with hacking or piracy or the
23 FAQ or anything like that.

24 Q Just as a subscriber?

25 A Correct.

1 Q And during that time, had anybody from NagraStar ever
2 contacted you?

3 A No.

4 Q At any point, did somebody contact you and say, "You
5 know, this FAQ, that's" -- "we don't think you should be
6 doing that. You shouldn't post that on the internet"?

7 A No.

8 Q Did anybody ever contact you and say that there was
9 anything wrong or improper with you posting the information
10 in your FAQ about EchoStar hacking?

11 A No.

12 Q Did anybody ever contact you and ask you to take it
13 down?

14 A No.

15 Q Did anybody ever tell you that there was something
16 illegal about the postings that you were making in the FAQ
17 about EchoStar hacking?

18 A No.

19 Q You -- you put the information out there, and it -- it
20 stayed out there until you changed it?

21 A Yeah, basically there was -- you know, I would find
22 information on the internet, code, things like that. I
23 would analyze it, and the results of those analyses are what
24 I was publishing.

25 Q Okay.

1 Could you please show the witness Exhibit 1350, please.

2 BY MR. SNYDER:

3 Q Mr. Dalla, do you recognize what we've marked as
4 Exhibit 1350?

5 A I do.

6 Q Is this an early version of your EchoStar Hacking FAQ?

7 A It is.

8 Q And you prepared this sometime in December of 1998?

9 A Well, I don't know if I prepared it in December or
10 November. Certainly when I prepared it, I -- I foresaw that
11 I might be releasing it, or you know, putting it on the
12 internet or something like that in December of '98, but
13 around that time frame, yes.

14 MR. SNYDER: Your Honor, I move Exhibit 1350.

15 THE COURT: Any objection?

16 MS. WILLETTS: No objection, your Honor.

17 THE COURT: Received.

18 (Defendants' Exhibit No. 1350 is received
19 into evidence.)

20 MR. SNYDER: Charlie, could you highlight the very
21 top portion, please.

22 BY MR. SNYDER:

23 Q Okay. So this is -- FAQ is a standard internet
24 abbreviation, Mr. Dalla?

25 A Yes.

1 Q What does that stand for?

2 A Frequently asked questions.

3 Q Why did you entitle your document "EchoStar Hacking
4 FAQ"?

5 A Because it's kind of standard practice. Whether or not
6 a document is about -- is something that -- that takes a
7 question and answer format, if there is a document that is
8 intended to provide information about a specific topic,
9 oftentimes on the internet, it's -- it's common practice to
10 call it an FAQ. For example, a lot of video games, sort of
11 walk-throughs and guides, are called FAQs on the internet.

12 Q Is this the earliest version of -- of your FAQ that
13 you're aware of Mr. Dalla?

14 A Yes.

15 Q And -- and it's from approximately when?

16 A Approximately, December, November of 1998.

17 Q And what was the purpose of creating this EchoStar
18 Hacking FAQ?

19 A Basically to consolidate information that I had found
20 on the internet. In fact, I think it may even say in there
21 that -- that my objective was to -- to sort of coalesce all
22 the information that was sort of floating around and that --
23 that took many disparate forms and -- and sort of homogenize
24 it.

25 Q Can you give us a little bit of an idea of the kinds of

1 information that you collected on the internet to create the
2 EchoStar Hacking FAQ?

3 A Oh, there would have been bits of code that were
4 floating around. There would have been information about
5 how various of the -- the processes in the -- in the
6 security system worked. There would have been log dumps
7 of -- of data being communicated back and forth between the
8 satellite receiver and the card, that sort of thing.

9 Q How did you get that information?

10 A It was on the internet. I just downloaded it.

11 Q So all the information that you collected was publicly
12 available, you just consolidated it?

13 A Yes.

14 Q Can you tell the jury approximately how many pages are
15 in this early version of your EchoStar Hacking FAQ.

16 A Well, it looks like 15, 16.

17 Q Now, among the information that you received, did you
18 ever receive any photomicrographs of chips?

19 A Ultimately, yes.

20 Q And did you receive photomicrographs of the EchoStar
21 chip?

22 A Ostensibly, that's what they were, yes.

23 Q Okay.

24 Could you hand the exhibit, please -- or the witness,
25 please, Exhibit 1357-A.

1 BY MR. SNYDER:

2 Q Do you recognize these pictures, Mr. Dalla?

3 A These appear to be photomicrographs of -- of an
4 integrated circuit.

5 Q Okay. And are these -- these are photomicrographs that
6 were sent to you?

7 A I -- I assume so, yes.

8 Q Okay.

9 I move Exhibit 1357-A, your Honor.

10 THE COURT: Any objection?

11 MS. WILLETTS: Objection, your Honor. Lack of
12 foundation. He doesn't know where the photos come from.

13 THE COURT: Reask the question, Counsel.

14 BY MR. SNYDER:

15 Q Are these photomicrographs that you received,
16 Mr. Dalla?

17 A These look like photomicrographs that I -- that I've
18 had, so probably, yes.

19 Q Okay. And could you look at the last page, please.

20 A Certainly.

21 Q In the middle, there's a dark bar.

22 A Uh-huh.

23 Q And on the left-hand side, it says "ST copyright 1994"?

24 A Yes.

25 Q And then in the middle, it -- you can see where it says

1 "CF1654"; do you see that?

2 A Yes, ST-16CF54A.

3 Q And what is the 16CF54?

4 A The -- that would be the -- the microchip that was in
5 the Smart Cards that EchoStar's -- that were using
6 EchoStar's Smart Card.

7 MR. SNYDER: I move Exhibit 1357-A, your Honor.

8 THE COURT: It's received.

9 (Defendants' Exhibit No. 1357-A is received
10 into evidence.)

11 BY MR. SNYDER:

12 Q Mr. Dalla, is it your understanding that
13 photomicrographs are taken of the scanning electron
14 microscope?

15 A They can be. They can also be taken with a regular
16 microscope.

17 Q Okay. Approximately when did you receive these
18 photomicrographs?

19 A I don't recall.

20 Q Was it sometime while you were preparing your FAQ?

21 A Well, yeah, because you know, I started preparing the
22 FAQ when I started looking at the EchoStar security system,
23 and I mean, work on that was sort of ongoing until I
24 basically stopped participating at all, so --

25 Q And were you told -- did somebody tell you why these

1 were being sent to you?

2 A No.

3 Q They just --

4 A I mean, I find things like this interesting, and I, in
5 fact, occasionally on the internet do a -- a search for --
6 for photomicrographs just because I find it interesting to
7 look at them and see if, you know, there are things on them
8 that are -- that the chip designers hid, like on -- on this,
9 there is a -- you know, a little frog to one side that --
10 that -- you know, things like that I enjoy looking for.

11 Q And you can also tell by looking at the micrograph what
12 chip it is?

13 A Well, in this case, yes; not always, but --

14 MR. SNYDER: So let's take and show that to the
15 jury. If you could go to the last page of the exhibit,
16 please.

17 And blow up the dark bar in the middle as large as
18 we can make it.

19 I'm not sure -- can you point out where the -- it
20 says "ST copyright 1994" on the left-hand side.

21 BY MR. SNYDER:

22 Q Mr. Dalla, do you see it?

23 A Yeah. Yeah, that's -- yes.

24 Q And then -- and then towards the middle of that same
25 bar, it says "16CF54"?

1 A Yes.

2 Q And so embedded into the actual silicon of this
3 computer chip, it identifies the actual chip?

4 A Yes.

5 Q And the 16CF4 chip manufactured by ST was the chip used
6 by -- in the EchoStar system?

7 A Yes.

8 Q So at some point when -- while you were working on your
9 FAQ, someone was able to make these photomicrographs of the
10 chip?

11 A Yes.

12 Q And you -- you obtained a copy of those?

13 A Yes.

14 Q Using photomicrographs, are you able to obtain the ROM
15 code for -- for a chip?

16 A Yes.

17 Q You didn't do that, though?

18 A No.

19 Q But it would be possible for somebody using
20 photomicrographs like these to obtain ROM code?

21 A I don't know if these particular photomicrographs could
22 be used to do that, but photomicrographs can be used to do
23 that.

24 Q And so, presumably, whoever was making these
25 photomicrographs would have able to obtain the ROM code for

1 the EchoStar card?

2 A It -- it's a good possibility, yes.

3 MR. SNYDER: Could you show the witness, please,
4 Exhibit 1352.

5 BY MR. SNYDER:

6 Q Mr. Dalla, is this a later version of your EchoStar
7 Hacking FAQ?

8 A Yes, it is.

9 Q And did you prepare this on or about December 28th,
10 2000?

11 A Yes, I did.

12 MR. SNYDER: I move Exhibit 1352, your Honor.

13 THE COURT: Any objection?

14 MS. WILLETTS: No objection, your Honor.

15 THE COURT: Received.

16 (Defendants' Exhibit No. 1352 is received
17 into evidence.)

18 BY MR. SNYDER:

19 Q If we could take a look at the very top of the page,
20 you changed the title from "EchoStar Hacking FAQ" to
21 "NagraVision Hacking FAQ"; do you see that?

22 A I do.

23 Q Why did you change the title?

24 A Because during the course of my analysis of all the
25 information that was out there, it had become clear to me

1 that this information was applicable, not just to the
2 EchoStar security system, but to the NagraVision security
3 system, in general.

4 Q And -- and why did you make that distinction?

5 A Because, I mean, it -- it's just what it is. This
6 applies to -- to more than just EchoStar. It applies to
7 NagraVision.

8 Q Right, and did Nagra use the same card in multiple
9 systems?

10 A Yes.

11 Q Do you recall any of the systems other than EchoStar
12 that used that card?

13 A You know, I -- I don't recall, specifically. I think
14 maybe -- I think there was a Canadian one, like maybe
15 ExpressVu. I think there was one in Spain that -- I don't
16 recall what the name of the --

17 Q Was that via digital?

18 A Yes.

19 Q And then you -- you have also indicated a revision date
20 on this document?

21 A Yes.

22 Q December 28th, 2000?

23 A Yes.

24 Q Is that about the time that you prepared this revision?

25 A Yes.

1 Q Now, can you tell the jury approximately how many pages
2 there are in this version of your -- your NagraStar Hacking
3 FAQ?

4 A Well, the page numbers at the bottom go up to 148, but
5 here is at least one page that doesn't seem to have a --
6 well, actually, the -- the last page is numbered page 149.

7 Q So we've gotten considerably larger?

8 A Yes.

9 Q Is the -- is what we've marked as 1352, the
10 December 2000 version of your FAQ, an update of the exhibit
11 that we marked earlier, 1350 from 1998?

12 A Yes.

13 Q And does this represent the additional EchoStar hacking
14 information that you collected on the internet in those two
15 years?

16 A Yes.

17 Q Now, there are several parts of this exhibit that
18 I'm -- I'm going to have to -- or want to ask you questions
19 about, Mr. Dalla, so we're going to take some time with it,
20 if you don't mind.

21 Could you look at -- if you could look, please, at
22 the -- I believe it's the fourth page of the exhibit. It
23 has the number 1352-4 at the bottom.

24 A Uh-huh.

25 Q And it has an introduction.

1 A Yep.

2 Q What is the first sentence of that introduction?

3 A It says "Okay, the first thing I'd like to say is that
4 I'm not the one" --

5 THE COURT: Just a little slower.

6 THE WITNESS: Oh, I'm sorry.

7 THE COURT: A little slower, so we can get what
8 you are saying.

9 THE WITNESS: I'm sorry, your Honor.

10 It says "Okay, the first thing I'd like to say is
11 that I'm not the one who figured all of this stuff out.
12 While I did figure -- figure out a lot of it, there's lots
13 of information in here that came from other sources. Their
14 names will be included in Section 0.3, 'Contributors,' as
15 will the names of others who have aided the cause."

16 BY MR. SNYDER:

17 Q And could you turn, please, towards the back to the --
18 to page that's got the number 1352-147.

19 A Yes.

20 Q And then there's a section entitled "12.1, Change Log";
21 do you see that?

22 A Uh-huh, yes.

23 Q What is the change log?

24 A Basically it just sort of details all the additions and
25 things like that of information as I added it to the -- to

1 the document.

2 Q Okay. And so does it indicate the date of the revision
3 or the change that you made?

4 A Yes.

5 Q Does it indicate any other information about the
6 changes that you made?

7 A Well, it indicates, you know, what specific information
8 I added to the document at that time.

9 Q So there is a little description of the changes you
10 made?

11 A Yeah, yes.

12 Q And then if you could -- we'll -- we'll come back to
13 some of these portions, but there is another aspect that I'd
14 like to take a look at. Could you look at the very last
15 page, please. It's marked 1352-148.

16 A Uh-huh.

17 Q And there is a Section 12.3.

18 A Yeah.

19 Q What's the title of that section?

20 A "Contacting me."

21 Q And do you include your e-mail address in there?

22 A Well, I included a StuntGuy e-mail address that I was
23 using at the time.

24 Q So people could contact you at the StuntGuy e-mail
25 address?

1 A Yes.

2 Q And this e-mail address was posted on the internet in
3 your Nagra hack -- or Nagra Hacking FAQ?

4 A Yes.

5 Q Did anybody from EchoStar ever contact you at that
6 e-mail address?

7 A Not that I recall.

8 Q Did anybody from NagraStar ever contact you at that
9 e-mail address?

10 A Not that I recall.

11 Q Did anyone from NagraStar or EchoStar contact you and
12 ask -- at that e-mail address and ask you to take your FAQ
13 down?

14 A Not that I recall.

15 Q Did EchoStar or NagraStar ever contact you at that
16 e-mail address and suggest that you shouldn't be publishing
17 this Nagra Hacking FAQ?

18 A Not that I recall.

19 Q Was there any time where somebody contacted you and
20 told you to take this down, and that's what you did?

21 A Again, not that I recall.

22 Q What is -- that address is at dishplex.com; do you see
23 that?

24 A Yes.

25 Q What is DISH Plex, or what was DISH Plex?

1 A I -- if I recall correctly, DISH Plex was a website
2 that was related to looking at satellite hacking, satellite
3 TV hacking.

4 Q Did you know any of the people associated with DISH
5 Plex?

6 A I sort of interacted with them on the internet, but I
7 didn't know any of them personally.

8 Q Okay. Were there any other groups that were also
9 associated with the DISH Plex group?

10 A Well, I mean, you know, there was a -- a group of guys
11 that I sort of associated with that were the -- the EROM
12 guys that tended to kind of hang out at DISH Plex and -- I
13 think they all had e-mail addresses at DISH Plex, but other
14 than that, there may have been, there may not have been.

15 Q And the EROM guys, was that a group of people, or was
16 that a forum; what was that?

17 A That was a group of people.

18 Q Okay. Was there also a -- a forum called EROM?

19 A I don't recall.

20 Q Okay. Did you ever learn the identities of any of the
21 EROM guys?

22 A No.

23 Q Did you ever learn where they were located?

24 A No.

25 Q Did you ever learn where DISH Plex was located?

1 A No.

2 Q Did you ever find out that it was in Ontario, Canada?

3 A No.

4 Q Did you ever find out that the EROM guys were in
5 Ontario, Canada?

6 A No.

7 Q In your FAQ, did you tell people where to find the --
8 where they would be able to find it?

9 A Probably, there -- there's probably a thing in here
10 that says where the most recent version can be found.

11 That's usually a common thing that's done in FAQs.

12 Q And did you tell people that they could find it on
13 dishplex.com?

14 A Yeah, as a matter of fact, here it is on page 4, "Where
15 to find this FAQ, the latest official release" --

16 THE COURT: Just slower.

17 THE WITNESS: I'm sorry.

18 THE COURT: I've got to take a record.

19 THE WITNESS: I'm sorry, your Honor.

20 Yeah, in Section 0.2, it says "The latest official
21 release of this FAQ can always be found at" --

22 THE COURT: Let's stop. Just rest.

23 THE WITNESS: Okay.

24 THE COURT: Counsel, why don't you just read that.

25 MR. SNYDER: So let's turn, please, to page 4 of

1 the exhibit, and the Section .2, "Where to find this FAQ."

2 THE COURT: Let the record reflect that the reason
3 the Court stopped the witness was because we couldn't get an
4 accurate transcription because of the speed.

5 BY MR. SNYDER:

6 Q And Mr. Dalla, please tell me if I read this correctly.
7 "The latest official release of this FAQ can always be found
8 at <http://www.dishplex.com/eromcentral.shtml>"; is that
9 right?

10 A Yes, that's correct.

11 Q And is that where you posted your Nagra Hacking FAQ?

12 A Well, I -- I don't recall that I specifically posted it
13 myself. I probably -- I -- I think I probably sent it to
14 somebody else, and -- and they put it there. I don't recall
15 having had, you know, any kind of -- it -- usually, to put
16 something on a website, you have to have some sort of
17 high-level administrative kind of access, and I never had
18 that level of access to any -- any website.

19 Q You -- you didn't have administrator privileges on the
20 DISH Plex website?

21 A Not -- not to my knowledge. I might have, but I didn't
22 know.

23 Q You would provide your Nagra Hacking FAQ to someone at
24 DISH Plex, and they would post it?

25 A Or to someone on the IRC, and they would post it, yeah.

1 Q Now, the next section on this page, 0.3, is labeled
2 "Contributors"; do you see that?

3 A Yes.

4 Q And the first contributor -- well, actually, let's take
5 a look at the first sentence. It says "The following is a
6 list, in no particular order, of people who I think have
7 made a significant contribution to the cause of NagraVision
8 hacking in one form or another"; do you see that?

9 A Yes.

10 Q And is that what you did, is list the people that you
11 thought had made significant contributions on the internet
12 to material you collected?

13 A Yes.

14 Q What is the first one that's listed at the bottom of
15 the page?

16 A Swiss Cheese Productions/Mr. Bean.

17 Q And what was Swiss Cheese Productions?

18 A Swiss Cheese Productions was the name of -- I don't
19 know if it was a person or a group, but there was some
20 technical -- looking at this, it seems that there was some
21 technical document that -- that was released and was
22 attributed to Swiss Cheese Productions and a person calling
23 themself Mr. Bean.

24 Q And did Swiss Cheese Productions publish some of the
25 earliest information about the Nagra or EchoStar code on the

1 internet?

2 A As I recall, yes.

3 Q Did you ever find out who the real identity of Swiss
4 Cheese Productions was?

5 A No.

6 Q Did you ever find out who the real identity of Mr. Bean
7 was?

8 A No.

9 Q Did you ever see any information whatsoever to suggest
10 that Swiss Cheese Productions was connected somehow to Chris
11 Tarnovsky?

12 A No.

13 Q Do you know who Chris Tarnovsky is?

14 A I do now, but I didn't at the time.

15 Q Before this litigation, had you ever heard of Chris
16 Tarnovsky?

17 A Not that I recall.

18 Q Have you ever heard of any information at all to
19 suggest that Mr. Bean is in some way connected with Chris
20 Tarnovsky?

21 A No.

22 Q Have you ever heard any information at all that NDS is
23 connected in any way to Swiss Cheese Productions?

24 A No.

25 Q Have you ever seen or heard any information at all that

1 NDS is connected in any way to Mr. Bean?

2 A No.

3 Q Could you turn, please, to the next page. So that's
4 1352-5.

5 And you list, here, a number of -- of additional
6 contributors?

7 A Yes.

8 Q The fourth one down is the EROM guys; do you see that?

9 A Yes.

10 Q And it says "For providing a good environment in which
11 to work, good information and good sounding boards."

12 A Yes.

13 Q Is that the group you mentioned earlier was connected
14 with DISH Plex?

15 A Yes.

16 Q And then further down -- well, let me pause there for a
17 moment.

18 Did you ever see or hear or find any information
19 whatsoever to connect the EROM guys with Chris Tarnovsky?

20 A No.

21 Q Did you ever see or hear or find out any information at
22 all connecting NDS with the EROM guys in any way?

23 A No.

24 Q Going down a few more, there's -- there's someone named
25 Dish Farmer?

1 A Yes.

2 Q Do you see that?

3 A Yep.

4 Q Did you ever find out who Dish Farmer is?

5 A No.

6 Q Did you ever hear that Dish Farmer was a gentleman
7 named Peter Beck?

8 A No.

9 Q Have you ever heard of Peter Beck, who lives in
10 Ontario, Canada?

11 A No.

12 Q Did you ever find any information at all that Dish
13 Farmer was connected with Chris Tarnovsky?

14 A No.

15 Q Ever find any information at all that Dish Farmer was
16 connected in any way with NDS?

17 A (No audible response.)

18 Q Maybe I can save us a little time. For any of the
19 contributors that you list in this exhibit, did you ever
20 learn any information at all, and I mean anything, other
21 than in connection with this lawsuit, connecting them to
22 Chris Tarnovsky?

23 A No.

24 Q Did you ever learn any information at all from any
25 source at all, other than this lawsuit and its allegations,

1 connecting any of these aliases to NDS?

2 A No.

3 Q In the context of this litigation, have you been shown
4 any information that would connect any of these aliases to
5 Chris Tarnovsky?

6 A Other than the -- the allegations in the Complaint?

7 Q That's right.

8 A No.

9 Q Have you been shown any information that would connect
10 any of these aliases to NDS?

11 A No.

12 Q Now, one of the people that you're -- one of the
13 aliases that you list on this FAQ is Nipper?

14 A Yes.

15 Q Do you see that?

16 A Yes, I do.

17 Q Do you understand that Nipper plays sort of an
18 important role in this case?

19 A Yes.

20 Q And so I want to ask you about it specifically.

21 A Okay.

22 Q Did you ever receive any information at all connecting
23 Nipper to Chris Tarnovsky?

24 A No.

25 Q Did you ever receive any information at all connecting

1 Nipper to NDS?

2 A No.

3 Q Did you ever find out who Nipper was?

4 A No.

5 Q Did you ever learn that Nipper was somebody in Ontario,
6 Canada?

7 A No.

8 Q Now, I would like to go back to the EROM guys for a
9 minute.

10 Were the EROM guys -- did they provide a substantial
11 amount of information to you for your FAQ?

12 A As I recall, yes.

13 Q What kinds of information did the EROM guys provide?

14 A Well, ultimately, I seem to recall that they provided a
15 complete code dump from one of the EchoStar cards. They --
16 you know, also, one of the things about the EROM guys
17 that -- that I seem to recall is that they were a -- a
18 fairly technically astute bunch of guys, who when I was sort
19 of stuck on a problem, I could bounce ideas off them and
20 get -- and you know, thereby stimulate my own thought
21 processes to -- to achieve a solution to the problem.

22 Q Was one of the things that you did as part of the
23 preparation of your FAQ analyzing one or more ROM dumps?

24 A Yes.

25 Q And creating disassemblies from it?

1 A Yes.

2 Q And were those ROM dumps that you received from the
3 EROM guys?

4 A I think at least one of them was. I don't recall -- I
5 seem to recall that I had dumps of both the -- the ROM 2 and
6 ROM 3 cards, and I -- I think the EROM guys provided me with
7 the ROM 3 dump. I don't recall where the ROM 2 dump came
8 from.

9 Q If you'd look at the second to the last page of this
10 exhibit, please, it has the production number ESC0099440.

11 A Yes.

12 Q And there is an entry dated July 15th, 2000.

13 A Yep.

14 Q Is this part of your change log, Mr. Dalla?

15 A Yes, it is.

16 Q And this identifies approximately when you made various
17 changes to your NagraStar hacking FAQ?

18 A Yes.

19 Q And the entry for July 15th, 2000, I'm going to look at
20 the third -- the third part of that entry. It says
21 "Completed analysis of all commands based on EROM 288-02 ROM
22 dump."

23 A Yes.

24 Q What is 288-02?

25 A That was the -- the -- I guess, code number or product

1 number that was printed on the back of a particular revision
2 of the EchoStar Smart Cards.

3 Q And is that what's been known as the ROM 3 Smart Cards?

4 A I believe so, yes.

5 Q And the ROM 3 ROM dump is the one that you received
6 from the EROM guys?

7 A I believe that's correct, yes.

8 THE COURT: Now, when you say "believe" --

9 THE WITNESS: Sorry, yes.

10 THE COURT: Do you know or not?

11 THE WITNESS: I -- I seem to recall that that's
12 the case, but it was a long time ago, your Honor.

13 THE COURT: I want the jury to have a clear
14 understanding --

15 THE WITNESS: Right, sure.

16 THE COURT: -- if you actually recall --

17 THE WITNESS: Okay.

18 THE COURT: Okay.

19 BY MR. SNYDER:

20 Q Mr. Dalla, did you ever learn that people had access to
21 backdoor commands in the EchoStar card?

22 A Yes, I recall that.

23 Q What are backdoor commands?

24 A Well, in -- in this particular context, what the
25 backdoor commands are is when you do a -- a card such as

1 this where a lot of the code is in ROM and can't be altered,
2 but there is a portion of the -- the -- the processor where
3 you can write new code, what you do is you would add some
4 manufacturing commands that would be used at manufacturing
5 time just prior to deployment that would allow you to do
6 things like get the -- the writable portion of the card
7 updated with the latest version of all the patches to the
8 code and things like that. Typically, those commands
9 wouldn't be ones that were usable once the thing had been
10 deployed into the field.

11 Q Okay. And were those commands that you identified as a
12 result of analyzing the ROM 3 dump?

13 A I don't recall if I identified them or if somebody else
14 pointed me in the direction of them. I -- I recall seeing
15 them in the disassembly, but I don't recall if I -- if I
16 discovered them autonomously or not.

17 Q And was that something that you or others discovered in
18 about mid-2000?

19 A I don't recall when they were discovered.

20 Q You did record that information, though, in your
21 NagraStar -- or your Nagra Hacking FAQ?

22 A The information about the backdoor commands? I -- I
23 believe I did.

24 Q Now, just so that everyone understands -- I'll find it
25 for you, Mr. Dalla.

1 A Okay.

2 Q Going back to the description of -- of the backdoor
3 commands, are those backdoor commands something that users
4 would typically be able to see?

5 A No.

6 Q And why not?

7 A Well, typically, in fact, none of the commands for
8 these Smart Cards are things that you typically see. A user
9 of a Smart Card, they just plug it into their satellite
10 and --

11 Q Slow down, Mr. Dalla.

12 A Sorry.

13 So, you know, to -- to say that -- that a user would
14 not ordinarily see these backdoor commands, it -- it sort of
15 implies something that I think isn't true. Ordinarily, I
16 mean, the user of the Smart Card is the end consumer, the
17 guy who has the satellite box, right? And that guy
18 ordinarily wouldn't see any commands. However, the backdoor
19 commands are not commands that would ordinarily be used
20 during the course of normal operation of the card. I think
21 that's the question you are asking.

22 Q Okay. Would -- if hackers know the backdoor commands,
23 would that be -- would that make creating pirate cards much
24 easier?

25 A It could, yes.

1 Q Could you look, please, at page 69 of the exhibit. So
2 it's marked 1352-69.

3 A Yep.

4 Q And the very top of the page.

5 Maybe we could blow that up, please, that -- that whole
6 paragraph.

7 BY MR. SNYDER:

8 Q The first sentence says "The NagraVision cards
9 apparently have several backdoor commands built in to allow
10 factory loading of EEPROM and other utility functions"; do
11 you see that?

12 A Yes.

13 Q And in the last sentence of that paragraph, you say,
14 "In this section, I'll provide all the details I have on the
15 backdoor passwords and the backdoor command."

16 A Yes.

17 Q Now, if you could look down at the bottom of that page,
18 there is a section entitled "The backdoor commands."

19 A Yes.

20 Q And underneath that, it says "Once one knows what the
21 backdoor passwords are or knows how to glitch the card so
22 that the card thinks one knows the backdoor passwords,
23 several utility commands become available that theoretically
24 should only be used for testing the card and loading the
25 EEPROM at the factory. For a hacker, however, the backdoors

1 provide an easy way of dumping the card, getting 3M code
2 into the card, and so on."

3 Do you see that?

4 A Yes.

5 Q And that was part of the text that you put into your
6 EchoStar Hacking FAQ?

7 A Yes.

8 Q There's a -- there's a lot of important concepts packed
9 into that paragraph, so I'd like to -- to ask you some
10 questions about that.

11 Do you see the reference to -- to "glitch"?

12 A Yes.

13 Q "One knows how to glitch the card"?

14 A Yes.

15 Q What is glitching?

16 A So when you have a microcontroller, sometimes,
17 particularly when you're dealing with Smart Cards, if you
18 want to have the Smart Card do something that will allow
19 you -- if you want to be able to do something with the Smart
20 Card that ordinarily you can't do, what you can do is you
21 can alter the operating parameters of the Smart Card very
22 quickly. You can change the amount of voltage that's being
23 supplied. You can speed up the processor clock for one or
24 two clock cycles and things like that. And what ends up
25 happening is that causes the card to -- or can cause the

1 card to erroneously execute one or more CPU instructions,
2 thereby -- thereby causing the card to -- or the code to
3 malfunction, and either think -- think something has
4 happened that has not or think something has not happened
5 that has.

6 Q In the process of developing your Nagra Hacking FAQ,
7 did you learn that people were glitching EchoStar cards?

8 A Yes.

9 Q And that was one of the ways that they were gaining
10 access to the contents of the card?

11 A Yes.

12 Q Were people talking on the internet about how to glitch
13 EchoStar cards?

14 A Yes.

15 Q Did you ever obtain a glitcher?

16 A Yes, I did have a glitcher. I had a few glitchers, in
17 fact.

18 Q Were glitchers difficult to obtain?

19 A Not that I recall. I -- it seemed like you could -- I
20 recall seeing websites where you could buy a glitcher for, I
21 don't know, a hundred dollars, something like that.

22 Q They were available on the internet?

23 A Yeah, you could just buy them on the internet, and
24 there were also -- as I recall, there were also plans that
25 were posted on the internet for how to build you own.

1 Q Did you ever create any of those plans?

2 A No.

3 Q You were just a consumer of them?

4 A Right.

5 Q Now, there is also a reference in the -- the sentence
6 in this paragraph, "For a hacker, however, the backdoors
7 provide an easy way of dumping the card." What does that
8 refer to?

9 A Well, dumping the card?

10 Q Yes.

11 A Dumping the card refers to -- to getting the code
12 that's in the card out.

13 Q And so when you were preparing your -- your EchoStar or
14 Nagra Hacking FAQ, were you aware that on the internet,
15 there was information posted about how to dump EchoStar
16 cards?

17 A Yes.

18 Q In the next -- the next reference is "Getting 3M code
19 into the card"; do you see that?

20 A Uh-huh.

21 Q What is 3M code?

22 A 3M code, there's several definitions for it, but
23 typically 3M code would be code that you could put into the
24 card that would allow -- that would make the card allow you
25 to -- to view programming that you -- that you theoretically

1 haven't paid for.

2 Q And in the process of creating your Nagra hacking FAQ,
3 did you learn that people were posting on the internet
4 information about how to get 3M code into the card?

5 A Yes.

6 MR. SNYDER: Could you hand the witness, please,
7 Exhibit 1351.

8 MR. O'DONNELL: What was that number?

9 MR. SNYDER: 1351, I'm sorry.

10 BY MR. SNYDER:

11 Q Mr. Dalla, I apologize for the very small type on this
12 exhibit, but this -- this is how we got it.

13 A Yeah. Yeah, that's my fault. I'm the one who printed
14 it originally, so --

15 Q You created this document?

16 A Yes.

17 Q Or this document?

18 A Yes.

19 Q And this is a version of your FAQ from December 12th,
20 2000?

21 A Yes.

22 MR. SNYDER: Your Honor, I move 1351.

23 THE COURT: Any objection?

24 MS. WILLETTS: No objection.

25 THE COURT: Received.

1 (Defendants' Exhibit No. 1351 is received
2 into evidence.)

3 BY MR. SNYDER:

4 Q If you could look at the second page of the exhibit,
5 please, Mr. Dalla, 1351-2. And there is a paragraph a
6 little more than halfway down the page. We are going to try
7 and blow that up a lot.

8 It starts out "The EROM guys"?

9 A Yes.

10 Q And it says "The EROM guys" -- these are people that
11 you are thanking as contributors?

12 A Uh-huh.

13 Q And it says "The EROM guys, for providing a good
14 environment in which to work, good information and good
15 sounding boards."

16 "In addition, as of 25 August, 2000, the EROM Group has
17 managed to gain full access, including backdoor commands, to
18 the EchoStar 288-02 cards. What does this mean? We're
19 cool, and ST isn't."

20 Do you see that?

21 A Yes.

22 Q Does that refresh your recollection about when you
23 learned or at least by what date you learned that someone
24 had enabled to get access to the backdoor commands for the
25 ROM 3 card?

1 A Yeah, apparently it was around the 25th of August of
2 2000.

3 Q And just so the record is clear, that reference to
4 288-02 was to the ROM 3 cards?

5 A Yes.

6 Q There is a last sentence on that paragraph that says
7 "LVD, my ass"; do you see that?

8 A Yes.

9 Q What does that mean?

10 A I think, there, what I was referring to is that the --
11 the EchoStar Smart Cards, the -- the chip that they were
12 based on, had a hardware security measure on it to attempt
13 to defeat glitchers, called a low voltage detector, that
14 basically the intent of the -- of the security measure was
15 to monitor the voltage being provided to the chip. And if
16 it were to detect that -- that the voltage had been brought
17 below some level for some period of time, it would reset the
18 chip or set some flag in -- in memory to indicate that there
19 was a -- there was a potential glitch trying to happen, and
20 thereby help to protect the card. And I -- I think that
21 what -- what this is saying is that -- that someone in the
22 EROM Group had managed to glitch the card, despite the
23 presence of the low voltage detector.

24 Q So either the low voltage detector wasn't turned on, or
25 it wasn't working?

1 A Or it was not robust enough to withstand whatever --
2 whatever attack was being performed.

3 Q So if there was a low voltage detector on the chip, it
4 wasn't preventing glitching?

5 A Correct -- well, certainly not all glitching.

6 Q Now, do you recall at some point receiving copies or
7 access to EchoStar or Nagra source code?

8 A No.

9 Q Do you ever recall hearing that EchoStar source code
10 was available on an FTP site?

11 A Oh, actually --

12 MS. WILLETTS: Objection. Calls for hearsay, your
13 Honor.

14 THE COURT: Restate that again, Counsel.

15 BY MR. SNYDER:

16 Q Did you ever learn that EchoStar source code was
17 available on an FTP site?

18 A I'm sorry, yes, and -- and I have to restate my answer
19 to your previous question about receiving EchoStar source
20 code. I was thinking in context of the Smart Cards. At one
21 point, yes, I did receive some EchoStar source code, but
22 related to their satellite receivers, not to the Smart
23 Cards.

24 Q And who sent that to you?

25 A I don't recall.

1 Q Was it sent to you by someone using the alias
2 "FreakGod"?

3 A I -- I don't recall. I -- I -- I might have credited
4 him in the -- in the FAQ, but I don't recall where I got the
5 code.

6 MR. SNYDER: Could you show the witness, please,
7 Exhibit 1354.

8 BY MR. SNYDER:

9 Q Mr. Dalla, is this another version of your EchoStar
10 Hacking FAQ?

11 A It is.

12 Q And is this the one that you prepared on or about
13 January 27th, 1999?

14 A Actually, this appears to be November 27th, 1999.

15 Q You're right, my -- that's a little obscured on my
16 copy. So November 27th, 1999 is the date?

17 A Yes.

18 Q And this is something that you prepared?

19 A Yes.

20 MR. SNYDER: I move Exhibit 1354.

21 THE COURT: Any objection?

22 MS. WILLETTS: No objection.

23 THE COURT: Received.

24 (Defendants' Exhibit No. 1354 is received
25 into evidence.)

1 BY MR. SNYDER:

2 Q And if you could please look at the page marked 1354-5.

3 And there is a section entitled "0.5, About the
4 Unabridged Version."

5 A Yes.

6 Q And in that first -- first part of the first paragraph,
7 it says "Those of you who have this version of the file may
8 find yourselves asking where the additional information came
9 from, as well as questioning its reliability and
10 authenticity."

11 "While it seems that the EchoStar guys are so sure that
12 their corporate FTP site is secure, that they are willing to
13 put the source code to their receivers up there, and nothing
14 more than encrypted zip files"; do you see that?

15 A Yes.

16 Q What is an FTP site?

17 A FTP stands for file transfer protocol. It's basically
18 a -- sort of a site where files are stored for -- actually,
19 files are stored there and -- and files -- additional files
20 can be uploaded to it, or files can be downloaded from it,
21 but -- but the intent of an FTP site is purely to facilitate
22 the transfer of files.

23 Q And -- and was someone able to get the source code for
24 EchoStar's receivers from the EchoStar FTP site?

25 A I -- that's what I was told.

1 Q If you'd look, please, at the previous page, which is
2 1315-4.

3 And near the bottom of that page, in the section on
4 contributors, there's a reference to FreakGod?

5 A Yes.

6 Q And it says "FreakGod for forwarding to me the files
7 that made this version possible"?

8 A Yes.

9 Q Is that a reference to those EchoStar source code files
10 that were sent to you?

11 A Probably.

12 Q Did you ever learn who FreakGod is?

13 A No.

14 Q Did you ever learn any information of any sort from any
15 source whatsoever that FreakGod was somehow connected to
16 Chris Tarnovsky?

17 A No.

18 Q And did you ever learn any information from any source
19 whatsoever, at any time whatsoever, that FreakGod was
20 somehow connected to NDS?

21 A No.

22 Q Did FreakGod tell you how you obtain the files?

23 A I -- when the files were provided to me, I recall
24 that -- that I was told they came from EchoStar's FTP site
25 and that they had been just on the FTP site, and they were

1 in encrypted zip files.

2 Q Now, by the time that you had posted your FAQ in -- in
3 early December of 2000, we saw a version dated
4 December 12th; do you recall that?

5 A Yes.

6 Q Would you agree that there were multiple methods of
7 hacking into an EchoStar card that were available on the
8 internet?

9 A Yes.

10 Q And many of those methods were described by you in your
11 FAQ?

12 A Yes.

13 Q And those were -- the information that you used to
14 create that FAQ was available to anybody?

15 A Yes -- well, as far as hacking the Smart Cards, yes.

16 Q Okay.

17 A I mean, the EchoStar -- the -- the source code to the
18 EchoStar receivers, I don't know that that ever became
19 public, but --

20 Q But the information on how to hack into the -- the card
21 was available to anybody?

22 A Yes.

23 Q And your FAQ was available to anybody?

24 A Yes.

25 Q When was the first time that you heard that a 3M-style

1 hack was available for EchoStar Smart Cards?

2 A I don't recall.

3 MR. SNYDER: Could you show the exhibit -- or the
4 witness Exhibit 1353.

5 BY MR. SNYDER:

6 Q I'm sorry that I keep calling you an exhibit,
7 Mr. Dalla; it's unintentional.

8 Have you seen Exhibit 1353 before?

9 A Yes.

10 Q The -- the first part of this is a posting, an internet
11 posting?

12 A Yes.

13 Q And this is a posting by you?

14 A Yes.

15 Q And it was a posting you made in September of 1999?

16 A It appears to be November of 1999.

17 Q Oh, you're right. I was looking at the date joined.
18 Posted November 5th, 1999?

19 A Yes.

20 MR. SNYDER: Your Honor, I move Exhibit 1353.

21 THE COURT: Any objection?

22 MS. WILLETTS: No objection, your Honor.

23 THE COURT: Thank you.

24 Received.

25

1 (Defendants' Exhibit No. 1353 is received
2 into evidence.)

3 MR. SNYDER: So if we could show that first
4 posting, please.

5 BY MR. SNYDER:

6 Q In the second paragraph, you say "Don't get me wrong,
7 here. I'm not trying to take anything away from the efforts
8 that others have put forth on this, XFile, Jethro, the Dual
9 AVR, the BAT fix, and even the E3M are clever fixes."

10 Do you see that?

11 A Yes.

12 Q And this post was in November of 1999?

13 A Yes.

14 Q And so by November of 1999, there were already E3Ms
15 available for EchoStar cards?

16 A Yes.

17 Q Now, if I could ask you to go back, please, Mr. Dalla,
18 to the -- to the really big exhibit, 1352.

19 A Yep.

20 Q And page 4, in the introduction section, it's right in
21 the middle of the page, there's a paragraph that starts
22 "lastly."

23 A Yes.

24 Q And about halfway through that paragraph, there is a
25 sentence that says "Hopefully, not everyone's cards are

1 based on the same lame code as EchoStar's."

2 A Yes.

3 Q Do you see that?

4 A Yes.

5 Q What were you referring to as "the same lame code as
6 EchoStar's"?

7 A The code within the Smart Cards.

8 Q Okay. Why did you call it "lame code"?

9 A Because after my analysis of it, I didn't think that it
10 was very elegant or very efficient.

11 MR. SNYDER: Could you show the witness, please,
12 Exhibit 786.

13 BY MR. SNYDER:

14 Q Is Exhibit 786 another version of your EchoStar hacking
15 FAQ, Mr. Dalla?

16 A Yes, it is.

17 Q And this version is dated October 15th, 1999?

18 A Yes, it is.

19 Q And did you prepare this --

20 A Yes.

21 Q -- EchoStar Hacking FAQ on or about that date?

22 A Yes.

23 MR. SNYDER: Your Honor, I move Exhibit 786.

24 THE COURT: Any objection?

25 MS. WILLETTS: No objection.

1 THE COURT: Received.

2 (Defendants' Exhibit No. 786 is received into
3 evidence.)

4 BY MR. SNYDER:

5 Q Could you turn, please, to page 37. So it's marked
6 786-37.

7 A Yes.

8 Q And in the first text paragraph, actually, the -- under
9 the Section 5.2, now, let's -- let's start there.
10 Section 5.2 is labeled "288-01 versus 288-02."

11 A Yes.

12 Q What does that refer to?

13 A It refers to two different versions of the EchoStar
14 Smart Card.

15 Q And 288-01 is what people would commonly call which
16 card?

17 A I think that was the ROM 2 card.

18 Q And 288-02 I think you've already said was the ROM 3
19 card?

20 A Yes.

21 Q And so about halfway through that section, the second
22 paragraph, it says "The 288-01 cards were the first release.
23 Their code was quite buggy and has a large amount of patch
24 code in the EEPROM, about 900 bytes. Most of the EchoStar
25 ROM dumps you'll see on the net came from these cards."

1 Do you see that?

2 A Yes.

3 Q Does this refresh your recollection that by October of
4 1999, there were ROM dumps from the ROM 2 cards available on
5 the internet?

6 A Yes.

7 Q And then the next paragraph it says "The 288-02 cards
8 have basically the same code, but with all the fixes that
9 were in the 288-01 EEPROM area integrated back into the
10 ROM"; do you see that?

11 A Yes.

12 Q And does this refresh your recollection that by October
13 of 1999, there were ROM dumps of the ROM 3 card available on
14 the internet?

15 A Yes.

16 Q How did you get -- did you ever receive copies of ROM
17 dumps from EchoStar cards?

18 A Yes.

19 Q Who sent them to you?

20 A I don't recall.

21 Q Was it -- did you receive it from multiple sources?

22 A Again, I don't recall.

23 Q Was one of the projects that you undertook in hacking
24 the EchoStar card compiling information about the ROM from
25 multiple sources?

1 A Yes.

2 Q Okay. And what did you do with it after you collected
3 that information?

4 A In what sense? I mean, I --

5 Q Did -- did you do something with it?

6 A I -- I don't recall. I -- I probably would have at the
7 time, you know, taken my compilation of that and given it to
8 the -- you know, whoever was -- I was interacting with on a
9 regular basis, but I -- I don't recall specifically.

10 Q Maybe my question was a little vague.

11 Did you create a disassembly?

12 A Oh, yes.

13 Q Okay. What is a disassembly?

14 A A disassembly is you basically take the object code
15 that's in the -- that is a computer program, which is,
16 essentially, a series of numbers, and you sort of reverse
17 compile it back into something that looks like source code.

18 Q Okay.

19 Could you show the witness, please, Exhibit 1371.

20 BY MR. SNYDER:

21 Q Now, this is another big, heavy exhibit, Mr. Dalla. Do
22 you recognize this?

23 A Yes.

24 Q Is this the disassembly of the EchoStar code that you
25 created?

1 A Yes, at least partially it is. The first part is just
2 dumps of -- of data, but towards -- I think when we get to
3 page 7 is where disassembly starts.

4 Q And then from page 7 on, for well over a hundred pages,
5 is your disassembly and comments on the code?

6 A Yes.

7 Q At the beginning of the -- this exhibit --

8 Well, I'll -- I move Exhibit 1371, your Honor.

9 THE COURT: Any objection?

10 MS. WILLETTS: No objection.

11 THE COURT: 1371 is received.

12 (Defendants' Exhibit No. 1371 is received
13 into evidence.)

14 BY MR. SNYDER:

15 Q At the top of the first page of this exhibit, you
16 list -- you have a -- a list there. Are those references to
17 addresses, memory addresses?

18 A Yes.

19 Q And then you have several names following them?

20 A Yes.

21 Q What do those refer to?

22 A I guess, as I recall, those refer to the names of the
23 people who provided those dumps or dumps of those areas of
24 the card.

25 Q And so they provided dumps and put it on the internet,

1 and you collected it?

2 A Yes.

3 Q And that information came from -- let me just read that
4 list into the record, "magma and macro, xman 250, xchi,
5 macro, xchi and macro"; did I read that correctly?

6 A Yes.

7 Q And those were the people who had posted on the
8 internet various portions of EchoStar ROM that you collected
9 for this document?

10 A Yes.

11 Q Did you ever learn any information from any source
12 whatsoever that any of those aliases were connected in any
13 way to Chris Tarnovsky?

14 A No.

15 Q Did you ever learn any information from any source
16 whatsoever that any of those aliases were connected in any
17 way to NDS?

18 A No.

19 Q Now, once you had created this disassembly for the
20 EchoStar ROM, was it posted -- or was it made available to
21 people?

22 A Yes.

23 Q And was it also posted on the DISH Plex website?

24 A I don't recall, but probably.

25 MR. SNYDER: Could you show the witness, please,

1 Exhibit 1372.

2 BY MR. SNYDER:

3 Q Have you seen Exhibit 1372 before today, Mr. Dalla?

4 A Yes.

5 Q And is this also a disassembly of EchoStar code?

6 A Yes.

7 Q And is this a disassembly that you prepared?

8 A Yes.

9 MR. SNYDER: I move Exhibit 1372.

10 THE COURT: Any objection?

11 MS. WILLETTS: No objection.

12 THE COURT: Received.

13 (Defendants' Exhibit No. 1372 is received
14 into evidence.)

15 BY MR. SNYDER:

16 Q Mr. Dalla, did you receive the code to prepare this
17 disassembly from the same sources that you used to prepare
18 the same disassembly in Exhibit 1371?

19 A Yes.

20 Q So this -- this code was also provided by magma and
21 macro, xman 250 and xchi?

22 A Yes.

23 Q And what did you do with this disassembly, 1372, when
24 you were finished with it?

25 A Again, it probably ended up getting posted on the

1 internet.

2 Q Okay. Were -- did people express appreciation for you
3 posting a disassembly of the ROM code?

4 A There were, I guess, people that were saying that --
5 that it was useful to them. I don't recall anybody, you
6 know, ever sending me, you know, e-mails or anything like
7 saying, you know, you're -- you know, specifically
8 expressing appreciation, but --

9 Q Did people tell -- send posts that it was helpful?

10 A I don't recall specifically.

11 Q Did people ever send a -- was there ever a post asking
12 you to take it down?

13 A No.

14 Q Were there several people who were working on hacking
15 the EchoStar system while you were preparing the FAQ?

16 A Yes.

17 Q And they would make their information available on the
18 internet?

19 A Yes.

20 Q And you first started seeing that information in 1998?

21 A I guess so, yes.

22 Q And you saw that information posted on the internet at
23 various times until you stopped your involvement in early
24 2001?

25 A Yes.

1 Q And the information that was available on the internet
2 is the information that you collected and synthesized into
3 your various versions of the EchoStar hacking FAQ?

4 A Yes.

5 Q And did that EchoStar hacking FAQ provide a pretty good
6 road map for anybody who wanted to hack the EchoStar cards?

7 A I suppose so, yes.

8 MR. SNYDER: No more questions.

9 Thank you, Mr. Dalla.

10 THE COURT: Cross-examination.

11 MS. WILLETTS: Christine Willetts for Plaintiffs
12 EchoStar and NagraStar.

13 CROSS-EXAMINATION

14 BY MS. WILLETTS:

15 Q Good morning, Mr. Dalla.

16 A Good morning.

17 Q Now, prior to giving your deposition testimony in this
18 case, you met with NDS's investigators, correct?

19 A Yes.

20 Q And following that meeting, but before you agreed to
21 come here and testify, NDS offered to enter into a deal with
22 you?

23 A Yes.

24 Q And they agreed to pay your legal fees?

25 A Yes.

1 Q And in exchange for you testifying here in this case,
2 they agreed to release you for all piracy activities you may
3 have been involved in, in the past; isn't that right?

4 A Yes.

5 Q And I think you testified that they wanted you to
6 cooperate in NDS's defense case here today. And didn't
7 they, in fact, tell you if you refused to cooperate, they
8 would subpoena all of your internet service providers?

9 A Yes.

10 Q And they -- they required that you acknowledge today
11 that -- that you were "StuntGuy," in front of the jury,
12 right?

13 A Yes.

14 Q And they also agreed to provide you with legal defense
15 in the event that you were ever sued as a result of any of
16 your past piracy activities; isn't that right?

17 A Well, that implies that I had piracy activities, but
18 they -- they agreed to -- to indemnify me and -- and provide
19 for legal defense if -- if any -- if any action should arise
20 as a result of my testimony here, yes.

21 Q Well, in fact, you admitted at your deposition that you
22 reprogrammed NDS access cards by writing code to those
23 cards; isn't that right?

24 A Yes.

25 Q And you don't consider that piracy?

1 A Not if doing that didn't get me free television.

2 Q You're understanding that these activities, your past
3 activities, could have exposed you to criminal and civil
4 liability; isn't that right?

5 A Yes.

6 Q So when NDS told you they were going to release you
7 from your past activities, you quickly agreed to come here
8 and help cooperate in their defense, right?

9 A I wouldn't say quickly, but I agreed, yes.

10 Q Now, Mr. Dalla, we talked a little bit about your
11 activities as they related to EchoStar's security system.

12 A Uh-huh.

13 Q Isn't it true that the only part of EchoStar's security
14 system you ever reverse engineered was portions of
15 EchoStar's code?

16 A I did a complete disassembly of the ROM 2 and ROM 3
17 code.

18 Q Do you recall testifying at your deposition that you
19 engaged in process of reverse engineering some of the code
20 that was in the Smart Cards?

21 A Yeah, I didn't disassemble -- there's -- there's a
22 section of code in those cards that's the system ROM code
23 that's provided by STMicro. That stuff I -- I didn't do a
24 complete disassembly of.

25 Q And you never extracted any of that code yourself, did

1 you?

2 A Well, not using means that I discovered myself. There
3 were some times when I found where there were posts that
4 people had said, you know, this does a thing where it -- it
5 causes the -- a dump of the card. And so I would have tried
6 that code, and thereby, would have ended up getting code out
7 of the card, but I never on my own discovered a means for
8 extracting the code from the card.

9 Q So you -- all of your activities related to information
10 that was available on various piracy-related websites; is
11 that right?

12 A Yes.

13 Q You never used a focus ion beam on the EchoStar system?

14 A No.

15 Q You never used a scanning electron microscope on
16 EchoStar's system or Smart Cards?

17 A No.

18 Q You know the tip codes or instructions that other
19 individuals posted, and disassembled or analyzed the codes?

20 A Yes.

21 Q Now, we talked a -- a lot about your FAQs, or
22 frequently asked questions, that you posted under the name
23 "StuntGuy," and Mr. Snyder asked you if -- if EchoStar ever
24 tried to contact you and tell you to take that down. You
25 didn't post -- when you posted your FAQ, you didn't say,

1 "Hi, this is Chris Dalla, I'm StuntGuy," did you?

2 A No.

3 Q You didn't give any identifying information other than
4 a DISH Plex e-mail address; isn't that right?

5 A That's correct.

6 Q And in fact, NDS never contacted you for over 10 years
7 after you were involved in this until this litigation began;
8 isn't that right?

9 A That's correct.

10 Q Now, in creating your FAQs, you used significant
11 information that was posted on other related websites
12 relating to EchoStar's security system?

13 A Yes.

14 Q And we talked briefly about a number of individuals,
15 but we didn't really focus on one of the significant
16 individuals you identified in your deposition, and that was
17 Nipper. He was a significant contributor to the piracy
18 information you used in your FAQs; isn't that right?

19 A The hacking information, yes.

20 Q And on some of the forms, and in fact, in your FAQ, you
21 gave credit to Nipper for posting significant information on
22 EchoStar's system?

23 A Yes.

24 Q Let's take a look at Exhibit 1352. This is an exhibit
25 you previously discussed with Mr. Snyder, and he discussed

1 with you the contributors section, which appears on page 5
2 of this exhibit?

3 A Yes.

4 Q About halfway down that page it says "Nipper." Can you
5 read that line for us?

6 A Yes. "Nipper, for your very enlightening, though far
7 too infrequent posts."

8 THE COURT: Well, just a moment. Let's put that
9 up on the board so the jury can follow.

10 MS. WILLETTS: It's 1352, page 5.

11 THE COURT: Let's put that up for a moment.

12 Let's underline it in yellow.

13 Okay. Thank you.

14 BY MS. WILLETTS:

15 Q So you were giving credit here to Nipper for --

16 A Yes.

17 Q -- for being a significant --

18 THE COURT: Just a moment. Let me speak to
19 counsel for just a moment.

20 Excuse me for just one moment. In fact, would you
21 excuse yourself for just a moment. And we'll come and get
22 you in just one moment.

23 (The following proceedings is taken outside
24 the presence of the jury.)

25 THE COURT: All right, please have a seat.

1 The Court's using its discretion in allowing each
2 of you to put up documents on the board. Who's controlling
3 the presentation of this during cross-examination?

4 MS. WILLETTS: We don't have that exhibit.

5 THE COURT: Well, somebody is, so once the
6 document comes in, it should be fair to both sides. So on
7 cross-examination, whoever is controlling this, that
8 document should go up, and those passages should be
9 underlined, okay? Simple as that. So it seems to be that
10 we are losing the flavor of this. The document goes up for
11 some presentations, and it doesn't go up for others. So
12 that's my warning. Otherwise, I'm going to make a comment.

13 Thank you.

14 Now, please, Kristee, get the jury.

15 (The following proceedings is taken in the
16 presence of the jury.)

17 THE COURT: All right. The jury is once again
18 present. All parties are still present. The witness is
19 present.

20 If you'd like to continue your cross-examination,
21 please.

22 MS. WILLETTS: Thank you, your Honor.

23 BY MS. WILLETTS:

24 Q Mr. Dalla, we were just discussing one of the
25 contributors that you gave credit to in several of your

1 "frequently asked questions." In fact, I believe it was in
2 all of them, and that was Nipper?

3 A Yes.

4 Q Is that correct?

5 A Yes.

6 Q And there were several other people listed on your
7 FAQs, but isn't it a fact that Nipper was one of the most
8 significant contributors to EchoStar piracy and the EchoStar
9 piracy community?

10 A As I recall, yes, Nipper -- Nipper provided some fairly
11 significant information.

12 Q And counsel for the defendants spoke with you about one
13 of the other contributors. He pointed out on page 4 of
14 Exhibit 1352, at the bottom of that page, you give credit to
15 a Swiss Cheese Productions, or Mr. Bean.

16 A Yes.

17 Q And he asked you a series of questions of whether or
18 not you ever knew whether Swiss Cheese Productions, or
19 Mr. Bean, was related to Christopher Tarnovsky or NDS; do
20 you recall those questions?

21 A Yes.

22 Q Isn't it true that -- that you wouldn't be aware of
23 whether or not Swiss Cheese, Mr. Bean or Nipper or any of
24 the other individuals listed in your FAQ was Chris
25 Tarnovsky?

1 A That's true. I had no way of knowing the identity one
2 way or the other of anybody that was -- that I was
3 interacting with or that I credited in the FAQ.

4 Q And Exhibit 1352, you give credit to Swiss Cheese and
5 Mr. Bean for being "The source of the first bit of technical
6 EchoStar info I found. Got me on the road. Thanks, man."

7 You came to understand that Swiss Cheese Productions,
8 or Mr. Bean, was also associated with the alias "Nipper";
9 isn't that right?

10 A I seem to recall that I formed that opinion, yes.

11 Q In fact, we'll take a look at Exhibit 786 that
12 Mr. Snyder discussed with you. If you'll look at page 3 of
13 that exhibit.

14 Do you have that in front of you?

15 A Yes.

16 Q And three lines up from the bottom, under your
17 contributors sections, again, it says "Swiss Cheese
18 Productions, Mr. Bean/Nipper," and so you also made that
19 association in one of your FAQs; isn't that right?

20 A Yes.

21 Q And what first source of technical EchoStar information
22 were you referring to?

23 A I seem to recall that it was a fairly short kind of
24 version of this -- of -- of the same kind of FAQ kind of a
25 thing. It was just general technical information.

1 Q You don't recall ROM portions being posted --

2 A Well --

3 Q -- on the internet by Nipper and --

4 A No, no. I -- I recall that as well, but that wasn't --
5 I'm sorry, I thought you were asking about what was the
6 first thing, because in this line, it talks about the first
7 bit of technical EchoStar info I found, and that's what the
8 first bit was, was a -- you know, very short sort of general
9 technical information about the EchoStar system.

10 Later, as I recall, Nipper also was the source of
11 various ROM information and -- and also information, I
12 think, about a means for dumping the card.

13 Q Okay. And we'll get to that second part a little bit
14 later.

15 I'll have you take a look at Exhibit 2008.

16 And this is in evidence, so we can put it up on the
17 screen.

18 BY MS. WILLETTS:

19 Q Have you -- have you ever been to the dr7 website
20 before, Mr. Dalla?

21 A Yes.

22 Q And Exhibit 2008 is a post dated November 12th, 1998.
23 At the very top of it, it's a post by Nipper.

24 A Yes.

25 Q You began doing your FAQs towards the end of 1998;

1 isn't that right?

2 A Yes.

3 Q And if you look at the post, it's a post by Nipper. It
4 states "All these routines were almost direct translations
5 from the ROM."

6 And there is also a reference to "Nipper the
7 buttlicker," part of the text that was in the ROM, as you
8 understand it; isn't that right?

9 A Yes.

10 Q Is this the first post that you recall or related to
11 the first ROM dump that you can recall ever seeing for
12 EchoStar system?

13 A Yes.

14 Q Now, we just looked at a post on the dr7 website. A
15 lot of the information that Nipper posted about hacking
16 EchoStar system was posted on dr7.com, as you recall; isn't
17 that correct?

18 A I recall that there was some. I couldn't testify as
19 to, you know, the percentage of volume, but --

20 Q Now, we discussed Exhibit 1352. I want to go back,
21 briefly, to that exhibit. It's the December 28, 2000 FAQ.

22 A Yes.

23 Q This was the last FAQ that you posted; isn't that
24 right?

25 A I believe that's correct, yes.

1 Q And this is, in fact, the first and only StuntGuy FAQ
2 that contained information about the ability to hack
3 EchoStar security system using a buffer overflow attack;
4 isn't that right?

5 A Probably, yes.

6 Q Well, let's look at page 74 of Exhibit 1352. If you'll
7 look at the bottom paragraph of that.

8 A Yes.

9 Q It says -- it starts off "Finally, new information
10 released to the public, and which I verified personally,
11 indicates that there is a bug and a 16CF54 silicon."

12 A Yes.

13 Q That's the chip that was in the ROM 3 EchoStar card;
14 isn't that right?

15 A Yes.

16 Q "It seems as though the addressing hardware for the RAM
17 and the card doesn't fully decode the" -- "the address being
18 requested, and as a result, reads and writes to RAM." Is
19 this the information that you added to your FAQ as a result
20 of the Nipper post in December of 2000?

21 A Yes.

22 Q And after that information was posted and you included
23 it in your FAQ, you didn't issue any more FAQs; isn't that
24 right?

25 A I don't recall having done so, no.

1 Q And that's because there really was nothing left to do

2 --

3 A Right.

4 Q -- with the EchoStar ROM 3; isn't that right?

5 A Right.

6 Q Now, you didn't discover that buffer overflow
7 technique, did you?

8 A No.

9 Q You didn't develop that hacking technique?

10 A No.

11 Q You got that from information that was posted on dr7's
12 website by Nipper; is that right?

13 A I don't recall what website the post originated from,
14 but -- but I got that information from a post on a website.

15 Q Okay. Let's take a look at Exhibit 998.

16 Now, you understand that Exhibit 998, nipperclauz.txt
17 file, this was a copy of the Nipper post that disclosed the
18 buffer overflow attack?

19 A Yes.

20 Q And on dr7's website; isn't that right?

21 A Again, I don't -- there nothing on here to indicate
22 that it came from dr7's website, but I -- this does look
23 like the post that -- that disclosed that -- that buffer
24 overflow.

25 Q And you recall that this was made in sometime

1 December of 2000; isn't that right?

2 A Yes.

3 Q And according to you, this post was the post that
4 allowed unlimited access to the backdoors for EchoStar Smart
5 Cards; isn't that right?

6 A Well, this post doesn't allow unlimited access to the
7 backdoors. This post, if you -- for somebody who's
8 knowledgeable, this post, by itself, allows unlimited
9 access.

10 Q Okay. So someone with knowledge, who wanted to hack
11 EchoStar's cards, this was the post that allowed them access
12 to do that?

13 A Yes.

14 Q Now, defense counsel asked you some questions about
15 an -- an EROM Group.

16 A Yes.

17 Q That was a group that, based on -- on your knowledge,
18 had some access to EchoStar's cards?

19 A Yes.

20 Q But you don't have any evidence that the EROM Group was
21 associated with Nipper in any way, do you?

22 A No.

23 Q And typically, you -- you knew when EROM was associated
24 with some sort of piracy that you were relying on; isn't
25 that right?

1 A Well, yes. Typically, when -- when there was -- with
2 any stuff that the EROM guys -- any information they had
3 relating to hacking, I was typically -- I typically knew
4 about that, yes.

5 Q That's because they took credit for that work; isn't
6 that right?

7 A Yes.

8 Q And they didn't take credit for this Nipper post, did
9 they?

10 A No.

11 Q There was an Exhibit 1372 that -- I'm sorry, that's the
12 wrong exhibit.

13 1352, that defense counsel asked you about, also, and
14 that was a November 5th, 1999 post by StuntGuy. I'm sorry,
15 it was actually 53.

16 A 1353, yes.

17 Q And that's a post that you made?

18 A Yes.

19 Q And in that post you say, "There's some fixes out there
20 for EchoStar, but none of them are stable. They go up and
21 down."

22 You didn't consider any of those fixes or those hacks
23 to be reliable; isn't that right?

24 A Correct.

25 Q In fact, you make a reference to the E3M hack that was

1 available out on the internet at that time -- or I'm sorry,
2 the 3M hack that was available at that time, but you didn't
3 consider that hack reliable at that point, did you?

4 A Correct.

5 Q And in fact, it was a commercial hack. You had to go
6 to a dealer to get those cards; isn't that right?

7 A I believe so, yes.

8 Q And once the Nipper post was made in December 2000, you
9 no longer had to go to the dealer to get the 3M hack?

10 A Well, you would have to go to a dealer to get a
11 commercial 3M hack. If you were knowledgeable after the
12 Nipper post, you can make your own.

13 Q So the pirates no longer had to rely on dealers, they
14 could do it themselves after the --

15 A Correct.

16 THE COURT: Excuse me, are you referring to the
17 first paragraph?

18 MS. WILLETTS: I don't have it in front of me,
19 your Honor, but I believe the second paragraph is what it
20 refers to.

21 THE WITNESS: It -- it's actually the second
22 paragraph, your Honor.

23 THE COURT: Just a moment.

24 Please underline it so the jury can see what
25 you're referring to.

1 BY MS. WILLETTS:

2 Q So if you could read the --

3 THE COURT: No, no. Just a moment, Counsel.
4 We'll wait.

5 MS. WILLETTS: Okay.

6 THE COURT: Which portion?

7 MS. WILLETTS: Because it's in black, I think the
8 underline isn't showing up.

9 THE COURT: They can underline it in yellow. In
10 other words, I'm allowing exhibits to go up, but I want
11 those exhibits equally displayed by the parties. So step
12 over and talk to the technical people and put it up equal.

13 MS. WILLETTS: It's not working for him, your
14 Honor. I'm happy to read in the first two sentences.

15 THE COURT: Why don't you do that, then.

16 BY MS. WILLETTS:

17 Q Or Mr. Dalla, can you read in the first two sentences,
18 the full sentences all the way through "pay for them"?

19 A Certainly.

20 "Don't get me wrong here. I'm not trying to take
21 anything away from the efforts that others have put forth on
22 this, XFile, Jethro, the Dual AVR, the BAT fix, and even the
23 E3M are clever fixes. All I'm saying is that none of them
24 is stable, and that I personally wouldn't pay for them."

25 Q So at this point in time, you were having to -- or

1 anyone who wanted one would have to pay for an E3M; isn't
2 that right?

3 A For an E3M, yes.

4 Q You had to get it from a dealer?

5 A Yes.

6 Q And once the NiPpEr2000 post, the -- or the posts in
7 December 2000 made by Nipper, once those were made, you no
8 longer had to go to a dealer, it was available for anyone
9 who had the know-how?

10 A Yes.

11 MS. WILLETTS: No further questions, your Honor.

12 THE COURT: Redirect.

13 MR. SNYDER: Thank you.

14 Darin Snyder for the defendants, your Honor.

15 REDIRECT EXAMINATION

16 BY MR. SNYDER:

17 Q Just a few questions, Mr. Dalla.

18 Were commercial hacks for EchoStar cards available
19 before December 2000?

20 A Yes.

21 Q There were commercial hacks available for the EchoStar
22 system before the postings by Nipper in December 2000,
23 right?

24 A Yes.

25 Q In fact, they were pretty widely available?

1 A Yes. I assume widely available. I -- I didn't, you
2 know, ever investigate the degree which they were
3 disseminated, but I assumed that if they were commercial,
4 that the people selling them would try and distribute them
5 as widely as possible.

6 Q Now, I think Ms. Willetts represent -- you were asked
7 whether all of the versions of your FAQ referred to Nipper,
8 but some of the early ones don't, do they?

9 A Well --

10 Q Maybe we can take a look.

11 If you could look at Exhibit 786, please.

12 A Okay.

13 Q And what is the date, again, on that exhibit?

14 A October 15th of 1999.

15 Q And starting on page 3 of that exhibit, you list your
16 contributors, and it extends onto page 4?

17 A Yes.

18 Q Do you list Nipper as any of the contributors to that
19 version?

20 A Yes, the second one down in 0.3 is Swiss Cheese
21 Productions, Mr. Bean, Nipper.

22 Q And that's where you'd put it, Mr. Bean -- you'd put
23 Nipper with Swiss Cheese Productions and Mr. Bean?

24 A That's correct.

25 Q And then later you took Nipper out, isn't that right,

1 and put it -- listed it separately?

2 A Yes.

3 Q Is that because you learned that Swiss Cheese
4 Productions and Mr. Bean were different than Nipper?

5 A I don't recall why I did that.

6 Q Now, I believe you mentioned that some of the
7 information that you found was posted on the dr7 website?

8 A Yes.

9 Q Was there a time when the dr7 website went down?

10 A Yes.

11 Q Did you ever learn that the reason the dr7 website went
12 down was because NDS and DirectTV took action against dr7?

13 A I -- you know, I don't recall specifically. That --
14 that, you know, sort of rings a vague bell for me, but I
15 recall that there was, you know, talk about, you know,
16 various websites. I mean, during that time various websites
17 came up and down, and there were talk that it was because of
18 various raids and things like that that had happened.

19 Q Now, you -- you were also asked by plaintiffs' counsel
20 several questions about the -- the December 2000 postings
21 and the ability to get into EchoStar cards as a result of
22 those postings; do you recall that?

23 A Yes.

24 Q People who were hackers were able to get into EchoStar
25 cards before those postings, weren't they?

1 A Yes.

2 Q They were able to get into the cards using the backdoor
3 passwords?

4 A Yes.

5 Q And just so everyone is clear, the backdoor passwords
6 is different, a different technique than the technique
7 described in the December 2000 Nipper postings, correct?

8 A Yes, that's correct.

9 Q Was it easier to use the backdoor passwords than the
10 Nipper postings?

11 A It -- it's kind of half dozen -- six, one, half a dozen
12 of another. From one standpoint, it was easier to use the
13 backdoor commands, but from another standpoint, to use the
14 backdoor commands, you had to have a glitcher to Nipper
15 posting; we didn't.

16 Q And the access to those backdoor commands was available
17 before the Nipper postings were even on the internet,
18 correct?

19 A Correct.

20 Q Now, you mentioned that you stopped publishing your FAQ
21 after the Nipper postings?

22 A Yes.

23 Q Did you keep track after that of any of the internet
24 traffic about the ability to use the technique described in
25 the NipperClause posting?

1 A I don't recall looking into that specifically. You
2 know, after I sort of exited the scene, I would occasionally
3 kind of look in and, you know, see if there was anything new
4 and interesting happening, but you know, I mean, it was
5 always just a spur of the moment thing, look around for
6 about a half hour. And then, okay, nothing new; leave.

7 Q Did you see information indicating that the
8 vulnerability described in the NipperClause posting has been
9 closed by EchoStar?

10 A I don't recall that, no.

11 Q You don't recall one way or the other?

12 A No.

13 Q Now, Mr. Dalla, were you surprised when you were
14 approached by NDS's investigator and asked whether you were
15 StuntGuy?

16 A Yes.

17 Q Had anyone before that time ever discovered your real
18 identity?

19 A No.

20 Q And the person who approached you identified themselves
21 as connected with NDS?

22 A Yes.

23 Q And NDS is the one who found you?

24 A Yes.

25 Q And NDS is the one that asked you to come here to

1 testify today?

2 A Yes.

3 MR. SNYDER: No further questions.

4 THE COURT: Recross, please.

5 RECCROSS EXAMINATION

6 BY MS. WILLETTS:

7 Q I just have a couple more questions for you, Mr. Dalla.

8 You talked a little bit about a backdoor password, and
9 defense counsel asked you whether or not, you know, that was
10 an easier way into the card. And I just want to be clear
11 with the jury, here, on what you were actually disclosing in
12 the FAQs. That was a -- a type of hack or way into the card
13 that someone had to be -- have some sophistication in order
14 to -- to use those backdoor passwords; isn't that right?

15 A Yeah, they had to have -- there -- there was equipment
16 that they would have to have in order to be able to -- to
17 utilize that method.

18 Q So they would have to have the know-how, as well as
19 particular types of piracy equipment; isn't that right?

20 A Well, I don't know if it would be specifically piracy
21 equipment, but yes, there's -- there would be a specific --
22 they would have to have had a glitcher device in order to be
23 able to -- to use the backdoor commands.

24 Q And they'd have to know how to use that glitcher device
25 as well?

1 A Correct.

2 Q And so would you characterize that as more of a
3 hobbyist type of hack, someone who was more interested in --
4 in getting around the card rather than more of a commercial
5 hack?

6 A Well, prior to the Nipper post, yes.

7 Q So prior to the Nipper post, all the hacks were, in
8 your opinion, hobbyists?

9 A Well, they weren't hobbyists, but -- so the sort of --
10 and it sort of depends on the -- the degree to which the
11 hobbyist wanted to -- to be experimenting with the cards. I
12 mean, I was doing this as a hobby, and I had a glitcher.
13 So, theoretically, I could have used the backdoor commands,
14 but after the Nipper post, it made it certainly much easier
15 for someone who didn't have the -- the more highly
16 specialized equipment.

17 Q And Mr. Snyder asked you about dr7, whether or not you
18 are aware whether NDS had any involvement in shutting down
19 dr7. Were you aware that NDS actually went out and hired
20 Allen Menard, who ran dr7?

21 A No, I was not.

22 MS. WILLETTS: No further questions, your Honor.

23 THE COURT: Sir, we are going to place you on call
24 until May 16th. The case is going to conclude much earlier
25 than that, but I want to be very cautious and very certain.

1 If you are needed back in court, I will give you 48 hours'
2 notice.

3 THE WITNESS: Okay.

4 THE COURT: Thank you very much. You may step
5 down.

6 THE WITNESS: Thank you, your Honor.

7 THE COURT: Ladies and gentlemen, why don't you
8 take a recess.

9 You are admonished not to discuss this matter
10 amongst yourselves, nor to form or express any opinion about
11 the case.

12 Counsel, see you in 20 minutes.

13 (Recess.)

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2 CERTIFICATE

3
4 I hereby certify that pursuant to Section 753,
5 Title 28, United States Code, the foregoing is a true and
6 correct transcript of the stenographically reported
7 proceedings held in the above-entitled matter and that the
8 transcript page format is in conformance with the
9 regulations of the Judicial Conference of the United States.

10
11 Date: May 1, 2008

12
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14 _____
15 JANE C.S. RULE, U.S. COURT REPORTER

16 CSR NO. 9316
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