

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

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|------------------------------|---|---------------------|
| ECHOSTAR SATELLITE CORP., et |) | |
| al., |) | |
| |) | |
| Plaintiffs, |) | |
| |) | |
| vs. |) | No. SACV 03-950 DOC |
| |) | Day 9, Volume I |
| NDS GROUP PLC, et al., |) | |
| |) | |
| Defendants. |) | |
| _____ |) | |

REPORTER'S TRANSCRIPT OF PROCEEDINGS

Jury Trial

Santa Ana, California

Wednesday, April 23, 2008

Debbie Gale, CSR 9472, RPR
Federal Official Court Reporter
United States District Court
411 West 4th Street, Room 1-053
Santa Ana, California 92701
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EchoStar 2008-04-23 D9V1

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I N D E X

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| WITNESSES | DIRECT | CROSS | REDIRECT | RECROSS |
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SHELTON, James

By Ms. Willetts

4

By Mr. Snyder

13

By Mr. Snyder

32

TARNOVSKY, Christopher G.

By Mr. Hagan

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EXHIBITS

| EXHIBIT NO. | IDENTIFICATION | IN EVIDENCE |
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| 6-A | E-mail posting | 54 |

1 SANTA ANA, CALIFORNIA, WEDNESDAY, APRIL 23, 2008

2 Day 9, Volume I

3 (8:18 a.m.)

4 (Outside the presence of the jury.)

5 THE COURT: All right. Mr. Shelton, if you would
6 retake the stand.

7 All right. We're back on record with NDS and
8 EchoStar.

9 Counsel are present. Mr. Shelton's on the witness
10 stand.

11 JAMES SHELTON, PLAINTIFF'S WITNESS, PREVIOUSLY SWORN

12 RESUMED THE STAND

13 THE COURT: Counsel.

14 MS. WILLETTS: May I approach, Your Honor, with an
15 exhibit?

16 THE COURT: You may.

17 FURTHER REDIRECT EXAMINATION

18 BY MS. WILLETTS:

19 Q. Good morning, Mr. Shelton. The last time you were here
20 to testify, you had identified some handwritten notes from
21 which you took certain numbers in order to come up with your
22 total piracy card calculations as well as total FTA piracy
23 calculations.

24 Exhibit 2031 that I've just handed you: Were those the
25 handwritten notes that you were referring to?

1 A. Yes. It's some of 'em, yes.

2 Q. Some of them. Are there any additional?

3 A. I could -- my wife could not find 'em that night when I
4 had her search the records.

5 Q. And what did you do to locate all of your handwritten
6 notes underlying the piracy calculations that you provided
7 in this case?

8 A. What I did was, the handwritten notes were in back of a
9 file with the typewritten schedules. And she was able to
10 identify these as laying out on the table from discovery
11 when I pulled all the records and sent 'em.

12 Q. And can you tell us -- and these are records for what
13 years, Mr. Shelton?

14 A. '99 through 2004.

15 Q. Can you tell us when -- on the first page of
16 Exhibit 2031, it says August 1999 -- when you created these
17 notes?

18 A. In the fourth quarter, for a report that went to
19 Bell ExpressVu.

20 Q. In the fourth quarter of 1999?

21 A. Correct. August of '99.

22 Q. And why were they created?

23 A. I was tasked with an analysis of the NagraStar system
24 at the request of Bell ExpressVu in order to obtain the
25 NFL Sunday Ticket.

1 Q. How did you come up with the figures that are listed on
2 Page 1 of Exhibit 2031?

3 A. I'd been tracking the activity on NagraStar as far as
4 some of the early activity in '98 posting, so all I did was
5 recap as to what I saw and provided information to
6 Bell ExpressVu.

7 Q. If you'll look at Page 2 of Exhibit 2031, can you tell
8 us what Page 2 is?

9 A. It's year-end, 2000.

10 Q. When did you create the notes that appear on Page 2 of
11 Exhibit 2031?

12 A. It would have been right around November in preparation
13 for a security working group meeting with the Satellite
14 Broadcasting Communication Association.

15 Q. And is the information on Page 2 -- the figures for
16 Discount Satellite, PiratesDen, MoreSat, High-Tech
17 Satellite, and Xtreme Satellite -- are those figures the
18 same as -- did you get those figures in the same manner that
19 you did for 1999? Is it a recap of what you had prepared
20 and looked at over the year?

21 A. Yes, it is, from the pirate websites.

22 Q. And can you tell me what again you prepared this for,
23 in preparation for what?

24 A. The Satellite Business Communication Association had
25 formed in 1997 a security working group which was tasked to

1 coordinate activity among all the security vendors and
2 programmers that were specializing in security in order to
3 jointly combat theft.

4 Q. And were you a member of the security working group?

5 A. I was the chairman of that security working group from
6 '97 through 2004 when SPCA disbanded -- or not completely
7 disbanded, but scaled down.

8 Q. So what was the purpose of you creating the notes on
9 Page 2 of Exhibit 2031?

10 A. We openly discussed in the security working group the
11 activity that we were monitoring and seeing going on in the
12 marketplace, and these were some of the notes that I used
13 for that meeting along with just ongoing tracking as to the
14 progress -- what was happening on the NagraStar system.

15 Q. And if you'll turn to the next page, it is for the year
16 2000. Can you tell me when about did you create the notes
17 that appear on Page 3 of Exhibit 2031?

18 A. It would also have been right around the fourth quarter
19 in October/November time frame.

20 Q. Of 2001?

21 A. Correct.

22 Q. And what was the purpose of you creating the notes that
23 appear here on Page 3?

24 A. Once again, just from ongoing tracking. And then the
25 security working group met twice a year, usually in the

1 spring and the fall. And it's -- we had ongoing discussions
2 about the activity as to what was happening.

3 Q. And how did you arrive at the figures that appear here
4 on Page 3 for year 2001?

5 A. Their post actually should be stated as threads. It's
6 just the activity in the section of the pirate forums that
7 was discussing the Nagra system.

8 Q. And at this point in time, were there any FTA piracy
9 that you were tracking?

10 A. No, there was not.

11 Q. If you look at the next page for year 2002, can you
12 tell us approximately what date you prepared the notes for
13 year 2002 that appear on Page 4 of Exhibit 231?

14 A. That was also year-end.

15 Q. Year-end 2002?

16 A. Correct.

17 Q. And how did you come up with the figures that appear on
18 the page for year 2002?

19 A. Just from threads in the pirate website that had a
20 section for NagraStar hack.

21 Q. Is that the same for year 2003 and 2004 that appear on
22 the following pages?

23 A. Yes, it is.

24 Q. And when did you create the notes that appear on the
25 page that says 2003?

1 A. That was also year-end, and it also started tracking
2 the al7bar.net, which was dedicated only to free-to-air.

3 Q. And what did you prepare the notes on the 2003 page --
4 what did you prepare those for?

5 A. That was also security working group along with just my
6 ongoing tracking as to what activity was occurring.

7 Q. And you said that al7bar.net, that was a purely FTA
8 site?

9 A. Correct.

10 Q. So at this time you also began tracking threads and
11 activity on FTA websites?

12 A. The other pirate websites, such as Discount Satellite,
13 PiratesDen, High-Tech Sat, did not have free-to-air
14 activity. It was only the one, the al7bar.net, that was
15 dedicated solely for free-to-air.

16 Q. And if you look at the following page for year 2004,
17 approximately when did you create the notes that appear
18 here?

19 A. That was also year-end.

20 Q. Year-end 2004?

21 A. Correct.

22 Q. And how did you arrive at the numbers that appear here
23 for the year 2004?

24 A. That was just from tracking the subsection of the
25 websites dedicated to Nagra Smart Card hacks.

1 Q. And at that point in time, that was Discount Satellite
2 and PiratesDen, correct?

3 A. Correct.

4 Q. And what did you use the information contained on the
5 2004 page -- what did you use that information for?

6 A. It was the security working group.

7 Q. And was NDS a member of that security working group or
8 employees of NDS members of the security working group?

9 A. Not throughout the complete time period of '99. They
10 were in '99. They were excluded in 2001 because of a
11 conflict they had with DirectTV and NDS security, and the
12 SBCA, the Satellite Broadcasting Communication Association,
13 dropped their name from the security working group.

14 MS. WILLETTS: May I approach, Your Honor?

15 THE COURT: You may.

16 BY MS. WILLETTS:

17 Q. I've handed you what has previously been marked as
18 Exhibit 1603 that we discussed the last time you testified.
19 Can you identify this document again for the record?

20 A. It's an internal document. Basically compares my
21 numbers with the various Carmel reports that I worked on in
22 2003 and 2007. And then it recaps as far as just the Smart
23 Card at the bottom, and free-to-air, separating the numbers.

24 Q. And if you look at the second page, can you tell us
25 what the second page of Exhibit 1603 represents?

1 A. That is just basically a summary of the different
2 websites, particularly the free-to-air starting in 2003 and
3 tracking the migration from Smart Card into free-to-air
4 piracy.

5 Q. And we just discussed your handwritten notes. Is the
6 information contained on Page 2 of Exhibit 1603 -- was that
7 information obtained from the handwritten notes that we just
8 discussed in Exhibit 2031?

9 A. Yes, it was.

10 Q. Is there any other information that you considered when
11 preparing Exhibit 1603?

12 A. The free-to-air growth and those websites, and that was
13 in reference to the files I had my wife search for, the
14 free-to-air websites.

15 Q. And the last time you testified, I believe there was a
16 question as to why there was some discrepancy or difference
17 in the numbers -- your numbers, the Shelton numbers -- in
18 Exhibit 1603 and the final total piracy numbers at the
19 bottom of Exhibit 1603. Do you recall that?

20 A. Yes, I do.

21 Q. And do you know why there's a difference in those two
22 numbers?

23 A. Yes. I went back, took a look, and, of course, what
24 I'm tracking is the total activity on websites, not breaking
25 out Canada, because it's almost impossible to do. Some --

1 some registered members will put their location as Canada,
2 but it's not reliable.

3 The number at the bottom where it's April -- the
4 April 2007 report, that's only U.S. numbers.

5 Q. So the difference accounts for you backing out Canadian
6 piracy; is that correct?

7 A. Correct.

8 THE COURT: Just one moment.

9 Thank you, Counsel. Please continue.

10 BY MS. WILLETTS:

11 Q. How are you able to back out the Canadian piracy?

12 A. Canada typically is 10 percent the size -- TV
13 households -- 10 percent the size of U.S. TV households.
14 Currently right around 12 million TV households are in
15 Canada compared with 112 million in the U.S. So we did it
16 on a percentage basis as to what I had was tracking, backed
17 out that 10 percent -- actually, it was 10 to 13 percent
18 that we backed out.

19 MS. WILLETTS: I have no further questions,
20 Your Honor.

21 THE COURT: Counsel on behalf of NDS, do you have
22 any questions, or would you like to reserve.

23 MR. SNYDER: I have a couple questions.

24 THE COURT: All right.

25 MR. SNYDER: Thank you, Your Honor.

1 FURTHER RE-CROSS-EXAMINATION

2 BY MR. SNYDER:

3 Q. Mr. Shelton, you have your handwritten notes in front
4 of you that have been marked as Exhibit 2031?

5 A. Correct.

6 Q. And you also have Exhibit 1603, which is your
7 spreadsheet?

8 A. Correct.

9 Q. I'd like your help making sure I understand some
10 aspects of those.11 Could you turn, please, to the fourth page of your
12 handwritten notes?

13 A. Okay.

14 Q. Actually, I'm sorry.

15 Let's go one more page to the next page, to the year
16 2003. Do you have that page in front of you?

17 A. Yes, I do.

18 Q. Okay. And is it your testimony now that the numbers on
19 this page were transferred to the second page of
20 Exhibit 1603, your table called, "Pirate Member
21 Projections"?

22 A. Correct.

23 Q. So I'm clear, what are these? What are these numbers?
24 Are these members or posts or threads or something else?

25 A. They're threads.

1 Q. So maybe you can correct me if I'm wrong. Did you
2 testify previously that you were tracking members?

3 A. Yes, in regards to the free-to-air pirate websites,
4 they were members.

5 Q. So when you track free-to-air, you're tracking members;
6 and when you're tracking something else, you're tracking
7 threads?

8 A. Correct. It migrated from DirectTV pirate websites
9 into -- once DirectTV went secure in April of 2004, that's
10 when the growth of free-to-air websites started changing and
11 dropping off the DirectTV activity and just to coordinate,
12 adding the free-to-air activity.

13 Q. And so for 2003, you assumed that the website,
14 al7bar.net, was all FTA piracy?

15 A. Yes, sir.

16 Q. And so you have assumed that that was the number for
17 that year of FTA pirates?

18 A. Correct.

19 Q. Okay. Could you look at the first page of
20 Exhibit 1603, please.

21 A. Okay.

22 Q. For 2003, what's the number of FTA pirates you
23 estimated?

24 A. 100,000.

25 Q. Okay. That's not the same as the number of members or

1 posted or whatever it is you tracked on al7bar, is it?

2 A. It's actually discounted by 20 percent from that
3 al7bar.

4 Q. Okay. And why did you discount it 20 percent?

5 A. Because you'd have multiple members of a household
6 registering as a member of a website, and it's not a
7 scientific number. It's something that I felt needed to be
8 discounted because of the fact that you could have multiple
9 members sign on.

10 Q. So that's your normal 20 percent discount to try to
11 avoid duplication?

12 A. Correct.

13 Q. And you don't believe that that 20 percent is
14 scientific?

15 A. No.

16 Q. That's just your best guess?

17 A. It's actually just from reading as to the comments and
18 what they're stating.

19 Q. Okay. Let's look at 2004 for a moment. Your notes on
20 2004 -- so I'm looking at the last page of Exhibit 2031.
21 And could we compare that, please, to the second page of
22 Exhibit 1603.

23 On the last page of Exhibit 2031, you have two
24 entries: Discount Sat and PiratesDen. Do I read that
25 correctly?

1 A. Correct.

2 Q. Now, looking at the second page of Exhibit 1603, you
3 got a whole bunch of websites listed.

4 A. Correct.

5 Q. There's no entry on there for Discount Satellite in
6 2004, is there?

7 A. No, there's not.

8 Q. Okay. And there's no entry on your pirate member
9 projections on Exhibit 1603 for PiratesDen, is there?

10 A. No, there's not.

11 Q. And there -- but you do have entries on your pirate
12 member projections for a whole bunch of other websites. Let
13 me see -- looks like 15 or so?

14 A. Correct.

15 Q. And none of those are listed on your notes, are they?

16 A. No, sir.

17 Q. And you don't list on your notes -- and again, that's
18 Exhibit 2031 -- any information related to FTA piracy, do
19 you?

20 A. No, sir.

21 Q. And you don't have any notes for 2005?

22 A. Correct.

23 Q. So we don't know where any of the 15 or 18 or so
24 websites that you list on the second page of Exhibit 1603
25 come from, do we?

1 A. Correct.

2 Q. And we don't know how many of those would be FTA
3 related or something else?

4 A. The bulk was all FTA. The pirate card was a subsection
5 of the FTA websites at that point in time.

6 Q. But you don't have any notes or records to underlie
7 those numbers, correct?

8 A. Correct.

9 MR. SNYDER: No, more questions, Your Honor.

10 THE COURT: Just a moment.

11 Do you have any more questions, Counsel?

12 MS. WILLETTS: No, Your Honor.

13 THE COURT: I'm doing this from memory.

14 On 1603, look over at the 1999 column for a
15 moment.

16 THE WITNESS: Okay.

17 THE COURT: On the 1999 column, Mr. Snyder had
18 asked you before about this disparity of 70,000. Do you
19 recall that?

20 THE WITNESS: Correct.

21 THE COURT: Now, look at your new Exhibit 2031,
22 the first page. And look at the top of the first page, and
23 it says "August"; is that correct?

24 THE WITNESS: Correct.

25 THE COURT: Okay. August 1999. The first page

1 doesn't match with 1603 with that column. Why is that? Is
2 it because you've got a nine-month total on your worksheet
3 and you show 40,000 there? In other words, explain that
4 disparity to me.

5 THE WITNESS: Plus it is all of North America on
6 the first page, whereas if you compare it with the
7 April 2000 report or just the Smart Cards, that's just U.S.
8 at the request of counsel in 2007.

9 THE COURT: If I followed your methodology in the
10 transfer from your notes to 1603 --

11 THE WITNESS: Correct.

12 THE COURT: -- and I took the explanation that you
13 had given to NDS's counsel a few moments ago, then I should
14 be able to apply that across the board for each year with
15 uniformity; is that correct?

16 THE WITNESS: Correct.

17 THE COURT: Now, by my question, I don't want to
18 insult you. It's going to sound like I'm insulting you.
19 I'm going to forewarn you.

20 THE WITNESS: Okay.

21 THE COURT: Let me begin by telling you that I
22 expect that you're monitoring pirate sites. That's your
23 business.

24 THE WITNESS: Correct.

25 THE COURT: So in a while counsel for both sides

1 will tell you that you are or you aren't. And you had
2 previously testified that in your deposition you had made
3 the statement that you did "more than"; and one of those
4 "more than's" was you monitored pirate sites. And counsel
5 had brought to the Court's attention that you were right.
6 Back in 2007, you'd said that at a deposition. That's --

7 THE WITNESS: Correct.

8 THE COURT: -- now of no concern to me.

9 But I've expressed my frustration on more than one
10 time about all of the last-moment documents -- and to keep
11 my statements neutral -- for both sides that have come in.
12 And, of course, we appreciate the fact that an effort's been
13 made to find these year-end summaries. I've been told that
14 these year-end summaries will arrive today.

15 MS. WILLETTS: They arrived at our hotel at 10:00,
16 and we have someone bringing them over.

17 THE COURT: I want to be absolutely certain. The
18 obvious question has to be asked.

19 THE WITNESS: Okay.

20 THE COURT: Did you or anybody else recently
21 prepare these photocopies that I have in front of me, or
22 were these documents prepared -- now, listen carefully to
23 me --

24 THE WITNESS: Okay.

25 THE COURT: -- or were these documents prepared at

1 or near the time and date of the year? In other words, the
2 1991 -- 1999 was prepared in August, the 2000 was prepared
3 in October or November -- and be very careful. I'm
4 literally, when I get these documents, probably going to
5 order both parties to undertake a forensic analysis and make
6 certain for my record --

7 THE WITNESS: Correct.

8 THE COURT: -- that this ink is not outdated.
9 And, quite frankly, I've got the capability of doing that.

10 THE WITNESS: I understand.

11 THE COURT: With all the --

12 THE WITNESS: I understand.

13 THE COURT: -- with all the shenanigans I think
14 that's gone on now in this case between the corporate
15 entities, I'm not going to take any chance that there's any
16 problem with these records. So be very careful.

17 Were these prepared in 1999, 2000, 2001, 2002,
18 2003, and 2004? And I'm not a soft judge. If I find a lack
19 of credibility, I'm going to make sure that you're indicted,
20 and I'll put you in prison. I want to be that direct with
21 you.

22 THE WITNESS: I understand.

23 THE COURT: Okay. What's your answer?

24 THE WITNESS: My only concern is that these
25 documents should have been with all my other year-end

1 documents.

2 THE COURT: Okay.

3 THE WITNESS: These were laying out on a table in
4 a basement, and I asked my wife to go ahead, fax it, and
5 send 'em. I checked my other files that I produced, and
6 these should be the documents, Your Honor.

7 THE COURT: Okay.

8 THE WITNESS: It's just the concern I had was that
9 they should have all been together and produced with the
10 other ones, too.

11 THE COURT: Do you want to look at those originals
12 when they come in to be absolutely sure?

13 THE WITNESS: That would be great.

14 THE COURT: I'm going to afford you that courtesy.
15 I'm not going to be soft about this. I'm tired of the --

16 THE WITNESS: I understand.

17 THE COURT: -- of the Court being in this
18 frustrating position of trying to ferret out, you know,
19 who's destroying documents at the last moment, producing
20 documents at the last moment, and, quite frankly, having
21 people tell part of the truth and the other half not. I'm
22 going to afford you that courtesy.

23 Second, when you're monitoring -- and I really
24 forewarn you -- be very careful with that answer. I'm not
25 playing with what I just said at all.

1 THE WITNESS: I understand.

2 THE COURT: Love this system, and if I think it's
3 being tampered with, there will be severe problems.

4 That's enough said about that. You've got the
5 message.

6 THE WITNESS: Yes, sir.

7 THE COURT: When you're monitoring these
8 websites -- once again, let me repeat that I expect to you
9 monitor websites -- are you taking notes on a monthly basis,
10 weekly basis, to end up with the year-end compilation that
11 you have?

12 THE WITNESS: Yes, sir. I do snapshots sometimes
13 on a monthly basis, yes.

14 THE COURT: Now, when I do my taxes, I don't want
15 my credibility to ever be called into line both as an
16 American citizen and because of my position.

17 THE WITNESS: Correct.

18 THE COURT: So I've got not only my tax returns,
19 I've got every scrap of every deduction I've ever taken, I
20 think, back to 1972. Now, I know I'm only required to keep
21 those for three years.

22 THE WITNESS: Right.

23 THE COURT: But as a professional in your
24 position, I would think that when you are, you know, being
25 paid these sums of money, and retained in this kind of a

1 milieu where you know you're going to be called upon in a
2 dispute involving multiple companies before this, you being
3 one of the alleged experts in this area, I would think that
4 you would be keeping the underlaying documentation
5 someplace. That you would just willy-nilly throw that to
6 the wind and give me a one-page summary -- do you keep that
7 documentation, or are you one of those -- I'm going to kid
8 you for a moment, but I'm not kidding at all -- taxpayers
9 who just throw away the underlying documentation and keep
10 the summaries? Are you one of those experts that just throw
11 away the underlying documents?

12 THE WITNESS: I'm one of those that throw away,
13 Your Honor, because --

14 THE COURT: Why? You're a professional. You're
15 going to be called into court on this ongoing dispute. Why?
16 Why throw it away?

17 THE WITNESS: Well, because of the volume. And
18 basically I felt that once I recapped it electronically,
19 then I had a more permanent, accurate record. And the paper
20 documents became meaningless, and I've never had to produce
21 the paper documents before.

22 THE COURT: How does somebody go back -- I want to
23 put you in the position being an expert -- and the expert
24 from the other side's testimony -- you're sitting in the
25 audience listening to this. How does somebody go back and

1 reconstruct these figures?

2 THE WITNESS: You can -- that's -- there's
3 historical documents in the marketplace that have a lot of
4 these figures.

5 THE COURT: Tell me how. I mean, walk me through
6 that process so that I would have some comfort level --
7 maybe not to the figure --

8 THE WITNESS: Right.

9 THE COURT: -- but some comfort level. If I was
10 opposing counsel or the Court, I would have some ability to
11 go back and say, "Well, gee, it's just not Mr. Shelton
12 sitting there writing it down and then click and burn and
13 here's my summary."

14 THE WITNESS: There's actually media reports.

15 THE COURT: Excellent. Tell me where.

16 THE WITNESS: Satellite Business News is one of
17 the better ones because he's always been tracking piracy
18 since the C-band days.

19 THE COURT: Now, it wouldn't be difficult -- since
20 I'm not letting you get on the stand right now --

21 THE WITNESS: Okay.

22 THE COURT: -- I don't know if you're ever getting
23 on the stand -- it wouldn't be difficult for you to go out
24 today while you're sitting there and track that, would it?

25 THE WITNESS: No. If you got his -- Bob Sherman

1 is editor and owner of Satellite Business News.

2 THE COURT: Okay.

3 THE WITNESS: If you got his publications,
4 historical publications, you could go back and reconstruct
5 everything from the C-band days.

6 THE COURT: And how would I get those?

7 THE WITNESS: You can order --

8 THE COURT: Better yet, how would you get those?

9 THE WITNESS: You can order 'em online from his
10 website.

11 THE COURT: Okay. So I would go to a computer,
12 order it online, which wouldn't be too difficult, and it
13 would pop up on my screen?

14 THE WITNESS: Actually, he ships 'em to you. It's
15 in the hard copy, large tabloid format.

16 THE COURT: Okay.

17 THE WITNESS: And he charges per publication.
18 It's not a whole lot. I believe it's like \$18.

19 THE COURT: We'll bill EchoStar and NagraStar for
20 it. I'm not too concerned.

21 THE WITNESS: Okay.

22 THE COURT: Now, I don't know what his methodology
23 is or his numbers, but at least I'd have a cross-reference.

24 THE WITNESS: Yes.

25 THE COURT: At least I would know that there's a

1 ballpark figure and --

2 THE WITNESS: Correct.

3 THE COURT: -- individual independent
4 corroborating entities.

5 THE WITNESS: Other than the 2002 story that he.
6 Did, where it said "satellite TV pirates go mainstream," I
7 worked with him on that story, so some of the numbers in the
8 story came from me.

9 THE COURT: That's fair enough. But not 1999, not
10 2000, not 2001, not 2002.

11 THE WITNESS: Well, that was 2002.

12 THE COURT: Not 2003, not 2004, not 2005.

13 THE WITNESS: Correct. And there were other
14 stories in 2002 that I didn't work with him on.

15 THE COURT: Okay. Just a moment.

16 (Pause in the proceedings at 8:57 a.m.)

17 THE COURT: All right. I want you to take 1603.

18 THE WITNESS: Okay.

19 THE COURT: We tried to implement your
20 methodology.

21 THE WITNESS: Okay.

22 THE COURT: I want to go back to NDS's counsel's
23 examination.

24 THE WITNESS: Okay.

25 THE COURT: And I want to start with your notes in

1 1999. From memory, I think that's 2031.

2 THE WITNESS: Correct.

3 THE COURT: And in 2031, the 1999 figures, there's
4 no transference of the Discount Sat and the PiratesDen on
5 Page 2 of 1603 -- from your notes, on Page 1 of 2031.

6 I'm baffled by that. Look over -- better yet,
7 let's take your -- better yet, let me go to 2004.

8 THE WITNESS: Okay.

9 THE COURT: Let me go to 2004 for a moment. That
10 was my confusion. There's absolutely no transfer of the
11 Discount Sat or the PiratesDen 2004, which all of us know is
12 going to be the critical year.

13 THE WITNESS: Correct.

14 THE COURT: Why?

15 THE WITNESS: That's the year that DirectTV went
16 secure in April of 2004. At that point in time, a lot of
17 the other old DirectTV pirate websites such as PiratesDen,
18 Discount Sat then started transferring everything over to
19 free-to-air because that was the popular method of -- the
20 only hack available in the market. DirectTV was gone. A lot
21 of the old DirectTV pirate websites simply disappeared, and
22 they were replaced by the free-to-air websites that had a
23 subsection in those websites for pirating Nagra Smart Cards,
24 and that's when I started tracking those subsections.

25 THE COURT: Okay.

1 THE WITNESS: Remember, Your Honor, in --
2 historically it was all primarily DirecTV piracy, and there
3 was just a small piece of Nagra in the pirate websites.
4 That all changes in 2004.

5 THE COURT: Okay. Now, I haven't had time to
6 actually get a calculator. I'm going to guesstimate this.

7 THE WITNESS: That's fine.

8 THE COURT: I want you to turn to 2000, 2001,
9 2002, and just jump, then, to 2004 on 1603, Page 1.

10 You told me in 2000 that there was approximately
11 190,000, but you had a discount rate of about 20 percent.
12 That's how you end up with the 150,000 under "Total EchoStar
13 Smart Card Pirates."

14 See that?

15 THE WITNESS: Correct.

16 THE COURT: Actually, it's 21 percent. It doesn't
17 matter.

18 I go over to 2001, and on a percentage basis
19 you've got about a 19 percent reduction. So I'm not
20 quibbling with a percentage, anyway. You're in the ballpark
21 in terms of your methodology.

22 THE WITNESS: Okay.

23 THE COURT: Then I go over to 2002, and roughly
24 speaking, that's about an 8 percent reduction.

25 THE WITNESS: From Page 2, Your Honor?

1 THE COURT: Well, I'm using your numbers off of
2 1603.

3 THE WITNESS: Okay. You're looking at the front
4 page.

5 THE COURT: Okay. At the front page.

6 THE WITNESS: Okay.

7 THE COURT: Okay. Now, at that 8 percent -- hold
8 on -- and that's a reduction.

9 Now I get to the critical year where damages can
10 flow. In 2004, I've got a 15 percent increase. My numbers
11 absolutely reverse themselves. When you think about that,
12 that's like a 35 percent swing.

13 You have to understand I'm a little suspicious
14 about --

15 THE WITNESS: Correct.

16 THE COURT: -- the very year the damages are
17 supposed to flow. What's going on?

18 THE WITNESS: Okay. At the top, I'm tracking all
19 of North America, which includes Canada, and then at bottom
20 it's just the U.S.

21 THE COURT: Well, I know that, but I'm using your
22 reduction figures. I'm using the EchoStar Smart Card
23 Pirates.

24 THE WITNESS: At the very bottom? Okay.

25 THE COURT: I'm coming up with 150,000. I'm

1 coming up with 2001, 400,000; 2002, 492 -- I can't quite
2 read that.

3 THE WITNESS: 492.

4 THE COURT: 492. My point is, however you
5 calculate it, in looking at your top numbers, I've got a
6 minus 21 percent in 2000, a minus 19 percent in 2001, a
7 minus 8 percent in 2002, and I get over to 2004 and I've got
8 a plus 15 percent.

9 THE WITNESS: Where my number at 2004 is ".97 "at
10 the top?

11 THE COURT: You figure it out. You're the one
12 that came up with the chart.

13 THE WITNESS: It was explained that the U.S.
14 market -- the only numbers we reported on at the very bottom
15 of the page, not all of North America.

16 THE COURT: And this number on 2004 doesn't
17 correspond to your handwritten notes. But here, there's a
18 jump in damages.

19 THE WITNESS: No, sir, it doesn't. Because it's
20 just two pirate websites that remained out of all the other
21 free-to-air.

22 THE COURT: So here we are at the big damage year.

23 THE WITNESS: Correct.

24 THE COURT: Your notes don't check.

25 THE WITNESS: 'Cause they're incomplete.

1 THE COURT: No. Or you're messing with them,
2 quite frankly. What's going on here?

3 THE WITNESS: No, Your Honor.

4 THE COURT: Okay. Then explain it to me.

5 THE WITNESS: Okay.

6 THE COURT: I don't understand it.

7 THE WITNESS: These are incomplete notes.

8 THE COURT: Okay. Where are the rest of them?

9 THE WITNESS: My wife was unable to find them.

10 THE COURT: Whose responsibility was that?

11 THE WITNESS: Recordkeeping would be my
12 responsibility.

13 THE COURT: You're an expert, and you come into
14 court, and you have a summary sheet. Shouldn't you have
15 these underlying notes?

16 THE WITNESS: To be honest with you, Your Honor,
17 once I put it in an electronic format, then the written
18 became useless.

19 THE COURT: And how do I reproduce that? That's
20 your responsibility. When I say "I," I'm referring to you.

21 You want to get on the stand as an expert. How do
22 you reproduce that?

23 THE WITNESS: I've never been asked to reproduce
24 the handwritten --

25 THE COURT: Well, it starts at the top. This is

1 your responsibility.

2 THE WITNESS: Okay.

3 THE COURT: All right.

4 Counsel, you know my concerns. Get busy.

5 MS. WILLETTS: Yes, Your Honor.

6 THE COURT: All right. Now, do you have any
7 additional questions?

8 MS. WILLETTS: No, Your Honor.

9 THE COURT: All right. On behalf of NDS,
10 Mr. Snyder?

11 MR. SNYDER: Can I just ask one more area to
12 clarify, Your Honor?

13 THE COURT: That's why we're here. You can have
14 all day.

15 FURTHER RECROSS-EXAMINATION

16 BY MR. SNYDER:

17 Q. Look at Exhibit 1603, Mr. Shelton.

18 A. Yes.

19 Q. I want to make sure I understand how and why numbers
20 are being moved from one category to the other.

21 At the bottom of the second page of 1603, you've got a
22 row called "gross total."

23 A. Correct.

24 Q. And then you subtract 20 percent. Why do you subtract
25 20 percent?

1 A. Because of the overstate of registered members.

2 Q. And after you subtract 20 percent, you then come up
3 with a net total?

4 A. Correct.

5 Q. And you transferred that net total to the top of the
6 first page of 1603. That's the Shelton Net Piracy Total,
7 correct?

8 A. Correct.

9 Q. And when you look at the very bottom row of 1603, Total
10 EchoStar Pirates, Cards Plus FTA"?

11 A. Correct.

12 Q. How do you go from Shelton Net Piracy Total to Total
13 EchoStar Pirates Cards Plus FTA?

14 A. Okay. If -- let's take 2004 as an example. Where it's
15 got the .97, that includes cards, FTA for all of
16 North America. Where we drop down into 2004 at the bottom,
17 we're separating out just the cards for the U.S. market and
18 just the free-to-air for the U.S. market.

19 Q. Let me interrupt for just a second. I want to make
20 sure I understand you.

21 I'm looking at the very bottom row, which is "Cards
22 Plus FTA." So that includes FTA pirates, right?

23 A. Correct.

24 Q. And your top row, the Shelton Net Piracy Total, that
25 also includes FTA piracy, correct?

1 A. For North America.

2 Q. Let me take it a piece at a time 'cause this is
3 important.

4 A. Okay.

5 Q. The top row, Shelton Net Piracy Total, is all of
6 North America?

7 A. Correct.

8 Q. And the bottom row, Total EchoStar Pirates Cards Plus
9 FTA, is something different. I'm going to get to that in
10 just a second. But both of those include cards and FTA
11 piracy; is that right?

12 A. Correct.

13 Q. So could you explain for us how you go from the numbers
14 in the top row of the first page of 1603 to the very bottom
15 row of the first page of 1603, Total EchoStar Pirates Cards
16 Plus FTA?

17 A. Could you repeat that?

18 Q. Sure. Let me take it a piece at a time so you can
19 follow.

20 A. Okay.

21 Q. The very top row on the first page of 1603 is the
22 Shelton Net Piracy Total, correct?

23 A. Correct.

24 Q. And that includes cards and FTA piracy?

25 A. Correct.

1 Q. And your testimony now is that's all of North America?

2 A. That's correct.

3 Q. And then on the very bottom row, there's a row called
4 total EchoStar Pirates Cards Plus FTA. Do you see that
5 line?

6 A. Correct.

7 Q. And that's cards and FTA as the label says, correct?

8 A. Just for the U.S.

9 Q. But those -- that bottom row is not the same as the top
10 row that was all of North America?

11 A. That's correct.

12 Q. So can you explain how you went from the top row of
13 1603, which is all of North America, cards and FTA, to the
14 bottom row, Total EchoStar Pirates Cards Plus FTA.

15 A. That's where we back out the percent of TV households
16 in Canada compared with the TV households in the U.S.
17 That's how we derive what allocated portion would be in just
18 Canada versus the U.S.

19 Q. And I just want to be clear. Your testimony now is
20 that that difference is only to account for the difference
21 between U.S. piracy and North America piracy --

22 A. Correct.

23 Q. -- is that right?

24 A. Correct.

25 Q. And the methodology that you used to do that was to

1 deduct 10 percent?

2 A. It averaged around 10 percent, right around -- let me
3 do the calculation real quick.

4 Q. Well, I'll tell you it doesn't average to 10 percent.
5 Well, I don't know what it averages, but in each year it's
6 not 10 percent.

7 So that's why I want to understand, Mr. Shelton, what
8 did you do to go from the top row to the bottom row where
9 one is North America and one is the United States, but
10 everything else is equal?

11 A. That's where Sean Badding basically plugged in and
12 percentage to subtract out, but my number, what would be
13 just Canada, in order to get to the U.S. market.

14 Q. And Sean batting did that work?

15 A. Yes, he did the spreadsheet.

16 Q. That's someone at the Carmel Group?

17 A. Correct. I'm not proficient in spreadsheets.

18 Q. Do you know what methodology Mr. Badding used to go
19 from your estimate of Card Plus FTA pirates in North America
20 to Cards Plus FTA pirates in the United States?

21 A. He used a percentage basis, which is historically what
22 we always have done in order to estimate how much would be
23 in Canada. And I don't have his backup sheets.

24 Q. Other than a percentage -- and that percentage was of
25 households?

1 A. TV households.

2 Q. TV households. So the percentage didn't have anything
3 to do with piracy?

4 A. No, no.

5 Q. It's just how many households in the two countries have
6 televisions?

7 A. The size of the market.

8 Q. Can we walk across just so we can see this?

9 THE COURT: Do you have the electronic authority
10 to put this up on the screen?

11 (Document displayed.)

12 BY MR. SNYDER:

13 Q. Mr. Shelton, this is not exactly -- I'm going to get
14 rid of a bunch of lines by taking two pieces of paper and
15 folding them over in the hopes that we can actually see
16 this.

17 A. That's okay.

18 Q. Okay. Can you see those numbers?

19 A. Yes, I can.

20 Q. Okay. So what I'm asking about is this line at the top
21 of the first page of 1603, the Shelton net piracy total.

22 A. I see that.

23 Q. Okay. And where we've been comparing that to the
24 bottom line, Total EchoStar Pirates Cards Plus FTA.

25 A. Correct.

1 Q. I don't want to go back over all of this.

2 THE COURT: Oh, I do.

3 MR. SNYDER: Okay.

4 BY MR. SNYDER:

5 Q. The top line is the number, Shelton Net Piracy Total,
6 that is a number that you transferred from the bottom of the
7 second page of 103, correct?

8 A. Correct.

9 Q. And that's all your estimate of all piracy in
10 North America cards plus FTA; is that right?

11 A. Well, in '99 it would just be cards.

12 Q. 'Cause in '99 there was no FTA?

13 A. Right.

14 Q. But that's the number for North America?

15 A. Correct.

16 Q. And this row, Total EchoStar Pirates Cards Plus FTA, at
17 the very bottom, your testimony now is that that's the
18 number for the United States?

19 A. Just the U.S.

20 Q. Okay. And the only difference between the top line,
21 Shelton Net Piracy Total, and the bottom line, Total
22 EchoStar Pirates Cards Plus FTA --

23 THE COURT: 50,000.

24 BY MR. SNYDER:

25 Q. -- is that you have deducted for non-U.S. So the top

1 row is North America; the bottom row is the United States,
2 correct?

3 A. Correct.

4 Q. Okay. Can we go across and see what those percentages
5 look like?

6 A. Okay.

7 Q. In 1999, you estimate 70,000 pirates in North America,
8 correct?

9 A. Correct.

10 Q. And then in the row, Total EchoStar Pirates in 1999 for
11 the U.S., you say 50,000?

12 A. Correct.

13 Q. So that's a deduction of about 30 percent?

14 A. Yes, we basically go very conservative on reporting.

15 Q. Okay. And that's to eliminate non-U.S. pirates?

16 A. Correct.

17 Q. Now let's look at 2000. In 2000, you estimated 150,000
18 pirates in North America, correct?

19 A. Correct.

20 Q. Then the bottom line is also 150,000, right?

21 A. Correct.

22 Q. So you didn't detect anything for pirates outside the
23 United States; it's the same number, right?

24 A. Right.

25 THE COURT: Time out. Why? That's what we were

1 going back to chambers and trying to calculate using your
2 methodology, expecting uniformity regardless of whether
3 there was free-to-air piracy. We know there's not in 2000,
4 so that can't be the explanation. So why?

5 THE WITNESS: No. I have no explanation other
6 than like I said...

7 THE COURT: Okay. 2001.

8 BY MR. SNYDER:

9 Q. Let's look at 2001. In 2001, you estimated 400,000
10 pirates in North America, correct?

11 A. Correct.

12 Q. And in your last line, Total EchoStar Pirates Cards
13 Plus FTA, you also include 400,000, correct?

14 A. Correct.

15 Q. So you have no deduction whatsoever for pirates outside
16 the United States?

17 A. Correct.

18 Q. All right.

19 A. And let me add that --

20 THE COURT: No, no. Don't add. Let's just --

21 BY MR. SNYDER:

22 Q. Let's keep going across here.

23 In 2002, you estimate 560,000 pirates --

24 A. Correct.

25 Q. -- in North America, correct?

1 A. Correct.

2 Q. And on the last line, Total EchoStar Pirates Cards Plus
3 FTA, you estimate 492,000, correct?

4 A. Correct.

5 Q. And so that's a reduction of about 12 percent, a little
6 more than 10 percent?

7 A. Correct.

8 Q. And in the next year, 2003, you estimated 700,000
9 pirates; is that right?

10 A. Correct.

11 Q. And the Total EchoStar Pirates Cards Plus FTA in 2003
12 is 600,240, correct?

13 A. Correct. That's correct.

14 Q. And that's a reduction of about 15 percent?

15 A. Yes.

16 THE COURT: Okay. Now, 2004.

17 BY MR. SNYDER:

18 Q. In 2004, it goes down even further. You estimate
19 970,000 pirates in all of North America, correct?

20 A. Correct.

21 Q. And Total EchoStar Pirates Cards Plus FTA, you have
22 768,307?

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

24 Q. And that's a reduction of about 22 percent?

25 A. Correct.

1 THE COURT: So excuse me. Then I'm mistaken.
2 That's not an increase as I thought.

3 MR. SNYDER: The percentage deduction increased;
4 the number went down.

5 THE WITNESS: Decrease.

6 BY MR. SNYDER:

7 Q. And in 2005, you had you estimated 1,010,000 pirates in
8 North America, right?

9 A. Correct.

10 Q. But for Total EchoStar Pirates Cards Plus FTA, you
11 estimated 885,000?

12 A. Correct.

13 Q. And that's a difference of about 12 percent?

14 A. Correct.

15 Q. Can you explain why the different percentages were
16 used?

17 A. Yes. This was an internal document. Basically --

18 THE COURT: But it became a public document for
19 me.

20 THE WITNESS: That's correct.

21 My top line was my own independent work that I was
22 doing irregardless of Carmel Group. Carmel Group was doing
23 their own work in earlier reports, including the 2003. I
24 was not working with the Carmel Group until 2005.

25 THE COURT: So what I'm hearing in a roundabout

1 way is the top numbers are your numbers; the bottom numbers
2 are Carmel Group.

3 THE WITNESS: Yes.

4 THE COURT: Simple as that.

5 THE WITNESS: Yes.

6 THE COURT: Where did Carmel Group get those
7 numbers?

8 THE WITNESS: They did that independently on their
9 own.

10 THE COURT: Nobody knows.

11 MR. SNYDER: I've got no further questions.

12 THE COURT: Counsel, do you have any further
13 questions?

14 MS. WILLETTS: I do not, Your Honor.

15 THE COURT: All right. I'm just going to have a
16 little discussion in chambers again. We're going to take a
17 sharp pen and do some of our own arithmetic for awhile and
18 look at these things. We'll be back.

19 Mr. Shelton, if you would like to remain, sir, on
20 the stand.

21 (Pause in the proceedings at 9:21 a.m.)

22 (Proceedings resumed at 9:54 a.m.)

23 THE COURT: Okay. Let's go on the record for a
24 minute.

25 All right. The Court's been in session since

1 8:00 o'clock out of the presence of the jury.

2 Mr. Shelton, I want to thank you for your
3 testimony this morning.

4 RULING RE PLAINTIFF'S EXPERT WITNESS

5 THE COURT: On oral argument, the Court discovered
6 a number of differences between the statistics reflected in
7 Mr. Shelton's handwritten notes and the spreadsheet produced
8 to summarize his findings. Mr. Shelton indicated that he
9 reduced the total number of pirates to reflect the
10 possibility of individuals creating multiple accounts on
11 pirate websites. However, the percentage difference between
12 the handwritten notes and the summary varied year by year
13 without sufficient explanation.

14 Additionally, Mr. Shelton again reduced his piracy
15 total to back out the number of Canadian pirates and isolate
16 the American pirates only. However, during questioning this
17 morning by opposing counsel, it was pointed out that the
18 percentage used to account for Canadian pirates was based on
19 number of TV households versus the number of pirates, which
20 fails to take into account the differences between the
21 United States and Canada in the market for piracy devices.

22 Additionally, the percentage reduction varied from
23 year to year with no explanation forthcoming. Indeed,
24 Mr. Shelton indicated he had based his calculations on the
25 Carmel Group findings. However, the parties have stipulated

1 that the Carmel Group's findings will not be presented.

2 At present, it is not clear that Mr. Shelton used
3 a consistent methodology in calculating the number of
4 pirates in the United States using the ROM 3 card.

5 He indicated that he is not proficient with the
6 spreadsheets that he created, and he relied on excluded
7 information in reaching his opinions.

8 He also indicated that many of the records
9 underlying his findings were lost or discarded. These
10 problems raise substantial concerns about the methodology
11 employed under the Kuhmo/Daubert standard for admission of
12 expert testimony.

13 While the Court does recognize that it is a unique
14 area of expertise and would be favorable to the plaintiff's
15 argument in that regard, without a consistent applied
16 methodology, this Court cannot permit Mr. Shelton to testify
17 as an expert at this time.

18 Therefore, this Court tentatively excludes
19 Mr. Shelton's testimony.

20 But that's not the end of our discussion.

21 EchoStar will be permitted to rely on the
22 testimony of Christopher Tarnovsky. You're not precluded
23 from arguing lost profits, and you're not precluded from
24 arguing the hundred thousand number that's indicated both in
25 the e-mail, regardless of whether Mr. Tarnovsky has a

1 methodology or not. Now, although that wasn't advertised,
2 et cetera, it still is an internal document circulated with
3 some credibility inside NDS.

4 If Mr. Shelton is able to reconstruct your
5 analysis, though, using information other than the
6 Carmel Group report, I'll conduct another evidentiary
7 hearing tomorrow morning at 7:30 to give you the opportunity
8 once again to testify during the plaintiff's case in chief.
9 If you cannot do that by that time, you will not be taking
10 the stand during plaintiff's case in chief.

11 Now, it gets even more complicated. I want to
12 trace out so that there's no surprise in the future what may
13 occur.

14 Since you're not precluded from arguing lost
15 profits based upon Tarnovsky, the arguments will go back and
16 forth in this regard:

17 Ladies and gentlemen of the jury, on behalf of
18 EchoStar you should find credibility in Mr. Tarnovsky. He
19 says he doesn't have a methodology, he doesn't know how he
20 came up with them, but look at NDS and how they relied upon
21 this hundred thousand number.

22 The counterargument's going to be, "We don't know
23 where he got it from."

24 "Weren't you guessing, Mr. Tarnovsky?"

25 "Yes, I was guessing."

1 And that's for the jury now to decide. That
2 doesn't go to admissibility. That goes to weight.

3 So there's no preclusion, once again, from lost
4 profits. There's a preclusion from the methodology thus far
5 with Mr. Shelton.

6 Now, assume for a moment, since experts can rely
7 upon hearsay and literally almost the universe, that NDS
8 puts up a damages expert. Mr. Shelton may be back. In
9 other words, we're not done with Mr. Shelton, and we're not
10 done with the damages expert. That now becomes NDS's call.

11 So NDS is forewarned, and you can do whatever you
12 want to tactically, but if an expert comes on the stand, you
13 may be opening the door for Mr. Shelton because that
14 expert's allowed to be asked in cross-examination, "Did you
15 read the expert report of Mr. Shelton?" "Did he reach a
16 conclusion different than yours?"

17 Regardless of methodology, that becomes a
18 difficult tactical choice for both of you. Damages expert
19 on the stand for NDS, other than swap out,
20 cross-examination's appropriate. Questions concerning "did
21 you read the other expert's report?" Of course he did.
22 "Why did you differ from those numbers?" "Did you take them
23 into account?"

24 Now, when we finally get down to it, there's not
25 much of a disparity. I keep pointing out to you that

1 however this gentleman reached his figures -- Mr. Shelton --
2 and Tarnovsky reached his figures, we're about 9,000 off. A
3 hundred thousand to 109,000 if you average it out.

4 I'll leave that to your discretion. Mr. Snyder,
5 you will have the initial choice to make. If you put up a
6 damages expert, other than swap, then the cross-examination
7 extends to the other expert's report.

8 (To the witness:) And you may be needed for
9 rebuttal at that time.

10 THE WITNESS: (Nods.)

11 THE COURT: In the meantime, these numbers, as you
12 know, in my findings are not sufficient in terms of
13 methodology, so you have a lot of work to do.

14 THE WITNESS: Okay.

15 THE COURT: Either between now and tomorrow
16 morning at 7:30, or I'll stay until 6:00 or 7:00 or
17 8:00 o'clock tonight.

18 So, Counsel, if you can come up with it in your
19 case in chief, you'll be allowed to present it. But if not,
20 you may not be done with Mr. Shelton. So the doors haven't
21 closed yet, but they certainly have at this point on
22 presenting Mr. Shelton as an expert in this area because of
23 the methodology and the Kuhmo-Daubert test.

24 That's complicated, but I'm trying to trace out
25 for both of you so there are no surprises later on of a

1 claim, "We didn't see this coming." Forewarning NDS and
2 telling you, I'd keep Mr. Shelton around potentially, and
3 NDS has a tactical decision to make if they're going to go
4 into lost profits.

5 Now, I don't know what that does to Mr. Rock.
6 Seems to me Mr. Rock becomes somewhat irrelevant at this
7 point, but what do we do with Mr. Rock?

8 MS. WILLETTS: Your Honor, Mr. Rock's lost profits
9 calculations, he can certainly take the hundred thousand
10 that Mr. Tarnovsky estimates. However, to come up with a
11 lost profits final number, he does have to rely on two
12 certain factors. He won't be relying on the actual total
13 number of piracy that Mr. Shelton has testified.

14 THE COURT: He won't take the stand again until we
15 have another hearing outside the presence of the jury this
16 afternoon or this evening. I want to hear exactly what he's
17 going to say.

18 Everybody seems to be straying over the line a
19 little bit. I'm not going to allow that.

20 Mr. Shelton, you're ordered to remain. You have
21 some work to do unless EchoStar decides to release you. And
22 you may be needed in rebuttal in a couple weeks. We'll see.

23 THE WITNESS: Okay.

24 THE COURT: Thank you very much, sir. You may
25 step down.

1 (Witness steps down subject to recall.)

2 All right. Now, once again, I'm going to wait to
3 see what Mr. Tarnovsky says. He may deny that that's even
4 an e-mail that he produced. So I may be supposing he's not
5 going to be coming up with a methodology. We'll find out.

6 All right. Are you ready to proceed with
7 Mr. Tarnovsky?

8 MR. HAGAN: We are, Your Honor.

9 THE COURT: All right. Kristee, could you get the
10 jury.

11 (In the presence of the jury.)

12 THE COURT: All right. If you would be seated,
13 please.

14 Counsel, if you would be kind enough to call your
15 next witness.

16 The record should indicate all the parties and
17 counsel are present, as well as the jury.

18 MR. HAGAN: Thank you, Your Honor.

19 The plaintiffs call to the stand
20 Christopher Tarnovsky.

21 THE COURT: Thank you.

22 Mr. Tarnovsky, if you would step forward, sir.
23 Would you be kind enough to raise your right-hand.

24 Kristee, who is the clerk, will administer an oath
25 to you.

1 CHRISTOPHER TARNOVSKY, PLAINTIFF'S WITNESS, SWORN

2 THE WITNESS: Yes, ma'am.

3 THE COURT: Thank you, sir.

4 If you would please be kind enough to take the
5 witness stand which is located to my left.

6 Sir, would you be kind enough to have a seat.
7 Would you turn your chair around and face the jury, please.
8 Slide the chair a little bit closer. Now, move the
9 microphone closer to you, sir. Thank you.

10 Would you state your full name for the jury.

11 THE WITNESS: My name is Christopher George
12 Tarnovsky.

13 THE COURT: Spell your last name, sir.

14 THE WITNESS: T-A-R-N-O-V-S-K-Y.

15 THE COURT: Thank you.

16 This is direct examination by Mr. Hagan on behalf
17 of EchoStar NagraStar.

18 MR. HAGAN: Thank you, Your Honor.

19 DIRECT EXAMINATION

20 BY MR. HAGAN:

21 Q. Good morning Mr. Tarnovsky.

22 A. Good morning, Mr. Hagan.

23 Q. You understand you were just administered an oath; is
24 that correct, sir?

25 A. Yes, I do.

1 Q. To tell the truth subject to the penalties of perjury?

2 A. Yes, I do.

3 Q. And that's the same oath that you were administered
4 previously when you gave deposition testimony in this case;
5 is that correct, sir?

6 A. Yes.

7 Q. Now, Mr. Tarnovsky, we're going to get into your
8 employment relationship with NDS in a minute, but before we
9 do that, I want to talk a little bit about the years that
10 preceded that relationship.

11 You were living in Europe in 1995/1996 time frame; is
12 that correct?

13 A. Yes.

14 Q. And during that time, you were engaged in efforts to
15 compromise conditional access technology; is that correct?

16 A. Yes.

17 Q. And you understand what that means is to circumvent a
18 system, to steal the programming -- a security system in
19 order to try to steal the programming that's encrypted by
20 it; isn't that correct, sir?

21 A. Yes.

22 Q. Now, you were a member of a Internet group called
23 tv.crypt; is that correct?

24 A. Yes, that's correct.

25 Q. Can you explain to the ladies and gentlemen of the jury

1 what tv.crypt was?

2 A. The tv.crypt was a private e-mail list. There was no
3 such thing as the Internet, a WWW-based Internet back then.
4 It was typically students in college going for their PhDs
5 and such, and it was a very elite list of people that had a
6 fascination with Smart Card technology in general. But it
7 was focused on getting access to English programming.

8 Q. It was a group of people that were interested in
9 hacking, correct?

10 A. Yes. And most of the list was PhD candidates in
11 college or professors, even.

12 Q. But it was a group of people interested in hacking
13 security systems for TV providers, correct?

14 A. Primarily, yes.

15 Q. And you posted information on this list, sir; isn't
16 that right, Mr. Tarnovsky?

17 A. Yes.

18 Q. And you understood at the time that the information you
19 were posting was to help people steal this programming,
20 correct?

21 A. I disagree, no.

22 MR. HAGAN: Let's take a look at Exhibit 6-A if we
23 could, Christine.

24 BY MR. HAGAN:

25 Q. Now, Mr. Tarnovsky, you're getting a copy of what's

1 been marked Exhibit 6-A.

2 If you could take a minute to look at that document.

3 It's one of the ones that we covered in your deposition. Do
4 you recognize it, sir?

5 A. I do.

6 Q. And this is a copy of one of the postings that you made
7 on the tv.crypt site or an e-mail that you sent related to
8 that tv.crypt site; is that correct?

9 A. It appears to be.

10 Q. And the "from" line has "Christopher Tarnovsky" and
11 then an e-mail address. Starts with ATVSCS27. Do you see
12 that?

13 A. Yes, I do.

14 Q. And that is your e-mail address; isn't that correct,
15 sir?

16 A. That was, yes.

17 Q. And in this posting --

18 MR. HAGAN: Clint, if we could blow this one up?
19 Your Honor, I would offer Exhibit 6-A into
20 evidence.

21 THE COURT: Any objection?

22 MR. KLEIN: No objection.

23 THE COURT: Received.

24 (Exhibit No. 6-A received in evidence.)

25 (Document displayed.)

1 BY MR. HAGAN:

2 Q. If you'll look at the first line, you admit, "My name
3 is Chris Tarnovsky, and I'm a hacker"; is that correct, sir?

4 A. Yes, it is.

5 Q. So at this time, you weren't trying to hide the fact
6 that you were engaged in hacking activities; is that
7 correct?

8 A. That is correct.

9 Q. Now, you moved back to the United States in 1996; is
10 that right?

11 A. Yes.

12 Q. You recall the month?

13 A. Yes.

14 Q. What month was that?

15 A. July.

16 Q. So July of '96 you moved back to the United States, but
17 you didn't stop your hacking activities, did you,
18 Mr. Tarnovsky?

19 A. No.

20 Q. In fact, you continued to engage in posting information
21 on various Internet websites related to hacking; is that
22 correct?

23 A. Yes.

24 Q. Now, during the time that you were in Europe, you met
25 an individual named Jan Saggiori; is that right?

1 A. Yes.

2 Q. And you understood at that time that Mr. Saggiori was
3 also interested in hacking conditional access technology?

4 A. Yes.

5 Q. And you shared files and codes and information with
6 Mr. Saggiori; is that correct?

7 A. Yes.

8 Q. And, in fact, you provided him with files for the
9 European battery card for a Dalas 5002 processor; isn't that
10 right?

11 A. I believe that's correct.

12 Q. You understood at the time that Mr. Saggiori wanted to
13 use that information to further his hacking efforts,
14 correct?

15 A. Yes.

16 Q. Now, when you got to the United States in '96 and you
17 continued to engage in hacking efforts, you were being paid
18 money from various individuals in Canada; isn't that
19 correct?

20 A. Yes.

21 Q. And I asked you in your deposition if you recalled
22 approximately how much money you got during that time frame.
23 Do you recall that, sir?

24 A. No.

25 Q. I believe you testified that it was somewhere between

1 \$40,000 and \$50,000 US; is that right?

2 A. Speculating, I believe that's correct.

3 Q. And the bottom line is, you have to speculate because
4 you don't recall how much money you received from the
5 Canadians for your assistance in piracy?

6 A. That is correct, after 11 years.

7 Q. Well, it -- it's also correct that you shredded all of
8 the shipping labels and shipping envelopes that that money
9 came in; isn't that correct?

10 A. Speculating, I probably did.

11 Q. Now, do you know any of these Canadian individuals that
12 you were assisting in piracy in the '96 time frame?

13 A. No.

14 Q. In your deposition, you testified that you felt you
15 needed to help these "poor, poor Canadians" receive
16 television. Do you recall that testimony?

17 A. I'm sure -- I believe you.

18 Q. But you can't identify any of these poor, poor
19 Canadians who you were helping and who sent you money; is
20 that correct?

21 A. Yes.

22 Q. In 1997, you started working for the defendants; is
23 that correct?

24 A. Yes.

25 Q. And you were aware at that time that they had knowledge

1 of your efforts to hack and compromise their security system
2 and technology, correct?

3 A. Yes.

4 Q. In fact, you're aware that they considered -- the
5 defendants considered you one of the two best hackers in the
6 world at the time they tried to recruit you; is that
7 correct?

8 A. I don't know that. I don't know.

9 Q. Now, you understood in the '97 time frame that the
10 defendant's conditional access technology was compromised,
11 correct?

12 A. Yes.

13 Q. Partly because you were assisting in the compromise of
14 that technology; is that right?

15 A. Prior to my employment, yes.

16 Q. And you understood that that technology was compromised
17 both here in the United States, as well as in Europe; is
18 that correct?

19 A. I am not sure about that. I don't believe it was
20 compromised in Europe.

21 Q. Which conditional access provider were you hacking or
22 circumventing when you were in Europe in the '95/'96 time
23 frame?

24 A. The British Sky Broadcasting, the BSkyB signal, coming
25 into England and the signals out of the Scandinavian

1 countries, TV1000 and so forth, based on the EuroCrypt
2 scrambling system.

3 Q. Well, let's talk about the BSkyB system. That's one of
4 the systems that you were hacking. You understood that that
5 system was protected by the defendant's technology, correct?

6 A. Yes.

7 Q. So you understood in the '95/'96 time frame that that
8 technology in Europe was compromised?

9 A. No, you're incorrect there.

10 They actually swapped out to a secure access card, and
11 they were no longer compromised.

12 Q. When you first began working for defendants, one of
13 your roles was to continue acting like a pirate, correct?

14 A. Yes.

15 Q. To continue posting information on websites, monitoring
16 pirate websites, and gathering information about other
17 pirates, correct?

18 A. No.

19 Q. As part of your work for the defendants, you were
20 obligated to sign a confidentiality agreement. Do you
21 recall that?

22 A. Yes.

23 MR. HAGAN: Let's take a look at Exhibit 4-A,
24 Christine.

25 (Live reporter switch at 10:16 a.m.)

1 (Further proceeding reported by Jane Rule in
2 Volume II.)

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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: April 23, 2008

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15 _____
16 DEBBIE GALE, U.S. COURT REPORTER

17 CSR NO. 9472, RPR
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