1 2 3 4 UNITED STATES DISTRICT COURT 5 CENTRAL DISTRICT OF CALIFORNIA 6 SOUTHERN DIVISION 7 8 HONORABLE DAVID O. CARTER, JUDGE PRESIDING 9 \_ \_ \_ \_ \_ \_ \_ ECHOSTAR SATELLITE CORP., 10 ) et al., ) 11 Plaintiffs, ) ) No. SACV-03-950-DOC DAY 3, Vol. III 12 vs. ) NDS GROUP PLC, et al., 13 14 Defendants. 15 16 17 REPORTER'S TRANSCRIPT OF PROCEEDINGS 18 19 Santa Ana, California 20 April 11, 2008 21 SHARON A. SEFFENS Federal Official Court Reporter 22 United States District Court 411 West 4th Street, Room 1-053 Santa Ana, California 92701 (714) 543-0870 23 24 25 SHARON SEFFENS, U.S. COURT REPORTER

Ŷ

1 2 3

4

5

2

1

c	April	11,	2008	Volume	3	Segoly	Cumberland	Mordinson	Rubin,	D.txt
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

## SHARON SEFFENS, U.S. COURT REPORTER

3

1					
2		IND	EX		
3					PAGE
4	PLAINTIFFS' WITNESS:	DIRECT	CROSS	REDIRECT	RECROSS
5	WITNESS.	DIRECT	CRUSS	REDIRECT	RECRUSS
6	AHARON SEGOLY (Reopened)	4			
7	MARK CUMBERLAND DAVID MORDINSON	9	29	36	51
8	DOV RUBIN	57		50	JT
9	PLAINTIFFS' EXHIBITS:		MARKED	PI	ECEIVED
10	EXHIBITS:		MARRED		
11	Exhibit 1034 Exhibit 1569				21 47
12	Exhibit 1027				59
13	DEFENSE WITNESSES:	DIRECT	CROSS	REDIRECT	RECROSS

14 (None)

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 15 DEFENSE EXHIBITS: MARKED RECEIVED 16 (None) 17 18 PAGE 19 Portion of Videotape Deposition of Eric Lebson Played 33 20 21 22 23 24 25 SHARON SEFFENS, U.S. COURT REPORTER

Ŷ

4

12:53:32 1 SANTA ANA, CALIFORNIA; FRIDAY, APRIL 11, 2008; 1:30 P.M. 2 (Jury present.) 3 MR. NOLL: The jury is present. Counsel are 4 The parties are present. present. 5 Counsel, have you finished your direct 6 examination? 7 MR. NOLL: Your Honor, I do have another document 8 to show him, but I will do that in the redirect. THE COURT: Do you want to reopen or wait until 9 10 redirect? Do you have any preference, Mr. Snyder? 11 12 MR. SNYDER: I have no questions, Your Honor. 13 MR. NOLL: Okay. Then I will do it now. 14 THE COURT: Okay, you can reopen. 15 AHARON SEGOLY, PLAINTIFFS' WITNESS, PREVIOUSLY SWORN 16 DIRECT EXAMINATION (Reopened) 17 BY MR. NOLL: Good morning, Mr. Segoly. 18 Q 19 Good afternoon. А 20 I am going to hand you what has been marked as Exhibit Q 1027. 21 22 Before we go into that document, sir, are you aware

23	April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt whether or not NDS had some standards of business conduct?
24	A I assume they have. I'm not sure about particular
25	documents.
4	SHARON SEFFENS, U.S. COURT REPORTER
	5
12:53:53 1	Q Have you ever seen a document that has listed standards
2	for NDS's business conduct?
3	A Not as far as I recall.
4	Q Have you ever seen a document that has News Corp.'s
5	standards for business conduct?
6	A No, sir.
7	Q In your employment at NDS, were you ever given an
8	employee handbook?
9	A I was given such a document with such a title, but it
10	was in '94. I'm not sure of the content of it.
11	Q Okay. Take a look at what I have had handed to you as
12	Exhibit 1027, sir. Let me know if you have ever seen this
13	document before.
14	A Not as far as I recall. I don't remember.
15	Q So it's your testimony that you are unaware of whether
16	or not NDS has standards for business conduct? Is that what
17	you are testifying to today?
18	A I'm assuming that. I don't remember. I haven't seen
19	it as far as I remember.
20	Q Do you know whether NDS has any standards for the way
21	that NDS conducts its business practices?
22	A I don't remember such a document.
23	Q What's your position currently at NDS?
24	A My current role is technical director for standard
25	coordination, so I coordinate NDS activities for various
Ŷ	SHARON SEFFENS, U.S. COURT REPORTER

12:53:53 1 standard organizations globally.

Page 4

6

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt Q Where do you work out of? 2 3 А The Jerusalem office. 4 Do you have any people that report to you? Q 5 А NO. 6 Q Who do you report to? 7 The VP or chief architect of the company who is Dewitt А 8 Jessick (phonetic). 9 What other positions have you held at NDS besides 0 10 technical director? I joined NDS in November '94. Until the beginning of 11 Α 12 '97 or '98, I was a security officer as we described before. 13 In '97 or '98, I became a group leader for a group that is 14 called Integration & Test working within a customer in the UK. In 2000, I traveled to China, and I was a technical 15 director for NDS in Beijing. In 2003, I traveled to Hong 16 Kong, and I was NDS Technical Director for the Eastern 17 Pacific. In September, I came back to Israel. 18 19 Look back at -- I am going to ask you to read to Q 20 yourself Exhibit 1027, page 12, the bottom section, Section 21 4 -- actually, it's Section 6 at the bottom. Let me know 22 when you have read it. 23 I have. А 24 Okay. Turn to the next page, and I want you to read Q 25 the top paragraph to yourself. SHARON SEFFENS, U.S. COURT REPORTER 7 12:53:53 1 А I have. Does that refresh your recollection as to whether you 2 0 are aware whether NDS had some standards for business 3 4 conduct that it abides by? I didn't see this document. I'm not sure I saw similar 5 А 6 documents when I was working in Israel. 7 Mr. Segoly, I will represent to you that this is a Q 8 document that I got off of NDS's website. 9 Do you ever go to NDS's website? 10 А Rarely.

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 11 THE COURT: What's unclear I think for the jury and for the Court certainly is -- you are representing that 12 13 this document was obtained recently? 14 MR. NOLL: Yes, in this case, and it was 15 produced --16 THE COURT: I don't know that this document 17 existed or when it existed, in '98, for instance, or 2000 or 18 2001. So, therefore, if you don't know, who would know? 19 THE WITNESS: I believe people that maintain the 20 site window. 21 THE COURT: Who because we need to know who to 22 bring them in here. 23 THE WITNESS: I don't know. I can find out. 24 THE COURT: Okay. Thank you very much. 25 BY MR. NOLL: SHARON SEFFENS, U.S. COURT REPORTER

8

12:53:53	1	Q If you can't identify this document, sir, that will be
	2	the end of my examination.
	3	THE COURT: Perhaps the two of you can reach a
	4	stipulation later on, but, otherwise, the gentleman is
	5	ordered to remain.
	6	Do you have any questions?
	7	MR. SNYDER: No questions.
	8	THE COURT: The confusion concerning this document
	9	is if it's relevant, if it's in the time period it may
	10	not be but no instruction was implemented. This
	11	gentleman may be at a real disadvantage in that sense.
	12	Maybe this document was implemented in 1997, bur if it was
	13	implemented in 1998 to 2004, let's say, shouldn't we know
	14	about that? So be aware of what you decide, and we just
	15	don't with this gentleman.
	16	Sir, you at the head of investigations or
	17	security?
	18	THE WITNESS: I was.

1	April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 9 THE COURT: I bet you could find out for us.
2	0 THE WITNESS: Yes.
2	1 THE COURT: Thank you.
2	2 THE WITNESS: It will only take half an hour.
2	3 THE COURT: You might contact that person and tell
2	4 him he is coming to court whereever they are in the world.
2	5 We're waiting. Thank you.
f	SHARON SEFFENS, U.S. COURT REPORTER
	9
12:53:53	1 Counsel, you may call your next witness.
	2 MR. HAGAN: We call Lieutentant Mark Cumberland
	3 from the Hays County Narcotics Task Force.
	4 THE COURT: Sir, if you would step forward between
	5 the double doors. After you have done so, would you be kind
	6 enough to raise your right hand, and, Kristee, our clerk,
	7 will administer the oath to you.
	8 MARK WILLIAM CUMBERLAND, PLAINTIFFS' WITNESS, SWORN
	9 THE COURT: Would you be seated in the witness
1	0 box. I want to thank you for your patience. I know you
1	1 have been standing out in that hallway, and we are going to
1	2 get you back home today.
1	3 Would you state your full name for the jury,
1	4 please.
1	5 THE WITNESS: Mark William Cumberland,
1	6 C-u-m-b-e-r-l-a-n-d.
1	7 THE COURT: This is direct examination by Mr.
1	8 Hagan on behalf of EchoStar.
1	9 DIRECT EXAMINATION
2	0 BY MR. HAGAN:
2	1 Q Good afternoon, Lieutenant Kommerling.
2	2 A Good afternoon.
2	3 Q Can you tell the ladies and gentlemen of the jury what
2	4 you do on a day-to-day basis for Hays County?
2	5 A I am currently a patrol lieutenant assigned to the
	SHARON SEFFENS, U.S. COURT REPORTER
4	Station Selfensy Stor Court Reporter

10

12:53:53	1	Patrol Division. I oversee eight sergeants who supervise 40
	2	patrol deputies. I deal mostly with personnel issues and
	3	hiring and firing at this point.
	4	Q Where is Hays County located?
	5	A It's directly between Austin and San Antonio on I-35 in
	6	Texas.
	7	Q Lieutenant Cumberland, prior to getting promoted to the
	8	position of lieutenant, did you hold any other positions or
	9	titles within Hays County?
	10	A I was a patrol sergeant for six years. Prior to that,
	11	I was a detective assigned to the Narcotics Task Force.
	12	Prior to that, I was a patrol deputy.
	13	Q At some point in time, you served as a detective for
	14	the Hays County Narcotics Task Force?
	15	A Yes.
	16	Q Can you tell the jury what that task force was designed
	17	to do?
	18	A It's a task force consisting of the Hays County
	19	Sheriff's Office and San Marcus Police Department. We
	20	handle all narcoticss case that are generated within the
	21	county or within the city of San Marcos.
	22	Q What period of time were you employed by the Hays
	23	County Narcotics Task Force as a detective?
	24	A Roughly from 1999 to 2001.
	25	Q What types of cases did you investigate when you were a
9		SHARON SEFFENS, U.S. COURT REPORTER
		11
12:53:53	1	detective for the Hays County Task Force?
	2	A The majority of the cases that I investigated were
	3	narcotics-related: marijuana or cocaine-type cases.

- 4 Q Now, Lieutenant Cumberland, did you ever have an
- 5 occasion during that time period where you investigated an
- 6 individual named Christopher Tarnovsky?

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt

7 A Yes. I did work a case on Christopher Tarnovsky.
8 Q Do you recall approximately when that investigation
9 started?
10 A Late August 2000.
11 Q How did that investigation begin?

A We received information at the task force about some
suspicous packages being mailed through a business called
Mail and More in San Marcos.

Q And do you recall the name of the individual who
contacted the Hays County Narcotics Task Force?
A He was a manager by the name of Ben Muess (phonetic).

18 Q Once you received that phone call, what did you do?

19 A Myself and other members of the task force went down to

20 examine the packages -- or the package that had been sent

21 through Mail and More.

Q When you got down to the Mail and More account, did youhave an opportunity to speak with Mr. Muess?

24 A Yes.

25 Q Did he disclose to you any information about

SHARON SEFFENS, U.S. COURT REPORTER

Ŷ

12

12:53:53 1 Christopher Tarnovsky's account there? 2 He advised it didn't make sense that he was receiving А 3 packages from all over and then having them directly turned 4 around and mailed to a location in San Marcos at a cost to himself. There was really no reason to have them sent to 5 6 San Marcos, Texas, first. 7 According to your investigation, where did Christopher Q 8 Tarnovsky live during the time that this was occurring? San Marcos, California. 9 Α According to your investigation, do you recall 10 Q 11 approximately when Chris Tarnovsky set up this Mail and More account in Texas? 12 I believe it was late July of 2000. 13 А 14 Now, Lieutenant Cumberland, once you got down to the Q

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt Mail and More account and you spoke with Mr. Muese, can you 15 walk us through what you did next? 16 17 The third package he received was from Luling, Texas, А which is roughly 20 miles from San Marcos, Texas. 18 We 19 checked the address and the phone number on the shipping 20 labels and neither one of them checked out true and correct 21 address or phone number. Did you discover through your investigative efforts 22 0 23 that Mr. Tarnovsky was receiving any additional packages 24 through this mail account in Texas? 25 We were advised he was receiving them probably every А SHARON SEFFENS, U.S. COURT REPORTER 13 12:53:53 1 other day. 2 Since he set the account up? Q 3 А Yes, sir. 4 You testified earlier that some of those packages came Q 5 from all over; is that correct? 6 А Yes. 7 Did some of those packages come from outside of the Q 8 United States? 9 Two of the packages we dealt with came from British Α Columbia. 10 11 Q That's in Canada? 12 А Yes, sir. 13 How did it come about that you investigated those two Q 14 particular packages? After the first packages, we asked Mr. Muese to call us 15 А 16 again if he received any other packages for Chris Tarnovsky, 17 and the next day another one came in. It was a much 18 different package. It was a CD player, a large box with a 19 CD player inside of it. 20 Now, Mr. Muese notified you of this activity, but isn't Q 21 it true that part of the goal of the Hays County Narcotics 22 Task Force was to educate business owners in the Hays County 23 area about suspicious conduct, suspicious activity, and how

Page 10

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt

24 to notify law enforcement?

25 A Yes, sir.

SHARON SEFFENS, U.S. COURT REPORTER

Ŷ

14

12:53:53	1	Q And Mr. Muese, as far as you knew, received this type
	2	of educational information?
	3	A Yes, sir.
	4	Q When he called you again the next day, what did you do?
	5	A Again, we went down to examine the package. Like I
	6	said, it was a much different package. It was a CD player.
	7	Q Do you recall who that package was shipped from?
	8	A That package was shipped from a company called Regency
	9	Audio.
	10	Q And that was in Canada?
	11	A Yes, sir.
	12	Q Did your investigation uncover any facts or evidence
	13	that linked that particular address to an individual named
	14	Allen Menard or a business operated by Allen Menard?
	15	A I don't know that, sir.
	16	Q You didn't handle the Canadian part of the
	17	investigation did you?
	18	A No, sir, I did not.
	19	Q Now, you went down there, and you looked at this second
	20	package. What did you do next?
	21	A We called for two police canines who worked for the San
	22	Marcos Police Department to come and search the package and
	23	see if they would alert on it.
	24	Q Did the officers bring those canines down to the mail
	25	account?
		SHARON SEFFENS, U.S. COURT REPORTER
Ŷ		

15

12:53:53 1 A Yes, and both canines gave a positive alert to the 2 package.

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 3 Did you have that particular package with other Q packages in the mail account? 4 5 А Yes. Six or seven other packages were set next to that 6 package. 7 And you ran the dogs through each of those packages? Q 8 Α Yes. 9 Q And the dogs hit on that particular package from 10 Canada? 11 А Yes, sir. 12 Do you recall where that package was going to be Q 13 forwarded to once it got to the mail account in San Marcos, 14 Texas? 15 CT Electronics in San Marcos, California, is where it А 16 was supposed to be forwarded to. 17 Did your investigation uncover a link between where Q that package was going and the mail account there and an 18 19 individual named Christopher Tarnovsky in San Marcos, California? 20 21 Yes. He is the one that rented the mailbox. А 22 And you had an opportunity to look at his mailbox Q 23 rental agreement, correct? 24 Α Yes. 25 Q It included a copy of his driver's license; is that SHARON SEFFENS, U.S. COURT REPORTER 16 right? 12:53:53 1 2 Yes, sir. А 3 And his signature on the application? Q Yes, sir. 4 Α And we will look at your report in just a minute, but 5 Q at the time that you got a hit with the dogs on this 6 7 package, could you think of any particular reason why Mr. 8 Tarnovsky was having shipments from Canada go through this mail account in Texas before being forwarded over to 9

> San Marcos, California? 10

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt MR. SNYDER: Objection, calls for speculation. 11 THE COURT: Overruled. You can answer the 12 13 question. 14 THE WITNESS: I couldn't think of a legitimate 15 reason for that. 16 THE COURT: I am allowing that as an opinion. не 17 is a narcotics officer. Obviously he was suspicious in that regard. That doesn't mean that he is casting an opinion why 18 19 this was occurring. It's just it came to his attention. 20 Obviously he was suspicious. 21 BY MR. HAGAN: what did you do after the two detection canines 22 Q 23 registered a hit on this particular package from Canada to 24 Mr. Tarnovsky? we secured the package and obtained a search warrant 25 А SHARON SEFFENS, U.S. COURT REPORTER 17 12:53:53 1 for that package. Can you walk the jury through the process that you went 2 Q 3 through to obtain that search warrant? 4 I wrote a probable cause affidavit and then submitted Δ 5 it to a county court law judge in San Marcos, and he signed off on it, which gave us permission to search the package. 6 7 Q Once you had that warrant, you had the ability to 8 execute that warrant and inspect the parcel? 9 А Yes. where did that inspection take place? 10 Q The San Marcos Police Department where our office was. 11 А 12 Were you personally present during the inspection of Q 13 that package? 14 А Yes, sir. 15 was there anyone else present there with you? 0 16 Other members of the task force were there. А 17 Q Do you recall any of their names? 18 Sergeant Chase Stack I know was there. А 19 Walk the jury through the process that you went through Q Page 13

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 20 to inspect the package. 21 Once we obtained the search warrant, we just opened the А box and found a CD player inside and nothing usual on the 22 23 outside. So we dismantled it, and inside we located a brown 24 envelope that was taped to the wires inside, and it 25 contained money. SHARON SEFFENS, U.S. COURT REPORTER 18 12:53:53 1 How much money was in that envelope taped inside the Q 2 circuitry? 3 \$20,100. А 4 Was that in U.S. currency or Canadian currency? Q 5 А U.S. Were they all \$100 bills? 6 Q 7 I don't remember what the denominations were. Α 8 What did you do once you discovered this cash concealed 0 9 inside the shipment? 10 We continued on with the investigation, but then we Α 11 also continued on with the seizure of the money by turning it over to the District Attorney's Office in Hays County. 12 13 Did you provide any instructions to Mr. Muese or other Q 14 folks at the Mail and More account there in Texas? We advised him that if Chris Tarnovsky received any 15 А 16 further packages to let us know, which he did. 17 Q When was that? 18 The day after the first seizure. Α 19 Did you go back down there again with the other Q 20 officers? Yes, sir, same procedure. We went down and examined 21 А 22 the package. Did you have the Canine Detection Unit come down as 23 Q 24 well? 25 Α We had just one canine on that occasion.

SHARON SEFFENS, U.S. COURT REPORTER

19

12:53:53	1	Q Did they run the dog through the other packages in the
	2	store?
	3	A The exact same way, yes, sir.
	4	Q Did the Canine Detection Unit put a hit on that second
	5	package?
	6	A Yes.
	7	Q What did you do next?
	8	A Again, we took custody of the package, and I obtained a
	9	search warrant for the package.
	10	Q Same process? You filled out the probable cause
	11	affidavit?
	12	A Yes, sir.
	13	Q And then you executed that search warrant?
	14	A Yes.
	15	Q Where did that take place?
	16	A Again, at the San Marcos Police Department at our Task
	17	Force Office.
	18	Q Who was that second package sent from?
	19	A Again, Regency Audio, Vancouver.
	20	Q Up in Canada?
	21	A Yes, sir.
	22	Q And it was sent to that mail account in San Marcos in
	23	Texas that was set up by Mr. Tarnovsky?
	24	A Yes.
	25	Q Who was it being forwarded to?
Ŷ		SHARON SEFFENS, U.S. COURT REPORTER
		20
12:53:53	1	A Chris Tarnovsky in San Marcos, California.
	2	Q When you executed the search warrant on the second
	3	package, what did you find?
	4	A The only difference was this was a DVD player. It was
	5	packaged the same way. When we executed it and opened it
	6	up, nothing was out of the ordinary on the outside. When we

	7	April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt took it apart, inside it was the exact same thing, same type
	8	of envelope taped to the circuitry the same way, and when we
	9	opened it up, there was cash inside that DVD also.
	10	Q How much cash was concealed inside the second package?
	11	A \$20,000.
	12	Q So in total, you intercepted \$40,100 through Mr.
	13	Tarnovsky's mail account?
	14	A Yes.
	15	Q And both of those packages were coming from Canada
	16	through Texas?
	17	A Yes, sir.
	18	Q What did you do next?
	19	A Again, we turned the money over to the District
	20	Attorney's Office, And we logged the electronics into
	21	evidence to be fingerprinted.
	22	Q Now, during the course of your investigation, is it
	23	common protocol and procedure for you and the other officers
	24	working on that investigation to keep notes and generate an
	25	official report?
Ŷ		SHARON SEFFENS, U.S. COURT REPORTER
f		SHARON SEFFENS, U.S. COURT REPORTER
° 12:53:53	1	
	1 2	21
		21 A Yes, sir.
	2	<pre>21 A Yes, sir. Q Have you seen a copy of that report before?</pre>
	2 3	<ul> <li>A Yes, sir.</li> <li>Q Have you seen a copy of that report before?</li> <li>A Yes.</li> </ul>
	2 3 4	<ul> <li>A Yes, sir.</li> <li>Q Have you seen a copy of that report before?</li> <li>A Yes.</li> <li>Q Did you participate in preparing that report?</li> </ul>
	2 3 4 5	<ul> <li>A Yes, sir.</li> <li>Q Have you seen a copy of that report before?</li> <li>A Yes.</li> <li>Q Did you participate in preparing that report?</li> <li>A Yes, sir.</li> </ul>
	2 3 4 5 6	<ul> <li>A Yes, sir.</li> <li>Q Have you seen a copy of that report before?</li> <li>A Yes.</li> <li>Q Did you participate in preparing that report?</li> <li>A Yes, sir.</li> <li>MR. HAGAN: Kristee, if you can show Lieutenant</li> </ul>
	2 3 4 5 6 7	<ul> <li>A Yes, sir.</li> <li>Q Have you seen a copy of that report before?</li> <li>A Yes.</li> <li>Q Did you participate in preparing that report?</li> <li>A Yes, sir.</li> <li>MR. HAGAN: Kristee, if you can show Lieutenant</li> <li>Cumberland of what has been marked trial Exhibit 1034.</li> </ul>
12:53:53	2 3 4 5 6 7 8	A Yes, sir. Q Have you seen a copy of that report before? A Yes. Q Did you participate in preparing that report? A Yes, sir. MR. HAGAN: Kristee, if you can show Lieutenant Cumberland of what has been marked trial Exhibit 1034. BY MR. HAGAN:
12:53:53	2 3 4 5 6 7 8 9	A Yes, sir. Q Have you seen a copy of that report before? A Yes. Q Did you participate in preparing that report? A Yes, sir. MR. HAGAN: Kristee, if you can show Lieutenant Cumberland of what has been marked trial Exhibit 1034. BY MR. HAGAN:
12:53:53	2 3 4 5 6 7 8 9 10	A Yes, sir. Q Have you seen a copy of that report before? A Yes. Q Did you participate in preparing that report? A Yes, sir. MR. HAGAN: Kristee, if you can show Lieutenant Cumberland of what has been marked trial Exhibit 1034. BY MR. HAGAN: Q Lieutenant Cumberland, the first part of this document is an affidavit by Lynn Leuders. Who is Mr. Leuders?
12:53:53	2 3 4 5 6 7 8 9 10 11	A Yes, sir. Q Have you seen a copy of that report before? A Yes. Q Did you participate in preparing that report? A Yes, sir. MR. HAGAN: Kristee, if you can show Lieutenant Cumberland of what has been marked trial Exhibit 1034. BY MR. HAGAN: Q Lieutenant Cumberland, the first part of this document is an affidavit by Lynn Leuders. Who is Mr. Leuders? A Lynn Leuders is a detective also assigned to the Hays
12:53:53	2 3 4 5 6 7 8 9 10 11 12	A Yes, sir. Q Have you seen a copy of that report before? A Yes. Q Did you participate in preparing that report? A Yes, sir. MR. HAGAN: Kristee, if you can show Lieutenant Cumberland of what has been marked trial Exhibit 1034. BY MR. HAGAN: Q Lieutenant Cumberland, the first part of this document is an affidavit by Lynn Leuders. Who is Mr. Leuders? A Lynn Leuders is a detective also assigned to the Hays County Narcotics Task Force.

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 16 MR. HAGAN: Your Honor, we offer plaintiffs' 17 Exhibit 1034 into evidence. 18 MR. SNYDER: No objection. 19 THE COURT: Received. 20 (Exhibit 1034 received.) 21 BY MR. HAGAN: 22 Lieutenant Cumberland, does this appear to be a true Q 23 and correct copy of the investigative file that the Hays 24 County Narcotics Task Force developed in connection with the 25 investigation of Chris Tarnovsky? SHARON SEFFENS, U.S. COURT REPORTER 22 Yes, sir, it does. 12:53:53 1 Α 2 If you will turn to the sixth page of the document. Q There is a stamp on the bottom. It's ESC 171885. 3 4 I have got it. А This particular page -- and it's representative of 5 Q several pages in there. Is this what your official reports 6 7 and case files look like for the Narcotics Task Force? 8 Α Yes. And you participated in the preparation of these 9 Q 10 reports? 11 А Yes. To the best of your knowledge, did these reports that 12 Q 13 the Hays County and you created contain all of the 14 information that you gathered during the investigation of 15 Chris Tarnovsky? 16 Yes, sir. Α 17 And as best you can recall or as best you know, all the Q information that you and the other officers included in here 18 was truthful and valid? 19 20 Oh, yes, sir. А Now, after you intercepted the second package and you 21 0 handed that over to the District Attorney's Office, did you 22 23 have occasion to assist any other government agencies in the

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt investigation of Christopher Tarnovsky? 24

We requested assistance from the DEA Office out of 25 Α

SHARON SEFFENS, U.S. COURT REPORTER

23

Austin due to the different locations. San Marcos. 12:53:53 1 2 California, is out of our jurisdiction, and obviously Canada is out of our jurisdiction, so we needed assistance. We 3 4 called the DEA out of Austin. THE COURT: Tell the jury what "DEA" stands for. 5 6 THE WITNESS: The Drug Enforcement Administration. 7 BY MR. HAGAN: 8 Given that the packages had come from Canada and into Q 9 the United States, did you or anyone working on the investigation contact any of the Canadian authorities? 10 11 Yes. We requested obviously the DEA, and they got Α 12 Customs involved, and Customs was in California and up in 13 Canada also. 14 To your recollection, did the RCMP or the Royal Q Canadian Mounted Police assist in any way in this 15 16 investigation? 17 Yes. They assisted running a fingerprint that was Δ lifted off of one of the electronics that was in evidence. 18 19 They ran it through their AFID system, which is an Automatic 20 Fingerprint Identification System up in Canada. Were the Canadian authorities, the RCMP, able to 21 Q 22 identify a match from those fingerprints lifted off of the 23 shipments to Chris Tarnovsky? They got a hit off of Mervin Main was his name. 24 А 25 MR. HAGAN: Christine, if you would please turn SHARON SEFFENS, U.S. COURT REPORTER 4

Ŷ

24

12:53:53 1 the exhibit to ESC 171914.

2 BY MR. HAGAN:

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt Q Do you have the document from the Royal Canadian 3 Mounted Police in front of you? 4 5 А Yes. If you will flip to the very next page, it's a letter 6 Q 7 from the Hays County Narcotics Task Force; is that correct? 8 Yes, it is. А Detective Lynn Leuders, that's the individual that 9 Q assisted you in parts of the investigation into Chris 10 11 Tarnovsky? 12 А Yes. Is that the letter that was sent to the RCMP with 13 Q 14 the -- the request for them to run a fingerprint analysis on 15 the packages? 16 А Yes. Now, the RCMP responded in the letter we just looked 17 Q at, and they advised you and the other officials working on 18 19 the investigation that they had a match to Mervin Main; is 20 that correct? 21 Yes. sir. А 22 Now, did your investigation uncover any links between Q Mervin Main whose fingerprints were on these packages to 23 24 Chris Tarnovsky and an individual named Allen Menard? 25 I don't know any of that. А SHARON SEFFENS, U.S. COURT REPORTER 25 12:53:53 1 If you look at the next page from where you are at, the Q 2 letter from the Hays County Narcotics Task Force, there is a handwritten notation at the bottom. It says, "Possible 3 suspect Allen Menard in British Columbia, Canada." 4

> 5 Does that refresh your recollection as to whether any particular link was made -- it may not be conclusive -- but 6 7 was any link between the packages and Mervin Main going to 8 Chris Tarnovsky and Allen Menard?

9 А I don't remember Allen Menard.

10 It's been several years. Q

Ŷ

11 Other than the RCMP and U.S. Customs and the Drug

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 12 Enforcement Agency, did you have an opportunity to work with any other agencies or officers or agents in connection with 13 the investigation into Chris Tarnovsky? 14 15 Just mostly those government agencies you mentioned. А 16 Did you learn from those other government agents that Q they were investigating Mr. Tarnovsky on any other 17 18 allegations or charges? 19 Yes, sir, Customs. Α 20 Q what were those allegations or charges? 21 MR. SNYDER: Hearsay. 22 THE COURT: Counsel, it's technically hearsay. 23 That's easy. Just get the Royal Canadian Mounted Police down. It's not an issue. 24 25 BY MR. HAGAN:

SHARON SEFFENS, U.S. COURT REPORTER

26

Did your investigation uncover any link between 12:53:53 1 Q Christopher Tarnovsky and satellite piracy or signal theft? 2 3 I was advised by Customs that that's what was going on. А 4 You didn't participate in that investigation of Chris Q Tarnovsky? 5 6 А NO. And you have no personal knowledge about the U.S. 7 Q 8 Customs investigation into Chris Tarnovsky's involvement in 9 satellite piracy? No. sir. 10 А 11 Did there come an occasion where you sent all of your Q 12 intel and information to other government agencies? Yes. We initially forwarded the majority of it to the 13 А 14 DEA out of San Diego. Do you recall the agent or representative that was 15 Q heading that investigation? 16 My contact in California was an agent named Beretta. 17 А 18 Special Agent Beretta? Q 19 Yes, sir. Α

20	April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt Q Did you work with any representatives from the AUSA,
21	the Assistant United States Attorney's Office, in connection
22	with the investigation into Chris Tarnovsky?
23	A No, sir, I did not.
24	Q Now, when you were conducting your investigation into
25	Mr. Tarnovsky, did you have an opportunity to obtain
4	SHARON SEFFENS, U.S. COURT REPORTER
	27
12:53:53 1	shipping and receiving records related to that mail account
2	that he set up?
3	A Yes, sir. We subpoenaed all the records from Mail and
4	More, which they did provide for us.
5	Q Do you recall from reviewing those records and your
6	investigation that Chris Tarnovsky was using any aliases
7	other than his name?
8	A I took for granted that CT Electronics stood for
9	Christopher Tarnovsky.
10	Q Did you also happen to come across the alias Von that
11	Mr. Tarnovsky used in connection with this account?
12	A Von was on the first package that was sent to
13	San Marcos to be forwarded to San Marcos, California. That
14	was the sender.
15	Q Now, if you will look at labeled ESC 0171932 do you
16	have that page in front of you?
17	A 1932 is the last four?
18	Q Yes.
19	A Yes.
20	Q Is this one of the shipping records that you obtained
21	through your investigation into Mr. Tarnovsky in this mail
22	account?
23	A Yes, sir, it is.
24	Q This is a shipping record that shows a package going
25	from Canada to CT; is that correct?
Ŷ	SHARON SEFFENS, U.S. COURT REPORTER

28

12:53:53	1	A Yes, sir.
	2	Q That package went from Canada to CT in California, but
	3	it was routed through that mail account in San Marcos,
	4	Texas?
	5	A Yes, sir, it was.
	6	Q This particular package was not one of the ones that
	7	you and the other officials intercepted; is that right?
	8	A Correct.
	9	Q So you never had an opportunity to inspect that
	10	package?
	11	A No, sir, we did not.
	12	Q Or to run the drug dogs around that package?
	13	A That's correct.
	14	Q It's fair to say that if you flip through here there
	15	are several other shipping records that were sent
	16	packages from Canada to Tarnovsky that you were not able to
	17	investigate?
	18	A Yes, sir.
	19	Q Now, I will represent to you that Mr. Tarnovsky has
	20	testified in deposition that he did in fact receive the
	21	package that's identified on this page. Do you have any
	22	reason withdrawn.
	23	Did you have an opportunity to inspect that package
	24	after Chris Tarnovsky received it in California?
	25	A No, sir.
		SHARON SEFFENS, U.S. COURT REPORTER
Ŷ		
		29
12:53:53	1	Q So you don't know what was in that particular package;
	2	is that right?
	3	A Correct.
	4	Q If you look at the shipping records, the description of
	5	that package says it contains a Sony PlayStation, a Sony
	6	controller, and a Sony CD player. Do you see that?
	7	A Yes.

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 8 One of the packages that you did intercept, though, Q 9 contained electronic equipment -- actually both of them did? Two of them did. 10 А 11 One of those packages was a CD player? Q 12 Α Yes, sir. 13 That was the package that when you opened it you found Q \$20,100 cash? 14 15 Yes, sir. It was the first package. А MR. HAGAN: Pass the witness. 16 17 THE COURT: Cross-examination by Mr. Snyder on 18 behalf of NDS. 19 CROSS-EXAMINATION 20 BY MR. SNYDER: 21 Just a very few questions, Lieutenant Cumberland. Q 22 As part of your investigation, you only seized two 23 packages? 24 А Yes, sir. 25 Those are the two packages that you described? Q SHARON SEFFENS, U.S. COURT REPORTER 30 12:53:53 1 А Yes. 2 Q One contained a DVD player and one contained a CD 3 player? 4 Yes, sir. А 5 Q Just so everybody understands, you said that dogs were brought in for each of those packages and hit on those 6 7 packages? 8 А Yes, sir. 9 what were those dogs trained to hit on? Q The odor of narcotics. 10 А They were drug dogs? 11 Q

> 12 Yes, sir. А

Ŷ

They weren't trained to hit on the smell of Smart 13 Q

14 Cards; were they?

15 No, sir. А

1	.6	April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt Q Did you find anything in either one of those packages
1	.7	that was connected to satellite television in any way?
1	.8	A No, sir.
1	.9	Q Did you find anything in either of those packages to
2	20	indicate any evidence of involvement in satellite piracy?
2	1	A No, sir.
2	2	Q Did you find anything during any part of your
2	3	investigation that indicated involvement in satellite
2	24	piracy?
2	25	A Just the information we received from Customs out in
Ŷ		SHARON SEFFENS, U.S. COURT REPORTER
I		
		31
12:53:53	1	California.
	2	Q That's what another investigatory agency told you?
	3	A Yes.
	4	Q But as part of your investigation, did you find
	5	anything indicating involvement by anybody in satellite
	6	piracy?
	7	A No, sir.
	8	Q Just a couple more questions. As part of your
	9	investigation after those two packages were seized, were any
1	.0	more search warrants issued?
1	.1	A By me, sir?
1	.2	Q Yes, sir.
1	.3	A No. I just conducted those two search warrants.
1	.4	Q As part of your investigation, were any arrests made?
1	.5	A No, sir.
1	.6	Q As part of your investigation, were there any charges
1	.7	filed against anybody?
1	.8	A Not by myself, no.
1	.9	Q As part of your investigation, were any charges filed?
2	20	A Not that I am aware of.
2	1	Q Were any indictments issued as a result of your
2	2	investigation?
2	3	A In Texas, I didn't know.
2	24	Q Was anybody convicted of any crimes as a result of your
		Page 24

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt

SHARON SEFFENS, U.S. COURT REPORTER

25 investigation?

Ŷ

32

12:53:53 1 A Not in Texas that I am aware of, no. 2 MR. SNYDER: Thank you very much. I appreciate 3 your time. 4 THE COURT: Redirect. 5 MR. HAGAN: Nothing further. We want to thank Lieutenant Cumberland for being here. 6 7 THE COURT: I am placing all of the witnesses on call. You are in a little different situation because I 8 9 know you will respond immediately. I can't imagine, though, why you would be back testifying in my court. I am going to 10 have you go about your professional responsibilities. If 11 you have a planned vacation, take it. If we need you, we 12 can find you. We will be courteous and give you plenty of 13 time to return to court. I doubt you will be one of the few 14 15 witness who will be in that position potentially. I will 16 have you remain on call, though -- we're actually ahead of 17 schedule -- I would say until about May 15, but I am saying 18 June 15 to everybody else. 19 Counsel, your next witness, please. 20 MR. HAGAN: The plaintiffs will call Eric Lebson by video deposition clips. 21 THE COURT: It will be a video deposition of the 22 23 next witness being called by EchoStar. This person's name is Eric Lebson. The first name is spelled E-r-i-c, last 24 25 name, L-e-b-s-o-n. SHARON SEFFENS, U.S. COURT REPORTER Ŷ

33

12:53:53	1	Counsel, you may play that video deposition.
	2	(Portion of videotaped deposition played.)
	3	THE COURT: This will be Exhibit 260. In the

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 4 deposition, what it is referred to? 5 MR. HAGAN: Exhibit 27. THE COURT: Thank you. So you are about to hear 6 some testimony in the deposition involving what they will 7 8 refer to as Exhibit 260. That is your exhibit. You have 9 already received or should have in your possession Plaintiffs' Exhibit 27. Okay. 10 11 (Videotape continued to be played.) THE COURT: I want to make sure the jury 12 13 understands Exhibit 247 will be your Exhibit 19. Let the jury get that for just a moment. 14 15 (Videotape continued to be played.) MR. HAGAN: The defendants have some additional 16 17 clips they would like to play. 18 THE COURT: That concludes the plaintiffs' designation of Mr. Lebson's tape. 19 20 Do you want to play some additional designations 21 of 106 at this time? 22 MR. SNYDER: Yes. 23 THE COURT: These will be some remaining portions 24 of Mr. Lebson's testimony. 25 (Videotape continued to be played.) SHARON SEFFENS, U.S. COURT REPORTER 34 12:53:53 1 THE COURT: Is this a good time for a recess? Before we take a recess, there was another 2 gentleman sitting back there. 3 4 MR. HAGAN: I will go get him. 5 THE COURT: This is a good time to take a break. We will come back in about 20 minutes. 6 7 Do not discuss this matter amongst yourselves nor

> 8 form or express any opinion concerning the case.

9 (Jury not present.)

THE COURT: Counsel, with your permission, I would 10

like to include the Lebson depo, 106, and the 11

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt cross-designations that you played in my transcript. That 12 way any reviewing court has it all in one place at one time. 13 14 I would like to follow that process and procedure. 15 Is that acceptable? MR. WELCH: That's fine. 16 17 MR. SNYDER: That's fine. 18 THE COURT: Most Courts don't do that, but if I was in the Circuit, I would appreciate the fact that I have 19 all of this without searching through a multitude of 20 21 documents. 22 (Recess.) 23 (Jury present.) 24 THE COURT: We are back in session. The jury is 25 The parties are present. Counsel are present. present. SHARON SEFFENS, U.S. COURT REPORTER 35 12:53:53 1 We are going to continue playing the clip of Mr. 2 Lebson. 3 Counsel, if you would like to continue playing the 4 clip. 5 (Videotape continued to be played) 6 MR. KLEIN: This is Exhibit 247 previously 7 admitted. 8 THE COURT: This is Exhibit 247, which is your 9 Exhibit 19. 10 MR. SNYDER: That concludes the designations, Your 11 Honor. THE COURT: Thank you very much. 12 Then, counsel, you would like to recall a witness 13 14 by stipulation of both parties. Is that correct? 15 MR. HAGAN: That's correct. 16 THE COURT: That witness is Mr. Mordinson. 17 MR. HAGAN: David Mordinson, yes. 18 THE COURT: David Mordinson. If you would please 19 summon him. 20 THE COURT: Mr. Mordinson, the interpreter is with Page 27

4

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 21 you. If you would be seated. Counsel has stipulated to recall you on today's date. They hope to get you back on 22 23 the plane. Both parties do. Let's see if we can accomplish 24 that so you can return to Israel. 25 This is Mr. Mordinson. Once again, ladies and SHARON SEFFENS, U.S. COURT REPORTER 36 gentlemen, instead of Tuesday, both parties have stipulated 12:53:53 1 2 to proceed today to see if we can conclude with the 3 gentleman. 4 This will be Mr. Hagan on behalf of EchoStar, and 5 then we will turn to Mr. Snyder on behalf of NDS. That will be the last round, counsel. 6 7 MR. HAGAN: Thank you. 8 DAVID MORDINSON, PLAINTIFFS' WITNESS, PREVIOUSLY SWORN 9 **RE-REDIRECT EXAMINATION** 10 BY MR. HAGAN: Mr. Mordinson, good afternoon. Thank you for staying 11 Q 12 with us today. There are a couple of additional issues that 13 I would like to cover with you. 14 when we took your deposition earlier in the case, you understood at that time that you were being designated by 15 the NDS defendants as a corporate representative; is that 16 17 correct? 18 Α During my deposition, yes. And, sir, there were a couple of topics I think from a 19 Q 20 list that we sent over that you were designated as the 21 company's representative to testify about. Do you recall 22 that? 23 А Yes. And you understood at that time that the company was 24 Q 25 putting you up as their most knowledgeable witness on those SHARON SEFFENS, U.S. COURT REPORTER

Ŷ

Ŷ

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt

particular topics; is that correct, sir? 12:53:53 1 I believe so. 2 Α 3 Now, earlier in your testimony this afternoon and Q yesterday, we talked a little bit about the hack methodology 4 that you developed and the one that was posted on the 5 internet. I just wanted to cover a couple of things on that 6 7 so that we can use that to refresh our recollection later in 8 the trial. In the Haifa report, the methodology that you 9 developed, you discovered the key or the phrase "Nipper" in 10 your reverse engineering of EchoStar's code; is that 11 12 correct? 13 It appeared in Smart Card EEPROM, yes. А And in Exhibit 998 -- can we take a look at that, 14 Q please? 15 16 А Yes. It's one of the exhibits that we looked at earlier. 17 0 That also had reference to the word "Nipper"? 18 19 А Yes. You also testified yesterday that as part of your work 20 Q for the Headend Project you developed certain software 21 22 applications? 23 А Yes. 24 And you developed those applications specifically in Q 25 your work for the defendants? SHARON SEFFENS, U.S. COURT REPORTER Ŷ 38 12:53:53 1 A Yes. 2 And some of those related just to the EchoStar hacking Q project? 3 4 А Yes. 5 And one of those software applications that you Q 6 developed you called Get ATR? 7 А Yes.

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt Q And if you look at Exhibit 998, it also has a reference 8 9 at the top to Get ATR; correct? 10 I recognize it. Α And ATR is answer to reset? 11 Q Yes. It's a standard message sent by any Smart Card as 12 А 13 a response to a signal. 14 As part of your work with the EchoStar hack project, Q you analyzed what EchoStar called the ROM 3 card? 15 16 Α Yes. It's written in EchoStar code actually in ROM. 17 So when you pulled the code out, you were able to see 0 it said ROM 003? 18 19 А I think, yes. 20 And you will agree with me looking at the methodology 0 -- the post from the internet, Exhibit 998, also references 21 22 the Nagra ROM 3; is that correct? 23 Yes, I recognize it. А 24 One of the portions of your report and one of the 0 25 portions of your earlier testimony was that you were able to SHARON SEFFENS, U.S. COURT REPORTER 39 12:53:53 1 develop a way to dump or extract the EEPROM from the ROM 003 2 card for EchoStar: correct? 3 А Yes. 4 Q And you will see that at the top of Exhibit 998, the 5 internet posting, it also deals with the -- references the 6 entire EEPROM; is that correct? 7 А Yes. Now, you also testified yesterday about some technical 8 0 things, and I think you did a great job of explaining it, 9 10 but I want to make sure we have a record. If I understood your testimony correctly, you 11 discovered something in the EchoStar card, the ROM 3 card, 12 13 called an IO buffer overflow vulnerability; is that correct? 14 А Yes. 15 And you also agreed with me this morning that the Q 16 vulnerability that was exploited in the internet posting, Page 30

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 17 Exhibit 998 -- one of those vulnerabilities was the IO 18 buffer overflow? 19 Yes. А 20 Now, in the Haifa Headend Project, you also discovered Q 21 something -- a quality of EchoStar's ROM 3 card called RAM 22 ghost effect or address alias. I think those terms are 23 interchangeable. Is that correct? 24 А Yes. 25 Q If I understood your testimony from this morning, the SHARON SEFFENS, U.S. COURT REPORTER 40 methodology posted on the internet, Exhibit 998, also 12:53:53 1 2 exploits or utilizes the RAM ghost effect or address 3 aliasing; is that correct? 4 А Yes. 5 You also testified that as part of the research you did Q 6 in the Headend Project you were able to determine that there 7 was a characteristic in NagraStar or EchoStar's ROM 3 card 8 where you could actually execute code in the RAM portion of 9 the memory; is that correct? 10 А Yes. And you agreed with me this morning that in the Nipper 11 Q post, Exhibit 998 -- also utilized the ability to execute 12 13 code in that RAM portion of the memory? 14 Α Yes. Now, I understand, Mr. Mordinson, that -- your earlier 15 Q 16 testimony was there are some technical differences in the 17 hack methodology that you developed for the defendants for EchoStar's system and the hack methodology that was posted 18 on the internet, Exhibit 998; correct? 19 20 А Yes. 21 But you would also agree, sir, that there are some Q 22 fundamental similarities in those two hack methodologies?

> 23 А Yes.

Ŷ

24 You also testified a little bit about the defendants' Q

## April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 25 efforts and your involvement in those efforts to reverse

f

## SHARON SEFFENS, U.S. COURT REPORTER

41

engineer other competitors of NDS; correct? 12:53:53 1 2 Α Yes. 3 And one of those competitors was Canal+? Q 4 А Yes. 5 Another one of those competitors was the plaintiff Q 6 NagraStar? 7 Α Yes. 8 And the Haifa team -- or at least part of the Haifa 0 9 team for the defendants conducted that reverse engineering; is that right? 10 11 А Yes. And two of the principal engineers that participated in 12 Q 13 that reverse engineering for the Canal+ system was Zvi 14 Shkedy, the hardware, and then you, Mr. Mordinson, looked at 15 the software; is that correct? 16 А Yes. 17 Those are the same two engineers -- in other words, you Q 18 and Mr. Shkedy were also the principal engineers for the 19 defendants that participated in the hack for EchoStar or the 20 reverse engineering for EchoStar? 21 А Yes. Both of those projects that you and Mr. Shkedy engaged 22 Q 23 in for the defendants, when you looked at the Canal system 24 and the NagraStar system -- on both of those projects, you created some written reports; correct? 25 SHARON SEFFENS, U.S. COURT REPORTER Ŷ 42

12:53:53 1 A Yes.

- 2 Q And in both circumstances, at least part of that
- 3 information was shared with individuals for the defendants

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt who were previously involved in hacking or piracy; is that 4 5 correct? Can you be specific about Nagra and Canal+? 6 А 7 Sure. I believe there may be some disconnect between Q 8 you and Mr. Shkedy, but if I understand your testimony, you 9 believe that Mr. Shkedy shared part of the Canal+ result, 10 part of the research that you gentlemen did, with an individual named Oliver Kommerling; is that correct? 11 12 А Yes. 13 And you understood that Mr. Kommerling who you 0 testified about yesterday was previously involved in piracy 14 and hacking before he came to NDS? 15 16 Yes. He was pirating NDS products. А Now, you also shared at least some of the information 17 Q in the Headend Report that was created for the NagraStar 18 19 hack project -- you shared some of that information with 20 Christopher Tarnovsky; is that correct? 21 Can you repeat that? I lost you. А 22 If I understood your testimony from earlier today, you 0 23 and Mr. Tarnovsky had a conversation, and during that conversation at his house, which is an NDS office, you 24 25 printed at least a few pages, two or three -- you don't SHARON SEFFENS, U.S. COURT REPORTER 43 recall -- but some of the pages from the Headend Report, 12:53:53 1 2 Exhibit 98, that we looked at earlier? 3 А Yes. You also agreed with me earlier this morning that the 4 0 5 Canal+ code -- part of that code was published on the 6 internet; correct? 7 А Yes. 8 And it's your understanding that the date and time 0 9 stamp on that particular posting is the same as the date and 10 time stamp on the code extraction that was done at NDS 11 Haifa? 12 А Yes.

Ŷ

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 13 You also understand looking at Exhibit 998 that part --Q at least some type of methodology to hack EchoStar's system, 14 NagraStar's system, was also published on the internet? And 15 16 it may have actually been the xbr21 posting that you looked 17 at earlier with Mr. Snyder. Do you recall the "dr7" logo on the top of that exhibit? 18 19 Α Yes. 20 THE COURT: That's two questions. 21 BY MR. HAGAN: 22 If I understand your testimony correctly, is it your Q 23 understanding that in fact an issue in this lawsuit deals 24 with the publication of a methodology to hack EchoStar's 25 security system on the internet? SHARON SEFFENS, U.S. COURT REPORTER 44 12:53:53 1 А Yes. 2 MR. HAGAN: Your Honor, I would move --3 THE COURT: No, these are for argument. These 4 don't come into evidence.

> 5 MR. HAGAN: Not as evidence but preserve them 6 as --7 THE COURT: Take them down, and you can preserve 8 them. 9 MR. HAGAN: Demonstratives 6 and 7. 10 THE COURT: We will see these again I am sure. What counsel has done is gone through a summary, 11 12 but it's not -- you are going to determine the facts in this 13 case. He is trying to point out if there are similarities 14 or not. You will probably see these charts again, and you 15 are going to see and hear other experts also about this. BY MR. HAGAN: 16

Mr. Mordinson, as part of your work for the Headend 17 Q Project, you also created what's called in the hacking 18 19 industry or the piracy industry a 3M code or a modified 20 EEPROM code?

4

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt
A Yes.
Q And what was the purpose of creating that code as it
relates to the EchoStar hacking project?
A The purpose of creating this code was to test findings
that we had come to in the course of our project.
SHARON SEFFENS, U.S. COURT REPORTER

Ŷ

Ŷ

45

12:53:53 1 Now, this 3M code that you created, was this the code Q that was used to load onto the EchoStar Smart Card when you 2 3 and Mr. Shkedy went to Canada and used the sniffer device? I think -- I should it explain my way maybe. 3M is a 4 Α 5 method or is a way to modify a subscription written in the card. In this way, it can be proven that our understanding 6 of how the conditional access systems works will come out. 7 8 The method that we used to load those changes into the card 9 is called IO buffer overflow and utilizes a memory ghost 10 effect. 11 Was that particular 3M code -- that was used by you as Q part of the EchoStar hacking project? 12 13 As a part of the Headend Project, yes. А 14 MR. HAGAN: Christine, could you show Mr. 15 Mordinson what has been premarked as Trial Exhibit 1569? 16 BY MR. HAGAN: 17 Q Mr. Mordinson, you have in front of you a document labeled Trial Exhibit 1569, and I will represent to you that 18 19 this was one of the documents produced by your counsel in 20 this action. 21 Does this document, Exhibit 1569, represent the 3M code that you developed for the EchoStar ROM version 003 card? 22 23 А What I can see in this document is the image file or 24 EEPROM content which I believe was used by me during the 25 testing in Canada.

SHARON SEFFENS, U.S. COURT REPORTER

46

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt

12:53:53 1 Q Mr. Mordinson, are you familiar with the term "domino 2 effect"?

3 A Yes.

Ŷ

4 Q Can you please explain to the ladies and gentlemen of
5 the jury what that term means as it relates to a Conditional
6 Access System or security system?

"Domino effect" is a term for phenomenon which exists 7 А 8 in a Conditional Access System which not protected against 9 -- if a conditional access vendor uses the same card or the same chip for every customer, hackers can compromise just 10 one Conditional Access System on just one of the -- and then 11 12 apply the knowledge that they got from breaking into the system from compromising this Conditional Access System to 13 14 the other systems due to the fact that this system used the 15 same Smart Card with the same platform.

Q Now, the domino effect, is that something that you
considered or that you determined, formed any opinion on,
about the EchoStar security system during your work for the
defendants on the EchoStar project?

A Yes. We figured out that NagraStar -- or Nagra
Vision's Conditional Access System is a subject for a domino
effect.

23 MR. HAGAN: We are going to look at one more
24 document, but before we do, I would like to offer Trial
25 Exhibit 1569 into evidence. This is the 3M code that Mr.

SHARON SEFFENS, U.S. COURT REPORTER

47

Mordinson just testified about. 12:53:53 1 2 MR. SNYDER: No objection. 3 THE COURT: Received. (Exhibit 1569 received.) 4 MR. HAGAN: Christine, can you hand Mr. Mordinson 5 6 a copy of Trial Exhibit 75? 7 BY MR. HAGAN: 8 Mr. Mordinson, we have handed you a copy of what has Q

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 9 been previously marked as Trial Exhibit 75. I will 10 represent to you that this is another document that was produced during the discovery phase of this litigation from 11 12 your counsel. 13 This document discusses -- as you look at it now, this 14 document discusses what you were testifying about, the domino effect; is that correct? 15 16 Yes. А Now, just looking at -- five paragraphs down the 17 Q 18 heading says "The Case of EchoStar." Let me know when you have found that particular place in the document. 19 20 А Yes. Now, the second sentence says "Nagra Systems" -- when 21 Q 22 it says "Nagra," you understood that to be referring to 23 Nagra Vision's technology? 24 А Yes. 25 The competitor of NDS. Q SHARON SEFFENS, U.S. COURT REPORTER 48 "Nagra's systems remained unhacked for some years." 12:53:53 1

2 Do you know what the date of this document --3 approximately when this document was created? 4 I'm sorry. I didn't hear your question. А Do you know approximately -- looking at this NDS 5 Q 6 Operational Security Group document, do you know 7 approximately when it was created? 8 NO. А 9 Have you ever seen this document before? Q 10 Α NO. I will move on then. Let me ask you one question and 11 Q see if you agree with this. There is a statement in the 12 13 document that says --14 MR. SNYDER: Objection, Your Honor. MR. HAGAN: I am just asking if it's consistent 15 16 with his definition of "domino effect."

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 17 BY MR. HAGAN: On the second page, there is a reference to an 18 Q 19 "accelerated domino effect." In the second paragraph down, 20 it says "almost immediately upon the release of the EchoStar 21 hack, the two other North American broadcasters using 22 Nagra's CAS," or Conditional Access System, and then it 23 lists those, "Sky Vista and Express View. Those systems were hacked as well." 24 25 Now, Mr. Mordinson, is that consistent with your

SHARON SEFFENS, U.S. COURT REPORTER

Ŷ

49

12:53:53 1 understanding of the domino effect as it relates to the plaintiffs' security system? 2 Actually I don't know what card is used by Sky Vista. 3 А 4 Express View used the same type of Smart Card as EchoStar. 5 It's possible that EchoStar and Express View are subject for a domino effect. 6 7 So at least as that sentence relates to Express View --Q and that's the Canadian satellite provider -- you agree with 8 it, that immediately upon the release of the EchoStar hack, 9 10 Express View was hacked as well? 11 I don't really know about the hack of Express View. A Α 12 domino effect could have taken place. I just can't 13 speculate about it. Mr. Mordinson, just a couple of more questions. I 14 Q 15 appreciate your time. I asked you certain things in your deposition. I just want to make sure that I cover those. 16 You testified this morning that if someone had tech 17 savvy knowledge, and if they had a copy of your Headend 18 19 Report, Exhibit 98, and they had EchoStar's code, the secret 20 code from the card, and they had knowledge about the 21 processor used in that card, the little chip on the back --22 it's your testimony that that person could create or develop 23 the hack methodology that was posted on the internet that we 24 looked at as Exhibit 998; is that correct? 25 With the exception of necessary to the Headend Report, А

Page 38

SHARON SEFFENS, U.S. COURT REPORTER

12:53:53 1 yes. 2 Other than NDS, you are not aware of anyone else in the Q world that had a copy of your Headend Report prior to the 3 Nipper publication in December 2000; correct? 4 5 Can you repeat that? А 6 Other than NDS, the defendant, are you aware of anyone Q else in the world who had a copy of the Headend Report in 7 8 December of 2000? 9 No, I'm not aware. Α 10 Other than NDS, you are not aware of anyone else in the Q world who had a copy of EchoStar's code in December of 2000? 11 12 No, I'm not aware. А 13 Other than NDS, you are not aware of anyone else in the Q 14 world that knew of the vulnerabilities in EchoStar's access 15 card prior to December 2000; correct? 16 I'm not aware. А 17 And other than NDS, you are not aware of anyone else in Q the world who understood the IO buffer overflow and its 18 19 relationship to the RAM ghosting effect for EchoStar's 20 security system prior to the posting in December 2000; 21 correct? 22 I'm not aware. Α 23 MR. HAGAN: Thank you, Mr. Mordinson. 24 THE COURT: This will be re-recross. Mr. Snyder on behalf of NDS. 25 SHARON SEFFENS, U.S. COURT REPORTER

51

50

## 12:53:53 1

4

**RE-RECROSS-EXAMINATION** 

2 BY MR. SNYDER:

3 Just a few questions. Mr. Hagan just asked you a few Q

4 questions about whether you were aware of other people who

Page 39

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 5 knew things about the EchoStar card. 6 were you in a position to know what other people in the world knew about EchoStar's card? 7 8 А NO. 9 were you in a position to know who else in the world Q might know about the RAM ghost effect? 10 11 А NO. 12 were you in a position to know who else in the world Q might know about the buffer overflow vulnerability? 13 14 А NO. 15 Would you have any way of knowing who else in the world Q 16 might have EchoStar's code? 17 А NO. 18 Now, Mr. Hagan did a chart, and part of his chart was Q 19 pointing out that for the NagraStar system you showed some 20 pages of your Headend Report to a former hacker, Chris 21 Tarnovsky. Do you recall that part of his chart? 22 Yes. А He took the chart down, but I think we all remember it. 23 Q 24 А Yes. 25 When was that? Q SHARON SEFFENS, U.S. COURT REPORTER 52 It was in -- during my visit to Chris Tarnovsky's house 12:53:53 1 Α 2 in August 2001. 3 The next line of Mr. Hagan's chart was that code was Q 4 posted on the internet. Do you recall that part of his chart? 5 6 Α Yes. 7 And he referred you back to what we have had in the Q case as Exhibit 511-A, the dr7 posting dot com site. Do you 8 9 recall when he asked you about that? MR. SNYDER: Can we bring up 511-A, please? 10 That's not -- we will get you a copy, Mr. Mordinson. 11 12 BY MR. SNYDER:

	13	April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt Q What is the date of that posting, the xbr21 posting							
	14	that has the code?							
	15	A The posting of the xbr21 posting is dated the 23rd of							
	16	December 2000.							
	17	Q So that was about eight months or so before you met							
	18	with Chris Tarnovsky in August of 2001?							
	19	A More than eight months, yes.							
	20	Q Now, Mr. Hagan also had another chart where he wanted							
	21	to show similarities between Haifa and the posting. He							
	22	listed a bunch of things. The first one he mentioned was							
	23	the reference to "Nipper."							
	24	Is the word "Nipper" something that's in the EchoStar							
	25	card?							
		SHARON SEFFENS, U.S. COURT REPORTER							
4		SHAKON SETTENS, 0.5. COURT REPORTER							
		53							
12:53:53	1	A Yes.							
	2	Q So anyone who looks at the code in the EchoStar ROM 3							
	3	card will see the word "Nipper"?							
	4	A In the E square or EEPROM of the card, yes.							
	5	Q In the E square, the EEPROM, of the EchoStar card,							
	6	anybody who looks at that code will see the word "Nipper"?							
	7	A Yes.							
	8	Q And the next thing he identified was ATR. What is ATR?							
	9	A "ATR" stands for answer to reset. It's a term that's							
	10	used in the Smart Card industry.							
	11	Q So anyone who is dealing with a Smart Card, including							
	12	an EchoStar Smart Card, there is going to be ATR present?							
	13	A Absolutely.							
	14	Q What is get? Is that a standard programming term?							
	15	A Get I believe is an English word for obtaining							
	16	something or getting a position.							
	17	Q The next thing he listed was ROM 3. Do you recall							
	18	where the reference to ROM 3 was in the card?							
	19	A It was in the card I am pretty sure I think it							
	20	was present in ATR. I'm not sure, but it's present in the							
	21	card.							

## Page 41

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 22 So anyone who looks at the contents of the card will Q 23 see that reference to "ROM 3"? 24 А Yes. 25 Now, the next thing you mentioned was dumping the Q SHARON SEFFENS, U.S. COURT REPORTER 54 12:53:53 1 double EEPROM. 2 Now, the double EEPROM is in every single EchoStar card 3 as well? 4 Yes. А 5 And the next thing you have mentioned was the buffer Q 6 overflow vulnerability. 7 Now, was the buffer overflow vulnerability something 8 that you created in the card? First of all, "buffer overflow vulnerability" or 9 А 10 "buffer overflow attack" is a common term used, and this 11 technique is well known. In every EchoStar card, this 12 technique would work. 13 The next thing you listed was the RAM ghost effect. Q Did you introduce the RAM ghost effect into the card? 14 15 No. I believe it's a byte design of the Smart Card for А this particular microcomputer. 16 17 So would every EchoStar Smart Card of this type have Q 18 that RAM ghost effect? 19 А Yes. 20 And the last thing you listed was the ability to Q 21 execute in RAM. 22 was that something that you created in the card? 23 No. It's a standard feature of this hardware. А 24 So every single EchoStar card of that type would also Q 25 have the ability to execute in RAM?

Ŷ

Ŷ

SHARON SEFFENS, U.S. COURT REPORTER

55

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 12:53:53 1 A Yes.

> 2 MR. SNYDER: Thank you, Mr. Mordinson. No more 3 questions.

4 THE COURT: Mr. Mordinson, thank you. We are 5 going to leave you on call as we are all of the other 6 witnesses, including Mr. Shkedy. I doubt that you will be 7 returning to court, but I need to know that you are 8 available. If you are needed back to court, believe me, it 9 will be because we need you.

This is a hard-working jury. They are not to be 10 inconvenienced. Therefore, you will be on a 72-hour call, 11 12 but I firmly believe that this case will finish in four 13 weeks. We are actually ahead of schedule, but I am being 14 very cautious in saying June 15 so I don't have to call out again and change my dates. If there is not a return by any 15 16 witness on behalf of NDS or EchoStar, I am going to give the 17 jury an adverse inference, and that would be very damaging to the party. Do you understand that? 18

19 THE WITNESS: Yes.

Ŷ

THE COURT: Thank you. You may step down.
Counsel, we are going to resolve one other issue
this evening, and that is the gentleman and the date of the
exhibit before we send of the jury home. How are we going
to resolve that? This is foundational. It concerns -MR. HAGAN: Mr. Segoly.

SHARON SEFFENS, U.S. COURT REPORTER

56

12:53:53	1	THE COURT: I suggest you two reach a quiet
	2	accommodation in the back, or Mr. Segoly will be with me
	3	until Tuesday.
	4	They will reach an agreement in just a moment.
	5	They can do this very quickly.
	6	(Off the record.)
	7	THE COURT: We are back on the record. All
	8	counsel are present. Thank you for your courtesy, counsel.

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt What is your method of proceeding? 9 MR. SNYDER: Your Honor, I believe that the 10 11 plaintiffs have agreed that Mr. Segoly can be released, and 12 we will discuss that document or a related document with 13 another witness. 14 THE COURT: No. This frightens me. Reach a 15 decision about how this is going to come in. If not, we will put the gentleman on the stand tonight that you 16 17 represented to me was available. It's one of the two. 18 MR. SNYDER: Mr. Rubin can take the stand. 19 THE COURT: Mr. Rubin, would you step forward, 20 please, and raise your right hand. Thank you. 21 DOV RUBIN, PLAINTIFFS' WITNESS, SWORN 22 THE COURT: Sir, please be seated. 23 Now, Mr. Rubin may be coming back later to 24 This is very limited testimony concerning this one testify. 25 document, which is the business ethics paper allegedly taken SHARON SEFFENS, U.S. COURT REPORTER 57 off the NDS website. 12:53:53 1 2 We need to know what date that document existed. Was it back in 1996 or '97 when Mr. Segoly went to work? Is 3 it a recent document in 2007? What's the evidence? Was it 4 5 caused by this lawsuit? Was it caused by a general company policy? We don't know that. I need to know that before I 6 receive it. 7 8 Mr. Noll. 9 DIRECT EXAMINATION 10 BY MR. NOLL: 11 Q Good afternoon, Mr. Rubin.

What's your position at NDS? 12

13 I am the vice-president and general manager of NDS А

14 Americas.

15 Q So you work here in California?

16 А Yes.

17 How long have you been in that position, sir? Q

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt 18 А Ten years. 19 Is that how long you have been with the NDS? 0 20 А NO. 21 How long have you been with NDS? Q 22 I am one of the co-founders of NDS. I have been with А 23 NDS since the beginning. 24 You are well aware of NDS's standards of business Q 25 practice; is that correct? SHARON SEFFENS, U.S. COURT REPORTER 58 12:53:53 1 A I am aware of it, yes. As a vice-president, that's something that you have an 2 Q 3 obligation to be aware of? 4 А Yes. 5 I am going to have you focus your attention on Exhibit Q 6 1027, please. 7 Do you see the front page of 1027? On the top left, it says "News Corporation"? 8 9 А Yes. You have seen this document before; is that correct? 10 Q 11 I don't recall the specific document, but I have seen Α 12 similar ones. Go ahead and take a second to flip through it. I want 13 Q 14 you to satisfy yourself that is one of the documents or a 15 similar document to one you believe you have seen in the 16 past. 17 It is. I have looked through it before. Α 18 You have no reason to believe that this is not a true Q 19 and correct copy of what it purports to be? 20 Α That's correct. MR. NOLL: At this time, plaintiffs offer Exhibit 21 22 1027. 23 THE COURT: Not yet. We still need to know the 24 time period.

Ŷ

25 How long has this been in existence? Ŷ

Ŷ

THE WITNESS: This document was produced sometime 12:53:53 1 2 in 2004/2005. 3 THE COURT: Then the obvious question for each of 4 you should be was there another document that preceded this? BY MR. NOLL: 5 6 was there another document that preceded this document? Q 7 There were documents. I don't have them handy. I have А not done any of that research. I am happy to do that for 8 9 the Court. 10 THE COURT: We will get them in the future. At least as far as this document, 2004/2005, it's received. If 11 you would be kind enough to go back and do the research. 12 13 You will be back on the stand either called by EchoStar or 14 NDS. That way we can send the jury on their way. 15 (Exhibit 1027 received.) 16 Mr. Rubin, I apologize. Your full name is? THE WITNESS: Dov Rubin, D-o-v, R-u-b-i-n. 17 18 THE COURT: Thank you very much. We will see you 19 later during the trial. 20 All right, ladies and gentlemen, we will see you 21 at 8:00 on Tuesday. I want to thank you for being so prompt 22 and hard working. 23 Make that call to get your hours changed, Juror No. 1. 24 Please drive safely. I can inform you that we are 25 SHARON SEFFENS, U.S. COURT REPORTER

60

59

12:53:53 1 ahead of schedule. How significantly and how the case goes,
2 you never know, but we are ahead of schedule. If we keep
3 going, we should have this case to you in a block of time.
4 Also, would you check about your presentation. In

April 11, 2008 Volume 3 Segoly Cumberland Mordinson Rubin, D.txt other words, if it's in the afternoon, maybe we can have a 5 Monday or morning session. If it's in the morning, maybe we 6 7 can have an afternoon session. Maybe I get half a day 8 Monday. Maybe I switch 30 cases. Maybe we can do that. On 9 Tuesday, tell me when that presentation is. The more I 10 think about it I would like you to keep that date because changing the date might put you at a disadvantage. We don't 11 know. that's a big contract for you. 12 I also know about next Friday. I think you told 13 Chrisy you need to recess by 1:00. We will go through the 14 15 lunch hour, and there is a memorial service for a loved one. 16 Take than to the bank. You are going. 17 Don't form or express any opinion about this case. Don't go to the Internet. Don't go to any press, 18 19 newspapers. Don't discuss this case with anyone. Leave it 20 alone. Have a nice time. We will see you at 8:00 promptly 21 Tuesday. (Thereupon, court was adjourned.) 22 23 -000-24 25 -000-SHARON SEFFENS, U.S. COURT REPORTER

Ŷ

15:52:24 1

61

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: April 11, 2008
12	
13	

	April	11,	2008	Volume	3 Sego <sup>-</sup> Sharon	ly A.	Cumberland Seffens	d Mor	dinson 4/11/(	Rubin, )8	D.txt
14							SEFFENS,				
15					SHARON	А.	SEFFENS,	0.3.	COOKI	KEPUKII	
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											

## SHARON SEFFENS, U.S. COURT REPORTER