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UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION

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HONORABLE DAVID O. CARTER, JUDGE PRESIDING

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EHOSTAR SATELLITE CORP.,)
et al.,)
Plaintiffs,)

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vs.) No. SACV-03-950-DOC
Vol. IV

13

NDS GROUP PLC, et al.,)
Defendants.)

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REPORTER'S TRANSCRIPT OF PROCEEDINGS

20

Santa Ana, California

21

April 9, 2008

22

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SHARON A. SEFFENS
Federal Official Court Reporter
United States District Court
411 West 4th Street, Room 1-053
Santa Ana, California 92701
(714) 543-0870

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I-N-D-E-X

PAGE

OPENING STATEMENT BY MR. STONE

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14:29:28 1 SANTA ANA, CALIFORNIA; WEDNESDAY, APRIL 9, 2008; 2:30 P.M.
2 (Jury present.)
3 THE COURT: The jury is present. Counsel are
4 present, and the parties are present.
5 This is the opening statement by Mr. Stone on
6 behalf of NDS.
7 MR. STONE: Thank you, Your Honor.
8 Good afternoon. My name again is Richard Stone.
9 I have the privilege and honor of representing NDS in this
10 case. We, too, have a team concept. Here with me is Dov
11 Rubin, the General Manager of NDS Americas; David Eberhart;
12 Darin Snyder; and Ken Klein who will be helping me present
13 the evidence in this long trial.
14 We just heard an amazing string of accusations.
15 It kind of sounded like a novel. The one thing it has in
16 common with a novel is it's complete fiction. Counsel
17 invited me to set the record straight, and I am going to do
18 that. That is going to take a little while, and I am going
19 to go through a lot of evidence, not argument, but I am
20 going to tell you about the evidence in this, and I am going
21 to set the record straight.
22 The truth is the evidence will show that NDS did

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23 not engage in any conspiracy post any code or instructions
24 on the Internet to hack EchoStar. NDS has done nothing to
25 create piracy of EchoStar. NDS has done nothing to

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14:35:08 1 illegally harm or damage EchoStar. All NDS has done is
2 compete hard but fair in the marketplace.

3 You are going to learn that contrary to the facts
4 as presented by plaintiffs NDS is the leader in fighting
5 satellite piracy. NDS has assisted law enforcement agencies
6 such as the FBI, U.S. Customs, and the Department of Justice
7 in identifying, capturing, and prosecuting numerous
8 satellite pirates. NDS has helped law enforcement fight
9 EchoStar piracy as well.

10 You don't have to take my word for it because you
11 are going to hear from a former federal prosecutor, Anthony
12 Peluso, who will come here and testify about NDS's
13 willingness to drop everything and help the United States
14 government prosecute satellite pirates and, specifically,
15 John Norris and his team's willingness to drop everything
16 and pitch in and help whenever the federal government needed
17 it.

18 You are going to hear Mr. Peluso explain that
19 these pirates just don't do DirectTV. The majority of them
20 if they are hacking DirectTV they are hacking EchoStar, so
21 when satellite pirates are prosecuted, it benefits EchoStar
22 as well. You will hear that this federal prosecutor had
23 evidence of EchoStar piracy. He was willing to prosecute
24 EchoStar piracy, but plaintiffs told him we don't have a
25 significant piracy problem. On the other hand, NDS has

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14:36:53 1 worked hand in hand with law enforcement to disrupt pirate

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2 organizations, to have them prosecuted, have assets seized,
3 and to send pirates to prison. Plaintiffs have benefited
4 from NDS's aggressive approach against piracy. Yet they
5 come in here and tell you we are the bad guy in this drama.

6 There is going to be a lot of evidence that NDS
7 had nothing to do with the Internet postings that you
8 briefly heard about in plaintiffs' opening, did not engage
9 in any piracy of the EchoStar system, and I am only going to
10 have time to go through some of it. I will just give you
11 sort of an overview and hit the key points, but I am warning
12 you there is going to be lot of it.

13 Then I am even going to go forward and tell you
14 the evidence of why we are really here. Why are we here?
15 It's not because NDS did anything wrong or illegal, and it's
16 certainly not because plaintiff suffered any damages from
17 some December 2000 Internet postings. I am going to give
18 you a number that the plaintiffs don't want you to remember,
19 \$1.2 billion in revenues.

20 The year after these postings that supposed
21 destroyed their system their revenues went up \$1.2 billion.
22 That number right there tells you something else is going on
23 in this lawsuit. There is an ulterior motive at work here
24 that has nothing to do with these postings that they claim.
25 I am going to cover that a little bit later.

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14:38:37 1 I am going to give you just a little preview that
2 the story you are going to hear and the evidence that you
3 are going to see is a lot different than what you have been
4 told. First, we are going to take up reverse engineering.
5 You are going to hear a lot of evidence that reverse
6 engineering is an entirely legitimate common practice in
7 many industries, including the high-tech industries. It
8 amounts to taking product, breaking it apart, looking at it
9 to see what makes it work, see how it operates, find out the
10 state of technology.

11 You will hear about it from NDS's engineering
12 expert, and you are going to hear about it from plaintiffs'
13 expert who has a company that specializes in reverse
14 engineering. In fact, they reversed engineered the Apple
15 iPhone three weeks after it was released to find out what
16 weaknesses it had and what security problems it had. They
17 didn't do that because Apple asked them to. In fact, Apple
18 asked them not to, but they did it anyway, and they
19 published of the weakness in the Apple iPhone.

20 what is interesting about that is that their own
21 expert speaks at these conferences called the black hat
22 security conferences, so when plaintiffs make a big deal out
23 of black hat, their own expert will tell you that it's a
24 well-known and well-used term in computer security. Those
25 of you involved in the computer industry probably heard it

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14:39:58 1 before. Black hat refers to computer security teams that
2 provide protection. You have to think like a hacker to
3 prevent against it, and they have conferences where these
4 folks come and speak about computer security. They are
5 called black hat conferences. So it's a completely
6 legitimate term, and it's disingenuous to claim otherwise.

7 You are going to hear from NDS's expert about a
8 conference of engineers where they took apart a Toyota
9 Prius on stage and then published the results. So reverse
10 engineering is nothing mystical. There is nothing wrong
11 with it. In fact, it keeps the marketplace honest when you
12 think about it. If your competitor is saying our product
13 does X, Y, and Z, and the customer thinks, well, it does X,
14 Y, and Z, but if you opened up the product and looked at it
15 and said, no, it does X and Y but it doesn't do Z, now you
16 keep your competitor honest. So it creates honesty in the
17 marketplace to know what products are actually capable of as
18 opposed to what the proponent of the product might be

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19 telling folks.

20 Now, reverse engineering serves another purpose in
21 this industry. There is rampant piracy. That is true. If
22 somebody else is going to be pirated, you know that the
23 money, skills, and knowledge from that piracy is going to
24 come back at you, so you need to monitor piracy and figure
25 out where is it going to come from? Who is it going to hit

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14:41:27 1 next, and is it going to boomerang?

2 The evidence is going to show the plaintiffs know
3 better than to spin this as something sinister or wrong by
4 NDS because plaintiffs' reverse engineered the NDS DirectTV
5 system. They have done the exactly same thing that NDS has
6 done. Plaintiffs extracted and analyzed the ROM code from
7 NDS access cards, ROM coded essentially the guts of the
8 card, the main part of the code. That's what Mr. Mordinson
9 analyzed. They have analyzed the same thing. You will an
10 e-mail, Exhibit 816. It's right in there.

11 They admit they subscribed to DirectTV. Now, why
12 does EchoStar subscribe to DirectTV? They are not trying to
13 send DirectTV money. The reason they did it is they analyzed
14 the system. They logged the data stream. They reverse
15 engineered NDS's electronic countermeasures used for the
16 DirectTV system. They set out to find out as much as they
17 could about the NDS DirectTV system, and it's not like they
18 called up NDS and DirectTV and asked for permission. They
19 just did it and kept it quiet.

20 NDS is not here complaining about that. Okay. So
21 far, that's fair competition. Fine. But what they forgot
22 to tell you is that the real unfair competition in this case
23 is the plaintiffs went out and had one of their pirate
24 informants provide them stolen NDS internal documents. I
25 don't mean one, and I don't mean two. I mean 26,000 pages

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14:43:10 1 on CDs. Plaintiffs executives, Mr. Guggenheim and Mr. Gee
2 (phonetic) flew to Canada for the handoff of these CDs in
3 the Vancouver airport.

4 where did the CDs come from? A gentleman named
5 Ron Ereiser, and you are going to be hearing a lot about Ron
6 Ereiser in this case. Mr. Ereiser had been sued and
7 indicted by NDS in the United States. He is a notorious
8 satellite pirate. He is now on their payroll for \$12,000 a
9 month if I recall correctly. So they knew these documents
10 were stolen. A satellite pirate that NDS had sued and had
11 prosecuted shows up with 26,000 pages of NDS documents,
12 including the highly sensitive technical documents, and they
13 didn't ask a single question. Ron, where did you get the
14 documents? Didn't NDS just have you indicted? You have got
15 their documents. Not a single question. So when we deposed
16 Mr. Ereiser, he refused to answer where he got NDS's stolen
17 documents.

18 So this is just a little preview that the evidence
19 is going to tell you a little bit different story than you
20 have heard so far.

21 Now let me give you another point that sort of
22 gives you a little preview of maybe things are a little bit
23 different than you have been told. You heard about the
24 supposed damages that the plaintiffs are going to be
25 claiming in this month long trial. Well, they forgot to

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14:45:05 1 tell you that two months after the postings on the Internet,
2 which I am going to get to in a minute in detail, they
3 launched two things: a killer electronic countermeasure
4 that killed all the pirate cards that used whatever was
5 posted on the Internet.

6 There is a guy in Switzerland that -- a little bit

7 of an oversimplification but not much -- presses a button,
8 zap, down the satellite signal, kills any card that uses
9 these instructions, but they did more. They can also send a
10 software patch through the satellite signal. So they send a
11 code through the signal, and it goes to the card, and it
12 completely prevented the type of attack posted on the
13 Internet through an electronic software patch.

14 So think about that for a moment. These Internet
15 postings that they claim cost them \$100 million in damages
16 were completely neutralized within 60 days of the Internet
17 postings through the satellite signal, and, again, you don't
18 have to take my word on it. You are going to hear from the
19 CEO of the plaintiff EchoStar at the time, Alan Guggenheim.
20 His job responsibility was security of the system. He has
21 testified under oath that the patch was completely effective
22 and blocked and prevented any of the attacks of the kind
23 shown in the Internet postings.

24 Guess what? Plaintiffs' software expert agrees.
25 And guess what? Our expert looked at the actual patch code.

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14:46:37 1 He finally had an opportunity to do so, and he has confirmed
2 that it completely prevents any buffer overflow attack,
3 including the one posted on the Internet.

4 Mr. Jones is going to tell you about some more
5 evidence, that well before these Internet postings
6 plaintiffs knew their cards had this vulnerability. They
7 knew the pirates were using this vulnerability. They knew
8 they could patch it and prevent it, and they chose to do
9 nothing until December of 2000 when the Internet postings
10 hit. If they had simply electronically patched their cards
11 when they first knew about it, we all would not be here.

12 So this is just a little preview of the evidence
13 that is going to be a bit different, and as we hear it over
14 the next four to five weeks, it's going to show you that

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15 contrary to what you have been told NDS did not do anything
16 wrong or illegal, and plaintiffs have no real damages here.

17 Now, bear in mind, they go first, so it might be
18 awhile before you hear all of that evidence, so I am going
19 to go through it with you here in some detail.

20 First, let me explain briefly the satellite
21 security industry. You have heard a little about it.
22 Companies like NDS provide the technology that scrambles the
23 signal that comes down to the home. They also provide the
24 smart card. You need the Smart Card for when the scrambled
25 signal comes in. The Smart Card processes it and

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14:48:08 1 descrambles it so that the customer can watch what they are
2 authorized to watch. The card keeps track of what you are
3 allowed to watch.

4 Some satellite security companies like NDS also
5 investigate piracy on behalf of their customers, and they
6 collect evidence to sue pirates or to help law enforcement
7 go after pirates to stop piracy. Everyone agrees this is a
8 highly competitive industry where you have to stay on top of
9 the technology. You have to stay on top of what competitors
10 are doing and capable of doing and learning all you can
11 about the competition.

12 You have to stay on top of piracy, both piracy of
13 your system as well as the other guy's system, because
14 piracy is a tough, ugly, complicated thing to stop. It's
15 not easy. Satellite television has been attacked from all
16 directions. You have hackers who are smart, sometimes
17 brilliant, techs who want to just hack anything that's on a
18 computer. You have got hobbyists who are people who are
19 somewhat tech savvy, and they just want to get free TV for
20 themselves, and then you have got pirates who are
21 well-organized, well-funded criminal organizations, and they
22 make pirated cards and pirated devices to try to make as
23 much money as they can from piracy.

24 And now you have got the Internet, so these folks
25 can work together and share information. And you will find

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14:49:35 1 that the pirates also use the Internet to fight with each
2 other. They put false information on the Internet, and they
3 hack each other's pirate stuff and put it on the Internet.
4 So there is this constant game of payback and revenge that
5 the pirates play out on the Internet itself.

6 Now, because of the piracy problem, you are going
7 to hear some evidence that's a little unusual. Not many
8 industries have the kind of evidence you are going to hear
9 here because of the piracy problem. You are going to hear
10 about informants, sting operations, uncover operations,
11 converting hackers or pirates to become part of any piracy
12 teams. You are going to be hear about monitoring the
13 Internet on a global basis to track down piracy and stop it.

14 Now, not all satellite security companies are
15 alike. Some are more proactive in fighting piracy. NDS has
16 been one of the more proactive ones. It has used the
17 intelligence it has gathered in it's uncover operations and
18 from it's sting operations to help law enforcement pursue
19 many pirates.

20 You will also hear from former law enforcement
21 like Mr. Peluso who is going to testify about NDS's role in
22 helping law enforcement identify and prosecute pirates. One
23 thing you didn't hear so far is many of the witnesses for
24 plaintiffs are some of the same pirates that NDS has
25 aggressively and successfully pursued. Guys like Ron

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14:51:02 1 Ereiser plaintiffs now employ and who was indicted with the
2 help of NDS and sued successfully for \$14 million or Jan

3 Saggiori, another pirate who was sued by NDS successfully.

4 Let me tell you just a little bit about NDS. Then
5 I will get right to the heart of the plaintiffs' case.
6 NDS's conditional access system is used in 72 million
7 set-top-boxes for satellite broadcasters around the world.
8 NDS employs 3,400 people across the globe and 200 in its
9 U.S. headquarters right here on 3500 Highland Avenue in
10 Costa Mesa.

11 NDS prides itself on being a global technology
12 leader in its industry, and it dedicates substantial
13 resources every year to researching and developing new
14 products and new technology to improve its Smart Cards, but
15 because NDS recognizes this is a very competitive industry,
16 it also analyzes competitors and what the competition is
17 doing and what the state of the art is. Again, it's the
18 same thing plaintiffs do.

19 NDS isn't going to come before you and say they
20 have never been hacked. Everyone in this industry is hacked
21 sooner or later. NDS has understood that its system is
22 going to be under attack from well-financed pirates as well
23 as engineers and whiz kids. It's a constant game of cat and
24 mouse. You have to have newer technology to prevent the
25 hacking. You have got to have better electronic

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14:52:31 1 countermeasures, which are specialized computer viruses that
2 go seek and destroy pirate cards, and you have to have
3 lawsuits and criminal prosecutions to deter pirates and shut
4 them down.

5 So in addition to fighting piracy at a
6 technological level, NDS has been very proactive in
7 instigating investigations, lawsuits, and cooperating with
8 law enforcement to stop piracy, and the team that does it is
9 called Operational Security. The head of Operational
10 Security in North America is John Norris, and you are going

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11 to hear from him. He is going to describe for you his
12 efforts working hand in hand with law enforcement to
13 prosecute the worst pirates.

14 You are also going to hear that both plaintiffs
15 and NDS use pirates or former pirates to gain valuable
16 intelligence to find out what the pirates are up to so that
17 they can use that intelligence to stop them or design
18 countermeasures.

19 And you are going to hear about Chris Tarnovsky.
20 Mr. Tarnovsky was a very bright tech savvy individual. He
21 is at the center of their accusations as you know. He has
22 contributed to shutting down many powerful satellite
23 pirates. NDS and its undercover agents like Chris Tarnovsky
24 have made many enemies in the pirate community. NDS has
25 cost the pirates millions of dollars, shut down hundreds of

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14:53:52 1 websites, and has helped send many of them to prison.

2 Now, there is one last piece of evidence about NDS
3 that you didn't hear about, and I think you should keep it
4 in mind when you evaluate the accusations in this case. You
5 heard testimony about the 1994 or '95 or '96 time frame that
6 NDS had problems with hacking and piracy, and it did, but it
7 didn't sit there and blame somebody else. It didn't wallow
8 in misery. It made a better product. It got more
9 aggressive against the pirates, and it improved itself, and
10 it didn't need to hack plaintiffs in the year 2000 to
11 compete.

12 How do I know that? Because after this lawsuit
13 was filed, EchoStar approached NDS to hire NDS to be its
14 security supplier. You didn't hear about that did you, but
15 you are going to hear about it from the president of
16 EchoStar Technologies Corporation at the time, Mark Jackson.
17 You are going to hear about it from Mr. Rubin, the General
18 Manager of NDS Americas, who was invited to these meetings
19 and attended them.

20 So when you hear these allegations about NDS was
21 desperate and needed to do something desperate, I want you
22 to remember that even up to 2007 plaintiff EchoStar was
23 haggling over price with NDS to use NDS as its security
24 company because its current security provider, Nagra, was
25 well behind the times in the technology war against pirates.

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14:55:33 1 Now let's talk about the plaintiffs' case. The
2 evidence is going to show it's nothing more than one big
3 deception. They make some facts without outright false
4 allegations. They take evidence of NDS's anti-piracy
5 efforts and they twist that truth into false evidence of
6 piracy. They take NDS's legitimate competition and
7 competitive intelligence-gathering and they spin it as
8 something sinister. I am going to through each of these
9 deceptions and tell you what the evidence actually proves.
10 There are seven major deceptions in this case.

11 The first deception, that Chris Tarnovsky caused
12 all the damages to the plaintiffs by posting on the Internet
13 the recipe to hack EchoStar cards in December 2000. That's
14 the claim. There are two Internet postings in December 2000
15 that they claim caused all their damages.

16 Now, there are two important names you need to
17 remember: Alan Guggenheim and JJ Gee, Alan Guggenheim and
18 JJ Gee. These are the two gentlemen who were the lead
19 investigators into the source of these Internet postings.
20 You heard about an expert, Dr. Rubin, who comes in years
21 later and says it kind of looks the same. They had two
22 investigators whose job it was to investigate these
23 postings.

24 You are going to see Exhibit 511-A, which is the
25 actual posting. It's posted by xbr2121 on the dr7 website.

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14:57:14 1 Now, during a lawsuit, we are able to send questions to the
2 other side. They are called interrogatories. It's
3 extremely important. They have to answer them truthfully
4 under oath under penalty of perjury. The reason that is
5 done is it makes it difficult for people to try to change
6 their story if it turns out there is no real evidence to
7 support their accusations.

8 For four years of this lawsuit, the plaintiffs
9 accused Mr. Tarnovsky of being xbr21, the person who posted
10 information on one way to hack the EchoStar security system
11 on the dr7 website. They even stated under oath that all of
12 their damages were caused by this December 23, 2000, posting
13 by Chris Tarnovsky using the alias xbr21. So under oath,
14 Mr. Tarnovsky's xbr21 was the person who posted this.

15 But we knew Mr. Tarnovsky was not xbr21, so we
16 took plaintiffs' information and we conducted our own
17 investigation. Guess what? We found the real xbr21. His
18 name is Marco Pizzo. He lives in St. Louis, Missouri. You
19 are going to hear him testify in this case. He is going to
20 explain how the information on the EchoStar hack ended up on
21 the dr7 website. He put it there himself. He took the
22 NipperClause file that was posted from a European pirate
23 website called interestingdevices.com, and he was the first
24 one to put it on the dr7 website the plaintiffs base their
25 claim on. He actually posted it twice because the first

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14:58:51 1 time he posted it there was a problem, and then he reposted
2 it. Mr. Pizzo has never been employed by NDS, has no
3 dealings with NDS, and doesn't know Chris Tarnovsky. No one
4 told Mr. Pizzo to make this posting. He did it all on his
5 own so that he could discuss this with other hackers.

6 Now, you have heard this statement that they are

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7 going to claim some other posting on December 21.
8 Apparently, it was there so momentarily nobody has ever seen
9 it because there is no evidence of any posting on
10 December 21. Mr. Pizzo will tell you that he was the first
11 person to post this on the dr7 website. He didn't see any
12 other postings or chatter referencing any prior posting.
13 Mr. Pizzo is also going to testify that he knew there were
14 pirates all over attacking the Nagra system, which he
15 believed was a weak system that EchoStar used. So this
16 evidence was a huge problem for the conspiracy story.

17 Plaintiffs' lead investigator on the Internet
18 postings, Mr. Gee, testified that if it turned out that
19 Chris Tarnovsky was not xbr21 then it would be true that NDS
20 was not responsible for plaintiffs' piracy problems after
21 the December 2000 postings. You are going to see that
22 evidence. You are going to see that Mr. Tarnovsky is not
23 xbr21. NDS is not responsible for plaintiffs' piracy
24 problems, and NDS did not cause any damage to the EchoStar
25 security system.

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15:00:18 1 The evidence will show you that their own
2 investigator, Mr. Gee, testified under oath that if Chris
3 Tarnovsky was not xbr21 then NDS would not be the cause of
4 damage to the EchoStar system. So when you hear the new
5 story about something on December 21, remember for over four
6 years they consistently and falsely accused Mr. Tarnovsky of
7 being xbr21 and being responsible for the posting that they
8 claim under oath caused all of their damages. The evidence
9 is undeniable that Marco Pizzo as xbr21 is the only guy to
10 post the so-called recipe on the dr7 website that they
11 complain about.

12 Now, there is one more amazing fact about this.
13 At the time of the December postings, the owner/operator of
14 the dr7 website, Mr. Menard, whose name you heard was
15 recovering from major hip surgery, so because of that, he

16 had other people running his website. In fact, during
17 December 2000, one of the administrators of the dr7 website
18 was Charles Perlman, who we now know was a pirate informant
19 paid by EchoStar. The evidence is going to show that the
20 very time these postings were made on the dr7 website they
21 had an informant running the website named Charles Perlman.

22 You are going to hear testimony that an
23 administrator of a website or a web master can monitor who
24 is posting, can block post, control the servers, you know,
25 basically run the website. So if somebody else other than

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15:02:11 1 xbr21 posted something, then Mr. Perlman should have been
2 able to provide a screen shot, an electronic file, a report,
3 something that proved that. And if the posting on dr7 was
4 supposed so dangerous and unstoppable, why didn't the
5 plaintiffs ask they inside guy to block it or delete it?

6 There is going to be more evidence that
7 Mr. Tarnovsky did not put the NipperClause posting as we
8 call it in this case -- you will see the file has a name
9 NipperClause in it -- on the dr7 website either on or before
10 December 23.

11 Now, they claim that this reverse engineering
12 Headend Report is the source of the posting. That's not
13 true, not true, but even taking their claim at face value,
14 Mr. Mordinson has testified he didn't even show the Headend
15 Report to Mr. Tarnovsky until mid 2001 well after the
16 posting. Mr. Tarnovsky has also testified he did not see
17 the Headend Report until 2001 after the posting, and Mr.
18 Tarnovsky is going to tell you why he knows it was 2001.

19 Now, we had an expert, Isle Jones (phonetic),
20 compare the posting to the Headend Report, so you have the
21 Headend Report from 1998 and the posting in 2000. Mr. Jones
22 is an expert in embedded systems. Embedded systems are
23 basically Smart Cards or microwaves or cell phones, anything

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24 that has a chip or a little computer embedded in it. He has
25 written hundreds of programs for such systems, and he has

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15:03:48 1 actually written code for the very processor that's in the
2 EchoStar cards, so he has lots of experience with this code.
3 He will tell you that the hypothetical attack that
4 Mr. Mordinson sketched out when he did his reverse
5 engineering report is dramatically different than the xbr21
6 code in ten major areas. Another fact that is critically
7 important -- and you are going to hear this evidence -- the
8 code that was posted by xbr21 on the dr7 website has
9 software code instructions and hardware addresses that are
10 not in the Headend Report and NDS didn't know about.
11 Mr. Jones is going to show you all the reasons why he can
12 confidently conclude that the posting on the Internet did
13 not come from the Headend Report.

14 Now, plaintiffs' expert obviously disagrees with
15 that, but Mr. Rubin is not a Smart Card or an embedded
16 systems expert. He doesn't design products or write code
17 for products. He never worked with a code that EchoStar
18 uses in its cards unlike Mr. Jones.

19 Now, he is a smart computer professor, but his
20 speciality is network security, but it's interesting because
21 he agrees with Mr. Jones that the programs are dramatically
22 different. In his report, Dr. Rubin has said -- and I want
23 to get this right -- the programming methodologies and
24 styles are different. The programs are of different
25 lengths. The hexadecimal byte sequences are different.

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15:05:18 1 Different addressing methodologies are used, and many other
2 specific aspects of the two programs are different.

3 Now, because he is a hired expert in this case,
4 Dr. Rubin tries to downplay all those differences he was
5 forced to concede exist, but our expert will point out why
6 those are all very significant differences in addition to
7 the fact that there is information in a posting that the
8 Headend Report didn't disclose and NDS didn't know.

9 Now, let me talk about the next deception, that
10 only NDS could be the source of EchoStar piracy. The
11 evidence is going to show that there were many skilled
12 pirates and hackers who had access to the EchoStar ROM code
13 before the December 2000 postings. Their own expert agrees
14 that a reasonably skilled pirate who had access to the ROM
15 code could have done this attack.

16 In fact, we are going to bring before you one of
17 the best hackers of the EchoStar system, a gentleman who
18 went by the name of "Stuntguy." He is going to come in here
19 and testify that pirates have been hacking EchoStar well
20 before the December 23 posting.

21 They threw out two other names, Nipper and
22 NipperClause. We know Tarnovsky is not xbr21, so who is
23 this Nipper and NipperClause? Can we solve that mystery?
24 You heard them accuse us of being that person.
25 Mr. Tarnovsky supposedly was xbr21. That's been disproven.

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15:06:46 1 Now he is NipperClause. well, we can solve that mystery.
2 The reason we can solve it is plaintiffs have already solved
3 it before they filed the lawsuit. So let me tell you about
4 that.

5 Before the postings -- before the December 2000
6 postings, plaintiffs acquired a pirate device called the
7 black box. It was used to illegally reprogram EchoStar
8 Smart Cards. Now, using evidence traced from the black box,
9 the plaintiffs had very strong leads about who was behind
10 the Internet postings and the information xbr21 found and
11 posted. The plaintiffs just stopped investigating.

12 The hard evidence is going to show that they
13 stopped investigating because it wasn't NDS. It wasn't
14 Tarnovsky. It wasn't anyone associated with NDS. Now as a
15 result of this lawsuit, we now know that plaintiffs know who
16 Nipper and NipperClause is.

17 Let me explain. The evidence is going to show
18 that about a year before the posting, in early 2000, there
19 was a type of hack to the EchoStar access cards called the
20 E3M hack floating around Canada. The plaintiffs suspected
21 that this so-called E3M hack used a buffer overflow type of
22 attack. That's the same type of attack in the Internet
23 posting, so they paid their pirate informant, Mr. Ereiser,
24 \$65,000 to get one of these black box devices to confirm
25 that.

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15:08:15 1 Ereiser acquired the black box pirate device. He
2 gave it to plaintiffs who studied it in October 2000, months
3 before the posting. What did they find? Well, they
4 compared the code when the posting came out with the black
5 box and found that it did the exact same thing, used the
6 exact same methodology, and was connected to the postings.
7 Remember, the black box comes from a pirate in Canada.

8 Now, there is going to be a lot of evidence about
9 the black box pirate device, but there are just a couple of
10 other important points I want to make about it. The
11 evidence is going to show the plaintiffs acquired a pirate
12 device, the black box, once before the postings. It breaks
13 the EchoStar system by attacking it in the exact same
14 vulnerability that was shown on the Internet and shown in
15 the xbr21 posting, so now the question becomes where did
16 Mr. Ereiser get the black box?

17 well, the evidence is going to show plaintiffs
18 know that Mr. Ereiser got the black box from a piracy group
19 in Barrie, Ontario, Canada, a known hotbed of pirate

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20 activity. You are going to hear NagraStar's own security
21 man, JJ Gee, is going to testify that Mr. Ereiser got the
22 black box from Jim Waters in Barrie, Ontario. Jim Waters is
23 a known pirate.

24 Again, you are going to see Exhibit 375, which is
25 Mr. Gee's notes that corroborates this testimony. In those

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15:09:39 1 notes, it shows that Jim Waters of the Barrie Group provided
2 the black box to Mr. Ereiser, and it also shows that
3 Mr. Waters sold another black box or a looper, which is
4 another name for it, to someone named Anthony Muldanado.

5 Now, I have mentioned four names. You have got JJ
6 Gee, whose is their security man and the lead investigator.
7 You have got Ronald Ereiser, their pirate informant. You
8 have got Jim Waters, a pirate in Ontario, Canada, and
9 Anthony Muldanado, also a known pirate, and Mr. Muldanado
10 purchased a black box device from Mr. Waters that is
11 connected to the postings.

12 So how did Mr. Gee know that Mr. Muldanado got a
13 black box device from Jim Waters in Barrie, Ontario, that is
14 connected to the postings? This is one of the most
15 significant exhibits in the case. It's Exhibit 374. It's
16 entitled "Report of an Investigation with Reference to
17 Anthony J. Muldanado and Paul Thomas St. James for Mr. Alan
18 Guggenheim, CEO, NagraStar, EchoStar March 23, 2001." It's
19 a 120-page comprehensive report that describes when Mr. Gee
20 accompanied the FBI on a raid of Mr. Muldanado's house on
21 March 23, 2001, within three months of the postings.

22 So what did they find on this raid with the FBI?
23 Well, you will see from this report and you will hear
24 Mr. Gee's testimony that Mr. Muldanado worked for Motorola
25 as an engineer in Arizona, but he had a double life as a

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15:11:19 1 major EchoStar piracy distributor. When they went to his
2 house, they seized 60 receivers, modified cards, all sorts
3 of evidence of piracy.

4 So what did they learn from Mr. Muldanado? well,
5 during the FBI raid, there was an interview of Mr. Muldanado
6 by the FBI and Mr. Gee. They asked -- remember, this is
7 three months after the postings. It's a logical question.
8 Do you know who Nipper is? Without prompting, Mr. Muldanado
9 said yes, and Nipper also went by the name NipperClause.

10 So Mr. Muldanado went on to tell the FBI and
11 Mr. Gee that Nipper was his piracy supplier, Jim, in Barrie,
12 Ontario, who Mr. Gee determined was Jim Waters. So Jim
13 Waters, the guy who sold the black box to plaintiffs'
14 informant was Nipper according to Mr. Muldanado, a piracy
15 distributor who was raided in March 2001.

16 Now, the evidence is going to show another amazing
17 fact about Mr. Muldanado. He made his connection with his
18 supplier Jim from Barrie, Ontario, on a pirate Internet
19 form that plaintiffs now admit was hosted by their own
20 informant, Mr. Ereiser. I am not making this up. So the
21 evidence is going to show that even though EchoStar and
22 NagraStar knew the source of their piracy problems Mr. Gee
23 and his security team did not pursue any of these leads to
24 the source of a black box in the postings. They did nothing
25 to pursue Jim Waters in Barrie, Ontario. They had just been

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15:13:03 1 given hot information from a pirate who told the FBI this,
2 and they did nothing, nothing in 2001, 2002, 2003, ever.

3 You are also going to hear evidence that the
4 source of the code in the black box may have come from a
5 company that was doing the software development for
6 plaintiffs. You are also going to hear evidence about
7 inside leaks of source code from plaintiffs' companies that

8 were helping pirates.

9 So what the black box evidence shows is that
10 plaintiffs had solid evidence within a couple months of the
11 December 2000 postings of a black box pirate device
12 connected to the postings that used a buffer overflow attack
13 that came from Jim Waters in Barrie, Ontario, and that his
14 distributor told the FBI and JJ Gee that he was Nipper.

15 Plaintiffs had every reason to investigate that
16 thoroughly. Yet they didn't investigate any of it, and they
17 can't give any reason why they did not. The reason is that
18 they knew the investigation would show it was not NDS or
19 Chris Tarnovsky, so they didn't want to investigate. The
20 evidence is also going to show they didn't care because they
21 fixed their problem with a software patch and an electronic
22 countermeasure in February 2001. Those are the reasons they
23 failed to even follow up on this.

24 Now, just when you thought it couldn't get any
25 more suspicious, there is one more fact about the black box.

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15:14:37 1 After they paid \$65,000 for the black box device, they had
2 it, they studied it, what did they do it? The plaintiffs'
3 explanation is they got rid of it. They gave it back to the
4 pirates.

5 So if NDS or its experts wanted to analyze the
6 black box pirate device and provide more evidence that NDS
7 is not responsible for this, we can't do it. There are only
8 two plausible explanations for why plaintiffs would get rid
9 of critical evidence that they paid \$65,000 for. They knew
10 that if we had it it would conclusively prove that the black
11 box that EchoStar had and the postings do not have any
12 connection to NDS and that if anyone was helping the pirates
13 it was a leak from the inside.

14 Now, there is a second posting you heard, the
15 so-called Nipper 2000 posting on December 24. Everyone

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16 agrees that this is a dump of a pirated card. In other
17 words, it was a card that was modified and somebody dumped
18 its contents on the Internet. The evidence is going to show
19 that the posting itself is meaningless, and it has no
20 connection to NDS or Tarnovsky.

21 You are going to hear from NDS's expert, Nigel
22 Jones, who has examined it. He is going to tell you that
23 it's completely inconsistent with the information in the
24 Headend Report. The information didn't come from any card
25 that NDS studied, and that if anyone used this posting it

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15:16:01 1 would simply crash their card. Again, plaintiffs' expert
2 agrees that if anyone were to use this posting it would
3 simply crash your card.

4 Now, some further investigation. The Internet
5 service provider for the posting from December 24 traces to
6 Sudbarrie, Ontario, which is near Barrie, Ontario, where we
7 know Jim Waters aka Nipper is located. So the computer used
8 to post the code on December 24 comes from Ontario, Canada.
9 More evidence that that posting has nothing to do with NDS.

10 Finally, the evidence is going to show that the
11 plaintiffs were able to determine whose card was used to
12 make that posting, and they have covered it up. Again,
13 Mr. Guggenheim, the former CEO of NagraEchoStar, has
14 testified that Nagra Vision in Switzerland was able to
15 analyze this code that was posted on the Internet and find
16 unique identifying information. He testified that process
17 was done. When he was asked what were the results, whose
18 card was it, I don't recall. Now, don't you think if it was
19 NDS or Chris Tarnovsky Mr. Guggenheim would have recalled?

20 well, guess what? We finally realized that buried
21 in that code is a unique password that the plaintiffs'
22 engineers used. It's the one piece of information that
23 wasn't changed and redacted by whoever posted it, so we told
24 the plaintiffs take this password and run it through your

25 database and tell us whose card this is.

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15:17:42 1 well, now we know, Exhibit 1510. It's the
2 printout of the results. There is an interesting address on
3 there. It says the card is owned by Margaret Kupes
4 (phonetic), 600 Main Street, Tanawanda, New York. So we did
5 some investigation. That's not a residence. It's a
6 commercial address. It's a freight-forwarding company
7 called M&M in Tanawanda, New York, that is within about 100
8 miles of the Canadian border.

9 what we also found out is this freight-forwarding
10 company allowed its address to be used in the United States
11 so that Canadian pirates could get U.S. subscriptions to
12 EchoStar because EchoStar cannot be received in Canada, so
13 now we have got the card that's tied to the posting is tied
14 to a freight-forwarding company that allows its address to
15 be used by Canadian pirates for illicit activities. Again,
16 it has nothing to do with NDS, and they knew it.

17 So every time they try to investigate these
18 postings we get away from NDS or Tarnovsky, so they weren't
19 interested in that, so you are not going to see any reports
20 of investigations into these postings with one exception.
21 There is one report. It's the 120-page report that
22 identifies Jim Waters as Nipper. That's the only
23 investigative report on these postings.

24 Now I am going to talk about the ICG/TDI story.
25 Because their own investigation proved that these postings

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15:19:22 1 were not related to NDS, plaintiffs try to claim that TDI
2 and ICG conducted some investigation that linked
3 Mr. Tarnovsky to the Nipper alias. well, because of the

4 false allegations against NDS, DirectTV did conduct an
5 investigation, but we know Mr. Lebson of TDI who headed up
6 the investigation has testified that when they say link they
7 grabbed anything they could off the Internet, anonymous
8 postings, rumors, so it's basically unsubstantiated Internet
9 gossip and hearsay. In fact, that's exactly what the
10 reports are.

11 Mr. Lebson testified he sent an e-mail to ICG and
12 said do you have any evidence proving that Chris Tarnovsky
13 is Nipper? He said no. We have got hearsay. We don't
14 really have any evidence, and Mr. Lebson testified that
15 never changed. Now, that's not surprising because we now
16 know who Nipper is, but TDI hired nine separate
17 subcontractors to investigate it. They never came up with
18 any evidence that Mr. Tarnovsky was Nipper. They are not
19 going to. It's Jim Waters. We know that from their own
20 records.

21 Now, the hearsay that ICG found two years after
22 the postings -- this report was done in 2002 -- two years
23 later where does the hearsay come from? Charles Perlman,
24 Dean Love, and Reggie Scullion. What they all have in
25 common is they are EchoStar's paid pirate informants, so

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15:20:54 1 that's the source of the hearsay in the 2002 report.

2 You are going to hear from Mr. Betsa (phonetic),
3 the president of ICG. Remember there is TDI, Mr. Lebson.
4 There is ICG, which is owned by Mr. Betsa. He is going to
5 testify and confirm that they never had any evidence, never
6 had any confirmation, linking any particular person to any
7 particular alias. He is also going to testify that ICG made
8 no connection between Mr. Tarnovsky and EchoStar piracy.
9 Again, it's not a surprise in light of what we now know.

10 One last point on ICG, if you look at Exhibit 360
11 in this case, it will be somewhat amusing. The same ICG

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12 that supposedly made this link -- well, they also said that
13 NagraStar's CEO, Alan Guggenheim, provided an EchoStar hack
14 to dr7, and they recommended that his potential involvement
15 in the pirate community should be further investigated. ICG
16 said their own CEO ought to be further investigated for
17 involvement in piracy. So under their theory of proof then,
18 Mr. Guggenheim ought to be the defendant in this case, not
19 NDS.

20 The testimony that it took a sophisticated lab to
21 do this, that is going to be disapproved by a mountain of
22 evidence. The system was weak. The Pizzo example is just
23 one example of one hack of the system. It's an attack that
24 is one of the oldest in the history of computing. Every
25 pirate knows about buffer overflow attacks. It's one of the

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15:22:31 1 first things you learning in a standard software security
2 class according to their own expert, and their own expert
3 even referred to it as a very bad security mistake.

4 Mr. Rubin admitted that any pirate who basically
5 had access to the ROM code could have figured this out, and
6 we are going to show you there are lots of pirates who had
7 access to the ROM code. You are going to hear from our
8 expert, Nigel Jones, that the cards were full of security
9 holes. In fact, he found so many obvious deliberate
10 mistakes in the failure to prevent this attack that
11 Mr. Jones thinks it's more likely than not that this began
12 as an inside job.

13 He found when he was finally able to look at the
14 source code for the ROM 3 card, which is the subject of the
15 posting, that the software programmer deliberately failed to
16 check for the ability to overflow the communications buffer,
17 deliberately didn't do it, the basic step. It would have
18 take two lines of code to do that.

19 Plaintiffs' expert, Dr. Rubin, raised even more
20 suspicions about this. when he looked at the code, he said,

21 hey, there are two other buffers that the programmer
22 specifically checked to make sure they couldn't be
23 overflowing, but those can't be used for any piracy attack.
24 So get this. The same programmer put in two lines of code
25 for the two buffers that can't be used for a pirate attack

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15:24:00 1 and deliberately could not check for buffer overflow on the
2 one buffer that can be used for a piracy attack.

3 Plaintiffs' expert admitted there are many other
4 major security flaws in this system. For example, there is
5 something called the box keys. The security system depends
6 heavily on those remaining a secret. It turns out that you
7 can use your remote control on your couch at home and punch
8 up the secret box keys on this system, and once you have the
9 box keys, those can be used for hacking. So your remote
10 control on your TV at home can get secret codes. Their own
11 expert had to call that a really bad security design. You
12 are going to hear lots of evidence of weaknesses in their
13 product that made them inherently vulnerable to known
14 methods of attack.

15 Now, there were numerous groups of pirates
16 attacking EchoStar as well, including skilled engineers.
17 You are going to hear from "Stuntguy." We went out and we
18 found "Stuntguy." The reason we found "Stuntguy" is
19 "Stuntguy" published on the Internet a bible of hacking
20 EchoStar, a detailed manual on how to hack EchoStar, and he
21 published this a year before the postings. His name is
22 Chris Dahl. Ironically, he lives within about 20 miles of
23 the EchoStar headquarters in Denver, Colorado.

24 He began publishing this hacking bible in the
25 early fall of '99 and updated it all the way through the

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15:25:33 1 year 2000. He has absolutely no connection to NDS, no
2 connection to Chris Tarnovsky. He even performed complete
3 studies of the ROM 3 code and the prior version, the ROM 2
4 code, before these postings. Mr. Dahla even received source
5 code to the EchoStar system that was posted by EchoStar
6 employees on a corporate FTP site that pirates were able to
7 access. He also figured out a backdoor password that was an
8 easy way to dump the card before these Internet postings.
9 So it does the same thing as the postings, but it's even
10 easier.

11 You heard about the DISH Plex Group. Something
12 counsel didn't tell you is it's not exactly a retailer.
13 DISH Plex was a piracy group in Ontario, Canada. One of
14 their informants was part of that group, Larry Pilon, whose
15 testimony you will see.

16 The DISH Plex piracy group had a sophisticated
17 piracy lab in Thunder Bay, Ontario. They had a scanning
18 electron microscope that was used to extract code.
19 Plaintiffs' own database entries, Exhibit 515, shows that
20 the Thunder Bay scanning electron microscope owned by the
21 DISH Plex Group was used to provide "Stuntguy" with his
22 information to create this bible of hacking.

23 The other thing they forgot to tell you is that
24 the posting was like one way to hack just the ROM 3 card,
25 but every other version of their card has been hacked, and

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15:27:09 1 they admit that it has been done by actual pirates, so ROM
2 2, 10, 11, 101, they admit were done by actual pirates. The
3 card that they provided for the swap, that was done in 2005.
4 It was hacked before the swap was completed. They are
5 facing what is called free-to-air piracy. That's where
6 people buy off-the-shelf receivers. You don't even need a
7 Smart Card, and you can steal their signal right out of the

8 air. That's their biggest piracy problem. It's by actual
9 pirates. So they want you to believe that only NDS could do
10 this one hack of this one card in this one time frame, but
11 they admit pirates did everything else.

12 You are also going to hear evidence about
13 plaintiffs' own internal security leaks that contributed to
14 their piracy problem. So while they are here accusing NDS,
15 there is going to be evidence that a lot of this was from
16 the inside.

17 Now, the next major deception is that John Norris
18 is somehow involved in a scheme to commit piracy. The
19 evidence is going to show that this is one of the most vile
20 aspects of their scheme to falsely blame NDS or to accuse
21 John Norris. John Norris has dedicated his career to
22 fighting piracy. He has worked hand in hand with law
23 enforcement for over a decade. He has spent his whole
24 career fighting piracy.

25 You are going to hear from Mr. Norris. After he

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15:28:39 1 served in Vietnam and achieved the rank of captain, he was
2 honorably discharged in 1973. He began providing security
3 work for companies like General Instruments thereafter, and
4 for the last 12 years, he has headed up NDS's security
5 operation for both North and South America. He has provided
6 instruction to law enforcement on numerous occasions,
7 including on topics like how to successfully prosecute
8 satellite piracy crimes, how to catch satellite hackers, how
9 satellite criminal organizations are organized. Through his
10 efforts, NDS has sued and prosecuted numerous pirates.

11 You are going to hear from Mr. Peluso who I have
12 discussed, a former federal prosecutor who worked with John
13 Norris on many prosecutions. Mr. Peluso also served in
14 Vietnam and after Vietnam became an Army prosecutor for 16
15 years for the judge -- advocate general support. He
16 resigned in the early '90s and became an Assistant United

17 States Attorney for the Middle District of Florida.

18 He is going to tell you three important things:
19 John Norris and his team always provided valuable assistance
20 in his fight against piracy and in helping the U.S.
21 Government and that invariably the piracy that they fought
22 was both DirectTV and EchoStar.

23 Now, he is also going to tell you that during the
24 same time period they claim their system was destroyed and
25 they suffered hundreds of millions of dollars of damages

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15:30:03 1 they told Mr. Peluso, a federal prosecutor, they had no
2 significant piracy problem. Even when Mr. Peluso brought
3 out major pirates who had successfully hacked them and who
4 he had convicted, EchoStar denied to Mr. Peluso that they
5 had a piracy problem. You are going to hear that this
6 attitude frustrated Mr. Peluso.

7 You are also going to hear that Mr. Peluso did
8 hear from EchoStar that they blamed NDS and Tarnovsky for
9 piracy while denying that actual pirates he had convicted
10 had hacked their system. But Mr. Peluso will tell you he
11 was willing to investigate any source of piracy. If it was
12 NDS or Tarnovsky, he would have investigated it, but he
13 never got any evidence from EchoStar or any other source
14 that NDS or Tarnovsky was engaged in any piracy.

15 Now, the evidence is going to show that John
16 Norris did recommend that NDS hire Chris Tarnovsky. He was
17 well aware that Chris had engaged in some questionable
18 satellite piracy activities after Mr. Tarnovsky returned
19 from serving in the Army in Europe, but he thought he could
20 be turned around and serve as a available intelligence
21 asset, which is exactly what happened.

22 Chris not only obtained important information to
23 help NDS prosecute pirates, but he worked very hard to help
24 them secure their products and improve their technology.

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15:31:30 1 Norris has engaged in piracy who are trying to ruin his
2 reputation, these are the same pirates that John Norris went
3 after. They are paid pirates who are out for revenge.

4 A perfect example is Graham James who you may or
5 may not hear about. Mr. James admitted he lied under oath
6 in his previous trial. The result, he was convicted of
7 armed robbery. They want you to accept the word of people
8 like that that John Norris is somehow engaged in piracy.

9 The next deception, Mr. Tarnovsky was in fact
10 terminated by NDS. That is true. But what plaintiffs
11 haven't told you is that the \$40,000 in cash they talked
12 about has absolutely nothing to do with these postings. In
13 early 2001, NDS learned that these packages had come. The
14 money had been intercepted, and Mr. Tarnovsky had not
15 claimed the money. He understood that drug-sniffing dogs
16 had hit on the packages, so they had Mr. Tarnovsky take a
17 drug test. He passed. They interviewed Mr. Tarnovsky. He
18 said he didn't know where the money came from. He believed
19 he had been set up.

20 Now, there is a certainly plausible explanation
21 because Mr. Tarnovsky was working uncover. He had made a
22 lot of enemies in the pirate community. NDS had pursued a
23 lot of pirates successfully, and the U.S. Government had
24 just revealed that a sting operation called
25 operationsmartcard.net was actually a government sting

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15:33:10 1 operation and not a pirate website as people thought.

2 Mr. Tarnovsky was working uncover in that
3 operation with government agents, and that had recently been

4 disclosed when these packages came in, so his story
5 certainly seemed plausible. So he wasn't terminated at that
6 point in time, and that's where it is at. He continued to
7 be an exemplary employee and continued to work hard.

8 But then during this lawsuit for the first time,
9 NDS obtained records that showed that a fingerprint traced
10 to Al Menard from his associate Merve Main, so it was Merve
11 Main's fingerprint apparently connected to Al Menard, and
12 Mr. Tarnovsky was terminated. He was terminated not for
13 engaging in piracy. He was terminated for not being
14 completely candid because this fingerprint seemed to show
15 some connection, and he said he had knew of no connection,
16 so that was the reason he was terminated.

17 One thing you should know about Mr. Tarnovsky when
18 he was in the Army in Europe is when he began his efforts to
19 understand satellite conditional access systems. He was a
20 driver for his colonel. The Army trained him in
21 telecommunications. His colonel offered to sell him a
22 satellite system that came with two cards that were broken,
23 so-called pit cards, so Mr. Tarnovsky fixed these pit cards
24 so that he could get English TV in Germany where he was
25 stationed. This was very common amongst American soldiers

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15:34:46 1 stationed in Germany at that point in time. In fact, Mr.
2 Tarnovsky will tell you that if you wanted to look for the
3 latest information on how to fix these cards, you would just
4 go to the "Stars and Stripes" magazine or newspaper to find
5 it.

6 So then he came back to the U.S. He was honorably
7 discharged after serving in the Army for seven years. In
8 1996, he was approached by Ron Ereiser. Ron Ereiser asked
9 him if he would engage in piracy of the DirectTV system.
10 Chris was still interested in that kind of stuff, and,
11 honestly, he took a wrong turn in life, and he agreed.
12 From September 1996 to June 1997, he worked with Ron Ereiser

13 in piracy of the DirectTV system, and Mr. Tarnovsky will
14 admit that. He will candidly tell you that he did that.

15 In 1997, NDS recruited him to serve on the
16 Anti-Piracy Team to use his skills and aptitude to fight
17 piracy. Chris Tarnovsky agreed. It was a way for him to
18 continue to do what he loved but to have a legitimate job
19 and fight piracy. So when they portray Mr. Tarnovsky as
20 this evil figure, let me give you the timeline. He worked
21 for Ronald Ereiser for ten months engaged in piracy in 1997.
22 He then worked for ten years fighting piracy for NDS.

23 After he was employed by NDS, he did not hack the
24 DirectTV system. The incident counsel referred to you will
25 hear about. You will hear about Operation Johnny Walker.

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15:36:30 1 These are uncover operations. Guess who was the target of
2 that 1998 operation that involved the money to the mailbox
3 that counsel told you about? Guess who was the target? Ron
4 Ereiser. Chris Tarnovsky and John Norris will tell you
5 about that operation and how successful it was.

6 They also will try to spin this Al Menard
7 relationship as something nefarious, but keep in mind
8 Chris's job was to get close to people like Al Menard who
9 ran a website, to gain intelligence, to find out what
10 pirates were up to. It's true that Mr. Tarnovsky developed
11 sort of an e-mail pen pal friendship with Mr. Menard, but I
12 don't think the plaintiffs can exactly criticize that
13 because, as you know, they did exactly the same thing.
14 Their informant, consultant Charles Perlman, was so friendly
15 with Mr. Menard he was in control of the website in
16 December 2000 when these postings were made.

17 Now, two last things. The notion that this
18 \$40,000 in cash has anything to do with this case is just
19 not true. In fact, the allegation that it somehow proves
20 NDS is engaged in piracy, that was investigated by the

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21 United States government. NDS cooperated with that
22 investigation. Plaintiffs could provide whatever evidence
23 they wanted. You are going to see when it was all said and
24 done the United States Attorney for the Central District of
25 California sent NDS a formal letter confirming they were

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15:38:15 1 closing the books on that investigation. It's Exhibit 1268.
2 It's a letter from Assistant United States Attorney James
3 Spertus.

4 So now they talk about the termination. Chris
5 Tarnovsky and Al Menard were fired. Well, you have to
6 understand how Al Menard was hired. In about 2003,
7 Mr. Menard was able to figure out and trace how somebody had
8 stolen sensitive documents from DirectTV relating to the
9 latest generation of their Smart Card. The way he was able
10 to track down the person behind this who was ultimately
11 prosecuted was ingenuous, so NDS hired him as a consultant,
12 and he went around educating law enforcement on how to stop
13 Internet piracy, Internet crimes, and he also served as an
14 intelligence resource monitoring pirate websites.

15 Now, the notion that, well, gosh, they fired him
16 right before their depositions so that's something
17 nefarious, it's the exact opposite. Think about it.
18 Mr. Menard was fired. He had no motive to lie for NDS.
19 Chris Tarnovsky had no motive to lie for NDS. Mr. Menard
20 had no love lost for NDS. In fact, at the time of his
21 deposition, he had an agreement with EchoStar that there
22 would be no adverse consequences to his testimony. He had
23 been fired by NDS, no love lost for them, and he had
24 essentially immunity from EchoStar, and he confirmed under
25 oath that NDS has no involvement, no role, no conspiracy in

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15:39:54 1 any EchoStar piracy.

2 The same thing for Chris Tarnovsky. If NDS had
3 put up Chris Tarnovsky to some conspiracy to hack EchoStar,
4 don't you think after he was fired he would spill the beans?
5 Instead, he confirmed under oath these allegations are
6 false.

7 The fifth deception is this notion that because
8 NDS was keeping tabs on the competition that's somehow proof
9 that they did something wrong. The evidence is going to
10 show that the plaintiffs gathered intelligence on the NDS
11 DirecTV system in the exact same way. What NDS did was
12 perfectly legitimate, fair competition. We reversed
13 engineered their product. They reversed engineered our
14 product. If it stopped there, nobody has a beef.

15 For NDS, it did stop there. This harping on you
16 couldn't improve your product, well, who knew until you
17 opened this card that there really wasn't much there. It
18 was pretty vulnerable. It wasn't very well made. So how
19 are you going to improve when it had the most basic common
20 mistake in computing a buffer overflow vulnerability?

21 But it was plaintiffs who crossed the line, not
22 NDS. They flew to Canada to get stolen documents from Ron
23 Ereiser, and these are highly confidential documents. In
24 fact, you are going to see one of these documents, Exhibit
25 391. It shows ways to attack the NDS P3 card. It shows the

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15:41:31 1 weaknesses in the card. It shows NDS and DirecTV's internal
2 analysis of the weaknesses and ways to hack their own card.
3 Now, there are many more documents like that they obtained.

4 what they didn't tell you is that Mr. Ereiser has
5 a reverse engineering lab up in Canada, but when Mr. Gee and
6 Mr. Guggenheim were deposed in 2007, he still hadn't gotten
7 around to visit him. So they have got a guy up in Canada a
8 thousand miles away, so when they complain about monitoring,

9 you are going to hear the testimony that John Norris visited
10 Chris Tarnovsky frequently. They have got their consultant
11 with a lab up in Canada nobody has ever visited.

12 Now, they try to make a big deal out of the fact
13 that NDS's engineers traveled to Israel to -- from Israel to
14 North America to test their theory about the vulnerability.
15 That's because the EchoStar broadcast stream cannot be
16 received outside of North America. Now, their engineers
17 didn't have to travel because they had the DirectTV receivers
18 in their lab in Colorado where you can get the DirectTV
19 stream.

20 However, the evidence is going to show that
21 plaintiffs also went to Canada to start their process of
22 analyzing the NDS DirectTV cards. The evidence is also going
23 to show that NDS DirectTV ROM code, countermeasures, and
24 DirectTV piracy devices were all sent to Switzerland to be
25 analyzed. So, again, when they come in here and complain,

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15:43:06 1 you are going to see lots of evidence that they had done
2 exactly the same thing.

3 Finally, there is an issue about motive, NDS had a
4 motive. The evidence is going to show it doesn't help NDS
5 to have another system hacked. If another system is hacked,
6 then the DirectTV NDS subscribers may go get the free TV that
7 can be hacked. The other problem with that is if the other
8 system is hacked the pirates build up knowledge, money.
9 Guess where that comes back to haunt? It comes back on you.
10 That's why whenever John Norris can -- and he is in a
11 position to do so -- he has fought EchoStar piracy,
12 including their free-to-air piracy, which is the biggest
13 problem. Because it's such a big problem, he is concerned
14 that that money that's made from there is then going to be
15 turned on the DirectTV system.

16 The notion that they had some motive to hack to

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17 keep DirecTV, that's completely false. You will hear from
18 Ray Kahn, who was the Senior Director of Engineering of
19 DirecTV at the time. He is going to testify that DirecTV
20 was not considering using the existing Nagra system. He
21 said that the fact that there was any compromise of the
22 EchoStar system played no role in their decision not to use
23 Nagra.

24 At the end of the trial, we will present you a
25 timeline of events that is going to show that the

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15:44:34 1 accusations of bad motive are completely wrong and don't
2 make any sense.

3 The final deception, No. 7, the idea that these
4 December 2000 postings destroyed their conditional access
5 system and resulted in a card swap, the first witness you
6 are going to hear from is their CEO, Charles Ergen. He owns
7 50 percent of the shares of EchoStar and is the person who
8 authorized the filing of the complaint.

9 You are going to learn that even though he
10 authorized the filing of the complaint he knew almost
11 nothing about the factual allegations in the complaint. As
12 of last week, he still hadn't gotten around to reading the
13 lawsuit, but he does have information about two subject
14 matters.

15 One deals with the motive to authorize the filing
16 of this lawsuit. His testimony on cross-examination is
17 going to make it clear that his real motive is that he was
18 upset with News Corp. for its role in a transaction that is
19 unrelated to this litigation, which ultimately cost EchoStar
20 \$600 million. It also forced EchoStar to face a stronger
21 competitor. So this lawsuit against NDS, which is a News
22 Corp. company, was an opportunity for EchoStar to even the
23 score and get NDS to pay for their card swap.

24 The second subject about which Mr. Ergen possesses
25 some information is government filings called 10-Ks, which

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15:45:54 1 are annual reports that must be filed by law with the
2 Securities & Exchange Commission. They are required to be
3 truthful and accurate because the investing public relies
4 upon these documents to make judgments about the financial
5 health of companies.

6 You are going to learn that the information in the
7 10-Ks is not consistent with the positions they are taking
8 in this lawsuit. while they allege here their system was
9 destroyed and completely compromised due to two Internet
10 postings in December 2000, there is no reference to that in
11 any of the 10-Ks. In fact, they don't state it. They don't
12 reference it. The 10-Ks don't indicate that anything out of
13 the ordinary occurred in the year 2000.

14 In fact, what they show is is that one year after
15 these postings that are at the heart of this lawsuit,
16 supposedly destroyed their whole security system, their
17 revenues went up \$1.2 billion. So the question is how could
18 that be? If the system was destroyed, how could your
19 revenues go up \$1.2 billion in the year following that
20 destruction?

21 well, you know the answer. It comes from Mr.
22 Guggenheim. It comes from our expert. It comes from their
23 documents. They were able to issue an electronic
24 countermeasure in a patch that blocked and prevented and
25 completely neutralized these postings, and you are going to

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15:47:16 1 see it in their own documents.

2 The evidence is also going to show they knew about
3 these vulnerability before these postings. Remember I told
4 you the evidence about the E3M cards and the black box and

5 all that stuff. That's all before the postings. So when
6 you know about it, why not issue that patch and that
7 electronic countermeasure then? If they had, we wouldn't be
8 here. So to the extent they claim any damages, it's a
9 completely self-inflicted wound, and they have no
10 explanation, no excuse, no reason, for why you wouldn't do
11 that as soon as you know about the problem.

12 The evidence is going to show that this card swap
13 occurred many years after these postings. They changed all
14 the card versions they had out there, and it was not because
15 of these Internet postings. You have heard the evidence
16 that during the same time they say their system was
17 completely destroyed they were telling law enforcement
18 officials they had no significant problem.

19 Okay, so why are we here? The evidence is going
20 to show that there is a conspiracy, but it's not the one
21 plaintiffs claim. It's a conspiracy amongst plaintiff
22 EchoStar, plaintiff NagraStar, and Kudelski to falsely blame
23 a competitor to try to stick us the costs of a routine
24 upgrade of technology that occurred many years after the
25 postings they complain about. The reason is NagraStar was

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15:48:43 1 embarrassed by its defective technology and the fact that it
2 could not compete with NDS.

3 Mr. Guggenheim was the CEO of NagraStar. His job
4 was to get new business in North America, new customers, so
5 he tried to persuade NDS's customers to switch. He went to
6 DirectTV and was told no. He wasn't to Galaxy Latin America
7 who was using NDS, and they said, no, we would like to stay
8 with NDS. He went to DirectTV Latin America, and they said
9 no. We are happy with NDS. In fact, in his testimony,
10 Mr. Guggenheim couldn't identify a single new customer he
11 was able to secure for Nagra in North America.

12 It gets worse because not only could he not

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13 persuade people to drop NDS and switch to them, then
14 EchoStar's largest customer, El Express View in Canada, said
15 you should go talk to NDS. You should try to use them.
16 They have a very good track record, and EchoStar did. Now
17 Mr. Guggenheim is threatened with the fact that he couldn't
18 get any new business, and now the one client they do have in
19 the United States is talking to NDS.

20 Plaintiff NagraStar and its 50-percent owner,
21 Kudelski in Switzerland, were trying to hide the fact that
22 they sold defective technology to EchoStar. The defect we
23 have talked about, the vulnerability to buffer overflow.
24 It's one of the oldest most common attacks on computers.

25 The posting that they try to blame on us, it

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15:50:11 1 relates to the raw version card, but every other version
2 they had was pirated and hacked, and they don't blame that
3 on NDS. As soon as they swapped the cards, the new cards
4 were hacked. Frankly, they had an inferior system, and they
5 could not compete with NDS in the marketplace, so they are
6 trying to accomplish in this lawsuit what they could not in
7 the marketplace.

8 while this was going on, NDS worked with DirectTV
9 to have the secure P4 card. NDS took an aggressive approach
10 to stopping piracy, and the DirectTV system became secured.
11 NagraStar, on the other hand, refused to get involved. They
12 refused to prosecute pirates. They refused to upgrade their
13 technology. They were not ready for the onslaught of piracy
14 when DirectTV became secured.

15 EchoStar has a financial motive obviously. These
16 ROM 3 cards and these cards they replaced, they were out in
17 the field for five, six, seven, eight years. The testimony
18 will show that in this industry that's too long of a time to
19 have a card out there when it's constantly under attack. So
20 these were basically old cards. They needed to be changed,
21 so they are trying to get us to pay for them.

22 Finally, there is the oldest motive known to man,
23 revenge. EchoStar tried to buy DirectTV once upon a time,
24 and then NDS's parent corporation, News Corp., stepped in
25 and was able to buy DirectTV, but Mr. Ergen had agreed that

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15:51:42 1 if the deal fell apart between EchoStar and DirectTV they
2 would have to pay a \$600 million failed deal fee. Now,
3 since he and his family own 50 percent of the shares, this
4 is a very personal \$300 million hit.

5 So what did they do? Well, News Corp. bought
6 DirectTV. Mr. Ergen and EchoStar had to watch the \$600
7 million go away, and then within a week of filing this
8 lawsuit, EchoStar filed a petition with the Federal
9 Communications Commission to stop News Corp. from buying
10 DirectTV. One of the reasons they gave was the lawsuit that
11 they filed a week before. Is it starting to make sense? So
12 the evidence is going to show that EchoStar has about 600
13 million reasons to falsely blame NDS in this case.

14 when you have heard all the evidence, we believe
15 you are going to see that the true conspiracy in this case
16 is the conspiracy to cover up the fact that the plaintiffs
17 knew their system was vulnerable to one of the oldest hacks
18 known to computing because it was defective. They knew
19 Chris Tarnovsky was not xbr21. They knew that neither NDS
20 or Tarnovsky were behind these postings. They knew who
21 Nipper was. They knew the December 2000 postings did not
22 amount to a significant security breach, let alone the
23 destruction of their system because it was completely
24 neutralized. They have known that actual pirates around the
25 world -- it's the same ones that attack DirectTV -- are

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15:53:08 1 responsible for their problems, not NDS. Finally, they knew
2 that their paid pirate consultant, Mr. Ereiser, had wrongly
3 obtained highly confidential stolen documents.

4 I know we have covered a lot of material. I want
5 to tell you that in these openings statements counsel have
6 made a promise to you. We have both made a promise to you.
7 What is the evidence going to show? At the end of the case,
8 we are going to come back and see who kept their promise
9 here.

10 I want to thank you for your attention here today,
11 and I want to thank you for your willingness to listen to
12 all the evidence before you make your decision, not the
13 accusations but the evidence. NDS has waited a long time to
14 present all of this evidence. When we are done, we are
15 going to ask you for a verdict first in favor of NDS on the
16 plaintiffs' claims, and equally importantly, I am going to
17 ask you for a verdict in favor of NDS on our counterclaim
18 for the misuse of its stolen documents.

19 Thank you very much.

20 THE COURT: Counsel, why don't you take a recess
21 and come back at ten after 4:00. We will take some
22 testimony. Mr. Ergen is waiting in the hallway.

23 Don't discuss this matter amongst yourselves or
24 form or express an opinion.

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CERTIFICATE

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I hereby certify that pursuant to Section 753,
Title 28, United States Code, the foregoing is a true and
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Date: April 9, 2008

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