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SIGNATURE PAGE

Mark E Hoffman

MARK HOFFMAN

DECEMBER 4

, 2002

Date

Subscribed and sworn to before me this

4th day of December, 2002

Julia A. Kaman

Notary Public

County of Oakland, State of Michigan

My Commission Expires: 12-17-04

JULIA A. KAMAN
NOTARY PUBLIC OAKLAND CO., MI
MY COMMISSION EXPIRES Dec 17, 2004

ERRATA SHEET

CASE: Allstate Insurance Company vs. Ford Motor Company, et al.
WITNESS: MARK HOFFMAN, Deposition taken November 5, 2002

PAGE	LINE	CORRECTION
8	13	"HAS" SHOULD BE "IS"
9	3	"THEN" " " REMOVED
13	9	"RESPONSE" TO" SHOULD BE "THE SPONSORS OF"
50	4	ADD A SPACE BETWEEN "FROM" & "LOOKING"
104	16	SPACE BETWEEN "CLAIMS" & "RECORDS"
104	16	SPACE BETWEEN "I'M" & "SORRY"
136	6	CHANGE "OF" TO "IN"
138	7	ADD A COMMA BETWEEN "HAD" & "MEMBER"
"	"	" " SPACE " " MEMBERS" & "OF"
"	8	" " COMMA AFTER "WHO"
148	3	" " SPACE BETWEEN "FROM" & "INDIANA"
"	11	" " " " "HIM" & "ABOUT"

COPY

Page 1

SAM
SAG
MH
SJ

1 UNITED STATES DISTRICT COURT
2 FOR THE WESTERN DISTRICT OF WASHINGTON
3 AT SEATTLE
4

5 ALLSTATE INSURANCE COMPANY, an
6 Illinois corporation, and
7 NORTHLAND INSURANCE COMPANY,
8 a Minnesota corporation,
9

Cause No. C01-1416L

10 Plaintiffs,

11 vs.

Hon. Robert S. Lasnik

12
13 FORD MOTOR COMPANY, a Delaware
14 corporation, and TEXAS INSTRUMENTS,
15 INC., a Delaware corporation,
16

17 Defendants.
18

19
20 DEPONENT: MARK HOFFMAN
21 DATE: Tuesday, November 5, 2002
22 TIME: 9:07 a.m.
23 LOCATION: 35980 Woodward Avenue
24 Bloomfield Hills, Michigan
25 REPORTER: Elizabeth G. LaBarge, CSR-4467

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APPEARANCES:

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Appearing via speakerphone on behalf of

Texas Instruments, Inc.

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Bloomfield Hills, Michigan

Tuesday, November 3, 2003

9:07 a.m.

MARK HOFFMAN

having been first duly sworn, was examined and testified as follows:

EXAMINATION

BY MR. DUNFORD:

Q Good morning, Mr. Hoffman, my name is Tom Dunford. We met July 30th, earlier this year, in Seattle at an evidence inspection; do you recall that?

A Yes, sir.

Q As you know, I represent Allstate Insurance Company.

They're the plaintiff in a lawsuit arising from a January,

2001, fire in Federal Way, Washington. Do you understand that, as well?

A Yes, sir.

Q You've been deposed many times; is that correct?

A Yes.

Q Today if I ask you a question that you do not understand, please let me know and I'll attempt to rephrase the question so that we can make sure we're communicating; will you do that, please?

A Yes, sir.

2 (Pages 2 to 5)

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EM2-025-A 15848

1 Q And as you know, your answers need to be audible so they can
2 be accurately transcribed by the court reporter. And if we
3 need to take a break or you feel like you need to take a
4 break at any time, please let me know and as long as a
5 question is not pending, we can do that; okay?

6 A Yes.

7 Q What were you asked on this case, Mr. Hoffman?

8 A Shortly after the suit was filed, August of 2001, I believe.

9 Q Were you given a particular assignment that you were to
10 accomplish?

11 A Not at that time.

12 Q Who asked you to work on this fire loss?

13 A The Office of the General Counsel of Ford Motor Company.

14 Q Now, is this law firm, the Feeney law firm, outside counsel
15 for Ford?

16 A Yes, they are.

17 Q Who in the Office of the General Counsel asked you to work
18 on this fire?

19 A I'm not certain. I think Doug Lampe.

20 Q Did you ultimately receive an assignment that you were to
21 accomplish relating to this fire?

22 A Our general practice in lawsuits is once it's assigned, to
23 try and minimize an inspection of the vehicle and any other
24 evidence that might be available.

25 Q Is order to do what?

1 Q What did you do to complete the assignment that you
2 received?

3 A Performed an inspection of the vehicle and other evidence
4 that was obtained by Schaefer Engineering, who were the
5 initial site inspectors, and a subsequent inspection of the
6 alleged component part that has been alleged in the cause of
7 this fire.

8 Q And by that, you're referring to the brake pressure switch?

9 A The speed control deactivation switch, yes.

10 Q How shall we call that today, shall we call it the SCDS or
11 the BPS or the brake pressure switch, the speed control
12 deactivation switch?

13 A The actual part part drawing which has the formal name
14 calls it a speed control deactivation switch. That tends to
15 be a bit of a mouthful, so if you want to use brake pressure
16 switch, that's a little easier, it rolls off the tongue a
17 little better.

18 Q As long as we know as we use those terms we're referring to
19 the same component part; correct?

20 A Yes.

21 Q So you subsequently examined the brake pressure switch.
22 Anything else that you did to complete your assignment?

23 A I reviewed the photographs that were taken of the scene by
24 Schaefer Engineering, depictions of and statements taken
25 from eyewitnesses to the fire. The fire reports from the

1 A In order to ascertain what the origin and cause of the fire
2 might be.

3 Q So was your assignment to determine the origin and cause of
4 the fire?

5 A In this particular case because of its size, I was asked to
6 be more of an engineering consultant on the vehicle and its
7 components.

8 Q When you say size, because it's a large dollar value case,
9 because the house was damaged?

10 A It involves the structure, so the magnitude of the fire
11 itself.

12 Q And have you completed that assignment?

13 A Yes.

14 Q Who ultimately gave you the assignment? Was it - I mean,
15 when you initially was asked to work on the fire, my
16 understanding is you weren't given an assignment.

17 Was you later instructed by someone on what your
18 responsibilities would be for the fire in Federal Way?

19 A I'm trying to recall. Sarah and I had some conversation,
20 Sarah McLaren, who's our outside counsel in this case, about
21 my duties in this particular case.

22 Q So the exact assignment or the scope of your work on this
23 case came from Ford's outside counsel; is that right?

24 A It came from Ford's counsel. Our outside counsel works with
25 our inside counsel.

1 Federal Way Fire Department. Some police reports that were
2 taken about this incident. A couple of other things that I
3 listed based on my report as materials that I reviewed. I
4 can't think of all of them off the top of my head.

5 Q In your mind, has your assignment been completed?

6 A Yes.

7 Q Do you plan any additional work between now and trial?

8 A Not at the moment, no.

9 MR. McLAREN: Just to be clear on that, Mr. Hoffman may
10 be asked to assist us in creating or proposing exhibits and
11 demonstrative evidence that might be used. I just don't
12 want to mislead.

13 MR. DUNFORD: I appreciate that. I expect that there
14 will be probably some participation in trial preparation.

15 BY MR. DUNFORD:

16 Q But as far as you're concerned, your opinions are complete
17 and final, in that right, at least with respect to this
18 particular case?

19 A With the information that I have had available to me in this
20 point in time, yes. At the end of my report I have made the
21 statement that if additional information becomes available,
22 I would like to be able to review that information and
23 update my report accordingly.

24 Q The opinions that you reached are contained in your witness
25 report; is that correct?

- 1 A Yes.
- 2 Q Since you wrote that report, have you obtained any
- 3 additional information that would cause you to alter or
- 4 change your opinions?
- 5 A No.
- 6 Q -- that was contained in that report?
- 7 A No.
- 8 Q Do you know what caused the fire in the McJannet residence
- 9 in January of 2001?
- 10 A No.
- 11 Q How long have you been investigating fires for Ford Motor
- 12 Company?
- 13 A About four years.
- 14 Q Who asked you to start investigating fires for Ford Motor
- 15 Company?
- 16 A Who asked me? I answered a job opening in the activity that
- 17 I work in, which is called Design Analysis Engineering. It
- 18 was part of taking that job transfer.
- 19 Q So there was a posting in Ford internally and you applied
- 20 for it?
- 21 A Yes.
- 22 Q At that time, had you had any experience investigating
- 23 fires?
- 24 A No.
- 25 Q So it was -- it was about four years ago, is that would be

- 1 A I have a degree in engineering which is quite heavily
- 2 based -- has a very heavy foundation in the sciences and I
- 3 have attended several training sessions around the country.
- 4 Q And those are listed in your resume; is that correct?
- 5 A Yes.
- 6 Q Are there any training sessions that you have attended that
- 7 are not listed in your resume? I believe it was current as
- 8 to July, 2002.
- 9 A Yeah, there was one that I haven't had an opportunity to
- 10 update the document yet that we attended out in Cody,
- 11 Wyoming, I think it was the last week of September.
- 12 Q You went to -- with Ray Nowell to that one; is that right?
- 13 A Ralph Nowell.
- 14 Q Ralph Nowell, I apologize.
- 15 A Yes, we presented our vehicle fire investigation training
- 16 class to the fire fighters and other attendees at that
- 17 seminar.
- 18 Q Do you have written materials that you use in your seminar
- 19 when you provide instruction?
- 20 A We have Powerpoint presentations that we use.
- 21 Q Are written materials provided to seminar attendees?
- 22 A No, we usually just carry them in our computers, it's much
- 23 more convenient.
- 24 Q What does the Powerpoint presentation consist of?
- 25 A It varies by presenter and the technology that they are

- 1 1998; is that right?
- 2 A The end of 1998, early '99.
- 3 Q Was there a promotion involved in that?
- 4 A No.
- 5 Q Was it just -- was there a change in assignments or
- 6 departments?
- 7 A Yes.
- 8 Q And before 1998, what department were you in?
- 9 A I was in an activity called Electrical and Electronic
- 10 Systems Engineering.
- 11 Q Did you ever testify as an expert witness for Ford while you
- 12 were employed in the Electrical and Electronic Systems
- 13 Engineering Department?
- 14 A No.
- 15 Q So all depositions that you've given on behalf of Ford Motor
- 16 Company have occurred since 1998; is that correct?
- 17 A Yes.
- 18 Q And in those depositions, have you always testified about
- 19 origin and cause of fires?
- 20 A No.
- 21 Q Sometimes you're talking about electrical and electronic
- 22 systems; is that right?
- 23 A That is one of the many subjects, yes.
- 24 Q What did you do, if anything, to learn about how to
- 25 investigate fires?

- 1 talking about.
- 2 Q I'm talking about yours.
- 3 A I have two separate sections, one is an overview of vehicle
- 4 fire investigation procedures and another is electrical
- 5 systems technology.
- 6 Q Would it be possible for me to obtain copies of those
- 7 materials or do I have to attend your seminar?
- 8 A The International Association of Arson Investigators' THE SPONSORS OF
- 9 corporate fire seminars would probably rather have you
- 10 attend the seminar.
- 11 Q Well, if I signed up for the IAAI, I could probably do that;
- 12 couldn't I? In essence, is it possible for me to obtain
- 13 a copy of your materials that you use in presentations?
- 14 A I don't think any of it is -- I mean, it's public knowledge
- 15 that we've shared with others, so I guess we could.
- 16 Q I'd like to have them if that's possible.
- 17 MR. McLAREN: I don't know how readily available they
- 18 are, Tom, but we'll be happy to get them if we can.
- 19 MR. DUNFORD: Thank you.
- 20 BY MR. DUNFORD:
- 21 Q Was there anyone at Ford that was doing automobile fire
- 22 investigations before you applied for the job posting in
- 23 1998, early 1999?
- 24 A Yes.
- 25 Q And who was that?

1 A There are a number of people in the Design Analysis
2 Engineering Department that perform these types of
3 inspections.
4 Q Were you replacing someone?
5 A Yes.
6 Q Was that Ray Davis?
7 A No.
8 Q Do you know him?
9 A I am familiar with Mr. Davis, yes.
10 Q Does he still work with Ford?
11 A I believe so.
12 Q Have you spoken with him about this fire?
13 A No.
14 Q Have you spoken with him about the brake pressure switch and
15 its propensity to cause fires?
16 A I don't really recall if I've ever had a conversation with
17 Ray about that part or not.
18 Q What department is he in?
19 A Ray is an outside independent contractor.
20 Q So he's not a Ford Motor Company employee?
21 A No.
22 Q Who else at Ford Motor Company that's an employee of Ford
23 Motor Company is investigating fires?
24 A There are about, I don't know, seven or eight of us, I
25 guess, in our activity that might be called upon to

1 A G-e-r-r-y - Garity, Garity, I'm not sure - t-h-y?
2 Q Have you ever spoken with Mr. Garity about your
3 investigation of the McJannet fire?
4 A I don't think Brian and I have ever talked about it.
5 Q Have you ever reported to anyone internally at Ford
6 regarding your investigation of the McJannet fire?
7 A Not to my recollection, no.
8 Q When's the first time that you examined the vehicle? I'm
9 talking about the Lincoln Town Car that was in the garage at
10 the McJannet home.
11 A It's listed in my report. I believe it was October of last
12 year, the first trip out there.
13 Q What was your purpose in making the trip to Seattle to look
14 at the car?
15 A To observe and inspect the evidence that had been retained
16 by Schneider Engineering.
17 Q Did you prepare a protocol for that visit?
18 A Not for that particular visit, no.
19 Q Why not?
20 A There had been other investigations similar to that where
21 protocols had been prepared in the past, so it was an older
22 one, actually, that was being discussed.
23 Q Did you present a protocol then to anyone before the
24 October, 2001, investigation or the visit or - I'm sorry,
25 it wasn't a site visit, but your examination of the car?

1 investigate a fire.
2 Q Have you spoken with any of those other individuals about
3 brake pressure switch fires?
4 A I might have in passing. I can't recall.
5 Q Do you know if any of those other seven or eight fire
6 investigators employed by Ford Motor Company have
7 investigated fires in which a brake pressure switch failure
8 is alleged to have been the cause?
9 A I don't know.
10 Q Do you ever meet with the other seven or eight fire
11 investigators?
12 A We have staff meetings every week.
13 Q What do you call the - is there - let's start over again.
14 Is there a name for the department?
15 A The entire activity is called Design Analysis Engineering,
16 that is our formal name.
17 Q Not the investigation?
18 A No.
19 Q Okay. Who's the head of that unit?
20 A Brian Garity (ph) is our manager.
21 Q Does Mr. Garity ever investigate fires?
22 A I'm not sure.
23 Q How do you spell his last name?
24 A Oh, no, spelling.
25 Q It can't be as tough as Shoryla.

1 A As far as the McJannet case is concerned?
2 Q Yes, sir.
3 A No.
4 Q The reason I'm asking is because your response to my earlier
5 question about a protocol made me think that there had been
6 one that had been used in an earlier case that you just
7 simply transferred over to the McJannet case and everyone
8 used that. Is that correct or incorrect?
9 A There was, and I can't recall, this is quite a few years
10 ago, an original attempt that I had made to put a protocol
11 together and it had subsequently been changed, modified,
12 edited by many people, and I believe Richard Clarke's
13 protocol was probably the one that's been used most often
14 and so we deferred to that one in this case.
15 Q Was Richard Clarke involved in October of 2001 in this case?
16 A Well, the particular protocol that we're talking about is
17 disassembling the switch, which was used later.
18 Q I want to focus on October, 2001. Was there a written
19 protocol presented for your examination of the vehicle in
20 October, 2001?
21 A I don't remember, to be honest with you.
22 Q Do you recall preparing a written protocol for your vehicle
23 examination in October of 2001?
24 A No, I don't recall doing that.
25 Q Did Mr. Hamilton, the witness for Tarrant Instruments, prepare

1 a written protocol for the October, 2001, examination?
 2 MR. McLAUREN: Object to foundation.
 3 MR. MILTON: Object to the form.
 4 A I don't know.
 5 BY MR. DUNFORD:
 6 Q Does your file have a written protocol for the October,
 7 2001, examination?
 8 A I don't believe so, no.
 9 Q What did you do when you went to Seattle in October of 2001
 10 for that vehicle examination?
 11 A We got at Schneider Engineering's facility and met
 12 Mr. Topinka of Schneider Engineering and he outlined where he
 13 had different materials and pieces of evidence stored and we
 14 kind of planned out our day at that point, started out with
 15 observing some of the smaller evidence that he had there in
 16 the office and then went to a storage facility to look at
 17 the larger pieces, including the vehicle.
 18 Q Anything else?
 19 A With regard to?
 20 Q Well, does that summarize the day or did you do anything
 21 else?
 22 A That's a general summary.
 23 Q When you looked at the smaller pieces of evidence at the
 24 Schneider Engineering office, did that include any portions
 25 of the brake pressure switch?

1 collected evidence that was on the floor of the garage after
 2 the fire looking for the mechanical side of the switch?
 3 A I did inspect some of that material. I did not go through
 4 it with that engine program in mind.
 5 Q Did you tell or mention to Mr. Topinka that the mechanical
 6 side of the switch was not present or that you had not
 7 observed it?
 8 A I don't recall the exact conversations that went on, but I
 9 do believe it was pointed out at that time or shortly
 10 thereafter and that's what prompted him to begin his search.
 11 Q Did you specifically look for the mechanical side of the
 12 switch when you were there in October of 2001?
 13 A Again, I don't try to look for anything specific, I was
 14 trying to inspect the entire collection of evidence.
 15 Q I mean, this is after the lawsuit has been filed; correct?
 16 A Yes.
 17 Q And you were aware that the allegation of the lawsuit when
 18 you went to look at the car in October of 2001 was that the
 19 brake pressure switch had failed and had caused the fire, is
 20 that right?
 21 A Yes.
 22 Q But you didn't feel it was important to look for the
 23 mechanical side of the switch even though you knew the claim
 24 was that the switch was the ignition source?
 25 A Inspecting all of the evidence is important. Finding that

1 A I believe it did, yes.
 2 Q Which portions?
 3 A The electrical connector and the electrical switch housing
 4 portion of the switch itself.
 5 Q Did you observe the mechanical side of the switch on that
 6 day in October of 2001?
 7 A I am not sure if it was there or not on that particular day.
 8 I'd have to go back and review my pictures.
 9 Q Could you do that, please?
 10 A (The witness complied.)
 11 It doesn't appear that it was there at that time.
 12 Q And you make that statement after reviewing your photographs
 13 from the October, 2001, inspection; is that right?
 14 A Yes.
 15 Q Have you read Mr. Alan Topinka's deposition in this case?
 16 A Yes.
 17 Q All pages included and some odd pages?
 18 A Yes.
 19 Q Do you recall his testimony that he didn't find the
 20 mechanical portion of the switch until earlier this year; is
 21 that right?
 22 A I couldn't remember the exact chronology of events, but I do
 23 recall that he went through some of the collected evidence,
 24 the fall-down from the floor.
 25 Q In October of 2001, did you do that, go through the

1 switch portion was an important piece of evidence, but it's
 2 not something that I could focus in on at that time. But
 3 yes, it needed to be found.
 4 Q Did it later become important to you to review or find,
 5 locate and examine the mechanical side of the switch?
 6 MR. McLAUREN: Object to the form.
 7 A Yes.
 8 BY MR. DUNFORD:
 9 Q And why did it later become important to examine the
 10 mechanical side of the switch?
 11 A It's just more physical evidence in the case.
 12 Q In your work on this case, have you spoken to any -- well,
 13 let me start over again.
 14 What I want to ask you is if you've consulted or spoken
 15 with anyone from Ford's Engineering Department or other
 16 departments about your investigation of the fire?
 17 A Not in this specific case, no.
 18 Q Have you ever spoken with anyone from other Ford departments
 19 about the brake pressure switch and its propensity to cause
 20 fires?
 21 A Yes.
 22 Q And who is that?
 23 A The product engineers that were involved in the recall, Fred
 24 Porter and Tom Mouton.
 25 Q Do you recall when those conversations took place?

- 1 A No.
- 2 Q Was it before or after the recall?
- 3 A It was after.
- 4 Q Was it before or after you became involved with this
- 5 particular fire?
- 6 A Before.
- 7 Q Did you talk with Mr. Foster and Mr. Masters together or did
- 8 you visit with them separately?
- 9 A I think a little bit of both, actually.
- 10 Q Did they approach you or did you approach them?
- 11 A I believe I approached them.
- 12 Q And what was your reason for doing that?
- 13 A To find out the details behind the recall.
- 14 Q And what did you learn from your conversations with
- 15 Mr. Foster and Mr. Masters?
- 16 A That they had put a team together in response to an inquiry
- 17 from the National Highway Traffic Safety Administration and
- 18 investigated the vehicles in question and performed some
- 19 analysis work to determine what they needed to perform a
- 20 recall.
- 21 Q Have you ever seen any written documents relating to the
- 22 analysis work that they did in determining to issue the
- 23 recall?
- 24 A Yes.
- 25 Q And what documents did you see?

- 1 A As part of working on an inquiry of that nature, a Ford
- 2 engineering team is required to put together a document
- 3 called a 14-D. It's the business discipline of
- 4 problem-solving, basically, so that document becomes the
- 5 team's reporting mechanism, if you will, and I reviewed
- 6 their 14-D. It's also called a White Paper by some people.
- 7 Q Any other documents relating to the analysis of the team
- 8 investigating the NHTSA inquiry that you reviewed?
- 9 A It's been a while. I don't recall, to be honest with you.
- 10 Q Do you know if the 14-D document has been produced in this
- 11 lawsuit?
- 12 A I don't know.
- 13 Q Is the 14-D document a part of your file?
- 14 A No.
- 15 Q Does your file contain all of the documents or information
- 16 that you relied upon in forming your opinion in this case?
- 17 A My file contains all of the documents that are involved in
- 18 this case. My opinion is based on a lot more than just the
- 19 paper, it's based on my knowledge and experience.
- 20 Q Does that include the 14-D document?
- 21 A That is part of my knowledge, yes.
- 22 MR. DUNFORD: Now, I haven't seen that in my review
- 23 of documents, so if it has not been produced, I'd request
- 24 that we obtain a copy of that.
- 25 MS. McLAREN: We'd be happy to produce it.

- 1 MR. DUNFORD: Thank you.
- 2 BY MR. DUNFORD:
- 3 Q Has anything been removed from your file, Mr. Hoffman?
- 4 A No.
- 5 Q How are you compensated?
- 6 A I'm a full-time salaried employee of Ford Motor Company.
- 7 Q And that didn't change when you went over to the Design
- 8 Analysis Engineering Department?
- 9 A No.
- 10 Q Have you recorded the time that you've spent investigating
- 11 the Majestic fire?
- 12 A No.
- 13 Q You don't have a responsibility or you're not required to
- 14 show or record or keep track of how much time you spend
- 15 investigating any particular fire?
- 16 A No.
- 17 Q Did you have any assistance from anyone else in
- 18 investigating the Majestic fire?
- 19 A Not personally, no.
- 20 Q I want to go back to the October, 2001, inspection. Do you
- 21 recall who was there besides you?
- 22 A Not off - I'm not sure. I've got the whole list, but
- 23 Mr. Topinka from Schaefer Engineering was there, Bill
- 24 Hamilton from Texas Instruments, I believe, was at that
- 25 first one. The attorney representing Texas Instruments from

- 1 Seattle, and I'm sorry, I don't remember his name off the
- 2 top of my head. And our local counsel in Seattle, Ray
- 3 Weber. And I believe, my memory may be fuzzy, I don't know
- 4 if it was you or one of your associates from your firm, I
- 5 can't recall if there was somebody there or not, but I
- 6 thought there was. I thought it was you, but I may be
- 7 wrong.
- 8 Q I believe there was, but it wasn't me.
- 9 A Okay.
- 10 Q How long did the examination take?
- 11 A I don't recall off the top of my head. I believe we were
- 12 there for five or five hours between the shop and the
- 13 storage facility.
- 14 Q In October of 2001, were you planning on coming back and
- 15 looking at the vehicle again?
- 16 A I'm not sure I was planning. I always leave that open as a
- 17 possibility for further investigation.
- 18 Q In October, 2001, did you look underneath the car?
- 19 A No.
- 20 Q Did you ask anyone to lift the car up so that you could look
- 21 underneath it?
- 22 A I'm not exactly sure it was asked. I know that the subject
- 23 was discussed, and the logistics of the situation of what
- 24 it was stored and our lack of equipment to lift it and the
- 25 three frames involved, we decided not to do it at that time

- 1 but left the possibility open.
- 2 Q In October, 2001, did you form any opinions about the origin
- 3 and cause of the fire?
- 4 A No.
- 5 Q Did you form any opinions about the possibility or potential
- 6 for the brake pressure switch to have caused the fire?
- 7 A Not then only on in the investigation, no.
- 8 Q So the October visit of 2001 was a preliminary visit for you
- 9 to become familiar with the physical evidence; is that
- 10 right?
- 11 A I don't know if I'd call it preliminary. I discovered at
- 12 that time that there was a lot of other evidence that I
- 13 needed to review.
- 14 Q Were there X-rays of the brake pressure switch available in
- 15 October of 2001?
- 16 A No.
- 17 Q Did you ask that X-rays be prepared or made of the brake
- 18 pressure switch?
- 19 A I don't recall if that subject was discussed or not, but I
- 20 believe it has been discussed at one time or another in this
- 21 case, yes.
- 22 Q Ultimately, X-rays have been taken of the brake pressure
- 23 switch; is that right?
- 24 A Yes, sir.
- 25 Q And you've had an opportunity to review those?

- 1 A Not on directly, no.
- 2 Q Have you ever seen any materials prepared by Texas
- 3 Instruments relating to the brake pressure switch?
- 4 A Yes.
- 5 Q And what materials are those?
- 6 A There's a cut-away view of the part that describes the
- 7 internal componentry of it.
- 8 Q Is that cut-away view part of your file?
- 9 A No. Not this case file, no.
- 10 Q Is there any reason why it's not included in your file
- 11 materials?
- 12 A It's become part of my general knowledge.
- 13 Q Any other materials that you received or were prepared by
- 14 Texas Instruments that you've reviewed relating to the brake
- 15 pressure switch other than the cut-away view?
- 16 A I believe there's been some legal documents and whatnot,
- 17 discovery in other cases, but not for this particular case.
- 18 Q Do you know the Texas Instruments part number for the brake
- 19 pressure switch?
- 20 A Not off the top of my head. It's on the drawing.
- 21 Q Does this sound correct, P2VC-099247?
- 22 A That is familiar, yes.
- 23 Q The switch, the brake pressure switch from the Midlander
- 24 vehicle, has a date of manufacture on it; is that correct?
- 25 A Yes.

- 1 A Yes, sir.
- 2 Q Anything else that we haven't talked about that was
- 3 significant to you in forming your opinions in this case
- 4 that you learned in your examination of the vehicle in
- 5 October of 2001?
- 6 A I'm going to fall back on my report, the things of
- 7 significance are listed and discussed in there. I don't
- 8 recall exactly when those observations were made in the
- 9 chronology of events.
- 10 Q It's an ongoing thing, is that right, your fire
- 11 investigation?
- 12 A Yes, sir.
- 13 Q And as you obtain additional information, then that can
- 14 affect the forming of your opinions; is that right?
- 15 A Yes.
- 16 Q Have you ever spoken with anyone from Texas Instruments, I'm
- 17 talking about a Texas Instruments employee, about the brake
- 18 pressure switch?
- 19 A You know, I'm not really certain if I've actually talked to
- 20 any of them about the switch itself. I've had conversations
- 21 with them, but I don't know if we actually talked about the
- 22 part.
- 23 Q So you have not gone to Texas Instruments employees to
- 24 obtain technical information about the brake pressure
- 25 switch; is that correct?

- 1 Q And on July 30th of 2002, the representatives of the
- 2 interested parties were able to determine that date; is that
- 3 correct?
- 4 A Yes.
- 5 Q And it's a Julian date?
- 6 A Yes.
- 7 Q And what does that mean?
- 8 A It basically designates the last digit of the year and then
- 9 the number of the day of that year on which the part was
- 10 manufactured.
- 11 Q Do you recall the Julian date that was stamped on the brake
- 12 pressure switch from the Midlander car?
- 13 A I don't recall the exact number.
- 14 Q Does 2209 sound correct?
- 15 A I thought it was either 2209 or 2309. The second digit was
- 16 rather badly damaged, so there was some question initially.
- 17 Q Was that question ever resolved?
- 18 A I think the group on the 30th of July agreed that it
- 19 appeared to be more like a 5 than a 2.
- 20 Q So that means that the switch was manufactured in 1992; is
- 21 that correct?
- 22 A Yes.
- 23 Q On either the 209th day or the 209th day; is that right?
- 24 A That's correct.
- 25 Q And if it was the 209th, it would be sometime in July?

- 1 A I believe that's how it worked out, yes.
 2 Q And if it was the 309th, when would that be?
 3 A That's early November.
 4 Q Do you know the build date of the Mejlman vehicle?
 5 A It was in December of 1992, I believe it was the 16th or the
 6 19th. I don't recall the exact date.
 7 Q Do you know the purchase date?
 8 A Not off the top of my head, no.
 9 Q I want to talk about the brake pressure switch for a few
 10 minutes. First let me just ask this.
 11 Does the purchase date of July 2nd of 1993 sound
 12 accurate to you?
 13 A I really don't know, I'd have to check the records.
 14 Q Is there something that's in your file?
 15 A I believe the vehicle data is in my file, yes.
 16 Q And the build date is in your file, as well?
 17 A Yes.
 18 Q Do you know the date of the recall?
 19 A The --
 20 Q Yeah, what vehicles were affected by the recall?
 21 A The vehicles that were affected by the recall were those
 22 that were built between I believe it was November 4th of
 23 1991 and November 30th of 1992 on the Lincoln Town Car
 24 vehicle line.
 25 Q So did that encompass 1992 model year and 1993 model year

- 1 Q Based on your conversations with Mr. Porter and Mr. Maston,
 2 is it your understanding that they were satisfied they had
 3 captured all of the parts that could be defective within the
 4 scope of the recall that was issued?
 5 A Yes.
 6 Q Were the Mejlman vehicle within the scope of the recall?
 7 A No.
 8 Q It missed the tail end of the recall by about two, two and a
 9 half weeks, is that right?
 10 A Roughly, yes.
 11 Q Have you personally investigated whether there's any
 12 difference in the brake pressure switch design for the
 13 cars -- the vehicles that were included in the recall and
 14 for the brake pressure switch that was installed in the
 15 Mejlman vehicle?
 16 A I'm sorry. Again?
 17 Q Have you personally done any investigation to determine
 18 whether there was any difference in the design of the brake
 19 pressure switch in vehicles included within the recall and
 20 the brake pressure switch installed in the Mejlman
 21 vehicle?
 22 A I'm not sure how to answer that so far as I know the design
 23 was the same.
 24 Q Have you personally investigated that?
 25 A I've looked at the drawings.

- 1 Lincoln Town Car?
 2 A Yes.
 3 Q All '92 and '93 model year Town Car or just some of them?
 4 A No, it was just some.
 5 Q What was the cut-off point, why was there a distinction made
 6 between some '93 Lincoln Town Car and others that were not
 7 included in the recall?
 8 A When the team analyzed the issue, they determined that the
 9 parts that may fail were built only in the production of
 10 that part and so they only extended the date covered into
 11 the early '93 model year because they weren't exactly
 12 certain of the inventory flow of those parts through the
 13 production process. They wanted to make sure they captured
 14 them all, so they picked a date further out than the firmest.
 15 Q Is that described in the 14-D document?
 16 A Yes, I know, I don't recall if it is or not.
 17 Q Do you know how long a brake pressure switch mounted from
 18 Texas Instruments would be in Ford's possession before it
 19 would be installed in a vehicle on the assembly line?
 20 A No.
 21 Q The information that you just related to me about the team's
 22 analyzing the issue to determine the scope of the recall,
 23 is that something that you were told by Mr. Porter and
 24 Mr. Maston?
 25 A Yes.

- 1 Q And there was no difference between the design of the brake
 2 pressure switch in the recall vehicles and the design of the
 3 brake pressure switch in the Mejlman vehicle, is that
 4 right?
 5 A Not to my knowledge.
 6 Q What is the function of the brake pressure switch?
 7 A It is a redundant shut-off for the vehicle speed control
 8 system.
 9 Q And when you're talking speed control, you mean the cruise
 10 control, is that another name for it?
 11 A Yes, it is.
 12 Q It's a redundant system. What's the -- would you call it
 13 the primary system or what's the other method by which the
 14 speed control is deactivated?
 15 A The primary deactivation is the brake on/off switch.
 16 Q And where is that located?
 17 A Mounted on the brake pedal.
 18 Q And how does that work, the primary -- I'm sorry -- the
 19 brake on/off switch, how does that work?
 20 A Whenever you put your foot on the brake pedal and begin to
 21 press on the brakes, that switch will be closed and send a
 22 signal to various components in the vehicle like your
 23 tail light and the speed control module.
 24 Q And how does the brake pressure switch operate as a
 25 redundancy to the brake on/off switch?

1 A As you continue to depress the brake pedal, the brake fluid
2 is pressurized in the brake lines to begin stopping the
3 vehicle and at a certain brake pressure - brake fluid
4 pressure that switch is opened by the pressure of the brake
5 fluid and turns off the power to the clutch in the speed
6 control assembly.
7 Q Is the brake pressure switch a required safety feature on
8 the Lincoln Town Car 1993 model year?
9 A Required? I'm not sure what you mean by the use of the
10 word.
11 Q Okay, fair enough. Is there some standard in the industry
12 that requires redundancy in the shut-off for the clutch
13 control?
14 A I don't believe so.
15 Q Is that just a safety feature that Ford initiated on its own
16 volition for Lincoln Town Car in the 1993 model year?
17 A I don't believe it had anything to do with the Lincoln Town
18 Car. It had to do with the speed control system in general.
19 Q It's good engineering practice to have redundancy?
20 A In that particular function of the vehicle, it was
21 determined that yes, a redundancy was a good idea.
22 Q Do you know who designed the brake pressure switch -
23 A No.
24 Q - that was installed in the - I apologize for my question
25 extending longer. Let me start again as the record is

1 time.
2 Q Do you have any knowledge of who the Ford and Texas
3 Instruments engineers involved in preparing the
4 specifications for the brake pressure switch are?
5 MR. MELTON: Objection to the form of the question.
6 MS. McLAREN: Joined.
7 A I don't recall any names specifically.
8 BY MR. DUNFORD:
9 Q What's the basis for your statement that Ford and Texas
10 Instruments were involved jointly in preparing the
11 specifications for the brake pressure switch?
12 A Just some of the documents that I have seen that described
13 the conversations that went on about the specification
14 itself.
15 BY MR. DUNFORD:
16 Q Are those documents in your file?
17 A Not in this case file, no.
18 Q Do you keep a separate file, Mr. Hoffman, for brake pressure
19 switch cases in general?
20 A I'm not sure you'd call it a file. I have copies of
21 drawings and specifications of all kinds of component parts
22 available to me.
23 Q I'm talking specifically about the brake pressure switch, do
24 you have a file with general information that's not case
25 specific that you refer to when you're involved in a case

1 clear.
2 Do you know who installed the brake pressure switch
3 that was installed in the McJannet/Town Car?
4 MR. McLAREN: I think you may have mispoke. You said
5 do you know who installed.
6 MR. DUNFORD: I apologize. Thank you.
7 BY MR. DUNFORD:
8 Q Do you know who designed the brake pressure switch that was
9 installed in the McJannet/Town Car?
10 MR. MELTON: Objection to the form of the question.
11 A Are you asking about an individual?
12 BY MR. DUNFORD:
13 Q Or company.
14 A The part was designed by Texas Instruments.
15 Q And how do you know that?
16 A It's on the part drawing.
17 Q Do you know if there were any specifications provided by
18 Ford to Texas Instruments for the design and/or production
19 of the brake pressure switch?
20 A There is an engineering specification for that component,
21 yes.
22 Q Was the engineering specification prepared by Ford?
23 A It was released by Ford, I believe, from the - the
24 discovery documents mentioned earlier that it was prepared
25 jointly between Ford and Texas Instruments engineers at the

1 where there's an allegation that a brake pressure switch
2 caused a fire?
3 A No.
4 Q You're referring to documents that you reviewed that are not
5 in your file specific for this case and so I'm wondering if
6 they are kept somewhere where you have access to them or if
7 you have maintained just a general file on brake pressure
8 switches?
9 A Well, the Ford system is computerized, we can download
10 drawings and specifications that we need to review, and I
11 might have a copy of the drawing or a copy of the spec, you
12 know, in my office, if that's what you mean. I'm not sure
13 what you mean by file.
14 Q Well, by "file," I mean like what's sitting before you, an
15 expandable folder where you have a physical paper or copy of
16 a document that you can refer to.
17 A I don't think I've got one with a - you know, with an
18 actual tab that says "Brake pressure switch" or it. I have
19 access to technical information about it, though.
20 Q That first answers my question and I appreciate that.
21 So what you're telling me is that if you want access to
22 those documents, generally they're available to you on the
23 Ford computer system?
24 MS. McLAREN: Object to the form of the question. I'm
25 not sure that "those documents" is specific enough to -

1 MR. DUNFORD: It's pretty broad.
 2 BY MR. DUNFORD:
 3 Q Documents relating to the brake pressure switch, you can
 4 gain access to those on the Ford computer system; is that
 5 right?
 6 MS. McLAREN: I'd still object to the form.
 7 A Again, engineering and technical documentation is available,
 8 yes.
 9 BY MR. DUNFORD:
 10 Q Are you aware of any contention in this case that Texa
 11 Instruments has made where they're contending that Ford
 12 prepared the specifications for the brake pressure switch?
 13 A I haven't seen anything in this case.
 14 Q Can you describe for me the operation of the brake pressure
 15 switch?
 16 A Yes. It basically has two portions to it, if you will,
 17 that's the easiest way to describe it, one is a mechanical
 18 or hydraulic portion and the other part is an electrical
 19 switch portion. The hydraulic portion is mounted in the
 20 brake line so that brake fluid can enter into the mechanical
 21 portion of it. The mechanical portion has a set of seals
 22 and other components that will engage when the fluid pressure
 23 is increasing and it will move a small actuating pin and
 24 that actuating pin will open and close the electrical
 25 contacts in the electrical portion of the switch.

1 Q And when the electrical circuit is complete, then the brake
 2 pressure switch deactivates the cruise control; is that
 3 right?
 4 A I'm sorry? State that again?
 5 Q Sure. When the actuating pin enters the electrical side and
 6 causes the contacts to come together, then the electrical
 7 circuit is complete; is that right?
 8 A When the pin -- when the actuating pin moves into the
 9 electrical contacts, it opens a set of normally closed
 10 contacts. The circuit is closed normally.
 11 Q So when the circuit is complete inside the switch, then it
 12 opens -- you can tell I'm not an engineer; can't you? So we
 13 have a normally closed switch and when the circuit is
 14 activated inside the switch, then -- well, maybe you should
 15 just explain it to me, that would be helpful.
 16 What happens when the actuating pin contacts the
 17 movable contact inside the electrical portion of the switch?
 18 A Actually, I believe it's connecting it all the time, but
 19 when the actuating pin is moved because of the brake
 20 pressure, it opens a set of electrical contacts, it moves
 21 the movable arm portion of the contacts and opens the
 22 switch.
 23 Q And that causes the cruise control to go off?
 24 A It removes the power from the cruise control, which causes
 25 it to go off, yes.

1 Q Is the brake pressure switch continuously energized?
 2 A Yes.
 3 (Mr. Gordon is no longer in attendance.)
 4 BY MR. DUNFORD:
 5 Q And what does that mean?
 6 A It just means that it has brake -- battery power available
 7 to it at all times.
 8 Q And is that twelve-volt?
 9 A Yes, the vehicle electrical system is twelve volts.
 10 Q Do you know whether the brake pressure switch, the design of
 11 that switch that was installed in the Metropolitan Town Car, is
 12 that same design installed on other vehicles manufactured by
 13 Ford Motor Company?
 14 A Yes.
 15 Q Do you know which vehicles?
 16 MS. McLAREN: What does that mean? Object to the form.
 17 Sorry.
 18 BY MR. DUNFORD:
 19 Q Has it varied over time?
 20 A Yes.
 21 Q How about the 1993 model year, do you know what vehicles
 22 besides the Lincoln Town Car had a similar designed brake
 23 pressure switch?
 24 A Not off the top of my head, no.
 25 Q If I referred to the Panther platform, would you know what I

1 was talking about?
 2 A Yes.
 3 Q And what is the Panther platform?
 4 A The Panther platform is a large rear-wheel-drive vehicle
 5 platform.
 6 Q And it's the basis for manufacture of the Lincoln Town Car;
 7 is that correct?
 8 A Yes.
 9 Q And for the Grand Marquis?
 10 A Yes.
 11 Q And for any other vehicles?
 12 A The Crown Victoria.
 13 Q For the 1993 model year, did the Lincoln Town Car, Grand
 14 Marquis, and Crown Victoria come equipped with the same
 15 brake pressure switch manufactured by Texa Instruments?
 16 A Yes.
 17 MR. MILLON: Objection to form.
 18 BY MR. DUNFORD:
 19 Q Do you know, Mr. Hoffman, whether the design of the brake
 20 pressure switch has ever changed?
 21 MS. McLAREN: Object to form.
 22 A Do I know --
 23 MR. MILLON: Same objection.
 24 A Yes.
 25 BY MR. DUNFORD:

1 Q So for example, is the brake pressure switch installed in
2 Lincoln Town Cars today different than the brake pressure
3 switch installed in the Midland Town Car when it was
4 built in 1992?

5 A Yes.

6 Q In what ways are they different?

7 A I believe the current redundant shut-off switch is now
8 mounted inside the vehicle on the brake linkage.

9 Q So the switch is in a different location?

10 A Well, it's a different switch, it's a mechanical switch now
11 rather than a pressure switch.

12 Q Is it still called the brake pressure switch?

13 A No.

14 Q What's it --

15 A Again, the brake pressure switch is a vernacular term that
16 people use, it's not the proper name for the part.

17 Q Is it still called the speed control deactivation switch?

18 A I believe it is still called a redundant speed control
19 deactivation switch, yes.

20 Q And where exactly is it located?

21 A I'm not sure precisely where it's located.

22 Q But it's no longer sitting on the prop valve, is that right?

23 A That's correct.

24 MS. McLAREN: Just to be clear, we're still talking
25 about the current model Lincoln Town Car vehicles only, is

1 prompted the recall?

2 A No.

3 MS. McLAREN: Object to the form of the question.

4 BY MR. DUNFORD:

5 Q Was it implemented after the recall?

6 A I'm not certain.

7 Q Are you aware of any other changes in the design or
8 operation of the speed control deactivation switch that have
9 occurred since the Midland's vehicle was manufactured in
10 1992?

11 MS. McLAREN: Again, object to the form of the
12 question. But just to clarify, are we talking only about
13 the Lincoln Town Car, the difference between the 92 model
14 and the current model?

15 MR. DUNFORD: Yes, we can limit it to that.

16 BY MR. DUNFORD:

17 Q Do you want me to restate the question?

18 A Yes.

19 Q Are you aware of any other changes in the brake pressure
20 switch currently being installed in Lincoln Town Cars that
21 are different than the switch that was installed in the
22 Midland's Town Car manufactured in 1992?

23 MS. McLAREN: Object to the form of the question.

24 A Yeah, I'm not sure exactly what you want to know.

25 MS. McLAREN: Can I clarify my objection? It might

1 that right, Mr. Dunford?

2 MR. DUNFORD: Yes.

3 BY MR. DUNFORD:

4 Q You understood that, correct?

5 A That was my assumption, yes, from the line of questions.

6 Q Do you know why the change in location was made?

7 A I'm not certain.

8 Q Are you familiar with any change in the design of the brake
9 pressure switch currently installed on Lincoln Town Cars?

10 MS. McLAREN: Object to the form.

11 A I'm not familiar with the current model components.

12 BY MR. DUNFORD:

13 Q You indicated that it is -- you do know that it's no longer
14 an electrical switch, though, is that right?

15 A No.

16 Q I thought I heard you say that.

17 A No. I said it's no longer a pressure-actuated switch, that
18 it's a mechanically-actuated switch. It's still a switch,
19 an electric switch.

20 Q I apologize, you're correct. Is it no longer has brake
21 fluid involved in its operating sequence, is that right?

22 A That's correct.

23 Q Do you know when that change was implemented?

24 A Not off the top of my head, no.

25 Q Was it implemented as a result of the design problems that

1 help. You're talking about a brake pressure switch. He's
2 already testified that there is no brake pressure switch in
3 the current model year.

4 BY MR. DUNFORD:

5 Q Well, I'll call it the speed control deactivation switch;
6 fair enough?

7 A Okay.

8 Q Other than the changes that you've described in the location
9 of the speed control deactivation switch and the fact that
10 the switch is no longer hydraulically operated, are you
11 aware of any other changes in the speed control deactivation
12 switch between current model year Lincoln Town Cars and the
13 Lincoln Town Car that the Midland's owned that was
14 manufactured in 1992?

15 A You're asking me about two different parts, so I don't know
16 how to answer your question.

17 Q Okay. Are you aware of any other changes in the speed
18 control deactivation switch other than what you've testified
19 for Lincoln Town Cars?

20 A Again, I'm not sure what you're asking. I think the answer
21 is no.

22 Q At some point in time, Ford vehicles began experiencing
23 problems with the brake pressure switch, is that correct?

24 A Yes.

25 Q Do you know when that was?

1 A It was in 19 --
 2 MS. McLAREN: Object to the form.
 3 A Sometimes around the 1998 calendar year is when it became
 4 known to us.
 5 BY MR. DUNFORD:
 6 Q In the 1998 calendar year, what vehicles began experiencing
 7 problems with the brake pressure switch or the speed control
 8 deactivation switch?
 9 A I don't recall exactly which ones. I thought it was just
 10 the Town Car at that time, but it's a fuzzy recollection.
 11 Q Was that before you became involved in investigating this?
 12 A Yes.
 13 Q What department at Ford were you working in before you
 14 became involved in investigating this?
 15 A I was in the Electrical and Electronic Systems Engineering
 16 activity.
 17 Q And you already told me that.
 18 Did you have any involvement with the brake pressure
 19 switch or speed control deactivation switch in your work in
 20 that department?
 21 A No.
 22 Q When did you first learn that Ford was experiencing problems
 23 with the speed control deactivation switch?
 24 A About the time the recall was published, I believe.
 25 Q Was that in 1999?

1 MS. McLAREN: Same objection.
 2 A No.
 3 BY MR. DUNFORD:
 4 Q Have you ever heard of Ford Executive 1993 model year vans
 5 that were experiencing problems with the speed control
 6 deactivation switch?
 7 MS. McLAREN: Object to the form.
 8 A That's an incomplete statement. The '93 Executive van, I
 9 believe, had a wiring connector loose on it for a short
 10 period of time.
 11 BY MR. DUNFORD:
 12 Q And can you describe what the issue was with the wiring
 13 connector?
 14 A As I recall, the connector could be put on crooked and allow
 15 water from the outside environment to splash into the
 16 switch.
 17 Q And what's the basis for your knowledge of that connector
 18 problem?
 19 A I can't recall where I read it.
 20 Q Can you tell me, the switch in the Mustangs' Town Car, is
 21 it -- was it mounted vertically or horizontally?
 22 A It was actually mounted on about a 45-degree angle.
 23 Q So somewhere in between, is that right?
 24 A Yes.
 25 Q I'm just going to show this document to you, Mr. Hoffman.

1 A Yes.
 2 Q Before the recall was published in 1999, had you
 3 investigated any firm on behalf of Ford Motor Company where
 4 the speed control deactivation switch was alleged to have
 5 been the cause?
 6 A I don't recall. That's a long time ago.
 7 Q Other than Lincoln Town Cars, have you ever heard of any
 8 other vehicles that experienced problems with the speed
 9 control deactivation switch?
 10 A Yes.
 11 Q And what other vehicles are those?
 12 A The Crown Victoria and Grand Marquis.
 13 Q What about vehicles that are not related to the Panther
 14 platform, do you have any knowledge of vehicles at Ford that
 15 experienced problems with the speed control deactivation
 16 switch other than those that were manufactured on the
 17 Panther platform?
 18 MS. McLAREN: Object to the form of the question.
 19 A Could you kind of repeat the question again?
 20 BY MR. DUNFORD:
 21 Q Sure, I'll try. Other than the Grand Marquis, Lincoln Town
 22 Car, and Crown Victoria, are you aware of any other vehicles
 23 manufactured by Ford that experienced problems with the
 24 speed control deactivation switch?
 25 A Am I aware of vehicles --

1 That's my only copy, but you can come through that and take
 2 the time that you need to read it.
 3 You've had a chance to review the document?
 4 A Yes, sir.
 5 Q We'll go ahead and mark it as Exhibit 1 just so the record
 6 will reflect what we're talking about.
 7 (Hoffman Exhibit No. 1 was marked for identification.)
 8 BY MR. DUNFORD:
 9 Q Have you seen this document before today that consists of
 10 four typewritten pages, correct?
 11 A There are four typewritten pages, yes.
 12 Q And have you seen it before today?
 13 A I do not believe so.
 14 Q Does this describe the Ford Executive Incorporative speed
 15 control systems that you were referring to earlier?
 16 A That document was prepared by Texas Instruments, but it is
 17 involving the same situation that I was discussing earlier,
 18 yes.
 19 Q And that's where there was water ingress into the switch
 20 cavity?
 21 A Yes.
 22 Q And it was causing failure of the control elements due to
 23 corrosion; is that right?
 24 A Yes.
 25 Q And the date of the document is July 29th, 1993?

1 A Yes.
 2 Q Do you know if this document, Exhibit 1, was communicated to
 3 Ford Motor Company?
 4 A I really don't know just from looking at the document
 5 itself.
 6 Q Just so the record is clear, also, the highlighting on
 7 Exhibit 1 is mine and that's my only copy, is -
 8 A There is one more in the bottom of one of these pages that
 9 says Produced by Ford, so I assume Ford had it at one time
 10 or another.
 11 Q Do you know how the speed control deactivation switch was
 12 oriented in 1993 model year Excursion?
 13 A Roughly, yes.
 14 Q Was it horizontal or vertical?
 15 A I believe it was mounted vertically.
 16 Q Does the orientation of the speed control deactivation
 17 switch in a vertical manner make it more likely or less
 18 likely that it would be vulnerable to water ingress?
 19 MS. McLAREN: Object to the form.
 20 A It's really a question of the orientation of the connector.
 21 BY MR. DUNFORD:
 22 Q Pardon me?
 23 A It's really more an orientation question for the connector,
 24 not the part, the connecting portion of it.
 25 Q So how can the orientation of the connector make the speed

1 That was a general statement that was made by the person
 2 preparing that report just like my statement earlier was a
 3 general statement. If you put a bowl on the ground during a
 4 rainstorm, the bowl will capture water, and that's the
 5 general nature of the remark that this person is making.
 6 BY MR. DUNFORD:
 7 Q Let me just ask you this then.
 8 Do you disagree with that sentence that I read which is
 9 on Page 4 of Exhibit 1?
 10 MS. McLAREN: Object to the form of the question. For
 11 the record, it is the last statement of the text of Page 4
 12 of Exhibit 1.
 13 A What was your question again?
 14 BY MR. DUNFORD:
 15 Q Having read the sentence on Page 4 of Exhibit 1, do you
 16 agree or disagree with the statement -
 17 MS. McLAREN: Object to the form.
 18 BY MR. DUNFORD:
 19 Q - In the sentence that's highlighted?
 20 MS. McLAREN: Object to the form.
 21 A I guess I neither agree nor disagree. There's some
 22 hypothetical things in it that make scientific sense. I
 23 don't think that it has any bearing on that particular
 24 issue.
 25 BY MR. DUNFORD:

1 control deactivation switch more vulnerable to water
 2 ingress?
 3 A If it's left in a place where water can pool.
 4 Q And again, how does the orientation affect that, allowing
 5 water to pool?
 6 A Well, water will tend to fall down with gravity, so if it's
 7 pointed up, the water can fall on top and sit there.
 8 Q Well, I'm reading this, it says the impact of the problem is
 9 magnified in the Excursion platform due to the mounting
 10 location and vertical mounting position, both of which are
 11 unfavorable from an ingress point of view.
 12 Do you see that in the document?
 13 MS. McLAREN: Object to the form of the question.
 14 A I do see the statement in the document, yes.
 15 BY MR. DUNFORD:
 16 Q And that's why I'm asking you about the orientation of the
 17 switch. When it refers to the vertical mounting position,
 18 does that make it more likely that the switch is going to be
 19 vulnerable to ingress of water?
 20 MS. McLAREN: Object to the relevance as well as the
 21 form of this line of questions.
 22 A The document was prepared by Texas Instruments, who are the
 23 switch manufacturers, and they don't have a lot of
 24 background in electrical connectors. The connector has a
 25 seal inside of it which stops any ingress from occurring.

1 Q On what particular issue?
 2 A The one that's discussed in that document.
 3 Q The Excursion speed control deactivation switch, it has no
 4 bearing on it?
 5 A That's correct.
 6 MS. McLAREN: When you come to a landing point, Tom,
 7 I'd like to just take a short one.
 8 MR. DUNFORD: You know, right now would be fine.
 9 MS. McLAREN: That would be great.
 10 (Short recess.)
 11 MR. DUNFORD: Let's go back on the record. Is Texas
 12 Instruments there?
 13 MS. McLAREN: Brian?
 14 MR. MELTON: Yeah, I'm here.
 15 BY MR. DUNFORD:
 16 Q Can I go back, Mr. Hoffman, and ask you a question about the
 17 speed control deactivation switch that's currently being
 18 installed in Lincoln Town Cars? Is that switch also
 19 manufactured by Texas Instruments?
 20 A I don't know.
 21 Q Do you know whether the design change in that switch was
 22 feasible for the 1993 model year Lincoln Town Cars?
 23 A No, I don't.
 24 MR. DUNFORD: Hey, Brian?
 25 MR. MELTON: Yeah.

1 MR. DUNFORD: While we were off the record I asked
2 Smith to let knowledge whether you had been admitted
3 pro hac vice. I know that's concerned for Eric Meyer, and
4 obviously, Edgar Sargent is a member of the Washington Bar.
5 Have you been admitted in this case pro hac vice?
6 MR. MELTON: I don't know, to be honest with you.
7 MR. DUNFORD: Do you care?
8 MR. MELTON: What's that?
9 MR. DUNFORD: Do you care?
10 MR. MELTON: Do you care, I guess, is the question.
11 MR. DUNFORD: Well, it may be down the judge's nose. You
12 know, because we had this discussion with Ed before we
13 received the order and I have some concern that your
14 participation may put you at risk in the case if you've not
15 been admitted pro hac vice.
16 MR. MELTON: At risk of what?
17 MR. DUNFORD: Unsubstantiated practice of law.
18 MR. MELTON: Okay, I understand your concern. Let's
19 go ahead and continue.
20 MR. DUNFORD: We'll proceed.
21 BY MR. DUNFORD:
22 Q Mr. Hoffman, have you investigated other fires other than
23 the McJannet fire in Federal Way, Washington, where there
24 has been an allegation that a defective speed control
25 deactivation switch caused the fire?

1 A Yes.
2 Q How many?
3 A I'm not certain.
4 Q Is it more than two dozen?
5 A Oh, yes.
6 Q Is it more than fifty?
7 A Yes.
8 Q So can you give me a range?
9 A Maybe somewhere between one and two hundred.
10 Q Of those one to two hundred fires that you've investigated
11 where a defective speed control deactivation switch is
12 alleged to have caused the fire, have you personally ever
13 concluded that that allegation was correct, in other words
14 that the switch did cause the fire?
15 A I don't believe so.
16 Q So if I understand correctly, you have never investigated a
17 fire that you believe was caused by a defective speed
18 control deactivation switch?
19 A Well, that's a different question.
20 Q Okay. I wasn't trying to confuse or mislead you.
21 Have you ever investigated a fire where you believe a
22 defective speed control deactivation switch was the cause?
23 A There have been some instances where I suspected that the
24 switch may have caused the fire.
25 Q Have you ever concluded that the switch caused the fire?

1 A Again, that's why I was a little confused between the two
2 questions. Concluding usually means, to me anyway, a
3 preponderance of evidence, and I don't believe that I've
4 ever had a situation where that kind of evidence was totally
5 in evidence after the fire.
6 Q So let me ask it this way.
7 Have you ever concluded on a more-probable-than-not
8 basis that a defective speed control deactivation switch
9 caused a fire?
10 A I believe so, yes.
11 Q On how many instances or occasions have you determined on a
12 more-probable-than-not basis that a defective speed control
13 deactivation switch caused the fire?
14 A I have no idea. I don't keep a count.
15 Q More than a dozen?
16 A I really -- I don't know, to be honest with you.
17 Q Can you give me the statute of any car owners in which you've
18 determined on a more-probable-than-not basis that a
19 defective speed control deactivation switch caused the fire?
20 MS. McLAUGHLIN: I'm going to caution Mr. Hoffman to make
21 sure he answers this question bearing in mind any privilege
22 that may exist on behalf of Ford Motor Company and that
23 anything said or work product in any ongoing case should
24 not be discussed.
25 A I really can't answer that question off the top of my head.

1 BY MR. DUNFORD:
2 Q Do you refer to the fires by other names other than the
3 vehicle owners?
4 A Not usually, that's fairly typical.
5 Q But as you sit here today, you don't recall any
6 instances -- well, let me start over again.
7 You don't recall the names of any vehicle owners today
8 where you determined the brake control -- I'm sorry -- the
9 cruise control deactivation switch more probably than not
10 caused the fire?
11 A Like I said, not off the top of my head.
12 Q Have you ever done any written reports on any of these fires
13 where you believe a cruise control deactivation switch more
14 probably than not caused the fire?
15 A I can't just because of the number of them. I don't believe
16 so, but that's off the top of my head. My memory is not
17 that inclusive.
18 Q What would it take for you to prepare a list of those fires
19 where you've determined the cruise control deactivation
20 switch more probably than not was the ignition source?
21 A I guess I would have to review a whole bunch of files, old
22 files.
23 Q What would it take for you to identify any written reports
24 that you prepared for an investigation where you determined
25 the speed control deactivation switch more probably than not

1 caused the fire?

2 A Again, a lot of time to review.

3 Q Do you keep those on the computer, your written reports?

4 A I prepare them on a computer. Whether they're -- if I've

5 prepared it, it's probably on my computer, yes.

6 Q Is it possible for you to perform a search and identify any

7 written reports that you've prepared relating to a speed

8 control deactivation switch that you believe caused a fire?

9 A Again, I think if I reviewed all of those files, I might be

10 able to do that, yes.

11 Q Would you do that for me?

12 MS. McLAREN: We'll consider that request and respond

13 to it as a formal discovery request. I don't think

14 Mr. Hoffman is under any obligation to perform a review of

15 all of the files he's ever worked on to answer that

16 question.

17 BY MR. DUNFORD:

18 Q Well, you've investigated other fires besides ones where the

19 speed control deactivation switch is the alleged cause; is

20 that right?

21 A Yes.

22 Q So I'm leaving this to you where you've investigated an

23 allegation that a speed control deactivation switch caused

24 the fire; you understand that, right?

25 A Yes.

1 Q And whether it's considered a formal discovery request or

2 not, I would appreciate receiving copies of written reports

3 where you determined that a speed control deactivation

4 switch more probably than not caused the fire and also a

5 written list of vehicles where you determined that -- or

6 reached that same conclusion, okay, sir?

7 MS. McLAREN: We'll certainly take that request and

8 consider it and respond to it.

9 BY MR. DUNFORD:

10 Q In those cases where you've determined that a speed control

11 deactivation switch on a more-probable-than-not basis was

12 the cause of the fire, are there any of those instances

13 where the fire spread from a vehicle to a structure?

14 A Again, I'm not certain of the files that I might have where

15 there was a report that it was a -- that the switch was the

16 probable cause, so I guess I have to answer I don't know

17 because I'm not sure of the contents of all of those files.

18 Q If the speed control deactivation switch fails and causes a

19 fire, do you have an opinion how that fire spreads in the

20 engine compartment in the Lincoln Town Car?

21 A Yes.

22 Q Can you describe for me in a fire that's caused by a failure

23 of the speed control deactivation switch what is the first

24 ignited material?

25 MS. McLAREN: Object to the form of the question.

1 A The first ignited material is the switch housing and its

2 contents, typically.

3 BY MR. DUNFORD:

4 Q And what's the switch housing made of?

5 A Plastic.

6 Q Do you know what kind?

7 A I'm not sure of the actual grade of plastic.

8 Q Have you ever investigated that?

9 A Yes.

10 Q When did you investigate it?

11 A I really don't know when originally.

12 Q Do you recall the results of your investigation?

13 A I determined that the part drawing does not specify what

14 that material is, the Ford part drawing.

15 Q And that's why you say you're not sure of the actual grade?

16 A Yes.

17 Q You are satisfied, though, that the plastic housing of the

18 switch is combustible?

19 A Plastics are combustible.

20 Q Do you know what the ignition temperature of the plastic

21 housing is?

22 A No.

23 Q When you refer to the contents of the switch housing as

24 being a first ignited material, what are you referring to?

25 A Along with the plastic switch housing, there is usually some

1 brake fluid in that area, as well.

2 Q And that's if brake fluid has leaked past the Kapton seals

3 into the electrical side of the switch?

4 A Yes.

5 Q Do you know what the ignition temperature of brake fluid is?

6 A It's around somewhere between 800 and 900 degrees.

7 Q Polymers?

8 A Yes, sir.

9 Q So after the switch housing and its contents, including, as

10 you've described, brake fluid have ignited, how does the

11 fire progress from that point?

12 MS. McLAREN: Object to the form of the question.

13 Is -- sorry, I'll stop there.

14 BY MR. DUNFORD:

15 Q In other words, what's the next ignited material?

16 MS. McLAREN: Same objection.

17 A It's not definitely clear, it's somewhat of an opinion based

18 on the sciences. It's typically burn upward and outward,

19 so the heat from those initial combustible components would

20 rise. There are wires, there are wire connections, there are

21 hoses. All of those materials are plastics or polymers or

22 rubber-based materials that have relatively low, as compared

23 to the grade around it, have relatively low melting points

24 in the, say, 400 to 600-degree range, depending on what

25 material you're talking about and exactly where the heat is

1 going, but since it does tend to go upward and outward,
2 there are those components.
3 BY MR. DUNFORD:
4 Q Where was the speed control deactivation switch located in
5 the McLAREN Town Car?
6 A The --
7 Q And I guess before the fire.
8 A Right. The design of the vehicle mounts the brake pressure
9 switch on the inboard proportioning valve; on the
10 proportioning valve assembly which is mounted on the
11 driver's side frame rail of the vehicle between the engine
12 and the left front fender and rearward in the vehicle just
13 about to the base of the dash panel or where the frame rail
14 goes underneath the body of the vehicle.
15 Q And that location was confirmed when you examined the
16 vehicle?
17 A The reason that was found when I investigated it initially
18 indicated that it was highly probable the part was in its
19 production-mount position.
20 Q And in that position in the area of the switch, there's
21 wiring harnesses, connections, hoses, that in your opinion
22 are all combustible and would facilitate a spread of a fire
23 that originated inside the switch; is that correct?
24 A If enough heat is generated, that heat can affect those
25 parts.

1 Q In addition to the wiring, the wiring connectors and the
2 hoses that you've described, are there also fluids that are
3 combustible in the area of the speed control deactivation
4 switch that would facilitate the spread of a fire?
5 A Yes.
6 Q And what are those fluids?
7 A Brake fluid, gasoline, and power steering fluid. And engine
8 oil possibly.
9 Q Where is the master cylinder located in comparison to the
10 speed control deactivation switch?
11 A The master cylinder is above the switch and forward in the
12 vehicle.
13 Q And it has brake fluid in it, correct?
14 A It has a brake fluid reservoir mounted on top of it, yes.
15 Q And that would be available in a fire originating in a speed
16 control deactivation switch to facilitate the spread of the
17 fire; is that right?
18 A It is possible, yes.
19 Q Have you ever come up with a scenario, Mr. Hoffman, in which
20 you've explained how a fire which you believed on a
21 more-probable-than-not basis originated at a speed control
22 deactivation switch spread through the engine compartment of
23 a Lincoln Town Car?
24 MR. McLAREN: Object to the Street of the question.
25 A I'm not sure what you're asking.

1 MR. McLAREN: Are you talking about in general or a
2 specific case where he's determined how it spread?
3 BY MR. DUNFORD:
4 Q In general, have you determined a scenario or developed a
5 scenario to explain how a fire originating at a speed
6 control deactivation switch spreads through the engine
7 compartment of a Lincoln Town Car?
8 MR. McLAREN: Object to the form.
9 A I guess the question, in general, yes, I've thought about
10 the scenario.
11 BY MR. DUNFORD:
12 Q Could you describe the scenario to me that you've thought
13 about?
14 A Well, it's basically what we were just discussing, that the
15 polymer materials, the plastic and the rubber materials,
16 tend to have the lowest melting point, they would tend to be
17 the first components affected. The brake fluid reservoir is
18 the next probable fuel source since it is above the point
19 where the switch is mounted, so the heat would tend to rise
20 upward and gather around that reservoir. And then the brake
21 fluid and possibly also gasoline, because the gasoline, the
22 fuel delivery system has two flexible lines that connect the
23 engine to the frame of the vehicle which are just forward
24 and slightly above the switch and they have some small
25 amount of gasoline in them at all times. So it really

1 depends on some environmental -- you know, in the vehicle
2 indoors or outdoors, is there any kind of wind or, you know,
3 air circulation that may cause the heat to move in slightly
4 different directions, but it would seem that the flammable
5 fluids would probably be the next thing to be involved in
6 the fire.
7 Q Have you seen fires involved in fires that you believe on a
8 more-probable-than-not basis originated in a defective speed
9 control deactivation switch?
10 A Again, I'm not sure if I can specifically point to one of
11 probable cases, but if you are suggesting a fire that starts
12 in the driver's side of the engine compartment, the fire is
13 mounted directly adjacent to that area and the rubber
14 material of the fire is combustible. I have seen Town Cars,
15 I have inspected vehicles where the fires are traced in the
16 fire. I'm not sure if that answers the question.
17 Q Are you satisfied that a fire originating in the driver's
18 side of the engine compartment was spread through the engine
19 compartment until it ignites the driver's side tire; is that
20 correct?
21 A Yes.
22 Q Do you know what the ignition temperature of the tire is?
23 A No.
24 Q Have you investigated any fires where you have seen the fire
25 spread from a vehicle to a structure?

1 A I'm really not sure off the top of my head.
 2 Q You know Bill Harrison; is that right?
 3 A Yes.
 4 Q How many fires have you investigated where Bill Harrison was
 5 involved?
 6 A Let's see. I don't know. Again, I don't keep score of
 7 things. I would guess a dozen or two.
 8 Q And he is typically involved on behalf of Texas Instruments?
 9 A Yes.
 10 MS. McLAUREN: Object to the first.
 11 BY MR. DUNFORD:
 12 Q Do you know if Bill Harrison has ever determined that a fire
 13 on a more-probable-than-not basis was caused by a speed
 14 control deactivation switch?
 15 MR. MELTON: Objection to factoids for speculation.
 16 A I don't know.
 17 BY MR. DUNFORD:
 18 Q Has he ever told you one way or another?
 19 A I don't think so. I don't think Bill and I have had too
 20 many conversations along those lines.
 21 Q Have you ever communicated to Bill Harrison any information
 22 that Ford has developed in its investigation of the speed
 23 control deactivation switch?
 24 A I don't believe so.
 25 Q Have you ever communicated to him any information that was

1 Q The date of that fire is before the recall; is that right?
 2 A Yes.
 3 (Offices Exhibit No. 3 was marked for identification.)
 4 BY MR. DUNFORD:
 5 Q Let me hand you what has been marked as Exhibit 3 and have
 6 you review it, please.
 7 Have you had a chance to review Exhibit 3?
 8 A Yes, sir.
 9 Q Have you seen that document before?
 10 MS. McLAUREN: I'm going to question Mr. Harrison before
 11 he answers any questions about this document that there is
 12 in fact a case pending in Federal Court in Georgia by the
 13 Corvairs alleging damage as a result of a defect in the speed
 14 control deactivation switch and I would suggest that
 15 substantively any comments that he has would be afforded
 16 protection by the work product doctrine. That would be
 17 Ford's privilege to waive. Go ahead and answer the question
 18 that's pending.
 19 A I'm sorry, would you repeat the question?
 20 BY MR. DUNFORD:
 21 Q I know that was coming. I think I asked you if you had seen
 22 the document before, Exhibit 3?
 23 THE WITNESS: What does that have to do with what you
 24 said?
 25 MS. McLAUREN: Well, my question to you, think, was that

1 developed during the investigation that prompted the recall?
 2 A Again, I don't believe so.
 3 Q Have you ever heard of a fire in a 1992 Lincoln Town Car
 4 owned by Dale Cassell?
 5 A That name is familiar to me, yes.
 6 Q Were you involved in investigating that fire?
 7 A I don't recall if I was the design analysis engineer on that
 8 case or not.
 9 (Offices Exhibit No. 2 was marked for identification.)
 10 BY MR. DUNFORD:
 11 Q I'm going to hand you what has been marked as Exhibit 2 and
 12 ask if you can just look at that and tell me whether you've
 13 seen it before.
 14 Have you seen that document before?
 15 A I don't believe so.
 16 Q You've had a chance to review it now?
 17 A Yes.
 18 Q Exhibit 2 refers to the Dale Cassell 1992 Lincoln Town Car;
 19 is that right?
 20 A That's what the document says, yes.
 21 Q Having reviewed Exhibit 2, does it help you recall whether
 22 you've been involved in investigating that fire on behalf of
 23 Ford?
 24 A It seems to clarify in my mind that I was not involved in
 25 that investigation.

1 there may be privileged information if you indeed have
 2 investigated this and your opinions have not been made
 3 public and you were hired as a consultant, as you often are,
 4 on these cases, that anything you may have to say about the
 5 substance of the Corvair claims would be privileged and you
 6 should not answer the questions, but the question about how
 7 you saw that document before does not really fall into
 8 that.
 9 THE WITNESS: Okay. I just wanted to be sure I
 10 understood what the legalese was all about.
 11 A I have not seen that document.
 12 BY MR. DUNFORD:
 13 Q Are you involved in the Corvair case?
 14 A I believe I am indirectly involved in that case, yes.
 15 Q Do you know if the Corvairs brought that case individually on
 16 their own behalf or if it's a subrogation claim?
 17 A My recollection is that it is part of a subrogation claim.
 18 Q Have you rendered an opinion in that case?
 19 A No.
 20 Q Have you been identified as a testifying expert in that
 21 case?
 22 A I don't know.
 23 Q Do you know whether the fire in the Corvair vehicle occurred
 24 before the recall was issued by Ford?
 25 A I don't know that other than what that document says.

1 (Hoffman Exhibit No. 4 was marked for identification.)
 2 BY MR. DUNFORD:
 3 Q Let me hand you what has been marked as Exhibit 4 and ask
 4 you to review that, please.
 5 Have you seen Exhibit 4 before?
 6 A No, sir.
 7 Q And you've had an opportunity to review it?
 8 A Yes, sir.
 9 Q Are you familiar with a fire in a Lincoln Town Car owned by
 10 Dan Ejelechi?
 11 A Is that the name that's on Exhibit 4?
 12 Q I tried to pronounce it.
 13 A I tried to understand it. I do not recognize that name at
 14 all.
 15 Q Did you have any involvement in investigating the fire
 16 that's referred to in Exhibit 4?
 17 A No, sir.
 18 Q Now, Allstate is the named plaintiff in this lawsuit arising
 19 from the fire at the Ejelechi home.
 20 Do you know of any other lawsuits brought by Allstate
 21 against Ford Motor Company alleging that a defective speed
 22 control deactivation switch caused a fire?
 23 MS. McLAREN: Object to the form of the question.
 24 Other than the four that you've just talked about?
 25 MR. DUNFORD: There's three, I believe. But I don't

1 Q What you're showing me is a drawing that was apparently
 2 printed on May 24th of 1999 by Mark Hoffman; is that
 3 correct?
 4 A Yes.
 5 Q And can you identify the drawing for the record?
 6 A This is the Ford released drawing for the speed control
 7 deactivation switch assembly.
 8 Q Do you know who prepared the drawing?
 9 A Yes.
 10 Q And who prepared it?
 11 A Texas Instruments.
 12 Q And the image is on the drawing; is that correct?
 13 A Yes, sir.
 14 Q And we'll mark the drawing that you referred to as Exhibit 5
 15 for your deposition; okay?
 16 A Okay.
 17 (Hoffman Exhibit Nos. 5 and 6 were marked for
 18 identification.)
 19 BY MR. DUNFORD:
 20 Q I'm going to hand you two pages that I've marked as
 21 Exhibit 6 in your deposition and have you review those,
 22 please.
 23 A (The witness complied.)
 24 Q Have you had a chance to review Exhibit 6?
 25 A Yes, sir.

1 know which of them are or aren't in suit, I have no idea,
 2 so it's just an open question.
 3 A Yes.
 4 BY MR. DUNFORD:
 5 Q How many?
 6 A That I couldn't tell you.
 7 Q Are you aware of lawsuits brought by insurance companies
 8 other than Allstate against Ford Motor Company alleging that
 9 a defective speed control deactivation switch caused a fire?
 10 A Yes.
 11 Q What other companies are you aware of that have brought
 12 claims against Ford Motor Company?
 13 A The ones that come to mind are State Farm and Farmers,
 14 Farmers Bureau I think is the one. I'm not exactly sure of the
 15 proper name, Farmers Insurance.
 16 Q But Allstate is not the only insurance company that's
 17 brought claims against Ford Motor Company alleging that a
 18 defective speed control deactivation switch caused a fire?
 19 A No.
 20 Q Do you have in your file, Mr. Hoffman, a drawing of the
 21 speed control deactivation switch that was installed in the
 22 Ejelechi vehicle?
 23 A I have a copy of the part drawing, the Ford part drawing.
 24 Q Could you pull that out of your file, please?
 25 A (The witness complied.)

1 Q Have you seen that document before?
 2 A Yes, sir.
 3 Q Would you describe for the record what it is, Mr. Hoffman,
 4 please?
 5 A It is a letter from Ford's Environmental and Safety
 6 Engineering Staff to the National Highway Traffic Safety
 7 Administration informing them that Ford was planning on
 8 recalling certain 92/93 Town Car, Crown Victoria, and
 9 Grand Marquis vehicles.
 10 Q And what's the date of the letter?
 11 A May 13th, 1999.
 12 Q And is this letter in response to the National Highway
 13 Traffic Safety Administration inquiry concerning allegations
 14 of speed control deactivation switch fires?
 15 MS. McLAREN: Object to the form.
 16 A This letter is a step in the procedures that are outlined in
 17 the National Highway Traffic Safety Administration
 18 procedures and it was in response to an investigation that
 19 was initiated by NHTSA, yes.
 20 BY MR. DUNFORD:
 21 Q I got my little mind up, sorry. Excuse me, this is my
 22 only copy.
 23 Who is L. W. Camp?
 24 A The letterhead shows that at that time Lou Camp was the
 25 Director of the Automotive Safety Office, which is part of

1 our Environmental and Safety Engineering Staff.
 2 Q Were you consulted in the preparation of Exhibit 6?
 3 A No.
 4 Q Who is R. A. Novi? Is that N-o-v-i?
 5 A Ray Novi is a manager in the Automotive Safety Office who
 6 reports to Mr. Camp, or reported to Mr. Camp at this time.
 7 At the time of the letter, I should say. I'm pointing at
 8 the date, that's not good.
 9 Q Does Ford consider the recall of certain model year Lincoln
 10 Town Car vehicles to be or to have been voluntary?
 11 MS. McLAREN: Object to the form. Mr. Hoffmann is best
 12 testifying as an expert witness about certain aspects of
 13 this particular fire. He has not been asked to be present
 14 as a 30(b)(6) witness to testify about what Ford does or
 15 does not say and I would object to this line of questioning
 16 in its entirety.
 17 But if you can answer the question, Mr. Hoffmann, you
 18 should certainly do that.
 19 A This is a standard procedure that the auto industry went
 20 with the National Highway Traffic Safety Administration.
 21 That's why you've got sections on this letter that have
 22 examined and letter designations up there, those are answers
 23 to direct questions in the procedure that we all follow.
 24 BY MR. DUNFORD:
 25 Q Do you know if Ford considers this recall to have been

1 by Ford.
 2 Do you know if there's a list or compilation of the
 3 sixty-four reports of underhood fires in Lincoln Town Cars
 4 that were identified by Ford?
 5 A I don't have any knowledge of that, no.
 6 Q Has that ever been made available to you?
 7 A I don't believe so.
 8 Q I guess that follows if you don't have any knowledge of it.
 9 A I'm sorry.
 10 Q You're fine. The next sentence says subsequent studies,
 11 including vehicle inspections and owner interviews, found
 12 additional incidents which appeared to have resulted from
 13 electrical overheating of the switch and which exhibited
 14 prior vehicle symptoms and that it lists some of those
 15 symptoms.
 16 My question is have you -- do you have any knowledge of
 17 the subsequent studies that are referred to in Exhibit 6?
 18 A As I mentioned earlier in the deposition, the recall team
 19 that was convened to investigate inquiry FESB-055 from
 20 NHTSA, they ended up publishing a 14-D or White Paper
 21 report, as is our procedure, and I am suggest -- I am
 22 assuming that that statement refers to that compilation of
 23 work.
 24 Q Are you aware of any other subsequent studies other than the
 25 publication of the 14-D report that were done by Ford?

1 voluntary?
 2 MS. McLAREN: Object to the format of the question.
 3 A I do believe that it was a voluntary recall.
 4 BY MR. DUNFORD:
 5 Q I want you to refer to page two of Exhibit 6. It says there
 6 was a NHTSA inquiry concerning underhood fires in twenty-one
 7 1992 and 1993 model year Lincoln Town Car vehicles; do you
 8 see that?
 9 A Yes, sir.
 10 Q Is there a list somewhere of those twenty-one fires that are
 11 referred to in the NHTSA inquiry?
 12 MS. McLAREN: Object to the form.
 13 A I don't know. I would assume NHTSA would have that, that's
 14 their list.
 15 BY MR. DUNFORD:
 16 Q Have you ever seen a compilation of the twenty-one fires
 17 referred to in the NHTSA inquiry?
 18 A No.
 19 Q The next one, it says over the course of the investigation,
 20 an additional twenty-six reports were identified by NHTSA.
 21 Do you have any knowledge about whether there's a list
 22 or a compilation of those twenty-six additional reports?
 23 A I have no knowledge of a list of that nature, no.
 24 BY MR. DUNFORD:
 25 Q The sentence continues, sixty-four reports were identified

1 MS. McLAREN: Object to the form of the question.
 2 A As I say, the 14-D is the standard document. If more
 3 documentation is required, you basically go back and update
 4 your 14-D, it's a living document.
 5 BY MR. DUNFORD:
 6 Q Page two of Exhibit 6 says laboratory analysis of switches
 7 returned from service found internal brake fluid leaks; do
 8 you see that?
 9 A Yes, sir.
 10 Q Do you know it, having read the 14-D report, if it refers to
 11 the laboratory analysis of switches that's mentioned in that
 12 sentence on page two of Exhibit 6?
 13 MS. McLAREN: Object to the form.
 14 A Again, off the top of my head without actually looking at
 15 the document, I want to recall that there was at least one
 16 switch that the recall team was able to recover. As a
 17 matter of fact, I think they called it the Memphis switch
 18 because it was found in Memphis, Tennessee, and I do believe
 19 it was discussed in the 14-D, as I recall.
 20 BY MR. DUNFORD:
 21 Q The next sentence says -- well, let me ask this.
 22 Other than the examination or testing of the Memphis
 23 switch, are you familiar with any other laboratory analysis
 24 of switches returned from service that was performed by Ford
 25 Motor Company?

1 MS. McLAUREN: Object to the form.
 2 A Yeah, I'm not familiar off the top of my head with the
 3 details. I know that there was other work of that nature
 4 done.
 5 BY MR. DUNFORD:
 6 Q Page two of Exhibit 6 states laboratory experiments
 7 demonstrated that internal leaks could result in internal
 8 corrosion in the switch which could create a conductive path
 9 to ground, ultimately resulting in sufficient internal heat
 10 to result in a fire. Do you see that?
 11 A Yes.
 12 Q Is that the conclusion reached in the 14-D document to your
 13 recollection?
 14 A I believe to the best of my recollection, yes, the 14-D is
 15 usually what generates this from letter, if you will, or
 16 this formal letter.
 17 Q Which is, you mean, Exhibit 6?
 18 A Yes.
 19 Q Have you done any testing yourself or been involved in any
 20 testing to corroborate or disprove the statement that I just
 21 read on Exhibit 6 referring to laboratory experiments
 22 demonstrating internal leaks could result in internal
 23 corrosion in the switch?
 24 A Not specifically to duplicate that kind of a failure mode,
 25 no.

1 Q Do you know if they replaced - I'm sorry, I'll start over
 2 again.
 3 Do you know if the recall contemplated replacing a
 4 damaged speed control deactivation switch with one of the
 5 same design?
 6 MR. MILTON: Objection to the form of the question.
 7 A Since these vehicles were seven years old, it was replacing
 8 it with the 1999 inventory of component parts. You'd have
 9 to check all of the drawings between 1992 and 1999 to know
 10 if it was absolutely perfectly identical in design, but it
 11 did fit in the same location and perform the same function
 12 as far as these two questions of design are concerned.
 13 BY MR. DUNFORD:
 14 Q But you're satisfied that Exhibit 5 is the drawing depicting
 15 the actual switch that was installed in the Majestic Towne
 16 Car; is that correct?
 17 A That is the Ford standard design that was originally
 18 installed in the Majestic vehicle.
 19 (Exhibits Exhibit No. 7 was marked for identification.)
 20 BY MR. DUNFORD:
 21 Q I'm handing you what has been marked as Exhibit 7 and ask if
 22 you'll review that, please?
 23 A (The witness complied.)
 24 Q Have you seen that document before? It consists of two
 25 pages.

1 Q So you've relied upon the investigation team that you
 2 referred to and the 14-D report; is that correct?
 3 A Pretty much, yes.
 4 Q Do you recall the date of the recall, Mr. Hoffman?
 5 A I believe it was May 2001.
 6 Q Of what year?
 7 A 1999. Actually, it may have been earlier than that. Don't
 8 hold me to the date.
 9 Q Well, I'll show you this document here and then --
 10 A This one doesn't help, since it just says May on it.
 11 Q But it says May of '99; right?
 12 A Yes.
 13 Q And the title of it is Service Recall Bulletin; is that
 14 right?
 15 A Yes, sir.
 16 Q Are you familiar with what the recall asked customers to do,
 17 the --
 18 A Yes.
 19 Q -- vehicle owners? What were the vehicle owners asked to do
 20 in the recall?
 21 A They were asked to bring their vehicle in to a dealership
 22 and have the vehicle inspected to make sure that it was part
 23 of the population and that the dealer would repair or
 24 replace their speed control deactivation switch at no charge
 25 to the customer.

1 A The first page is a facsimile transcript that I have never
 2 seen before. The second page appears to be an excerpt
 3 from one of the earlier exhibits that you showed me, but
 4 it's -- it's kind of jumbled up and incomplete due to the
 5 faxing process, I guess.
 6 Q Do you know Sherry Norton?
 7 A Yes.
 8 Q What is her?
 9 A She's
 10 Q I apologize.
 11 A You lost me way of knowing.
 12 Q What is she?
 13 A Sherry is a claims adjuster in our Office of the General
 14 Counsel.
 15 Q And I'm showing you just for comparison Exhibit 2, page two.
 16 A Yes, it appears like the portions of the document that are
 17 on Exhibit 7 appear to be page two from Exhibit 2, or a
 18 portion of it anyway.
 19 MS. McLAUREN: Just for the record, Exhibit 4 -- or
 20 sorry -- Exhibit 7 with the fax never about shows that the
 21 original transcript was four pages.
 22 MR. DUNFORD: And I agree there's only two there and I
 23 can't explain why the other two aren't there, I can't
 24 explain that today.
 25 BY MR. DUNFORD:

- 1 Q Do you know what Sharon Norton's involvement was, if any, in
2 the brake control - emergency - speed control deactivation
3 switch investigation?
4 A I have no idea.
5 Q Do you know who Ash Sharp is?
6 A No, that name doesn't ring a bell.
7 Q Are you familiar with any firm that occurred in Island
8 Lincoln-Mercury as referenced on page two of Exhibit 7?
9 A Other than making the connection today with the documents
10 you've shown me, I don't recall if Island Lincoln-Mercury
11 has ever been involved in anything or not. The name does
12 ring a bell, though.
13 Q But you don't recall investigating either of the firms that
14 are mentioned in Exhibit 7 on page two?
15 A No.
16 (Exhibits Exhibit No. 8 was marked for identification.)
17 BY MR. DUNFORD:
18 Q I'm handing you what has been marked as Exhibit 8. Have you
19 seen this drawing before?
20 A I have seen versions of this drawing before. I'm not sure
21 I've seen one with all these notes on it.
22 Q The top says Hydraulic Pressure Switch Cross Section; do you
23 see that?
24 A Yes.
25 Q So it's a speed control deactivation switch; is that right?

- 1 Q Does Ford have a scanning electron microscope?
2 A I'm not sure. I would assume so.
3 Q Have you ever used a scanning electron microscope as part of
4 your firm's investigation?
5 A I don't believe so, but I couldn't be certain.
6 (Exhibits Exhibit No. 9 was marked for identification.)
7 BY MR. DUNFORD:
8 Q I'm handing you what's been marked as Exhibit 9. Have you
9 seen that document before?
10 A I believe so, yes.
11 Q Where have you seen it before?
12 A I'm not sure originally. I notice it's got an
13 identification number on the bottom. It may have been part
14 of the discovery process in a previous case.
15 Q The document says Contributing Factors; is that correct?
16 A That's the title of this page, yes.
17 Q Do you know who prepared it?
18 A I remember correctly, it was Texaco Instruments members of
19 the recall team.
20 Q Did Texaco Instruments have members on the recall team?
21 A Yes.
22 Q Do you know who they were?
23 A No, not offhand.
24 Q Do you know how many employees of Texaco Instruments were on
25 the recall team?

- 1 A Yes.
2 Q Is this the type of speed control deactivation switch that
3 was installed in the McJannet Town Car?
4 A This is a cross-sectional sketch of a part of that nature,
5 yes.
6 Q Do you know if it's different in any way from the speed
7 control deactivation switch that was installed in the
8 McJannet Town Car?
9 A I don't believe so to this level of detail.
10 Q Do you know whose handwriting is present on this Exhibit 8?
11 A No.
12 Q Do you know what switch is being examined, in other words,
13 when the switch came from?
14 MS. McLAUREN: Object to the form.
15 A Taken as a single piece of paper out of context, I really
16 couldn't tell you.
17 BY MR. DUNFORD:
18 Q Do you know if Ford has conducted scanning electron
19 microscope review of switches returned from dealers?
20 A I don't know.
21 Q I see the letters "SEM" here on Exhibit 8. Do you see them?
22 A Yes.
23 Q And they're in someone's handwriting.
24 Do you know what they mean?
25 A No, I don't.

- 1 A Not exactly, no, I don't recall.
2 Q Do you know if Texaco Instruments contributed financially to
3 the cost of the recall?
4 A No, I don't know for certain.
5 Q This document, Contributing Factors, lists connector seal,
6 Kapton life, continuous power, switch orientation, current
7 capability, grounded hanger, and plastic paramaters.
8 Is it your understanding that this document is an
9 attempt to list the factors that contributed to the failure
10 of speed control deactivation switches?
11 A No, it is not.
12 Q What is the purpose of this document?
13 A As I recall from the conversations with Ford Parts, this
14 was a brainstorming effort that the team went through to try
15 and determine what the root cause was and this was a listing
16 of that brainstorming session of all the possible things
17 that they could look at in the design of the switch that
18 might be contributing to it.
19 Q Do you know why they wanted to look at the connector seal?
20 A No.
21 Q Do you know why they wanted to look at Kapton life?
22 A No. Again, as far as I know, this was a brainstorming
23 session. I wouldn't think to impose my opinion on what they
24 say or may not have been thinking at the time.
25 Q Based on your investigation of the switch, its operation,

1 and the allegations that it's failed and caused fire, have
2 you reached a conclusion regarding contributing factors that
3 lead to the failure of the switches?

4 A I have developed some opinions, I guess I would say.

5 Q And in your opinion, what do you believe are the
6 contributing factors that lead to the failure of the speed
7 control deactivation switch?

8 A I think that has to do somewhat with the environmental
9 conditions. It has to do somewhat with usage conditions and
10 the specific manufacturing period of time.

11 Q What do you mean by that, how old the switch is?

12 A No, no, the time in - time frame in which the switch was
13 manufactured.

14 Q Any other contributing factors?

15 A Not that I can think of.

16 Q How does environmental conditions contribute to the failure
17 of the speed control deactivation switch?

18 A Well, depending on what type of an environment it may have
19 been put through in its life. It may have been damaged
20 somehow during the course of its life. It may have been
21 replaced in service and we don't know that it is the
22 original part in some cases. I'm speaking hypothetically
23 here. The vehicle may have been involved in an accident or
24 some other event during its life that may have caused some
25 sort of stress on the part that wasn't considered in its

1 A Not physical kinds of evidence. There are a couple of minor
2 concerns that I raise, partially because it appears as if
3 some non-production service parts were used, the steel hood
4 being in place on this vehicle where the production hood was
5 made of aluminum, and that just really gives me an
6 indication that maybe there were other things that were
7 somewhat overlooked or not recommended competency or
8 practices that were performed on the vehicle. And again, I
9 say it's an indicator. It's not a real powerful, you know,
10 piece of evidence as far as how it relates to the switch,
11 but it just leads me to some concerns.

12 And then the other thing I noticed in those documents
13 that, again, kind of left me with a small point of concern
14 was the fact that after the second collision it had been
15 recommended by the adjuster that the vehicle be cooled
16 because of its age and tremendous amount of miles that it
17 had on it, and the customer at the time chose not to have
18 that done, they wanted the vehicle repaired. So there was a
19 question of age and mileage.

20 Q Other than what you've described as your concerns, do you
21 have any evidence that the conditions that the vehicle was
22 involved in affected the performance of the speed control
23 deactivation switch?

24 A No.

25 Q So if you were to testify that the accidents were somehow

1 design, for instance, collision damage to an engine
2 overheating from a radiator hose, you know, some of the
3 typical things that can happen to vehicles.

4 Q Let me stop you there. The McLaren speed control
5 deactivation switch, are you satisfied that it was the
6 switch that came with the car when it left the assembly
7 line?

8 A Based on the evidence, yes, it appears to have been the
9 original production component.

10 Q We know the McLaren vehicle was involved in a couple of
11 fender-bender accidents; right?

12 A A couple of accidents, yes.

13 Q You have information in your file relating to two accidents
14 that the car was involved in; correct?

15 A Yes.

16 Q Do you know whether either of those accidents affected the
17 operation or performance of the speed control deactivation
18 switch?

19 A No.

20 Q They didn't or they did not or you don't have any
21 information?

22 A Well, you asked me if I know, and I said I don't know.

23 Q Do you believe then that or do you have any evidence that
24 either of those accidents affected the operation of the
25 functioning of the speed control deactivation switch?

1 obviously related to the fire, it would be speculation; is
2 that right?

3 A At this -

4 MS. McLAREN: Object to the form.

5 A At this point in the investigation, I would say that it
6 might be considered speculation if I went to that point.
7 The concern is not a speculation, the concern is a concern.

8 BY MR. DUNFORD:

9 Q Did the steel hood cause the fire?

10 A No.

11 Q Let's go back to contributing factors. Usage conditions.

12 Or let me ask this first. Have we covered everything
13 with environmental conditions?

14 A Everything? Everything is an awfully large word. I'm not
15 sure what you mean.

16 Q Sure. We've talked about environmental conditions as a
17 contributing factor in your opinion to the failure of the
18 speed control deactivation switch. Have you listed all the
19 environmental conditions you believe can cause a failure of
20 the switch?

21 A Have I listed them?

22 Q Have you given them to me or described them to me in your
23 previous answer?

24 A That's why I used the term "environmental," anything from
25 the external environment that could have possibly affected

- 1 the part from its original condition.
- 2 Q Do you have any evidence of that occurring with the
- 3 Midwestern speed control deactivation switch?
- 4 A Well, I would classify the fact that there was a steel hood
- 5 on the vehicle as a change in environment, it does change
- 6 the way the physical structure of the vehicle will perform
- 7 going down the road, it will -- in the case of the Midwestern
- 8 vehicle that was in a fire, it will change the physics of
- 9 the fire.
- 10 Q How will it change the -- how will the installation of the
- 11 steel hood change the operation of the vehicle to -- in a
- 12 way that would affect the speed control deactivation switch?
- 13 A Well, I'm not certain that it can, I was just giving you an
- 14 example of what I meant by environment.
- 15 Q So you have no evidence that the installation of the steel
- 16 hood actually changed the functioning of the speed control
- 17 deactivation switch on the Midwestern Town Car; is that
- 18 right?
- 19 A Not at this point in time, no.
- 20 Q You mentioned usage conditions as being a contributing
- 21 factor in the failure of a speed control deactivation
- 22 switch. What did you mean by that?
- 23 A Usage being how long has it been used, how many miles, how
- 24 many years in service.
- 25 Q Does a Lincoln Town Car have a useful life, a 1993

- 1 what I've seen and heard that the process that was used
- 2 before this switch was brought into production was a manual
- 3 operation where there would be a person actually putting the
- 4 pieces together and operating the crimping equipment, and at
- 5 this time when this was being introduced on the Town Car
- 6 there was also an automated assembly process being
- 7 implemented and at that time there was some concern with the
- 8 new equipment, and so Town Instruments had requested from
- 9 Ford that they be allowed a deviation from their process to
- 10 go back to their manual crimping equipment.
- 11 Q What was it about the crimping that caused or contributed as
- 12 a factor to the failure of the speed control deactivation
- 13 switch?
- 14 A As I recall, when they ran the in-process aging testing, that
- 15 the components that were coming off of the new equipment had
- 16 failed the leak test, pressure leak test.
- 17 Q And what was it about the crimping that caused them to fail?
- 18 A I'm not really certain of the details, but it just appeared
- 19 as if there was some inconsistency from one operation of the
- 20 equipment to the next so far as in creating a good solid
- 21 integrity crimp that held all the parts together.
- 22 Q What part was being crimped?
- 23 A I'm not exactly sure of the technology here. If I could
- 24 refer to Exhibit Number 57 I believe the operation that was
- 25 in question was the crimp between the cup and the harpoon

- 1 model year Lincoln Town Car?
- 2 A I'm not sure what you mean by the term "useful life."
- 3 Q Well, let me ask this. Is there -- with a speed control
- 4 deactivation switch, is there a time at which the speed
- 5 control deactivation switch would be considered too old and
- 6 need to be replaced?
- 7 A Again, I'm not sure what you're asking me.
- 8 Q Does Ford make a recommendation to 1993 model year Lincoln
- 9 Town Car owners about a time frame in which they should
- 10 consider replacing the speed control deactivation switch?
- 11 A No.
- 12 Q Do you have an opinion on what the useful life of a
- 13 speed control deactivation switch is?
- 14 A No.
- 15 Q You mentioned manufacturing period of time as a contributing
- 16 factor in failure of the switches. What did you mean by
- 17 that?
- 18 A Part of the recall investigation determined that
- 19 there was a question with a crimping operation in the part
- 20 just as it was -- about the time that same as it was being
- 21 introduced on the Town Car and they felt that that was a
- 22 possible contributing factor to the recall situation.
- 23 Q What was the issue with the crimping operation that caused
- 24 concern?
- 25 A I'm not certain exactly of the details, but it appeared from

- 1 pieces that are shown in this section view.
- 2 Q And what was it about the crimp that was being performed by
- 3 the equipment at Town Instruments that was producing
- 4 inconsistency?
- 5 A I'm not sure of the details.
- 6 Q Was it not working correctly?
- 7 A As I said, they then ran the required testing to verify that
- 8 it worked correctly and that the parts exhibited leakage.
- 9 Q Do you know if the switch in the Midwestern Town Car was
- 10 manually crimped or was it crimped automatically by a
- 11 machine?
- 12 A I don't know for certain.
- 13 Q Are there other crimping operations other than the one that
- 14 you've identified between the cup and the harpoon?
- 15 A I believe there is another one between the -- again, I want
- 16 to use the right terms on this picture here -- between the
- 17 crimp ring and the -- it actually traps the -- this crimp
- 18 ring traps the harpoon and the switch base together, that's
- 19 the final operation, is to crimp those two halves of the
- 20 switch together with the crimp ring.
- 21 Q Do you know if that crimp that holds the two halves of the
- 22 switch together was done manually or was it done
- 23 automatically by equipment back in 1993?
- 24 A I'm not certain.
- 25 Q Or for 1993 model year Lincoln Town Car, do you know?

- 1 A No.
- 2 Q And it's my understanding then that the recall was intended
- 3 to encompass speed control deactivation switches that had
- 4 been crimped during the manufacturing process at Times
- 5 Instruments electronically or by some machine as opposed to
- 6 being manually crimped; is that right?
- 7 A I'm not certain exactly what the details were of their
- 8 decision process and how it relates to that particular
- 9 operation.
- 10 Q Mr. McLAREN testified that he never used his speed
- 11 control. In your opinion -- or do you have an opinion how
- 12 that would affect the life of the speed control deactivation
- 13 switch?
- 14 A Yes.
- 15 Q Can you state what your opinion is?
- 16 A I don't think that using or not using the speed control
- 17 would have much of an effect on this component.
- 18 Q And why not?
- 19 A Because the speed control function only requires a very
- 20 small amount of current to pass through the switch and so if
- 21 the speed control is not used, the switch is still just
- 22 doing the same thing it always does, it's just doing them
- 23 electrically.
- 24 Q Sitting there electrically energized; right?
- 25 A Um-hmm. Yes.

- 1 they begin to deteriorate?
- 2 Let me ask it this way. Is deterioration of the Kapton
- 3 seals an issue in the operation of the speed control
- 4 deactivation switch?
- 5 MS. McLAREN: Object to the form.
- 6 A Again, I'm not quite sure --.
- 7 BY MR. DUNFORD:
- 8 Q Can you answer the question? You don't understand it?
- 9 A I don't understand what you're asking me.
- 10 Q Have you heard that the Kapton seals crack and deteriorate
- 11 and allow brake fluid from the mechanical side of the switch
- 12 into the electrical side?
- 13 A Yes.
- 14 Q Have you investigated that issue in any of the fires that
- 15 you've been involved with where a failure of the speed
- 16 control deactivation switch is alleged to have caused the
- 17 fire?
- 18 A I have looked at Kapton seals and switches in those types of
- 19 alleged cases, yes.
- 20 Q And your opinions are based on the visual appearance of the
- 21 Kapton seals; is that correct?
- 22 A If there is enough of the Kapton seals remaining to make
- 23 that kind of an assessment.
- 24 Q Have you ever done any testing or asked anyone to do any
- 25 testing of the Kapton seals following a fire?

- 1 Q Back to Exhibit 9, do you know what's being referred to as
- 2 plastic parameters? That's point number 7.
- 3 A Not for certain, no.
- 4 Q Who at Ford is most knowledgeable about Exhibit 9 and its
- 5 preparation?
- 6 MS. McLAREN: Object to form and foundation.
- 7 BY MR. DUNFORD:
- 8 Q If you know.
- 9 A I wouldn't know for sure.
- 10 Q Do you know who participated on the team with the Times
- 11 Instruments folks?
- 12 A I think I mentioned Fred Porter.
- 13 Q And Mister?
- 14 A Yes.
- 15 Q I'm just going to do this just for example, okay? Forgive
- 16 me, but I'm going to ask you about each one of them.
- 17 Do you know what is being referred to in point 2,
- 18 Kapton life?
- 19 A Again, not specifically.
- 20 Q Do you know whether there's an issue as to the length of
- 21 service time that the Kapton seals provide before they begin
- 22 to deteriorate in the speed control deactivation switch?
- 23 A I'm sorry, do I know what?
- 24 Q Do you know if there is a length of time that the Kapton
- 25 seals can be expected to be present in the switch before

- 1 A I don't believe so.
- 2 Q Item 3 of Contributing Factors is continuous power. Do you
- 3 know what that refers to?
- 4 A Again, I'm guessing the term has some very definite ideas
- 5 been. Continuous power is evidently the fact that it's
- 6 powered by battery continuously.
- 7 Q And we've talked about that.
- 8 Point 4 says switch orientation. Do you know what
- 9 that's referring to?
- 10 A Again, just, you know, translating the words, it appears
- 11 they mean the way it's mounted.
- 12 Q Horizontally, vertically, or the 45-degree angle?
- 13 A Something of that nature, yes.
- 14 Q Do you have an opinion whether mounting the switch at a
- 15 45-degree angle in a model year 1993 Lincoln Town Car has
- 16 any impact on the functioning of the speed control
- 17 deactivation switch?
- 18 A Yes, I do.
- 19 Q And what is that?
- 20 A That it doesn't.
- 21 Q Do you have an opinion about whether the orientation of the
- 22 switch at a 45-degree angle in a 1993 model year Lincoln
- 23 Town Car affects the failure rate of the switch?
- 24 A Yes, I do.
- 25 Q And what is that?

1 A That's correct.
 2 Q And why is it your opinion that the orientation of the
 3 switch does not affect the failure rate?
 4 A There is no indication in warranty data that that's an
 5 issue.
 6 Q So you've relied on other people and their work to reach
 7 that conclusion; is that right?
 8 A Yes.
 9 Q Number 5 on Exhibit 9 says current capability. Do you know
 10 what that's referring to?
 11 A No.
 12 Q Number 6 refers to grounded interrupt. Do you know what
 13 that's referring to?
 14 A Again, the interrupt portion of the switch is grounded, that
 15 seems to be a statement of fact.
 16 Q And I think I asked you directly about plastic connectors, do
 17 you know what that's referring to?
 18 A Yeah, that's a little too general a statement.
 19 MR. DUNFORD: Did you want to take lunch?
 20 MR. McLAREN: Good break time? That would be good.
 21 yeah.
 22 (Deposition resumed for lunch at 12:12 p.m.)
 23
 24 (Deposition resumed at 12:50 p.m.)
 25 (Hoffman Exhibit No. 10 was marked for identification.)

1 MS. McLAREN: Just to make a clarification for the
 2 record, Exhibit 10 does in fact contain some handwritten
 3 notes and I'm not sure whether it's clear whether the
 4 witness is saying that the handwritten notes are also
 5 incorporated within the document as he knows it to be part
 6 of the White Paper.
 7 BY MR. DUNFORD:
 8 Q Do you know one way or another whether the handwriting
 9 appears on the document included in the White Paper?
 10 A No.
 11 Q Do you know if there's any other failure scenarios of the
 12 speed control deactivation switch other than that outlined
 13 in Exhibit 10?
 14 A No.
 15 Q Have you ever heard of water ingress causing a failure of a
 16 speed control deactivation switch other than the 1993 model
 17 year Buick Wildcat van that we looked at on Exhibit 17?
 18 A No.
 19 (Hoffman Exhibit No. 11 was marked for identification.)
 20 BY MR. DUNFORD:
 21 Q Can you look at Exhibit 11, please? This consists of two
 22 pages. They're numbered consecutively, so I want them and
 23 stapled them together. And the question is whether you have
 24 seen these two pages before?
 25 MS. McLAREN: Again, for the record, these are notes

1 BY MR. DUNFORD:
 2 Q Mr. Hoffman, welcome back from lunch. We'll go back on the
 3 record.
 4 I've handed you what has been marked as Exhibit 10 to
 5 your deposition. Have you seen that document before?
 6 A Yes, sir.
 7 Q And where have you seen it before?
 8 A I believe it's part of the recall team's work. And it's
 9 part of that White Paper.
 10 Q So is that included in the 14-D list?
 11 A I'm not sure if it's actually attached to it or not. I know
 12 it's part of that work.
 13 Q Do you know whose handwriting appears on Exhibit 10?
 14 A No, sir, not certain.
 15 Q The document is entitled Summary; is that correct?
 16 A Yes, sir.
 17 Q And would you agree that the document refers to or describes
 18 the scenario that leads to failure of the speed control
 19 deactivation switch?
 20 A That's what it intends to do, yes.
 21 Q Do you have any information that would contradict the
 22 conclusion of the recall team: of the speed control
 23 deactivation switch failure scenario as outlined in
 24 Exhibit 10?
 25 A No.

1 markings on it. I would ask that it be clarified whether
 2 we're talking about before or after the handwritten notes.
 3 A I don't recognize the handwriting notes. I do recognize the
 4 basic documents, the two pages.
 5 BY MR. DUNFORD:
 6 Q The first page of Exhibit 11 is titled CLS Report 9804105;
 7 is that correct?
 8 A Yes, sir.
 9 Q And what does that refer to?
 10 A The CL is Central Lab. I believe the S is Services, but
 11 I'm not certain. Central Lab Services.
 12 Q And it also says "Minneapolis Switch"; is that correct?
 13 A Yes.
 14 Q What is your understanding of what the Minneapolis switch is?
 15 A It is a switch that was brought to the attention of the
 16 recall team during their work from a dealership in Minneapolis,
 17 in the Minneapolis, Tennessee, area, and that switch was sent to
 18 the recall team and this is the result of a tear-down and
 19 analysis of that switch that was done by Ford's Central Lab
 20 Services.
 21 Q Do you know when the tear-down and analysis was done?
 22 A No, not specifically.
 23 Q Are you using the tear-down and analysis performed by Ford's
 24 Central Lab on the Minneapolis switch as a basis for your
 25 opinions in this case?

- 1 A No.
- 2 Q Does the test-down and analysis of the Memphis switch by
- 3 Ford's lab help you in any way in determining whether the
- 4 speed control deactivation switch in the Memphis car was
- 5 involved in causing the fire?
- 6 A It's one piece of data in a large volume of data.
- 7 Q Do you know Steve LaRoche?
- 8 A Yes.
- 9 Q Who is Steve LaRoche?
- 10 A He is a - one of the scientists in our Criminal Laboratory.
- 11 Q Do you know what his background and training is?
- 12 A No.
- 13 Q Have you communicated with him about his examination of the
- 14 Memphis switch?
- 15 A No, I don't believe I've ever talked to Steve about this.
- 16 Q Have you communicated with Steve LaRoche about any of the
- 17 fires that you've investigated where it is alleged a brake
- 18 pressure switch had caused the fire?
- 19 A I don't believe so.
- 20 Q In your opinion, does the analysis and test-down of the
- 21 Memphis switch documented in Exhibit 11 match the scenario
- 22 that's outlined in Exhibit 10 or is it consistent with the
- 23 scenario?
- 24 A I believe there is consistency between Exhibit 10 and
- 25 Exhibit 11, yes.

- 1 was printed.
- 2 Q And what's the date of the document then?
- 3 A The next line below that says in the right, it says Date
- 4 and then, 12 -- "I can't quite make it out on this copy, I
- 5 think it's an 18, 98.
- 6 Q Thank you. And it refers to the NHTSA letter PB98-055; do
- 7 you see that?
- 8 A Yes.
- 9 Q And it also says a total of 89 warranty claims are
- 10 identified in AWS.
- 11 What does AWS stand for?
- 12 A Analytical Warranty System
- 13 Q Is that a computer system at Ford?
- 14 A Yes.
- 15 Q And what does it do?
- 16 A It maintains all of our warranty claims records for all of
- 17 the warranty service performed on the vehicles.
- 18 Q Do you know what the -- it says --
- 19 Would the 89 warranty claims then be referring to
- 20 warranty claims involving the speed control deactivation
- 21 switch?
- 22 A The statement in this document says:
- 23 "A total of 89 warranty claims are identified in
- 24 AWS on the FZVY-09924-A for 1992 and 1993 Taurus Cars."
- 25 Q And that's the part number for the switch; right?

- 1 Q Which documents the scenario of how this speed control
- 2 deactivation switch fails; is that right?
- 3 A What's that, Exhibit Number 10 you're talking about?
- 4 Q Yes.
- 5 A Yes.
- 6 Q And that Exhibit 11 is consistent with that scenario?
- 7 A Yes.
- 8 (Motion Exhibit No. 12 was marked for identification.)
- 9 BY MR. DUNFORD:
- 10 Q I'm going to hand you what has been marked as Exhibit 12 and
- 11 ask you if you'd review that, please.
- 12 A Okay.
- 13 Q You had a chance to review Exhibit 12?
- 14 A Yes.
- 15 Q Have you ever read that document before?
- 16 A I've not seen.
- 17 Q It consists of three pages, correct?
- 18 A Yes.
- 19 Q It's dated January 5th, 1993, do you see that?
- 20 A Yes.
- 21 Q And it refers to brake pressure switch investigation;
- 22 correct?
- 23 A I'm sorry, what date did you say?
- 24 Q At the very top.
- 25 A No, that's not the date of the document, that's the date it

- 1 A The service part number, yes.
- 2 Q What is the CQES report referred to in the next paragraph?
- 3 A That is -- I believe the acronym stands for Customer Quality
- 4 Information System. That is another data base that we use
- 5 at Ford.
- 6 Q Is that generated by the Ford dealer?
- 7 A I don't know. I think Ford Customer Service Division
- 8 maintains it.
- 9 Q Have you reviewed those two CQES reports mentioned in
- 10 Exhibit 12?
- 11 A I don't know based on this, there's not enough information.
- 12 I don't think so.
- 13 Q Page two of Exhibit 12 refers to X-rays taken by Steve
- 14 LaRoche, Nance LaRoche, and Clark Thomas on 12/17/1998.
- 15 Have you ever seen those X-rays?
- 16 A I don't think so.
- 17 Q Have you seen original photographs and the part that are in
- 18 Steve LaRoche's possession?
- 19 A Again, I don't think so.
- 20 Q Can I ask you, the Memphis switch that's referenced in
- 21 Exhibit 11, did you ever personally examine it?
- 22 A I don't believe I ever saw the Memphis switch, just the
- 23 report.
- 24 Q Did you see any X-rays or photographs of the switch that
- 25 accompanied the report?

1 A I don't recall exactly what I reviewed or saw.
 2 Q Do you know if there are any X-rays of the Memphis switch?
 3 A I'm not certain. I assume that's what this is referring to.
 4 MR. DUNFORD: Is it possible to get copies of them?
 5 MS. McLAREN: I'll take on that request.
 6 MR. DUNFORD: That was a request, I would like to get
 7 copies of photographs or X-rays of the Memphis switch.
 8 BY MR. DUNFORD:
 9 Q Page two of Exhibit 12 lists other vehicles that use the
 10 brake pressure switch. Do you see that down under -- at the
 11 bottom of the page, point 57
 12 A Yes, sir.
 13 Q And it shows the '93 Lincoln Town Car and other vehicles
 14 that have the same brake pressure switch in the model years
 15 indicated.
 16 Does that refresh your recollection about other
 17 vehicles that have the same brake pressure switch?
 18 A Yes.
 19 Q Have you ever heard of the Reddick switch, a switch referred
 20 to as the Reddick switch?
 21 A I don't believe so.
 22 (Hoffman Exhibit No. 13 was marked for identification.)
 23 BY MR. DUNFORD:
 24 Q I'm going to hand you what has been marked as Exhibit 13 and
 25 ask you to review that, please.

1 A I don't recall if that ever came up in the conversation I
 2 had with Fred.
 3 Q What about with Mr. Messing?
 4 A No.
 5 Q Is the water ingestion scenario that Steve LaRoche
 6 describes in Exhibit 13 different than the scenario that we
 7 looked at earlier on Exhibit 10?
 8 MS. McLAREN: Object to the form and foundation.
 9 A I can't answer that question. I don't know what
 10 Mr. LaRoche was looking at when he wrote those words.
 11 BY MR. DUNFORD:
 12 Q Well, you can look at Exhibit 10 and see if it's describing
 13 the failure scenario involving the ingestion of water or
 14 the leaking of brake fluid, can you tell by looking at
 15 Exhibit 10 which it's referring to?
 16 A I'm sorry, I don't understand what you mean.
 17 Q Okay. If you look at the scenario shown or outlined on
 18 Exhibit 10, can you tell whether that scenario was referring
 19 to ingestion of water or is it referring to leaking of
 20 brake fluid?
 21 A Exhibit Number 10, the first statement listed there says:
 22 "Contamination enters switch cavity through
 23 perhaps Kapton seal or capacitor seal."
 24 Q So what conclusion do you draw from that? In other words,
 25 is that --

1 A Okay.
 2 Q You've had a chance to review Exhibit 13?
 3 A Yes.
 4 Q And have you seen this document before?
 5 A I don't recall.
 6 Q It's dated April 20th of 1999; is that correct?
 7 A The last entry in the sequence was April 20th, 1999, yes.
 8 Q It appears to be a sequence of e-mails; is that correct?
 9 A Yes, sir.
 10 Q Between Steve LaRoche and Fred Porter?
 11 A That's correct.
 12 Q And it appears that Steve LaRoche states that there appear
 13 to be two modes of failure occurring; is that right? This
 14 is page two.
 15 A That is what that particular portion of that particular note
 16 says.
 17 Q And one failure mode involves leakage of brake fluid and the
 18 other failure mode involves -- that he's describing involves
 19 ingestion of water into the switch cavity; is that correct?
 20 A That is what he has described here, yes.
 21 Q Have you ever talked to Steve LaRoche about these two modes
 22 of failure that he describes in Exhibit 13?
 23 A I don't believe so.
 24 Q Did you ever talk with Fred Porter about the two modes of
 25 failure that Steve LaRoche describes?

1 A I don't draw a conclusion from this scenario.
 2 Q Well, let me ask you this then. Does it help you answer the
 3 question?
 4 A No.
 5 Q So you can't tell what scenario it's describing or which
 6 failure mode?
 7 A It appears that the statement on Exhibit 10 is consistent
 8 with the statement in Mr. LaRoche's e-mail.
 9 Q Regarding which failure mode? I mean, that's the question,
 10 is whether it refers to leakage of brake fluid through the
 11 Kapton seal and an apparent seal being set up between the
 12 contacts and the steel cup or if it refers to ingestion of
 13 water into the switch cavity with no brake fluid leakage and
 14 no evidence of a seal?
 15 A That's what it says. I'm not sure if you've asked me a
 16 question.
 17 Q So my question is if you look at the scenario shown on
 18 Exhibit 10, can you tell whether Exhibit 10 is referring to
 19 the leakage of brake fluid through the Kapton seal or is it
 20 referring to ingestion of water into the switch cavity with
 21 no brake fluid leakage?
 22 A Oh, I -- your question is with Exhibit 10 because it doesn't
 23 mention which fluid is involved? Is that --
 24 Q I'm just --
 25 A -- what you're asking?

1 Q -- trying to understand what scenario, what the scenario
2 shows on Exhibit 10 is documenting. Because we've got
3 Mr. LaRocche identifying two failure modes.
4 A And the scenario document, Exhibit 10, is also referring to
5 two possible failure modes.
6 Q And how do you reach that conclusion?
7 A Because of statement one on Exhibit Number 10, it says
8 contamination enters switch cavity through perforated Kapton
9 seal or connecting seal, two different separation lines.
10 Q Is there any reference in the Exhibit 10 scenario to a seal
11 being damaged?
12 A Not in that exact verbiage, but item number 2 and item
13 number 3 would be consistent, just a different set of terms.
14 Q Before today, were you aware that Steve LaRocche had
15 identified two modes of failure concerning in speed control
16 deactivation switches?
17 MS. McLAREN: Object to the form.
18 A I don't recall having a lot of knowledge about what Steve
19 LaRocche thought or didn't think.
20 BY MR. DUNFORD:
21 Q Do you know Michael Salama?
22 A Yes.
23 Q Who is he?
24 A He is an engineer in Electrical and Electronic Systems
25 Engineering.

1 Q In the first e-mail down at the bottom of the page in May of
2 1999 from Michael Salama, it lists some dollars and cents
3 figures there. Do you see those?
4 A Yes.
5 Q Do you know what those are?
6 A Not specifically, no.
7 Q Is it the cost of the switch?
8 A I don't know.
9 Q Do you know if it's how much would be saved if the switch
10 was deleted?
11 MS. McLAREN: Object to the form of the question.
12 Asked and answered. He's already said he doesn't know.
13 A It's really not sure. That's what it is -- it appears like it's
14 part of the discussion about deletion of the switch.
15 BY MR. DUNFORD:
16 Q Do you know what Mr. Salama meant when he said -- or when
17 he wrote, "I personally, I would not cry if the 99324 went
18 away"?
19 MS. McLAREN: Object to the form of the question and
20 introduction.
21 BY MR. DUNFORD:
22 Q I asked if you knew. Do you know?
23 A No, I do not.
24 Q Have you ever heard of the Econ Rouge linker?
25 A No.

1 Q Do you know if he was involved with the recall itself?
2 A I'm not sure.
3 Q Have you ever spoken with Mr. Salama about the speed
4 control deactivation switch?
5 A No.
6 (Offense Exhibit No. 14 was marked for identification.)
7 BY MR. DUNFORD:
8 Q I'm going to lead you what has been marked as Exhibit 14.
9 A Okay.
10 Q You've had a chance to review Exhibit 14?
11 A Yes.
12 Q Have you seen that document before today?
13 A I don't believe so.
14 Q Do you know what the cost reduction idea mentioned in the
15 attached PWCPS goes refers to, do you see that statement?
16 A It refers to a cost reduction idea.
17 Q Do you know in what?
18 A The note that's physically beneath that is actually the
19 first one in the series of notes, and in looking at that one
20 it is titled "Delete cruise control deactivation switch." It
21 appears like one of the vehicle teams was considering
22 changing the switch or removing it from the vehicle as a
23 cost reduction idea.
24 Q Do you know if that was ever done?
25 A I don't believe so.

1 Q Have you ever heard that the southern area of the United
2 States may be the worst wear-out environment for speed
3 control deactivation switches?
4 A Have I heard that?
5 Q Yeah.
6 A No.
7 Q Are you aware of any informal testing done at Ford on speed
8 control deactivation switches?
9 A No.
10 Q If there was any done, would it be included in the -- do you
11 recall seeing it in the White Paper?
12 A No.
13 Q Are you aware of any chemical analysis performed by Ford on
14 brake pressure switches?
15 A Mr. LaRocche's report is one of the earlier exhibits that
16 you had.
17 Q Is that the extent of it?
18 A As far as in the documents that you've shown me so far.
19 Q Are you aware of any cyclic life tests that have been
20 performed on speed control deactivation switches?
21 A You mean other than the specification test or --
22 Q Yes.
23 A Again, there may have been some reference in the White Paper
24 to some of that testing, that type of testing.
25 Q Do you know Steve Rimmer?

and to go upward and downward,
up.

control deactivation switch located in
Car?

is fire.

If the vehicle contains the brake pressure
proportioning valve, on the
assembly which is mounted on the
front of the vehicle between the engine
and rearward in the vehicle just
the dash panel or where the front rail
body of the vehicle.

was confirmed when you examined the

was found when I investigated it initially
it highly probable the part was in the
position.

ion in the area of the switch, there's
connectors, hoses, that in your opinion
is not would facilitate a spread of a fire
side the switch; is that correct?
is guaranteed, that heat can affect those

be wiring, the wiring connectors and the
is described, are there also fluids that are
the area of the speed control deactivation
and facilitate the spread of a fire?

those fluids?

gasoline, and power steering fluid. And engine

the master cylinder located in comparison to the
of deactivation switch?

is cylinder is above the switch and forward in the

a brake fluid in it; correct?

the fluid reservoir mounted on top of it, yes,
could be available in a fire originating in a speed
deactivation switch to facilitate the spread of the
is right?

side, yes.

as ever come up with a scenario, Mr. Hoffman, in which
explained how a fire which you believed on a
stable-than-not been originated at a speed control
dash switch spread through the engine compartment of
is Town Car?

McLAREN: Object to the format of the question.

is sure what you're talking.

1 MS. McLAREN: Are you talking about in general or a
2 specific case where he's determined how it spread?

3 BY MR. DUNFORD:

4 Q In general, have you determined a scenario or developed a
5 scenario to explain how a fire originating at a speed
6 control deactivation switch spreads through the engine
7 compartment of a Lincoln Town Car?

8 MS. McLAREN: Object to the form.

9 A I guess the question, in general, yes, I've thought about
10 the scenario.

11 BY MR. DUNFORD:

12 Q Could you describe the scenario to me that you've thought
13 about?

14 A Well, it's basically what we were just discussing, that the
15 polymer materials, the plastic and the rubber materials,
16 tend to have the lowest melting point, they would tend to be
17 the first components affected. The brake fluid reservoir is
18 the next probable fuel source since it is above the point
19 where the switch is mounted, so the heat would tend to rise
20 upward and gather around that reservoir. And then the brake
21 fluid and possibly also gasoline, because the gasoline, the
22 fuel delivery system has two flexible lines that connect the
23 engine to the frame of the vehicle which are just forward
24 and slightly above the switch and they have some small
25 amount of gasoline in them at all times. So it really

1 depends on some environmental - you know, is the vehicle
2 indoors or outdoors, is there any kind of wind or, you know,
3 air circulation that may cause the heat to move in slightly
4 different directions, but it would seem that the flammable
5 fluids would probably be the next thing to be involved in
6 the fire.

7 Q Have you seen fires involved in fires that you believe on a
8 never-probable-but-not been originated in a defective speed
9 control deactivation switch?

10 A Again, I'm not sure if I can specifically point to one of
11 probable cause, but if you are suggesting a fire that starts
12 in the driver's side of the engine compartment, the fire is
13 mounted directly adjacent to that area and the rubber
14 material of the fire is combustible. I have seen Town Car,
15 I have inspected vehicles where the fires are burned in the
16 fire. I'm not sure if that answers the question.

17 Q So you're satisfied that a fire originating in the driver's
18 side of the engine compartment can spread through the engine
19 compartment until it ignites the driver's side tire; is that
20 correct?

21 A Yes.

22 Q Do you know what the ignition temperature of the fire is?

23 A No.

24 Q Have you investigated any fires where you have seen the fire
25 spread from a vehicle to a structure?

one of that fire is before the recall; is that right?

from Exhibit No. 3 was marked for identification.)

(UPFORD:

found you what has been marked as Exhibit 3 and have

it, please.

you had a chance to review Exhibit 3?

is sure that document before?

McLAREN: I'm going to mention Mr. Hoffman before

any questions about that document that there is

is pending in Federal Court in Georgia by the

ing damage or a result of a defect in the speed

deactivation switch and I would suggest that

any comments that he has would be afforded

the work product election. That would be

to waive. Go ahead and answer the question

Q: Did you repeat the question?

JED:

was coming. I think I asked you if you had seen

before, Exhibit 3?

MSK: What does that have to do with what you

SEN: Well, my question to you, Mark, was that

reputed information if you indeed have
and your opinions have not been made
as listed as a consultant, as you often are,
if anything you may have in any about the
lower claim would be privileged and you
the questions, but the question about have
must believe does not really tell into

: Okay, I just wanted to be sure I

Ignition was all about.

document.

the Court case?
only involved in the case, you
Crown brought that case individually on
it's a subrogation claim?
is it part of a subrogation claim.
opinion in that case?

had as a satisfying report in that

the fire in the Crown vehicle occurred

not by Ford?

that what that document says.

1 (Hoffman Exhibit No. 4 was marked for identification.)
 2 BY MR. DUNFORD:
 3 Q Let me hand you what has been marked as Exhibit 4 and ask
 4 you to review that, please.
 5 Have you seen Exhibit 4 before?
 6 A No, sir.
 7 Q And you've had an opportunity to review it?
 8 A Yes, sir.
 9 Q Are you familiar with a fire in a Lincoln Town Car owned by
 10 Don Bjelostich?
 11 A Is that the name that's on Exhibit 4?
 12 Q I tried to pronounce it.
 13 A I tried to understand it. I do not recognize that name at
 14 all.
 15 Q Did you have any involvement in investigating the fire
 16 that's referred to in Exhibit 4?
 17 A No, sir.
 18 Q Now, Allstate is the named plaintiff in this lawsuit arising
 19 from the fire at the McJannet home.
 20 Do you know of any other lawsuits brought by Allstate
 21 against Ford Motor Company alleging that a defective speed
 22 control deactivation switch caused a fire?
 23 MR. McLAREN: Object to the form of the question.
 24 Other than the fire that you've just talked about?
 25 MR. DUNFORD: There's three, I believe. That I don't

1 Q What you're showing me is a drawing that was apparently
 2 printed on May 24th of 1999 by Mark Hoffman; is that
 3 correct?
 4 A Yes.
 5 Q And can you identify the drawing for the record?
 6 A This is the Ford released drawing for the speed control
 7 deactivation switch assembly.
 8 Q Do you know who prepared the drawing?
 9 A Yes.
 10 Q And who prepared it?
 11 A Timm Instruments.
 12 Q And their name is on the drawing; is that correct?
 13 A Yes, sir.
 14 Q And we'll mark the drawing that you referred to as Exhibit 5
 15 for your deposition, okay?
 16 A Okay.
 17 (Hoffman Exhibit Nos. 5 and 6 were marked for
 18 identification.)
 19 BY MR. DUNFORD:
 20 Q I'm going to hand you two pages that I've marked as
 21 Exhibit 6 to your deposition and have you review those,
 22 please.
 23 A (The witness complied.)
 24 Q Have you had a chance to review Exhibit 6?
 25 A Yes, sir.

1 know which of them are or aren't in suit, I have no idea,
 2 so it's just an open question.
 3 A Yes.
 4 BY MR. DUNFORD:
 5 Q How many?
 6 A That I couldn't tell you.
 7 Q Are you aware of lawsuits brought by insurance companies
 8 other than Allstate against Ford Motor Company alleging that
 9 a defective speed control deactivation switch caused a fire?
 10 A Yes.
 11 Q What other companies are you aware of that have brought
 12 claims against Ford Motor Company?
 13 A The ones that come to mind are State Farm and Farmers.
 14 Farmers Insurance I think is the -- I'm not exactly sure of the
 15 proper name, Farmers Insurance.
 16 Q But Allstate is not the only insurance company that's
 17 brought claims against Ford Motor Company alleging that a
 18 defective speed control deactivation switch caused a fire?
 19 A No.
 20 Q Do you have in your file, Mr. Hoffman, a drawing of the
 21 speed control deactivation switch that was installed in the
 22 McJannet vehicle?
 23 A I have a copy of the part drawing, the Ford part drawing.
 24 Q Could you pull that out of your file, please?
 25 A (The witness complied.)

1 Q Have you seen that document before?
 2 A Yes, sir.
 3 Q Would you describe for the record what it is, Mr. Hoffman,
 4 please?
 5 A It is a letter from Ford's Environmental and Safety
 6 Engineering Staff to the National Highway Traffic Safety
 7 Administration informing them that Ford was planning on
 8 recalling certain 92/93 Town Car, Crown Victoria, and
 9 Grand Marquis vehicles.
 10 Q And what's the date of the letter?
 11 A May 13th, 1999.
 12 Q And is this letter in response to the National Highway
 13 Traffic Safety Administration inquiry concerning allegations
 14 of speed control deactivation switch fires?
 15 MR. McLAREN: Object to the form.
 16 A This letter is a step in the procedure that are outlined in
 17 the National Highway Traffic Safety Administration
 18 procedures and it was in response to an investigation that
 19 was initiated by NHTSA, yes.
 20 BY MR. DUNFORD:
 21 Q I got my initials mixed up, sorry. Excuse me, this is my
 22 only copy.
 23 Who is L. W. Camp?
 24 A The letterhead shows that at that time Lou Camp was the
 25 Director of the Automotive Safety Office, which is part of

1 our Environmental and Safety Engineering Staff.
 2 Q Were you consulted in the preparation of Exhibit 6?
 3 A No.
 4 Q Was it R. A. Nevi? Is that Ne-vi?
 5 A Ray Nevi is a manager in the Automotive Safety Office who
 6 reports to Mr. Camp, or reported to Mr. Camp at this time.
 7 At the time of the letter, I should say, I'm pointing at
 8 the date, that's not good.
 9 Q Does Ford consider the recall of certain model year Lincoln
 10 Town Car vehicles to be or to have been voluntary?
 11 MR. McLAREN: Object to the form. Mr. Hoffman is here
 12 testifying as an expert witness about certain aspects of
 13 this particular fire. He has not been asked to be present
 14 as a 302(b)(6) witness to testify about what Ford does or
 15 does not say and I would object to this line of questioning
 16 in its entirety.
 17 But if you can answer the question, Mr. Hoffman, you
 18 should certainly do that.
 19 A This is a standard procedure that the auto industry uses
 20 with the National Highway Traffic Safety Administration.
 21 That's why you've got motions on this letter that have
 22 mentioned and letter designations on them, those are answers
 23 to direct motions in the procedure that we all follow.
 24 BY MR. DUNFORD:
 25 Q Do you know if Ford considers this recall to have been

1 by Ford.
 2 Do you know if there's a list or compilation of the
 3 sixty-four reports of underhood fires in Lincoln Town Cars
 4 that were identified by Ford?
 5 A I don't have any knowledge of that, no.
 6 Q Has that ever been made available to you?
 7 A I don't believe so.
 8 Q I guess that follows if you don't have any knowledge of it.
 9 A I'm sorry.
 10 Q You're fine. The next sentence says subsequent studies,
 11 including vehicle inspections and owner interviews, found
 12 additional incidents which appeared to have resulted from
 13 electrical overheating of the switch and which exhibited
 14 prior vehicle symptoms and then it lists some of those
 15 symptoms.
 16 My question is have you -- do you have any knowledge of
 17 the subsequent studies that are referred to in Exhibit 6?
 18 A As I mentioned earlier in the deposition, the recall team
 19 that was convened to investigate inquiry PH06-035 from
 20 NHTSA, they ended up publishing a 14-D or White Paper
 21 report, as is our procedure, and I am suggest -- I am
 22 suggesting that that statement refers to that compilation of
 23 work.
 24 Q Are you aware of any other subsequent studies other than the
 25 publication of the 14-D report that were done by Ford?

1 voluntary?
 2 MR. McLAREN: Object to the form of the question.
 3 A I do believe that it was a voluntary recall.
 4 BY MR. DUNFORD:
 5 Q I want you to refer to page two of Exhibit 6. It says there
 6 was a NHTSA inquiry concerning underhood fires in twenty-one
 7 1992 and 1993 model year Lincoln Town Car vehicles; do you
 8 see that?
 9 A Yes, sir.
 10 Q Is there a list subsequent of those twenty-one fires that are
 11 referred to in the NHTSA inquiry?
 12 MR. McLAREN: Object to the form.
 13 A I don't know. I would assume NHTSA would have them, that's
 14 their list.
 15 BY MR. DUNFORD:
 16 Q Have you ever seen a compilation of the twenty-one fires
 17 referred to in the NHTSA inquiry?
 18 A No.
 19 Q The next one, it says over the course of the investigation,
 20 six additional twenty-six reports were identified by NHTSA.
 21 Do you have any knowledge about whether there's a list
 22 or a compilation of those twenty-six additional reports?
 23 A I have no knowledge of a list of that nature, no.
 24 BY MR. DUNFORD:
 25 Q The sentence continues, sixty-four reports were identified

1 MR. McLAREN: Object to the form of the question.
 2 A As I say, the 14-D is the standard document. If more
 3 documentation is required, you basically go back and update
 4 your 14-D, it's a living document.
 5 BY MR. DUNFORD:
 6 Q Page two of Exhibit 6 says laboratory analysis of switches
 7 returned from service showed internal brass field leads; do
 8 you see that?
 9 A Yes, sir.
 10 Q Do you know if, having read the 14-D report, if it refers to
 11 the laboratory analysis of switches that's mentioned in that
 12 sentence on page two of Exhibit 6?
 13 MR. McLAREN: Object to the form.
 14 A Again, off the top of my head without actually looking at
 15 the document, I want to recall that there was at least one
 16 switch that the recall team was able to recover. As a
 17 matter of fact, I think they called it the Memphis switch
 18 because it was found in Memphis, Tennessee, and I do believe
 19 it was discussed in the 14-D, as I recall.
 20 BY MR. DUNFORD:
 21 Q The next sentence says -- well, let me ask this.
 22 Other than the examination or testing of the Memphis
 23 switch, are you familiar with any other laboratory analysis
 24 of switches returned from service that was performed by Ford
 25 Motor Company?

1 MS. McLAREN: Object to the form.
 2 A Yeah, I'm not familiar off the top of my head with the
 3 details. I know that there was other work of that nature
 4 done.
 5 BY MR. DUNFORD:
 6 Q Page two of Exhibit 6 states laboratory experiments
 7 demonstrated that internal leaks could result in internal
 8 corrosion in the switch which could create a conductive path
 9 to ground, ultimately resulting in sufficient internal heat
 10 to result in a fire. Do you see that?
 11 A Yes.
 12 Q Is that the conclusion reached in the 14-D document in your
 13 recollection?
 14 A I believe to the best of my recollection, yes, the 14-D is
 15 usually what generates this form letter, if you will, or
 16 this formal letter.
 17 Q Which is, you mean, Exhibit 6?
 18 A Yes.
 19 Q Have you done any testing yourself or been involved in any
 20 testing to corroborate or disprove the statement that I just
 21 read on Exhibit 6 referring to laboratory experiments
 22 demonstrating internal leaks could result in internal
 23 corrosion in the switch?
 24 A Not specifically to duplicate that kind of a failure mode,
 25 no.

1 Q So you've relied upon the investigating team that you
 2 referred to and the 14-D report; is that correct?
 3 A Pretty much, yes.
 4 Q Do you recall the date of the recall, Mr. Hoffman?
 5 A I believe it was May 20th.
 6 Q Of what year?
 7 A 1999. Actually, it may have been earlier than that. Don't
 8 hold me to the date.
 9 Q Well, I'll show you this document here and then --
 10 A This one doesn't help, since it just says May on it.
 11 Q But it says May of '99, right?
 12 A Yes.
 13 Q And the title of it is Service Recall Bulletin; is that
 14 right?
 15 A Yes, sir.
 16 Q Are you familiar with what the recall asked customers to do,
 17 the --
 18 A Yes.
 19 Q -- vehicle owners? What were the vehicle owners asked to do
 20 in the recall?
 21 A They were asked to bring their vehicle in to a dealership
 22 and have the vehicle inspected to make sure that it was part
 23 of the population and that the dealer would repair or
 24 replace their speed control deactivation switch at no charge
 25 to the customer.

1 Q Do you know if they replaced -- I'm sorry, I'll start over
 2 again.
 3 Do you know if the recall contemplated replacing a
 4 damaged speed control deactivation switch with one of the
 5 same design?
 6 MR. MELTON: Objection to the form of the question.
 7 A Since these vehicles were seven years old, it was replacing
 8 it with the 1999 inventory of component parts. You'd have
 9 to check all of the drawings between 1992 and 1999 to know
 10 if it was absolutely perfectly identical in design, but it
 11 did fit in the same location and perform the same function
 12 as far as those two questions of design we concerned.
 13 BY MR. DUNFORD:
 14 Q That you're satisfied that Exhibit 5 is the drawing depicting
 15 the actual switch that was installed in the McJannet Town
 16 Car; is that correct?
 17 A That is the Ford retained design that was originally
 18 installed in the McJannet vehicle.
 19 (Hoffman Exhibit No. 7 was marked for identification.)
 20 BY MR. DUNFORD:
 21 Q I'm handing you what has been marked as Exhibit 7 and ask if
 22 you'll review that, please?
 23 A (The witness complied.)
 24 Q Have you seen that document before? It consists of two
 25 pages.

1 A. The first page is a facsimile transcript that I have never
 2 seen before. The second page appears to be an excerpt
 3 from one of the earlier exhibits that you showed me, but
 4 it's -- it's kind of mangled up and incomplete due to the
 5 fixing process, I guess.
 6 Q Do you know Steven Noring?
 7 A Yes.
 8 Q Who is he?
 9 A He's?
 10 Q I apologize.
 11 A You had no way of knowing.
 12 Q Who is he?
 13 A Steven is a claims adjuster in our Office of the General
 14 Counsel.
 15 Q And I'm showing you just for comparison Exhibit 2, page two.
 16 A Yes, it appears like the portions of the document that are
 17 on Exhibit 7 appear to be page two from Exhibit 2, or a
 18 portion of it anyway.
 19 MR. McLAREN: Just for the record, Exhibit 4 -- or
 20 sorry -- Exhibit 7 with the fax cover sheet shows that the
 21 original transcript was four pages.
 22 MR. DUNFORD: And I agree there's only two there and I
 23 can't explain why the other two aren't there, I can't
 24 explain that today.
 25 BY MR. DUNFORD:

- 1 Q Do you know what Steven Norton's involvement was, if any, in
2 the brake control — I'm sorry — speed control deactivation
3 switch investigation?
4 A I have no idea.
5 Q Do you know who Rob Sharp is?
6 A No, that name doesn't ring a bell.
7 Q Are you familiar with any firm that occurred in Island
8 Lincoln-Mercury as referenced on page two of Exhibit 7?
9 A Other than making the connection today with the document
10 you've shown me, I don't recall if Island Lincoln-Mercury
11 has ever been involved in anything or not. The name does
12 ring a bell, though.
13 Q But you don't recall investigating either of the firms that
14 are mentioned in Exhibit 7 on page two?
15 A No.
16 (Offense Exhibit No. 8 was marked for identification.)
17 BY MR. DUNFORD:
18 Q I'm handing you what has been marked as Exhibit 8. Have you
19 seen this drawing before?
20 A I have seen versions of this drawing before. I must say
21 I've seen one with all these notes on it.
22 Q The top says Hydraulic Pressure Switch Cross Section; do you
23 see that?
24 A Yes.
25 Q So it's a speed control deactivation switch; is that right?

- 1 Q Does Ford have a scanning electron microscope?
2 A I'm not sure, I would assume so.
3 Q Have you ever used a scanning electron microscope as part of
4 your fire investigation?
5 A I don't believe so, but I wouldn't be certain.
6 (Offense Exhibit No. 9 was marked for identification.)
7 BY MR. DUNFORD:
8 Q I'm handing you what's been marked as Exhibit 9. Have you
9 seen that document before?
10 A I believe so, yes.
11 Q Where have you seen it before?
12 A I'm not sure originally. I notice it's got an
13 identification number on the bottom. It may have been part
14 of the discovery process in a previous case.
15 Q The document says Contributing Factors; is that correct?
16 A That's the title of this page, yes.
17 Q Do you know who prepared it?
18 A If I remember correctly, it was Toms Instruments speakers of
19 the recall team.
20 Q Did Toms Instruments have members on the recall team?
21 A Yes.
22 Q Do you know who they were?
23 A No, not offhand.
24 Q Do you know how many employees of Toms Instruments were on
25 the recall team?

- 1 A Yes.
2 Q Is this the type of speed control deactivation switch that
3 was installed in the McJannet Town Car?
4 A This is a cross-sectional sketch of a part of that nature,
5 yes.
6 Q Do you know if it's different in any way from the speed
7 control deactivation switch that was installed in the
8 McJannet Town Car?
9 A I don't believe so to this level of detail.
10 Q Do you know whose handwriting is present on this Exhibit 8?
11 A No.
12 Q Do you know what switch is being examined, in other words,
13 where the switch came from?
14 A MR. McJANNET: Object to the form.
15 A Taking as a single piece of paper out of context, I really
16 couldn't tell you.
17 BY MR. DUNFORD:
18 Q Do you know if Ford has contracted scanning electron
19 microscope review of switches returned from dealers?
20 A I don't know.
21 Q I see the letters "HBM" here on Exhibit 8. Do you see them?
22 A Yes.
23 Q And they're in someone's handwriting.
24 Do you know what they stand for?
25 A No, I don't.

- 1 A Not exactly, no, I don't recall.
2 Q Do you know if Toms Instruments contributed financially to
3 the cost of the recall?
4 A No, I don't know for certain.
5 Q This document, Contributing Factors, lists escamator seal,
6 Kaptan life, continuous power, switch orientation, current
7 capability, grounded harness, and plastic parameters.
8 Is it your understanding that this document is an
9 attempt to list the factors that contributed to the failure
10 of speed control deactivation switches?
11 A No, it is not.
12 Q What is the purpose of this document?
13 A As I recall from the conversations with Ned Porter, this
14 was a brainstorming effort that the team went through to try
15 and determine what the next steps were and this was a listing
16 of that brainstorming session of all the possible things
17 that they could look at in the design of the switch that
18 might be contributing to it.
19 Q Do you know why they wanted to look at the connector seal?
20 A No.
21 Q Do you know why they wanted to look at Kaptan life?
22 A No. Again, as far as I know, this was a brainstorming
23 session. I wouldn't think to impose my opinion on what they
24 may or may not have been thinking at the time.
25 Q Based on your investigation of the switch, its operation,

1 and the allegations that it's failed and caused fire, have
2 you reached a conclusion regarding contributing factors that
3 lead to the failure of the switch?

4 A I have developed some opinions, I guess I would say.

5 Q And in your opinion, what do you believe are the
6 contributing factors that lead to the failure of the speed
7 control deactivation switch?

8 A I think that has to do somewhat with the environmental
9 conditions. It has to do somewhat with usage conditions and
10 the specific manufacturing period of time.

11 Q What do you mean by that, how old the switch is?

12 A No, no, the time in -- time frame in which the switch was
13 manufactured.

14 Q Any other contributing factors?

15 A Not that I can think of.

16 Q How does environmental conditions contribute to the failure
17 of the speed control deactivation switch?

18 A Well, depending on what type of an environment it may have
19 been put through in its life. It may have been damaged
20 somehow during the course of its life. It may have been
21 replaced in service and we don't know that it is the
22 original part in some cases. I'm speaking hypothetically
23 here. The vehicle may have been involved in an accident or
24 some other event during its life that may have exerted some
25 sort of stress on the part that wasn't considered in its

1 A Not physical kinds of evidence. There are a couple of minor
2 concerns that I raise, partially because it appears as if
3 some non-production service parts were used, the steel hood
4 being in place on this vehicle where the production hood was
5 made of aluminum, and that just really gives me an
6 indication that maybe there were other things that were
7 somewhat weakened or not accompanied componentry or
8 practices that were performed on the vehicle. And again, I
9 say it's an indicator. It's not a test powerful, you know,
10 piece of evidence as far as how it relates to the switch,
11 but it just leads me to some concerns.

12 And then the other thing I noticed in those documents
13 that, again, kind of left me with a small point of concern
14 was the fact that after the second collision it had been
15 recommended by the adjuster that the vehicle be totaled
16 because of its age and tremendous amount of miles that it
17 had on it, and the customer at the time chose not to have
18 that done, they wanted the vehicle repaired. So there was a
19 question of age and mileage.

20 Q Other than what you've described as your concerns, do you
21 have any evidence that the collisions that the vehicle was
22 involved in affected the performance of the speed control
23 deactivation switch?

24 A No.

25 Q So if you were to testify that the accidents were somehow

1 design, for instance, collision damage or an engine
2 overhauling from a radiator hose, you know, some of the
3 typical things that can happen to vehicles.

4 Q Let me stop you there. The McFarlane speed control
5 deactivation switch, are you satisfied that it was the
6 switch that came with the car when it left the assembly
7 line?

8 A Based on the evidence, yes, it appears to have been the
9 original production component.

10 Q We know the McFarlane vehicle was involved in a couple of
11 head-on collisions, right?

12 A A couple of accidents, yes.

13 Q You have information in your file relating to two accidents
14 that the car was involved in; correct?

15 A Yes.

16 Q Do you know whether either of those accidents affected the
17 operation or performance of the speed control deactivation
18 switch?

19 A No.

20 Q They didn't or they did not or you don't have any
21 information?

22 A Well, you asked me if I know, and I said I don't know.

23 Q Do you believe then that or do you have any evidence that
24 either of those accidents affected the operation of the
25 functioning of the speed control deactivation switch?

1 usually related to the fire, it would be speculation; is
2 that right?

3 A At this --

4 MR. McLARIN: Object to the form.

5 A At this point in the investigation, I would say that it
6 might be considered speculation if I went to that point.

7 The concern is not a speculation, the concern is a concern.

8 BY MR. DUNFORD:

9 Q Did the steel hood cause the fire?

10 A No.

11 Q Let's go back to contributing factors. Usage conditions.

12 Or let me ask this first. Have we covered everything
13 with environmental conditions?

14 A Everything? Everything is an awfully large word. I'm not
15 sure what you mean.

16 Q Sure. We've talked about environmental conditions as a
17 contributing factor in your opinion to the failure of the
18 speed control deactivation switch. Have you listed all the
19 environmental conditions you believe can cause a failure of
20 the switch?

21 A Have I listed them?

22 Q Have you given them to me or described them to me in your
23 previous answer?

24 A That's why I used the term "environmental," anything from
25 the external environment that could have possibly shared

- 1 the part from its original condition.
- 2 Q Do you have any evidence of that occurring with the
- 3 Mojmarian speed control deactivation switch?
- 4 A Well, I would classify the fact that there was a steel band
- 5 on the vehicle as a change in environment, it does change
- 6 the way the physical structure of the vehicle will perform
- 7 going down the road, it will -- in the case of the Mojmarian
- 8 vehicle that was in a fire, it will change the physics of
- 9 the fire.
- 10 Q How will it change the -- how will the installation of the
- 11 steel band change the operation of the vehicle to -- in a
- 12 way that would affect the speed control deactivation switch?
- 13 A Well, I'm not certain that it can, I was just giving you an
- 14 example of what I meant by environmental.
- 15 Q So you have no evidence that the installation of the steel
- 16 band actually changed the functioning of the speed control
- 17 deactivation switch on the Mojmarian Town Car; is that
- 18 right?
- 19 A Not at this point in time, no.
- 20 Q You mentioned usage conditions as being a contributing
- 21 factor in the failure of a speed control deactivation
- 22 switch. What did you mean by that?
- 23 A Usage being how long has it been used, how many miles, how
- 24 many years in service.
- 25 Q Does a Lincoln Town Car have a safe useful life, a 1993

- 1 what I've seen and heard that the process that was used
- 2 before this switch was brought into production was a manual
- 3 operation where there would be a person actually putting the
- 4 pieces together and operating the crimping equipment, and at
- 5 this time when this was being introduced on the Town Car
- 6 there was also an automated assembly process being
- 7 implemented and at that time there was some concern with the
- 8 new equipment, and so Texas Instruments had requested from
- 9 Ford that they be allowed a deviation from their process to
- 10 go back to their manual crimping equipment.
- 11 Q What was it about the crimping that caused or contributed as
- 12 a factor to the failure of the speed control deactivation
- 13 switch?
- 14 A As I recall, when they did the in-process spot testing, that
- 15 the components that were coming off of the new equipment had
- 16 failed the leak test, pressure leak test.
- 17 Q And what was it about the crimping that caused them to fail?
- 18 A I'm not really certain of the details, but it just appeared
- 19 as if there was some inconsistency from one operation of the
- 20 equipment to the next as far as creating a good solid
- 21 integrity crimp that held all the parts together.
- 22 Q What part was being crimped?
- 23 A I'm not exactly sure of the terminology here. If I could
- 24 refer to Exhibit Number 8? I believe the operation that was
- 25 in question was the crimp between the cap and the insert

- 1 model year Lincoln Town Car?
- 2 A I'm not sure what you mean by the term "safe useful life."
- 3 Q Well, let me ask this. Is there -- with a speed control
- 4 deactivation switch, is there a time at which the speed
- 5 control deactivation switch would be considered too old and
- 6 need to be replaced?
- 7 A Again, I'm not sure what you're asking me.
- 8 Q Does Ford make a recommendation to 1993 model year Lincoln
- 9 Town Car owners about a time frame in which they should
- 10 consider replacing the speed control deactivation switch?
- 11 A No.
- 12 Q Do you have an opinion as to what the safe useful life of a
- 13 speed control deactivation switch is?
- 14 A No.
- 15 Q You mentioned manufacturing period of time as a contributing
- 16 factor in failure of the switches. What did you mean by
- 17 that?
- 18 A Part of the recall team's investigation determined that
- 19 there was a question with a crimping operation in the past
- 20 just as it was -- about the same time frame as it was being
- 21 introduced on the Town Car and they felt that that was a
- 22 possible contributing factor to the recall situation.
- 23 Q What was the issue with the crimping operation that caused
- 24 concern?
- 25 A I'm not certain exactly of the details, but it appeared from

- 1 pieces that are shown in this section view.
- 2 Q And what was it about the crimp that was being performed by
- 3 the equipment at Texas Instruments that was producing
- 4 inconsistency?
- 5 A I'm not sure of the details.
- 6 Q Was it not meeting correctly?
- 7 A As I said, they then did the required testing to verify that
- 8 it worked correctly and that the parts exhibited leakage.
- 9 Q Do you know if the switch in the Mojmarian Town Car was
- 10 manually crimped or was it crimped automatically by a
- 11 machine?
- 12 A I don't know for certain.
- 13 Q Are there other crimping operations other than the one that
- 14 you've described between the cap and the insert?
- 15 A I believe there is another one between the -- again, I want
- 16 to use the right terms on this picture here -- between the
- 17 crimp ring and the -- it actually traps the -- this crimp
- 18 ring traps the insert and the switch base together, that's
- 19 the third operation, is to crimp those two halves of the
- 20 switch together with the crimp ring.
- 21 Q Do you know if that crimp that holds the two halves of the
- 22 switch together was done manually or was it done
- 23 automatically by equipment back in 1993?
- 24 A I'm not certain.
- 25 Q Or for 1993 model year Lincoln Town Cars, do you know?

- 1 A No.
- 2 Q And it's my understanding then that the recall was intended
- 3 to encompass speed control deactivation switches that had
- 4 been crimped during the manufacturing process at Texaco
- 5 Instruments intentionally or by some machine as opposed to
- 6 being manually crimped; is that right?
- 7 A I'm not certain exactly what the details were of their
- 8 decision process and how it relates to that particular
- 9 operation.
- 10 Q Mr. McLAREN testified that he never used his speed
- 11 control. Is your opinion -- or do you have an opinion how
- 12 that would affect the life of the speed control deactivation
- 13 switch?
- 14 A Yes.
- 15 Q Can you state what your opinion is?
- 16 A I don't think that using or not using the speed control
- 17 would have much of an effect on this component.
- 18 Q And why not?
- 19 A Because the speed control function only requires a very
- 20 small amount of current to pass through the switch and so if
- 21 the speed control is not used, the switch is still just
- 22 doing the same thing it always does, it's just sitting there
- 23 electrically.
- 24 Q Sitting there electrically energized; right?
- 25 A Um-hmm. Yes.

- 1 they begin to deteriorate?
- 2 Let me ask it this way. In deterioration of the Kapton
- 3 seals an issue in the operation of the speed control
- 4 deactivation switch?
- 5 MR. McLAREN: Object to the form.
- 6 A Again, I'm not quite sure --
- 7 BY MR. DUNFORD:
- 8 Q Can you answer the question? You don't understand it?
- 9 A I don't understand what you're asking me.
- 10 Q Have you heard that the Kapton seals crack and deteriorate
- 11 and allow leaks fluid from the mechanical side of the switch
- 12 into the electrical side?
- 13 A Yes.
- 14 Q Have you investigated that issue in any of the fires that
- 15 you've been involved with where a failure of the speed
- 16 control deactivation switch is alleged to have caused the
- 17 fire?
- 18 A I have looked at Kapton seals and switches in those types of
- 19 alleged cases, yes.
- 20 Q And your opinions are based on the visual appearance of the
- 21 Kapton seal; is that correct?
- 22 A If there is enough of the Kapton seal remaining to make
- 23 that kind of an assessment.
- 24 Q Have you ever done any testing or asked anyone to do any
- 25 testing of the Kapton seals following a fire?

- 1 Q Back to Exhibit 9, do you know what's being referred to as
- 2 plastic parameters? That's point number 7.
- 3 A Not for certain, no.
- 4 Q Who at Ford is most knowledgeable about Exhibit 9 and its
- 5 preparation?
- 6 MR. McLAREN: Object to form and foundation.
- 7 BY MR. DUNFORD:
- 8 Q If you know.
- 9 A I wouldn't know for sure.
- 10 Q Do you know who participated on the team with the Texaco
- 11 Instruments folks?
- 12 A I think I mentioned Fred Porter.
- 13 Q And Manning?
- 14 A Yes.
- 15 Q I'm just going to do this just for exercise, okay? Recognize
- 16 me, but I'm going to ask you about each one of them.
- 17 Do you know what is being referred to in point 2,
- 18 Kapton life?
- 19 A Again, not specifically.
- 20 Q Do you know whether there's an issue as to the length of
- 21 service time that the Kapton seals provide before they begin
- 22 to deteriorate in the speed control deactivation switch?
- 23 A I'm sorry, do I know what?
- 24 Q Do you know if there is a length of time that the Kapton
- 25 seals can be expected to be present in the switch before

- 1 A I don't believe so.
- 2 Q Point 3 of Contributing Factors is continuous power. Do you
- 3 know what that refers to?
- 4 A Again, I'm guessing the team had some very definite ideas
- 5 here. Continuous power is evidently the fact that it's
- 6 powered by battery continuously.
- 7 Q And we've talked about that.
- 8 Point 4 says switch orientation. Do you know what
- 9 that's referring to?
- 10 A Again, just, you know, translating the words, it appears
- 11 they mean the way it's mounted.
- 12 Q Horizontally, vertically, or the 45-degree angle?
- 13 A Something of that nature, yes.
- 14 Q Do you have an opinion whether mounting the switch at a
- 15 45-degree angle in a model year 1993 Lincoln Town Car has
- 16 any impact on the functioning of the speed control
- 17 deactivation switch?
- 18 A Yes, I do.
- 19 Q And what is that?
- 20 A That it doesn't.
- 21 Q Do you have an opinion about whether the orientation of the
- 22 switch at a 45-degree angle in a 1993 model year Lincoln
- 23 Town Car affects the failure rate of the switch?
- 24 A Yes, I do.
- 25 Q And what is that?

1 A That it doesn't.
 2 Q And why is it your opinion that the orientation of the
 3 switch does not affect the failure rate?
 4 A There is no indication in warranty data that that's an
 5 issue.
 6 Q So you've relied on other people and their work to reach
 7 that conclusion; is that right?
 8 A Yes.
 9 Q Number 5 on Exhibit 9 says current capability. Do you know
 10 what that's referring to?
 11 A No.
 12 Q Number 6 refers to grounded buspost. Do you know what
 13 that's referring to?
 14 A Again, the buspost portion of the switch is grounded, that
 15 seems to be a statement of fact.
 16 Q And I think I asked you already about plastic parameters, do
 17 you know what that's referring to?
 18 A Yeah, that's a little too general a statement.
 19 MR. DUNFORD: Did you want to take lunch?
 20 MS. McLAREN: Good break time? That would be good.
 21 yeah.
 22 (Deposition recessed for lunch at 12:12 p.m.)
 23 * * *
 24 (Deposition resumed at 12:50 p.m.)
 25 (Hoffman Exhibit No. 10 was marked for identification.)

1 BY MR. DUNFORD:
 2 Q Mr. Hoffman, welcome back from lunch. We'll go back on the
 3 record.
 4 I've handed you what has been marked as Exhibit 16 in
 5 your deposition. Have you seen that document before?
 6 A Yes, sir.
 7 Q And where have you seen it before?
 8 A I believe it's part of the recall team's work. And it's
 9 part of their White Paper.
 10 Q So is that included in the 14-D then?
 11 A I'm not sure if it's actually attached to it or not. I know
 12 it's part of that work.
 13 Q Do you know whose handwriting appears on Exhibit 10?
 14 A No, I'm not certain.
 15 Q The document is entitled Scenario; is that correct?
 16 A Yes, sir.
 17 Q And would you agree that the document refers to or describes
 18 the scenario that leads to failure of the speed control
 19 deactivation switch?
 20 A That's what it intends to do, yes.
 21 Q Do you have any information that would contradict the
 22 conclusion of the recall team of the speed control
 23 deactivation switch failure scenario as outlined in
 24 Exhibit 10?
 25 A No.

1 MS. McLAREN: Just to make a clarification for the
 2 record, Exhibit 10 does in fact contain some handwritten
 3 notes and I'm not sure whether it's clear whether the
 4 witness is saying that the handwritten notes are also
 5 incorporated within the document as he knows it to be part
 6 of the White Paper.
 7 BY MR. DUNFORD:
 8 Q Do you know one way or another whether the handwriting
 9 appears on the document included in the White Paper?
 10 A No.
 11 Q Do you know if there's any other failure scenario of the
 12 speed control deactivation switch other than that outlined
 13 in Exhibit 10?
 14 A No.
 15 Q Have you ever heard of water ingress causing a failure of a
 16 speed control deactivation switch other than the 1993 model
 17 year Escalade vans that we looked at on Exhibit 1?
 18 A No.
 19 (Hoffman Exhibit No. 11 was marked for identification.)
 20 BY MR. DUNFORD:
 21 Q Can you look at Exhibit 11, please? This consists of two
 22 pages. They're numbered consecutively, so I want them and
 23 stapled them together. And the question is whether you have
 24 seen these two pages before?
 25 MS. McLAREN: Again, for the record, there are some

1 markings on it. I would ask that it be clarified whether
 2 we're talking about before or after the handwritten notes.
 3 A I don't recognize the handwritten notes. I do recognize the
 4 basic documents, the two pages.
 5 BY MR. DUNFORD:
 6 Q The first page of Exhibit 11 is cited CLS Report 9804105;
 7 is that correct?
 8 A Yes, sir.
 9 Q And what does that refer to?
 10 A The CL is Control Lab. I believe the S is Service, but
 11 I'm not certain. Control Lab Service.
 12 Q And it also says "Memphis Switch"; is that correct?
 13 A Yes.
 14 Q What is your understanding of what the Memphis switch is?
 15 A It is a switch that was brought to the attention of the
 16 recall team during their work from a dealership in Memphis,
 17 in the Memphis, Tennessee, area, and that switch was sent to
 18 the recall team and this is the result of a tear-down and
 19 analysis of that switch that was done by Ford's Control Lab
 20 Service.
 21 Q Do you know when the tear-down and analysis was done?
 22 A No, not specifically.
 23 Q Are you using the tear-down and analysis performed by Ford's
 24 Control Lab on the Memphis switch as a basis for your
 25 opinions in this case?

1 A No.
 2 Q Does the tear-down and analysis of the Memphis switch by
 3 Ford's lab help you in any way in determining whether the
 4 speed control deactivation switch in the Memphis car was
 5 involved in causing the fire?
 6 A It's one piece of data in a large volume of data.
 7 Q Do you know Steve LaRouche?
 8 A Yes.
 9 Q Who is Steve LaRouche?
 10 A He is a -- one of the scientists in our Central Laboratory.
 11 Q Do you know what his background and training is?
 12 A No.
 13 Q Have you communicated with him about his examination of the
 14 Memphis switch?
 15 A No, I don't believe I've ever talked to Steve about this.
 16 Q Have you communicated with Steve LaRouche about any of the
 17 fire that you've investigated where it is alleged a brake
 18 pressure switch had caused the fire?
 19 A I don't believe so.
 20 Q In your opinion, does the analysis and tear-down of the
 21 Memphis switch documented in Exhibit 11 match the scenario
 22 that's outlined in Exhibit 10 or is it consistent with the
 23 scenario?
 24 A I believe there is consistency between Exhibit 10 and
 25 Exhibit 11, yes.

1 was printed.
 2 Q And what's the date of the document then?
 3 A The next line below that over to the right, it says Date
 4 and time, 12 -- I can't quite make it out on this copy, I
 5 think it's on 10, 98.
 6 Q Thank you. And it refers to the NHTSA letter PE98-055; do
 7 you see that?
 8 A Yes.
 9 Q And it also says a total of 89 warranty claims are
 10 identified in AWS.
 11 What does AWS stand for?
 12 A Analytical Warranty System.
 13 Q Is that a computer system at Ford?
 14 A Yes.
 15 Q And what does it do?
 16 A It maintains all of our warranty claim records for all of
 17 the warranty service performed on our vehicles.
 18 Q Do you know what the -- I'm sorry --
 19 Would the 89 warranty claims then be referring to
 20 warranty claims involving the speed control deactivation
 21 switch?
 22 A The statement in this document says:
 23 "A total of 89 warranty claims are identified in
 24 AWS on the F2VY-9F924-A for 1993 and 1998 Town Cars."
 25 Q And that's the part number for the switch, right?

1 Q Which documents the scenario of how this speed control
 2 deactivation switch fails, is that right?
 3 A What's that, Exhibit Number 10 you're talking about?
 4 Q Yes.
 5 A Yes.
 6 Q And then Exhibit 11 is consistent with that scenario?
 7 A Yes.
 8 (Hoffman Exhibit No. 12 was marked for identification.)
 9 BY MR. DUNFORD:
 10 Q I'm going to hand you what has been marked as Exhibit 12 and
 11 ask you if you'd review that, please.
 12 A Okay.
 13 Q You had a chance to review Exhibit 12?
 14 A Yes.
 15 Q Have you seen that document before?
 16 A I'm not sure.
 17 Q It consists of three pages, correct?
 18 A Yes.
 19 Q It's dated January 24th, 1999, do you see that?
 20 A Yes.
 21 Q And it refers to brake pressure switch investigation;
 22 correct?
 23 A I'm sorry, what date did you say?
 24 Q At the very top.
 25 A No, that's not the date of the document, that's the date it

1 A The service part number, yes.
 2 Q What is the CQES report referred to in the next paragraph?
 3 A That is -- (I believe the acronym stands for Customer Quality
 4 Information System. That is another data base that we use
 5 at Ford.
 6 Q Is that generated by the Ford dealers?
 7 A I don't know. I think Ford Customer Service Division
 8 maintains it.
 9 Q Have you reviewed those two CQES reports mentioned in
 10 Exhibit 12?
 11 A I don't know based on this, there's not enough information.
 12 I don't think so.
 13 Q Page two of Exhibit 12 refers to X-rays taken by Steve
 14 LaRouche, Norm LaPointe, and Clark Thomas on 12/17/1998.
 15 Have you ever seen those X-rays?
 16 A I don't think so.
 17 Q Have you seen original photographs and the print that are in
 18 Steve LaRouche's possession?
 19 A Again, I don't think so.
 20 Q Can I ask you, the Memphis switch that's referenced in
 21 Exhibit 11, did you ever personally examine it?
 22 A I don't believe I ever saw the Memphis switch, just the
 23 report.
 24 Q Did you see any X-rays or photographs of the switch that
 25 accompanied the report?

1 A I don't recall exactly what I reviewed or saw.
 2 Q Do you know if there are any X-rays of the Memphis switch?
 3 A I'm not certain. I assume that's what this is referring to.
 4 MR. DUNFORD: Is it possible to get copies of those?
 5 MS. McLAREN: I'll take on that request.
 6 MR. DUNFORD: That was a request, I would like to get
 7 copies of photographs or X-rays of the Memphis switch.
 8 BY MR. DUNFORD:
 9 Q Page two of Exhibit 12 lists other vehicles that use the
 10 brake pressure switch. Do you see that street under - at the
 11 bottom of the page, point 57
 12 A Yes, sir.
 13 Q And it shows the '93 Lincoln Town Car and other vehicles
 14 that have the same brake pressure switch in the model years
 15 indicated.
 16 Does that refresh your recollection about other
 17 vehicles that have the same brake pressure switch?
 18 A Yes.
 19 Q Have you ever heard of the Reddick switch, a switch referred
 20 to as the Reddick switch?
 21 A I don't believe so.
 22 (Hoffman Exhibit No. 13 was reviewed for identification.)
 23 BY MR. DUNFORD:
 24 Q I'm going to lead you what has been marked as Exhibit 13 and
 25 ask you to review that, please.

1 A I don't recall if that ever came up in the conversation I
 2 had with Fred.
 3 Q What about with Mr. Masters?
 4 A No.
 5 Q Is the water ingestion scenario that Steve LaRouche
 6 describes in Exhibit 13 different than the scenario that we
 7 looked at earlier on Exhibit 10?
 8 MS. McLAREN: Object to the form and foundation.
 9 A I can't answer that question. I don't know what
 10 Mr. LaRouche was looking at when he wrote those words.
 11 BY MR. DUNFORD:
 12 Q Well, you can look at Exhibit 10 and see if it's describing
 13 the failure scenario involving the ingestion of water or
 14 the leaking of brake fluid, can you tell by looking at
 15 Exhibit 10 which it's referring to?
 16 A I'm sorry, I don't understand what you mean.
 17 Q Okay. If you look at the scenario shown or outlined on
 18 Exhibit 10, can you tell whether that scenario was referring
 19 to ingestion of water or is it referring to leaking of
 20 brake fluid?
 21 A Exhibit Number 10, the first statement listed there says:
 22 "Contamination enters switch cavity through
 23 perforated Kapton seal or compressor seal."
 24 Q So what conclusion do you draw from that? In other words,
 25 is that -

1 A Okay.
 2 Q You've had a chance to review Exhibit 13?
 3 A Yes.
 4 Q And have you seen this document before?
 5 A I don't recall.
 6 Q It's dated April 20th of 1995; is that correct?
 7 A The last entry in the sequence was April 20th, 1995, yes.
 8 Q It appears to be a sequence of e-mails; is that correct?
 9 A Yes, sir.
 10 Q Between Steve LaRouche and Fred Forster?
 11 A That's correct.
 12 Q And it appears that Steve LaRouche states that there appear
 13 to be two modes of failure occurring; is that right? This
 14 is page two.
 15 A That is what that particular portion of that particular note
 16 says.
 17 Q And one failure mode involves leakage of brake fluid and the
 18 other failure mode involves - that he's describing involves
 19 ingestion of water into the switch cavity; is that correct?
 20 A That is what he has described here, yes.
 21 Q Have you ever talked to Steve LaRouche about these two modes
 22 of failure that he describes in Exhibit 13?
 23 A I don't believe so.
 24 Q Did you ever talk with Fred Forster about the two modes of
 25 failure that Steve LaRouche describes?

1 A I don't draw a conclusion from this scenario.
 2 Q Well, let me ask you this then. Does it help you answer the
 3 question?
 4 A No.
 5 Q So you can't tell what scenario it's describing or which
 6 failure mode?
 7 A It appears that the statement on Exhibit 10 is consistent
 8 with the statement in Mr. LaRouche's e-mail.
 9 Q Regarding which failure mode? I mean, that's the question,
 10 is whether it refers to leakage of brake fluid through the
 11 Kapton seal and an apparent seal being set up between the
 12 contacts and the steel cup or if it refers to ingestion of
 13 water into the switch cavity with no brake fluid leakage and
 14 no evidence of a seal?
 15 A That's what it says. I'm not sure if you've asked me a
 16 question.
 17 Q So my question is if you look at the scenario shown on
 18 Exhibit 10, can you tell whether Exhibit 10 is referring to
 19 the leakage of brake fluid through the Kapton seal or is it
 20 referring to ingestion of water into the switch cavity with
 21 no brake fluid leakage?
 22 A Oh, I - your concern is with Exhibit 10 because it doesn't
 23 mention which fluid is involved? Is that -
 24 Q I'm just -
 25 A - what you're asking?

1 Q -- trying to understand what scenario, what the scenario
2 shown on Exhibit 10 is documenting. Because we've got
3 Mr. LaRouche identifying two failure modes.
4 A And the scenario document, Exhibit 10, is also referring to
5 two possible failure modes.
6 Q And how do you reach that conclusion?
7 A Because of statement one on Exhibit Number 10, it says
8 contamination enters switch cavity through perforated Kapton
9 seal or connector seal, two different scenarios there.
10 Q Is there any reference in the Exhibit 10 scenario to a call
11 being formed?
12 A Not in that exact verbiage, but item number 2 and item
13 number 3 would be consistent, just a different set of terms.
14 Q Before today, were you aware that Steve LaRouche had
15 identified two modes of failure occurring in speed control
16 deactivation switches?
17 MS. McLAUREN: Object to the form.
18 A I don't recall having a lot of knowledge about what Steve
19 LaRouche thought or didn't think.
20 BY MR. DUNFORD:
21 Q Do you know Michael Salento?
22 A Yes.
23 Q Who is he?
24 A He is an engineer in Electrical and Electronic Systems
25 Engineering.

1 Q Is the first e-mail down at the bottom of the page in May of
2 1999 from Michael Salento, it lists some dollars and cents
3 against them. Do you see those?
4 A Yes.
5 Q Do you know what those are?
6 A Not specifically, no.
7 Q Is it the cost of the switch?
8 A I don't know.
9 Q Do you know if it's how much would be saved if the switch
10 was deleted?
11 MS. McLAUREN: Object to the form of the question.
12 Asked and answered. He's already said he doesn't know.
13 A It's really not sure. That's what it is -- it appears like it's
14 part of the discussion about deletion of the switch.
15 BY MR. DUNFORD:
16 Q Do you know what Mr. Salento meant when he said -- or when
17 he wrote, "Financially, I would not cry if the 99014 went
18 away"?
19 MS. McLAUREN: Object to the form of the question and
20 foundation.
21 BY MR. DUNFORD:
22 Q I asked if you knew. Do you know?
23 A No, I do not.
24 Q Have you ever heard of the Baton Rouge incident?
25 A No.

1 Q Do you know if he was involved with the recall team?
2 A I'm not sure.
3 Q Have you ever spoken with Mr. Salento about the speed
4 control deactivation switch?
5 A No.
6 (Hearing Exhibit No. 14 was marked for identification.)
7 BY MR. DUNFORD:
8 Q I'm going to hand you what has been marked as Exhibit 14.
9 A Okay.
10 Q You've had a chance to review Exhibit 14?
11 A Yes.
12 Q Have you seen that document before today?
13 A I don't believe so.
14 Q Do you know what the cost reduction idea mentioned in the
15 attached PROPS note refers to, do you see that statement?
16 A It refers to a cost reduction idea.
17 Q Do you know in what?
18 A The note that's physically beneath that is actually the
19 first one in the series of notes, and in looking at that one
20 it is titled "Delete cruise control deactivation switch." It
21 appears like one of the vehicle teams was considering
22 changing the switch or removing it from the vehicle as a
23 cost reduction idea.
24 Q Do you know if that was ever done?
25 A I don't believe so.

1 Q Have you ever heard that the southern area of the United
2 States may be the worst wear-out environment for speed
3 control deactivation switches?
4 A Have I heard that?
5 Q Yeah.
6 A No.
7 Q Are you aware of any injured testing done at Ford on speed
8 control deactivation switches?
9 A No.
10 Q If there was any done, would it be included in the -- do you
11 recall seeing it in the White Paper?
12 A No.
13 Q Are you aware of any structural analysis performed by Ford on
14 brake pressure switches?
15 A Mr. LaRouche's report is one of the earlier exhibits that
16 you had.
17 Q Is that the extent of it?
18 A As far as in the documents that you've shown me so far.
19 Q Are you aware of any cyclic life tests that have been
20 performed on speed control deactivation switches?
21 A You mean other than the specification test or --
22 Q Yes.
23 A Again, there may have been some references in the White Paper
24 to some of that testing, that type of testing.
25 Q Do you know Steve Blomgren?

1 A. Yes.
 2 Q. Who is he?
 3 A. He's an engineer that works for Ford Motor.
 4 Q. Was he on the recall team?
 5 A. I believe so.
 6 Q. Do you know if Steve Hickman was involved in any cycle life
 7 tests of speed control deactivation switches as part of his
 8 work on the recall team?
 9 A. I don't recall.
 10 Q. Have you ever been shown any information related to tests
 11 performed by Texas Instruments on speed control deactivation
 12 switches?
 13 A. I think there might have been some references to them in the
 14 White Paper.
 15 Q. Have you ever seen any videotapes of tests performed by
 16 Texas Instruments?
 17 A. No.
 18 Q. Do you recall the results of any tests that you're aware of
 19 performed by Texas Instruments?
 20 A. Yes.
 21 Q. And what were the results?
 22 A. That they could get a switch to ignite by injecting it with
 23 the right chemical solutions.
 24 Q. And how are you aware of the results of that test or those
 25 tests?

1 A. I don't recall the date offhand. I was in one of the
 2 deposition transcripts.
 3 Q. Before you reviewed the deposition, were you familiar with
 4 that demonstration or test?
 5 A. I had heard that it had been done, but I wasn't privy to any
 6 of the details.
 7 Q. Do you -- have you seen any videotapes of that test?
 8 A. No.
 9 Q. Any photographs or other documentation prepared as a result
 10 of the test?
 11 A. Just the large blow-up still photograph that Richard keeps
 12 in his shop in Marietta, Georgia, on the wall.
 13 Q. Displayed prominently, no doubt?
 14 A. Yes.
 15 Q. Have you ever asked Richard Clarke about the test or
 16 demonstration that he performed?
 17 A. I don't believe we've ever had any conversations on it other
 18 than he did that and then he showed me the picture kind of a
 19 thing.
 20 Q. What's your understanding of what Richard Clarke did?
 21 A. I don't really recall what it was that he used to simulate
 22 the failure, but he was attempting to get one of the brake
 23 master switches to ignite a fire.
 24 Q. Beyond that, do you know any details?
 25 A. No, I don't recall the details offhand.

1 A. I really don't recall how I came to that bit of knowledge.
 2 I keep going back to the White Paper because that's
 3 the -- that's really the document that contains all of this.
 4 Q. When is the last time you looked at the White Paper?
 5 A. I have no idea.
 6 Q. It's my understanding it's an ongoing document, is that
 7 correct, an additions or revisions made to it?
 8 A. It was an ongoing document during the time of the recall.
 9 Q. And now it's a completed document, there's no longer
 10 additions or revisions being made to it?
 11 A. I don't know.
 12 Q. Are you aware of any tests on speed control deactivation
 13 switches performed by anyone else other than TI and Ford?
 14 A. Yes?
 15 Q. Yes, sir.
 16 A. Depending on how I define the word "tests," I would have to
 17 answer yes.
 18 Q. And what tests are those?
 19 A. That's why I say I have to question your use of the word
 20 "tests." I would say that I'm aware of some demonstrations
 21 that have been performed by Richard Clarke.
 22 Q. Anyone else other than Richard Clarke?
 23 A. Not that I can think of at the moment.
 24 Q. Do you know when the demonstration, as you referred to it,
 25 was performed by Richard Clarke?

1 Q. Do you believe it was a valid test?
 2 A. No.
 3 Q. Why not?
 4 A. The phenomenon of the failure mode in this case, in the case
 5 of these recalled switches, requires a long aging period,
 6 and I feel that Richard's procedure was -- somewhat similar
 7 to the recall team's testing, was rather difficult and
 8 somewhat inconclusive, too, because they couldn't duplicate
 9 the aging portion of the phenomenon.
 10 Q. Do you know where Richard Clarke obtained the switch that he
 11 utilized in his test?
 12 A. No, I don't.
 13 Q. Other than the inability to replicate or duplicate the aging
 14 portion of the phenomenon as you described, any other
 15 criticisms of Richard Clarke's demonstration or test?
 16 A. I wouldn't want to go any further without knowing some
 17 details about exactly how he set it up and performed it.
 18 Q. So none today?
 19 A. At the moment, no.
 20 Q. Did you consider the documentation or test done by Richard
 21 Clarke in forming your opinion in the Meljunen case?
 22 A. No.
 23 Q. We talked about in October of 2001 you traveled to Seattle
 24 to perform an investigation, examine the vehicle from the
 25 Meljunen home, the Lincoln Town Car, and other items of

1 evidence retained from the fire scene, and my question is
2 this. Between October of 2001 and July 30th of 2002 when a
3 second exam was performed, did you do any work on the case?
4 A I don't know specifically. I might have, yeah.
5 Q You don't recall?
6 A Well, I handle many different cases. I don't recall
7 specifically, you know, what I did on each case. I'm sure
8 in this particular case between those two dates I might have
9 done something.
10 Q The July 30, 2002, inspection, was that done at your request
11 or at someone else's, do you know, do you remember?
12 A I don't recall exactly. I think it was somewhat of a
13 general agreement amongst the people that were there in
14 October.
15 Q Did you feel like you needed to go back and see the vehicle
16 and other evidence a second time?
17 A Yes.
18 Q Was that helpful to you in forming your opinions?
19 A Yes.
20 Q On July 30th, you were able to examine the laptop; is that
21 correct?
22 A Yes.
23 Q Which you had not seen before, or the mechanical side of the
24 switch?
25 A Correct.

1 Q And you were also able to see X-rays of both sides of the
2 switch; is that right?
3 A Yes, I do believe there were X-rays of both, yes.
4 Q Were there any other items of evidence or information
5 available to you on July 30th of 1999 that were not
6 available to you in October of 2001 at the first
7 investigation?
8 A I think the laptop was about the only thing that was in
9 need of finding, if you will. I mean, it was in the
10 materials that were retained, we just didn't know its exact
11 location at the time.
12 Q Is there any doubt in your mind that the mechanical side of
13 the switch which you examined on July 30th was connected to
14 the electrical side of the switch? Do you understand my
15 question?
16 A I understand, and I have no reason to doubt where the parts
17 came from.
18 Q On July 30th of 1999, did you prepare a protocol for that
19 examination?
20 A I'm sorry?
21 MR. McLAREN: July 30, 1999?
22 MR. DUNFORD: I'm sorry. 2002. Let me start over
23 again and strike that question.
24 BY MR. DUNFORD:
25 Q For the July 30, 2002, examination in Seattle, did you

1 prepare a written protocol?
2 A I've heard some remarks in some of the other depositions
3 about Hoffman's protocol, and I had prepared one a long time
4 before that, but I don't really recall working on it again.
5 Q Is there a protocol in your file?
6 A No.
7 MR. McLAREN: I'm sorry, I was going to clarify because
8 we had the problem before dealing with a protocol for an
9 inspection as opposed to a protocol for a disassembly. Are
10 we having the same confusion again? Is there a protocol for
11 an inspection versus is there a protocol for a disassembly?
12 And that last question may be the same answer, but I'm sort
13 of wondering if the previous ones may be different.
14 A I'm sorry, I thought all the questions about protocol had to
15 do with the disassembly of the switch.
16 BY MR. DUNFORD:
17 Q Well, do you know if there was a protocol for the
18 inspection?
19 A I did not prepare one.
20 Q Did you prepare one for disassembly of the switch on
21 July 30th, 2002?
22 A No.
23 Q Did you prepare one for one that you had prepared in an
24 earlier case?
25 A I think in this particular case I may have shared an old

1 document with people to show them an example of one. In
2 most of the cases that I'm familiar with, we have used a
3 protocol that Richard Clarke had basically pulled together
4 from everyone else's bits of different versions of the
5 document and since Richard was the keeper of the evidence at
6 the time, I think we agreed that his document would be the
7 one that we would use.
8 Q With the McLAREN vehicle, Richard Clarke is not the
9 evidence custodian; is that correct?
10 A That's correct.
11 Q It's Schaefer Engineering?
12 A Yes.
13 Q Do you know whether there was any protocol for inspection of
14 the vehicle ever presented to Schaefer Engineering?
15 A Inspection of the vehicle?
16 Q Correct.
17 A Not to my knowledge. I don't know.
18 Q On July 30th of 2002, did you request for the vehicle to be
19 raised?
20 A Did I request for it to be raised? I do not believe that we
21 requested it to be raised at that time.
22 Q Did you ever hear Bill Hoffman make that request?
23 A You know, I don't really recall the conversation, the
24 content of the conversation. I know that it was a subject
25 that we discussed. It was more kind of in the vein of it

1 would be nice if we could, but again, the logistics of the
 2 situation would have made it necessary to wait quite a long
 3 time to set up.
 4 Q Having been at the vehicle in October, 2001, you were
 5 already aware of the logistics of the situation when you
 6 returned in July of 2002; is that correct?
 7 A Yes.
 8 Q When you returned in July of 2002, did you make any
 9 provisions or send any request for Schaefer Engineering to
 10 make any provisions to lift the vehicle so the underside
 11 could be examined?
 12 A No.
 13 Q I want to go in the fire now, you've been waiting patiently,
 14 and I want you to tell me, Mr. Hoffman, to the best of your
 15 ability your understanding of what happened at the Mejlmanian
 16 home on the night of the fire?
 17 A I believe that there was some sort of a failure to the
 18 natural gas supply lines coming into the appliances in the
 19 home that was probably the most likely cause of the fire.
 20 Q Anything else you can tell me about what happened in the
 21 Mejlmanian home the night of the fire?
 22 MS. McLAUREN: I'm going to object to the form of the
 23 question. I'm not sure Mr. Hoffman understood it.
 24 A I'm sure I didn't understand it.
 25 BY MR. DUNFORD:

1 Q I'm trying to gather your impression of the facts.
 2 What were the Mejlmanians doing the night of the fire?
 3 A Based on the reports that I have read, they were in their
 4 family room. I think the son and grandmother may have been
 5 upstairs in their bedrooms. Mr. Mejlmanian was in the family
 6 room, I think Mrs. was in the kitchen, I recall, or going
 7 back and forth.
 8 Q Did Mr. Mejlmanian drive the Lincoln Town Car that day?
 9 A Again, according to the reports I reviewed, he had been
 10 interviewed and mentioned that he had driven the car that
 11 day.
 12 Q Do you know what time he came home?
 13 A I think I might have noted it in my report. I don't know
 14 the exact time, but it was eight o'clock or so, I think,
 15 seven o'clock in the evening.
 16 Q Do you recall if his wife and son were at home when he
 17 returned?
 18 A No, I don't recall if they were at the house when he got
 19 there.
 20 Q Do you recall his wife leaving to go pick up the son at the
 21 bus stop?
 22 A Again, from the documents and interviews and depositions
 23 that I've reviewed, it appears that Mrs. Mejlmanian went to
 24 pick up her son in the other vehicle that was in the garage.
 25 Q The Camaro, right?

1 A Yes.
 2 Q Do you know what time she returned?
 3 A Again, I've got it noted some place. Off the top of my
 4 head, I recall it was like eight or nine o'clock, but I'd
 5 refer to the report for more specifics.
 6 Q How was the fire discovered?
 7 A Again according to all the documents I've reviewed, the
 8 Mejlmanians noticed smoke along the ceiling in their family
 9 room and I think it was also reported that they might have
 10 heard a small loud noise, and they went to investigate and
 11 opened the pedestrian door between their utility
 12 room/basement room and the garage, and that's when they
 13 noticed smoke and fire in their garage.
 14 Q Do you place any significance on the noise that they heard?
 15 A Any significance? It is an indication that the fire may
 16 have been burning for some period of time.
 17 Q Do you know what produced the noise?
 18 A No.
 19 Q Was there a fire in the garage when Mrs. the wife, returned
 20 in the Camaro from picking up the son, Mac?
 21 A Again, as I recall from the reports, I believe she came
 22 through the garage and did not notice anything out of the
 23 ordinary.
 24 Q The Camaro was parked in the garage at the time of the fire;
 25 correct?

1 A Yes, it was.
 2 Q Do you know whether Mrs. went into the garage at any time
 3 while the fire was burning after it was discovered?
 4 A I am not certain that she actually went into the garage.
 5 Q Are you relying upon her observations of the fire as the
 6 basis for your opinion?
 7 A Her observations and other significant observations are a
 8 consideration in any fire investigation. Yes, I do use them
 9 in my considerations on this case.
 10 Q So it would be important to know where Mrs. was standing
 11 when she viewed the fire; wouldn't it?
 12 A Oh, yes.
 13 Q But you don't know whether she went out into the garage at
 14 any time after the fire was discovered?
 15 A You said into the garage.
 16 Q Correct.
 17 A Which in my interpretation means over the threshold of the
 18 doorway from the laundry room or over the threshold from the
 19 garage door at the other end of the garage, and I'm not
 20 certain exactly whether she stepped over those thresholds or
 21 not to be in the garage, as you stated, which is why I
 22 answered that question that way. She looked into the garage
 23 at least twice that is mentioned in the documentation.
 24 Q Do you know whether she entered over the threshold and went
 25 into the garage?

- 1 A I am not certain how far she actually entered into the
2 garage.
3 Q Or if she did at all?
4 A Correct.
5 Q What did Miss see when she first saw the fire?
6 A She reported seeing smoke in the garage and fire and smoke
7 described it in slightly different terms a couple of
8 different - in a couple of different documents, but it
9 appeared to be in her report between the vehicle and the
10 wall of the garage.
11 Q What was there first could cause a fire?
12 A She had mentioned the heater, is the word she used, I think,
13 in one of her statements. The house's furnace was mounted in
14 a bit of an alcove, if you will, in the wall directly to the
15 left of the front driver's side corner of the Town Car.
16 Q Did she describe that the car was on fire?
17 A I'm really not certain of the exact words she used. I know
18 that the ones that were significant to me were that she saw
19 something between the car and the heater, is what she said.
20 Q Did she see something at the heater?
21 A I'd have to re-look at the documents to know the exact
22 words, but the way it is in my mind, it was she said
23 something between it, between them.
24 Q Did she see fire coming from the heater?
25 A I'm not sure she used those words.

- 1 when I was - when I was looking through the door."
2 Q And then she went around to the outside of the house, right?
3 A Yes.
4 Q And as she looked through the garage, what did she see?
5 That's page 13, lines 8 and 9 through 11.
6 A She says:
7 "From the outside it was the front part of the
8 Lincoln Town Car, the tires, the front part of the
9 Lincoln Town Car, then, and at first time already there
10 was something like heat, heat, and I think the fire
11 already started on the house."
12 Q Do you know what the house was?
13 A I believe she goes on to describe a garden hose that was
14 stored along that wall in the garage.
15 Q And on page 16 she says that when she first looked through
16 the laundry room door into the garage, she did not see the
17 house on fire at that time; do you see that?
18 A Yes.
19 Q So from those statements, Mr. Hoffman, how do you derive
20 that the fire started in the furnace?
21 MR. McLAUREN: Object to the form of the question.
22 A Just taking those statements in and of themselves, they are
23 somewhat inconsistent with the interview that was done with
24 her the night of the fire by the police and by other
25 reports. As I said, there have been several conditions of

- 1 Q Well, whether she used those words or not, did she describe
2 fire coming from the heater?
3 A She did not describe any directional characteristics to it.
4 She said between, which is a location, not a direction.
5 Q Did she say that there was fire at the heater?
6 A Again, I don't believe she used the word "at." She said
7 "between."
8 Q Have you read her deposition?
9 A Yes, I have.
10 Q And how did she describe the fire in the deposition when she
11 first saw it?
12 A Again, I'd want to refer back to the actual document, but as
13 I recall, she was speaking more between the vehicle and the
14 wall.
15 Q Why don't you turn to her deposition, if you have it in your
16 file, and show me where she referred in her deposition to
17 fire in between the car and the wall?
18 A On page 26. Or page 15, I'm sorry, of the transcript copy
19 that I have, she mentions seeing thick smoke and fire light
20 in front of the door, is how she describes it in her
21 deposition.
22 Q And then read line 15. Where was the fire?
23 A Where was it? She says:
24 "It was in front part of the car, the Lincoln Town
25 Car, the front part of the car. This is what I saw

- 1 what she had said she had seen, and of course in a situation
2 like this, a person is going to be in a bit of a panic, so I
3 can understand her sometimes being a little - a little
4 inconsistent.
5 BY MR. DUNFORD:
6 Q Well, her neighbor described her as hysterical; didn't he?
7 A In one of his statements he did, yes, that she was very much
8 panicked.
9 MR. McLAUREN: Just to clarify for the record while
10 we're between questions, that Mr. Hoffman has not actually
11 been asked to give an opinion as to the cause and origin of
12 this fire, for what that's worth.
13 BY MR. DUNFORD:
14 Q And that's correct?
15 A What is correct?
16 Q That you're not being asked to give an opinion on the origin
17 and cause of the fire?
18 A That's correct.
19 MR. McLAUREN: His testimony is going to be limited to
20 the engineering evaluation of the switch itself and its
21 potential for the cause of this fire as opposed to what did
22 cause this fire and a traditional origin and cause opinion.
23 Mr. Newell has been designated as the origin and cause
24 expert in this case.
25 BY MR. DUNFORD:

1 Q Well, as I read your report, Mr. Hoffman, I see a great deal
2 of it dedicated towards origin and cause opinions and
3 theories; is that correct?
4 A It is a report of the evidence that I have in this case.
5 Q And your testimony is going to be explicit as to what,
6 as you understand it?
7 A Well, being that I am an engineer and familiar with the
8 functioning of electronics and the electrical component, I
9 was -- I am under the impression that I would spend more
10 time discussing the engineering and electrical aspects of
11 the speed control deactivation switch and why I don't think
12 that it was the cause of this fire.
13 Q And you're not going to testify about origin and cause other
14 than that the speed control deactivation switch was not the
15 cause and was not at the point of origin?
16 A Not a specific origin and cause as you are using that term.
17 Q I mean, because you already told me today you don't know
18 what caused the fire, right?
19 A And I believe that's what my report says, also.
20 Q And so does Ralph Newell's, right?
21 A That's correct.
22 Q He's calling the fire undetermined?
23 A I believe so. I'm not certain.
24 Q He also refers to it as possibly suspicious; do you recall
25 that?

1 modifications?
2 A No.
3 Q Did anyone from Ford?
4 A I believe there were some of our -- my associates in Dodge
5 Analysis were involved in a couple of hours, yes.
6 Q Does NFPA 921 address the classification of fires as
7 suspicious in cases?
8 A I'm sorry?
9 Q Does NFPA 921 have provisions that address a fire
10 investigator's classifying a fire as suspicious?
11 A Well, they describe suspicious, undetermined, or determining
12 an origin and cause. I'm not sure exactly what the
13 terminology -- what the words, what the verbiage is that
14 they use.
15 Q Do you know if "suspicious" is an acceptable classification
16 of a fire under NFPA 921?
17 A I'm not certain if 921 actually specifies the use of that
18 word for what they would consider as arson or a not fire.
19 I'm not sure what their actual verbiage is, is all I'm
20 saying.
21 Q So you don't know if it's appropriate for an investigator
22 relying upon NFPA 921 to classify a fire as suspicious?
23 A Well, I'm not sure that 921 is that dictatorial about the
24 use of words. Suspicious means it is that -- it's still
25 undetermined, but it also means that they are leaning toward

1 A Who?
2 Q Mr. Newell.
3 A No.
4 Q Do you know -- you're familiar with NFPA 921; is that right?
5 A Yes.
6 Q Did you rely or utilize the provisions of NFPA 921 as part
7 of your work in this investigation?
8 A I use a standard procedure similar to what's described in
9 921.
10 Q I mean, it's a guide that's pretty much accepted in the fire
11 investigation industry to assist investigators in going
12 about their investigation in a methodical way; is that
13 right?
14 A Yes.
15 Q What version of 921 did you rely on in doing your
16 investigation here?
17 A You know, it may have been a couple, because there just came
18 out -- a new edition just came out recently while this work
19 was going on, so I'm not sure if it's the '99 or 2001, I
20 think, were the two editions.
21 Q Are you aware of any differences between the '99 and 2001
22 versions of NFPA 921 relating to vehicle fire investigation?
23 A Yes, the vehicle fire investigation section was quite
24 heavily modified.
25 Q Did you have any involvement in that, in those

1 the possibility that there is evidence of arson.
2 Q You have a copy of the statement that Lisa Nannym gave to
3 the Federal Way Department of Public Safety in your file;
4 right?
5 A I believe so.
6 Q Do you have that? It's dated January 22nd, 2001.
7 A I believe that is so. What else does it say up there?
8 Q Oh, you can't -- can you read it okay?
9 A I just wanted to make sure I was looking at the same
10 statement from that you have there.
11 Q I'll show it to you.
12 A I believe that's the same one, yeah.
13 Q How many days after the fire is this?
14 A Two.
15 Q And the specific statement that she makes:
16 "I then opened the garage door and I saw dark
17 smoke and fire near the front of the Lincoln by the
18 heater."
19 Do you see that?
20 A Right.
21 Q And is that the statement that you're relying upon when you
22 stated earlier in your deposition here today that you
23 believe that the heater or the heater caused the fire?
24 A Yes. Partially. It's one of the many things.
25 Q Do you know if anyone was closer to the fire than Lisa?

1 A I am not certain of exact distances of anyone. It's really
2 kind of unclear in their statements as to who was standing
3 at what location of the door. It does appear like she and
4 her husband and possibly her son were all standing at the
5 pedestrian door, which appears to be the closest point that
6 anyone was at who saw the fire.
7 Q Do you know if anyone ever entered the garage while the fire
8 was progressing, while it was burning?
9 A Again, from the reports, it appears that Mr. McJannet did
10 attempt to go around and come in from the rear of the
11 vehicle in an effort to try and remove the car from the
12 garage and was unsuccessful at doing that.
13 Q In fact, he says that he went into the garage to the
14 driver's side door of the Lincoln Town Car, right?
15 A I believe in one of the statements he does mention getting
16 up pretty close to the door.
17 Q And what did he see when he was there at the driver's side
18 door of the Lincoln Town Car inside the garage while the
19 fire was burning?
20 A Again, I'm not sure all the statements are perfectly
21 consistent, but he says it seemed as if the driver's side
22 fire and possibly the passenger side fire were already on
23 fire.
24 Q Does he describe fire anywhere else in the garage when he's
25 standing at the door of the Lincoln Town Car?

1 distance at the door on the driver's side of the car to the
2 street?
3 A As you are approaching the driver's door from the rear and
4 as they would have seen from the pedestrian door which was
5 within very short distances of the front of the vehicle, they
6 would have been at very similar distances from the area of
7 question here between the fire and the furnace of the house.
8 Q When Mr. McJannet is in the garage, does he describe the
9 fire burning anywhere else than inside the car, the engine
10 compartment, at the street?
11 A I don't believe that he mentioned any other materials that
12 he noticed, that he mentioned.
13 Q You've read the deposition of Dale Wiese?
14 A Yes.
15 Q Do you know who he is?
16 A The neighbor from across the street.
17 Q Is he a credible witness in your opinion?
18 A I'm not sure what you mean by the word "credible," but he is
19 an eyewitness and I think his statements need to be
20 considered in the overall picture of things.
21 Q Let me ask it this way then. Do you believe he's a reliable
22 witness?
23 A I have no evidence that would indicate that he's not.
24 Q Did Mr. Wiese ever go into the garage while the fire was
25 burning?

1 A I don't recall that he does.
2 Q If he --
3 A He does mention that there was very heavy smoke.
4 Q If he only saw fire at the driver's side fire and the
5 passenger side fire when he entered the garage and stood by
6 the driver's side door where the fire was burning, would that
7 affect your opinion on where the fire originated?
8 A In an investigation of this nature, you don't take one
9 specific item and put your entire case on it, you need to
10 consider all of the different information. Eyewitness
11 testimony can sometimes be a little different because it is
12 a very emotional moment and so sometimes their observations
13 might be somewhat inconsistent. He was only one of those
14 people that have made extensive statements as to what they
15 witnessed visually during the start of the fire, so --
16 Q You would agree with me that he's the person that would have
17 the best observation point, is that right?
18 A I can't say that. As far as other distances, the door of the
19 car is really an different distance from the location
20 we're talking about than the door for the laundry room.
21 Q Have you measured it?
22 A I have seen measurements taken of it and I have measured
23 one, so I know that the distances are very similar.
24 Q You're saying the distance from the threshold of the open
25 door into the garage to the driver's side fire is the same

1 A Based on my interpretation of the statements, it does not
2 sound like he actually stepped over the threshold of the
3 garage door.
4 Q In fact, he admits that from where he was, looking into the
5 garage from the sidewalk, that he couldn't really see, that
6 there's no depth perception from there to the front of the
7 car to the end of the garage, isn't that right?
8 A Um-hmm. Yes.
9 Q And that he makes the statement in his deposition:
10 "There was no way I could be certain that the fire
11 was coming from the car itself because I couldn't see
12 the front of the car."
13 Do you recall that testimony that he gave?
14 A I believe that might have been in his deposition --
15 Q Correct.
16 A -- as opposed to his interview by the fire department.
17 Q Correct.
18 A Yes.
19 Q And you're aware of that testimony?
20 A It sounds familiar, yes.
21 Q How did Mr. Wiese describe Mr. McJannet and his behavior
22 during the fire?
23 A He, as I recall, seemed to think that he was a bit relaxed,
24 if you will, or not as panicked as Mr. Wiese thought
25 he might -- should have been, you know, in there

1 circumstantial.
 2 Q In fact, is it your understanding that Mr. Wiene gave a
 3 statement to the fire department inferring that the fire may
 4 have been intentionally set because Mr. Mejsman was so
 5 calm?
 6 A I'm not sure if Mr. Wiene is the only one that made that
 7 observation. I believe the fire department had members of
 8 the fire department who made that kind of an observation
 9 also.
 10 Q So you're aware that Mr. Wiene made that observation;
 11 correct?
 12 A I might want to review it in detail, but I'm almost certain
 13 he was one of the people who mentioned it to the
 14 investigating officer.
 15 Q Did Mr. Wiene see the fire in its initial stages?
 16 A I don't believe that he saw it in its absolute initial
 17 stage, no.
 18 Q Because he heard the alarm, too, that's what attracted him
 19 from his office or bedroom window across the street, right?
 20 A Correct.
 21 Q And as you said earlier, the noise could indicate that the
 22 fire had been burning for some period of time before it was
 23 discovered, right?
 24 A That would be my interpretation of that, yes.
 25 Q In fact, he wrote in his deposition that when he came

1 Q Mr. Wiene has described a fire burning inside the garage and
 2 he's described a flame coming out under pressure; do you
 3 recall that description?
 4 A I'm not sure he used those words, but again, he did describe
 5 a blue flame with a rather whooshing I think he used the
 6 term blew that kind of appearance to him.
 7 Q Do you have an explanation for what Mr. Wiene was observing?
 8 A Yes.
 9 Q What is that?
 10 A The type of flame that he described is one of a relatively
 11 hot fire. You even used the term "under pressure." It also
 12 indicates from the noise and the direction that he described
 13 that it was probably something under pressure. And the
 14 combustion of something under pressure and something that
 15 burns hot enough to create a blue flame, from all of the
 16 evidence of what the - Mr. Topinka investigated when he
 17 investigated the scene as far as the only materials in that
 18 area of the garage that could have done that were the
 19 natural gas lines in the house.
 20 Q And you're sure of that?
 21 A That is my professional opinion at this point in time, yes.
 22 Q What color is a natural gas flame when it's controlled, in
 23 other words, it's coming through an orifice?
 24 A If you look under your water heater or your furnace, you
 25 will tend to see a blue flame.

1 across the street with the fire extinguisher, that the fire
 2 was fully - the garage was fully engulfed in flames; do you
 3 recall that testimony?
 4 A I'm not sure that I recall the actual words that he used,
 5 but he did say that by the time he got there with his fire
 6 extinguisher, that he did not try to put the fire out with
 7 his fire extinguisher, that he felt it was too progressed at
 8 that point to - for his fire extinguisher to do any good.
 9 Q Do you know if before the night of the fire Mr. Wiene had
 10 ever talked to Constantine or Janet?
 11 A Again, my recollection of the statements was that he had no
 12 real personal interaction with them one way or the other, he
 13 sort of described them as people who keep to themselves, who
 14 were quiet people.
 15 Q He called them stand-offish, right?
 16 A Was that one of the words? Yeah.
 17 Q What was his basis, if you recall, for saying that
 18 Mr. Mejsman was in his opinion too calm?
 19 A From what I understood of his statement, it was just his
 20 interpretation of Mr. Mejsman's behavior at the time.
 21 Q Isn't it hard on how he believed he would react if he had a
 22 fire in his home?
 23 A It might very well be. It's a very qualitative kind of a
 24 thing, a very emotional kind of a thing for all of us, I'm
 25 sure.

1 Q What color is a natural gas flame when it's uncontrolled or
 2 it's coming from a ruptured pipe?
 3 A It depends on the size of the rupture and the pressure
 4 that's being able to be maintained behind it in the pipe.
 5 Q So how big does a rupture have to be or how small does it
 6 have to be before the flame is something other than blue?
 7 A Well, I'm not sure about the size of the rupture, but the
 8 phenomenon of changing that flame from a blue flame to one of
 9 yellow or orange is just to have more oxygen or less oxygen
 10 involved so that it's not burning at stoichiometry.
 11 Q It's not burning what? I didn't hear.
 12 A At stoichiometry. That's the chemical term for the point at
 13 which you have the correct mixture of fuel and oxygen to
 14 burn that fuel as efficiently as possible.
 15 Q So if there's more oxygen, what color is the flame going to
 16 be?
 17 A I would tend to think in either case, with natural gas being
 18 as pure a fuel as it is, going either side, it would tend to
 19 become a cooler flame, so it would become yellow.
 20 Q With more oxygen?
 21 A With either more or less oxygen. If it's off the point of
 22 stoichiometry, the flame becomes cooler, it's not as
 23 efficient of a burn.
 24 Q Is natural gas heavier than air or lighter than air?
 25 A I believe it's lighter than air.

1 Q What about gasoline, is it heavier than air or lighter than
2 air?

3 A Its vapor state is lighter than air. In liquid state is
4 heavier than air.

5 MR. McLENNAN: Mr. Dunford, we've spent going on five
6 hours talking about stuff that Mr. Hoffman has not been
7 asked to render an opinion on. Are we going to save an
8 some point to the expected testimony of Mr. Hoffman and what
9 he has been asked to give an opinion on?

10 MR. DUNFORD: Well, his expected testimony was given to
11 me about a half an hour ago, so I mean, I'm going by what
12 was in his report and that's what I prepared for. And I
13 know Mr. Newell is out there, but the roles and the lines of
14 demarcation of the different opinions that were going to be
15 offered by Mr. Hoffman and Mr. Newell have just been
16 described to me in detail today.

17 BY MR. DUNFORD:

18 Q So I am going to serve on, because I have addressed
19 before -- but I haven't been addressing information that's
20 contained in your report.

21 A Absolutely.

22 Q Is there anything inside the engine compartment of a 1993
23 model year Lincoln Town Car that would produce a blue flame
24 that would have the appearance of being under pressure when
25 it burned?

1 A No.

2 Q Is there anything else to your knowledge as a fire
3 investigator that you've encountered that would produce a
4 blue flame in a vehicle fire?

5 A In a vehicle fire?

6 Q Yes.

7 A Didn't you just ask me that question?

8 Q I'm talking engine compartment. Now I've mentioned it a
9 little bit.

10 A There was nothing that I know of as a vehicle that will burn
11 in a manner as it was described in Mr. Wimer's statement.

12 Q Are you aware of anything else, not looking at a vehicle
13 fire, other than natural gas that you believe would burn
14 with a blue flame?

15 A I believe propane or any other bottled type of fuel could
16 conceivably do that.

17 Q Anything else?

18 A Off the top of my head -- you have to have a pretty good
19 flame. Alcohol, very pure alcohol might burn with somewhat
20 of a blue flame, although not with the blow torch sound with
21 it, as -- there aren't too many other explanations for what
22 he described that I can think of.

23 Q Have you ever heard of carbon monoxide burning and producing
24 a blue flame?

25 A I have heard of it, yes.

1 Q So that's another possibility, an explanation for what
2 Mr. Wimer saw in the garage or driveway?

3 A Well, again, it's not consistent with a blow torch kind of a
4 sound and a flame going horizontally. The carbon monoxide,
5 unless it was in a container, a steel container, and under
6 pressure, wouldn't have caused that physical phenomena to
7 occur. The carbon monoxide in that fire was all over the
8 room and it's uncontained, so you don't get that whooshing
9 sound and a sideways movement of it like he described.

10 Q Do you know if anyone at the fire department turned off the
11 natural gas supply?

12 A No, I don't.

13 Q Is it your suspicion or belief that that occurred?

14 A I would think so, because the fire report mentioned that
15 they called for utilities, which is a typical procedural
16 step. There is no mention in the fire report of any order of
17 natural gas in any of the reports. So if the flames erupted
18 as Mr. Wimer described and the fire fighters went in after
19 that -- after the fire was extinguished and did not notice
20 leaking gas, then I would have to assume that the gas
21 utility had been shut off sometime between those two points
22 in time.

23 Q Did anyone smell gas in the house or the garage the day of
24 the fire?

25 A There is no mention by any of the witnesses to the fire or

1 the fire department investigation of any odor of gas or
2 gasoline or anything else.

3 Q What is your explanation for how the lines ruptured then?

4 A Looking at the photographs that Mr. Topinka had taken during
5 his investigation, it leaves me kind of strongly suspect,
6 shall we say, of the iron pipe gas line that comes up out of
7 the concrete pad of the garage to feed the furnace. It's in
8 a highly corroded state.

9 Q So how did it rupture?

10 A I don't know.

11 Q And you're looking at it in a highly corroded state after
12 the fire, right?

13 A I am looking at Mr. Topinka's photographs after the fire had
14 occurred, yes.

15 Q Now, the fire department did an investigation and they were
16 convinced that the fire was incendiary, correct?

17 A That's the impression I got from their reports, yes, their
18 initial inclination.

19 Q And a couple of the reasons they had that concern was
20 because they couldn't find license plates on the vehicles;
21 right?

22 A Right.

23 Q And the other reason is because they couldn't find gas caps
24 for the vehicles, right?

25 A Yeah, actually, their discussion of gas caps is a little

1 unclear to me. I'm not sure if they're talking about the
2 screw door on the vehicles or if they're talking about the
3 cap that actually screws into the end of the filler pipe, so
4 it's a little funny in any way of thinking, their statements
5 anyway.

6 Q Based on your experience, is it unusual for the screw door
7 to be open like there were after the fire?

8 A Well, again, I'm not certain what they were reporting and at
9 what point in time they were reporting it. As a matter of
10 fact, I think one of the investigators even commented that
11 maybe one of the first-in fire fighters had opened the door
12 either during suppression of the fire or during the early
13 stages of investigation and happened to leave it open. I'm
14 not sure if they're talking about the door or the cap
15 itself, so it's --

16 Q Well, let me ask you this then. Do you have that same
17 concern that the fire department had about the gas caps?
18 And I mean the screw-on caps.

19 A The screw-on caps have -- that we use in production are
20 predominantly -- or have a high content of plastic, and I
21 believe again in Mr. Topinka's photographs he took a picture
22 of the opening of the filler pipe and there is some plastic
23 residue in that filler pipe.

24 Q Which suggests that the cap was there when the fire
25 occurred?

1 A Yes.

2 Q Who is John Walker?

3 A He is a fire investigator. I believe he's from Indiana or
4 Illinois.

5 Q Was he involved in examining the evidence from the Hoffman
6 case?

7 A As I understand it, Mr. Walker did inspect the evidence in
8 this case at one point in time.

9 Q And he was working for Ford Motor Company?

10 A Yes.

11 Q Did you ever talk with him about the results or the
12 conclusions that he drew, if any, as a result of his
13 investigation?

14 MR. McLAREN: I'm going to object to the answer it
15 calls for information protected by the attorney-client
16 privilege and work product doctrine. M. Walker was
17 retained by Ford as a consulting expert in this case and
18 anything that Mr. Walker may have said to Mr. Hoffman would
19 be protected by that consulting privilege as long as there
20 was an attorney present at the time.

21 He I don't -- you know, again, the specific question
22 you'll have to answer --

23 THE WITNESS: Okay.

24 MS. McLAREN: -- to discuss whether the answer would be
25 objectionable.

1 A They have been there, although Mr. Hoffmann mentioned that
2 he had a locking gas cap, which is not our production
3 component, so I really don't know what that component may
4 have been made of. But there does appear to be some plastic
5 residue in the opening. And I do believe that Mr. Topinka
6 also had pictures from the filling through of the vehicle of
7 fire-damaged bumper plates, as well.

8 Q So the things that concerned the fire department, missing
9 bumper plates, missing gas caps, do they concern you?

10 A Not in a tremendously strong way. They are observations of
11 professionals, but some of them, I think, have been somewhat
12 obscured by physical evidence.

13 MR. DUNFORD: Do you wish to take a break?

14 MR. McLAREN: Uh-huh.

15 (Short pause.)

16 (Hoffman Exhibit No. 15 was marked for identification.)

17 MR. DUNFORD: Let's go back on the record.

18 BY MR. DUNFORD:

19 Q Mr. Hoffman, if you'd pick up that one sheet that's just
20 been marked as Exhibit 15 and describe for me what it is,
21 please?

22 A There are some handwritten notes that I had prepared.

23 Q Do you know the date that you prepared them?

24 A No, not specifically.

25 Q Do you know who John Walker is?

1 BY MR. DUNFORD:

2 Q I haven't asked you the substance, but what I'm asking is
3 whether you have spoken with Mr. Walker about his review of
4 the evidence?

5 A I did have a phone conversation with John Walker.

6 Q Was counsel involved in that phone conversation?

7 A I don't recall.

8 Q Are you relying on any information that Mr. Walker provided
9 to you as a basis for your opinion?

10 A No.

11 Q Do you know whether Exhibit 15 was prepared before or after
12 July 31, 2002, or maybe even on that date?

13 A No, this was long before July 31st of 2002. This was, I
14 believe, shortly after the original inspection in October of
15 2001.

16 Q Do you have any notes that you prepared as a result of the
17 July 31, 2002, inspection?

18 A No.

19 Q You didn't make any notes on that day?

20 A No.

21 Q Exhibit 15 says "Inspection Observations"; do you see that?

22 A Yes.

23 Q "BPS contacts used and broken hoses." Does that refer to
24 the brake pressure switch?

25 A Yes.

- 1 Q And what contacts are arced and broken loose?
- 2 A At the time of the October inspection, we did I guess what I
- 3 will call a macroscopic as opposed to a real microscopic
- 4 look at the switch portion, the contacts of the switch, and
- 5 just with the naked eye what I could observe were that the
- 6 contacts, I say -- you know, I mentioned it verbally there
- 7 because both the moving and the stationary contact from what
- 8 I could see with the naked eye appeared to have had signs of
- 9 electrical arcing and breakage.
- 10 Q Was that later confirmed by the X-rays that were taken of
- 11 the electrical side of the switch?
- 12 A Yes.
- 13 Q Did you see anything in the X-ray that was inconsistent with
- 14 your naked-eye visual observations shown on Exhibit 15 that
- 15 both the stationary and movable contacts had arced and
- 16 broken loose?
- 17 A No, it appeared similar in the X-ray.
- 18 Q Did that observation lead you to any conclusion, in other
- 19 words, that the brake pressure switch contacts were arced
- 20 and broken loose?
- 21 A That observation by itself is not conclusive of anything, so
- 22 no.
- 23 Q The next inspection observation on Exhibit 15, "Ham
- 24 housing," is that electrical housing?
- 25 A Yes-ham.

- 1 Q Is that referring to the electrical portion of the switch?
- 2 A Yes.
- 3 Q So the electrical housing and connector had damaged but
- 4 intact; is that right?
- 5 A That's what I says, yes.
- 6 Q And why did you -- why was that significant to you that you
- 7 wrote it down?
- 8 A Just the fact that a combustible plastic that was at the
- 9 alleged point of ignition of the fire was still relatively
- 10 intact.
- 11 Q And if I understand correctly, it's your opinion there's too
- 12 much plastic there for the fire to have started at the
- 13 switch?
- 14 A Among other things, that's one way of stating it, yes.
- 15 Q The next entry is the prop valve and EPS retaining ring
- 16 consumed, stuck, damaged by fire, and the prop valve is the
- 17 proportioning valve; is that right?
- 18 A Yes.
- 19 Q And the switch is mounted on the prop valve at a 45-degree
- 20 angle; correct?
- 21 A Yes.
- 22 Q And the prop valve is made of what?
- 23 A Aluminum.
- 24 Q And it was totally gone after the fire; is that right?
- 25 A Yes.

- 1 Q Do you know what temperature aluminum melts at?
- 2 A Around eleven, 1,200 degrees, depending on which alloy.
- 3 Q And that's Fahrenheit?
- 4 A Yes.
- 5 Q And the brake pressure switch retaining ring, what is it
- 6 manufactured of?
- 7 A It's also made of aluminum.
- 8 Q And both of those were consumed, or there are some portions
- 9 of the retaining ring that survived the fire; is that right?
- 10 A Right.
- 11 Q Is there any portion of the proportioning valve that
- 12 survived the fire?
- 13 A There were pieces of melted aluminum that were found in the
- 14 area that was identified as portions of it, but they were
- 15 melted down, basically, so they didn't really represent a
- 16 part anymore, they just represented a mass of melted metal.
- 17 Q You couldn't identify them as being the prop valve?
- 18 A I couldn't or you couldn't?
- 19 Q No. Could you?
- 20 A I based my opinion on the knowledge of where the parts are,
- 21 what they're made of and where these globs, if you will, of
- 22 aluminum were found, but they do not resemble the
- 23 proportioning valve as it's made. If someone had just
- 24 looked at it, they would say it's a melted piece of
- 25 aluminum. I was going on the premise that where we found

- 1 It, it was from the proportioning valve.
- 2 Q The next entry says "Wheel hood." Why did you write that
- 3 down?
- 4 A It was an observation that I made during my inspection.
- 5 Q The next entry says "Wheel intact, exterior body totally
- 6 burned." Is it your testimony -- well, let me ask this
- 7 first.
- 8 The wheels that you're referring to, are they the
- 9 aluminum ones?
- 10 A Yes.
- 11 Q And it's your testimony that the wheels on the Mejdikian
- 12 Three Car were intact after the fire?
- 13 A It is an observation that I made during the inspection that
- 14 those wheels were relatively intact.
- 15 Q Were there any of the wheels that were damaged more than the
- 16 others?
- 17 A I think I went into that in a bit of detail in my report.
- 18 Q And what conclusion did you reach?
- 19 A In and of itself, that is not a conclusion-drawing type of a
- 20 thing, it's an observation.
- 21 Q What observation did you reach then about the wheels?
- 22 A It appeared that the left -- the driver's side front wheel
- 23 and the passenger side rear wheel sustained slightly more
- 24 heat damage than the other two.
- 25 Q Now, the passenger side rear wheel is away from what you've

1 described as when you believe the fire originated; right?

2 A. The area that has been the point of interest of I think just

3 about every investigator involved in this case at the

4 moment, yes. This was a large fire.

5 Q. So do you have an explanation for why the passenger side

6 rear wheel, the aluminum rim sustained more damage than the

7 passenger front or the driver's side rear?

8 A. It experienced more heat.

9 Q. Do you know the source of that heat loss in the garage?

10 A. There needs to be a fuel load to create that sort of heat or

11 heat flow from the fire.

12 Q. Can you tell me whether the driver's side front wheel was

13 more or less damaged than the passenger side rear wheel?

14 A. I'm sorry?

15 Q. Can you tell me whether the driver's side front wheel was

16 more or less damaged than the passenger side rear wheel?

17 A. It's close. Because of the way the vehicle was moved when

18 I was in Seattle, I didn't really get a great opportunity to

19 look at the passenger side rear wheel, I was basing that

20 observation more on Mr. Topinka's photographs of the scene,

21 which are a little more complete than my inspection.

22 photographs could be under the circumstances. I don't think

23 that -- I don't think there's a great difference between the

24 two of them based on what I've seen so far.

25 Q. Do you know if the interior of the driver's side wheel is

1 Q. Where is the brake vacuum boost gasket located?

2 A. It is in the flange of the brake booster.

3 Q. And where is the brake booster located in the engine

4 compartment?

5 A. It is directly in front of the driver's position at the top

6 of the engine compartment.

7 Q. Is it more toward the middle of the engine compartment or

8 is it to the outboard?

9 A. It is outboard, it's almost directly above the frame -- the

10 driver's side frame rail.

11 Q. And my understanding is that you just believe there's too

12 much of the gasket there that's not consumed by the fire to

13 reach a conclusion that the fire started in the engine

14 compartment; is that right?

15 A. Yes.

16 Q. Have you ever seen a brake vacuum boost gasket survive an

17 engine compartment fire?

18 A. I have seen a couple, yes.

19 Q. Does that include in fires that were allegedly caused by the

20 speed control deactivation switch?

21 A. Yes.

22 Q. Are those fires where you have determined that the fire was

23 caused by the speed control deactivation switch?

24 A. I don't know. That's getting into more detail than I can

25 recall from some of these files.

1 more or less damaged than the exterior of the driver's side

2 wheel?

3 A. As I recall, the damage to the rim is slightly more inboard

4 than outboard, if you will, of the vehicle.

5 Q. The next entry, combustion still present in interior,

6 parts, four recently, closed parts, that's an observation

7 that you made. Did you draw any conclusions from it?

8 A. No, it's just an observation that appears to support the

9 movement of the fire from outside of the interior passenger

10 compartment of the vehicle toward to that passenger

11 compartment.

12 Q. So it helped you determine that the fire didn't start inside

13 the passenger compartment?

14 A. Yes.

15 Q. So the next entry, combustion still present underhood,

16 gasket, brake vacuum boost gasket, EEC connector, plug wire

17 caps on coils, top cover of battery, parts, partial, closed

18 parts, rollers, parts, partial, closed parts, headlamp

19 housings, parts, partial, closed parts, and I read that

20 correctly?

21 A. Yes, sir.

22 Q. Those were observations that you made. What conclusions did

23 you reach from them?

24 A. Those observations are indications to me that the fire

25 didn't start in that particular area of the vehicle.

1 Q. What would happen if you put a scratch to the -- or a flame to

2 the brake vacuum boost gasket that's in the flange of the

3 Lincoln Town Car?

4 A. The remains of the gasket as it is today?

5 Q. Yes, sir.

6 A. I'm not sure.

7 Q. Are there still combustion present something in that

8 gasket or have they all been burned away?

9 A. I am not certain if there are any combustion left. I

10 would assume there are, since there is material there, but

11 it is charred from heat.

12 Q. What is the boost gasket made of?

13 A. Rubber.

14 Q. Do you know the ignition temperature of rubber?

15 A. No.

16 Q. What is the EEC connector?

17 A. I used an old-fashioned term there. EEC stands for

18 electronic engine control.

19 Q. Some people call it an ECM; is that right?

20 A. General Motors used to call it an ECM, we used to call it an

21 EEC. We now both call it a powertrain control module, which

22 is the proper term in this modern day, it should be called

23 the PCM.

24 Q. Where is the electrical engine control connector located?

25 A. It is located in the dash panel between the engine

- 1 compartment and the passenger compartment. It is slightly
2 outboard of the frame rail and about halfway up the dash
3 panel.
4 Q So is that on the fire wall?
5 A What some people refer to as a fire wall, yes, that's what I
6 call a dash panel.
7 Q What's the EEC connector made of?
8 A Plastic.
9 Q Do you know what kind of plastic?
10 A I believe it's polycarbonate, but I'm not certain.
11 Q Do you know what its ignition temperature is?
12 A No, not offhand.
13 Q What is it about the appearance of the EEC connector that
14 leads you to believe that I guess there's too much of it
15 there to support the conclusion that the fire started inside
16 the vehicle?
17 A Again, yes, there is still plastic remains there relatively
18 close to the alleged point of ignition that would be
19 inconsistent with that point of ignition.
20 Q Is the EEC connector above or below the level of the speed
21 control deactivation switch?
22 A It is above.
23 Q About how far away from it is it?
24 A I'd be guessing.
25 Q The plug wire caps on the coils, where are those located?

- 1 high-technology polymer.
2 Q Do you know what its ignition temperature is?
3 A No.
4 Q Is it higher or lower than the plastic?
5 A It is plastic.
6 Q Okay. Fiberglass?
7 A The fiberglass filler -
8 Q Yeah.
9 A - is glass, it doesn't burn.
10 Q Okay. So there is fiberglass filler that remained after the
11 fire at the rear of the valve cover, but is the plastic
12 burned away at the rear of the valve cover?
13 A As I recall from the photographs, the rear end of the valve
14 cover is not - does not have a lot of the polycarbonate cooked
15 out of it yet.
16 Q The top cover of the battery. When is the battery located?
17 A The battery is in the passenger side front corner of the
18 engine compartment.
19 Q And in fact, you concluded in your report that the passenger
20 side of the engine compartment had less damage than the
21 driver's side, is that correct?
22 A Yes.
23 Q So it's not surprising then that the top cover of the
24 battery is less damaged on the passenger side or when it's
25 located on the passenger side than the other components that

- 1 A The coil packs for the engine in this vehicle are mounted on
2 the front of the engine valve covers, mounted by the front
3 end of the valve covers on the front of the engine.
4 Q What is it about their appearance that was significant to
5 you?
6 A Again, the plug wire caps are rubber, steel, plastic, you
7 know, a polymer-based material like the others that I've got
8 listed there that would typically melt and be consumed in
9 the six, seven, 800-degree Fahrenheit temperature range that
10 was still intact, partially intact.
11 Q So they're mounted on front of the engine valve covers. Is the
12 engine valve cover itself closer in orientation to the speed
13 control deactivation switch than the plug wire caps?
14 A The rearward end of the valve cover is closer to the speed
15 control deactivation switch than the coil caps are, yes.
16 Q Is the rear end of the valve cover more or less damaged than
17 the plug wire caps on the front of the engine valve cover?
18 A I would say that they're not significantly different.
19 They're different materials and different parts, so they go
20 through some different thermodynamic dynamics during a fire,
21 but I would say that the relative damage at the front edge
22 and the rear edge are similar.
23 Q What's the valve cover made of?
24 A Fiberglass, reinforced nylon, I believe. Don't hold me to
25 the nylon, it might be a different polymer, but it is a

- 1 not over on the driver's side where you observed heavier
2 fire damage, is that right?
3 A Correct.
4 Q And the radiator is obviously at the front of the engine
5 compartment?
6 A Yes, sir.
7 Q And what observations did you make about the condition of
8 the radiator following the fire?
9 A That it was only partially consumed.
10 Q If the fire was coming from outside the vehicle, isn't the
11 radiator one of the first things that it would attack?
12 A Not necessarily.
13 Q If the fire was coming from outside the vehicle at the front
14 of the vehicle, what is the first portion of the vehicle
15 that is going to be susceptible or influenced by the fire?
16 A The bumper cover. There is an air flow deflector cover, if
17 you will, underneath the bumper, the front grill opening
18 that holds the hoodlamps in place and the grill itself in
19 place, those are all plastic pieces which would melt down
20 and ignite long before the radiator began to melt.
21 Q So you've got hoodlamps housings which are made of plastic
22 that are partial. Do you mean they're partially consumed?
23 A Yes.
24 Q Would you expect that a fire starting outside of the car and
25 coming to the front of the car would in fact consume the

- 1 handlamp housings?
- 2 A It depends on the directions that you're talking about.
- 3 Q From the appearance of the handlamp housings, can you tell
- 4 which direction the fire came from?
- 5 A Not using that as a singular piece of information.
- 6 Q The next entry says "Plaintiff expert photos of same" and I
- 7 went to go to the -- it says "Rug on floor under vehicle not
- 8 totally consumed," and that's an observation that you made?
- 9 A Yes.
- 10 Q And did you draw any conclusions from that observation?
- 11 A Again, not a conclusion on a single observation, no.
- 12 Q What portions of the rug were damaged by the fire?
- 13 A It appeared that there was heavier damage on the perimeter
- 14 of the rug and also on the end that was, to the best of our
- 15 ability to reconstruct its original position, was under the
- 16 front of the vehicle.
- 17 Q Are there any holes burned in the rug?
- 18 A Yes, there appears to be a hole burned in the rug.
- 19 Q How many?
- 20 A I'm not sure, it depends on how you want to count them. I
- 21 believe the way I would look at it as I recall, there's one
- 22 relatively large one that's a hole itself. The other damage
- 23 is actually being done to the perimeter of the rug, so it's
- 24 not really a hole, it's a section of the edge, if you will,
- 25 that's cut away, burned away.

- 1 Q And where was that hole located, where would it be oriented
- 2 in relationship to the vehicle at the time of the fire?
- 3 A Again, it's kind of an estimate because it had been pulled
- 4 away when the vehicle was originally moved, but based on
- 5 the relative position of some of the parts that had fallen
- 6 down and adhered to the rug, it appeared like the hole
- 7 that was burned through would have been somewhere around
- 8 the -- underneath the front end of the vehicle on the
- 9 driver's side at the base of the dash panel.
- 10 Q So it's to the rear of the engine compartment, correct?
- 11 A I think as from -- again, I'm not really certain if it was
- 12 angled or turned or whatever, the positioning of it is
- 13 somewhat unknown, but --
- 14 Q That's the area of heaviest damage on the rug, isn't it, the
- 15 only place where it burned through completely?
- 16 A I don't think it's the only place of damage of that relative
- 17 significance. Like I say, there are several -- I think
- 18 there's three or four places around the perimeter of it that
- 19 have also been totally consumed.
- 20 Q Is the hole in the rug directly under the location where the
- 21 speed control deactivation switch was installed?
- 22 A I'm not certain of its exact location. It was somewhere in
- 23 that general area. The brake fluid reservoir is also
- 24 directly above that same general location.
- 25 Q What was the condition of the brake fluid reservoir after

- 1 the fire?
- 2 A It was consumed in the fire.
- 3 Q What about the wiring harness and the wire connections that
- 4 are in that same area, what was their condition after the
- 5 fire?
- 6 A They have been what I call partially consumed.
- 7 Q The insulation is burned off?
- 8 A The insulation on the wiring is burned off, yes.
- 9 Q The wires are still there?
- 10 A The copper wires are still there.
- 11 Q Are there any other components other than the prop valve,
- 12 the brake fluid reservoir, the wiring harness, and wiring
- 13 connections that are in the area of the speed control
- 14 deactivation switch that you observed after the fire?
- 15 A That I observed?
- 16 Q In the hydrogen vehicle.
- 17 A There were remains of the air filter, which is slightly
- 18 forward of those components in its original position. The
- 19 load-leveling compressor and pump assembly had fallen down,
- 20 it's further up in the front, and it had adhered to the
- 21 carpet, which is one of the -- the air filter was much
- 22 smaller and the pump remains are what we kind of used to try
- 23 and guess the orientation of the rug under the vehicle.
- 24 Q There was an issue made about Richard Clark in his
- 25 deposition disliking the suspension leveling pump in the

- 1 cause of the fire. Have you done that, eliminated it as a
- 2 cause of the fire?
- 3 A Yes.
- 4 Q You don't think it caused the fire, do you?
- 5 A I don't believe so, no.
- 6 Q Other than the components -- well, let me --
- 7 Are there any other components in the area of the speed
- 8 control deactivation switch that you observed after the fire
- 9 that you haven't already described their appearance to me?
- 10 A I don't know, we've been talking for quite some time. The
- 11 fuel lines, the brake lines. There are other component
- 12 pieces. The frame itself is there, that's a component, if
- 13 you will.
- 14 Q Are there any other components that were totally consumed
- 15 other than the prop valve, the insulation on the wires, wire
- 16 connections, and the brake fluid reservoir?
- 17 A The flexible fuel lines between the frame and the engine,
- 18 the power steering lines, the power steering reservoir, the
- 19 transfer inter lines, the speed control module, the ignition
- 20 module, the relay box, the tips, those items are all in that
- 21 same general area. The air intake system as well as not
- 22 just the filter itself, but the air intake passes right
- 23 across that same area, and all of those devices are made of
- 24 plastic or have heavy plastic content and that was all
- 25 consumed in the fire.

1 Q Now, you indicated that you were going to testify about the
2 engineering and electrical aspects of the speed control
3 deactivation switch and why you do not believe it caused the
4 fire, so what I want to ask you -- is that correct?
5 A Yes.
6 Q Can you describe for me the basis for your testimony for
7 that opinion, why you reached that conclusion?
8 A The condition of the switch remains, the condition of other
9 components that still remains in the vehicle and other
10 facts and observations in this case lead me to believe that
11 that switch did not fail until after the fire started.
12 Q And we've already talked -- we just went through the
13 condition of the other components in the engine compartment;
14 right?
15 A Some of them, yes, many of them.
16 Q Anything else about the condition of other components in the
17 engine compartment that we have not already talked about
18 that is a basis for your opinion that the switch did not
19 cause the fire?
20 A Not that I can think of at the moment.
21 Q Did the switch fail?
22 A The switch was damaged. It depends on how you want to use
23 the word "failures." It was damaged by the fire.
24 Q Did the switch fail before it was damaged by the fire? In
25 other words, was there arcing in the switch before the fire

1 sustained for a period of time, will achieve temperatures in
2 the four to 6,000-degree Fahrenheit range.
3 Q And that's pretty hot; isn't it?
4 A It's very hot, yes, sir.
5 Q So in these such a thing as a low-temperature arc that's
6 going to have temperatures below four to 6,000 degrees?
7 A Arcing that occurs in an inconsistent way where it's on
8 again, off again, if you will, or one that is caused due to
9 some sort of relative connection will generate heat and
10 and different damage patterns because of it.
11 Q So if there had been a lower temperature arc, then you
12 believe you wouldn't have the very sharp and jagged edges on
13 the remains of the contact; is that correct?
14 A Among other observations, yes, that's true.
15 Q Tell me about the existence of or deposits of brass on the
16 harpoon, what is your opinion as to the significance of that?
17 A Well, in this particular case the harpoon has, as I recall,
18 three or four small what I'll describe as globules of
19 gold-colored metal, brass or copper, that are adhered to the
20 steel portion of the foot of the harpoon that faces the
21 contacts and it is -- appears -- it appears to be adhered in
22 a very tight way, shall we say, that's far less of a better
23 word, which indicates a welding kind of a phenomenon
24 occurring. Which is, again, a high-energy arc phenomenon.
25 Q And that's just based on your visual observation, correct?

1 reached it?
2 A Not in my opinion, no.
3 Q How do you know?
4 A Because the quality of the wiring and the remains of not
5 only the contacts that are shown in the X-ray but also the
6 deposits of brass on the harpoon portion of the switch are
7 inconsistent with the failure mode that's described in some
8 of those exhibits we were talking about earlier.
9 Q Exhibit 10? That's the one that says "Scenario."
10 A Some of the descriptions of the failure mode is in 10, yes.
11 Q Okay. What is it about the remains of the contact in the
12 X-ray that supports -- you believe supports your opinion?
13 A There are very sharp -- not very. Let me rephrase that.
14 There are relatively sharp and jagged edges on the
15 remains of the contacts and those observations are -- I'm
16 sorry -- the parts that you can make those observations on
17 are buried inside the plastic, so you really do need to look
18 at the X-ray. And those sharp, jagged edges indicate that
19 this was a rather severe electrical arc which reached a
20 very high temperature to cause that kind of damage.
21 Q I've never heard of a low-temperature arc. Is there such a
22 phenomenon?
23 A There is -- there's going to be variation in just about
24 anything in, you know, the real world because it is not
25 perfect. In a short circuit, an arc, if it is created and

1 A Visual observations, some microscopic observations, X-ray
2 analysis.
3 Q Other than --
4 A Experience.
5 Q Other than visual observations, microscopic observations,
6 the X-rays, and your experience, is there anything else that
7 you're relying upon when you talk about the globules adhered
8 to the steel portion of the harpoon?
9 A I don't believe there's anything else that I can think of at
10 the moment, no.
11 Q So you haven't done any testing to verify your opinions or
12 conclusions in that area; is that right?
13 A No, not in this case.
14 Q Have you done it in any other cases?
15 A No.
16 Q Anything else as a basis for your opinion that the switch
17 didn't cause the fire?
18 A Well, as I told earlier on, the consumption of components
19 around that area, the witnesses and their observations, the
20 appearance of some of the other items in that area of the
21 garage.
22 Q Well, if Mr. McJannet testified that the fire was burning
23 on the driver's side tire and he doesn't say there's fire
24 burning anywhere else, that doesn't support the conclusion
25 that the fire originated somewhere outside the engine

1 compartment; does it?

2 A Well, it tells me that Mr. McJannet got there about fifteen

3 to twenty minutes after the ignition of the fire.

4 Q And does it tell you that the fire was coming from inside

5 the engine compartment if it's not out in the garage, but

6 it's only burning at the car?

7 A Not necessarily, with all the smoke in the area.

8 Q So you're assuming that the smoke prevented him from seeing

9 the fire burning at the fire or assuming that the smoke

10 prevented him from seeing fire that you assume was burning

11 somewhere else in the garage; is that right?

12 A I am taking the statement as I read it, that he was in a

13 very smoky situation with an awful lot of smoke and fire

14 and activity going on and he made a statement as to what he

15 saw at one particular point in that fire.

16 Q Do you discount his statement that the fire was burning on

17 the fire of the driver's side when he went into the garage?

18 A Do I discount the statement? No.

19 Q Do you accept it as being correct?

20 A I'd accept it as being what he represented observing at that

21 point in time.

22 Q But you're assuming that there's something else that he

23 didn't observe; is that right?

24 A When I look at all of the other statements, all of the other

25 evidence, there are other things around that I would have

1 fire is coming from underneath the car as Mr. McJannet

2 described, then where did the fire start?

3 A I'm sorry, now you're talking about something coming from

4 under the car. I thought you said he described it as the

5 fire was burning.

6 Q Well, he talks in his deposition too about the fire coming

7 from underneath the car and he talks about the fire burning

8 at the driver's side as well as the passenger side fire

9 burning; right? Are you familiar with those statements?

10 A He made that statement from his earlier observation through

11 the doorway, yes.

12 Q Well, actually, he made that statement when he went into the

13 garage.

14 A I believe he made the comment from the laundry room

15 observation that both doors --

16 Q That he saw both doors?

17 A Right.

18 Q And then he goes into the garage and he sees the driver's

19 side and says the driver's side fire is burning; right?

20 A Right. He also said he was going around to try and get the

21 car out of the garage, so --

22 Q Right, so are you --

23 A -- I guess you could say I would have to somewhat discount

24 his statement in the eyes of subsequent statements he made

25 and other observations that were made by other eyewitnesses

1 been curious to hear his opinion on, but it appears like he

2 only saw a spot that's about, you know, two or three feet

3 square in an area that -- you know, that corner of the

4 garage was involved in a fire, we're talking about an area

5 that's sixty feet square and seven or eight feet high and

6 filled with smoke, and his observation is one of a spot

7 that's very small, so I wonder what was going on around

8 other than that.

9 Q Because if you accept his testimony that the fire was

10 burning only at the fire and nowhere else in the garage,

11 then you have to conclude that the fire started in the

12 engine compartment; don't you?

13 A No, I don't.

14 Q Where else could it have started if it's only burning at the

15 time and nowhere else in the garage?

16 A I can pour gasoline on that fire and light it with a match

17 and that fire will burn.

18 Q But you have no evidence of that, Mr. Hoffman; do you?

19 A No, I don't. But you're asking a hypothetical question, so

20 I'm giving you a hypothetical answer.

21 Q Based --

22 A The fact that a fire is burning does not tell me anything

23 about the direction of the fire, it tells me that the fire

24 is burning.

25 Q But if there's no fire anywhere else in the garage and the

1 as well as physical evidence that I've had the opportunity

2 to see myself.

3 Q So you don't believe what he said he saw?

4 A I don't want to say I don't believe him. I will say I

5 discount what he said because it appears like his

6 observations were focused on a very small area.

7 Q When a speed control deactivation switch fails, should it

8 fall out?

9 A Should it fall out? I'm not sure what you mean by the use

10 of the term "fall out."

11 Q In other words, if there is one of these scenarios that

12 happens, either the backing of brakes from through the

13 Kaplan mode or the ingress of water into the electrical

14 cavity that causes corrosion of the contacts and the switch

15 fails, should that switch come a fire?

16 A We would hope not.

17 Q And that's what I mean by fall out. You've heard of that

18 term, haven't you?

19 A Well, the part is a redundant safety feature for the speed

20 control, which is an attempt to make something more

21 fail-safe, more foolproof, yes, I know what the term means

22 in general.

23 Q But that has to do with the operation of the cruise control

24 is --

25 A Yes.

1 Q - the car. What I'm talking about is the switch itself.
 2 If it fails, shouldn't it fail early?
 3 A And as I said, that would be desirable, yes.
 4 Q And in fact, Ford's investigation found that the speed
 5 control deactivation switch in many instances was not
 6 falling safe, is that correct?
 7 A No, that's not --
 8 MR. MELTON: Objection to the form of the question.
 9 MS. McLAREN: Joined.
 10 A And it's not correct.
 11 BY MR. DUNFORD:
 12 Q What precipitated the recall then?
 13 A A very small possibility of occurrence, not many, as you put
 14 it.
 15 Q If I said several instances, Ford found that in several
 16 instances the speed control deactivation switch was not
 17 falling safe, would you agree with that?
 18 MR. MELTON: Objection to the form of the question.
 19 A Because of the failure of the switches that the recall team
 20 determined was a possibility of occurrence was the basis for
 21 the recall.
 22 BY MR. DUNFORD:
 23 Q Is in your opinion the design of the speed control
 24 deactivation switch defective?
 25 A No.

1 MS. McLAREN: For now it does, yes.
 2 BY MR. DUNFORD:
 3 Q Are these better copies?
 4 A Yes.
 5 Q Now, you have these X-rays in your file, correct, and these
 6 are my copies, and I'm using them because I want you to be
 7 able to see what we have available most clearly. And I want
 8 you to compare these three X-rays with Exhibit 11, the
 9 Memphis switch, and I want you to tell me, if you can, what
 10 is different between the X-rays of the Memphis switch and
 11 the diagram set away with description of the Memphis switch?
 12 MS. McLAREN: Object to the form of the question. I
 13 don't know how Mr. Hoffman can, you know, do a full analysis
 14 of the comparison of the two switches in the time frame
 15 we're talking about. I don't think it's a fair question.
 16 A Well, there's incomplete information that -- the
 17 information in this case is this type of information, and
 18 this information is that type of information, so there's
 19 pieces of things that you can see in this that you can't see
 20 in that and vice versa. I think that's the basis of Mr. Hoffman's
 21 comment, it's difficult to -- you're comparing an apple to
 22 an orange.
 23 BY MR. DUNFORD:
 24 Q They're both speed control deactivation switches, aren't
 25 they?

1 MR. MELTON: Objection to the form of the question.
 2 BY MR. DUNFORD:
 3 Q And why not?
 4 A Because there's no evidence that there's anything wrong with
 5 the design of the switch.
 6 Q And I'm talking about the switch in general, right, that was
 7 recalled, not necessarily the one in the Memphis car.
 8 A Well, I was under the impression that all of these questions
 9 having to do with the recall have to do with other things
 10 other than the Memphis vehicle.
 11 Q Do you know if there was any recall notice to the
 12 Memphis?
 13 A Not for this recall.
 14 Q Do you know if there was any warning to the Memphis that
 15 the Lincoln Town Car could be a fire hazard after a certain
 16 mileage was reached?
 17 A Not to my knowledge.
 18 Q Do you know if there was any warning to the Memphis that
 19 the speed control deactivation switch could be a fire
 20 hazard?
 21 A Not to my knowledge.
 22 Q Do you have a copy of the X-ray of the switch from the
 23 Memphis car?
 24 A I have some bad copies. Does this have to do with this
 25 pile of stuff?

1 A Yes.
 2 Q So --
 3 MS. McLAREN: One's a diagram and one's an X-ray.
 4 BY MR. DUNFORD:
 5 Q All your experience, Mr. Hoffman, in the Memphis fire,
 6 your investigation, your looking at the switch itself, your
 7 review of photographs of the switch, the X-rays are just a
 8 demonstration here. In fact, if it's easier for you, I'll
 9 take them away and I want you to tell me, if you can, the
 10 difference between the Memphis switch after the fire and
 11 the Memphis switch?
 12 MS. McLAREN: Object to the form of the question.
 13 Mr. Hoffman has already testified that he hasn't ever seen
 14 the Memphis switch, and in fact, I think he said he hadn't
 15 seen that document before today. It's an incomplete
 16 hypothetical and I object to the form.
 17 BY MR. DUNFORD:
 18 Q Can you answer the question?
 19 MS. McLAREN: If you can answer it, Mark.
 20 A The main difference between the Memphis switch and the
 21 Memphis switch is that the Memphis switch is in the recall
 22 population and the Memphis switch is not.
 23 BY MR. DUNFORD:
 24 Q What about the nature of the damage that both of these
 25 switches or referenced in the document Exhibit 11?

1 A The McJannet switch was much more highly damaged or was the
2 vehicle as was the structure that it was in. So again,
3 you're comparing apples and oranges.

4 Q What about the nature of the damage to the electrical
5 contacts inside the switch?

6 MS. McLAUREN: Object to the form of the question. The
7 electrical contacts are not shown on the diagram of the
8 McJannet switch in the same detail that he's been able to see
9 the McJannet.

10 BY MR. DUNFORD:

11 Q That's because they're missing in the McJannet switch; aren't
12 they?

13 MS. McLAUREN: Objection.

14 A They are not shown on the diagram. That could be a lay
15 artist.

16 BY MR. DUNFORD:

17 Q In fact, our lay artist indicates that the transfer pin and
18 the movable contact are missing on Exhibit 11; doesn't he?

19 A I didn't get a chance to look at all of the notes in detail.
20 There is a note there that says that, yes.

21 Q And they're also missing in the McJannet switch; aren't
22 they?

23 A No.

24 Q Is the movable contact anywhere in those X-rays or any
25 photographs or do you recall seeing it?

1 A I'm not sure that you could, but I would at least want to
2 take the thing apart a little further. But the evidence
3 that's there doesn't indicate that it necessarily matters in
4 this case because the contacts were used, which means there
5 was a tremendous amount of heat there for a small period of
6 time, which could have caused that hole from the inside.

7 Q Well, it is important, because you're saying the fire came
8 and started the switch from the outside instead of
9 originating from the inside. So the question is whether
10 those holes give you an indication whether the heat came
11 from the outside or the inside initially?

12 MS. McLAUREN: Asked and answered.

13 A At the moment, I don't know that you can make that
14 differentiation, although, as I said, knowing that there was
15 arcing inside, I would say there is a possibility that it
16 came from the inside out.

17 BY MR. DUNFORD:

18 Q Well, if it's possible that it came from the inside
19 out, how can you eliminate the switch as being an ignition
20 source for the fire?

21 A Because there's no evidence that a coil was created.

22 Q And by a coil, what do you mean?

23 A A long-term electrolytic reaction going on between the
24 metals in the switch.

25 Q And what would a long-term electrolytic reaction between

1 A I believe the transfer pin remains as still there. And if
2 I interpret those X-rays correctly, there are portions of
3 contacts, and I'm not really certain what they are, to be
4 honest with you.

5 Q But you believe it could be the movable contact?

6 A Well, again, that's just an X-ray look through those things.
7 It's not a dissection of them and verifying what exactly are
8 some of those shadows in that X-ray.

9 Q The document Exhibit 11 says "There has separation in this
10 general area." Do you see that?

11 A Yes.

12 Q Did you find similar damage in the McJannet switch?

13 A No.

14 Q Were there holes in the side of the base of the switch?

15 A I believe there was one hole in the side of the McJannet
16 switch. This statement says separation in this general
17 area. That did not occur in the McJannet case.

18 Q What caused the holes in the McJannet switch?

19 A Heat.

20 Q From the inside or the outside?

21 A I'm not sure that you can make that conclusion. Or at least
22 I can't yet at the point of -- the subject of inspection that
23 I have done.

24 Q What would you have to do in order to reach a conclusion
25 whether the heat came from the inside or the outside?

1 the metals in the switch produce or how could you tell that
2 there was a coil or what evidence would you expect to find
3 if a coil had been created?

4 A It would not leave globules of brass adhered to the steel
5 facing.

6 Q You believe it would leave a plating of brass; is that
7 correct?

8 A It would tend to leave more of a plating kind of an effect,
9 yes.

10 Q Did you find any evidence of a plating of brass on the
11 interior of the electrical portions of the switch?

12 A No.

13 Q You looked for it, I assume?

14 A As far as the naked eye and microscope can get you, yes.

15 Q Is there something else you could do to determine if there
16 was plating?

17 A I don't know if you can do anything with a part that's in
18 that condition.

19 Q In fact, the part was so corroded, you really couldn't tell
20 if there was plating or not; could you?

21 A Well, the corrosion is red, which means rust, that means
22 steel, so that has to be the base metal of those component
23 parts. Brass does not turn red when it corrodes.

24 Q Are you a metallurgist?

25 A No.

1 Q Have you ever been trained in metallurgy?

2 A I have taken courses in metallurgical and material science.

3 Q Have you ever testified as an expert metallurgist?

4 A I have not testified as an expert metallurgist.

5 Q In fact, have you ever testified in a brake pressure switch

6 case?

7 Let me ask you this. Have you ever given a deposition

8 in a case where a speed control deactivation switch is

9 alleged to have caused a fire?

10 A Yeah, I believe so.

11 Q Can you recall the name of the case?

12 A I'm trying to remember the allegations. Yeah, the Schmidt

13 case.

14 THE WITNESS: That's pending, though, right?

15 BY MR. DUNFORD:

16 Q Where is it pending?

17 A Arizona.

18 Q Does it arise from a Lincoln Town Car?

19 A I'm not sure of the details of the case. I haven't looked

20 at that one in a while.

21 Q How long ago were you deposed, Mr. Hoffman?

22 A I don't know. A couple months, three months, something like

23 that.

24 Q For some of us, that's not very long ago.

25 THE WITNESS: Now he's going to make fun of my age, is

1 caused the fire, that you found pitting of brass along the

2 surface of the bracket?

3 A I can't answer that. I don't always get a chance to see the

4 bracket, so I'm not sure what the, you know, the way to

5 answer that is. I don't know, I guess.

6 Q Have you ever reached a conclusion that a speed control

7 deactivation switch on a more-probable-than-not basis caused

8 a fire where there was not pitting of the brass on the

9 bracket?

10 A Gosh, I don't know, that's transcendence detail that I can't

11 keep all of those in my head.

12 Q But it seems to be a very significant detail for you in this

13 case, isn't it?

14 A It is one of many, but it is significant, yes, in my mind.

15 Q That you can't recall whether it has occurred in every other

16 case where you believe on a more-probable-than-not basis a

17 failure of the switch caused the fire?

18 A Well, I'm not certain if we've ever gotten down to that

19 level of inspection detail on a case.

20 Q Is that one of the first things that you look for when you

21 examine a switch, is pitting or evidence that a call was

22 created?

23 A It's one of many things that you look for in an

24 investigation.

25 Q How is the appearance of the pitting different than the

1 that what this young gentleman is going to do?

2 BY MR. DUNFORD:

3 Q No, I just - three months ago was -- it just seemed not too

4 long ago to me from -- but anyway.

5 Has that case gone to -- it hasn't gone to trial yet,

6 it's still pending?

7 A Yes.

8 Q So the next question is have you ever testified or been

9 qualified to testify in a case that went to trial where the

10 allegation was that the speed control deactivation switch

11 caused the fire?

12 A I don't believe so.

13 Q What would happen if you applied flame to the remains of the

14 switch from the Mojave case? Would it burn, would it

15 undergo combustion?

16 A I don't know.

17 Q If you burn plastic and it's totally consumed, what remains?

18 A Just ash.

19 Q Do you know what the composition of the material is that's

20 the housing of the switch from the Mojave Town Car?

21 A I am not certain what the polymer composition is of that

22 part, no.

23 Q Is it your testimony that on every other speed control

24 deactivation switch where you believe on a

25 more-probable-than-not basis that a failure of the switch

1 brass that you observed in the Mojave switch?

2 A Well, as I said earlier, there wouldn't be quite as much

3 overfilling of the steel portion and such small level

4 depositions of brass, it would tend to be more flat and

5 widespread across that steel surface.

6 Q Do you ever look for evidence of scoring on the bracket in

7 your investigations of speed control deactivation switches?

8 A I suspect the bracket if it's available to be inspected.

9 Q It was in this case, right?

10 A Yes.

11 Q Did you find evidence of scoring on the bracket?

12 A The brass deposits on the bracket are an indication to me of

13 scoring.

14 Q And is that consistent with what you observed in other speed

15 control deactivation switches?

16 A No.

17 Q And that's because what you're referring to is the pitting

18 phenomenon, correct?

19 A Again, that's one observation that can be made in the

20 failure mode process of the parts that were recalled.

21 Q Your report on page 5 states this:

22 "The remaining parts of this portion of the

23 assembly exhibited heavy scoring, pitting, corrosion of

24 the steel pieces."

25 Do you see that? It's in the paragraph under Speed

- 1 Control Deactivation Switch.
- 2 A Yes, I am the statement that you were referring to.
- 3 Q Is it true, Mr. Hoffman, that the heavy rusting or corrosion
- 4 of the steel plates that you're referring to would make it
- 5 impossible for you to determine whether the plating had
- 6 occurred inside the switch, the electrical portion?
- 7 A No, I can't say that.
- 8 Q Do you believe that the plating would still be there despite
- 9 the heavy rusting or corrosion in the steel plates that
- 10 you've described?
- 11 A I think that the physical evidence that remains in the
- 12 Mejsmanian switch would be quite different than what is
- 13 there.
- 14 Q How would the switch appear if you believe -- well, let me
- 15 start over again.
- 16 If in your opinion the switch caused the fire, what
- 17 would the appearance be or how would it be different from
- 18 what it appears today?
- 19 A I would expect more of the plastic housing to have been
- 20 consumed and the connector that plugs into it. I would
- 21 expect less rust on the face of the bezel. I would expect
- 22 no large globules on the bezel. I would expect the ends
- 23 of the contacts to be quite a bit softer than they appear to
- 24 be in those X-rays.
- 25 Q Anything else?

- 1 if you will.
- 2 Q And I apologize, we can just strike that whole bunch of
- 3 garbage because as I started asking the question I realized
- 4 that Alan probably had that in an evidence bag. So let me
- 5 ask it this way.
- 6 Would the manner in which the bezel was stored or the
- 7 time that's elapsed since the occurrence of the fire in your
- 8 opinion have any effect on the appearance of the bezel?
- 9 A Just the fact that there is a time frame involved that does
- 10 allow rusting to occur. I don't think that it makes a
- 11 significant difference. I've looked at parts that have been
- 12 stored outside in much worse conditions than this one that
- 13 don't look as bad.
- 14 Q Just below that, what we just said in your report on page 5,
- 15 the next point says:
- 16 "Kapton seals inside the pressure sensing chamber
- 17 were almost entirely consumed by the heat from the fire
- 18 event."
- 19 Do you see that?
- 20 A Yes.
- 21 Q If that is true, what are we looking at when we see the
- 22 Kapton seals there when we look at that side of the switch?
- 23 A I'm sorry?
- 24 Q You don't understand the question?
- 25 A I don't understand the question.

- 1 A Not that I can think of at the moment.
- 2 Q What do you mean, you'd expect less rust on the face of the
- 3 bezel?
- 4 A Well, if it's plated with brass, it will tend not to rust.
- 5 Q Where has the bezel been since the fire?
- 6 A It has -- I assume it was in an evidence bag that Schooner
- 7 Engineering had in their custody.
- 8 Q Actually, that's not true, is it?
- 9 A I don't know.
- 10 Q Mr. Hoffman testified that it wasn't located until
- 11 approximately May or June of 2002?
- 12 A Correct.
- 13 Q Would the fact that it's not in an evidence bag, that it's
- 14 still out in the debris on the rug, impact the appearance of
- 15 the bezel?
- 16 A No.
- 17 Q And in fact, I apologize, because as I'm thinking, it may
- 18 have been collected and installed in an evidence bag. I
- 19 apologize.
- 20 A I should apologize, too, because I just assumed that when he
- 21 said in -- I think he said in his deposition or his report
- 22 that he lifted, so I assumed he had gone through one of the
- 23 bags of debris. You just mentioned it might have been found
- 24 on the rug. And when I said evidence bag, I meant
- 25 collectively Schooner Engineering's saving of the evidence,

- 1 Q I mean, you took pictures of the switch, right?
- 2 A Yes.
- 3 Q Was there any evidence of the Kapton seals?
- 4 A There were some remains, yes.
- 5 Q So it says "almost entirely consumed." What are we looking
- 6 at, I mean what's left of the Kapton seals?
- 7 A There are some small sections of very unburned
- 8 heat-damaged plastic. It basically looks like a piece of
- 9 shattered glass.
- 10 Q Based on its appearance, were you able to determine whether
- 11 the Kapton seals had been burning before the fire occurred?
- 12 A No.
- 13 Q You couldn't conclude one way or another?
- 14 A That's correct.
- 15 Q The shattered glass appearance of the Kapton seals, did you
- 16 draw any conclusions from that?
- 17 A Yes.
- 18 Q And what was that?
- 19 A That those seals had experienced a very high heat, very high
- 20 temperature impingement upon them.
- 21 Q From an arcing event or from just a regular fire combustion?
- 22 A There's nothing anywhere in contact with them that can arc,
- 23 and because of the shattering nature, it looks more like it
- 24 was a, again, I say a cooking kind of an effect. The Teflon
- 25 coating on that will probably melt at around 300 degrees, so

- 1 It requires pretty good heat, but not the heat of an arc.
 2 Q Do you believe that a quick arcing event would have left
 3 more evidence of the contact than what we now see in the
 4 Mojkanovic switch?
 5 A I'm not sure in the Mojkanovic case because the thing was
 6 falling apart at the time, so it would be hard to say how
 7 long it would be there.
 8 Q Your report indicates that there is a failure mode of the
 9 switch that might result in the fire; is that correct? And
 10 I'm talking about the speed control deactivation switch in
 11 general.
 12 A I'm sorry?
 13 Q I'm talking -- I'm on page 7 of 8.
 14 A Okay, I'm on page 7 of 8.
 15 Q The second paragraph. And I just took a phrase out of the
 16 first sentence. It says "the failure mode of this switch
 17 that might result in a fire."
 18 And so my question is that you agree there is failure
 19 mode of a speed control deactivation switch that might
 20 result in a fire?
 21 A The allegation is that the speed control deactivation switch
 22 failed and started the fire, right?
 23 Q In this lawsuit, yes. So the question is in your opinion,
 24 there is a failure mode of the speed control deactivation
 25 switch in general that might result in a fire?

- 1 allegation brought the recall into question. I'm only
 2 trying to offer a description of why this is not a failure
 3 that is typical of that recalled population.
 4 Q Okay.
 5 A That was the intent of this section.
 6 Q So in your opinion that the failure mode of the switch
 7 every time is going to cause or involve long-term corrosion
 8 of the brass pieces?
 9 A No.
 10 Q Is there anything else other than evidence of pitting that
 11 suggests in your opinion that this was a, quote, hot, very
 12 fast arcing event?
 13 A I think we mentioned them before, the glimmers, the sharp
 14 edges of the contact remains in the X-ray, the -- I don't
 15 remember, I thought there were a couple more things.
 16 Q The circuit on which the brake -- the speed control
 17 deactivation switch is located is fused; is that correct?
 18 A Yes.
 19 Q And it's a 15-amp fuse?
 20 A In production, yes.
 21 Q Did you examine the fuse in the Mojkanovic vehicle after the
 22 fire?
 23 A No.
 24 Q Why not?
 25 A It would have required some level of destruction of the

- 1 A I don't recall seeing the word or writing the word "in
 2 general" in this context. It says "the failure mode,"
 3 referring to the recall, which even though this switch is
 4 not subject to that recall, that recall has been brought
 5 into this lawsuit. So that's what the context of that
 6 phrase means.
 7 Q And I'm just trying not to mislead your report.
 8 But apart from the report, there is failure scenario
 9 of the speed control deactivation switch which you believe
 10 might result in a fire; is that correct?
 11 A There was a recall made in 1999 that states that in these
 12 other circumstances very clearly.
 13 Q So the answer is yes?
 14 A Not the way the question was asked.
 15 Q What's wrong with the question?
 16 A It's not clear.
 17 Q Okay. The next sentence says:
 18 "The failure mode typically involved a long-term
 19 corrosion of the brass pieces."
 20 When you use the word "typically," the question that I
 21 have is are you stating that every time the failure mode
 22 involves long-term corrosion of the brass pieces?
 23 A In this paragraph of this report, we are basically talking
 24 about the same subject matter that we were discussing most
 25 of the morning about the recalled parts because the

- 1 vehicle remains.
 2 Q Did you read Mr. Topol's deposition on that point?
 3 A Yes, I did.
 4 Q And he was subject to some criticism for not having looked
 5 at the fuse; do you recall that?
 6 A Yes, I recall that in his deposition.
 7 Q Do you feel that criticism was valid?
 8 A To some degree, yes.
 9 Q But you yourself didn't look at the fuse either; is that
 10 right?
 11 A I did not state a cause and origin opinion, either.
 12 Q Your report doesn't contain an opinion on cause and origin?
 13 A No, sir.
 14 Q What would the fuse indicate to you if you looked at it?
 15 A I have thought a lot about that particular subject. It's
 16 very difficult to say what it may tell you. The fuse is
 17 either open or it's not.
 18 Q If a circuit is fused, how is it that the brake pressure
 19 switch can cause a fire without the fuse interrupting the
 20 flow of electricity to the switch?
 21 A The amount of current that is flowing through the relative
 22 long-term, corrosion-induced short circuit in the switch
 23 does not -- that particular electrical circuit does not draw
 24 enough current to open the fuse in all cases.
 25 Q So it's high resistance; is that right?

- 1 A It's relatively high resistance, yes.
 2 Q And it produces heat, but it doesn't trip the fuse, correct?
 3 A In the case of the recalled parts in the failure scenario,
 4 yes.
 5 Q Did you ever attempt to clean the surface of the steel parts
 6 where you located the globules?
 7 A I don't think we did any tremendous amount of disturbing of
 8 the evidence at the last inspection. I don't recall.
 9 Q If there was brass plating as you've described it on the
 10 facing of the inductor, would that change your opinions in
 11 this case about the involvement of the switch in causing the
 12 fire?
 13 A No.
 14 Q And why is that?
 15 A Because it's only one of many observations that are involved
 16 here.
 17 Q Have you ever seen any other switches that have had the
 18 holes in the side of them like the Majumdar switch does?
 19 A I'm not sure I've actually seen a part itself. I believe
 20 I've seen pictures of them.
 21 Q And that's possible?
 22 A Yes.
 23 Q Were those switches that you believe were involved in
 24 causing the fire?
 25 A I don't know. I've looked at a lot of switches.

- 1 Q Are you aware of fire in case, Lincoln Town Car, that had
 2 no previous manifestation of mechanical problems that were
 3 related to the speed control deactivation switch?
 4 A Yes.
 5 Q In fact, Mr. Majumdar isn't using his cruise control, so
 6 he's not going to know one way or another whether it's
 7 operating or not, is he?
 8 A Well, that's only one of the possible observations, but it
 9 does limit the probability, yes.
 10 Q If a fire started somewhere else and progressed to the speed
 11 control deactivation switch, wouldn't you expect that it's
 12 first going to attack the connectors that supply energy to
 13 the switch?
 14 A No.
 15 Q Why is that?
 16 A It depends on the flow of the heat of the fire.
 17 Q So do you believe that the switch body itself was subject to
 18 heat flow before the connectors were?
 19 A Based on the remains of the part, it appears like the heat
 20 was coming from below the switch.
 21 Q Is that where the connectors are located?
 22 A No, they're all above the switch.
 23 Q Could you explain this sentence to me? I don't understand
 24 it. It's the last sentence in the third paragraph on Page 7
 25 of your report.

- 1 "If this type of short circuit had occurred
 2 without the fire damage present, the vehicle's timing
 3 system would have opened to disconnect the circuit."
 4 What do you mean by that statement?
 5 A Well, what I am saying is that as a result of the intensity to
 6 have brass globules on steel and leave the somewhat jagged
 7 edges of contacts left in the X-rays, that it had to be a
 8 fairly high-energy arc. And that's another indication to me
 9 that the fire had attacked the vehicle.
 10 Q What do you mean, the fuse would have opened to disconnect
 11 the circuit?
 12 A To have that amount of energy at that location in the part
 13 would have shown more concern than the fuse is capable of
 14 conducting and the fuse would have opened.
 15 Q But you don't know if the fuse opened or not?
 16 A No.
 17 Q So that statement is speculation?
 18 A I'm not sure how you use the word "speculation." It's based
 19 on my knowledge of electricity and wiring, fuses and wires.
 20 Q But it's not based on an examination of the fuse?
 21 A Not --
 22 MR. McLAREN: Object to the form of the question. It's
 23 an "if" question, not a "is it" question.
 24 MR. MELTON: This is fine. Whenever we get to a good
 25 stopping point, I'd like to take a little break.

- 1 MR. DUNFORD: Why don't we do that and I'll look
 2 through my notes and I'll be done in the next ten minutes.
 3 MR. MELTON: Okay. I'll just stay on the phone then.
 4 MR. DUNFORD: Do you want to just stay on? Because we
 5 can take a quick break and I'll look through my notes and
 6 then we'll be done.
 7 MR. MELTON: I'm going to leave the room for about five
 8 minutes.
 9 (Short recess.)
 10 BY MR. DUNFORD:
 11 Q I may have asked you this question, but I just want to make
 12 sure, okay?
 13 How would the switch be different in appearance if it
 14 caused the fire in your opinion?
 15 MR. McLAREN: Arced and scorched.
 16 A I would expect more of the plastic to be destroyed. I would
 17 expect the contacts to be a little softer-edged. I would
 18 expect the facing to be a little less rusty.
 19 BY MR. DUNFORD:
 20 Q Are you done with the switch? In other words, are you done
 21 with your examination of it?
 22 A I suppose.
 23 Q Anything else you would like to do if you had the chance or
 24 opportunity?
 25 A No.

1 Q I want to show you two diagrams of what appears to be the
2 fuse box, and those were produced by Ford as you can see.
3 "Courtesy of Ford Motor Company" on both, and the question
4 that I have for you is do you know whether or not either of
5 these depicts the fuse box on the 1993 Lincoln Town Car
6 owned by the defendant?
7 A I'm not sure.
8 Q Is one of the reasons you're not sure because you didn't
9 look at the fuse box on the vehicle?
10 A No.
11 Q You just don't recognize either of the drawings?
12 A I am not totally -- I'm not totally convinced of how
13 accurate they are because I don't recognize their source, if
14 you will.
15 Q By that, do you mean they don't have a Ford stamp on it?
16 A Among other things, yeah.
17 Q Is there anything specific that you can identify that's not
18 accurate about the drawings?
19 A Just as I said, the source is in question, I don't recognize
20 the source of where the information came from.
21 Q You identified an alternator wire in the vehicle. You know
22 what I'm referring to; right?
23 A Yes.
24 Q In your written report? You indicate that the wire was so
25 destroyed by the fire event, it was impossible to determine

1 Q What's the wire made of?
2 A Copper.
3 Q What kind of temperature does it take to destroy copper as
4 you describe in your report?
5 A About 1,950 degrees Fahrenheit.
6 Q Are there any other copper wires inside the engine
7 compartment that you believe were destroyed as a result of
8 the fire?
9 A There were other wires that were identified by Mr. Tophan
10 that showed signs of having had some melting occur to them.
11 Q But this one, the alternator wire, is totally gone in your
12 opinion; right?
13 A I did not find any other remains of the wire.
14 Q Which if it was cut, you wouldn't expect to; right? If it
15 was cut before the fire, you wouldn't expect to find the
16 remains of the wire in the engine compartment? It's just an
17 obvious question. I'm sorry.
18 A Well, it's not obvious to me.
19 Q I'm sorry. I'm not trying to make it difficult.
20 But if the wire was cut and removed before the fire,
21 you wouldn't expect to find it in the engine compartment
22 after the fire?
23 A Cut and removed is different than just cut.
24 Q Okay. You wouldn't expect to find it if it had been cut and
25 removed before the fire?

1 where it went in the vehicle; is that right?
2 A Yes.
3 Q And you believe that the wire arced; is that correct?
4 Page 7, the fourth paragraph.
5 A I don't see any reference in the report to the word "arc."
6 Q Well, let me ask you this.
7 Do you believe the wire arced?
8 A The remains of wire that I observed appeared to have had
9 some electrical activity occurring on it, yes.
10 Q How long were the remains of the wire that you observed?
11 A I didn't measure them, but they were very short.
12 Q You read Mr. Tophan's deposition?
13 A Yes, I did.
14 Q And he testified that the wire was cut before the fire?
15 A That's what he said in his deposition, yes.
16 Q Do you believe that's correct or an inaccurate statement?
17 A I think he may be mistaken.
18 Q And what's your basis for that?
19 A The photos, I believe they were applied during his
20 deposition, he has a picture of a microscopic view of the
21 end of the wire, and also my photos that I took during
22 July, the July inspection of 2002.
23 Q You just believe the appearance of the wire inside
24 appearance of arcing and not being cut?
25 A Yes.

1 A No.
2 Q What is it about the appearance of the wire that makes you
3 think it arced?
4 A The photograph that I took on July 30th appeared to have a
5 globule of -- or a ball of metal, melted metal, on the end
6 of the end of wire.
7 Q Is it melting or arcing?
8 A It is melting.
9 Q Is it melting as the result of an arc?
10 A It is in my opinion, yes.
11 Q That wire is outside the area of what you determined to be
12 the heaviest damage inside the engine compartment; isn't it?
13 A The small piece that remained that we found, yes.
14 Q Have you worked with Ralph Newell before on other fires?
15 A Yes.
16 Q How many?
17 A I don't know.
18 Q A couple, can you give me a range?
19 A A couple dozen. A guess.
20 Q Is he typically employed by Ford, do you know?
21 A I'm not that familiar with him -- the branch of his
22 business.
23 Q The firm that you've worked with him on, he's been employed
24 by Ford; is that right?
25 A Yes.

- 1 Q Have you ever seen Mr. Nowell write a report on the origin
2 and cause of a fire without having examined the vehicle
3 itself before writing the report?
4 A I wouldn't know.
5 Q Do you know if he did that in this case?
6 A I can't really remember the chronology of events. I know
7 that there was a date for reports to be due, and I'm not
8 sure if - what Ralph's estimate was, so I can't say, I'm
9 not sure.
10 Q Have you read his report?
11 A I think very briefly I scanned it. I don't recall a lot of
12 the content of it.
13 Q Did you ever discuss your findings with Mr. Nowell relating
14 to this particular case?
15 A No.
16 Q Never at any time?
17 A I think we did discuss it with the attorneys at one point,
18 he and I were together with the attorneys when we were
19 discussing it.
20 Q If Mr. Nowell wrote a report describing his opinions on the
21 origin and cause of the fire before he had examined the
22 vehicle, do you believe that that is appropriate?
23 A It depends on the amount of evidence and the quality of
24 evidence that he had available to him when he wrote it.
25 I -

- 1 Q Photographs.
2 A - can't really say.
3 Q Photographs.
4 MS. McLAREN: Objection to the form of the question.
5 BY MR. DUNFORD:
6 Q Be assume that Mr. Nowell had photographs available to him
7 to review and as a result of or after having reviewed those
8 photographs wrote an opinion on the cause and origin of this
9 fire. Do you believe that that is an appropriate practice?
10 MS. McLAREN: Object to the form of the question.
11 A I guess I feel uncomfortable answering because I'm really
12 not certain what Mr. Nowell had available to him, so I don't
13 think it's appropriate for me to question.
14 BY MR. DUNFORD:
15 Q Would you prepare a written opinion on the origin and cause
16 of a fire in a - allegedly started in a vehicle without
17 having examined the vehicle itself?
18 MS. McLAREN: Object to the form of the question.
19 A There have been instances where I have been required to do
20 that just because the evidence no longer exists.
21 BY MR. DUNFORD:
22 Q What if the evidence is available?
23 A It should be inspected.
24 Q Before the report is written?
25 A Again, depending on the quality of the material that he had,

- 1 I can't say.
2 Q Would you be comfortable in writing an opinion on the origin
3 and cause of a fire if the vehicle still exists and you had
4 not had an opportunity to review it or examine it before
5 writing your opinion?
6 MS. McLAREN: Object to the form of the question, it's
7 an incomplete hypothetical.
8 A I don't think any content is relevant. You'd have to ask
9 Mr. Nowell if he's comfortable with it.
10 BY MR. DUNFORD:
11 Q But I'm asking you about your practice, Mr. Hoffman. The
12 question was directed towards your practice or your work as
13 a fire investigator.
14 Would you be comfortable in preparing a written report
15 regarding the origin and cause of a fire if the vehicle is
16 still available and you hadn't examined the vehicle before
17 preparing your report?
18 MS. McLAREN: Object to the form of the question. It's
19 an incomplete hypothetical.
20 A Would I be uncomfortable, you asked?
21 BY MR. DUNFORD:
22 Q Yes-hmm.
23 A Is that basically the question? It's a relative term. I'd
24 be relatively uncomfortable.
25 Q You'd prefer to see the vehicle first, wouldn't you?

- 1 A If time allowed, which in this case it didn't for him.
2 Q How do you know time didn't allow him an opportunity to
3 examine the vehicle before he wrote his report?
4 A I was under the assumption that the reports were required by
5 a certain date.
6 Q Do you know when Mr. Nowell was retained?
7 A No.
8 Q I mean, the lawsuit has been pending since what, August of
9 2001; right?
10 A Yes.
11 Q Your report talks about spalling of concrete. Did you find
12 anything unusual in the spalling of concrete that you
13 observed in the photographs?
14 A Yes.
15 Q And what is that?
16 A Just the amount and separation of it, how much of it there
17 was.
18 Q What caused the spalling?
19 A I'm really not certain, having not seen it personally.
20 Q You've seen that phenomenon before, I assume?
21 A Yes.
22 Q In other fire investigations?
23 A Yes.
24 Q And what typically causes spalling of concrete?
25 A The fire science literature says that it's due to the

1 heating of concrete and the expansion of any trapped
2 moisture inside the concrete, and that expansion separates
3 the surface of the concrete from the aggregate that's
4 holding it together.
5 Q Was the spalling of concrete in the McJannet's garage in
6 your opinion a result of fuel lead in the garage at the time
7 of the fire?
8 A I'm not sure that fuel lead is, you know, by itself
9 something that can cause what appeared to be happening on
10 their garage floor.
11 Q Well, what do you think caused the spalling of concrete that
12 occurred in the McJannet garage?
13 A Well, as I said before, I'm not sure, having not seen it
14 myself.
15 Q Have we talked about all of the opinions that you're going
16 to testify to at trial?
17 A I really don't know the answer to that question.
18 Q Well, when you say that, it makes me nervous because I'm
19 hoping to be done. So I need to know if during the course
20 of our deposition today you have disclosed to me all of the
21 opinions that you're going to testify at trial?
22 A I believe we have, yes, to the best of my knowledge.
23 MR. McLAUREN: I certainly hope so.
24 BY MR. DUNFORD:
25 Q And we've talked about a lot of stuff that you've maybe not

1 A That is correct.
2 MR. MELTON: I'll pass the witness.
3 MR. McLAUREN: I'm never quite sure what that phrase
4 means, but I think we're finished.
5 MR. DUNFORD: That's just the way they do it in Texas.
6 Thanks, Brian.
7 (Deposition concluded at 4:20 p.m.)
8 * * *

1 going to testify about, is that true?
2 A Again, I'm not sure I can answer that question at this point
3 in time.
4 MR. DUNFORD: I don't have any further questions. I
5 appreciate your time today.
6 THE WITNESS: Thank you, sir.
7 MR. McLAUREN: Brian, do you have any questions for
8 Mr. Hoffman?
9 MR. MELTON: Yeah, yeah.
10 EXAMINATION
11 BY MR. MELTON:
12 Q Mr. Hoffman, my name is Brian Melton. I represent Turner
13 Industries.
14 You have prepared a report in this case dated
15 September 24th, 2002; is that correct?
16 A Yes, sir.
17 Q Your opinion as of September 24th, 2002, are stated in that
18 report, correct?
19 A Yes.
20 Q As we sit here today, have any of your opinions that are
21 contained in that report changed?
22 A No.
23 Q So, it is your opinion that the fire in the McJannet case
24 did not start and was not caused by the Turner Instruments
25 speed control deactivation switch, correct?

SIGNATURE PAGE

MARK HOFFMAN

_____, 2002
Date

Subscribed and sworn to before me this
____ day of _____, 2002

Notary Public
County of _____, State of Michigan
My Commission Expires: _____

1 State of Michigan)
2 County of Oakland)
3

4 Certificate of Notary Public - Court Reporter
5

6 I do hereby certify the witness, whose attached testimony
7 was taken in the above matter, was first duly sworn to tell the
8 truth; the testimony contained herein was reduced to writing in
9 the presence of the witness by means of stenography; afterwards
10 transcribed; and is a true and complete transcript of the
11 testimony given.

12 I further certify that I am not connected by blood or
13 marriage with any of the parties, their attorneys or agents; and
14 that I am not interested, directly, indirectly, or financially in
15 the matter of controversy.
16

17 In witness whereof, I have hereunto set my hand this day at
18 Troy, Michigan, County of Oakland, State of Michigan.
19

20
21 Elizabeth G. LaFargo, CSR-4467
22 Certified Shorthand Reporter
23 Notary Public, Wayne County, Michigan
24
25

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