EA02-025

FORD 10/27/03

APPENDIX N

BOOK 33 OF 61

PART 3 OF 6

A. The warranty data is a count of the number of switches that are replaced under the warranty program at Ford over time. The -- The -- The data that we looked at, I don't recall exactly what it was at the time.

Q. Okay. The -- The warranties data tells you if there have been switches that have been returned by customers and Ford dealers because there were problems with those switches?

A. That's correct.

Q. And these switches that were called (sic.) in 1999 were manufactured either eight years earlier or seven years earlier; is that right?

A. The switches that were being recalled?

Q. Yes.

A. Yes.

Q. They were manu -- The recall was in '99, but the switches that were involved are switches that were manufactured sometime in 1991 or '92?

A. That is correct.

Q. Okay. So you had several years available to you of what the field -- what the field warranty numbers looked like, correct?

A. That would be included in that database, yes.

Q. Right. And tell me how you went about looking at what the warranty data indicated.

A. What we would get is an output of the warranty data would be a graph of the number of repairs per thousand vehicles versus the build date of the vehicles.

Q. And how many -- Prior to 1998 and the investigation, how many switches had been returned through this warranty data system?

A. I don't know what that number is.

Q. Do you know how it compared to the number of switches that had been sold during that time period?

A. No, I do not know what the comparison is at this point. I don't remember those numbers. I'd have to go back and look at the data.

Q. Did it indicate -- Did your analysis indicate that there was an unusual warranty incidence on this part prior to your investigation?

A. At this point in time I can't really tell you what -- what a conclusion on that without looking at the data.

Q. What would be unusual?

A. What would be unusual?

Q. Uh-huh. Yeah.

A. Some anomaly. I mean, if there was a -- a spike or a high number compared to the rest of the population.

Q. And what would that tell you?

A. That would say that there was a problem.

Q. There were some switches out there that had problems and had to come back; right?

A. That's what that indication would be.

Q. And are you able to sit here and tell us as the representative for Ford that there were unusual warranty returns on this switch prior to 1998?

A. I would have to look at the data to reply to that answer.

Q. That fact doesn't stick in your mind though as you sit here today, does it?

A. But that is either that it's good or bad.

Q. I understand that. But you -- you don't have any recollections sitting here today that there was unusual warranty returns, do you?

MR. FEENEY: He's answered this question now three times. Come on.

A. I don't know that there was -- that -- that it was unusual or not unusual.

Q. When the -- When the wiring connector is

delivered to the Ford factory at Wixom, is the connector shipped separately or is it attached to a wire and harness?

A. The connector coming into the Wixom plant at -- at Ford typically would come in as part of a wiring harness.

Q. Would there be any other things attached to it other than a wiring harness do you know?

A. I wouldn't know what else would be on the wiring harness.

Q. Do you know if the wiring harness is supplied by United Technologies?

A. I don't know who the supplier is on that.

Q. Did you look at -- In your investigation, did you look to see what exactly was shipped by United Technologies, whether it was an assembled component or some separate components?

A. We asked Norm LaPointe to look into that and he came back that there was really nothing of -- of -- of importance associated with that.

Q. So as far as you knew, at least, someone reported to you that the product was shipped with a wiring harness?

A. Yes.

Q. And beyond that there was nothing unusual

reported?

A. That is correct.

Q. When Texas Instruments -- When Ford decided to do issue its recall and change the brake pressure switch supplied by T.I. and a connector, did United Technologies manufacture the new connector?

A. I'm not sure who was the manufacturer of the connector.

Q. Do you know whether the new connector was a foam seal or a silicon seal?

A. I don't recall which one it is.

Q. Do you know whether, in your investigation, you noticed any potential problems with either the foam seal or the silicon seal?

A. During the investigation we did not find think problems with the foam or the silicon.

Q. Who is the person that would know the answer of whether or not the recall changed a switch from a foam seal to a silicon seal or vice-versa?

A. I -- It would be in the data that was -- was provided. Part of those switches, it would be on the specification.

Q. I'm trying to find out if there's any individual other than yourself who I should direct

those questions to.

A. I think that, looking at the specification, we could find out that information. I just don't know it off the top of my head.

Q. Do you know how many parts -- Well, when you have a warranty item come back to you at Ford, does Ford then provide those parts to Texas Instruments, the component manufacturer, and ask them to assist in looking at the -- the warranty return?

A. I can't tell you exactly what happened with these parts.

Q. Do you know how many warranty parts for this brake pressure switch were returned to Texas Instruments from 1991 to 1998?

A. I'd only be able to tell that looking at the data.

Q. I'm sorry. I didn't hear that.

A. I'd only be able to tell that looking at the data.

Q. Do you know if it was some -- Was that somebody that Ford tracked?

A. That would be something that Ford tracks, yes.

Q. And sitting here today, you're not able to

tell us even a ballpark on that?

A. No, I cannot.

Q. Do you think T.I. would also have records on that?

A. I would say hope they did.

Q. Have you asked anyone from Texas Instruments whether they experienced an unusual warranty recall -- return -- I'm sorry -- for this part?

A. We did ask that as part of the investigation.

Q. Who did you ask that to?

A. It would've been members of T.I. who were represented at the -- the meetings.

Q. And do you remember what answers you received?

A. The answers that we typically got from T.I. was basically surprise that we thought there was any warranty issue at all.

Q. Do you remember whether people from Texas Instruments indicated that they had received any particular number of switches back?

A. I don't recall what they would've said.

Q. Can you give me the names of the people who were at the meetings that you believe this issue

was raised at?

A. There were a variety of people that -- that could've been involved: Andy McGuirk, Aziz Rahman, Steve Beringhause. There were other people that were connected in by phone that I don't recall exactly who they were.

Q. Okay. And you are -- you are fairly confident that this issue was discussed?

A. Somewhere during the investigation, yes.

Q. Did you keep notes of what transpired in the meetings that you attended?

A. No, I did not.

Q. Was there somebody designated to keep notes?

A. I think people kept notes as they needed them.

Q. Let me hand you what we're going to mark as Exhibit 6.

(Exhibit No. 6 marked.)

Q. Exhibit 6, Mr. Porter, appears to me to be a printout of portions of your calendar. Would you take a look at it and tell us if this is, in fact, your calendar?

A. That appears to be the case.

Q. Okay. Now, you said you got involved in

the investigation, I think, in November of 1998 --

A. Yes.

Q. -- is that correct? On the page for November of 1998, I don't see any entries. Is there a reason for that?

A. Yes, there is.

Q. Okay.

A. Between then and now, a couple of different things have happened; not the least of which is that the system used for keeping the calendars of Ford Motor Company have changed. And that happened in that time period. And as far as I know, all the information on the old system was lost.

Q. Okay. And when -- when did that system change and the information was lost? When did that happen?

A. I don't remember exactly when that happened.

Q. When did the system change?

A. I don't know when that happened. But I would guess, just from the data here, that it happened sometime in the April time frame.

Q. Okay. And so you were working on the problem and the investigation, but there's simply --

there are no entries because the data's not available?

A. That's correct.

Q. It's been lost; is that right?

A. That's correct.

Q. And the first entry that I see on your calendar, it looks to me to be April 1st of the year 1999.

A. That's correct.

Q. Okay. And then explain a little bit how your calendars works. Is this a computerized calendar that you keep at your desk?

A. This is a computerized calendar that's kept on the centralized system.

Q. And do you attend all the meetings that are listed here?

A. Not necessarily.

Q. How do we know which ones are ones that you attend and which ones you don't?

A. There's no indication of that.

Q. Let me just try to go down one of them and get an understanding of how it works. Let's just take Monday, April the 12th. Do you see that?

A. Okay.

Q. 8:30 to 10:00, Electrical quarterback, is

that some type of regular meeting that's held at Ford?

A. In that time period, that was a standard meeting that was held at the Ford, yes.

Q. And would be a meeting that you would've attended that?

A. I may have attended that one or I might not have. That was a general meting.

Q. All right. What's the purpose of the meeting, just briefly?

A. The purpose of that meeting was to discuss the warranty improvements that were being worked at Ford.

Q. Okay. The quarterback, I mean, does that refer to like football?

A. Basically, like football, you know, as the captain of the ship or whatever.

Q. And was that your position?

A. No, sir.

Q. Who -- Who held that position?

A. I believe, for the electrical quarterback, that was the Director of Electrical Electronic Systems Engineering.

Q. And who was that?

A. Kerry Wilson.

Q. Is that man or a woman?
A. That's a man.
Q. And was Mr. Wilson involved in the investigation into the speed control on the 1992, '93 Lincoln Town Car?
A. No, he was not.
Q. If you look further down on that day there's is a reference, 1992, '93 Town Car. Do you see that?
A. Yes, I do.
Q. Okay. Now, is that the investigation you worked on?
A. That would've been a meeting consistent with the investigation, yes.
Q. And then the next day there's another entry at 7:00 a.m. It says: Speed Control Deactivation switch. Is that a different working group?
A. I'm not sure who's necessarily involved in those groups. It was probably a different working group, yes.
Q. I guess, what I'm trying to find out is, is that somebody just -- it's the same group, but they typed a different name in or are these actually different -- different groups of people's work or

different investigations?

A. I can't tell you what is different about those -- those meetings. The -- I believe -- I guess I -- I really can't recall that -- you know, who was involved with those, if they were the same people or different people.

Q. Okay. If you look, for example, on the last day of the month there's something from 8:30 to 9:30, '93 '92, under hood Town Car deactivation switch. Is that, again, different than the other two we've just talked about?

A. It very well could've been.

Q. Well, how many investigations were going on in April regarding this speed control deactivation switch?

A. There was one investigation going on, several meeting happening with respect to that investigation.

Q. And were you attending all of them?

A. I would try to attend most of them.

Q. Who was leading the '92, '93 Town Car investigation that's listed there on April 12th?

A. I'm not sure who -- who would've called that meeting.

Q. Who was leading the 7:30 to 8:30 a.m.

speed control deactivation switch listed on April the 13th? I'm not interested in who called the meeting. I'm trying to find out who the leaders were.

A. Well, the lead for the investigation was me.

Q. Okay?

A. Okay. Who was -- You know, the purpose of the different meetings could've had various characteristics of the aspect of the investigation, depending on people's schedules and availability. As an example, we might go over to Sci lab and to understand what they had. That would show up as -- It could either be a speed control deactivation switch meeting or 1992, '93 Town Car meeting and -- and that, you know, a variety of meetings that were happening on this was great. But overall, I was the leader.

Q. Okay. If you look on the 6th -- I'm sorry -- 13th, there is a reference of 2:00 to 3:00 to air suspension. What was that meeting about?

A. I don't know what that meeting was about.

Q. Did you attend it?

A. I can't tell you that. I don't know.

Q. Was there an investigation into the air

suspension system on any of the vehicles that you participated in?

A. What kind of investigation do you mean?

Q. Well, I don't have a whole lot to go for. All it says is Air Suspension. There were sure a lot of meetings on air suspension. So why don't you tell us what they were about?

A. Well, what I can tell you is that part of my position as chassis electronics supervisor deals with a lot of components that are in the chassis system, air suspension being one of those. The facts that there's a meeting on air suspension does not necessarily mean that there's an investigation.

Q. I understand that. There's a -- If you count up the number of air suspension meeting in April, there are more of them than there are brake pressure meetings. So I'm just trying to find out, do you remember sitting here today what those meetings were about? And if so, what were they about?

A. No, I don't remember what those were about.

Q. Who attended those groups with you besides you, air suspension?

A. The air suspension? It -- Again, I --

First of all, I don't recall necessarily going to that meeting. I may not have gone to those meetings. But, you know, it could've -- it would've been air suspension engineers.

Q. By the names of?

A. Depending on which programs they are.

Q. Can you give me the names of any engineers that you attended -- air suspension meetings with -- during the same time you were doing the investigation into this '92, '93 Lincoln Town Car?

A. Right now I cannot recall what would've gone on back then.

Q. Were those meetings in any way related to the investigation of the under hood fires in the Lincoln Town Cars?

A. No, they were not.

Q. Did that have to do with a completely different vehicle line?

A. They may have dealt with the Town Car, Crown Vic, Grand Marquis; but they may have been a different vehicle line also.

Q. You just don't know?

A. I don't know.

Q. If I'm trying to track the number of meetings that were involved with the Lincoln Town

Car deactivation switch and the investigation in under hood fires, would it be safe to say that I could exclude the air suspension meetings?

A. It would be safe to say you exclude the air suspension meetings.

Q. There are some miscellaneous things that I see. For example, security, safety, chassis, EE sub systems. You see that on the 29th. Is that unrelated?

A. The 29th? Oh, I'm sorry. I was looking at the wrong date. That would be unrelated, yes.

Q. Okay. And if you look on the next page in May there is an entry, 8:00 o'clock to 9:00 o'clock on Wednesday, the 5th, EOL diagnostics. What is that?

A. I believe EOL would stand for End Of Line. So that would be a meeting on End Of Line diagnostics.

Q. And what is that?

A. The end of the assembly line is a test to make sure that control modules are working.

Q. Was that test done at the Wixom plant?

A. Which test?

Q. To determine whether the components were functioning properly.

A. Well, what -- what this one is looking at specifically, being End Of Line diagnostics, is what kind of diagnostics would be done on a particular program. And I'm not sure which program this one's referring to.

Q. What types -- Was this something you were involved in, diagnostics? Is this something that you have a specialty in?

A. Part of my group's objectives or part of my group's task is to work with our suppliers who are supplying control modules to define what diagnostics their control modules have.

Q. And that was part of your job in 1999?

A. That's correct.

Q. How long has that been part of your job?

A. Since 1995.

Q. Were there End Of Line diagnostics in the 1992, '93 Lincoln Town Cars?

A. Yes, there were.

Q. What types of things did they diagnose?

A. We -- The one that I am particularly -- The only one that I know of since I was involved with the 1992, '93 Town Car design was the rear air suspension module.

Q. Okay. And what type diagnostic was in the

car and how did it relate to the rear air suspense module?

A. There's a lamp in the -- in the vehicle that turns on if the rear air suspension isn't working properly. Actually, I think it's a message in the message center. And the diagnostics were to make sure that when the module turns on and checked out the system and it worked properly.

Q. And how does it do that?

A. How does it --

Q. How does it check out that it's working properly?

A. The microprocessor in the module goes out and clears the -- the different sensors and actuators.

Q. And looks for anomalies?

A. Well, looks -- looks that they're operating. Not necessarily for anomalies, but looks for -- that they're operating.

Q. Like an early warning system, to see if the switches are operating properly?

A. What switches?

Q. The air suspension.

A. There aren't -- There aren't switches in the -- in the air suspension.

Q. But the diagnostics is designed to go and examine a component to make sure that component's working properly and notify the owner if it's not? I mean, in a simple manner, that's what diagnostics do?

A. The diagnostics are there to identify whether the component -- or not the components -- but whether the system is operating; not necessarily to a component level.

Q. And who decides which diagnostics to put in the vehicle? Is that something that's in Ford's responsibilities?

A. That's usually agreed on between the supplier and Ford.

Q. And the speed control system, who made the decisions on what diagnostics to put in that system? Was that Ford or was that Highlight? Was it Texas Instruments? Who -- Who planned the diagnostics for that vehicle?

A. The diagnostics for that vehicle line were the speed control system. I would say that it was probably the Speed Control Engineering Group.

Q. At Ford?

A. At Ford.

Q. Texas Instruments had nothing to do with

the diagnostics, as far as you know, on that vehicle for speed control?

A. Yes, they did.

Q. How were they involved?

A. They would have identified to Ford what failure modes their component could have and identify to Ford what the -- what the results of those failures could've been so that Ford could look for that.

Q. And they would -- they would -- By doing that -- Well, first of all, let me back up. You weren't involved personally, this is what you believe happened, correct?

A. That's correct.

Q. Okay. And they would notify Ford on what potential failure modes are through the use of some document. I think it's the FMEA?

A. Failure Modes and Effects Analysis, yes.

Q. And what would Ford do with that FMEA?

A. They would look at what the failure modes were that the device might have and understand which ones could be detected.

Q. And engineers at Ford would have that responsibility, at least, in this time frame?

A. Well, they would need the cooperation of

the suppliers also.

Q. Do you have any evidence to suggest that T.I. did not submit and FMEA on this product?

A. I believe they did submit an FMEA.

Q. Have you reviewed it?

A. Yes, I have.

Q. When is the last time you reviewed it?

A. It was just recently, not too long ago.

Q. We asked for Ford's FMEA on the cruise control system. Do you know if that still exists?

A. No, I do not.

Q. Did you Look for it when you were doing your investigation?

A. I think we may have asked for that.

Q. What were you told when you asked for it?

A. I was told that they would look for it.

Q. Were you ever told that they couldn't locate it?

A. They may have told me that. I don't know.

Q. That it had been destroyed?

A. They may have said that.

Q. The decision to put in diagnostics on the 1992, '93 Lincoln for speed control, do you know what diagnostics Ford engineers put into the speed control system?

A. No, I do not.
Q. Do you know if they had a diagnostic to tell you, for example, if the speed control was engaged?
A. I don't know that.
Q. Are you able to say whether or not your investigation looked into that?
A. Looked into --
Q. What diagnostics existed in the speed control system.
A. I don't -- can't say that we looked into what the diagnostics were for that system other than -- You know, I can't say that we looked into that.
Q. Were you aware of any problems that have been reported to Ford about potential fires in the air suspension at any time?
A. At any time?
Q. Yes, sir.
A. In -- There was failures in the air suspension system on the 1984 Mark VII and -- Mark VII.
Q. Did it result in fires?
A. Yes, it did.
Q. Were you aware of any claims by anybody

that the air suspension in the '92, '93 Lincoln Town Car had been alleged to have been the cause of any under hood fires?

A. No, I was not.

Q. Do you know where the air suspension module is located in connection with the brake pressure switch? Do you know what side of the vehicle it's on?

A. I believe -- In the -- In the 1992, '93 Town Car?

Q. Yes.

A. I believe it's in the trunk.

Q. Take a look at alternatives what we're going to mark as Exhibit 6.

THE COURT REPORTER: 7.

Q. 7.

MR. MAYER: Thank you.

(Exhibit No. 7 marked.)

Q. 7. Do you have a highlighter? I ask you to take a look at Exhibit 7. And that is a -- Well, first let's establish -- is that a picture of the under hood '92, '93 Lincoln Town Car?

A. It looks -- Well, I guess I don't see where it says the Town Car on here. I don't know that.

Q. Can you look at it and look at the orientation of some of the components and see if that looks to you like it is that? I think it may have got cut off in the photocopying.

A. I guess, if you wanted to represent it as that, I'll -- I'll accept that.

Q. Okay. I have highlighted something. Would you read what I have highlighted?

A. Air suspension compressor, motor and vent solenoid.

Q. And that is in the 1992, '93 Panther platform; is it not?

A. Yes.

Q. Okay. And that is locate on the left side of the engine; is it not?

A. That's -- Yes.

Q. Have you ever heard of anybody alleging that that device that I have highlighted has been the cause of under hood fires?

A. On the '92 '93 Town Car?

Q. Yes.

A. No.

Q. Did you look into that during your investigation of under hood Town Car fires in the Lincoln platform?

A. No, we did not.
Q. Why not?
A. Because what our objective was was to look at brake pressure switch.
Q. Okay. Do you know if anyone else at Ford looked into that component during the investigation?
A. I don't know if they did or not.
Q. Now, on your calendar there's also a reference to ADS. It's on, I think, the 26th of May, Building 5. It says ADS, Building 5.
A. Okay.
Q. Did that have anything to do with the investigation that you were engaged in in the Lincoln Town Car?
A. No, it did not.
Q. Is that involved in a different vehicle line?
A. It could have been. Probably was.
Q. And then I see an entry the previous day, 7:30 to 8:30, speed control wiring and fusing. Was that in any way related to the investigation you were involved in in the speed control?
A. That may have been.
Q. Can you tell us what that meeting was about and what the --

A. From the words that are there, it looks like we were looking at different opportunities for what we might do with the speed control switch for the recall.

Q. And did you have a team leader on that? And if so, who was that?

A. A particular leader? It would've been -- Again, I was the overall lead. I think -- I guess I'd be the lead.

Q. And the purpose was to look at different wiring and fusing options?

A. That's what I would read from that.

Q. And what other options did you look at?

A. With respect to --

Q. I think you talked about a relay with --

A. Well, I think that would be -- that would be consistent with this meeting.

Q. Did you look at an in-line fuse?

A. I think that was part of the discussion.

Q. Relay in-fuse. Anything else?

A. I think there was a look at moving the wires to some other locations.

Q. All right. Explain to me what you looked at there.

A. Well, I think there was a proposal, a

thought, an idea, basically something that somebody thought as an idea that maybe if we took T.I.'s recommendation to move the wire to someplace else, that that would result in -- that we might be able to get around the problem that we were having when leaky switches were causing fires.

Q. And T.I. made this recommendation, according to your recollection?

A. I don't know whether T.I. made the recommendation or if it was somebody else. But it turned out --

Q. What was the recommendation?

A. The recommendation was finding a different place to -- to locate the wiring for the speed control. This would've ended up in a failure mode that we were trying to get away from in the original design of the system, so the speed control people were adverse to doing that.

Q. I'm not sure I follow that. Explain -- Explain that again a little bit. The recommendation made by somebody was to move the wiring from where it -- You have the diagram -- from where to where?

A. There was no recommendation to move the wiring. Okay. Somebody said, hey, maybe if we can find a place that we could change something, we

could do that.

Q. Okay.

A. That was not a feasible thought.

Q. Okay. Kind of like brainstorming?

A. Brainstorming.

Q. Were there any other things that were considered by your group other than putting in a relay, putting an in-line fuse and perhaps moving the wiring?

A. We considered several possibilities of what we could've done to eliminate the fire with the defective switch that had brake fluid in the -- in the switch compartment. We were not able to make any of those other things work, for a variety of reasons. But the bottom line was was that in order to protect the customers from fires in their Town Cars due to leaky brake switches, you know, we couldn't -- we couldn't do that with these other ideas.

Q. So you just put in a new brake switch, right?

A. We put in a brake switch that had been manufactured after the time frame at which T.I. had made their manufacturing changes that they hadn't told us about. But the data showed that it looked

like it would work.

MR. MAYER: Object, nonresponsive.

MR. FEENEY: Object to your objection.

Q. So you put in new brake switch?

A. We put in new brake switches.

Q. Now, tell me what, in your mind, made the use of a relay, something that wasn't advisable.

A. First of all, the relay in itself was only a Bandaid to -- to what was going on with the circuit. A relay in the recall would've bee applied by many different people across the country with a variety of unknown results, a lot of opportunities for mistakes. It would've also offered up an opportunity for the relay to catch fire because it would then be powered at all times; and inside the relay, 12 volts to ground were even closer together than they are inside if brake pressure switch.

Q. Anything else?

A. There may have been some other ideas that escape my mind right now.

Q. Now, in the Field Review Committee that you talked about earlier, I think there is a -- Do you have that exhibit in front of you? I think it's No. 5. There is a -- There's a test that was done.

Take a look at Test 16, Page 18 of 20. Okay. Do you see that test?

A. Yes.

Q. Okay. The objective, as I read it, is to test proposed relay circuit; is that correct?

A. That's correct.

Q. Okay. And there's a description of the results of the test: Switch was injected with five percent saltwater and tap water solution placed in a proposed current limiting circuit for 48 hours. The current draw remained constant at 180 milliamps throughout the test. Did I read that correctly?

A. That's correct.

Q. Okay. And was this test something that you asked to be performed; you, meaning Ford asked to be preformed?

A. Yes.

Q. And who did the test?

A. I believe this was probably done by Texas Instrument.

Q. Do you know one way or the other?

A. At this moment I can't tell you that for sure, but I believe that there are probably some other documents that would show this was done by T.I.

Q. And did people from Ford participates in the test, to your knowledge?

A. T.I. ran this test.

Q. And the -- the test results are identified there. I won't read them. The -- The tests yielded a conclusion, did they not?

A. There is a conclusion there.

Q. Okay. The conclusion was that at .75 watts, the maximum power in the proposed circuit design is not enough power to cause the switch terminal heating sufficient for ignition. Did I read that right?

A. That is what T.I. concluded.

Q. Do you have any evidence to suggest that's not correct?

A. I don't have any evidence to suggest that it is correct?

Q. Did Ford do any tests to determine whether that information was accurate?

A. No, we did not.

Q. Does Ford no of anything to suggest the information is not accurate?

A. At this point in time we don't know for sure what we were provided by Texas Instrument based on their -- the information that we know they didn't

provide us.

MR. MAYER: Object, nonresponsive.

Q. Did you -- Did you ask to see the results of the test?

A. This is -- This is what we got from Texas Instrument. This is what they supply as the results.

MR. MAYER: Let me just take a break --

MR. MANSKE: Sure.

MR. MAYER: -- and say Goodbye.

MR. MANSKE: We've been going about an hour and 15 minutes anyhow.

(Recess taken.)

(Mr. Colingo leaves the deposition.)

Q. Mr. Porter, as far as you know, the tests and the results and the conclusions described in Exhibit 16 (sic.), have those been removed from any of the versions of the 14-D that has been provided to your management?

A. Exhibit 16?

Q. No. Test 16.

A. Oh, that would be Exhibit 5. What was the question again?

Q. Have you removed Test 16 from the white

paper that you provided to your management?

A. I believe this is the most recent version of the white paper, so it's still there.

Q. Now, one thing you mentioned when, I think, Mr. Jolly was asking you questions related to the amount -- the amount of power -- the limits on power to make the product safe from ignition, do you recall that general discussion with Mr. Jolly?

A. Vaguely.

Q. Okay. Do you recall that you said that you didn't know what the limit -- what the correct limit would be to eliminate the possibility of an ignition?

A. What I -- What I know that -- that I can say with that regard is that I don't know the minimum current requirement that would cause a -- a switch that had leaky brake fluid to start fire.

Q. Do you -- Do you -- Did you review Exhibit 1 prior to the deposition here?

A. I did look at it, yes.

Q. There is -- There is a provision on Page 3 of 20 where they're explaining what they did in the test. And it says -- I'll read it -- The power supplies were limited to 100 milliamps so that they may run unattended 24 hours a day with a low risk of

fire. Do you agree with that statement?

A. Yes, I do.

Q. And that was something that Ford engineers called for, correct?

A. That's correct.

Q. Do you know how the limiting of the power supply to 100 milliamps allows the device to run 24 hours a day with a low risk of fire? Why does that happen?

A. Because there would be less power available to start a fire, so there would be a lower risk of a fire; but it doesn't say that there would be no risk of a fire.

Q. Is that something that was -- Ford suddenly discovered in the year 2000 or is that something Ford knew back in 1991?

A. Is that what?

Q. Power supply is limited to 100 milliamps so that they can run unattended 24 hours a day with a low risk of fire. Is that something you just suddenly discovered or is that something Ford knew back in 1991 and '92?

A. I guess I'm not -- I mean, any time that there is current available in a circuit that is dissipating power -- I guess I'm still not sure what

it is you're trying to drive at with your question.

Q. There's nothing unusual about that statement. It is common knowledge, correct?

A. Well --

Q. It was in 1991, it is today. There's no mystery about it; is there, Mr. Porter?

MR. FEENEY: Object to form. I don't even know what's being asked at this point.

A. I -- Again, I'm not sure what it is -- I'm not sure what the question is you're asking.

Q. Limiting the power supply to a hundred milliamps so something can run unattended for 24 hours a day with low risk of fire, that's not something that Ford suddenly discovered in the year 2000; is it, Mr. Porter?

A. Well, it would be lower risk than running it at 200 milliamps, right.

Q. Right. And a lower risk than running it at a higher power, correct?

A. But higher risk than running it at zero.

Q. Do you know which of the Ford engineers worked on this test?

A. Steve Reimers.

Q. Did you -- Were you present when the test was run?

A. I was -- I visited the test from time to time.

Q. And did he consult with putting a hundred milliamp limit on the test?

A. Yes.

Q. Did you agree with him?

A. Yes.

Q. Why?

A. Because we needed to have some current for the test -- or we thought we needed come current for the test to run.

Q. Why did you limit it to a hundred milliamps, Mr. Porter?

A. Because if we limited it at 15 amps, we -- we were afraid that it would start a fire.

Q. Thank you. I did have a question about one of graphs on that same exhibit.

MS. WEINER: Is this Exhibit 1?

MR. MAYER: Yes.

Q. Exhibit 1, if you'd take a look at Page 7 of 20, my understanding of the limit to a hundred milliamps would be the 1.00E + 05 line on the left-hand side of the graph; is that correct? Have I read that right?

A. Let me work this out.

Q. Okay.
A. That's true.
Q. Okay. Can you explain to us why then on this graph we have one of the devises being measured at a higher -- higher than a hundred milliamps?
A. I believe, at periods of time during the test, when the power supply would limit it a hundred milliamps, when somebody was there to attend it, they would allow more current to flow. And that would've been one of those times.
Q. So the hundred milliamp limit was only placed on the device when it was unattended?
A. Correct.
Q. Okay. When people were in attendance they took that limit off?
A. Yes.
Q. As far as you understand?
A. As far as I understand.
Q. Can you show me where in the report it says that, in the test?
A. It doesn't unless -- I mean, I --
Q. Is there some reason why it was left out?
A. That was not deemed a piece of information that goes useful.
Q. Did you make that decision?

A. No.
Q. Who did?
A. Steve.
Q. All right. Thank you. Did -- Did you pay this company, Hi-Stat, to run these tests?
A. No, we didn't.
Q. Why not?
A. Because they're interested in the business.
Q. So there was no -- no -- no payment, no invoicing, no payment for those tests?
A. Not for those tests, no.
Q. Did they get any compensation for working and doing these tests?
A. We did buy some switches from them that they were compensated for.
Q. What kind of switches did you buy?
A. They were the pressure type switches.
Q. For installation in what vehicles?
A. It was for general study. It was not for any particular vehicle.
Q. Is there some reason why they just didn't invoice you for the tests?
A. They were interested in the business.
Q. So in lieu of invoicing you for the test,

you just bought some sample parts from them?

A. The -- I guess that would be a way of looking at it, yes.

Q. Is that typically how Ford does business?

A. Ford does business in many different ways.

Q. As I understand your testimony earlier to Mr. Jolly that Ford has a -- determined a root cause and that root cause is that the brake fluid has leaked through the Kapton seal, when did Ford come to that conclusion?

A. After reviewing documentation that T.I. provided on a previous case.

Q. And was that -- Okay. Was that done in the year 2000?

A. I believe it was in 1999.

Q. Do you know when -- what documents you reviewed that assisted you in coming to that conclusion?

A. Texas Instruments Highlights was the primary contributor to that. Other internal documents that T.I. provided would also show that T.I. was concerned about that themselves.

Q. And what exactly in the Texas Instruments documents allowed Ford to say that the root cause was leaking -- brake fluid leaking through the

Kapton?

A. It was a document that T.I. sent to me with respect to a possible scenarios of the Ford -- or that could cause the diaphragm to leak and they listed a couple of those scenarios in their document. What we received in the document production were previous copies of that, and which common specifically identifying those situations that were common with the Tennessee switch were deleted from the memo that was presented to us. So it became clear that T.I. understood that the problem we were looking at was, in fact, something that they had experienced.

Q. Okay. I need to explore that with you a little bit because I'm not sure I followed it all. These are documents that you got sometime in 1999 in discovery?

A. Yes.

Q. And how did they relate to the Memphis switch?

A. What the documents was doing was describing to Ford various modes that the -- that the diaphragm could fail. One of those modes was identified as being the same as observed in the Tennessee switch. That line was removed from the

document that was presented to us.

Q. So you saw two versions of the same document?

A. Yes.

Q. All right. One of them had same as the Tennessee switch removed?

A. Yes.

Q. And the other one was identical except that phrase was contained in it?

A. That's correct.

Q. Okay. Is there anything else that you saw that convinced you that the root cause for this recall was a leaking diaphragm -- leaking Kapton other than that?

A. The Highlights that T.I. presented as part of their document production hand a running commentary through 1992 about leaking Kapton. They identified the pressure and crimping process was one possibility of causing leaking diaphragm. They also indicated that the gasket seal being misplaced, which was continued on into August of 1992, was also a factor in reducing the life of the Kapton. In addition to that, they identified other manufacturing process problems that they had never identified to Ford, including the braking spring arm

that was observed during their impulse testing also.

Q. So the documents that you're referring to, the Highlights, those are documents that you reviewed and they indicated to you that there were problems with T.I.'s production of the switch during the time period involved?

A. Yes.

Q. And those were problems that -- It's your position that Ford was unaware of it until such time as you reviewed them --

A. And, in fact --

Q. -- is that right?

A. In fact, the documents identified that they did not tell Ford in some cases of those incidents.

Q. These were problems of the misplaced gasket, those you are things that you claim that Ford was unaware of until the time that you reviewed those things?

A. I not only claimed that. T.I. also provided Ford during the investigation a list of changes that -- that had occurred, upon our request, of with a production changes had happened. What their list showed was nothing during the 1992 time frame, that there were any production changes

changing -- happening. But, in fact, the Highlights say that there were changes to the production process. So in 1999 they were withholding that information from us when specifically asked.

Q. Did you ask people at Ford whether they had discussed with Texas Instruments any of the issues that you believe you were learning for the first time in 1999?

A. Yes.

Q. Who did you talk at Ford to see if anyone had discussed that with Ford at the time it occurred?

A. Bruise Pease.

Q. Anybody else?

A. Gary Klingler. Those are two names that come to mind right now.

Q. Those were two individuals that were around during the 1991, '92 time frame --

A. Yes.

Q. -- right? Because you weren't in that position?

A. That's correct.

Q. Okay. So you don't know firsthand whether anyone from Texas Instruments discussed those issues with Ford because you were told they were not; and

that's based on information you got from Pease and Klingler?

A. And Texas Instrument.

Q. Okay. And who at Texas Instruments told you that they were not disclosed?

A. The Highlights.

Q. Other than your reading of the documents. I'm trying to find, was there any -- Did you ask anybody at Texas Instruments, hey, did you all discuss this with anybody at Ford; and if so, who?

A. No, I have not.

Q. Have you ever asked that to this day?

MR. FEENEY: Now, wait a minute. Time out. I mean, how is he going to do that in the middle of litigation?

Q. Have you ever asked that to this day, Mr. Porter, from anybody from Texas Instruments? Have you asked that question?

A. By recommendation of my counsel, I have not had contact with people from T.I. except in their presence.

Q. And what exactly did Mr. Pease tell you?

A. Mr. Pease did not remember a lot about what was going on did during that period of time.

Q. What exactly did Mr. Klingler tell you?

A. Mr. Klingler said T.I. never informed of him of any of these issues.

Q. I thought you told me that -- Well, I don't think I covered this. When is the last time you spoke with Mr. Klingler?

A. The last time I spoke with Mr. Klingler was several months ago.

Q. Several months ago. So today is November. Summer or after the summer?

A. I -- It would've been possibly even before the summer. I don't know when it was.

Q. All right. Did you call him or he called you?

A. We had a meeting over at his office.

Q. And where was that meeting, sir?

A. That was in Plymouth, I think.

Q. Plymouth where?

A. Michigan.

Q. And who was in attendance at that meeting?

A. Let's see. I think I was there. Mr. Manske was also there.

Q. Mr. Manske, the lawyer here that's repressenting you in this deposition?

A. Yes.

Q. Okay. Was Mr. Feeney there?

A. No, he was not.
Q. Anybody else?
A. I do not believe so.
Q. Okay. Give me the hierarchy. Did Gary Klingler work Bruce Pease or was it the other way around or?
A. They were not in the same organization.
Q. Okay. They were both in different divisions?
A. Yes.
Q. Okay. And was that the first time you had met with Mr. Klingler?
A. No. I had had some discussions before that over the phone.
Q. When -- When is the first time you started talking with Mr. Klingler?
A. It would've been sometime in 1999.
Q. Did you talk with Mr. Klingler during the investigation prior to May of 1999 when the recall was issued?
A. Yes, I did.
Q. Okay. And where was he working at the time?
A. He was working in what became Visteon Visteon. Actually, I think that organization's

already been identified then.

Q. Okay. And why did you contact Mr. Klingler?

A. Because I knew that he was involved with the speed -- speed control system.

Q. How did you know that?

A. From -- Actually, I remembered back in 1992, that was the group that he was the section supervisor for.

Q. So you tracked him down over at Visteon and you -- and you telephoned him?

A. Yes.

Q. Okay. Was it before or after the recall?

A. This was before the recall.

Q. What did you ask him?

A. I asked him if he could work with us on the team that was investigating the NHTSA system.

Q. Okay. And did he agree to do so?

A. He indicated it would be better to use one of the people who were presently working on the speed control system.

Q. Okay. In other words, somebody working on the -- whatever, the 2000 speed control system or whatever it was under?

A. Yes.

Q. So he declined. And who did he send in his place?

A. Well, I think he gave me the name of the people over at the other system. The person who eventually represented speed control was Fred Kohl.

Q. And had Mr. Kohl been around in the 1991, '92 time period working with Texas Instruments?

A. I don't know that he had been. I don't think so.

Q. Did you ask him whether he had worked with Texas Instruments?

A. I -- I believe that I did. My impression was that he wasn't there then.

Q. And did you discuss anything else with Mr. Klingler?

A. At that time -- Or initially? No.

Q. You just asked him for help and he said, I'm not going help, I'll send somebody?

A. That's right.

Q. And did Mr. Kohl assist in the investigation?

A. Yes, he did.

Q. And exactly what was Mr. Kohl working on, as you understood it, other than this investigation? What was he doing?

A. He had responsibility generically for car speed control systems.

MR. JOLLY: What? Speed -- What type?

THE WITNESS: Car. As opposed to truck.

MR. JOLLY: Oh.

Q. And do you know what car lines he worked on?

A. My understanding is that he worked on all the car lines.

Q. When you say "all" you mean all that are manufactured by Ford and Lincoln or does it go to G.M. and Chrysler and --

A. All the Ford car lines.

Q. By the way, in the 1991, '92 time frame, do you know what type of speed controls systems were used by your competitors, the Cadillacs, Buicks? Do you know?

A. They had a variety of different systems. There was some -- Well, there were different kinds.

Q. Were any of them receiving constant power?

A. How do you mean, were they receiving constant power?

Q. Well, were any of them wired the same or

similar to the Ford system where they had a 15-amp fuse and direct to the battery?

A. I believe that they all have -- Maybe it was 15, maybe it was 20, but --

Q. Were they continuously powered 24 hours a day, seven days a week, Mr. Porter?

A. Those systems also utilized the brake pedal for a deactivation, so that would be continuously powered, yes.

Q. So when you began your investigation into the 1991, '92 Town Car part, is one of the things you did, say, hey, what's our competitors doing? Let's go see how they're doing it?

A. That was part of it.

Q. And who did you get to assist you with that or did you do that yourself?

A. I think that that was one of the questions that we put to the Vehicle Center people. It turned out that their systems were not the same as Ford's overall, so that it was not applicable with what we're trying to do. Again, we were really trying to focus on the brake pressure switch and what could be the defect with that.

Q. I understand that. How were their systems different?

A. Their systems in -- generically, I guess, instead of using a brake pressure switch in the brake line, they used a redundant switch on the brake pedal.

Q. That's similar to what Lincoln had used before 1991, '92?

A. No, it's not.

Q. What was the type of system that the Lincoln Town Car used in early '91?

A. Lincoln Town Car used a vacuum dump switch that was based on the brake pressure.

Q. Can you explain just briefly how that would work?

A. The -- Again, I'm not -- Well, maybe not again. But for the brake pressure system prior to 1992, the '92 model year, I really didn't go into a deep dive of that. The -- The switch method that was used would -- Or the system for energizing the system was a nonelectrical system. So it was a different type of switch.

Q. And when Ford decided to go from that system to an electrical system that was energized all the time, what studies did Ford make to determine whether this system would be one that they thought would be compatible with real life under

hood environment?

A. Specifically, you'd have to ask Gary Klingler what they did. But they did do a lot of analysis of the competitive vehicles. They also did standards practices, the FMEAs and --

Q. Was that material available to you during your investigation, I guess, is what I'm trying to get at?

A. Not all of it, no.

Q. Okay. Because I have not seen a lot of studies that indicate what Ford studied to move from the vacuum system to the electrical system. Did you look at that material in your investigation?

A. I -- No. No, we did not. That wasn't -- That wasn't the issue. The issue really was the brake pressure switch.

Q. All right. But this was a new speed control system, was it not?

A. For the '92 vehicle it was a new speed control system, yes.

Q. All right. And did you have someone on your team go and try to study the old system to compare to the new system to see what, perhaps, some of the differences may be that may be one explanations of the anomalies?

A. After we found out that it was a vacuum switch in the previous, it was no longer relevant.

Q. Why is that?

A. Because it was not the same system.

Q. Okay. I interrupted you. You were telling me about you talked with Mr. Klingler, you located him at Visteon sometime in '99 before the recall and he declines, but sent you Fred Kohl to work with your people?

A. That's correct.

Q. And did you have any other meetings or discussions with Mr. Klingler between that initial call where you got Fred Kohl and the meeting you had with Jeff Manske?

A. That -- That was probably the only meeting. There may have been a phone call as far as setting up the meeting with Mr. Manske.

Q. Okay. Can you recall any substantive information you discussed with Mr. Klingler?

A. When?

Q. Prior to the meeting you had with Mr. Manske.

A. No.

Q. Did you ask Mr. Klingler any particular questions about system design and who was

responsible for designing the speed control system during this time frame?

A. No, we did not. We depended on Mr. Kohl to provide that information.

Q. And did Mr. Kohl work with your team through the investigation?

A. Yes, he did.

Q. Were there others from Visteon that worked along with him, or to your knowledge, was he the only one?

A. I believe there were other individuals that -- that work in his group at Visteon. I don't know exactly what their involvement would've been.

Q. Now, did Mr. Klingler tell you that he did have a good recollection of this time period?

A. Yes, he did.

Q. Okay. And what did he tell you that he recalled about it?

A. With -- With respect to what?

Q. Any of the questions you asked him.

A. What -- What he was surprised, was the number of problems that T.I. had identified in their process from the Highlights.

Q. Okay.

A. He was surprised that the failures that

they were experiencing, he was surprised that -- that these issues hadn't been brought up before.

Q. So you showed him the Highlights that you had gotten and asked him to review them?

A. Yes.

Q. And then you talked about whether he was aware of any of them --

A. That's correct.

Q. -- stuff contained in the Highlights?

A. That's correct.

Q. Did you ask him whether he knew whether Bruce Pease had then discussed any of these items with the T.I.?

A. I didn't ask him that, no.

Q. And did you have a similar type meeting with Mr. Pease or he did not recall the events?

A. He didn't recall the events.

Q. All right. And are there particular events that you recall discussing with Mr. Klingler that he explained to you that he was not aware of?

A. I guess, in specifics, I can't -- I can't identify those. He knew that there was a problem with the -- with the life on the -- on the switch, but he wasn't aware of what -- what exactly those problems were.

Q. Okay. When you say he knew there was a problem with the life on the switch, what was he aware of in terms of a problem?

A. He knew that there was alert that had been written.

Q. And that's the alert that I think you talked about with Ms. Weiner?

A. That's correct.

Q. Was he aware of anything other than that, that the alert was issued and there was some --

A. There -- There were some other issues that he talked, but I don't recall what those are off the --

Q. Would he have been the person responsible for reviewing the materials Texas Instruments sent and approving the alert?

A. I don't know if he would've been or not.

Q. In your investigation, were you able to find out who at Ford had worked with Texas Instruments during the alert that was issued in early 1992 on this problem?

A. I think that would be listed on the alert.

Q. I'm asking you something different. Did you, in the investigation, go to that person and speak to them and say, we think there is the basis

of a recall based on this alert, we want to talk to you about, what do you remember about it?

A. Okay. The person who initiated the alert was Bruce Pease.

Q. Okay.

A. Okay. He didn't remember that. The issues that we had are not with the alert, but the parts that were built after the alert expired.

Q. So as I understand it, Ford is -- Ford's position is that some switches provided after the alert, Ford believes, were not manufactured properly and have Kapton that leaks?

A. The information that we have on the vehicle fires that are shown in the 14-D point to the parts built off the AMI system that were built after the alert are the primary parts causing the fires because of leaky Kapton.

Q. And you talked to Bruce Pease about it during the investigation, but he had very little recollection.

A. He had very little recollection.

Q. All right. And what did Klingler say about it other than what you've told me?

A. Basically, what -- what we've spoken already.

Q. How long did you and Mr. Manske meet with Mr. Klingler?

A. I think it was about an hour.

Q. What other topics did you discuss?

A. That was the only topic that we discussed.

Q. Did you ask Mr. Klingler if he knew Mr. Offiler, the person who wrote many of the Highlights?

A. I don't recall if we did.

Q. Did you ask Mr. Klingler if he ever spoke with Mr. Offiler during this time frame?

A. I don't recall whether we did.

Q. So it's your testimony, you didn't ask the question or you don't remember?

A. I don't remember.

Q. Okay. Did you discuss with Mr. Klingler who at Texas Instruments he dealt with during this time period?

A. As we're discussing this, I -- I remembered that being something that was discussed, yes.

Q. Okay. And who did he say that he dealt with that he could recall?

A. Well, what I recall him recalling, I think he mentioned Joe Shook as the sales engineer. I

think he mentioned Charlie Douglas as a possibility. I think he mentioned Marcus Sullivan as somebody that he dealt with. I -- That's all I remember that -- that he mentioned at that time.

Q. And -- And I don't recall. I apologize. Did he -- Did he say -- Scratch that. Okay. Did you guys ask Mr. Klingler to review the 14-D that you had provided your management?

A. No, we did not.

Q. Is there some reason why you didn't give him that?

A. It was not something for him to review.

Q. Did Mr. Klingler ask you what tests Ford had done on switches that had been either returned from the field or came in through the recall?

A. No.

Q. Now, as I understood your testimony earlier today, you said that T.I. did all of the tests involving brake fluid and the switches. Am I -- Did I hear that right or did I hear that wrong?

A. I'm not -- I guess I --

Q. Let me ask it another way.

A. Okay.

Q. It's true, isn't it, during the investigation, Ford tested switches with brake fluid

in them to see if they could get ignition? Ford did the tests themselves at Ford?

A. No, Ford did not do that.

Q. Okay. You're not aware that anyone at Ford did that?

A. I'm not aware that during the investigation that Ford did any active tests to -- or any long-term active tests to start ignition. I do believe that there were some tests that were run to identify what the electricity effect would be of the brake fluid in -- on the electrical components of the switch. But those tests were not actually run with the intent of causing an ignition.

Q. Did Ford do some tests at its proving ground on vehicles outfitted with a relay?

A. There was one vehicle that was outfitted with a relay.

Q. Was that testing done at the -- I think it's Ford Proving Grounds. Is that what you call it?

A. It may have been proving ground, it may have been on city streets.

Q. Who gave the instructions to have that test done?

A. Test is really a -- a broad word, or maybe

too tight of word for what was -- The system was installed into a vehicle and was run and reviewed.

Q. And who gave the instructions to do it?

A. The instruction to do it, it was probably an agreement by the team of me being the lead of that. The methodology of how it was going to be installed was probably some of the people working on the team.

Q. Did you have somebody in particular that was involved in this test, Mr. Reimers or --

A. I think Mr. Riemers probably was particularly involved with that.

Q. Okay. What other documents did you show Mr. Klingler other than the T.I., the Highlights?

A. I'm not sure what other documents were shown. I think the Highlights were the primary area of discussion.

Q. Did you show him any of the -- the reports on vehicle fires that had been received by either Ford or NHTSA?

A. No, we did not.

Q. Was he aware that there was an investigation ongoing?

A. I had indicated that to him.

Q. And did Mr. Klingler ask to see any

material from you?

A. I guess, you know, we were -- we were showing him the material that we had.

Q. I mean, was there something you didn't bring? I mean, from what I understand, all you showed him was the Highlights from Texas Instruments; is that right?

A. There may habe been other information, but that's --

Q. You can't recall any?

A. I don't recall any.

Q. Okay. What I'm asking is a different question. Did he say, well, what about your white paper, your 14-D or what about -- Did he ask for anything.

A. No, he didn't.

Q. And what did you ask Mr. Klingler to do at the conclusion of the meeting, if any?

A. I guess, what we were asked -- what we were looking for was -- was confirmation that what we were reading in the Highlights was something that was really going on at the time.

Q. Okay. And what did Mr. Klingler say in that regard?

A. Well, he -- he had said that the

information that the Highlights indicated was news to him, that he hadn't been informed of many of these issues that T.I. was experiencing, even as the -- the speed control switch was going into production.

Q. And did -- Was he able to articulate which of the issues he believed he had not been informed about?

A. Particularly, the impulse test problems that they were having.

Q. And the impulse testing, that -- the material that led up to the alert?

A. And afterwards.

Q. What is the impulse testing data that you're referring to after the alert was issued?

A. In August of '92 the Highlights identified that -- that misplacement of the gasket seal led to reduction in life of the -- the Kapton in impulse testing. So that means there had to have been some failures in impulse testing that had not been identified to us previously.

Q. Can you explain from the diagram where that gasket is located?

A. I'm not sure --

Q. Here's a highlighter. Why don't you

highlight the gasket on there for us.

A. I believe that the gasket that they are referring to -- only because it's in contact with the Kapton -- is the -- is the small gasket between the hex port and the Kapton.

Q. Okay.

A. It may, in fact, have been something else. But it was quite clear in the Highlight that it had a negative effect on the life of the Kapton.

Q. Would you pass the exhibit back so I can see where you highlighted it?

A. (Witness complies.)

MR. MAYER: Okay. For the record, Exhibit 2 has some highlighting marks on it placed by the witness that refers to the gasket that he was previously discussing.

Q. Can you explain, Mr. Porter, how the gasket being misplaced there would result in -- is it decreased Kapton life? Is that --

A. Decreased Kapton life is the problem that they identified in the Highlight. They did not explain how that would happen.

Q. Has Ford done any tests to try to determine whether or not a gasket that is misplaced in the area that you have highlighted would result

in decreased Kapton life?

A. Ford would be unable to run such a test.

Q. Okay. Did -- When Ford -- Do you know how the reduced Kapton life would come about from a gasket being misplaced --

A. No, I don't.

Q. -- as opposed to just a straight leak?

A. I -- What was indicated in the Highlight as -- as the reduced life of the Kapton would be leak that would allow brake fluid into the switch cavity.

Q. I mean, it seems to me that if the gasket is misplaced, you're not going to have a very good seal and you would have some leaking. Is that the way you interpreted the document?

A. What -- What the Highlight says is that the test equipment that T.I. had in place for -- for looking at the gasket placement could only detect gross placements of the gasket and that small placements -- misplacements of the gasket that were being observed resulted in a percentage of Kaptons with reduced life.

Q. And did Ford see any type of unusual warranty return in the period following April of 1992 when this alleged misplaced gasket was to have

occurred?

A. The alleged misplacement of the gasket occurred from the beginning of production at the AMI device until sometime just prior to August of 1992. And I would have to look at the data, the warranty data, as discussed before, to tell you if there was something unusual about it.

Q. So if there was an unusual return of switches to Ford dealers following that time period, that would be one indication that the misplaced gasket was, in fact, a problem?

A. That would be.

Q. Okay.

A. However, what we do have is an occurrence of fires that do coincide with that time period.

Q. Ford's position is, the occurrence of fires that it's seeing on the basis of this recall coincide with the misplaced gasket reference that they see in the Highlights?

A. That is one of the possibilities.

Q. How is that -- Explain how that is related to it.

A. How they are related?

Q. Uh-huh.

A. Frequency of fires in the recalled

vehicle -- Or the frequency of fires declined from early 1992 until the end of -- Or actually -- Yeah, from early 1992 until the end of 1992. So if there was a change to the process that would fix the gasket placement, that would result in the fall-off that we saw.

Q. Okay. Anything else?

A. Again, there was continuous talk in the Highlights regarding crimp pressure of the system and that there was a concern about the robustness of the switch to that process; and that also was throughout the 1992 time frame. So if there were changes being made to that process, based on those comments, that would also be reflected -- or the fires would also come about from that.

Q. So as I understand the line, what you've determined from looking at the Highlights are, that you do have a root cause; and that root cause is leaking Kapton; it's not based on any additional tests that were run. Am I right about that?

A. It's based on the information provided to us by Texas Instrument.

Q. In the material in these Highlights?

A. That's correct.

Q. All right. And so -- Now, have you

discussed the -- the cracked Kapton that has been observed by Ford or Ford engineers? Have you discussed that with anyone from Du Pont?

A. I believe that there were some representatives from Du Pont that have come to Ford to discuss that.

Q. And do you know who those representatives are?

A. I don't recall the person's name.

Q. Did you meet with them, Mr. Porter?

A. Yes, I did.

Q. Do you recall approximately when you met with them?

A. There were two occasions. One time was with Texas Instrument. There was a time prior to that. Again, it was after the recall, but not -- back in that time frame.

Q. And has -- Does John Slater, does that name ring a bell to you?

A. That sounds like the guy.

Q. And do you recall that Mr. Slater met with you at Ford at any particular point where Texas Instruments wasn't present?

A. Yes. There was one time.

Q. And do you recall when that trip occurred?

A. That was the one that was after the recall. Again, I'm not exactly sure what the date was on that.

Q. And what information did you share with Mr. -- I mean -- I'm sorry -- Mr. Slater?

A. We showed him the pieces of Kapton that had been -- come back from parts during the investigation that he looked at under a microscope.

Q. Okay. And did you ask Mr. Slater what he thought the mechanism was by which the Kapton had failed?

A. I don't recall the -- any substantive discussion. Again, it was a somewhat contentious meeting.

Q. Okay. Explain that to me. What gave you the impression that it was a contentious meeting?

A. There was a Du Pont lawyer there.

Q. I mean, I've been at meetings with you that wasn't contentious. What made you say that it was --

A. We don't discuss a lot about what's going on with the product during those meetings either.

Q. What about the meeting was contentious?

A. Just -- Just the fact that there was not going to be an exchange of information; that he

wasn't going to tell us what his opinions were.

Q. Okay. Besides you and Mr. Slater, who else was present, and the lawyer for Du Pont?

A. There was a Du Pont lawyer. I think, actually, Mr. Manske was present for part of that and an engineer from Central Laboratories.

Q. By the name of?

A. Steve LaRouche.

Q. Any -- Anybody else that you can recall at the meeting?

A. That's all I recall.

Q. Okay. So you were there, a Ford lawyer was there, Ford engineer was there, Mr. Slater was there and Mr. Slater's and Du Pont's lawyer was there?

A. Correct.

Q. Do you know if Mr. Slater works for Du Pont or not?

A. I believe that he's a consultant for Du Pont.

Q. And did -- did Ford at this meeting ask Mr. Slater what he had concluded about the mechanism for failed Kapton that he had observed?

A. Again, as I said earlier, I think it was basically the same question; that we didn't get that

information.

Q. Okay. That's part of the contentious aspect?

A. Yes.

Q. Was there anything other than there wouldn't be an exchange of information that you deemed contentious?

A. There was no -- no social issues.

Q. And how many switches did Mr. Slater look at when he was here?

A. I believe that it was somewhere in the neighborhood of ten -- or 11 switches.

Q. And how were those switches identified by Ford?

A. They had be identified as they -- as they came back from the field. Some of them were identified with letters, some of them had been identified with numbers.

Q. All right. And do you know how they were selected, why these and not some others?

A. Well, these were switches that came back during the investigation from -- from various dealerships that had been identified as being in thermal events.

Q. Okay. When you say, being in thermal

events, what does that mean? Does that mean a fire or --

A. A fire would be an extreme thermal event.

Q. Okay.

A. Some of -- Some of them were melted.

Q. Uh-huh.

A. That would also been thermal.

Q. Would it be fair to say that no one from Du Pont has indicated to Ford that the cracked Kapton that they have observed is a result of anything other than end of life?

A. I can't say that they have.

Q. And, of course, Ford itself has not made a determination between Kapton that has ended its life and Kapton that you claim has failed prematurely to determine what differences, if any, exist? Correct, sir?

A. Premature death is death in either case. I mean, prematurely is an end of life. Premature is against a specification that -- that is not being met. You know, there is -- that's still an end of life event.

MR. MAYER: Object, nonresponsive. Would you read my question back, please?

(The record was read as requested.)

Q. Back to my question. Mr. Porter, would it's be safe to say that Ford has not done its own investigation, comparing Kapton that has run its life simply -- because it simply wore out versus Kapton that Ford believes has failed prematurely to determine what differences, if any, exists in those failure modes? Am I correct on that?

A. That would be a test that Ford would expect T.I. to run.

Q. All right. So the answer is: Ford hasn't done the test, right?

A. That is a test that Ford would expect T.I. to run.

Q. I hear you. I'm just -- Ford has not done that test, have they, sir? They haven't done it yet?

A. Well, I guess I'm still not sure what tests it is exactly you're talking about.

Q. Looking at Kapton that has failed because it has been cycled to the end of life and looking at Kapton in switches you believe have failed prematurely to see if there are any differences between that Kapton failure?

A. Switches that have been cycled to fail before 500,000 cycles are failing at end of life.

Q. I'm talking about switches that we know have cycled beyond 500,000 and failed. That's what I'm talking about, Mr. Porter. Have you looked at the Kapton of those switches to --

A. No, we haven't, because there would be no difference that Ford could necessarily tell between those.

Q. Thank you. How many vehicles, the actual vehicles that were alleged to have been in car fires, have you, Fred Porter personally looked at?

A. How many vehicles have I looked at?

Q. Yes, sir. Yes, sir.

A. One.

Q. And which one was that?

A. I don't recall the name of the case on that one.

Q. What state was it in?

A. Florida.

Q. And do you remember when you looked at it?

A. It was in December of 1998.

Q. And what about the car do you remember? What type of car was it?

A. It was a 1992 Town Car.

Q. And do you remember how many miles it had on it?

A. No, I do not.

Q. Do you know how many miles the vehicle involved in this case had on it when the alleged fire -- I mean -- Yeah -- the fire alleged to have occurred in the speed control deactivation switch occurred?

A. I don't know about this case.

Q. Do you know if it's more than 90,000 miles?

A. I don't know.

Q. Anyway, back to your vehicle trip to Florida, who attended that inspection with you?

A. A fire inspector from Florida.

Q. Okay. Do you remember the fellow's name or woman's name?

A. It was a man. Right now I don't remember what his name was.

Q. And this was -- You did this in connection with the investigation you were making into the '91, '92 under hood fires in Lincolns?

A. Yes.

Q. Okay. And how did you know about this car? I mean, how did you learn about it?

A. The -- The Office of the General Counsel had told me that there was that vehicle there.

Q. When you say Office of General Counsel, that's Ford's Office of General Counsel; is that right?

A. Yes.

Q. And did anyone else from your group here in Michigan go with you to inspect the car?

A. No, they did not.

Q. And do you remember approximately when this was in 1998?

A. In December.

Q. And do you recall what city it was in?

A. Cape Canaveral.

Q. And was it a '91 or a '92 Lincoln Town Car?

A. It was a 1992 Town Car.

Q. And was the car completely burned up or was it partially burned? Or describe it to us.

A. The engine compartment was basically consumed. It was a burned car.

Q. And do you recall anything else about the vehicle that you can tell us?

A. All of the plastic components of the brake pressure switch had been consumed in the fire.

Q. Was there a brake pressure switch on the vehicle?

A. Yes, there was.
Q. Okay. But only a portion of it?
A. It was just the metal components left.
Q. And did -- did you remove it?
A. No, we did not.
Q. Did anyone inspect the switch beyond visually inspecting it?
A. No.
Q. Did Ford -- Did the Ford fire investigator tell you that he had investigated what he thought the cause of the fire was?
A. First of all, it was not a Ford fire investigator.
Q. Oh, I'm sorry.
A. I believe he was an insurance company investigator. The -- The Ford -- Or the vehicle had been impounded at T.I.'s request and, you know, we -- we discussed the possibility of it -- or what -- what it might've been and I believe he said that he thought it was the brake pressure switch.
Q. Did he give you any reason why?
A. He talked about fire patterns, etcetera; but it really didn't mean anything to me.
Q. Did it --
A. My primary reason for going was that if

there was something available left of that switch, that I was looking to retrieve it; But again, it's plastic, it had been totally consumed.

Q. And was anyone from T.I. with you on the trip?

A. No, they weren't.

Q. Did you notify them that you were going?

A. Yes, I di I.

Q. And you said that car was impounded in some fashion?

A. It was -- It was in an small garage.

Q. And your understanding is, T.I. had requested that that vehicle be --

A. That's what I understood, yes.

Q. And that's the only vehicle that you've looked at from November of 1998 to the present; is that correct?

A. That's correct.

MR. MAYER: I'd like to take a little short bathroom break if I could.

MR. FEENEY: Sure.

(Recess taken.)

Q. Okay. Mr. Porter, I want to make sure I've got everything covered. Other than your meeting with Mr. Klingler that you mentioned to us,

have you had any other conversations with him that you have not described here today?

A. There -- There were probably other conversations with him, you know, because I don know that there was preparation that -- that was going on; that he's been asked to -- to be deposed.

Q. And have you talked to him about that?

A. I -- Again, in the context of -- of reviewing the documents, understanding how the -- the specification was written as it's highlighted in the Highlights, he's confirming that T.I. had input into the specification. You know, yes, that was part of the discussion.

Q. What -- In addition to the Highlights, what other documents have you sent him or have been sent to him by counsel for Ford that you're aware of?

A. I guess I'm not sure what has been sent to him.

Q. What did you send him?

A. Well, again, we had the Highlights. I think that the specification was -- was one of the items. We also had a copy of a specification that -- that T.I. had marked up prior to. We also -- Oh, we also talked about some testing that

Gary had requested of the -- of the switch. There was a concern in system that if the wire between the switch and the speed control were to short out, that the full 15 amps from the fuse might be run through that switch. And so he asked T.I. to run testing to confirm that the switch would be able to survive that and they were able to exceed that much greater than the 15 amps; it would go to 30 amps.

Q. Is there -- Is there written test results on that that you sent him?

A. That -- Actually, I believe that information is included in the Highlights.

Q. So that's the date of the Highlights. What I'm trying to find out is, other than the specifications which you sent him and some marked up specifications, have you sent him any other documents?

A. I -- You know, the documents that he has really could be any of the documents that -- that T.I. produced.

Q. Whose job was it to get him the material that you wanted him to look at? Was that your job or Mr. Manske's?

A. I think I -- I provided him with the first pieces of information and that I had a copy of the

Highlights. There may have been some other documents that were subsequently necessary. I'm not sure which legal office would've handled that.

Q. Are you saying you're not sure which legal office?

A. I believe it would've been Mr. Manske.

Q. The only other legal office that I know is involved in this case is Mr. Feeney's office. Is that right?

A. Well, at -- at Ford, there's also our in-house lawyers. But it would've been Mr. Manske.

Q. When you gave Mr. Klingler the Highlights that you've mentioned in this deposition, did you give him all 300 pages of those Highlights? I know there were over 300 pages.

A. Is that how many it is?

Q. Uh-huh.

A. It did seem like it was a couple of inches thick.

Q. Did you give him all of them or you gave him selected cherry picks of them?

A. I believe I gave him the whole -- the whole stack.

Q. And the specifications that were sent to him, the original specification for the vehicle, or

the component as well as the marked up specification, did you have possession of those? Are those the documents you had that you had looked at?

A. Those are documents that I had looked at that had been also produced by Texas Instrument.

Q. And when did you sent him those? Was that in 2000? Was that in 1999?

A. I think it was -- I'm not sure of the exact date. It could've been 1999 or early 2000.

Q. But you've only had one face-to-face meeting with him?

A. All that I remember specifically was one face-to-face meeting. There may have been others that -- that I don't recall off the top of my head. I know that, you know, his job has since taken him to Japan and I have not had a face-to-face meeting with him since then; so this would've happened before that meeting.

Q. Who does he work for? Does he still work for Visteon?

A. He works for Visteon.

Q. Okay. Even though he's in Japan, he's still with them?

A. That's right.

Q. Has Mr. Klingler agreed to assist Ford in this litigation?

A. I believe that he has.

Q. Did he -- Did you ask him to that?

A. No, I did not.

Q. Do you know who did?

A. It would've been one of the lawyers. I'm not sure who it would be.

Q. And does Ford have any relationship with Visteon anymore, ownership interest?

A. Ford Motor Company, I guess I really don't know. That's -- You know, I -- the corporate dealings of how that works, I'm not sure how that would have been.

Q. Well, do you have a layman's understanding of what the relationship is?

A. Well, the layman's understanding is that there were issues of Visteon stock issued to stockholders. How many stocks of Ford -- Ford Motor Company owned and therefore issued shares of Visteon to themselves, I don't know if there were any or what.

Q. And I apologize if I've asked you this. When did Ford spin off the Visteon division?

A. I believe -- I recall it was sometime this

year, in 2000, but that would probably be documented in the newspapers pretty well.

Q. So until that time Mr. Klingler was a Ford employee?

A. That's correct.

Q. Okay. Now, I want to focus on -- We talked about cars that you have seen, you have physically seen. Now I want to talk about switches that you have physically seen. You mentioned that you looked at some switches at Exponent and that you've looked at some switches at Ford Central Labs. Have you looked at switches at any other location?

A. Those would be the only two places where we disassembled switches.

Q. And as far as I remember your testimony, you don't know the exact number of switches you looked at at Exponent; you think it's more than between, but that's about all you can say. Is that a fair statement?

A. That's correct.

Q. Okay. And do you know the number of switches that you looked at at Central Labs?

A. No, I don't.

Q. Can you give us any ballpark idea?

A. It's in the order of ten or eleven.

Q. And that was done in 1998?
A. No. That would've been done in 1999.
Q. Okay. After the recall or before the recall?
A. Before the recall.
Q. And the examination of switches at Exponent, that was after the recall?
A. Yes.
Q. Okay. As I understand it, you're the designated representative here today about the recall and the root cause of the recall. Am I correct on that?
A. I believe that's correct.
Q. Can you tell me the current status of the recall? And by that I mean, how many vehicles have been returned and repaired?
A. I don't know the exact number on that.
Q. How many owners have been notified?
A. I don't know the exact number on that.
Q. How many parts have been returned to Ford?
A. I don't know that exact number.
Q. Do you know where the parts are?
A. The parts are at Exponent that were returned to Ford.
Q. Exponent is a company that is a consulting

company that Ford uses from time to time?

A. That's correct.

Q. And they're located -- The office that have the switches are located here in Michigan?

A. That's correct.

Q. How many -- My understanding is 273 -- approximately 273,000 vehicles were recalled by Ford. Is that consistent with your understanding?

A. That -- That sounds consistent.

Q. Okay. And I've seen documentation that indicates there's about -- Of that recalled population, there have been a significant number every people that have brought their cars in. Are you able to tell me in percentages what you think that is?

A. I think it's -- What I've heard is that it's in excess of 60 percent.

Q. Okay. And when Ford issued the recall, they -- they recall notice provided for a interim and a long-term repair and it also provided that the Ford dealers return copies of the -- I'm sorry -- return parts, the old parts to Ford, correct?

A. I believe language in the recall notice asked is that, yes.

Q. Okay. And as I understand it, today of

the 273,000 recalled vehicles, Ford has approximately 19,000 parts that it has gotten back in the recall. Is that consistent with what you understand?

A. That's consistent.

Q. What happened to the rest of the parts that were recalled and -- and changed out?

A. They were not returned to Ford.

Q. Do you know why?

A. No, I do not.

Q. Did Ford ask its dealers to return the parts for examination?

A. Ford asked as part of the recall notice that the switches be returned.

Q. When did Ford ask its dealers to do that?

A. With the recall notice.

Q. And so we look at the paperwork that went out with the recall notice, there was paperwork sent only to the dealers to alert them that this was coming, right?

A. I'm not sure what the whole process is on -- on what the -- what they send out to who.

Q. All right. Do you know how many switches have been destroyed, lost, thrown away?

A. No, I do not.

Q. Have you tried to find that out from anybody?

A. It's -- All the I know is the switches that have been returned.

Q. Do you know where the switches, when they were returned, where they -- were they sent to Ford?

A. There -- There's a process in place. And again, I don't know what the exact details are. But it would've been returned to a Ford location.

Q. And did Ford itself do any tests on the returned parts other than shipping off to Exponent? I'm trying to find, did Ford do any tests or examination of the returned parts?

A. On some of the initial returned parts we -- we had them eventually brought into our building and we looked through some of those parts and did some electrical tests.

Q. When you say you looked through some of those parts, this is parts that were returned early on in the recall campaign?

A. That's correct.

Q. And approximately how many did you and your team, I guess, look at?

A. With a lot of rounding error, the number is probably a thousand.

Q. Okay. What did you do? I mean, what -- what physically was done to this more or less a thousand switches?

A. Basically, their dates codes were written down, the VIN number was written down. There may have been some other information that came with the switches that would've been written down. Some of the switches were electrically tested. Some of the Switches were looked at to see there was some -- something that looked physically wrong with them.

Q. The thousand or so switches that came in, did you also note the mileage on the switches, how many miles were reported to have been on the switch?

A. I -- I'd have to look and see exactly what's listed with each of those switches. But that -- that would be information that would've been possible to have, yes.

Q. And would you agree with me, that would be information that you would want to know?

A. Yes.

Q. Okay. And I mean, all of the paperwork I've seen, there always -- it appears to me there would be always a question of how many piles were on the vehicle at the time of either the replacement of

the part or any incident that's reported. That's consistent with Ford's view, correct? Am I correct?

A. That's correct.

Q. And the -- of the 1,000 or so that were looked that that came in early on in the recall, did you have some formal way of categorizing and signing those in, or a spread sheet prepared and I wanted to see what those -- who those switches were, were records kept on that?

A. I think there was a -- you know, some -- some documentation that was put together. I think it was in the form of a spread sheet.

Q. Who was in charge of that?

A. Those initial parts were done by the technologist that works for me, Allen Janetic.

Q. And this was done sometime after May of '99, since that's when the recall was announced?

A. That's correct.

Q. And of the thousand or so switches that came in, how many did you look at? I mean, more than just, you know, see on the table. Obviously, I know you looked at plenty of them. How many of them did you actually examine? That's a better way to say it.

A. The -- Actually, I don't think I

personally examined any of them. There may have been some that I did, but --

Q. Okay. And of this thousand that came back, did anyone report to you that there were switches in that thousand that had cracked or leaking Kapton?

A. Yes.

Q. Okay. How many of that thousand do you recall people told you had cracked or leaking Kapton?

A. I don't remember what the number was.

Q. Could've been one, it could've been more than one?

A. It was more than one.

Q. Okay. But you don't know how many?

A. I don't remember.

Q. You don't know whether it was the quiet switch or not a quiet switch?

A. It would've been Town Car switches.

Q. So they would've all been snap switches?

A. Yes.

Q. Now, of this thousand or so switches that were examined by Mr. Janetic --

A. Yes.

Q. -- what was he looking for? Do you know?

A. He was looking for some signs of -- of damage to the switch housing. He was looking for some electrical anomaly with the switch.

Q. Can you explain to us how you do that?

A. We would put an ohm meter between the pins of the switch and also between the pins and the hex port of the switch.

Q. What would tell you that there would be some anomaly?

A. If there was a high resistance between the two pins of the switch or if there was any resistance between the pins and the hex port.

Q. And what should a normal reading be between, let's say, the hex port and the terminal?

A. It should be open.

Q. And what -- what should a normal reading be between the terminals?

A. It's should be a short.

Q. Which would read as what?

A. Zero.

Q. And was there any particular method of collecting this thousand other than first in the door?

A. That was the method.

Q. Okay. And did -- did someone at Ford cut

open any of those switches, to your knowledge?

A. Some of those switches were opened, I believe, at Center Laboratories.

Q. Okay. Did you participate in that or were you not involved in that?

A. I wasn't there for opening of switches, no.

Q. Okay. Were you the one that asked that they be opened?

A. I think so, yes.

Q. Okay. And -- And what -- Well, have you seen pictures or anything of what they found when they opened up some of the switches?

A. Yes. There were some pictures.

Q. How did you determine which of the switches to open up?

A. They would've been switches that showed either the electrical anomaly or -- or damage to the plastic.

Q. The ones that read normal, no further investigation was made of them?

A. Not at this point in time.

Q. And has it been done -- Has anybody done anything since then with that group, to your knowledge?

A. So far, I don't believe that any more have been looked at.

Q. And did you get some kind of written report from Central Labs on what they found?

A. There was a report generated on those parts.

Q. And what do you recall it provided?

A. It showed that all the Kaptons had -- had a leak path through and that brake fluid had leaked into the electrical side.

Q. And do you know who at Texas Instruments was informed, if anyone, of those results?

A. I don't know of -- of that for sure.

Q. Did you ask someone to notify Texas Instruments?

A. The -- I -- I don't think so, no.

Q. Now, other than this group of switches that were looked at at Ford Central Labs, did Ford look at any other switches that came back as a result of the recall?

A. Yes, we did.

Q. Explain the process that was used for that.

A. It was a process that was developed at Ford, T.I. and Du Pont at Exponent where the -- the

switches were opened up and reviewed under the microscope.

Q. When you looked at the first thousand switches that came back, that was sometime in 1999; is that right?

A. Yeah, I think that was in '99.

Q. And the examination of switches at Exponent, that would be something that has occurred just recently? Am I correct?

A. The examination that we had, yes, was just recently.

Q. Between the time that they were looked at, the first group that was looked at at Central Labs and the time that you went to Exponent, did anyone look at any switches, to your knowledge, that came back in the recall?

A. I think that there was some ongoing investigation, that Exponent was opening up some pieces and they were looking at those. I don't remember under what direction they -- they had been given to do that, but they had -- they were collecting all the switches for us and continuing on the categorization that we had started. We sent them the thousand switches that we had. So there were some switches that they -- that they had opened

up.

Q. I get the impression from your answer, it was not something organized, no organized investigation that you asked for, at least between those two period of times?

A. Not an organized investigation.

Q. You think somebody at Exponent was looking at stuff, but you're not sure exactly what they were doing and who gave them the instructions?

A. I believe it was either myself -- or it was Steve -- It was probably Steve Reimers that -- that did the specific instructions to Exponent as to what they were doing. But there wasn't a written protocol, per se, as to what they should do.

Q. And do you know -- any idea of the number of switches that they may have examined?

A. I don't know that number off the top of my head.

Q. Would it fair to say it's probably fairly small?

A. Fairly small, yes.

Q. Have you tried to distinguish between the quiet and the loud switch in the recall that you've received back?

A. No, we have not; other than the part

numbers are different.

Q. Why not, if that's your theory --

A. Because the part numbers are different.

Q. No. No. If your theory is -- As I understand, you have some theory that you think the problems are less likely in the quiet switches. I guess my question to you is: Why is it that Ford has done nothing to examine that?

A. I guess, to -- to go back to your previous question, the quiet switches have a different part number, so they are identified differently as the parts that have come back. The -- The Town Car switches are the ones that were that we're seeing leaky brake fluid.

Q. You've done no formal examination of the returned switches from the recall to quantify that. Am I right?

A. That would be included in -- in the list of parts that T.I. was looking -- or that Exponent put together.

Q. I'm just asking, are you aware of any test that they're doing specifically to look at that difference and try to quantify it if one exists. That's all I'm asking.

A. No.

Q. Have you asked anyone to do that?
A. To quantify the difference?
Q. Yes.
A. No, we haven't.
Q. Okay. Have you -- Mr. Porter, have you made -- have you given any depositions relating to your role in the investigation other than the deposition I think you gave in the Gonzales case?
MR. MAYER: Is that right, Mr. Jolly?
MR. JOLLY: Uh-huh.
A. That's the only other deposition.
Q. And have you been asked to provide any reports other than the documents that have been produced to us, to NHTSA or any other government agency on this issue?
A. No, we have not.
Q. Now, the -- there has been some discussion about this Memphis switch. Did you personally look at the Memphis switch yourself?
A. Yes, sir.
Q. So that would be another switch that you looked at at Ford Central Lab?
A. And I looked at it frequently.
Q. Is that it next to you right there?
A. Yes.

Q. What is it about it that you look at frequently?

A. The Kapton of the switch shows that there are multi -- Well, the Kapton of the switch is the thing that we like to look at the best.

Q. Okay.

A. If I can find it.

Q. And this is the Kapton that was removed from the switch after it caught on fire?

A. That's correct.

Q. Okay. So the switch had been through some thermal event?

A. Yes.

Q. And --

A. It was observed by the service technician that it was burning.

Q. Like a candle?

A. Like a candle, is what --

Q. Now, have you ever seen any of the Texas Instruments brake pressure switches ever burn? Have you seen it, like the one in the Memphis car?

A. I have seen the video tape of Texas Instruments' test. I have seen the video tape of Ford's test. I have lit with a match Texas Instruments' switches.

Q. Other than that, you have not seen one burning, you know, in a mechanic's garage or anything like that?

A. No, I have not.

Q. And what about the Kapton that was removed from the Memphis switch is it that you looked at?

A. The deformation in the Kapton appears to be similar to what I would call Mickey Mouse ears and there are two cracks in that switch that our friends from Texas would -- look like Texas Longhorn. The -- Clearly, this switch has created a leak path from the brake pressure side -- or from the fluid side to the electrical side.

Q. Am I correct that you are not qualified to explain -- to testify whether or not any cracks resulted from the fire, you're not a chemist, you don't know what effect heat would have on Kapton?

A. I can't tell you what effect heat would have on the Kapton.

Q. Would you pass the sample to me just for a second.

A. (Witness complies.)

Q. Do you know what layer of Kapton this is?

A. I think it's marked on the bag.

Q. I only see two layers. There are three

layers in the switch, are there not?

A. There are.

Q. Is there another one back there?

A. No, there are not.

Q. Do you know where the third layer is?

A. This was a popular switch. It's been handled by a lot of different people. The third layer's been misplaced.

Q. Who has had possession of this switch in the last year or two, you or Exponent?

A. It's been in my possession.

Q. Do you know when the other piece of Kapton went missing?

A. Sometime prior to -- prior to the beginning of this year.

Q. And who had it when it was lost?

A. I'm not sure who had it.

Q. Who are the candidates?

A. The candidates, again, if -- it could've been anybody who -- who had been looking at -- at the part; Central Lab, T.I. There's a rather large number of people that have looked at it.

Q. Did Mr. Slater look at this part when he was here visiting Ford?

A. I believe that he did.

Q. Were all three layers there when he looked at it?

A. I don't recall.

Q. Would you defer to his notes on that?

A. I'd defer to his notes.

Q. And there's also some question marks. It says one, No. 2, and then No. 1, question mark in parentheses, No. 1, No. 2, question mark in parentheses. Did you make those marks?

A. No, I did not.

Q. Do you know what they refer to?

A. No, I do not.

Q. Are you able to the say which is the first layer and which is the second layer?

A. I would say that the first layer is the one that is labeled pound sign 1. But there may be some -- some information that somebody had along the line that would change that.

Q. How many miles did the Memphis car have on it? Do you know?

A. I don't remember off the top of my head. But I don't recall it was in the neighborhood of 54,000.

Q. Would the records be the best evidence of that?

A. That would be the best evidence.

Q. Okay. Now, other than the fact that you like to look at the Kapton in the Memphis switch, is there any other particular reason you refer to it from time to time?

A. It is the best example we have from the field of -- of the fire that did not consume all of the plastic components.

Q. And how was that fire extinguished?

A. I believe they used a fire extinguisher.

Q. And where do you get that understanding from?

A. From what I remember, it is stated about the event at the time.

Q. Are there any other switches that you have looked at other than the ones we've talked about so far?

A. I don't know that there are.

Q. Now, there was also a chemical analysis done of the fluids in the Memphis switch. Do you recall that?

A. I recall that there was an analysis done.

Q. Was that done by the Central Lab at ford along with Texas Instruments?

A. I believe that Central Lab at Ford and

Texas Instrument both did a chemical analysis.

Q. Did they agree on the analysis?

A. I believe they agreed on the chemicals that were present.

Q. Okay. What is your -- What is your best -- What is your best explanation for the period of time that you believe Texas Instruments sent switches that were not manufactured properly to Ford, the start date and the end date? From everything you know today, what do you believe those dates are?

A. November 1st, 1991 through November 1st, 1992. Or maybe it was November 30th.

Q. All right. And is that based on the information that you've had at the time you planned the recall and then confirmed by subsequent events like the documents you've described looking at?

A. That's correct.

Q. Why do you believe it starts November 1st, 1991. You've also told me that the automated crimping didn't begin then.

A. We don't have a sure way of identifying which -- which parts were -- for sure when -- when the automated equipment parts were actually put into production.

Q. Have there been any car fires that you know of where the switch date codes have been in a period of time where you know switches were prepared on the manually fed crimping line?

A. I don't know of any of those.

Q. Have you looked?

A. Of the -- Of the ones that we have, I don't -- I don't think any of them were from that time period.

Q. I'm just trying to find out, did you ask someone to go do that investigation?

A. Yes, the question was -- was asked.

Q. Okay. And the answer you got back was?

A. No.

Q. And who did you ask that of and who gave you the answer?

A. It would've been Steve Reimers.

Q. So am I correct that the date -- the November 1st, 1991 date is simply -- it's a -- it's an artificial date that Ford has selected in order -- Well, let me stop there. It's an artificial date. It doesn't really correspond to anything that you know of occurred in the --

A. It's a date that Ford selected to assure that we got all possible switches that could have a

leaking diaphragm that would've resulted in a fire.

Q. Okay. And the --

A. Since there was no other way of any -- to tell how the switches might -- what switches might fail or may not fail.

Q. That's what I'm trying to get at. If Ford's position is that it's the returned to the automated crimping line that began problems and those problems persisted for some period of time, do you know when Texas Instruments began shipping product that was manufactured on the automated crimping line after the alert expired? Do you know a date?

A. I don't know what that date is.

Q. All right. In the investigation, did you ask your people to investigate that?

A. I asked T.I. to tells us that.

Q. And what is the date or approximate dates that you got?

A. The approximate dates that we got were the end of December and early January.

Q. Do you know when the alert actually expired, the alert issued by Ford, the 90-day alert?

A. I don't know the date exactly, but I believe it was the end of December.

Q. All right. And so the November 1st date was a date Ford selected, to be on the conservative side?

A. That was to assure that in the event that there was information on the manual -- problems with the manual switch, we would be sure to collect those also.

Q. Now, have there been car fires in '91 and '92 Lincoln Town Cars prior to cars built in November of 1991?

A. Can you -- Which -- Which vehicles do you mean exactly?

Q. '91 or '92 Lincolns. Have you ever heard of fires in '91 or '92 Lincolns before November 1, 1991?

A. I really don't go into -- I don't investigate that information.

Q. And you did not in this investigation?

A. That was not part of this investigation. This investigation was looking at the brake pressure switch.

Q. Now, the cutoff date, the end date you have, is November of 1992 and you're not sure whether it's November 1 or November 30th; right?

A. That's correct.

Q. You'd have to look at the recall to make that call?

A. That's correct.

Q. What is it about November 30th, 1992 that Ford believes marks the end of any alleged manufacturing problem at Texas Instruments?

A. The data that we had with the -- with result that showed fires in Town Cars for December of 1992 was zero. So we felt that any defect that may have gotten in there would've worked through the system by that point in time.

Q. Okay. That was based on trend data?

A. Trend data.

Q. Okay. We talked about that earlier this morning?

A. That's right.

Q. And that's the basis of the November of 1992 cutoff, you saw a decline in which you perceived to be fires that you thought were attributable to symptoms that could relate to brake pressure switch and you felt that was a sufficient margin of safety?

A. That's correct.

Q. Anything else?

A. That was the primary drive.

Q. Now, during this investigation that you launched, did you have conversations with people from United Technologies, did you personally?

A. No, we did not. We had Norm LaPointe speak with United Technologies.

Q. Did you attend any meeting where people from United Technologies were in attendance?

A. I -- I -- I guess I can't say specifically. Somebody from United Technologies may have come to one of the team -- one or two of the team meetings along the way.

Q. You don't have a specific recollection?

A. I don't have a specific recollection.

Q. Would you be able to tell me who that person would -- was?

A. No, I couldn't.

Q. Do you know what -- what the purpose of them attending any meetings that they may have attended would have?

A. The purpose would've been to respond to any questions that the team might've had, including questions from Texas Instrument.

Q. And Norm LaPointe was the person on your team that dealt with United Technologies?

A. That's correct.

Q. Did you have any phone calls from the people at United Technologies during the course of the investigation?

A. I don't believe that I did.

Q. Do you know the date that Ford began producing Lincoln Town Cars with Texas Instruments' brake pressure switch?

A. I believe that would be November 1st, 1991.

Q. And as I understand it, the brake pressure switch was used in the '91, '92, '93, '94, '95, '96 model lines for Lincoln Town Car?

A. It was used on the 1992 through '96 Lincoln Town Car. The 1991 was prior to the T.I. brake pressure switch.

Q. When they had a vacuum switch?

A. That's correct.

Q. Vacuum dump valve; is that the way to describe it?

A. Yes.

Q. Okay. And then in 1997 Lincoln went to a different design?

A. That's correct.

Q. Okay. And what did Lincoln go to in the '97 vehicle model year?

A. They went to a brake pedal switch.

Q. Explain to us in layman's terms how that works, Mr. Porter.

A. It works identically the same as the brake pressure switch, except it's mounted on the brake pedal instead of the brake line.

Q. Okay. And when you step on your brake, what happens to the switch?

A. When you step on the brake, first of all, the brake lamp switch engages; and secondly, the -- the new brake switch disengages power from the cruise control clutch coil.

Q. And it's mounted inside the passenger compartment?

A. Yes, it is.

Q. And were you involved in the design of that new cruise control system for the '97 Lincoln Town Car?

A. No, I was not.

Q. In your investigation, did you determine that the switch was no longer being used in the Lincoln Town Car?

A. Yes.

Q. How did you find that out?

A. It was reported to us by --

Q. Did you ask why that there had been a design change and what -- what -- what the reasons behind it were?

A. Yes, we did.

Q. And what did you learn?

A. It was less expensive.

Q. Anything else?

A. No.

Q. So it was cheaper to put the switch at the brake pedal?

A. It was less expensive to package the switch at the brake pedal and that's possible.

Q. All right. And was there some changes to the '97 Lincoln that made that possible, where it wasn't before?

A. I don't know what the details are of that.

Q. Are you aware of any changes?

A. No, I'm not.

Q. That would've prevented that from being placed on the brake pedal of the '92 Lincoln Town Car?

A. I'm not aware of that, no. What I do know is that it wasn't put there on the '92.

Q. Right. And part of your investigation -- I think it's in the Exhibit 5 -- you say it's no

longer being used after model year as?

A. Rights.

Q. And the same thing would be true with the Crown Vic and the Grand Marquis, it was phased out in the '97 model year?

A. That's correct.

Q. And it was put on the brake pedal for reasons of cost?

A. Yes.

Q. As far as you know?

A. As far as I know.

Q. And you're not aware of anything that would've prevented that design in the '92 or '93 Crown Vic or Grand Marquis?

A. I'm not aware of anything that would've prevented or -- or not prevented that design. I do know that the idea of using the brake pressure switch was considered of value because it was using a different mechanism of the brake system; so it would be an independent, redundant shut-off from the other switch that was on the brake pedal.

Q. Okay. The hour is late. If you wouldn't mind, I would like an explanation on how that works, why it's a redundant switch that's used. I think the other switch is called the BOO switch?

A. That stands for Brake On-Off.

MR. MAYER: If you have no objection, I'd like to keep going, but I will defer to you. It's 5:00 o'clock.

MR. FEENEY: Yeah. We're going to adjourn.

MR. MAYER: Okay.

MR. FEENEY: You can save your question and get the explanation in the morning.

MR. MAYER: All right.

(Proceedings concluded for the day.)

CHANGES AND SIGNATURE

PAGE	LINE	CHANGE	REASON

I, FREDERICK JAMES PORTER, have read the foregoing deposition and hereby affix my signature that same is true and correct, except as noted above.

_____
FREDERICK JAMES PORTER

THE STATE OF _____)

COUNTY OF _____)

Before me, _____, on this day personally appeared FREDERICK JAMES PORTER, known to me (or proved to me on the oath of _____ or through _____ (description of identity card or other document)) to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

(Seal) Given under my hand and seal of office this _____ day of _____, _____.

_____
NOTARY PUBLIC IN AND FOR
THE STATE OF _____