Deposition of Thomas Baughman

1 CAUSE NO. 00-02303-A

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MICHAEL GEORGE BAILEY, as Next Friend for IN THE

3 JEREMIAH NATHANIEL BAILEY, A Minor child,

and CASSANDRA MICHELLE BAILEY, Individually DISTRICT

4 and as Guardian of the Person and Estate of

DONNA LYNN BAILEY, an Incapacitated Person, COURT

5

Plaintiffs,

6 -vs- NUECES

COUNTY,

7 TEXAS

FORD MOTOR COMPANY; BRIDGESTONE/FIRESTONE,

8 INC.; and TRADEWIND FORD SALES, INC,. d/b/a

CROSSTOWN FORD SALES, INC.,

9 28TH

Defendants, JUDICIAL

10 _____/ DISTRICT

11

V I D E O D E P O S I T I O N O F

12

WITNESS: THOMAS D. BAUGHMAN

13

LOCATION: Crowne Plaza

14 8000 Merriman Road

Romulus, Michigan

15

DATE: December 21, 2000

16 9:30 a.m.

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18 REPORTER: Patricia J. Hyland, CSR-0453, RPR

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20 ALSO PRESENT: Tim Reitman, Video Technician

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1 Romulus, Michigan

2 December 21, 2000

3 9:36 a.m.

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6 VIDEO TECHNICIAN: Today's date is December 21,

7 the year 2000 and we are on the record at 9:36 a.m. This

8 is the video deposition of Mr. Thomas Baughman and we are

9 at the Crowne Plaza Hotel in Romulus, Michigan.

10 This is the matter of Bailey versus Ford Motor

11 Company, Bridgestone/Firestone, et al.

12 Counsels, could you put your appearance on the

13 record please?

14 MR. TURNER: Tab Turner for the plaintiffs.

MR. WATTS: Mikal Watts for the plaintiffs.

MR. BRAUGH: Roger Braugh for the plaintiffs.

MR. WOODROW: Thomas Woodrow for Bridgestone/Firestone.

MR. PLATT: Warren Platt for Ford Motor Company.

T H O M A S D. B A U G H M A N

called as a witness herein, having been first duly sworn, was examined and testified as follows:

EXAMINATION

BY MR. TURNER:

Q. Give us your name please.

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A. Thomas J. Baughman.

Q. Mr. Baughman, are you an employee of Ford Motor Company?

A. Yes, I am.

Q. And what do you do at Ford, sir?

A. Well, I have served in the last three and a half years as the Engineering Director for Ford's Truck Operations responsible for engineering of Ford truck products around the world. Recently I got re-assigned to a new position so I currently, my title shows I'm the Vehicle Line Director responsible for Ranger and Escape model lines.

Q. The Escape is a sport utility vehicle?

A. Yes, Escape is a small sport utility vehicle just introduced to the marketplace.

Q. When you say you are charge of the engineering department, I guess it is, or group for all of light trucks, did that

include the Explorer?

A. Yes, it did.

Q. And that job began in approximately 1996, 1997?

A. I started my job in October of '96.

Q. Before that what was your job?

A. I was the Chief Engineer of a vehicle program called PN96 which is known in the marketplace as the F150.

Q. How long were you in charge of the F150?

A. Seven years.

Q. So that would have taken us back to about '89?

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A. Correct, late '89.

Q. And before that what was your job responsibility?

A. Before that I was Chassis Engineering Manager in the Heavy Truck Division for Truck Operations of the Ford Motor Company.

Q. Would you tell us what your first involvement in design-related issues surrounding the Explorer was.

A. Probably my first involvement in any Explorer-related issues was associated with reported tire problems in Saudi Arabia that were first reported to me in late 1998 as my memory serves me.

Q. So sometime in 1998 is your first involvement or at least your recollection of a first involvement with design issues surrounding the Ford Explorer?

A. Yes. The Ford Explorer was freshened in October of 1994 in what has became known as the UN105 program when the SLA

suspension was involved. I was not involved at all in either that program or the program that preceded it, which was the UN46 program. I was off doing the F150 during the time while that work was being done.

Q. Okay. So for purposes of my questions today let me kind of walk through some things that we can exclude that we don't have to talk about with you. First of all, you were not involved in testing the UN46 Explorer in 1989 before Job 1?

A. That's correct.

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Q. You were not involved in deciding whether to sell that Explorer to the public from a safety standpoint?

A. That's correct.

Q. You were not involved in making decisions about what air pressure should be in those tires, the tires that were on the Explorer in 1990?

A. That's correct, I was not involved.

Q. You were not involved in any tire design issues for the Explorer between 1990 and 1997?

A. I would have said 1998 but yes, you are correct.

Q. You were not involved in any issues involving Explorer rollovers between 1990 and 1998?

A. That's correct.

Q. You were not involved in any testing of the UN105 or what I commonly refer to as the 1995 and later model Explorer vehicles; is that correct?

A. That is correct.

Q. You were not involved in any design decisions that were made before 1998 relating to the Explorer?
A. That is correct.
Q. Were you involved and have you been involved in any design decisions about the 2002 Explorer model?
A. Yes, I have.
Q. What was your job in relation to that particular vehicle?
A. As the engineering director I have leadership

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responsibility for the engineers who are assigned to the program chief engineer and that are out executing the program. I participated in the engineering sign-off drives and evaluations both data and physical drives for the vehicle now known as the new 2002 Explorer. Its code name was UN152 and participated in many of the reviews of that program once the initial strategy had been established for the vehicle.
Q. Who is the chief engineer for the 2002 model Explorer or the U152 program?
A. His name is Steven VonForester.
Q. And Mr. VonForester is the person that's in charge of organizing and leading the engineering team on that particular vehicle?
A. Yes, he is.
Q. Does he report to you?
A. As the engineering director, yes, he would have reported to me in a matrix relationship. He had two bosses. He had a

boss who was the vehicle line director, who was responsible for the business of the Explorer platform. And then I am his second boss as the chief engineer, the chief technical officer within Ford Truck.

Q. I've been told and obviously I am not an engineer, but I've been told that Ford made the 2002 model Explorer wider; is that true?

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A. I believe the track of the new Explorer is wider than the track of the outgoing Explorer.

Q. How much wider?

A. It would only be a guess on my part. I don't recall an exact number.

Q. Was that done to help improve the stability of the vehicle? In other words, to help keep the wheels on the ground in emergency turning maneuvers?

MR. PLATT: Object to the form of the question.

THE WITNESS: No, I wouldn't say that it was done for that reason. There were a number of vehicle architecture changes that the company wanted to make associated with improving the interior package space of the vehicle, and also offering our latest technology powertrain line-up, which is a 4.6 liter modular V8 engine, which by its configuration is actually wider as it sits between the frame rails. To package that engine in the engine compartment you generally have to widen the frame rails and widening the frame rails causes the track width to

increase. It's a result just of the natural consequence of using an engine that has a very large cylinder head and consequently a very large package width.

Q. I have seen Ford quoted in the newspapers recently as saying the 2002 model year should be more stable than the earlier ones; is that right or wrong?

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A. I believe based on the architectural changes that were made to the new Explorer the vehicle is inherently less prone to rollover in very severe limit handling maneuvers than the vehicle it replaces.

Q. Why is that?

A. I think two things. I think the wider track width is one element of it. And secondly, the slightly longer wheelbase is the second piece. And to some point and we probably won't ever know how much, we added an independent rear suspension which probably also helps the overall handling capabilities of the vehicle.

Q. Now, can you explain to us from an engineer's standpoint what it is about making a vehicle wider that makes it inherently more stable?

A. From a very nontechnical view it's just like why an athlete on the football field spreads his feet apart to get a better stance. There is obviously a higher resistance to an overturning moment the wider the track width is.

Q. And how about the length of the vehicle, you mention wheelbase that's actually the distance between the center

of the front wheels to the center of the rear wheels, is it not?

A. That is correct.

Q. And can you explain to the jury what it is about the length of the vehicle that inherently helps a vehicle stability?

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A. It really has to do really with just the geometry of the way a vehicle reacts to a steering input maneuver. The shorter the wheelbase the more quickly the yaw rate increases and the longer the wheelbase the slower the yaw rate increases for a given amount of steering input. It is just the physical geometry of the way four tires, two of them being steered, react to a steering input.

Q. By yaw rate do you mean how quickly or how slowly the vehicle tends to spin?

A. No. By yaw rate I mean how quickly the vehicle tends to change direction from its intended -- from its original path.

Q. Using that black case in front of you can you demonstrate yaw rate, what it would look like for the jury? Or a yaw.

A. A vehicle that was travelling straight ahead, meaning this direction, given a given amount of steer input the yaw rate would be the rate at which the vehicle starts to yaw, which is any deviation from its straight ahead position, as a result of the given steering input. Vehicles with longer wheelbases will react slower for a given amount of yaw input than a vehicle with a shorter wheelbase. It's just

the physical geometry of the steering system and the architecture of the vehicle.

Q. So if we are comparing a vehicle with a relatively long wheelbase to one that has a short wheelbase, for instance,

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the 2-door Explorer has a shorter wheelbase than the 4-door Explorer; is that correct?

A. Yes. And for a given amount of steering input the yaw rate change will always be more for the 2-door than it would be for the 4-door.

Q. Okay. Now could you also explain the final factor, which I think you mentioned was an independent rear suspension system that Ford had decided to put on the 2002 model year; is that correct?

A. Yes. We actually decided to put the independent rear suspension on the vehicle for a different reason. It again was a package advantage because we wanted to make available a third row seat and to make that third row seat fully functional we wanted to make sure that it would fold flat in the rear cargo compartment. To make it fold flat in the rear cargo compartment we needed to either significantly reduce the jounce travel of the rear suspension or to fix the differential close to the underbody so that we did not have to deal with the clearance issues of the differential moving up and down. Once you fix the differential and space to the chassis then you can allow the wheels to move independently which is called an independent rear

suspension.
The benefit of the independent rear suspension is
that the two wheels are able to travel independently of
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each other, and consequently in general maintain a better
footprint on the road given over various bumps and surface
conditions.
Q. Does the 2002 model year Explorer come in both the 4-door
and a 2-door version?
A. The 2002 Explorer comes only in a 4-door version, but we
continue to produce the 2-door Explorer on the same
assembly line in Louisville, Kentucky.
Q. What do you mean by the same assembly line?
A. Actually, we have two assembly plants that build Explorers.
The main plant is in Louisville, Kentucky and in
Louisville, as we speak, we are building three model lines
of vehicles simultaneously. The new UN52 Ford Explorer, a
2-door version of the Explorer which is really in the, on
the carryover configuration from the UP105 program. And we
also build a vehicle that's known as Sport Track, which is
known as a P207 which is a vehicle that has the Explorer
body with a small four foot box, pickup truck box in the
back.
Q. So would the 1996 or 1997 or 1998 2-door version of the
Ford Explorer be any different from the 2002 2-door
Explorer?
A. Yes. There were a number of changes that were made to the

vehicle both from a design standpoint, in other words, the exterior and interior appearance. Plus to improve the ride

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of the vehicle there were changes made to both the front and the rear suspension as well as I believe some stiffening of the frame to help reduce some of the lateral shake characteristics of the vehicle.

Q. But is the suspension system for the '96 through '98 version the same as the 2002 2-door version?

A. It is essentially the same. There are differences, but they are essentially the same geometry.

Q. So if I'm understanding you correctly, for the 2002 model year you haven't widened the track width of the 2-door?

A. That's correct.

Q. You haven't changed to an independent rear suspension system?

A. That's correct, it remains a solid rear axle.

Q. And you haven't increased the wheelbase of the 2-door version either?

A. That's correct, we have not increased the wheelbase of the 2-door.

Q. Now I'm going to move back for just a second to the 2002 model year that you did change. The one where you made it wider and you made it longer and you changed the rear suspension.

A. The 4-door model.

Q. Right. Let's talk about that one for just a second. Is

there anything about those three changes that you made

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making it wider, making it longer and changing from a just a suspension system that was on it, to an independent suspension system. Is there anything about those three changes that was not technologically feasible to do back in say 1995?

A. All of those changes were driven by the need to repackage the vehicle, either for the customer or for the powertrain we intended to offer or for the availability of a third seat package. Thus, they were all package driven changes. There was not the need for the 1995 program to do that because we were going to continue with carryover powertrains including a 5 liter V8, which is not as wide as the 4.6 liter modular V8. At that point in time we had not introduce the Expedition, which was the first sport utility vehicle that we offered with three rows of seats. And so there just was not a need to do the things that were later judged to be advantageous to give us a potential marketing advantage in the marketplace.

Q. I understand that part of it, the need, in your view about the need to do it. My question is more aimed at is there anything that if the need had arisen in 1995, is there anything about what you did that was technologically impossible for you to do in 1995?

A. Nothing that was technologically impossible to do.

Q. Okay. Now let's move to one other issue that I want to ask

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you about in that same regard. When you made this vehicle, this 2002 model year when you made it wider, did that somehow harm the utility of the Explorer for purposes of what people purchase it for?

A. People who would be diehard off-roaders would probably tell you that making the vehicle wider would not be beneficial to their use of the vehicle in terms of sheet metal damage to the sides of the vehicle as they travel down trails between trees and branches in an off-road situation. But for the vast majority of people who buy Explorer type sport utilities and use the vehicle fundamentally as a replacement for the family station wagon they would not be disadvantaged by the widening of the track of the vehicle.

Q. And I presume since you have the same demographic group of people interested in the Explorer from a length standpoint you would have the same answer to that question too there might be some people upset about the length because of their off-road use of the vehicle, but by and large the majority of people, the length of the vehicle is not going to upset their ability to use the vehicle?

A. That's generally correct. Although the wheelbase lengthening was strictly driven by increasing the front rear seat -- the front and rear seat passenger and driver, the package envelope in which they would sit in the vehicle. So it was all driven by trying to increase the

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interior spaciousness of the vehicle.
Q. And likewise with regard to the independent rear suspension system, did that harm in some way the utility of the vehicle?
A. I don't expect that that would harm any of the utility of the vehicle for either on road or off-road.
Q. And at some point in time those three changes were determined by somebody at Ford not to be cost prohibitive or they wouldn't have been done obviously?
A. Not cost prohibitive, but there was certainly considerable debate regarding the independent rear suspension. We did not think that we would get any substantial ride or handling benefit out of it, but it was the enabler for doing the third row full flat seat in the back compartment, but there was an expense that came with it.
Q. And I presume, and correct me if I'm wrong, that the 2002 model year at some point in time was taken through the testing necessary to evaluate the vehicle from a rollover resistance standpoint?
A. The 2002 4-door Explorer was subjected to the standard battery of evaluations that we use for all of our vehicle lines. The principal that one that is used to determine resistance to rollover is the J-turn analysis and that is all done by computer. It is not done by physical testing.
Q. So the 2002 model year Explorer was never taken out on the

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test track and run through actual J-turn maneuvers?

A. Not to the best of my knowledge.

Q. Strictly use of computer simulation?

A. Yes, and that's the same procedure that we have used since the middle of I'd say '92-'93 time frame. We suspended doing actual J-turn testing as the result of some people unfortunately being injured as they attempted to run that very severe test on our proving grounds.

Q. Who was hurt?

A. One of the drivers was hurt.

Q. And what was his name?

A. I don't recall his name.

Q. And this involved an actual J-turn where somebody broke the outrigger or rolled over despite the existence of an outrigger?

A. When we ran the actual physical J-turn test we did not run it with outriggers. And this individual lost control of a Ranger vehicle and left the paved road surface and had a tripped rollover.

Q. By tripped you mean something struck the tires?

A. As he slid sideways, as I understand it, he pushed up dirt in the grass and eventually it caused the vehicle to rollover.

Q. Now is the Explorer still considered to be a derivative of the Ranger pickup truck?

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A. No, and I don't consider that it ever was a derivative of the Ranger pickup truck.

Q. Do you consider that the Bronco II was a derivative of the Ranger pickup truck?
A. Perhaps, more so than the Explorer was a derivative of the Ranger or the Explorer was a derivative of the Bronco II.
Q. Well, engineers working at Ford have previously told me under oath that the Bronco II was a derivative of the Ranger pickup truck. Is their understanding or my understanding incorrect or?
A. I was not involved in the development of the Bronco II and as I stated earlier, I was not involved with the actual development of the Explorer. When the Bronco II was developed I was actually working in the heavy truck division and had no interface, casual or otherwise, with the people who were working on the Bronco II. That was not true as I started work on the F150. There was lots of dialogue and discussions between the program team that was working on UN46 and the program team that I had under myself. So I'm more familiar with the heritage of the Explorer than I am the heritage of the Bronco II.
Q. Well, let's talk about the heritage of the Explorer for just a second. I have also been told and I also have seen documents from Ford Motor Company, that they have given me in the context of representing people like Miss Bailey and

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other people involved in some of these crashes that the Explorer started out being called a 4-door Bronco II. Have you ever been told that?

A. No, I have never heard that expression.
Q. Would it surprise you if Ford internal documents from the mid to late 1980s referenced the Explorer as the 4-door Bronco II?
MR. PLATT: Object to the form of the question.
I think you are really misstating those documents.
BY MR. TURNER:
Q. Go ahead.
A. As I said, I have had no reason to ever hear that referred to as that. Generally the program teams are quite proud of the efforts that they are working on and they usually referred it to themselves under the code name that was assigned to each one of the vehicle teams. I only heard the Explorer team referred to as the UN46 team. I never heard it ever referred to as the 4-door Bronco II team.
Q. So if Ford originally expected to call the Explorer the 4-door Bronco II nobody ever told you that?
A. I have no knowledge that it was ever going to be called that.
Q. And you've never seen that in writing in any Ford documents?
A. I don't believe so. Most of the documents I've ever looked

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at regarding the early development of the Explorer always refer to the UN46 either as a 2-door or a 4-door.
Q. And if there was an event that transpired in the late 1980s where Ford actually made a conscious decision to change the

name from the 4-door from Bronco II to Explorer you are not familiar with that?

A. No, I'm not familiar with that.

Q. And of course, the Explorer came out as an, in 1990 as a '91 model year vehicle; is that correct?

A. That's correct.

Q. And it has been produced ever since although the design has been changed, modified from time to time; is that correct?

A. Yes, in my view there were three iterations of the original Explorer. And we are now in probably a version that I would consider to be a different version than the original Explorer, but the lineage of the original UN46 flowed through into the 1995 model and with some cosmetic changes and a few other minor changes became also the 1998 model.

Q. In your job working on light trucks including the Explorer, did you become familiar with Ford's J-turn procedure, the requirements of it?

A. I actually became very familiar with Ford's J-turn requirements as I started work on the vehicle that is now known as the F150.

Q. And is my understanding correct that a J-turn basically

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looks like a J, you drive down, the driver of the vehicle, assuming you are out on the test track, drives down the roadway and then makes a turn in one direction for a certain amount of steering wheel input at a certain rate and basically holds the steering wheel into a J?

A. Let me try to describe it. You are mostly correct in your assumption. The vehicle is actually configured with some positive stops on the steering system and those positive stops are at a 90, 180, 270 degree position. And the actual driver when he drives the maneuver, this was in the days when the maneuver was tested on vehicles, actually crosses his hands on the steering wheel so that when he's doing a 90 degree input he can get the maximum fastest speed of steer that he can physically input into the vehicle and whether that's the 90 degree input, the 180 degree input or the 270 degree input, this is as fast as he can move his hands from a crossed position to bring the vehicle around.

It is judged by myself and others to be an extremely violent steering maneuver. Most people if they did not have their hands crossed could not even replicate the speed of steer that is replicated by crossing your hands in the maneuver. The vehicle path describes a J as a result of that maneuver.

Q. Now just for purposes of making sure everybody kind of gets

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as idea of what we are talking about. This would be the path of the vehicle in this direction and the driver would turn the steering wheel like you've described, but this is generally what it would look like; is that correct?

A. That's correct.

Q. All right. And if I understand Ford's procedure, that in

7 order to pass this test at least three wheels have to
8 remain on the ground at all times, there cannot in other
9 words be two wheels coming off the ground at the same time?
10 A. What you have described was the requirement that was in
11 place when a physical vehicle test was being tested. A
12 different requirement exists if the analysis is done
13 through our ADAMS model CAE.
14 Q. Okay. And the ADAMS model CAE, the requirement you were
15 referencing for that is in place today, what is the
16 requirement to pass that or fail it?
17 A. Three of the four tires on the vehicle must have a minimum
18 down force that is not less than 100 pounds.
19 Q. So the rule today?
20 A. Okay. So the rule today is not gauged at whether two wheel
21 lift is simultaneous, but whether or not how much weight is
22 left on the third tire at the time that the maneuver is
23 being done in simulation. The difference between what I've
24 described is when the physical J-turn test is made an
25 observer can observe whether or not two wheels lifted. The
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1 computer can only calculate the down force of the tire in
2 each position, each of the four tires as it goes through a
3 maneuver. What is considered to be a failure is should any
4 two of those tires ever get to a down force of less than
5 100 pounds, thus, you are allowed to have zero down force
6 on one tire which would suggest that the wheel has lifted,
7 but all other three tires must have a minimum of 100 pounds

of down force which suggests certainly that the second tire did not lift.

Q. Now, let's put a little bit of time frame on this. At what point did that become, what you've just described for me, become the standard at Ford Motor Company the guideline at Ford Motor Company?

MR. PLATT: When did the ADAMS simulation standard become standard?

BY MR. TURNER:

Q. No, the one he just described for me.

A. For a considerable period of time, as I understand it, those two requirements existed sometimes in parallel with each other. Since what I recall as being the early '90s, '92 or '93 when the accident that I previously described took place all of the activity has been CAE. But there was a period of time in the late '80s and perhaps even in the early '90s where the ADAMS CAE work was still being developed and being correlated to actual vehicle use that

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sometimes there were physical tests in addition to CAE going on simultaneously.

Q. Now I've been told, and maybe I was either told wrong or misunderstood, but I was told that as late as 1997 the rollover resistance guideline at Ford Motor Company for purposes of the J-turn required a 360 degree steering wheel input at a minimum of 515 degrees per second, at a minimum of 55 miles per hour and that the pass/fail standard was

that two wheels could not simultaneously come off of the ground? Is my understanding incorrect?

MR. PLATT: Object to the form of the question.

THE WITNESS: The only thing in what you said that does not make sense to me is I didn't think the requirement was 360 degrees of wheel input at 55. I thought it was 270 at 55 miles an hour. Otherwise what you said was correct. However, what I would interpret from your description is people are describing what the CAE model is telling you, but they are now describing it in a physical way as if the two wheels didn't lift, as if it was physically done. Best of my knowledge there has not been any real J-turn vehicle test done in the time frame that you discussed.

BY MR. TURNER:

Q. But on the computer you can tell when a wheel would be coming off the ground by the fact that the force on the

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wheel goes all the way down to zero, right?

A. The requirement for J-turn is the second wheel cannot have less than 100 pounds of down force. The first wheel could be at zero. The assumption is that that wheel has probably lifted as a result of what the CAE model is telling you. How much you don't know. All you know is it's zero.

Q. Let's use an example. If we have an Explorer out in the parking lot it has got four tires on the ground, right?

A. Correct.

Q. And as a general number, I know this is not a test, so you don't have to be correct in, precisely correct on how much weight is sitting on the left front tire of an Explorer in a parking lot. As a general proposition how much is that?
A. I wouldn't want to, it would just be a guess.
Q. Well, let's for purposes of my example let's just say 1,000 pounds is on the left front tire. Now let's start moving the vehicle in this J-turn procedure and let me walk you through a hypothetical and ask you what's a pass and what's a fail. If on the computer the Explorer drives through a J-turn and the left front tire goes from 1,000 pounds all the way to zero but the remaining three tires keep at least 100 pounds of force on them in that maneuver, is it a pass or is it a fail?
A. That would be a pass in J-turn.
Q. So it's okay in the computer simulation for one of the

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wheels to be lifting off the ground?
A. From a vehicle dynamic standpoint it is actually desirable to lift one of the front wheels because you induce significantly more understeer in the vehicle which is one of the things that keeps a driver in that situation from losing control, potentially losing control of the vehicle.
Q. So as an engineer you would advise the consumer that if in a turn in their vehicles regardless of what kind of vehicle it is and in there vehicle if you got a vehicle with four wheels on the ground, if they are making turn and one of

them comes off the ground that that's not necessarily a bad thing?

A. Given the circumstances that the J-turns simulate, which is an extremely unlikely event. It is a maximum limit handling evasive maneuver. It would not be unusual to see a wheel lift under that circumstance.

Q. But setting aside whether it would be unusual in a J-turn, what I'm asking is that if I'm a consumer and I turned my steering wheel to avoid a kid in the roadway and I go from being a car with four tires on the ground to a car with three tires on the ground, you are saying it's better to be a three wheel vehicle than a four wheel vehicle?

MR. PLATT: Object to the form of the question. It misstates the testimony and also it's so full of assumptions that it's impossible to respond to.

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BY MR. TURNER:

Q. Go ahead.

A. The thing that you desire under these maximum handling conditions is that you do not the want the vehicle to go a condition of understeer which is designed into the vehicle to a condition of oversteer. Having both of the front tires fully saturate or having one of the front tires lift, and it's usually the inside tire, is not a bad thing from a vehicle handling standpoint. It is actually desirable because it helps maintain control of the vehicle.

Q. Understeer and oversteer in common language you are

basically saying you want to maintain directional stability of the vehicle?

A. That's correct.

Q. You don't want the back end sliding around on you?

A. The back end sliding around would be a very simplistic definition of oversteer, yes.

Q. And if the back end slides around why is that bad?

A. It can result in a loss of control of the vehicle. In actual practice probably what is the worst thing that happens, is that a driver who may not be an experienced driver, will tend to then take the steering wheel the opposite direction trying to steer into the skid, and depending on the circumstances particularly at these very high speed and very high J-turn limit kind of maneuvers he

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can actually lose control of the vehicle not in the first maneuver, but in actually his correction to the first maneuver.

Q. And typical reaction would tell somebody when your back end begins to slide around that you probably ought to turn into the --

A. That's what we were all taught in driver's training school.

Q. In actuality when you do that, when you cut into the turn like that it's actually going to enhance or increase the yaw rate coming back in the opposite direction, is it not?

A. If you are not prudent about how much correction you put in the potential exists that you can then actually overcorrect

and then have an oversteer condition in the opposite direction.

Q. And the prudence you are talking about being prudent in that, all of that is occurring in a very, very, very short period of time?

A. Depending on the circumstances, yes. At this limit handling condition it would occur in a very short period of time.

Q. And from a vehicle design standpoint what you would like to have is a vehicle that plows out or continues to understeer as opposed to spins out?

A. All Ford Motor Company products are designed with inherent understeer into them, as I believe probably every vehicle

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designed by any manufacturer on the road today is. Understeer is an inherent capability of the vehicle that helps ensure that the vehicle always stays under control.

Q. And going back to our hypothetical if two wheels come off the ground in these maneuvers is that bad?

A. With respect to directional control of the vehicle, no, it is not bad. With respect to the potential of having an overturning moment which would cause the vehicle to rollover, two wheels off the ground potentially depending on where the second wheel is, is getting to a region where vehicle rollover could occur at some point beyond that.

Q. Why would you not want to design a vehicle so that the wheels are coming off the ground on one side of the vehicle

in a turning maneuver?
A. It increases the likelihood of potential rollover depending on the specific loading conditions, the condition of the highway, the condition of the tires, the speed at which the event occurs. All of the things which could result in a sufficient overturning moment to cause any car or truck to turn over given those individual set of circumstances.
Q. Now as a general proposition is a vehicle that has a narrow track width relative to its high center of gravity going to rollover faster and easier and with less energy than one that is tall and, I mean wide and narrow, I mean wide and short from the center of gravity standpoint?

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MR. PLATT: Why don't you start that one all over?
MR. TURNER: Probably good idea.
BY MR. TURNER:
Q. Would you agree with me, Mr. Baughman, from a practical standpoint if a vehicle that is wide and low, in other words, the track width. The width of the vehicle is wide, and the center of gravity is low is from a physics standpoint going to take more energy to roll that vehicle over than the same vehicle that is more narrow and tall?
A. Yes, the laws of physics would suggest that's absolutely correct.
Q. Now there are a lot of other factors involved in whether a vehicle is going to rollover, correct?

15 A. That is absolutely correct.

16 Q. There are a lot of dynamic characteristics that you have to

17 take into consideration other than simply static

18 considerations?

19 A. Yes, I do not put much credence in the static stability

20 index that has been proposed by NHTSA and by other people

21 over the last 15 years because clearly the dynamic

22 properties of the vehicle can be very different than the

23 static stability index would indicate that vehicles are all

24 the same or difference by some amount. So I think that

25 static stability index is bad science.

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1 Q. Well, it's a good fundamental static comparative measure,

2 but there are a lot of other factors that are important

3 too, right?

4 A. That is absolutely correct.

5 Q. For instance, tires are important?

6 A. Yes, tires are very important.

7 Q. Suspension characteristics are important?

8 A. All of the suspension characteristics with spring rates and

9 damping characteristics are very important.

10 Q. Which all goes into things like how stiff the vehicle is

11 from a roll stiffness standpoint?

12 A. Not only the suspension parameters, but how stiff the frame

13 is and the overall frame and body combination, all play

14 into that.

15 Q. And another thing that dynamically impacts the ability of

the vehicle to maintain directional stability is how the load transfers across the axles in the turning maneuver?
A. That's correct.
Q. And also I guess the distribution of the weight of the vehicle front to rear or rear to front makes an issue?
A. Yes, all those parameters play into the, a vehicle's resistance to rollover.
Q. And you have to take all of that into consideration, but you can't ignore width and height of the vehicle?
A. I think the parameters beyond the width and the height of

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the vehicle in many, many cases are more predominant into whether a vehicle is prone to rollover than just the simple static stability index.
Q. Isn't it also true that you can modify all of these dynamic characteristics by making the vehicle wider and lower?
You want me to give you an example?
A. Yes, please.
Q. Okay. Let's take roll angle. You understand the concept of roll angle, how much the vehicle tends to roll in a given radius turning maneuver?
A. Okay. Yes, I understand.
Q. All right. Now, isn't it true that the same vehicle with a wider track width at the same speeds is going to have a different roll angle than one with a narrow track width?
A. Different, but not necessarily less.
Q. Well, let's take a vehicle. Let's say the Ford Explorer

and let's use the 1997 version versus the 2002 model. If you take that vehicle and you change it from having say a 58 inch track width, the 1997 model, and you put that track width out at 63 inches you keep the center of gravity the same, keep the same tire, same suspension system all other things remaining the same, isn't it true that the tendency of that vehicle to roll in a given radius turn is going to be less in the wider vehicle than it is in the more narrow vehicle?

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A. No, I don't agree with that.

Q. You don't agree with that at all?

A. No.

Q. Okay. Are you familiar with Don Tandy?

A. Yes, I met Mr. Tandy.

Q. Did you meet him after he left Ford or while he was working at Ford?

A. I don't recall meeting him while he was at Ford, although I suspect we probably had some point of interface and I just don't recall it, but many of the occasions that I have met Don Tandy have been since he has left Ford.

Q. Have you ever read any studies that Mr. Tandy did while he was employed at Ford wherein he specifically used your ADAMS computer system to evaluate what impact widening vehicles and lowering center of gravities of vehicles would have on these dynamic characteristics you are talking about?

A. I recall seeing a document that I believe was prepared by Don Tandy that suggested, I remember the lowering the centerline of the engine discussion. I don't recall whether that document had wider track as well.
Q. The reason I'm asking that is because Mr. Tandy has previously told me that when back in the early 1990s when he was employed at Ford Motor Company one of his projects was a project using the ADAMS computer simulation to define

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just how significant very small changes in the width of the vehicle and the center of gravity of the vehicle would impact these dynamic characteristics of vehicles that you are talking about. Are you not familiar with that work?
A. No, I'm not.
Q. Now, sometimes when people talk about changing center of gravity height from 26 and a half inches say to 26 inches that doesn't sound like a whole bunch a half inch, does it?
MR. PLATT: Define a whole bunch.
MR. TURNER: Well, in Arkansas that would mean a lot, but I don't know what it means up here.
THE WITNESS: I would think that a half inch reduction in the center of gravity of a vehicle is probably a significant reduction in the, I mean, as contrasted with insignificant. If you were to have said a tenth of an inch, I would have said a tenth of an inch is within the ability to measure the center of, height of the vehicle. A half an inch is probably a measurable amount and is

probably significant.
BY MR. TURNER:
Q. The reason I ask that is simply because this. If we can look up here on the board just a second, then we will take a brief -- lost my microphone here.
Take a look at the board a second and let's talk about something if you have a vehicle that has a 26 and a

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half inch center of gravity and you decide you are going to change it to 26 inch center of gravity when we look at these two numbers just raw, from just a plain standpoint changing from 26 and a half to 26 doesn't sound like a whole lot, but the purpose of my question is to ask you from an engineering standpoint is that half inch change significant from a design standpoint?
A. I think, yes, it is significant from a design standpoint.
Q. And if you change from a 26 and a half to a 26 inch center of gravity for a given vehicle design are you familiar with any studies by Mr. Tandy or anybody else at Ford Motor Company talking about the fact that even a half inch change in the center of gravity can sometimes help keep wheels on the ground of vehicles. Are you familiar with any of that?
MR. PLATT: Object to the form of the question.
THE WITNESS: I only saw some documents and I seen them in the last six months or so, that talked about lowering the center of gravity of the vehicle through various selection of different tires and tire aspect ratios

and sizes and suspension component changes, but never any of the analytical work that may have led up to those conclusions being made. I mean, my time line really starts with Tandy in Arizona and running J-turn tests and they said, lower the suspension half an inch and do some other things, stiffen the front spring rates. I don't really

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have any background of why those recommendations were made and what level of sensitivity half an inch versus some other dimension. I only know that half an inch was the recommendation.

MR. TURNER: Fair enough. Let's take about a five minute break.

VIDEO TECHNICIAN: Off the record at 10:23 a.m.

(A brief recess was taken.)

VIDEO TECHNICIAN: Back on the record at 10:37 a.m.

BY MR. TURNER:

Q. Okay. When we took a break, Mr. Baughman, one of the things that we were talking about was center of gravity height and we were talking about, going up here to the screen for just a second, 26 and a half inches versus 26 inches and the significance. Although it sounds small, the significance of a half inch change in center of gravity height.

Let me go back for a second and ask you a question about sport utility vehicles. When you first got

involved with sport utility vehicles it was in the late 1980s, 1990s is that correct or did I understand you wrong?

A. Well, I think I should probably explain that one of my roles when I started within the company was known as the PN96 program in 1996 was, I was also charged with the

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responsibility of developing the replacement of the full-sized Bronco. So I did all of the engineering work associated with a vehicle that's now known as the Expedition/Navigator as well.

Q. Would you consider an Expedition to be a full-size sport utility vehicle, midsize or a compact?

A. Full-size sport utility vehicle.

Q. Let's move back into the categories that we are here to talk about. The Explorer is a midsize?

A. I would describe it as a midsize compact utility, yes.

Q. Now the 2-door, technically speaking, does that fall into compact sport utility range or the midsize?

A. I would say Explorer as a family, both 2-door and 4-door fall into the midsize range of sport utilities.

Q. Now what was your first involvement in your experience at Ford Motor Company with midsize to compact sport utility vehicles?

A. That was probably in the 1998 time frame. And prior to that in 1997 when I started my job, there were some changes that were going on that were scheduled for the Explorer to go into production into 1998, but most of them were

22 strictly cosmetic by appearance. And consequently, I did
23 not have a great deal of involvement with that program
24 because they were cosmetic kinds of changes as opposed to
25 true engineering changes that were change in the base
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1 capability of the vehicle. So my first involvement in the
2 Explorer in any depth was when we started to get reports
3 from Saudi Arabia that we were having tire separations on
4 some Firestone stores in the Saudi Arabian market also
5 known as the Gulf Cooperative Council.
6 Q. We are going to talk about the Saudi Arabian situation
7 later on down the road, but those likewise, those
8 situations in Saudi Arabia included the issue of Explorers
9 rolling over, correct?
10 A. The documentation that we got from Saudi Arabia was very,
11 very scarce, but yes, there were reports of vehicle
12 rollovers as a result of tread separations.
13 Q. New, let's go back to the center of gravity concept because
14 I want to continue through this issue of CG height and make
15 sure we understand exactly what we are talking about. I
16 have drawn up here on the board a very rough picture of the
17 vehicle. It's not a very pretty vehicle, but it's a
18 vehicle we are going to use for purposes of talking about
19 it. The center of gravity is a point on that vehicle and
20 actually there are two points. There is a vertical center
21 of gravity and a horizontal center of gravity; is that
22 correct?

A. Yes, there's actually a point, the third dimension too as well is laterally across the vehicle.
Q. And where it's located laterally, so if we are looking at,

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first of all, if we are looking at the vehicle from the side view it has got a point in here where it is vertically in terms of this relationship; is that correct?
A. Correct.
Q. And then if you are talking about this plane along in here somewhere it's located horizontally; is that correct?
A. Yes, I would guess that for most typical front engine, rear wheel drive vehicles it's probably to the left of where you've drawn it, but.
Q. And then if you look at the vehicle from the back and you are talking about this plane you got a location of the center of gravity whether it be on this side of the vehicle, this side of the vehicle or in the middle of the vehicle, right?
A. Correct.
Q. Now, the two I want to talk about first of all, are the vertical where it's located vertically and where it's located horizontally along this path. Now first of all, the vertical center of gravity, where it's located, how high up off the ground, that is something that can either be calculated or physically measured; is that correct?
A. Correct.
Q. Now, does Ford calculate it? Does Ford measure it or do

24 you do a combination of both of those?

25 A. Combination of both as I understand it.

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1 Q. Now what defines the center of gravity, the vertical center

2 of gravity of the vehicle? What factors help define where

3 it is?

4 A. Well, it's really the summation of all the component

5 weights of the vehicle and their individual centers of

6 gravity summed up into an aggregate. For example, the

7 engine obviously has a center of mass that is probably

8 about the center of the engine, the rear axle has a center

9 of mass and all of those have to be summed. And what they

10 do is they move a composite center of gravity to perhaps to

11 even a point in space, that if you pointed to it physically

12 in the vehicle there may not be anything there. In other

13 words, it could be, let's say four or five inches above the

14 passenger seat or above the driver's seating position. And

15 yet in space there is nothing there, but that is the center

16 of gravity of the composite of the vehicle.

17 Q. So is it fair to say that the center of gravity of the

18 vehicle is defined by the design of the vehicle?

19 A. It's defined by the design of the vehicle and the placement

20 of all of the individual components and the selection of

21 the material in each one of those components whether that

22 be steel or aluminum or magnesium, all of those things

23 influence where the center of the gravity of the vehicle is

24 going to end up.

25 Q. The vertical center of gravity?

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1 A. The vertical center of gravity.

2 Q. But it also applies to the horizontal?

3 A. As well as in your rear view as the lateral center of

4 gravity.

5 Q. Okay. Now, just so that we are all crystal clear. First

6 of all, if you just put the Explorer on the parking lot

7 with nobody in it, it would have a vertical center of

8 gravity that's defined by the vehicle design and the

9 placement of the components, correct?

10 A. Correct.

11 Q. Now if you put a person in it, if you put a driver in it,

12 that center of gravity is now going to change depending

13 upon where it's initially located based upon the design of

14 the vehicle?

15 A. That is also correct.

16 Q. And if you put a whole bunch of people in it with a bunch

17 of luggage in the back or on the top, that's likewise going

18 to change the center of gravity of the vehicle?

19 A. That is also correct.

20 Q. Now according to some documents that I've seen, not only

21 from Ford -- just turn it off -- but also according to some

22 documents that I've seen not only from the Ford Motor

23 Company, but also from the National Highway Traffic Safety

24 Administration based upon measurements done by both your

25 company and the government, as you put people and luggage

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in the Explorer assuming they are sitting upright and assuming the luggage is placed according to typical loading, this vertical center of gravity goes up?

MR. PLATT: Object to the form of the question.

BY MR. TURNER:

Q. Are you familiar with that?

MR. PLATT: Same objection.

THE WITNESS: Yes, in general as a vehicle is loaded with cargo, particularly in the configuration of a sport utility vehicle which does not have a deep trunk, as well as the opportunity in the sport utility to put things up in the luggage rack as you load the vehicle the center of gravity tends to move up, yes.

BY MR. TURNER:

Q. So is it fair to say that with regard to the 2-door Explorer and the 4-door Explorer the more people you put in it and the more luggage you put in it the higher the center of gravity it is going to tend to go?

A. The vertical center of gravity will tend to go up under most conditions and the horizontal center of gravity will tend to go rearward at the same time.

Q. Okay. So as we begin to put people and luggage in a Ford Explorer the center of gravity not only gets higher, but it begins to move rearward; is that right; is that correct?

A. That would be my engineering judgment, yes.

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Q. Now as that center of gravity gets higher and as it moves rearward that's going to affect the handling characteristics of the vehicle in an unloaded condition versus a loaded condition, right?
A. We do all of our J-turn and subjective handling maneuvers at both one passenger loading as well as maximum passenger plus maximum cargo conditions.
Q. Right. I understand how you do it, but as a general concept the more people you put in an Explorer the higher the center of gravity?
A. The statement you just made is true for any vehicle.
Q. And especially with regard to sport utility vehicles; is that correct?
A. Not with respect to just the addition of people. I think if you take into account the opportunity that we provide customers to put in cargo in what is a very large cargo volume area of the vehicle as well as the access to a luggage rack on top, then sport utility vehicles start to look like station wagons as differentiated from a passenger sedan.
Q. Then part of, at least according to what I've read, part of the marketing strategy for the Explorer was to aim at the station wagon market, was it not?
A. I have no idea whether that was the marketing strategy.
Q. Did the engineers working on the design of the various

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model years of the Explorers communicate with the marketing

people so that you would know from a safety standpoint what it was that the marketing people were telling the consumer about how to use this vehicle and where to use this vehicle and encouraging them in the purchase of this vehicle?
A. I'm sure such conversations took place. I'm not aware of any of them firsthand from a knowledge standpoint.
Q. So you are not personally familiar with how the Explorer was marketed or the intent of how it was to be marketed to the consumer?
A. No, I'm not.
Q. Now going back to our center of gravity analysis for just a second. The height of the center of gravity -- the higher the center of gravity goes is that going to tend to affect how a vehicle responds to a given maneuver?
MR. PLATT: Object to the form of the question.
THE WITNESS: Yes, directionally raising the center of gravity will change the handling characteristics of the vehicle all other things being held constant. But as that center of gravity moves around as a result of vehicle loading, those are all conditions that are taken under account when the engineers design the vehicle. So the spring rates of the vehicle, the shock absorber damping characteristics, the size of the stabilizer bar, everything about the vehicle takes into combination the fact that that

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CG moves around as a result of all of the various permutations of loading both passenger and cargo that can

take place in any vehicle.
BY MR. TURNER:
Q. And another thing that happens to the handling characteristics is as you put people and cargo in this particular vehicle and the center of gravity is going up it's moving backwards on the vehicle as well, correct?
A. Generally speaking, yes, it moves backward as well.
Q. And as the center of gravity moves rearward in an Explorer is that going to tend to alter or change the handling characteristics of the vehicle?
A. Yes, to some extent it will change the handling characteristics of the vehicle.
Q. Will it affect the vehicle's tendency to want to yaw or spin or turn?
A. It may affect the tendency of the vehicle to yaw more in a given situation. Many of the documents on Explorer that I've had a chance to look at would suggest that the handling characteristics of the vehicle are different at maximum loaded conditions than they are at empty, and that the vehicle tends to move toward oversteer. It doesn't get to oversteer, but moves from a great deal of understeer more toward a neutral condition as the load in the rear is increased particularly with loads in the roof rack.

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Q. Now. If we move from the issue of vehicle center of gravity a minute. I want to talk about ways that you as an engineer can affect or change or alter a vehicle's tendency

to maintain control. And I think, if I understood you correctly a moment ago, one of the things that you pointed out to me was that you want to design a vehicle so that hopefully when the driver, the consumer, turns the steering wheel he is able to maintain directional stability and he does not lose control of the vehicle? That's a goal at least?

A. Yeah. All Ford vehicles are designed with what is inherently a dilemma associated with the way the vehicle performs. Is that in reality you would love to give the customer the very highest level of accident avoidance capability with very responsive steering with very high levels of yaw change. But in reality that is not the situation that you want from a vehicle stability standpoint, from a controllability, as well as a rollover standpoint. And so consequently, the engineer's dilemma is how to get the right balance between accident avoidance capability and something that only a professional driver would be able to remain in control of given the responsiveness of the rest of the vehicle system.

Q. One of the things that you can do and, in fact, Ford did in order to try to keep the wheels of the Ford Explorer on the

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ground was to take some air out tires; is that correct?

A. No, I don't think that's correct at all.

Q. You don't recall Ford back in the late 1980s making a decision to change the air pressure from 35 psi to 26 psi

on the Explorer?

A. I read some reports of some vehicle drive evaluations that the UN46 team did and the conclusions of those ride evaluations were that the P235 tire would be inflated to 26 psi based on the ride performance. I have not seen any reference to anything that would suggest that 26 psi was picked for a handling objective or a handling issue.

Q. Are you sure about that?

A. I'm fairly certain.

(Deposition Exhibit 1 was marked.)

BY MR. TURNER:

Q. The reason I'm asking is because, and we will mark this as Exhibit Number 1. This is an article from USA Today dated August 21 of this year. And it quotes you as saying "we ran the tests, and in really severe maneuvers, emergency lane change maneuvers, 35 is not where you want to go, says Ford's chief truck engineer Tom Baughman."

And then down here it says "Baughman notes you may not want crisp steering in a vehicle with a relatively high center of gravity and relatively short wheelbase. Putting more air pressure in your vehicle is not in the

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direction of goodness in a vehicle with a relatively high center of gravity."

Did I read that correctly?

A. Yes, you did.

Q. Now did you or did you not tell the media in these

circumstances that Ford did, in fact, change from 35 psi to 26 psi as one of the factors helping or trying to help keep the wheels on the ground?

A. I don't think I ever made that statement to the media. The quotes that you are showing there were quotes that are correct. And it was based on my knowledge of what we had been able to do to evaluate the Explorer, given the Firestone recall that was announced on August 9, so this was about two weeks into our going back through the records as well as recreating testing to understand the sensitivity of the vehicle to tire pressure changes.

On the day that I met with Firestone to negotiate the recall of the tires, which was Saturday, August 5, I had a meeting prior to Firestone arriving, with my vehicle dynamics people to understand what they knew about the sensitivity of the Explorer to inflation pressure. And they had brought over, they had looked at the J-turn results that were on file and had concluded that over a relatively small range of tire inflation pressures specifically the 26 to 30 psi range, the vehicles, the

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Explorer, all flavors of the Explorer, would meet the J-turn requirements.

Consequently, I asked them to go back and rerun the J-turn analysis for all of the flavors of the Explorer, past and present, and sweep the entire tire pressure ranges from 26 to 35 psi so that we could understand whether or

not there was anything in our J-turn results that would suggest that there was a tire sensitivity issue. The reason why I requested that was I knew based on the conversations that I had the day before that on August 4 with the Firestone people, who were coming to Detroit on Saturday, that one of the things that they were going to recommend as at least an interim action until we got the tires replaced, was a change in the inflation pressure from 26 to 30 psi. And I needed to know whether or not I could agree with that as part of the negotiations that would take place either on that Saturday, or as it turned out subsequent to that Saturday. So when I was interviewed by Mr. Healey of USA Today on the 19th or 20th whatever the day of the week is we talked, it was my belief that we knew that we were completely safe for J-turn handling performance up to 30 psi. And I had no knowledge at that point in time as to whether or not going beyond 30 psi would represent a risk to the J-turn performance or not. Consequently, the basis of my statement to him.

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Q. Have you ever told anybody that the Explorer's stability was one of the reasons that Ford recommended a tire pressure of 26 psi instead of 35 psi?

A. The statements that I made with respect to how vehicles handle was meant, was made in a generic sense. It was not made specifically with respect to my knowledge of how the Explorer would perform. The point in time that I was

8 interviewed I had very little firsthand knowledge as to how
9 the Explorer would actually perform.
10 Q. Right. And of course, you weren't present in 1989 working
11 on the Explorer at the time all of those decisions were
12 made, correct?
13 A. That's correct. And in fact, data that was shown to me by
14 Don Tandy perhaps three weeks even after the USA Today
15 article indicated that he had actually run the Explorer
16 with the Firestone P235 ATX tire and had indeed run it at
17 35/35 psi and it had passed the J-turn test performance.
18 That was unknown to me at the time of the interview with
19 Jim Healey.
20 Q. And you are talking about back in 1990?
21 A. Back in the summer of 1989 when the tests were run at the
22 Arizona Proving Grounds.
23 (Deposition Exhibit 2 was marked.)
24 BY MR. TURNER:
25 Q. Now Exhibit Number 2 is copy of a U.S. News article that
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1 was published again this is one of the articles from August
2 of this year and it's quoting you. To put it into some
3 context so everybody understands, first of all, what we
4 are --
5 MR. PLATT: Who is this from, Tab?
6 MR. TURNER: This is from U.S. News August 21 of
7 this year.
8 And to put it into context at the bottom down

here it says "the October 1989 documents showed that the Explorer failed safety tests and was at risk for rollovers when equipped with tires inflated to 35 pounds per square inch, but subsequent tests found it did not have that stability problem when the tires were inflated to 26 pounds of pressure."

Did I read that correctly?

A. It's a very bad copy, but it appears you read it correctly.

Q. Fine. Now if we flip over to the next page of Exhibit Number 2 this is where it quotes you. And according to this it says "Tom Baughman" and that's you, correct?

A. Correct.

Q. "Ford's chief engineer for North American Trucks and the lead investigator in the Firestone recall" is that fair characterization?

A. Yes, it is.

Q. "Told the Post the concern about the Explorer's stability

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was one reason Ford recommended a lower tire pressure." Did I read that correctly?

A. Yes, you did.

Q. Are you saying that you did not tell anyone that statement?

A. That I did make that statement and based on my knowledge that third week of August that's what I believed to be true.

Q. And then it goes on to say "what we do," we meaning Ford; is that correct?

A. Yes.
Q. You were purporting to speak for Ford on this particular issue at the time, right?
A. Correct.
Q. "What we do by the tires we select and the inflation pressure we specify." So let's stop right there for a minute. There is no question that Ford specified the air pressure to consumers on the Explorer; is that correct?
A. That's correct, we specified the inflation pressure.
Q. "We try to dial as much as of that inherent instability out of the vehicle, Baughman said."
Now is that a fair characterization of what you told this person?
A. Yes, it is.
Q. "You want to find the right balance based on predictability, handling stability and ride. Like all

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things it is a compromise somewhat."
Did I read that correctly?
A. Yes.
Q. Now, what you told me a second ago was that somebody by the name of Don Tandy later on showed you some materials that he claims to have done back in 1990 showing on a computer that the Explorer actually did pass at 35 and not 26 psi?
A. No, I don't believe that's what I said.
Q. What?
A. What Don Tandy actually showed me were the test results

from the physical tests that he ran in Arizona the summer of 1989 that showed that the Explorer passed the test at both 26/26 and 35/35 psi. That fact was unknown to me the day that I gave that interview.

Similarly, the assignment that I had given to my vehicle dynamics people, the CAE people, on the morning of Saturday, August 5 had not been completed. And consequently, I only knew that for a range of pressures from 26 to 30 psi that the family of Explorer vehicles both past and present would meet all of the J-turn requirements. Subsequent to that they have completed their tire sweep of inflation pressure at 32 and 35 psi and have concluded that of all those tire pressures it would meet Ford's J-turn requirements.

Q. Now let's talk about Mr. Tandy and what he told you for

0056

just a minute. You are saying that Mr. Tandy showed you a document from the early 1990s where, or the late 1980s, one or the other. Which one was it?

A. I don't know when the document was created. It was making, the document was a compilation of all the test results that were run at Arizona Proving Grounds, J-turn testing, in the spring of 1989 through as I recall July or August of 1989.

Q. Right. Back during that period of time somebody at Ford authorized the engineers to go to Arizona and do both J-turn testing and what's referred to as Consumer Union testing of the Explorer; is that correct?

A. That is correct. And that is that process that I described earlier where in that time frame not only was the computer being used to do J-turn performance prediction, but also physical testing was conducted at the same time.
Q. All right. And we are going to look at some of that testing in just a minute to just to kind of give everybody an idea of what it looked like. But I want to understand exactly what Mr. Tandy showed you. He showed you a document from that testing that indicated that at both 26 pounds of pressure and at 35 pounds of pressure the Explorer passed?
A. It passed the physical J-turn test, yes.
Q. And did he also show you a document where at 35 pounds of pressure the Explorer failed?
A. I don't recall that he did. The test runs that he did the

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compilation on probably were in excess of 250 to 300 specific runs. The question that I had asked him were show me the test runs that confirm what the J-turn analysis is now showing is that the Explorer is, meets our J-turn requirement of both 26/26 and 35/35. He showed me in that dec of material that he had, those specific points. I don't recall seeing a point that said that there was also data where it didn't pass at 35/35.
Q. I want you to assume that the people driving the cars in Arizona told us under oath that the reason 26 pounds of pressure was chosen was because the Explorer could not pass at 35 pounds of pressure. It could every once in a while,

but that there are also tests on that document, that Mr. Tandy either did show you and you've forgotten or that he didn't show you, where the vehicle would not pass at 35 pounds, therefore, they chose 26. Now assuming, I've been told that, is that inconsistent with what Mr. Tandy told you?

MR. PLATT: Object to the form of the question. It's improper.

THE WITNESS: Yeah, I think it's inconsistent with what he told me.

One of the things that I was, and they were parallel work streams, was to go back and understand what physical testing had been done and what that physical

0058

testing would have shown. In addition to going back and running the CAE analysis and to actually sweep the range of tire pressures that were quite frankly predictable in the field. Because I think it's an unfair expectation to believe that every customer always inflated their tires to 26 psi. So to me as an engineer it seemed illogical to me that people were making statements like the tire passed the J-turn requirement at 26 psi and that there was no knowledge within the CAE community or very little knowledge of how it would perform at different air pressures. They were convinced that it would be fine at 28 or 30, but there was no knowledge, as I say, on the morning of Saturday, August 9 that anyone knew of that, would suggest whether or

not it would be okay at 32 or 35 psi. And it is that, in pursuit of that knowledge that I started these two parallel work streams. One was to get the information from Tandy as to what he remembered from the work that was done the summer of '89, but also to go back and actually run the computer simulations and sweep those air pressure ranges to see if it made any difference.

Q. Now going back to the late 1989 time frame there is absolutely no question that Ford is the one that made the recommendation that the Explorer be used at 26 pounds of pressure; is that correct?

A. Based on all the documents I have ever seen I believe Ford

0059

made the recommendation 26 psi and that Firestone concurred with it.

Q. And you understand the concept of a margin of safety being built into the design of a vehicle?

A. I certainly do.

Q. And I want to talk about that concept for just a second. And ask you if you have a vehicle that at 35 psi of pressure that the wheels lift off the ground and rolls over, but at 26 pounds of pressure you have no rollover, do you think that is a safely designed vehicle that has a reasonable margin of safety in it?

MR. PLATT: Object to the form of the question.

THE WITNESS: I don't know of a vehicle that as has a rollover condition at 35 psi.

BY MR. TURNER:
Q. Well, let's assume it does. Assume Ford Motor Company designed a vehicle that at 35 pounds of pressure in the tires it rolls over, but at 26 pounds of pressure it doesn't rollover. Do you think, knowing what you know about what consumers do with their tires, do you think that would be a safe design, one that you would allow your family to ride in?
A. I would like to maybe answer this a little bit differently. If somebody came to me with a proposal for a new vehicle program that had the conditions that you stated, that was

0060

that sensitive to tire pressure as a single variable as to whether or not the vehicle would meet or not meet the J-turn requirement I would tell them that they needed to do something to the architecture of the vehicle to help mitigate that because tire pressure is not something that anybody at the Ford Motor Company or dealers, or in many cases even customers are even aware of or let alone in control of, to inflate the tire pressure and maintain it at the recommended level.
Q. And what you are saying, I think, if I'm understanding you correctly, is that if somebody came to you and they were going to try to stop the rollover of this vehicle by simply letting air out of the tires, that is not something that you would trust as a reasonable alternative to redesigning the vehicle?

A. You are absolutely correct. And that's why I do not believe that the people that designed the Explorer chose 26 psi as a way of avoiding flunking J-turn. And subsequent CAE analysis has indicated that that is absolutely true as well as Don Tandy's test results.
Q. Do you know Roger Simpson?
A. Yes, I know Roger Simpson.
Q. Would you tell us who he is?
A. Roger Simpson was the program manager of the UN46 program.
Q. That's the Explorer back in 1989-90?

0061

A. That is the Explorer back in 1989 and '90. And Roger was also the chief program engineer for the UN105, which was the redo of Explorer that was introduced in the 1995 model.
Q. Okay. The next thing I want you to take a look at with me, if you will, this is an exhibit, actually Exhibit Number 3 to Roger Simpson's deposition. And it has got a Bates number of 8547.
And Warren, that comes out of the Bronco II selection group CD-ROMs.
MR. PLATT: Okay.
BY MR. TURNER:
Q. And I want to focus in on this paragraph right here. And it says ADAMS criteria. You understand ADAMS criteria, that's the one we were talking about earlier about wheels coming off the ground in the computer simulation, right?
A. ADAMS is a complete suite of software programs that are

17 associated with vehicle dynamics. Only one subset of the
18 sad ADAMS suite deals with J-turn performance, so I'm
19 unable to judge exactly what the ADAMS criteria there may
20 be because the ADAMS model generates all kinds of other
21 things, yaw performance. Other things that may not be
22 associated with J-turn. I guess I don't know where you are
23 headed with that question. I mean, just word ADAMS
24 criteria suggests to me it is something coming out of that
25 suite of software.

0062

1 Q. That's fair enough. Let me see if I can put some context
2 for you. Because first of all, in 1988 you were not
3 working with Roger Simpson on the Explorer program; is that
4 right?
5 A. No, in 1998 I was still in the heavy truck engineering
6 division of truck.
7 Q. '88?
8 A. '88, sorry.
9 Q. That's okay. Now I want you to assume for purposes of my
10 question that Ron Campbell, Don Tandy, and Roger Simpson
11 have all three told me under oath that this paragraph that
12 we are about to read, this ADAMS criteria that is being
13 referenced has to do with whether two wheels are coming off
14 the ground in a J-turn procedure, okay?
15 A. All right.
16 Q. This particular document says "ADAMS criteria have been met
17 for the 2-door worst case four wheel drive and two wheel

drive on a 225 tire. At 35 psi the ADAMS criteria is not being met with the 245 and the 235 tire. There is good subjective correlation with ADAMS analysis on the 225 tires, therefore, we expect to get a favorable ADAMS analysis for the 245 tires at 26 psi. Initial ADAMS analysis with estimated tire coefficients for the 245 tire at 26 psi will be complete mid February. Final analysis is scheduled by the end of February with Calspan data."

0063

First of all, did I read that correctly?

A. It appears that you did.

Q. Now if you move down here at the bottom it says "the use of high performance tires like the Firehawk instead of the 225 FR480 tire will result in poor performance based on subjective and ADAMS predictions. Similar performance issues occur with the 235 and 245 tires at 35 psi. The 4-door, due to its longer wheelbase, is more tolerant of these tires than the 2-door."

And then it goes on to say "in both cases the outside front tire does not saturate and very high cornering levels can build up. With the lower pressure in the large tires of the FR480 225 tire the tires saturate and increase understeer."

Did I read that correctly?

A. Um-hum. Yes.

Q. Now, to put some of this into context, recognizing you weren't there, assuming that Roger Simpson, Ron Campbell

and Don Tandy all three told me under oath that the testing that was going on at the time showed that at 35 pounds of pressure on the ADAMS the wheels were lifting off the ground, but at 26 pounds of pressure they were not lifting off the ground is that consistent with what you've been told?

MR. PLATT: Object to the form of the question.

0064

Are you assuming that this is a production level vehicle? Why don't you tell the witness at least whether this a prototype vehicle.

THE WITNESS: Yeah, I have no idea even of the time frame of these documents.

BY MR. TURNER:

Q. I just asked you, 1988 and 1989. And let me ask you, that's a fair question by Warren. Is there any production of any Explorer in 1988 or 1989?

A. No, the vehicle had not gone into production yet.

Q. Because it is being developed; is that right?

A. That's correct.

Q. And development means decisions like how much air pressure you are going to put in the tires. Those kinds of decisions are being made during development; is that right?

A. That's correct.

Q. And how high the center of gravity, those kinds of decisions are being made in development?

A. Those decisions probably would have been made a lot earlier

than the 1988 or 1989 time frame.
Q. Right, but they are made during development?
A. That's correct.
Q. They are made before a production level vehicle is made, right?
A. Correct.

0065

Q. And if you want to know what people knew and when they knew it with regard to what's good and bad about air pressure, what's good and bad with this vehicle about center of gravity, why they put the center of gravity where they put it, why they made this vehicle stiff, you have to go back and look at what they did and when they did it, you would agree would that, wouldn't you?
MR. PLATT: Object, which one of those multiple questions do you want him to answer?
MR. TURNER: The whole.
MR. PLATT: Object to the form of the question.
BY MR. TURNER:
Q. Do you understand the intent of my question?
A. Yes.
Q. I think, I mean, it's not a very good question. Warren is probably right. I mean, it was more of a speech than a question, but you understand where I was going, right?
A. Yes. And I think engineers create documents like this that show as they do their work and as they do their tradeoffs there are discussions. What I understand about this

statement and I would take exception with what you said is you said ADAMS testing. The word ADAMS and testing cannot go in the same sentence together. Adams is a suite of software that is CAE. Testing is physical evaluation of the vehicle. And as I understand it, having talked to Don

0066

Tandy is the whole reason that the test series was done in Arizona in the spring and the summer of 1989 is because the ADAMS criteria or the ADAMS models were showing a sensitivity to air pressure when the model was run that the engineers did not believe existed in the real vehicle. And that is why they set aside the model and they went to Arizona to run the tests. And those tests very conclusively, I think, showed that the vehicle was insensitive to air pressure over the range of 26 to 35, and subsequent CAE stuff that I've had my people duplicate, okay, continues to show that. To me that's just an issue that whenever that document was written, the CAE model was not well correlated to the way the prototypes were performing. And given that dilemma they loaded everybody on a plane with lots of the parts and they went to Arizona to physically run the tests.

Q. Now Mr. Baughman, that's not what I've been told. I've been told that the testing in Arizona in 1989 was done because Consumers Union magazine was going to run the Explorer, or it was very likely that Consumer Reports magazine was going to run the Explorer through the

Consumers Union maneuver and that's why they went to Arizona.

MR. PLATT: Hold on. Wait a second. Tab, these questions about what I've been told, they are not

0067

appropriate. It's not right to cross-examine one witness about another witness's testimony, particularly when no one has a clue what you are talking about. If you persist in that I would ask to you rephrase the question. Ask him whatever you want, but don't ask him to rely on your judgments about what some unknown Ford witness has said in some other deposition. That isn't right.

MR. TURNER: Well, I understand your speech, but first of all, let me point out that these are not unknown witnesses. I mean, we've been deposing Ford witnesses for years and you know as well as I do, Warren, that you know, I could come up here and I could take three or four days with these and show videotapes to Mr. Baughman of these witnesses saying these kinds of things, but another permissible way of asking the same question is to ask him to assume for purposes of my question.

MR. PLATT: You can do that. What I'm asking you not to do is end up making the transcript unusable by saying these guys have all told me. If you want to ask him to assume instead of facts I don't object to that. The form of your questions today are unusually awful.

MR. TURNER: Thank you.

23 THE WITNESS: Should I?

24 MR. PLATT: Let him ask a question.

25 BY MR. TURNER:

0068

1 Q. Let's go to a document, first of all, and I know you

2 probably haven't seen this because you weren't working on

3 the Explorer back in '88, '89 and '90.

4 A. Correct.

5 Q. But document EXP71606 through 1607 is called Explorer

6 suspension ride tuning, ride and handling development. And

7 it has got a date up here of February 13, 1991 and it says,

8 "a major suspension redesign of the Explorer was initiated

9 approximately one year prior to Job 1."

10 Now first of all, one year prior to Job 1, Job 1

11 was in early 1990, correct?

12 A. April of 1990 as I recall.

13 Q. So one year before that would have been 1989?

14 A. Correct.

15 Q. In 1989 is, at least according to what you understand, the

16 period of time that the Ford engineers went to Arizona with

17 the Explorer, the Blazer, the Bronco II and a number of

18 other vehicles?

19 A. Correct.

20 Q. And it says "in response to a Consumer Report article

21 critical of Bronco II handling performance."

22 Did I read that correctly?

23 A. Yes.

24 Q. Now were you familiar with the fact that Consumer Reports
25 magazine was critical of the Bronco II's handling
0069
1 characteristics including its tendency to lift wheels off
2 the ground?
3 A. No, I was not.
4 Q. You never heard that before today?
5 A. I know that I was aware that Bronco II was the subject of a
6 number of lawsuits associated with rollover, but I had no
7 opinion one way or the other of what Consumers Union may
8 have done with it.
9 Q. I'm not asking for your opinion, I'm just asking factually.
10 Are you saying before today you had no idea that the
11 Consumer Reports magazine had been critical of the Bronco
12 II as reflected in this document?
13 A. No, prior to you saying that I had no knowledge of it.
14 Q. Now, Exhibit Number 247 and this comes out of Charles
15 White's deposition.
16 MR. PLATT: What is the EXP number?
17 MR. TURNER: It's EXP4198 through 212.
18 MR. PLATT: 40198?
19 MR. TURNER: Yes. It's actually EXP4-0198.
20 BY MR. TURNER:
21 Q. This is from August 4 of 1989 and it's kind of difficult
22 for you to see. Can you see that all right?
23 A. Barely.
24 Q. That help any?

25 A. Little bit.

0070

1 Q. Okay. And it says "1991 UN46 Consumer Union testing" and
2 Mr. Hagenlocker and Mr. Engelhart are listed. These people
3 were relatively high management in the early 1990s, weren't
4 they?
5 A. Mr. Hagenlocker was the Vice President of Truck at that
6 point in time and Mr. Engelhart had the job that I now
7 hold.
8 Q. Okay. So Mr. Engelhart was the chief engineer over all of
9 the light trucks?
10 A. I think his title was executive director of engineering,
11 but yes, he was in essence, the chief engineer.
12 Q. And Mr. Hagenlocker was in charge of all trucks in North
13 America; is that correct?
14 A. He was in charge generally of the truck business in North
15 America, that's correct.
16 Q. Now this says "results from July" and again we are in '89,
17 "Consumers Union testing at the Arizona Proving Grounds are
18 attached for your information."
19 Have you ever seen the Consumers Union testing
20 that was done on the Explorer, the Blazer and the Bronco II
21 from 1989?
22 A. No, I have never seen it.
23 Q. And in conjunction with this testing did you know that they
24 also did J-turn testing?
25 A. I knew that when the team was sent out to Arizona to do the

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test, it was to do both the Consumers Union evaluations of the UN46 and competitive vehicles and also because the ADAMS model was under some dispute as to its sensitivity with respect to air pressure and tire selection that part of the plan was to do the J-turn testing at Arizona at the same time.

Q. And isn't it true, Mr. Baughman, that after the Consumers Union testing in 1989 of the Explorer somebody at Ford Motor Company explained to management that there was a risk that the Explorer as designed would not pass the Consumers Union maneuver with the Firestone 235 tires and that somebody in management accepted that risk and took that risk in producing the Explorer to the consumer?

MR. PLATT: Object to the form of the question.

BY MR. TURNER:

Q. Are you familiar with that?

A. I'm familiar with the fact that there was a great deal of concern over how the vehicle would perform in the Consumers Union test because it was not a very repeatable test and was very, it was very dependent upon the actual way in which the driver did the steering inputs both from a speed standpoint plus where he was positioned in the lanes and so forth. I don't know that I have any firsthand knowledge of what recommendations were made. I do vaguely remember in culling through thousands of documents that I've looked at

0072

over the last six months, a concern about the Consumers Union performance of the UN46. I don't know that I was ever made aware of a firm recommendation to management with respect to that there would be a risk that it would not pass.

Q. And the reason I was asking that is because when we deposed Mr. White, and this is document EXP1, the lawsuit number 0619?

MR. PLATT: EXP1?

MR. TURNER: 0619.

MR. PLATT: Okay.

BY MR. TURNER:

Q. And this is Exhibit Number 2 from Mr. White's deposition last month. This is an E-Mail, an electronic mail from Mr. Stornant, who by the way, is deceased now?

A. Yes, I know that.

Q. To Mr. White. And it says, Ms. Stornant is telling Mr. White. "I believe that management is aware of the potential risk with P235 tires."

Now P235 tires meant at that point in time the Firestone ATX tires, correct?

A. That is correct.

Q. And the 235 tire later on became the Wilderness tires; is that correct?

A. That is correct.

0073

Q. "And has accepted risk."

Did I read that correctly?

A. You read it correctly.

Q. Now can you tell me, is it true that back in 1989-1990 time frame that Mr. Hagenlocker and Mr. Engelhart, those two people we talked about a minute ago, that would have included among a lot of other people, management?

A. Yes.

Q. Now is it also true that in that same time frame, Mr. Baughman, not only was management being made aware of a risk associated with using these Firestone 235 tires on the Explorer, but not only that, isn't it true that the lawyers working in Ford Motor Company were interjecting themselves into the design issue and recommending to engineers not to use the Firestone 235 tire unless you are going to make design changes to the vehicle?

MR. PLATT: Object to the speech and the form of the question. You just used the risk, there is no statement in this document that supports what you just said.

BY MR. TURNER:

Q. Go ahead.

A. I have seen some documents that would suggest that there were people other than the engineers who had a concern. I don't know whether or not they were lawyers or not.

0074

Q. Okay. Well, let me see if I can help you. Here is a deposition exhibit from Mr. White, this is Exhibit

Number 1.

MR. PLATT: What's the number?

BY MR. TURNER:

Q. The document number is EXP1-0625, that is Ford lawsuit number. And this is again an electronic mail and it's from Mr. Stornant to Mr. White. Do you see that?

A. Um-hum.

Q. And the date of this is September of 1989. Let's take a look at the paragraph just a second. It says "I have heard," this is Mr. Stornant telling Mr. White, "I have heard via the grapevine that OGC," now OGC right there, that is the Office of General Counsel; is that right?

A. That is my understanding.

Q. And the Office of General Counsel at Ford is the lawyers, correct?

A. Correct.

Q. It says "I have heard via the grapevine that OGC" -- the lawyers -- "is arming themselves for one more attempt to revise the initial tire release plan."

Now I'm going to stop right there and ask you a question. Is it routine practice, in your experience at Ford for the lawyers at Ford Motor Company to be telling the engineers what tires to put on cars?

0075

A. It's a bit unusual for them to be telling people what tires to put on a vehicle. It is not unusual for people from the Office of General Counsel to make the engineers aware that

the company may have had lawsuit activity associated with the design of a vehicle, so that those component issues or subsystem issues, should they exist, okay, can be corrected in future production.

Q. So it's fair for us to conclude that if the lawyers are interjecting themselves into an issue like this even before the car is sold to the public that that is not common practice, is it?

MR. PLATT: Object to the form of the question.

THE WITNESS: Common practice. I don't find that grapevine rumor to be particularly unusual. It maybe is a little specific with respect to the tire, but it is absolutely not unusual.

BY MR. TURNER:

Q. And then he goes on to say "they have heard that Nissan and Toyota are designing their utility vehicles to meet the Consumers Union test."

Did I read that correctly?

A. Yes, you read it correctly.

Q. Then in parentheses it says "GM already meets." Now let's stop there for a second.

You told us a minute ago that Consumers Union

0076

maneuver in your opinion is not a reliable test?

A. It is not only my opinion that, but I have had many people who were involved in the original evaluations tell me that.

Q. And I presume by not being a reliable test it's something

that you would consider not worth running?
A. I don't know that I would say it was not worth running. If someone beyond the scope of the Ford Motor Company is using a technique to evaluate the vehicle, whether or not it is good science or bad science, whether it's reliable or unreliable, I think people should be aware of how the vehicle performs if evaluate to that criteria.
Q. Now, can you tell us why at least from Ford's standpoint, the lawyers would be concerned about the fact that General Motors is meeting the Consumers Union test, that Nissan and Toyota are designing their vehicles to meet the Consumers Union test. Can you explain to us why, based on your experience at Ford, would the lawyers be pointing those kinds of things out to the engineers?
MR. PLATT: Object to the form of the question.
BY MR. TURNER:
Q. For lawsuits?
MR. PLATT: Object to the form of the question.
THE WITNESS: No, given that that sentence -- that paragraph is very specifically with respect to the Consumers Union test I would presume that the grapevine

0077

issue they are talking about there is that the lawyers are worried that from a competitive standpoint that the UN46 would not be competitive in the marketplace, for whatever that means, by reputation or by defending it against lawsuits, should it be disadvantaged in the Consumers Union

test versus its competitive set.

BY MR. TURNER:

Q. Then it goes on to say "I understand," they referring to the lawyers, "would be asking us", referring to the engineers, "to restrict to the P225 tire and make additional changes to increase confidence in the optional tires."

Now isn't it true, Mr. Baughman, well, first of all, let me ask you have you ever seen this document before?

A. Yes, I have. I saw it.

Q. When did you first see it?

A. I saw it last week as I was preparing for this deposition.

Q. Is that the first time?

A. That's the first time I've ever seen it.

Q. So when you were going on television and being quoted by media reporters about what Ford knew and when they knew it and what they did with air pressure and things of that nature, nobody at Ford ever showed you this document?

A. No one ever showed me that document.

0078

MR. TURNER: Let's take a break.

VIDEO TECHNICIAN: Off the record at 11:32 a.m.

(Recess for lunch.)

VIDEO TECHNICIAN: Back on the record at 12:26 p.m.

BY MR. TURNER:

Q. Mr. Baughman, was one of the reasons the lawyers were interjecting themselves into the process in September of 1989 because the Explorer in Arizona, when tested with 35 pounds of pressure in the tires in the J-turn, went up on two wheels?

MR. PLATT: Object to the form of the question, calls for pure speculation.

THE WITNESS: I don't -- I really couldn't speculate.

BY MR. TURNER:

Q. But as you recall Mr. Tandy, Mr. Tandy told you that at 35 pounds of pressure the Explorer in Arizona did not go up on two wheels?

A. He showed me evidence that it passed the test at 35/35, yes.

Q. Okay. Let's watch what we will mark as Exhibit Number 3. Which is Run 43 from the videotape testing in 1989 that was done in Arizona by Ford Motor Company. Before we look at Run 43 were you aware that the

0079

testing that Mr. Tandy was referring to was actually videotaped by Ford?

A. Yes, I was.

(Deposition Exhibit 3 was marked.)

BY MR. TURNER:

Q. And before today have you gone back to look at all of the videotape?

A. No, never.
Q. Have you asked anyone if that videotape was available for you to look at?
A. I knew the videotape was available. I did not ask to see it.
Q. Let's watch the run for just a second.
First of all, if you'll look on this particular sheet. And can you see this all right from where you are? And if you need to get up and come over here you can, but the camera is not on you right now.
A. As I understood it those placards were developed at some other point in time or was that at the actual time of the test?
VIDEO TECHNICIAN: We will have to mike him, Mr. Turner. Should we go off the record to do that?
MR. TURNER: Can he use mine?
VIDEO TECHNICIAN: Yeah, I guess.
BY MR. TURNER:

0080

Q. You were answering a question, Mr. Baughman, as you were to the video camera and your question I think was, were these placards made after the tests was run. Was that the question you were asking?
A. That was the question I was asking.
Q. And I can't answer your question. All I can tell you is that what you are about to see is exactly in the condition at least, that Ford Motor Company gave it to me, and I was

obviously not invited nor did I attend any of this testing. So I don't know exactly what the placards and the videotape material was done at the time. And so let's go back for just a second and look at this.

First of all, this is Run Number 43 up in the right hand corner; is that correct?

A. That's correct.

Q. And the vehicle is the UN46, which is the code name for the Explorer 2-door version; is that correct?

A. That is what is indicated, yes.

Q. And the weight is shown is 4917; is that correct?

A. The weight as shown is 4917.

Q. And the tire type is indicated special, did I read that correctly?

A. Yes, you did, it says special

Q. And then the tire psi is 35/35, correct?

A. That's correct.

0081

Q. And the tire size is the 235/75R15, correct?

A. I cannot read the aspect ratio very clearly. It looks like a 70 or 70 or 75, yes.

Q. Okay. I want you to assume for purposes of my questions when you correlate the test index provided by Ford with this videotape it actually is a 235/75R15 and it is an ATX version, can you assume that for me?

A. Yes, I can.

Q. And the steering input is shown as being 270 degrees; is

that correct?

A. Correct.

Q. And the vehicle speed is shown as being 55 miles per hour?

A. That's what's shown, yes.

Q. And the driver's initials are E, looks like a T and an S?

A. I agree.

Q. Now, let's take a moment to look at this particular test run.

Does this look like that the outriggers are preventing this vehicle from completely rolling over?

A. Yes, it does.

Q. And you would agree with me that at this particular roll angle the driver is clearly out of control of this vehicle?

A. Yes, clearly out of control.

Q. Now is this the first time today that you've ever seen this particular videotape?

0082

A. Yes, first time I've ever seen it.

Q. You can go back and sit down now.

Now let me ask you a couple of questions about 1989. If you can get your microphone back on.

A. All set.

Q. Because Mr. Platt made a point earlier that we need to talk about. And it's this concept of a prototype vehicle.

Obviously in 1989 there are no Explorers being sold to the public at that point in time; is that correct?

A. That is correct.

Q. And a prototype is a kind of a term of art at Ford Motor Company, right?
A. I don't know what you mean by term of art, but.
Q. Well, it has got a special meaning?
A. I think it's meaning at all manufacturers of vehicles is probably very similar. I don't think it's special at Ford Motor Company.
Q. Okay. Well, that's fair. In the automotive industry a prototype means that that is not necessarily the vehicle that is going to be sold to the public?
A. That is correct.
Q. It is the most current or it can be the most current version of what you intend to sell to the public?
A. Yes.
Q. But there may be changes made to it after a given time?

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A. That's correct. It may or may not be even the current level depending upon which prototype it is.
Q. Now at a given point in time, a prototype represents a current production level of design, it might be changed later and it might not, but a prototype at any given time is what the vehicle represents at that point in time?
A. That is correct.
Q. All right. Now a prototype ultimately at some point in time becomes a production level, right?
A. That is correct.
Q. Now, you were not involved in 1989 and 1990 determining

exactly what was a prototype and what was a production level Explorer, correct?

A. That is correct.

Q. You do know that after the testing in Arizona, one of which we watched on videotape a moment ago, there were some design recommendations made by the engineers at Ford who basically said we recommend making the following design changes to this vehicle. Do you recall that?

A. I have seen reference to those recommendations. I don't know that they were made before or after that particular test since you didn't let me know when that test was run. It was just Number 43.

Q. That's fair. And I don't know the specific date. The only information I was given by Ford was that these tests were

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run in June and July of 1989. So I can't give you the information you are looking for, but I'm certain if we filter back through some of the depositions of the other engineers that there are some very detailed records that might be able to piece that together for you. But you can assume for purposes of what we are talking about, that this is in 1989 in the months of June and July, okay?

A. All right.

Q. Now you were not involved in making the recommendations to redesign this vehicle after what we saw?

A. Not at all.

Q. And you were not involved in the decision-making as to

whether to follow the recommendations of the Ford engineers or not?

A. I was not involved in the process.

Q. Now, let's move for a minute to --

MR. PLATT: Tab, let me, this is belated. But I just want to be sure it's part of the record. The information I have suggests to me that this is not an ATX tire and I think you represented that it was. And I guess the record will turn out to be whatever it is. But the information that I have is that it is not an ATX tire.

MR. TURNER: And your information is based upon what?

MR. PLATT: It is based upon the analysis that

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was put together by Don Tandy of all the J-turn CU tests that were done that was given to NHTSA.

MR. TURNER: I can't answer your question. All I can tell you is that we were given an index of the testing and it's my understanding that the only tires that were used that were the P235/75R15 size, at least according to what we were told were the Firestone ATX tires unless you have some.

MR. PLATT: That is not true. There were a number of other tires that were tested. The FR480 was tested as well as the ATX as there were some tires that are simply described as special. I'm not sure what the characteristics of them were, but they are clearly

distinguished in the index that you got as different than the ATX.

MR. TURNER: I don't know the answer to your question, Warren. I'm just simply responding based upon the information that I was given, which is that yes, there were some FR480s used, but it's my understanding according to Ford's answers to discovery in prior cases that the FR480 tires were all P225 tires. Do you have some information to the contrary?

MR. PLATT: I have got P235 70 aspect 480s tested.

BY MR. TURNER:

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Q. Well, let's go back and let me ask the question in a different manner then. The video we watched a while ago, assuming Mr. Platt is correct, that tire was a P235 tire, it was not a P225 tire; is that correct?

A. The placard said it was a P235 tire.

Q. Okay. And what we would have to go back and look at is to determine whether that was an ATX tire, a FR480 tire, a Firehawk tire or some other kind of 235 tire; is that correct?

A. Correct. And based on what I saw there I would question what the aspect ratio was, whether it was a 70 or a 75.

Q. Okay. Because you couldn't read whether that was zero or a five?

A. That is correct.

15 Q. All right. But in any event the test that we watched at 35
16 pounds of pressure what happened to the vehicle?
17 A. The vehicle lifted two wheels.
18 Q. Now did Ford Motor Company tell the consuming public when
19 it began to sell Explorers that it was okay to use a
20 P235/75R15 tire on the Explorer?
21 A. By definition since we built them in that configuration, I
22 presume that we told customers that it was okay to replace
23 that tire with a similar or same tire. Was that the
24 essence of your question or.
25 Q. No, I was just asking was it okay for a consumer to drive
0087
1 the Explorer once you began to sell it with a 235/75R15 on
2 it?
3 A. By the fact we put it into production it met all of our
4 internal requirements.
5 Q. Regardless of whether it was a Firestone tire, a Goodyear
6 tire, a Michelin tire, a Cooper tire, so long as it was the
7 right size and so long as you followed Ford's
8 recommendation on air pressure it was okay to drive it with
9 any of the same size tires?
10 MR. PLATT: Objection.
11 THE WITNESS: I don't know that. I can't answer
12 that from any knowledge that I have.
13 BY MR. TURNER:
14 Q. Well, if somebody came up to you on the street and said,
15 now Mr. Baughman, you are an engineer at Ford Motor Company

and I bought this Explorer and it's got Firestone P235/75R15 tires on it and they are wearing out on me, and I can't get a Firestone tire. Is it okay for me to put a Michelin, same size, same air pressure on it, what would your answer be?

A. Generally I would say it would be fine to put another tire of the same size at the same inflation pressure.

Q. Regardless of tread pattern?

A. I would say generally regardless of tread pattern.

Q. So if it was an all-terrain tire you could put an

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all-season tire on it so long as it was the same size and same air pressure?

A. Generally that has been the convention within the industry for the 29 years that I've worked for the automobile businesses.

Q. And the Explorer was designed, I take it, to make sure that it was safe whether you used a Firestone tire, a Michelin tire, a Goodyear tire or a Cooper tire, so long as you used the same size and the same air pressure?

A. I think our statement would be if you were to use tires of similar quality to the OEM tire. I would not in the description of the question that you just said, put Cooper in that category.

Q. You would not put Cooper in that category?

A. No, I would say of the Firestones, the Michelins, the Goodyears, that those are OEM level type tires. And you

17 know, Continental and General's and those people, but I
18 would not have some of the Siberling or the Coopers or the
19 Daytons or some of the other tires that are around being of
20 the same quality level as an OE. I would not make a
21 recommendation to someone to put on what is really a second
22 class kind of tire as opposed to what's used from an
23 OE standard.
24 Q. Can you give us an example of what other kinds of tires,
25 from a company standpoint, you would considerate as an
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1 engineer at Ford to be second class tires?
2 A. I would say Siberlings and Daytons, and I'm not certainly a
3 tire expert. But I don't consider some of those
4 off-branded tires, some of which at one point represented a
5 tire company in some cases which have now been acquired by
6 some of the larger tire companies, to have the same quality
7 control standards and treadwear life and robustness to all
8 the things a tires see in the real world, than the tires
9 are developed specifically by the major OEM suppliers. I
10 would certainly be more, I would more readily accept a tire
11 that had been developed for a GM sport utility vehicle on a
12 Ford vehicle, and I'm sure my GM counterparts would feel
13 the same way because those tires are all subjected to very
14 vigorous test procedures. So I have OE equipment tires in
15 one category, then I have aftermarket tires, particularly
16 off brand aftermarket tires, in a different category.
17 Q. New going back to my earlier question. Let me narrow it

down like you asked me to. Let's limit it for purposes of my questions to Firestone, Goodyear and Michelin. It would be safe in your view for an owner of an Explorer, so long as they used the same size and the same air pressure, it would be safe for that consumer to replace a Firestone tire with say a Michelin or a Goodyear?

A. I think my recommendation would be if you were only replacing one tire of the vehicle set or perhaps two tires

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of the vehicle set I would recommend you buy the same Firestone tire. If you intend to replace all four of the road wheel -- of the road tires, it would be fine to go to a Michelin or a Goodyear kind of equivalent size tire at that inflation pressure.

Q. And so long as you do what you just said you would expect the vehicle based upon your experience with the design parameters at Ford Motor Company, you would expect it to perform safely regardless of whether it's a Michelin, a Firestone or a Goodyear?

A. I think it would perform safely. The customer who had substituted a different brand of tire might notice subtle differences in the ride characteristics of the vehicle or the dry traction or the wet traction or the snow traction of the tire, but from a safety perspective the vehicle should perform equivalently with any of those OE level kinds of tires on it.

Q. Do you know if Ford Motor Company provides any information

to consumers along the lines of what you just told me about
the difference between second class tires and OEM tires?
A. Not that I'm aware of. I don't know that I have ever seen
any document that would suggest, you asked me as to whether
or not I would make a personal recommendation what I gave
you was a personal answer that I think some tires in the
aftermarket are better than others.

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Q. What is it about your experience that tells you that a
Cooper tire, for instance, is a second class tire?
A. I've had experience with some of these other tire
manufacturers with respect to parameters of the tire that
involved the specifications that we specify for OE level
equipment with respect to concentricity, radial force
variation, engineering parameters of the tire that we use,
and obviously interface with the vehicle. And it is my
experience that many of those kind of second class
aftermarket tire manufacturers do not have very good
control over the manufacturing variables and consequently
they are unable to meet those requirements.
Q. Now let's change directions for just a minute. And I want
to ask you some questions about tires, okay? All right
with you?
A. Certainly.
Q. One of the things that we are here to talk about is
obviously the tires that were created by Firestone,
Bridgestone/Firestone Inc. I think is the formal way to

call it for use on the Explorer which, during certain times was an ATX II and certain times was a Wilderness AT tire, is that correct?
A. Correct.
Q. Is it true that Firestone and Ford were involved in a partnership for purposes of creating this tire? And by

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this tire I'm talking about the ATX II and the Wilderness.
MR. PLATT: Object to the form of the question. Are you using partnership in a legal sense or just as a?
MR. TURNER: Well, no, I wouldn't expect him to know all the definitions of, the legal definitions of a partnership.
MR. PLATT: That is the reason I objected.
THE WITNESS: I would say it was a cooperative effort between Firestone and Ford to develop the tire. We provided the very high level vehicle attributes where the tire interfaced with the vehicle. And it was Firestone's responsibility is to do the detailed design work and make the proper selection of the materials and construction techniques, etc. to provide what would eventually was the tire that would interface with the vehicle and go into production.
Q. The reason that I asked that is because a Mr. Vines, do you know Mr. Vines, Jason Vines?
A. I certainly do.
Q. He was quoted in, and this comes from an Associated Press

article dated October 12 as saying, as calling "Firestone, our supplier partner has been waving red flags about tire pressure and vehicle design, Vines said, we're incredibly disappointed with what they've done." They being Firestone.

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Would you consider having the experience you've had at Ford would you consider Firestone to have been your partner, not in a legal context, but your partner in the design and development of these tires?

A. Yes, I have always considered Firestone and our other tire manufacturers to be a partner in the design and development of vehicles.

Q. Did Ford Motor Company provide certain specifications for the Wilderness and the ATX tire to Firestone?

A. Yes, we did.

Q. Did you tell them how you wanted it to look from an appearance standpoint?

A. I have no personal knowledge as to whether or not we gave them any appearance-related kinds of input. I do know that we provided them with other engineering attributes that we wanted from the tire such as rolling resistance and treadwear capabilities, load carrying capacity, bounce frequencies, engineering attributes and I have no, and I only know that because I have seen the specification sheets that were really the, not the contract, but were the agreement between Ford and Firestone signed by both. I am

not aware of any specific appearance-related requests that Ford may have ever had.

Q. Needless to say, at some point in time you became familiar with the fact that Ford Motor Company did provide some

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forms of specifications to Firestone regarding the tires?

A. That is correct.

Q. You were not personally involved in that, but you became aware of it?

A. Yes, I have done many vehicle programs over my career at Ford and consequently when I went back and looked at the documents that describe the development of the original UN46 and the tire selection process and the evaluations that they went through I saw nothing that appeared surprising based on my 29 years of vehicle development experience.

Q. And you told me earlier that sometime in 1998 time frame when you became involved with the Explorer, this situation in Saudi Arabia arose; is that correct?

A. That is correct.

Q. And you became involved in that situation in Saudi Arabia; is that correct?

A. That is correct.

Q. And you can correct me if I'm wrong, but to kind of summarize, is it fair to say that when you became aware of the situation, the situation included issues about the tires, the Firestone tires, the Wilderness tires on those

23 vehicles in Saudi Arabia were failing?
24 A. We were getting reports of various failures including tire
25 separations and reports of subsequent rollover accidents.
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1 I found that situation in those reports to be very unusual.
2 My experience with tires is that a tire separation event is
3 usually pretty rare. You know, a tire blowout is not
4 necessarily a rare event, but tire separations are a fairly
5 rare event based on my vehicle development and tire
6 knowledge over the last 29 years. So I was startled by the
7 fact that there was a large number of reports of tread
8 separations on a particular tire which happened to be the
9 Firestone tire in a particular area which happened to be
10 Saudi Arabia.
11 Q. Explain to me what you mean by rare.
12 A. Certainly tires can fail, tires do fail for all kinds of
13 reasons. The tire maintenance-related issues, tire repair
14 procedures and the adequacy of the repair. There are
15 certainly other customer factors such as, you know,
16 sustained underinflation during operation, say in an
17 off-road condition, or failure to reinflate the tires when
18 people go back on the road. As well as peculiar high speed
19 operation that could cause a tire to fail.
20 My experience base would tell me that when you
21 did a Praedo analysis of tire failures of a given size or
22 type of tire, what you would normal normally see is tires
23 being replaced usually for uneven wear or unusual wear as

24 the most predominant factor, followed usually by blowouts,
25 followed by usually other and tread separations are
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1 generally buried somewhere in the other. So generally the
2 tread separations are not a significant factor in why tires
3 are replaced in any given market situation. And what was
4 unusual to me was even though we had no firm data what was
5 going on, we were getting at least anecdotally, as many
6 tread separations as we were blowouts and that's what
7 caused my attention.
8 Q. Can you tell me how it came to your attention?
9 A. It came to my attention through what is our normal process
10 for dealing with such problems. I'm responsible for
11 managing on a week-by-week, month-by-month basis, a system
12 within Ford which is called the CCRG, which is Critical
13 Concerns Review Group. And I specifically have a staff of
14 people that report directly to me who help manage that
15 process in conjunction with the people from the Automotive
16 Safety Office and the Office of General Counsel. And one
17 of the people who is a Ford representative, who watches
18 over the GCC market opened a concern in the CCRG group
19 associated with those failures.
20 Subsequently we learned that there had actually
21 been activity going on prior to that maybe at really two
22 different levels. There was some knowledge within the
23 worldwide export group that they had been having tire
24 issues with Firestone, that was unknown to myself or the

25 CCRG group prior to that CCRG item being opened, but even

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1 more interesting there was a period of time even before
2 that, of almost a year where one of our dealers in Saudi
3 Arabia had been reporting directly to Firestone/Bridgestone
4 issues with the tires that even our people who were
5 responsible for looking out for that portion of the world
6 were aware of. So there was kind of a, there was a
7 dealer/Firestone awareness that took place for a year and
8 then there was three or four months, perhaps five months of
9 local market knowledge including Ford, and then it really
10 didn't get to Dearborn until after almost a year and a half
11 had gone by which is really a shameful.
12 Q. So this CCRG group, was this something that was
13 specifically created in 1998 or is this a group that had
14 existed for quite sometime?
15 A. It has existed since the day I walked into the Ford Motor
16 Company in 1971.
17 Q. All right. You were a member of this group?
18 A. I'm not technically a member of this group. The CCRG group
19 really is the working level people who try to do the
20 analysis and establish root cause, etc. for potential
21 safety-related issues that exist on products that we have
22 produced. They work directly for me and I get a weekly
23 update as to what activities are going on, what items were
24 closed, what items were opened, what items may require my
25 follow-up to make sure they are resolved in a timely event.

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The output of the CCRG, in general, is either to close an issue or to recommend that we go forward with some kind of a field action. And I am a member of the group that recommendation is presented to, and that's really the activity level at which I participate, although I'm actively involved in monitoring the group of a CCRG on a weekly basis.

Q. Did the CCRG group, did that include representatives from the Automotive Safety Office?

A. Yes, it does.

Q. Did it include lawyers from the Office of General Counsel?

A. Yes, I have two lawyers from the Office of General Counsel assigned to my staff and one of the two of them is always present at the meeting.

Q. Did it include other engineers?

A. Yes, the engineers are generally brought into the process as they are required on a subject matter basis. They do not sit in full attendance for the meeting. There is kind of a standing membership of the meeting. And then the engineers who have issues come in, they are given a timetable during the agenda for which they are to be there and they come in and update the group, the working group as to what's going on.

Q. Were you the highest ranking person in the meetings in 1998?

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A. Are you asking the question about the CCRG?
Q. Yes.
A. I do not attend, nor did I attend the CCRG as a routine member. I would go on, kind of on an exception basis perhaps once every several months, to monitor the progress of the group in dispositioning issues, but it was more of a feedback mechanism as opposed to my participation participating in the decision process. But as a general rule I did not attend those meetings.
Q. Were there any other groups of individuals like the Automotive Safety Office, engineers, the Office of General Counsel that routinely attended those meetings?
A. Yes, there are people from our customer service group would attend those meetings and they would use it as an early warning system should they need to start a parts procurement action to protect against a potential field action. But when the CCRG got to the point where they said we think we understand the problem, we think we need to go forward with a recommendation to management, then they would schedule what is called a technical review with myself and other members of the party -- of this process. Some of the members of those technical review are the same people from the Automotive Safety Office and the Office of General Counsel and our Automotive Components Service Division Group, and then others are unique to that process

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as well.

Q. So Automotive Safety, the lawyers from the Office of General Counsel, engineers on as needed basis, and then the people or representatives from the Customer Service Department?

A. The people who are my direct staff members are permanent members of the CCRG and they are engineers by training.

Q. Now how does information and how did information come to the attention of the CCRG group in 1998? In other words, what are the avenues available to the CCRG for them to learn of problems like Saudi Arabia.

A. Generally we, the Ford Motor Company, monitor all of our potential avenues of communication with our customers and our dealers routinely looking for safety-related issues. This one because it came in from Saudi Arabia was quite unusual because it we had no early indication of anything going on. That would not normally happen in the United States, Mexico or Canada because dealers would submit issues to the company on a regular basis. The fact that about 18 months went by before the company in Dearborn was even aware an issue was going on was quite unusual. That is not the normal process for our problem system. We are usually aware, usually within sometimes days and sometimes weeks of an issue.

Q. So one way the CCRG group would learn about a problem is

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through its dealers?

A. We monitor all of the various reporting mechanisms, whether

it be a service engineer in the field, a dealer report, a customer call in to our customer hotline, any of those we monitor very carefully looking for an issue. For example, it happens to be that Thursday is the day that the Truck CCRG group meets. If there had been a fire on a vehicle somewhere in the United States on Monday I can assure it would have been walked into the CCRG meeting this morning. It is very much a real time system. So the fact that we did not learn of the issues of tire failures in Saudi Arabia until, as I say, almost 18 months after they began was very, very unusual for our system.

Q. So the system could learn about potential problems out in the field from dealers, right?

A. That's correct.

Q. You could learn from customers?

A. That's correct.

Q. Customers being people who complained to Ford?

A. Um-hum.

Q. That's one way?

A. That is one way.

Q. I presume they could learn of potential problems through lawsuits?

A. We, the CCRG group usually has a linkage with lawsuits. It

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is not a primary input into the CCRG process. If we spot an issue going on in the field we always ask the question do we have any lawsuits alleging the same defect. Just

because a lawsuit exists does not automatically open a CCRG issue.

Q. But lawsuits are available for CCRG to know about. It doesn't mean they are going to do anything, but they have they would have access to that information?

A. Because we have representatives of the OGC serving on the CCRG any issue if somebody at a cocktail party mentioned to me an issue I could ask them do we have any other lawsuits on this issue. And they would go and discover whether or not any lawsuits existed and what the circumstances were and provide feedback.

Q. Is another method of learning about problems through the warranty claims?

A. Yes, absolutely.

Q. Is another method, or is there a method for learning about potential problems from your various suppliers of component parts?

A. Yes. We require our suppliers to provide us in process data on certain parameters. We also have a system where we monitor rejects at the assembly plant level. And on a monthly basis by supplier, by shipping location, monitor their parts per million defect rate and look for any

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unusual trends in that process as well.

Q. And with regard to the system that you have then working with suppliers, did Ford back in 1998 have people assigned, for instance, to work with Firestone quality people in the

area of trucks?
A. I'm not so sure I fully understand your question. But we have an area of Ford that is called Supplier Technical Assistance. And those Supplier Technical Assistance folks are assigned, as I understand it, by supplier. And generally cover all of that supplier's sites. And they are available if the supplier requests technical assistance because they are having an issue. Or if in monitoring reject rates of incoming supplier quality at the assembly plant, if that system triggers an issue or a concern the STA people are then asked to visit that supplier site. But they do not routinely visit that site just to see what's going on. They will come if requested or they will come if any of the early warning systems give us an indication that they are having a high reject rate at our assembly plants.
Q. One of the things that I think we've all learned through this process is that one of the items on an Explorer or any vehicle, for that matter, that comes from Ford Motor Company that is not warranted by Ford Motor Company is the tire; is that correct?
A. That is correct.

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Q. Firestone in the context of the Explorer provided the warranty for the tires; is that right?
A. That is absolutely correct.
Q. Now, if Ford provided a warranty for a tire then those kinds of claims would have fallen under the typical

warranty review process at Ford, correct?
A. Yes, they would have.
Q. Now, you knew at the time that you joined that tires were not warranted by Ford, correct?
A. Correct.
Q. Was there a method in place in 1998 when you joined the Explorer along with the other truck programs, was there a system in place where Ford would from time to time communicate with Firestone about how tires were performing in the field?
A. Actually prior to 1998 at numerous times in my career I have requested either all of my tire suppliers or on a specific model line or a specific size of tire or a specific manufacturer of a tire to gather up their warranty adjustment data over some period of time, analyze it, and bring the results of that analysis to me so that I could review it. And it is having seen numerous reports over many, many years of that size -- of that kind of analysis that my expectation would be, as I described earlier that issues of uneven wear, unusual wear, blowouts and other

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kind of related issues is normally what you see when you see that analysis.
Every once in a while you may see an issue of road hazards become more predominant than their expectation would be, and in that case you have to start asking the questions about the robustness of the tread compounds and

other things to road hazards. And I have had other issues on tires and that analysis technique has usually led us to what we needed to do to resolve an issue, whether it was a unusual wear or premature wear, a cupped wear, a road hazard resistance issue. This is the first time in my career that I've seen evidence of a predominant tread separation issue.

Had we had the warranty information we might have been able to spot it, but unfortunately at least within the universe, and I have looked at Firestones adjustment data for this tire over time, and I must tell you that my eyes would have not spotted it looking at just the adjustments which is, you know, tire replacement or exchanges for all conditions.

Q. Going back to my question for just a minute. It is really more a general question I'm trying to get a feel for. Did Ford have in place when you came into the Explorer area in 1998, did Ford have a system where they communicated with Firestone to simply ask them, look, we are putting your

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tires on our trucks and we would like to periodically know how these tires are holding up out in the real world, could you please provide us with what information you have available. Was there a system in place when you joined the truck operations in '98 for that kind of information gathering?

A. I would only struggle with how formal the system would be.

I would know exactly who to go to in Firestone's organization to request that data. The thing that would cause me to request that data was spotting some issue, either in the CCRG system or through some other reporting mechanism that said hey, I've got a problem with a Firestone tire on an Explorer. The first question I would ask would be to contact Firestone's local salespeople and ask them to take a look at the adjustment data, to do an analysis and tell me whether or not there was anything unusual in it. We had no signs prior to the receiving the reports from Saudi Arabia of anything going on anywhere. The best of my knowledge there were no reports, either anecdotally or otherwise that had come into the system.

Q. Either through the dealers, correct?

A. Correct.

Q. Or through customers?

A. Or through customers.

Q. Or through lawsuits?

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A. Lawsuits, because the other systems didn't suggest there was anything going on, I never asked the lawsuit question about Firestone tires until they opened the, NHTSA opened the defect investigation in early May.

Q. Do you know if anybody did before you took over in 1998?

A. I would not know.

Q. At any point did you look back to see just how many combination Firestone tire and Explorer rollover crashes

had resulted in a lawsuit as of say 1999?
A. The association of Explorer rollovers with Firestone tires really did not come into our thinking in a major way, particularly in the United States, until about February of last year February of --
Q. '99?
A. No, February of 2000, when a TV station in Houston ran the article that said they were having, they were seeing rashes of failures on ATXs. That was the first time tire failures on Explorer vehicles was in my vocabulary with respect to the United States, Canada or Mexico.
Q. So it was ahead of all the trucks in 1999 the first time you ever became involved or became aware of the number of lawsuits involving people killed or injured involving the combination of a Firestone tire and an Explorer rollover was in February of 2000?
A. In February of 2000 we learned of the activity of the TV

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station down in Texas. I actually didn't ask the question about the number of lawsuits until NHTSA opened the defect investigation in May.
Q. Now it's fair for me to assume that the Office of General Counsel had that information. What you are telling me is that nobody had brought it to your attention?
A. That is correct.
Q. Do you know if anybody had ever brought a number of lawsuits to the attention of your predecessor before 1998?

A. I really don't have any idea. My suspicion would be that they would not have.

Q. And who was your predecessor?

A. His name is Terald Dejonckheere, D-e-j-o-n-c-k-h-e-e-r-e. And that's Terald, T-e-r-a-l-d. He goes by Terry.

Q. At some point, Mr. Baughman, did you learn that the first lawsuit involving a combination of an ATX tread separation and an Explorer rollover had actually occurred as far as back as 1991 and 1992?

A. In preparation -- in getting ready for preparation to review our investigation with the Congressional staffs in what was the late August or maybe early September time frame, John Mellen of the Office of General Counsel showed me a document that said the number of cases that had been opened, rollover tire-related cases opened against the Ford Motor Company over time, and I remember the first one as

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being a 1993 lawsuit, not a 1991. But maybe his data was when the case was opened as opposed to when the event occurred.

Q. Now, just so everybody kind of understands how the process works when a company like Ford doesn't warranty the tires. If I own a Ford truck and my tire tread separates on me and I don't have a crash and I get out of my truck and I change my tire and I take my tire to the Ford dealership, what would the Ford dealership in the ordinary course of business tell me if I wanted my tire replaced?

A. We would, the Ford dealership would tell you that we Ford do not warrant the tire and that you should approach the tire manufacturer for some kind of an adjustment.
Q. Were your dealers instructed that when people come in with tire-related problems like that, that although you don't warrant the tire, you are not going to financially replace it, that the dealer is supposed to type it into the computer system so that Ford knows that somebody has come in and complained about that?
A. I don't know of any communications to the dealers that would have instructed them to do that. And in fact, I know that data does not exist so I presume that they were never instructed to type that information in.
Q. Now we've seen a number of reports that have been provided through the computer databases that Ford has provided to us

0110

that represents information dealers provided, your dealers provided to Ford relating to vibration complaints from customers?
A. I presume you are referring to our CQIS system.
Q. See there is something called a CQIS?
A. Yeah, that's CQIS. Yes, that system is the dealers reporting observations that they make on a vehicle that are unusual by any way, in any sense. They may involve a warranty repair or they may not involve a warranty repair. So our dealers, just because they don't warrant the tires and they sent the customer down the street to the Firestone

dealer does not mean that they don't enter their observations into our CQIS system.

Q. And this is a computer system, right?

A. Yes, it is.

Q. And that means the dealer enters into the system and makes it available to some group within Ford Motor Company in Detroit?

A. There are people, who as part of their normal responsibilities, look at that database continually and look for any safety-related issues or any consistent trend in reports coming in on CQIS.

Q. Okay. Let me show you an example of, I think, one of these systems, I'll mark it as Exhibit Number 4.

And Warren, this doesn't really have a Bates

0111

number attached to it like you would ordinarily have. It says 848 at the bottom. This document actually came from Firestone.

MR. PLATT: Okay.

MR. TURNER: And I've never seen this document from Ford before.

(Deposition Exhibit 4 was marked.)

MR. PLATT: There is lots and lots and lots of those.

BY MR. TURNER:

Q. Is that an example?

A. Yes, of a CQIS report, yes.

Q. Okay. Let's put it up here so everybody understands what this particular kind of thing looks like. First of all up at the top it has got the CQIS Technical Service Detail, right?
A. Um-hum.
Q. This kind of report is generated at a dealership and it's by computer sent to somebody in the customer service division at Ford?
A. That's correct.
Q. And it tells the symptom and then what does that article number mean up there?
A. Well, it seems to be referencing a SSM number, if I'm reading it correctly, SSM is that what it says, yeah,

0112

SSM05195. SSM is an acronym for special service message within the Ford Motor Company. So we either told them to go out and look for this condition or whatever that SSM said. Without seeing the SSM itself, it's hard to guess what the reference was to.
Q. Okay. And this particular one is dated October of 1996 and this one happens to reference, is telling, I guess it's telling your dealers to replace tires, right? Can you see that okay? Probably not.
A. Barely.
Q. It says "replace tires built between 9/3 and 10/3/96 coded W2. Some Firestone P235 tires may exhibit a high frequency vibration at 65 to 75 miles per hour. This issue is a

14 supplier quality issue with the Firestone Wilderness AT
15 P235 tires built at their Wilson plant."
16 A. Um-hum.
17 Q. "And can be identified by the DOT serial number on the
18 inside wall of the tire. The first two characters of the
19 serial number represent the plant code. Wilson tires can
20 be identified as a W2. Vehicles with suspect tires were
21 built between September 3, 1996 and October 3 of 1996.
22 These tires should be replaced with like tires."
23 Did I read that correctly?
24 A. Yes, you did.
25 Q. Now, my question about this particular document is this
0113
1 document seems to me to be saying somebody in the Customer
2 Service Division at Ford is telling somebody at a Ford
3 dealership someplace in the country, or all across the
4 country that it's okay for Ford to be replacing these
5 tires. How can that be if you don't warranty the tires?
6 A. Well, I can't answer that question. This document is very
7 unusual because usually a CQIS report is a dealer to Ford
8 Dearborn communication. And yet the words that you read
9 here are more a Dearborn communication to the dealer. So
10 if the top of the document said that it was a special
11 service message I would understand the text of the
12 document, but it seems to be upside down to me. This is a
13 communication that should be going from Dearborn to the
14 dealers and it's on a Ford piece of paper that is the

other, which is information coming in, as opposed to information going out.

Q. And the other thing that I noted about this particular document is it's talking about knowledge that Ford people at Ford in Detroit had about customers complaining about high frequency vibrations in the tires. How would Ford, if Ford is not providing a warranty for their tires, how would Ford know about customers complaining about their tires?

A. Oh, it's not unusual at all for somebody who feels a ride disturbance in their vehicle, a high frequency vibration or something to -- it's normal course of business that they

0114

would approach the Ford dealership first because it could easily be a vehicle sensitivity or it could be an improper tire balance since we balance the tires at the plant. It would only be if dealer said that it isn't a tire vibration or a vehicle interface issue, what is really going on is that it's something wrong with the tire, would we send them down the street to Firestone. So it's not unusual at all that we would know of issues like that, because really most people go to the dealership they bought the vehicle from first. It is only when they need the tire replacement to resolve their issue and Ford doesn't warrant the tire that we'd send them down the street. We would never send them down the street for a vehicle vibration issue due to a tire balance. We balance the tires at our assembly plant.

Q. Could a symptom of tread separation be a vibration in the

16 tire?
17 A. It's possible.
18 Q. Are your dealers, and were your dealers instructed that if
19 customers with Explorers or any other vehicle came into
20 them complaining of violations and they checked, they being
21 the dealers, checked the vehicle and could not find nothing
22 to explain the vibration were they taught to then look at
23 the tires?
24 A. I would not think that our service technicians at a Ford
25 dealership would be qualified to inspect a tire other than
0115
1 for just the most obvious signs of something being wrong
2 with it, which would more likely be cupped tire wear or
3 something else that would cause a vehicle vibration due to
4 improper wheel and tire balance. I would not expect a
5 service technician to be able to inspect a tire looking for
6 some other evidence of a partial or tread separation. He
7 might notice tire chunking, he might notice some unusual
8 wear characteristics, he most certainly would probably
9 notice a bruise or a bulge in the side of the tire, but I
10 wouldn't say in general that our service technicians at the
11 Ford dealer would be qualified to inspect a tire.
12 Q. Well, did you instruct your people working at dealerships
13 that when people came in with vibration problems in their
14 car and nothing could be found in the car to explain it,
15 that your dealers needed to send the people immediately to
16 Firestone or whatever other tire dealer there was?

A. I really can't answer that question. I don't know what was contained in that special service message that was referenced at the top of the CQIS report.
Q. Did anyone at Ford to your knowledge ever advise the people working at Firestone who were providing the Wilderness tires for the Explorer and the ATX tires for the Explorer, that customers were coming in complaining about vibrations in their vehicles and they couldn't find anything to explain in the vehicles so it might be in the tire?

0116

A. I have no firsthand knowledge that Firestone was ever told that. I don't recall ever seeing any, I don't recall ever seeing any documentation of any correspondence between Ford and Firestone.
Q. Since all of this tire-related and Explorer-related rollover stuff has become a hot issue of late, have you had anybody go back to look at all of the customer complaints to see whether customers did, in fact, come in between 1991 and today at dealerships across the country, Ford dealerships, complaining about vibrations that were unexplained by your dealerships?
A. Yes. We went back in preparation for the Congressional hearings and took all of the sources of data that we routinely monitor with respect to looking for identification of a concern, including the lawsuits. And looked at each one of those categories individually, and also we summed them by model year, so that we could look

and see. And our conclusion was even in the aggregate of all those reporting systems we would still not have noticed that there was a tire separation problem going on on Firestone tires on Explorers.

Q. Okay. Now I'm going to have to just as a formality object to the answer as not being responsive. And I understand what you told me and we are going to get to that in a second, but I don't want you to be offended by the face I'm

0117

going to go back and ask you the same question.

A. Okay.

MR. PLATT: The reason he is saying that he didn't like your answer even though it was completely responsive.

MR. TURNER: I would have liked his answer had it been responsive to my question.

MR. PLATT: I thought it was.

MR. TURNER: I don't think it was.

THE WITNESS: Okay. Try again.

BY MR. TURNER:

Q. My question was, have you since this Firestone/Ford Explorer tread separation/rollover situation become a hot topic, have you had anybody go back to look at all of the customer complaints through your dealer systems to see whether anybody ever complained about vibrations in the Explorer vehicles?

A. I thought I guess, I answered your question. I mean,

that's what we did when we went back and looked at each one of those reporting systems.

Q. Did your CQIS system show that there were any customers complaining about vibrations in vehicles equipped with Firestone ATX or Wilderness AT tires?

A. I believe there were reports of people complaining of high speed vibrations. There were also people complaining of

0118

evidence of tires with unusual bulges on them. Okay. There was individual verbatim reports that clearly suggested that there was something not right about Firestone P235, ATX and Wilderness tires. But I can also tell you that we also went back and looked at verbatims from other tires in other points in time to say should we have reacted to the fact that there were any reports of tire issues and when you go back and you look at Goodyear tires on Explorers in the same period of time, there were reports that were coming in unusual wear, early wear-out, whatever. And so the presence of just a report did not of itself seem to be a differentiator that would lead us that we had a problem with Firestone tires versus others. And we looked at models other than Explorers. And we get CQIS reports on tires as a general course of business. And high speed vibration could easily be just a tire that was improperly balanced at the assembly plant.

Q. Right. You wouldn't know that unless that tire ended up creating some sort of a problem like a lawsuit, right?

A. Let me try this. Parts that are warranted by the Ford Motor Company, when replaced at a dealership, are routinely sample sampled and the parts brought back to Dearborn for analysis. Because we Ford don't warrant tires we don't bring any tires back. And so therefore, tires are not part of our routine engineering follow-up and analysis process.

0119

We believe, and I believe to this day, it is still true that Firestone samples tires that are being replaced at Firestone dealerships and Firestone outlets as a routine course of business in a system that very much parallels what we do bringing components back for analysis in our warranty system.

Q. I understand that. Because what you are basically telling me is that since the warranty was Firestone's problem, they were the ones that were supposed to be looking at the failed tires?

A. Since their agents made the decision to replace the tire, their agent should provide whatever Firestone requires of documentation, you know, whether that's in physical hardware or in written reports back to them.

Q. Well, did anybody at Ford ever pick the phone up and call Firestone on an annual basis and say, hey guys, can you tell me what kind of record your tires are providing out in the real world? For instance, are people coming in complaining about the treads coming apart or blowouts or road hazards? Did anybody at Ford ever do that or did you

21 guys just pretty much wait for Firestone to call you?
22 A. Could I ask you to frame your question just a little more
23 tightly?
24 Q. I'll try to. What part of it do you have a problem with?
25 A. Many times over my career I have asked Firestone and other
0120
1 tire manufacturers to gather up their data and bring it and
2 analyze it and bring it and to show it to me as the chief
3 engineer of a vehicle line program, or me as the chassis
4 manager, or me as the engineering director. It was, it
5 would not necessarily be a routine course of business that
6 every June 1 they had to show up with their data, if that's
7 the scope of your question.
8 Q. Well, I'm just trying to get an idea because Ford buys
9 these tires from Firestone and they put them on their car
10 and they sell them to a consumer. And I understand that
11 Ford doesn't warrant, doesn't provide a warranty for the
12 tire, that that's Firestone's responsibility. But it would
13 seem to me, and maybe not being in the automotive industry
14 I don't understand the process well enough, but it would
15 seem to me that every once in a while somebody at Ford
16 would ask Firestone whether your tires are okay. That just
17 doesn't happen?
18 A. I wouldn't say it happens as a routine course of business.
19 Q. So you pretty much relied upon, you being Ford, relied upon
20 Firestone that if they saw a red flag go up, a red flag
21 meaning problems that were resulting in people dying and

people being injured you relied upon them to tell you?
MR. WOODROW: Object to the form.
THE WITNESS: Yes, I would say so for two
reasons. One is because the tire manufacturers warrant the
0121
tires. And secondly, the tire manufacturers must live on
their brand reputation as well. So they have two reasons
to be proactive in the analysis of how their tires are
performing in the field.
BY MR. TURNER:
Q. Is that how you treat all of your other suppliers, for
instance, let's use antilock brake systems. Somebody
supplies Ford Motor Company with antilock brake system for
your vehicle, correct?
A. That is correct.
Q. Do you rely upon the antilock brake system people to tell
you when their systems are failing and how they are
performing?
A. No, because we warrant those components. We have access to
how their components are performing in our warranty
database and we routinely sample any parts that are
replaced and bring them back. If we brought back an
antilock modulator or an antilock sensor we would provide
those parts to the supplier for him to do analysis as to
with respect to what root cause caused the part to be
replaced in the field.
Q. All right. Let's kind of move backwards just a second.

And let me go back to I was kind of creating a table for this CCRG. If I'm understanding you correctly, Mr. Baughman, you've got all of these available avenues

0122

like dealers and customers and lawsuits and warranty claims and suppliers, the monitoring of rejects and this supplier technical assistance group. Those people provide information to the CCRG?

A. Normally the supplier technical assistance people are not providing data directly. If they, if we had a high parts per million reject rate at an assembly plant the STA people would not come to the CCRG. They would go into action independently and visit the supplier's plant to make sure that all of his quality operating system processes were correct.

Q. Let's go up to the board for just a second and let me see if I've got this right. First of all, we've got the CCRG you said it was since 1971 at least, because you've been with the company since then?

A. Right.

Q. Then I've got the people down here and you monitor basically the group; is that right?

A. Yes.

Q. And then we've got the Automotive Safety Office, we've got the lawyers, and the engineers and they were of course, on an as needed basis, correct?

A. Well, again some of them were, and some of them were

24 permanent people. The people that worked personally for me
25 for me were permanently attached to that group.
0123
1 Q. Now when all of these people over here collected the
2 information was there some group in here in the middle that
3 filtered this information and when it got serious enough
4 then they would bring it to your group?
5 A. I wouldn't use the word filter. I would say there are a
6 number of people, who it is their responsibility on a daily
7 basis to look through CQIS reports that have been received
8 that day and look for any evidence of an issue, either an
9 issue that is already in CCRG or an emerging issue that
10 should be taken into CCRG.
11 Q. Okay. And the CCRG at some point in time if this group of
12 individuals here in the middle thinks it's serious enough
13 it gets sent to CCRG?
14 A. Yes.
15 Q. And that's what happened in Saudi Arabia?
16 A. No.
17 Q. That's not what happened? It did not get to CCRG?
18 A. You need to draw almost on your drawing a separate arrow
19 coming from someplace else --
20 Q. Okay.
21 A. -- that says.
22 Q. What?
23 A. The WDMO sales guy for Saudi Arabia becomes aware of a
24 problem.

25 Q. Who is WDMO?

0124

1 A. Worldwide Direct Markets Organization. Operations, I guess
2 it is.
3 Q. Worldwide direct?
4 A. Markets.
5 Q. Operations?
6 A. Yes. And actually one of the Ws is just worldwide, so it's
7 WDMO, okay. Worldwide Direct Markets.
8 Q. And their job is to do what?
9 A. They are the people who are orchestrating the sale of
10 vehicles in markets outside the United States, Canada,
11 Mexico, South America, Australia and Europe. So they are
12 kind of the rest of the world if that description will help
13 you at all.
14 Q. Yeah. Are we basically talking about two sets, we've got
15 this is the U.S. over here and this is worldwide non-U.S.?
16 A. Unfortunately not quite that simple.
17 Q. Okay.
18 A. The systems that we have in place that you described as the
19 U.S. is really U.S., Canada and Mexico.
20 Q. Okay.
21 A. Think of it that way. And there are parallel activities
22 that are handling other regions of the world as well.
23 Q. Okay.
24 A. Okay. Like South America, South America is an entity into
25 itself.

0125

1 Q. And the short of it is that WDMO down here also has access
2 to the CCRG?
3 A. Yes.
4 Q. And they provided you with the information about Saudi
5 Arabia?
6 A. They provided us information about Saudi Arabia.
7 Q. Now what we will mark as Exhibit Number --
8 VIDEO TECHNICIAN: Off the record at 1:35.
9 (A brief recess was taken.)
10 VIDEO TECHNICIAN: Back on the record at 1:45
11 p.m.
12 BY MR. TURNER:
13 Q. Mr. Baughman, I want to jump backwards real quick and ask
14 you one question on CQIS.
15 VIDEO TECHNICIAN: Hold on, something is
16 happening with the microphone here. Can you give me a
17 test?
18 Off the record at 1:45.
19 VIDEO TECHNICIAN: We're back on the record at
20 1:47.
21 BY MR. TURNER:
22 Q. Mr. Baughman, I want to back up one second and ask a
23 question about the CQIS system program, okay.
24 A. Certainly.
25 Q. We talked about that earlier and this is an example of one

0126

of them. Now flip back to him, if you will, Tim.
I asked you a question awhile ago and I didn't go
one step further, which I wanted to do and that is when you
went back and looked at your CQIS system how many customers
did you find complaining on your vehicles equipped with
Firestone tires, how many people did you find complaining
about vibration?
A. I don't recall an exact number. I'm sure we could make
that available to you. I remember going through the
analysis of all the CQIS reports and reading them all
individually and categorizing them as to anything that
would make, to make someone suspicious that it might be
indicative of a tread separation. And I did that analysis
personally because I wanted to be prepared to testify
before Congress that to my eyes there was nothing that
would have led me to the indication that there was a
problem. I'm remembering the number 26. 26 CQIS reports
alleging issues that had an unusual vibration or loss of
tread or tread chunking was the general category that we
were looking at. And I remember the number 26, but I mean,
that's the order of magnitude of the number that we had.
Q. Now what percent of all vibration or tire-related
complaints from your customers at dealerships across the
country, do you think based on your experience, that 26
would represent? 80 percent? 50 percent? 10 percent? Do
0127
you have a standard number?

MR. PLATT: Are you saying of all the CQIS reports about Explorers? What is the population you want to compare the 26 against?

BY MR. TURNER:

Q. Ford trucks with Firestone ATX or Wilderness AT tires on them.

A. Versus Explorers with ATX tires?

Q. No, just all of your trucks and tires?

MR. PLATT: People were complaining of what?

BY MR. TURNER:

Q. That came in with these kind of complaints you just told me about, vibrations, tread chunking, tread separation, whatever it was.

Do you see what I'm trying to get at? I'm trying to figure out what based on your experience, what percent of the population that 26 would represent because I presume there is some dealers out there that don't put a vibration related complaint that's not vehicle related into the system, would they not?

MR. PLATT: Population of what, Tab, I'm sorry.

BY MR. TURNER:

Q. Population of people with trucks.

A. If a dealer saw a tire issue that he judged to be unusual he would put it into the CQIS system. Whether or not he

0128

warrants it, whether or not he sends the customer away, any of that is not the criteria for putting in the CQIS system,

independent. And we can certainly get you the data.
But as a result of NHTSA opening the
investigation against Firestone tires we did a word search
in our CQIS system against anything that would sound like
or would suggest a serious tire problem. So we did a word
search against blowout, against separation, against
failure, you know, I mean, there were 75 words that we
built up as our word search criteria. And went in and
there were literally tens of thousands of reports that came
back that when we then sorted them all down to the ones
that were the really serious-related issues there was a
very, very small number.
So we went from CQIS reports that we probably
received 20 to 30,000 a month not on tires, but on our
total vehicle line population. We sorted all the way down
to this very finite number of opportunities that a customer
could have tried to tell us that something was going on
that we should have been suspicious by the words that were
listed.
Q. How about --
A. And as I recall the number was 26.
Q. How about vibration alone, setting aside all of these
things like blowouts and tread problems what about people
0129
who came to your dealerships in this country between 1990
and today, who came to your dealerships complaining of
vibration in the vehicle, your dealership could not find

anything wrong with the car and sent the customer away.
How many of those were there?
A. I really have no idea. And I would and it would be improper for me to try and estimate that.
Q. Was it more than 26?
A. We didn't do a word search against just the word vibration. We were really looking for the serious tire issues.
Q. But you could do one for vibration?
A. You certainly could. My expectation would be if you did one for vibration on tires you would see a large number of reports because of vehicles that had not been properly balanced at the plant. We statically balance tires in our assembly plant or mostly statically balance our tires in our assembly plant, and yet the static balance does not always result in a pure balance when it's dynamically driven as well as other things that can happen that can affect the weight of the vehicle, so my guess would be vehicle vibration while driving is probably a very frequently reported CQIS condition in our CQIS system.
Q. I would assume it would be.
A. Because there is so many things that can lead up to that.
Q. Yeah, there are a lot of things that can cause vehicle

0130

vibration?
A. Right. And then if you said vehicle vibration tire-related it would be a subset of that and I would expect it still to be a fairly large universe of reports. Thrown wheel

5 weights, bent wheel, a lot of things that could be traced
6 directly to tire vibration.
7 Q. But you would agree with me that if a customer in the
8 United States comes in to his or her dealership and
9 complains of vibration and the mechanic goes through A, B,
10 C, D, all of the potential vehicle-related problems that
11 could cause that vibration, are you with me so far?
12 A. Um-hum.
13 Q. And finds nothing to explain the vibration, that it could
14 be tire related. It could be that a tread is having
15 problems from a separation standpoint?
16 A. It could be. I will agree with that.
17 Q. And are you telling me that there was no system in place
18 within Ford Motor Company to make sure Firestone was, those
19 kinds of complaints were shifted to Firestone?
20 A. I don't know that any information ever went to Firestone on
21 this specific issue. But I'm sure as you indicated in the
22 CQIS report that was up there through some mechanism the
23 company became aware of a high speed vibration problem on
24 the tires that were generated in that time frame, and
25 obviously told the field that if they ran into it to have
0131
1 the tires be replaced. The Ford dealer couldn't do that
2 replacement work, so it would have had to haven been done
3 by a Firestone dealer. And as I testified earlier, I don't
4 know what the communication message would be back to
5 Firestone. I would be willing to speculate that Firestone

was aware that we were doing that. There would have been no reason to keep Firestone in the dark at all.

Q. Because Exhibit Number 4, I mean, this clearly is indicating to your dealers out in the country that tires ought to be replaced, right?

A. That's correct.

Q. And did your Ford dealerships in Texas, for instance, did they have tires that they could replace for people before this recall started?

A. What is before that?

Q. This is 1996.

A. As I understand it beginning in about 1998 our customer service division started a program that's called Around The Wheel, wherein our Ford dealers can become authorized tire replacement centers and can replace any OE level tire that is used on a Ford vehicle. And under those circumstances they are acting as Firestone or General's or Michelin's or whoever's agent just as a Firestone dealer acts as the agent for those manufacturers.

Q. And you get reimbursed from Firestone?

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A. Yes. Unfortunately as we have since learned is that the Ford Motor Company, the dealer, the Ford dealer, does not enter that data into Ford's warranty system, but handles it exactly as the Firestone tire agent down the street would handle it, that is, he submits the claim directly to Firestone.

Q. An adjustment form?
A. An adjustment form.
Q. Okay. So that information as of that time through the adjustment system still was not coming to Ford?
A. Yeah, even though our Ford agent, our Ford dealer, actually may have touched the tire, the data was still not coming back through Ford, it went directly to Firestone.
Q. Am I hearing you correctly, that when you became involved with these trucks at Ford in '98 including the Explorer that the way the system worked was that Firestone had data on failed tires out there that they were not giving to you on a routine basis, right?
A. That's correct.
Q. And that you had information like the CQIS system, the CQIS system on vibrations that were nonvehicle-related that you weren't giving to Firestone?
A. I don't know whether they were given to Firestone or not.
Q. They could have been?
A. Could have been or could not have been.

0133

Q. Well, did Firestone have access to your computer system?
A. Not to the best of my knowledge. We don't allow outside suppliers access to the system. As a normal course of any investigation when an item is brought into CCRG we immediately request a word search in CQIS looking for the issue or any indication of the issue in the CQIS system. So in addition to people looking at every CQIS report every

day and looking for a troublesome report of an emerging issue we also when a CCRG item comes about for some other reason, we also then trigger a CQIS search looking for the data. I mean, that's our standard routine.

If we were to spot a supplier problem we still might not give the CQIS reports to the supplier. I don't know what the practice is. I don't know of anything that precludes us giving CQIS reports to the supplier, but I don't know anything that the procedure says we automatically give all of the CQIS reports to a supplier.

Q. Well, even as of today have you taken the vibration-related the nonvehicle, noncar vibration-related complaints and given them to Firestone to look at?

A. No, I don't believe we have.

Q. Taking a step back for just a minute to the CCRG group in Saudi Arabia at some point WDMO, WDMO that group that's worldwide, they informed or somehow communicated with the CCRG about this Saudi Arabia situation, right?

0134

A. Yes. There is a person who is the administrator to the CCRG who if contacted by anyone in the company will put them on the agenda for review of their issue at the next available meeting. As I say, the meetings take place every Thursday morning. And so apparently what happened is WDMO brought forward this issue that they were having tire failures on 16-inch Firestone tires in Saudi Arabia and the issue was opened in CCRG.

Q. And how many tire-related rollover events triggered the WDMO bringing this problem to the CCRG?
A. To be perfectly honest with you I do not recall a specific number. There may be one recorded in the campaign 14D paper that was eventually written. I'm remembering a number that I must be very hesitant, I remember there was a number of like eight to 12, maybe 14. I mean, it was a number of that order of magnitude.
Q. So that was a sufficient number at least in WDMO's view, the worldwide group's view, to get the issue to the CCRG?
A. Yes. And it is unfortunate that it would have even gone on that long without CCRG being aware. We try to run the CCRG on basically what I would describe as first report. One report of a vehicle fire anywhere in the United States, Canada or Mexico and the following week it will be on CCRG.
Q. What is it about a fire in a car or a vehicle that would trigger that kind of response?

0135

A. We judge a fire to be a very significant opportunity for someone to be injured.
Q. Is that the same thing for a rollover?
A. Rollovers occur for many, many reasons. And it's unfortunate that they do. A rollover that had been traced back to a tread separation that had occurred under either unusual circumstances because there was no obvious reason for the tread separation to have occurred, should normally trigger the CCRG system into action.

Q. So one rollover that involves a tread separation and a fatality should trigger?
A. Would almost for sure always trigger it. And that's why I'm at a loss to explain how there could have been all of this activity that the TV station in Houston was able to find and yet our systems were all, I'll use the word numb to it, because our system is not intended to be numb to any issue that involves a potential loss of life or injury to a person.
Q. So you would agree with me that if one tread separation rollover of an Explorer had caused the death of somebody that should have triggered the CCRG at least knowing of the problem?
A. Let me go back to what I testified earlier. It is possible for the event that you just described to have happened to have been entered in as a lawsuit. And if the CCRG was not

0136

informed of the tread separation, they would not be aware of the lawsuit. But under normal circumstances if we heard of the accident and the tread separation, we would ask the question are there any other lawsuits on this same issue. You know, tire X, vehicle Y, tread separation is the route root cause of an accident.
Q. Do you know how many times Ford Motor Company and Firestone had been codefendants in a tread separation rollover of an Explorer as of 1988 when you became aware of the Saudi Arabian situation?

A. 1998?

Q. 1998.

A. No, I really don't know. I mean, as I said before in preparing for the preparation for the Congressional staffs coming in John Mellen showed me a document and I would have said that prior to '98 that it appeared, at least by my memory, to have been perhaps a dozen and a half lawsuits.

Q. Given what Mr. Mellen showed you, would you agree with me that given the number of lawsuits involving tread separations in Explorer rollovers as of 1999 that that should have long before triggered somebody looking into that problem?

MR. PLATT: You mean alleged tread separations in lawsuits?

BY MR. TURNER:

0137

Q. Well, sure. I mean, a lawsuit itself doesn't prove anything, but it does put you on notice that one of your customers is complaining, doesn't it?

A. In looking back at the time frame before about 1998, as I recall the data, I would have had no reason to be suspicious looking at the number of lawsuits that had been opened against the company. And that was the data that Mellen showed me, not the ones that were still open, but the ones that had been opened. I would have had no reason to be suspicious that the company had a problem with Explorers and rollovers and Firestone and tread

separations. But once the data for 1998 and certainly 1999 was very different data than the data in the early years.
Q. Yeah, but given what you told me about one fire-related crash across the country and one tread separation rollover, if your company had 12 lawsuits pending involving the combination of a Firestone tire failure and a Ford Explorer rollover involving the death or serious injury to somebody, you would agree with me, wouldn't you, that somebody dropped the ball if the CCRG did not and had not considered those together?
MR. PLATT: Object to the form of the question.
THE WITNESS: I don't know that I have a very good answer for you on that one. It is very surprising to me looking back when we had the problem in Saudi Arabia we

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did a data search of all of our files. You probably heard the story, we asked Firestone if there was any indication of a problem in the United States. They came back and said no. Okay, and that was with specifically with respect to the 16-inch tire. I don't know that we ever, at least I don't recall asking -- we have asked the question do we have any lawsuits in Saudi Arabia, and the answer there probably there was we were not aware of any, okay. To this day I don't know that we even know of any lawsuits in Saudi Arabia. I don't know if I would have even asked the question on any 16-inch tires in the United States. But it would have been a 16 inch question. Not until we started

to see failures in Malaysia on 15-inch tires did we realize that there was a 15 inch problem going on in Malaysia, and later discovered it was going on in Venezuela as well. That's our first. I mean, Saudi Arabia was really very paradoxical to us because we couldn't find any evidence of tire issues anyplace else. There was nothing being reported by our reporting systems.

(Deposition Exhibit 5 was marked.)

BY MR. TURNER:

Q. Now Exhibit Number 5 and this does not have a Bates number. but it's an April 28, 1999 memo. The subject is Firestone tire tread separations and it was one of the documents produced to Congress.

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MR. PLATT: Produced by Ford or produced by?

MR. TURNER: This particular document was produced by, I think this is a, well, maybe you can tell me?

MR. PLATT: Why don't you let him take a look at the document.

MR. TURNER: That's probably a good idea. Why don't you turn the camera off for a second? Let me give you a couple documents.

VIDEO TECHNICIAN: Off the record at 2:08.

(A brief recess was taken.)

VIDEO TECHNICIAN: Back on the record at 2:19 p.m.

BY MR. TURNER:

Q. Of Exhibit Number 5 is a memo where the subject is Firestone tread separations. It's dated April of '99. Did you have a chance to look at that?

A. Yes, I did.

Q. Can you tell whether this is a Ford document or a Firestone document?

A. I believe it's a Ford document.

Q. Have you seen it before?

A. I may have seen it before. Shortly after the issue was opened up in CCRG I was requested to attend a series of technical reviews in the process that I described earlier

0140

to go through what we knew about the problem and to organize work streams that would allow us to try and get to the bottom of why we were having tread separations and reported rollovers in Saudi Arabia.

Q. And how many rollovers are referenced in Exhibit 5?

A. I believe the number is eight.

Q. And eight triggered the information, or at least eight, triggered the information getting to the CCRG?

A. Yes, it did.

Q. And these eight rollovers all were preceded by a Firestone tire tread separation; is that correct?

A. I think the allegation that they were all tread separation related. The reports we had back from the region were very sketchy. We had received no tires. We had seen no

pictures of postaccident scenes. And so it was just an allegation that they were all related to tread separations.
Q. And according to Exhibit 5 someone had inspected some of these tires in Saudi Arabia; is that correct?
A. That's what the memo alleges, yes.
Q. And Firestone was taking the position that they were assuming no responsibility; is that correct?
A. That statement is made in the letter and is made very strongly. I would suspect that it's from a person who may have had an opinion of what Firestone's position was on it. I don't know that this individual at the level he was in

0141

the company would have had the kind of discussions with Firestone that would be required before such a strong statement would be factual.
Q. Who made the statement?
MR. WOODROW: Objection, lack of foundation.
THE WITNESS: I presume it was, well, obviously it was the person who wrote the memo. I would guess it was probably a WDMO person just based on what I see there.
BY MR. TURNER:
Q. Is this the kind of information that would have been generated in Saudi Arabia?
MR. WOODROW: Objection, lack of foundation.
THE WITNESS: It could very well have been generated in Saudi Arabia, but that is not the way. WDMO has a number of people who live in the region. I don't

mean to offend anybody by saying this, that are actually sales type people, and are really involved in the financial transactions between the Ford Motor Company and the dealers.

There is another group of people who look out for the service aspects of the vehicle and that particular activity is coordinated by people who are actually located in Dearborn. I would be willing to guess that that memo is a Dearborn written memo based on a visit made by one of the service people to the GCC region.

0142

MR. WOODROW: Firestone moves to strike any guess or speculation testimony.

BY MR. TURNER:

Q. Well, Exhibit 5 also indicates that one set of these tires had, in fact, been sent to a local Firestone distributor in Akron; is that correct?

A. I didn't catch the word distributor in the letter. Maybe I did not read it carefully enough.

Q. I'm reading, right here it says, "one set of the Explorer tires were sent by the local Firestone distributor to the Firestone facilities in Akron."

A. Oh, facilities, okay.

Q. And then it goes on to say that "the inspection report indicates that two of the tires were improperly repaired, and one was damaged by operation in an underinflated condition. And that Firestone was assuming no

17 responsibility."
18 Did I read that correctly?
19 A. You read it correctly.
20 Q. At some point in time, Mr. Baughman, did Firestone take the
21 position that the situation with tires failing and
22 Explorers rolling over in Saudi Arabia was Ford's problem,
23 not theirs, because they gave you the tire you ordered for
24 that area?
25 MR. WOODROW: Object to the form.
0143
1 THE WITNESS: I don't -- I don't recall any such
2 statement by Firestone. When we held the tech reviews it
3 is normal course of business that our suppliers are not in
4 attendance at those reviews. If Firestone were to have
5 received an assignment which they did out of those tech
6 reviews, it was conveyed to them by one of the members who
7 attended the tech review. Firestone, to the best of my
8 knowledge, never made any statement relative to that's the
9 tire you ordered for the vehicle and, therefore, it's a
10 vehicle problem.
11 BY MR. TURNER:
12 Q. Did Firestone ever take the position in Saudi Arabia that
13 the cause of these crashes was not their tires, but your
14 car, the Explorer?
15 A. Not to the best of my knowledge.
16 Q. Did Ford recall these tires in Saudi Arabia?
17 A. We offered a customer satisfaction program to our customers

in Saudi Arabia. I would not describe it as a recall, but an owner notification program that allowed customers who were unhappy or felt that their tires might be unsafe, that they could have them replaced with Goodyear tires at no charge to the customer.

Q. So basically what you are telling them, that your customers in Saudi Arabia was, if you are not happy come in and we will give you a free tire to replace the Wilderness tires?

0144

A. That was what was recommended by the WDMO people to help ensure that we could maintain sales momentum in the region on Explorer. Explorer's reputation was being tarnished by the performance of the Firestone tires.

Q. Did Ford conclude that the 16-inch Wilderness AT tires supplied with the Explorers in Saudi Arabia were defective?

A. We concluded that the tires were not performing as we would expect them to perform. The evidence of tread separations was one of the indications that indicated that they were not performing as we would have intended them to perform.

Q. Did you feel and did Ford feel that the 16-inch Wilderness tires were creating a safety hazard in Saudi Arabia?

MR. WOODROW: Object to the form.

THE WITNESS: There was a great deal of anecdotal evidence that other conditions were also involved beyond just the way the tire was performing, reported incidences of underinflation, of overloading, of extremely high speed continuous operation, and very high ambient conditions that

were causing the tires to fail. I, certainly a tire failure at high speed on any vehicle is a cause for concern. I was not asked to make a determination of whether or not I thought it was a safety-related issue and consequently, I did not make such a judgment. But certainly I did not want people to be exposed to the risk of a significant tire event and the possibility of a

0145

resultant loss of control of the vehicle that could lead to a vehicle crash.

Q. Did Ford ever treat the situation with the Firestone tires in Saudi Arabia as a safety-related matter?

A. No, we did not. We treated it as an owner satisfaction issue. We thought there was a great deal of evidence that some of the failures that had occurred were due to the way the vehicle had either been repaired, the tire had been repaired or the vehicle was being operated. Example, with underinflated tires. And so consequently, we wanted to make a program available to the customers to get tires replaced, the tires that had performed very, very well, in the marketplace in the same size on similar vehicles.

Q. Was there a concern that there was an inadequate safety margin on the tires in Saudi Arabia?

A. Without an understanding of the root cause for why the tires were failing we were, we could not have made much of a judgment with respect to the safety margin. Certainly it appeared that the Firestone tires, the Wilderness At tires

16 inch size, were not robust to the conditions of operation that were taking place in Saudi Arabia. And the tires that I had put into the marketplace on the F150 and the Expedition two years earlier of the same exact P255/70R16 size were robust to those operating conditions. And therefore, with no root cause knowledge of what was

0146

causing the problem, I made the decision to offer this program to customers rather than lose, have people lose faith in the Explorer as a brand name in that region.

Q. Did Ford ask Firestone to provide a robust tire for Saudi Arabia?

A. We asked them if such a tire existed. In fact, that memo makes reference to one of the questions we asked them as to whether or not a special tire that we had used in Australia that's referred to as a special service tire, might be helpful given the failures we were seeing.

Q. But my question is going back to before you provided Explorers to people in Saudi Arabia with these 16-inch Wilderness tires, had you asked Firestone to give you robust tires for Saudi Arabia?

A. Once again, I was not involved in the development of the Explorer, nor the decision to export Explorers to Saudi Arabia. So I have no knowledge as to whether or not that question was ever asked.

Q. Well, you were the guy in charge of kind of cleaning it up though, right?

MR. WOODROW: Object to the form.
MR. PLATT: Object to the form of the question.
BY MR. TURNER:
Q. Is that right?
A. Yes, I would say that cleaning it up is part of what I did
0147
over the last several months.
Q. Somebody else might have created the mess in Saudi Arabia,
but it was part of your job to clean it up?
MR. WOODROW: Same objection. Object to the
form.
BY MR. TURNER:
Q. Is that right?
A. That is right. We could find no evidence one way or the
other that we asked Firestone whether or not that tire was
appropriate for that region of the world and by the same
token we could find no evidence that Firestone ever
objected to the use of that tire in that portion of the
world.
Q. But going back to my question. Based upon all of the
cleaning that you did do, did you ever ask anybody, did you
ever see any document or did you ever hear anybody tell you
from Ford Motor Company that when we asked Firestone to
provide a tire for Saudi Arabia we asked them to provide a
robust tire?
MR. WOODROW: Object to the form. There's a lack
of foundation.

BY MR. TURNER:
Q. Go ahead.
A. I'm not aware of any such request.
Q. Have you ever asked, and by you I'm talking about Ford
0148
Motor Company, to your knowledge has Ford ever asked
Firestone to provide a tire for a given market that is not
robust?
A. I know specifically that we have asked Firestone for a
recommendation on tires to be used in specific regions of
the world. And Firestone came back to Ford Motor Company
and made a recommendation with respect to what those tire
modifications would be and Ford incorporated those
modifications into those tires that went into those
regions. Specifically, the two regions that I'm referring
to is Germany where the Firestone tire is an H speed rated
tire to recognize the high speed performance on the
autobahn.
And secondly, the unique tire that we use which
is a severe service tire, that's used in Australia because
of tire chunking issues due to the sharpness of the corners
of the gravel that are on the off-road conditions.
So given those, at least twice that question was
asked and Firestone responded positively, my assumption is
that Firestone was aware of the vehicles going into Saudi
Arabia and was comfortable with how they were performing.
MR. WOODROW: I object and move to strike that

23 last sentence as lacks foundation and it's based on an

24 assumption, guess or speculation.

25 BY MR. TURNER:

0149

1 Q. I asked you a moment ago whether Ford ever created --

2 strike that and ask it again.

3 I ask you a moment ago whether Ford ever treated

4 the Saudi Arabia situation as a safety-related issue. Do

5 you recall me asking you that?

6 A. Yes.

7 Q. Isn't it true that Ford questioned, at least individuals

8 within Ford questioned, the safety margin of this tire and

9 this vehicle in Saudi Arabia?

10 A. People inside the company I think were very much concerned

11 with how this tire was performing in Saudi Arabia. The

12 fact that we had vehicle rollovers would certainly lead you

13 to the conclusion that concern for safety would be foremost

14 in their mind.

15 Q. And then a decision was made also in Saudi Arabia to,

16 setting aside the issue of replacing the tires, an issue

17 also came up about what to do about the rollover

18 situations, right?

19 A. Not to the best of my knowledge. I don't know what you

20 mean by decision with respect to the rollover situation.

21 Q. I thought the engineers working at Ford decided to handle

22 the rollovers on a case-by-case basis as opposed to in the

23 context of a recall?

MR. PLATT: I object to the form of the question.
I don't know that.
0150
THE WITNESS: I'm sorry, I don't know what you
are trying to ask there.
BY MR. TURNER:
Q. Well, we know that there were two things going on if I'm
understanding you correctly in Saudi Arabia. One was
Firestone tires were coming apart or failing, right?
A. That is correct.
Q. On Explorers, correct?
A. Correct.
Q. And that the Explorers at least according to Exhibit 5 were
rolling over?
A. The fact that the vehicles were rolling over was not
considered to be the problem, the problem was considered to
be the failures of the Firestone tires that were occurring
at high speeds.
Q. Well, didn't Ford decide to divide this into two different
approaches, number one, get the customers in and replace
the tires if they are not happy. They did that, right?
A. Correct.
Q. And Number two, they were going to, a decision was made to
handle the rollovers on a case-by-case basis?
A. I don't know what handle the rollovers on a case-by-case
basis means.
Q. Okay. Well, let's look at Exhibit Number 5. Look down at

25 the very bottom of this document it says "actions, number

0151

1 4, address the issues related to the rollovers on a

2 case-by-case basis."

3 Did I read that correctly?

4 A. Yes, you read it correctly.

5 Q. So somebody made a decision that the rollover issues would

6 be addressed in Saudi Arabia on a case-by-case basis?

7 A. That's what the words say.

8 Q. You don't remember that being one of the actions that was

9 going to be taken?

10 A. No, and I really don't know what that is with respect to,

11 whether that's settling an injury claim or a property

12 damage claim or replacing a vehicle, I really have no idea.

13 There was no discussion that ever took place in front of me

14 regarding what handle them on a case-by-case basis meant.

15 (Deposition Exhibit 6 was marked.)

16 BY MR. TURNER:

17 Q. Now Exhibit Number 6 does have a Bates number and it's

18 PE00-020 2150 and this is the Explorer Tire DNP document

19 you looked at a moment ago you recall looking at that?

20 A. Yes.

21 MR. PLATT: By I the way, I don't think that is a

22 Bates number.

23 MR. TURNER: You think that's just the

24 investigation.

25 MR. PLATT: That's the investigation number, I

0152

1 think.

2 BY MR. TURNER:

3 Q. This is a Ford document, is that correct, Exhibit 6?

4 A. I don't recognize it necessarily. I don't know who the

5 author was.

6 Q. Now this particular DNP document. DNP, by the way, means

7 Dealer Notification Program; is that correct?

8 A. Until you said that I would have only been guessing at what

9 DNP stood for.

10 Q. Okay. You have never heard that in your context of work at

11 Ford?

12 A. No.

13 Q. Now this particular document was previously marked as an

14 exhibit in Mr. Martin's deposition as well, and the part I

15 want to ask you about is right in the center of the page,

16 and it says a high incidence, and it's a tick mark, it says

17 "a high incidence vehicle rollover after tire blowout or

18 tread loss has not been detected for other vehicle brands;

19 Toyota, GM and Chrysler all have significant presence in

20 this market segment."

21 Now this particular market segment is in Caracas

22 Venezuela; is that correct?

23 A. Yes.

24 Q. Now at some point in time after the Saudi Arabian situation

25 you became aware of a similar tire/Explorer situation in

0153

Venezuela, right?

A. Correct.

Q. Now those vehicles, unlike the Saudi Arabian vehicles, those tires or at least some of them were actually being made in Venezuela, correct?

A. Depending on the tire size more than some, and actually most of the tires produced and used on the vehicles in Venezuela were produced locally.

Q. Some of them were produced in Wilson, North Carolina, correct?

A. I believe some of them were produced in Wilson North Carolina.

Q. Some of them were 15-inch tires that had failed, right?

A. Yes, for sure some of them were 15-inch tires.

Q. And some of them were 16-inch tires?

A. And some were 16s.

Q. And also the other issue that came up in Venezuela was the issue of whether or not tires had been mislabeled by Firestone regarding the existence of a nylon overlay or a nylon cap ply is that also correct?

A. That is also correct.

Q. Now let's back up and kind of put some time sequence into this. When in relation to Saudi Arabia, did you become aware of the situation in Venezuela of Firestone tires coming apart and Explorers rolling over?

0154

A. About the time that shortly after that document was

created. And I'm not so sure I recall an exact time frame.
I would have said directionally the spring of 1999.
Q. Now this particular document, and this was the interesting
part, to me at least, it says in July 1997 FOV, that means
Ford of Venezuela, correct?
A. Correct.
Q. "In July 1997 Ford Venezuela representatives were called to
a meeting in Caracas with a group of independent lawyers
representing Ford customers."
Did I read that correctly?
A. You read it correctly.
Q. You didn't join the Explorer situation until when?
A. Well, this gets a little more complicated now. I did not
start working on Explorer and tire related-issues until,
you know, the first quarter of 1999.
Q. So in July of 1997 you were not involved nor were you made
aware of the meeting between Ford of Venezuela
representatives and the lawyers in Caracas about these
tread separation rollovers of Explorers?
A. No, I was never made aware of it.
Q. When did you first learn that there was a meeting between
Ford representatives and lawyers in Venezuela about
Firestone tires failing and Ford Explorers rolling over?
A. I believe that it was the first time I saw that document,
0155
and I don't recall exactly when it was that I saw it, but I
was surprised also that there was a discussion that had

taken place several years before I was aware of it regarding how tires were performing in Venezuela.

Q. Did you ask why the people in Venezuela had not informed you?

A. No, I did not.

Q. Why?

A. I don't know that I have a good answer for you. In most -- well, I need to explain that organizationally there is a group of engineers that work in the plant in Valencia, Venezuela and those people work directly for me. So in addition to all of the people that I have located in Dearborn and in various locations around the United States I also have a small group of about 30 engineers who work at the plant in Valencia. And I have a manager who works directly for me who supervises those people and I make usually an annual trip to Venezuela to review product issues associated with their products, their truck products because their truck products are all North American truck products. And at no time did they ever bring that up that they were seeing tire failures. And I was there in July of 1996. I was there in July of 1997. And I was there sometime in the summer of 1998.

Q. And in all of those trips down there nobody ever brought

0156

this to your attention?

A. No.

Q. In retrospect do you wish they would have?

A. Of course I do.
Q. Why?
A. The story in Venezuela is very perplexing because it appears that there were a number of mistakes that were made in terms of the tires that were specified by Ford to Firestone of Venezuela. There is certainly a case that Firestone of Venezuela did not supply the tire that the engineers at Ford thought they were getting, in addition to the mislabeling problem. And it really is quite a mess and I really wish that I had known what I know now about some of the mistakes that were being made because the mistakes really began to compound upon each other.
Q. Do you think the mistakes in Venezuela were made by Ford or Firestone or both?
A. I think the mistakes were made on both sides.
Q. And do you think people were harmed as a result of these mistakes?
A. They may have been.
Q. Well, rather than may have been, were there people harmed as a result of these mistakes?
MR. PLATT: Are you asking whether he is now supposed to generically answer whether the accidents are

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caused by the mistakes or something more generic? What is this harm issue?
MR. BRAUGH: Is that supposed to be objection as to form?

MR. PLATT: That is my best shot at it since it is a terrible question.

MR. TURNER: I don't think it was a hard question at all. And maybe it's a hard question to answer, Warren, but I don't think it's a difficult question to understand. And the question, very simply put is, were people harmed as a result of the mistakes made by Ford and Firestone in Venezuela?

MR. PLATT: Same objection.

MR. WOODROW: Object to form.

THE WITNESS: I must again answer they may have been. The mistakes that I am aware of in terms of the way the tires were specified by Ford, the drawings of the tires that were produced by Firestone of Venezuela, the PSW submission warrants that were made against the drawings that were supplied by Firestone. They had issues associated with them. I do not know to this day whether or not the discrepancies, the mistakes that were made, directly led to the tire separation issue that led to accidents in Venezuela. I do not know whether or not Firestone had built all of the 16-inch tires with the nylon

0158

cap ply as specified in the drawing, whether or not the tires would have separated or not separated.

BY MR. TURNER:

Q. Do you think -- I'm sorry, go ahead.

A. I do not know whether or not had the drawings that the PSW

status that indicated the tire was only at a minimum a Q speed-rated tire or perhaps an S speed rated tire or an R speed-rated tire, instead of the S speed-rated tire that the Ford engineers thought they were getting, whether or not that played any role in the subsequent. I have a hard time believing that that was the difference, but I really don't know.

Q. But we do know that there were people killed as a result of tread separation rollovers of Explorers in Venezuela?

A. We do know that, yes.

Q. Do you think based on what you know, Mr. Baughman, that Firestone provided a product to you that was less than what you ordered in Venezuela?

MR. WOODROW: Objection, lack of foundation.

THE WITNESS: I think for sure the tire that came from Firestone was not the tire that Ford of the United States directed the Ford of Venezuela to put on the vehicle. We told them to put on a tire that was equivalent the U.S. 15-inch tire or the U.S. 16-inch tire and through the mistakes that were made on both sides the tires meeting

0159

that description did not get onto the vehicles in Venezuela.

BY MR. TURNER:

Q. Were the ones that got on the vehicles in Venezuela better than the ones in the U.S. or worse?

A. I believe they were worse.

Q. Did Ford know they were worse?
A. I do not believe that the people that work for me in Venezuela knew that they were worse. I believe they should have caught the fact that the tires were not S speed rated, but the PSW documentation indicates they were certainly at least a Q rating, in some cases an R rating. And I have a hard time in my mind believing that's the difference between the, what seemed to be a very accelerated tread separation rate in Venezuela.
Q. An accelerated tread separation rate based upon what?
A. Based upon the number of tread separations, the number of accidents and particularly the number of fatalities.
Q. How did you become aware of the accelerated tread separation rate?
A. Well, throughout the course of what was going on in Venezuela I had a number of conversations, telephone conversations with my person in Venezuela who was updating me based on what were largely media reports of accidents and injuries based on tread separations, and once again

0160

which very much parallels the situation in Saudi Arabia, none of his internal indicators, reports from the field, warranty reports or anything indicated that in the Ford warranty or in the Ford reporting system, that anything unusual was going on. And it was not until the first week of May of this year that he called me quite panic stricken and reported to me that the Caracas newspaper had run an

article in the paper that described the Explorer as a killer Explorer and that the death count in Venezuela was now up to at least 46 known deaths, that I was aware of the seriousness of the problem in Venezuela. Within 48 hours we recalled all the tires in Venezuela.

Q. Now you called this a recall. Is this something different than what you did in Saudi Arabia?

A. Yes, but only a twist to it. In Saudi Arabia right, wrong or indifferently, looking back on it now, we did what we really believed was an owner satisfaction program. And it was a reputational issue with the vehicle and the tire, and we wanted to make replacement tires available to those people who either had had a bad experience with a Firestone tire or were uncomfortable with operating their vehicle with a Firestone tire.

In Venezuela based on the death count, that is, to say reported by the newspapers to be 46 and I don't think has ever been confirmed as to what the real number

0161

is, we made a decision that we needed to be much more proactive than that and make sure that every customer was contacted.

Q. Now --

A. Which is in the United States on a safety-related recall the company has to not only contact every customer, but make every humanly possible avenue available to get the message to the customer that they may have a vehicle that

needs some kind of corrective action to it.
Q. So you did take slightly different actions in Venezuela that than you did in Saudi Arabia?
A. Yes, completely driven by the very high level of deaths that were reported within a population of 40,000 vehicles.
Q. How many people died in Venezuela based upon your work?
A. I only know of the report of the newspaper that had the number of 46. I know of no number beyond that, although I'm sure there probably are some deaths beyond that. That was an early May number.
Q. In Saudi Arabia did Firestone give you, Ford, the tire that you wanted?
A. In Saudi Arabia? Your question was Saudi Arabia? We are back to Saudi Arabia again?
Q. We are going to come back to Venezuela in a second, but going back to Saudi Arabia did Firestone give Ford the tire it asked for in Saudi Arabia?

0162

MR. WOODROW: Object to lack of foundation.
THE WITNESS: The tire that was on the vehicle, the vehicles in Saudi Arabia were produced in the United States and they were produced with the U.S. produced 16-inch tire. They were identical to a vehicle that was sold in the United States.
BY MR. TURNER:
Q. And is that the tire that Ford asked Firestone to give it?
A. The process that we use in markets overseas that have

engineering activities like Venezuela does, is that they come to the United States and ask for what our minimum recommendation would be with respect to a component, in this case a tire. Our recommendation was the minimum of the equivalent of the 16-inch Wilderness AT or the equivalent 15 inch, it was an ATX at one point in time and then a Wilderness AT, that is a minimum requirement. If our engineering people, in this case Venezuela, in working with the local supplier know of any reason why they should upgrade beyond that requirement then they have local authority to make that upgrade. They cannot be less than the U.S. equivalent. They can be more than, if they have reason to believe they need a different tread compound from a wear or they know more about road hazards in Venezuela than we know. We do not specify that thou shall only use what is used in Dearborn. Thou shall only use the minimum

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equal to the minimum of what is used in Dearborn or greater if either the local engineering or the local supply base knows differently.

Q. Did the tire that was provided by Firestone in Saudi Arabia perform like Ford expected it to perform?

MR. WOODROW: Object to the form again.

THE WITNESS: I think the answer to that is absolutely not.

BY MR. TURNER:

Q. Did the tire that Firestone provided in Venezuela perform

as Ford expected it to perform?
A. I think the answer to that is absolutely not.
Q. Did Firestone provide the tire, setting aside performance, did Firestone provide the tire Ford expected it to provide in Venezuela?
A. Two answers to that question. When the tires were imported from the United States the tires that were shipped in met that minimum equivalency level. When the tires were produced locally, I do not believe they met that minimum requirement.
Q. Do you think the mistakes that Ford made in Venezuela created a hazard to the consuming public down there?
MR. PLATT: Object to the form of the question.
THE WITNESS: I think what is interesting to speculate is since we had failures on both the imported

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tires and the locally produced tires, and I cannot tell you at what frequency normalized for the population would be, that I think my assumption at this point in time is that the problem in Venezuela would have occurred whether all the tires would have been imported or whether all the tires would have been locally manufactured.
BY MR. TURNER:
Q. So you believe that the tire tread separation/Explorer issue or problem in Venezuela would have occurred whether these tires all came from Wilson, North Carolina or whether they were all made by the Firestone plant in Venezuela?

A. I think the Firestone tires, whether imported from the United States or produced in Venezuela, are not robust to the operating conditions that the tire experienced in Venezuela.

Q. Did Ford ask Firestone to produce for them a robust tire in Venezuela?

A. The story there is very confusing. If you were to ask the Ford of Venezuela people they would answer that, yes, they wanted a tire that was robust to the ambient temperature conditions, the road hazard conditions, the sustained high speed driving conditions in Venezuela. I think, at least based on my discussions with the Firestone people of Venezuela and translation from Spanish to English aside, they would say that Ford did not ask for anything unique.

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Q. So there appears to be a dispute between Ford and Firestone?

A. There certainly is a dispute that can be evidenced in the paperwork and so I must believe that in fairness to both sides, that there was probably a dispute in the spoken word as well.

Q. Did Ford ask Firestone to provide a robust tire for Explorers in the U.S.?

A. Um, I don't think Ford would ever ask any tire supplier to supply a tire that was not robust against the foreseen operating conditions in any market.

Q. Including the operating conditions in the southern part of

the United States?
A. Including the operation of the tires in the southern United States.
Q. Did Ford conduct an investigation of any tread separation Explorer rollover crashes in Venezuela?
A. Ford of Venezuela, to the extent that they could do that, visited a number of the, they reviewed the vehicles that were involved in a number of the accidents. As I recall kind of a status in early August there were a total of somewhere between 75 and 80 accidents that were reported, and the Ford of Venezuela people had been able to review about 26 to 30, as I remember, of the vehicles and physically determine, you know, whether the tire that was

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still remaining on the vehicle, whether it had been imported or produced locally and whether it was a 15 inch or 16 inch. And from the serial numbers and other information, get police reports, and start to gather information about the specific accident. They certainly weren't accident reconstruction type people. These were just my engineers that they split up, and one guy went to one city and looked at three and another guy went to another city and looked at one, and another guy went and they brought back photographs of what they could learn about the vehicle.
Q. Did Ford collect any tires from Venezuela?
A. Well, two pieces of the question. On the vehicles that

were involved in the accidents, police procedures much like here in the United States is the vehicles were impounded and the vehicles were to be left intact. We could not remove the tires from the vehicle. In some cases they got to physically touch the tire, in other cases they took photographs through a locked fence.
We immediately as a result of starting the recall of the tires in Venezuela began bringing tires back and taking them back to our plant in Valencia and conducting similar analysis by cutting tires apart and doing other evaluations on them. And I own a mountain full of tires in Valencia, Venezuela if you want to see them.

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Q. But you didn't bring any failed tires from Venezuela to Dearborn?
A. Failed tires in the sense of a separated tire?
Q. A crash-related separated tire.
A. Not to the best of my knowledge have any of those tires, most of those tires are tangled up in the Venezuelan legal system like they would be tangled up in ours.
Q. Did you collect any tread-separated tires from Saudi Arabia?
A. No. We never received a single -- we, Ford never received a single sample of a separated tire, although I'm told some tires were shipped back to Bridgestone Japan and some tires were shipped back to Akron, but I don't think any of them ever passed through Dearborn to the best of my knowledge.

Q. Do you have some understanding as to why failed tires were shipped to Bridgestone Japan?

A. Remember I described that in the first year of what was going on it was very much local, it was dealer A and the Firestone/Bridgestone distributor B just working with each other. And apparently that Firestone, Bridgestone/Firestone dealer in Saudi Arabia thought of Japan as his home base not Nashville or Akron as his home base. And so he shipped the tires back to Japan even though the tires had been produced by Firestone in the United States.

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Q. So the information at least that you have received during your part of the investigation was that the initial wave of information, failed tires and things of that nature were going to Bridgestone Japan not Bridgestone/Firestone Inc. in the U.S.?

A. That's correct.

Q. And it is clearly your recollection that under no circumstances did your company ever become in possession of failed tires from Saudi Arabia?

A. No, I don't know that I can absolutely positively say that because in the spring of 198 or '99 one of our people by the name of Jim Johnson, who may actually be the author of the document that makes allegations of Firestone.

Q. Exhibit 6?

A. Exhibit 6. He actually visited Saudi Arabia with several

Firestone employees and they looked at a number of vehicles, they looked at some failed tires and he might have brought one back. I mean, I don't know that I ever saw it, but I would have thought the normal course of business would have been they would have returned to Firestone. We have, and the Ford Motor Company we have no, we had at that point in time we had no ability to independently analyze a tire that we could really understand what was going on.

Q. How about in Qatar? Did your company ever take any failed

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tires or receive any failed tires from Qatar?

A. I'm aware there were failures in Qatar. I do not know what happened to those tires. Most likely they would have been sent back to Akron I would have guessed.

Q. Now on Exhibit Number 6 Mr. Johnson, or whomever the author of is of this particular document, indicates that with regard to the Explorer rollovers there was apparently a high incidence of rollovers after a tire blowing out with tread loss, but it has not been detected for Toyota, GM and Chrysler vehicles in Venezuela. Is that what you were told?

A. I think you just crossed over two documents there.

Q. Oh, I'm sorry?

A. Jim Johnson is the Saudi Arabia, he's the WDMO guy.

Q. I thought you mentioned that he was the author of Exhibit 6?

A. No, I think it's probably the other one and I apologize.
Q. Okay, Exhibit 5.
A. Exhibit 5 is Jim Johnson if I had to guess.
Q. Okay.
A. Exhibit 6 was obviously prepared by someone, it's just kind of interesting it doesn't read as a typical Ford of Venezuela document. Most Ford of Venezuela documents very clearly have a letterhead Ford of Venezuela at the top. To me, and I know you guys don't like me to speculate, but it

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almost reads as if it is a translation of perhaps a Spanish document.
Q. But in any event whether it is a translation of a Spanish document, Exhibit Number 6, clearly reflects that although Explorers were rolling over after tire-related problems in Venezuela, Toyota, GM and Chrysler sport utility vehicles were not, is that what it says?
A. At the time the document was made that statement was obviously put it forth. That statement is no longer true today.
Q. You now have some evidence that there was in fact, a GM, a Toyota or a Chrysler rollover crash following a tread separation of a Firestone tire?
A. I have seen pictures of both a GM Grand Blazer and a Toyota 4Runner with Firestone tires that has crashed as a result of tread separation.
Q. How many have you seen?

A. I have seen at least two or three Grand Blazer series of photographs and I think at least two 4Runner, Toyota 4Runner. I don't think I've ever seen a Chrysler. I don't think I've ever seen a Chrysler thing, at least that I recall.

Q. Were there 47 deaths involving any of those other vehicles?

A. I do not know what the number of fatalities. Unfortunately Venezuela seems to have no equivalent to a Fatal Accident

0171

Reporting System like in the U.S. and I just find it amazing that it's whatever the newspaper report must be the count because there is no other way to know.

Q. Well, did the newspaper in Venezuela ever run an article calling it the killer Blazer.

A. Not to the best of my knowledge.

Q. Or the killer 4Runner?

A. Not to the best of my knowledge.

Q. How about in Mexico, did your company, Ford, ever get any failed tires from Explorer rollovers in Mexico?

A. To the best of my knowledge I am not aware of any reported failures of tires in Mexico.

(Deposition Exhibit 7 was marked.)

BY MR. TURNER:

Q. The reason I asked that is because Exhibit Number 7 is a receipt for a tire from Mexico reflecting that Ford Motor Company was receiving a tire from somebody in Mexico. After you have a chance to read that let me know and I'll

ask you a question.
Are you ready do you recognize this company
called or this department called building tire lab? Did I
say that right, by the way?
A. Yeah, Building Tire Lab, Ford Motor C.
Q. Have you ever heard of that?
A. I've heard of the Tire Lab.

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Q. Do you recognize the address?
A. Oakwood Boulevard, Receiving B, yes, Dearborn, Michigan.
Q. Is that where failed tires go?
A. I don't know but, it would not be surprising to me that
somebody would have asked them to ship one back to there if
there had been a failed tire.
Q. Why?
A. Because that's the tire lab. I mean the only logical I
mean, they would either ship it to an individual or they
would ship it to the tire lab.
Q. Well, why would it go to a tire lab? What do they do in
the tire lab?
A. In the tire lab they have certain machines that they use to
do parameter testing on tires, not very in-depth, well,
they have a MTS machine where they can get force and moment
data on tires which is used to generate the ADAMS model.
Q. That's the flat track machine?
A. That's the flat track machine, yes.
Q. But you are not going to do that with a failed tire, are

you, you can't test it on a flat track machine?
A. No, you cannot test, nor would you want to test it on a flat track machine.
Q. Let's move to another area. For what reason would a failed tire go to the test lab if you can't put it on the flat track machine?

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A. Can I ask a question say what makes you believe this is a failed tire?
MR. WATTS: Sure. I'll tell you.
MR. PLATT: Swear the man.
BY MR. TURNER:
Q. Let me ask you to assume for purposes of my question, this tire failed and it ended up, failed on a customer in service and during the investigation of the wreck itself we were informed that the tire, the failed tire was collected by Ford Motor Company pursuant to that receipt you have.
A. Okay.
Q. Can you give me an explanation for why that particular tire would end up at your lab as opposed to Firestone?
A. No.
Q. Is your company in the business of testing failed tires?
A. No.
Q. Does your company have a warehouse where they locate failed tires?
A. Not as the normal course of business. As a result of the Firestone recall investigation, yes, we have Firestone

21 tires that we are using. We have a storage depot in
22 Dearborn where we keep them.
23 Q. What is the date of that receipt?
24 A. It appears it's February 8 of this year.
25 Q. At that point in time was there a recall?
0174
1 MR. PLATT: United States recall?
2 MR. TURNER: Yes.
3 THE WITNESS: No.
4 BY MR. TURNER:
5 Q. At that point in time was your company routinely and
6 selectively collecting failed tires from across the country
7 and across the world?
8 A. Not to the best of my knowledge.
9 Q. Do you have any explanation as you sit here today for why a
10 failed tire from an Explorer rollover in Mexico would have
11 been collected by people working at Ford Motor Company in
12 February of this year?
13 A. If the failed tire that you are describing was involved in
14 some kind of a lawsuit in Mexico it could well be that the
15 design analysis people asked that it be sent to the tire
16 lab.
17 Q. But what if there was no lawsuit at that point, can you
18 give me an explanation?
19 A. Someone may have been interested in investigating the
20 circumstances of whatever caused this tire, or you know, to
21 have failed assuming your failure assumption is correct.

Q. In February of 2000 was there a group of individuals that were watching for Firestone tread separation/rollover Explorer crashes across the U.S. and Mexico?
A. No, I don't believe so. There were some tire engineers who

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had been involved in the Saudi Arabian issue. There was, the whole group of the tire engineers is about three or four in total count. And they had also been involved in the investigation of the Venezuelan problem, but in this period of time I would not have expected that they had been gathering tires as a proactive thing. We had completed our Southwestern study and had done all that. I can't say that individually if somebody said oh, by the way I heard of a tire that failed in Mexico, that one of these tire engineers would not have asked that it be sent back.
Q. Can you think of any reason why Ford would not want to release that tire to the customers or the customer's family?
MR. PLATT: tab, you've got a whole set of facts here you know something about that we have no clue about.
MR. TURNER: I really don't. He does I'm just asking question.
MR. PLATT: Is there a family out there somewhere who has asked for the tire? What is the assumption about all this?
MR. TURNER: Go ahead and explain your position, Mr. Watts.

23 MR. PLATT: This is like playing mumbledy peg

24 without knowing where your feet are.

25 MR. WATTS: We have got lawsuits arising out of

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1 Mexican accidents, car accident where everyone has receipts

2 has indication that Ford has got the tires. We have called

3 Office of General Counsel, we've written letters asking for

4 our tires back. Originally we can't find the tires. Now

5 maybe we are finding the tires.

6 MR. PLATT: Where are they?

7 MR. WATTS: Ford has them. Ford tells us well,

8 we are not sure where they are.

9 MR. BRAUGH: I can add to it, a representative of

10 Ford Motor Company says you have collected a lot of tires

11 and they are all shuffled in some warehouse. And no

12 records were kept as to which tires came from where.

13 THE WITNESS: No.

14 MR. PLATT: Who has told you this? Who told you

15 that from Ford?

16 MR. WATTS: OGC.

17 MR. PLATT: Who was it that said it?

18 MR. WATTS: Somebody working for Lou Banciu.

19 MR. TURNER: Paralegal maybe, lawyer.

20 THE WITNESS: All respect to Lou, who is a

21 friend, Lou has not been involved in the Firestone tire

22 investigation at all.

23 MR. TURNER: Could somebody find an answer to

24 that question so we can move to something else?

25 MR. PLATT: Yeah, as a matter of fact, if you

0177

1 guys would give us whatever it is you think you are looking

2 for, we'll go on the Easter egg hunt and find them. this

3 is the first I ever heard about it.

4 THE WITNESS: First I've known about it.

5 MR. TURNER: That way we don't have to keep --

6 MR. WATTS: We'll take that as a request on the

7 record.

8 MR. PLATT: Ask and you shall receive. We are

9 not trying to keep your old failed tires away from you, we

10 wouldn't want to do that.

11 THE WITNESS: The reality is that the tire lab

12 has very limited storage capability and when we started

13 bringing back large numbers of Firestone tires for us to do

14 our root cause investigation, we quickly overflowed the

15 ability of the lab to store them inside the lab. So we

16 went outside and we rented some additional space for

17 storage. But all the tires that we had brought back as a

18 result of the Firestone root cause investigation are very

19 clearly labeled. We know exactly where they came from.

20 BY MR. TURNER:

21 Q. Including DOT numbers?

22 A. Including DOT numbers and what position they were on the

23 vehicle, and whether they were a spare or not a spare,

24 yeah.

25 (Deposition Exhibit 8 was marked.)

0178

1 BY MR. TURNER:

2 Q. Exhibit Number 8 is a March 12, 1999 memo from Chuck

3 Sellnacht to Dave MacKinnon on Ford Motor Company

4 letterhead. You are familiar with this document, are you

5 not?

6 A. Yes, I have seen it.

7 Q. You have had an opportunity to look at it today, is that

8 correct?

9 A. Correct.

10 Q. At some point during the process of investigating the

11 situation in Saudi Arabia did you become aware of

12 discussions between Ford and Firestone about whether, and

13 what to do in terms of those failed tires and those

14 Explorers rolling over in Saudi Arabia in terms of whether

15 to call it a recall or not?

16 A. As part of the Congressional investigations that took place

17 this summer I saw that document for the first time and I

18 found it very surprising that that dialogue was going on

19 with those two WDMO people, both of which are located as I

20 understand it, outside of the United States, when the

21 discussions and conversations that took place at the tech

22 reviews that I participated in, we never had that

23 conversation. What was reported to me was that Firestone

24 would not agree to some kind of a field action on the tires

25 and therefore, I took action.

0179

Q. Okay.
A. There was no discussion with lawyers present or anybody else about, you know, precedents or safety-related notification. I mean, I was aware that in Saudi Arabia I'm not legally required to recall the tires. I got that advice from my counselor.
Q. You were advised that you were not legally required to recall tires in Saudi Arabia under the circumstances; is that correct?
A. Under their national laws I was not legally required to recall the tires, in the sense of what we know of as a NHTSA kind of recall.
Q. But you did become aware that there were lawyers working at Ford and lawyers working at Firestone that communicated to each other about whether to call it a recall in Saudi Arabia because of the impact that might have on the American Department of Transportation?
A. I was only aware much after the fact when I read that memo that those discussions were taking place.
Q. You were not aware of those discussions in 1999; is that correct?
A. The day I made the decision to bring those tires back as an owner satisfaction program, I was not aware of any discussions that took place between Firestone and Ford at a lawyer level regarding a precedent with NHTSA.

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Q. But you would agree with me that Exhibit Number 10, in fact, let's just put the paragraph up there for just a second.

MR. PLATT: 8 or 10?

MR. TURNER: Exhibit 8 in this deposition.

MR. PLATT: His favorite document.

MR. TURNER: It's what?

MR. PLATT: It's your favorite document.

MR. TURNER: Well, any time that you have a document like this you have to kind of slowly go through the question, Warren.

MR. PLATT: Kind of like savoring with every witness.

BY MR. TURNER:

Q. Exhibit Number 8, the fi al paragraph of the first page under, beside number 4, it says, "Firestone legal has some major reservations about the plan to notify customers and offer them an option."

Now this plan that's being referred to in this particular document, was that a plan that Ford had come up with or is that a plan that Firestone had come up with, or is that a plan that you both came up with together?

A. Firestone was extremely reluctant to do anything in Saudi Arabia. The basis for that I was told strictly secondhand, and that was that they believe that underinflation and poor

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repair and overload were the root cases of the tire

failures and that they did not think they were responsible for that. Okay. Therefore, we Ford, developed a plan called what are we going to do for our customers in Saudi Arabia on Explorers. Do we want to offer them an upgraded Firestone tire? Do we want to replace their Firestone tires with Firestone tires and do so on a basis of every three years, you know, just keep taking them out of service and setting the clock back to zero, or do we want to change them out of Firestone tires and get them onto something that we know performs well in the marketplace.

Q. So this plan that's being referenced was Ford's plan, right?

A. Yes.

Q. So Ford puts together a plan and then Firestone legal, according to the Exhibit Number 8, Firestone legal, the lawyers at Firestone, had major reservations about your plan assuming this document is correct; is that right?

A. That's correct.

Q. All right. And then it says "first, they and it's referring to Firestone, "feels that the United States Department of Transportation will have to be notified of the program."

Did I read that part correctly?

A. Yes.

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Q. Now when you became aware of that did that kind of shock you that that kind of discussion in light of the issues

about people dying in Saudi Arabia, that this kind of an issue was even discussed by anybody?

MR. WOODROW: Object to form.

THE WITNESS: Yes, it actually did because by the time we were formulating that plan we knew that we had already checked with Firestone with respect to the performance of the 16-inch tire in the U.S. and that's the memo dated March 11, of '99 from John Behr. And when our own internal reporting mechanism said no problem with 16s. When the John Behr memo said no problem with 16s in the United States, we had just started to launch the Southwest study, so we didn't have those results yet, but we were at a fairly high confidence level that we did not have a problem in the United States with the 16-inch tire. And I would have been prepared to tell NHTSA what we were doing in Saudi Arabia. Beats the heck out of me why it's going on, but it's going on and here is what we are doing. Okay. Because all NHTSA could look at there is CQIS database, ask them to provide warranty and other CQIS information, ask Firestone how the tire was. We had already done that drill, there was no evidence of anything going on there, so I would not, as that sentence would suggest, I would not have felt at risk of telling NHTSA what was going on. We

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would have had a big argument, are we obligated by law to. As you know, we don't have to by law tell them. We checked all indicators and checked with Firestone. The answer was

4 no problem in the United States.

5 Q. Setting aside all this discussion between the lawyers about

6 what to call this and about the plan whether to notify the

7 Department of Transportation of the United States, did you

8 when you made the decision to put this plan into place and

9 have customers exchange these tires in Saudi Arabia.

10 VIDEO TECHNICIAN: Mr. Turner, I'm sorry, somehow

11 your microphone went out.

12 I need to switch out microphones. Off the record

13 at 3:20.

14 (A brief recess was taken.)

15 VIDEO TECHNICIAN: We are back on the record at

16 3:28 p.m.

17 BY MR. TURNER:

18 Q. Mr. Baughman, did you at any time notify the National

19 Highway Traffic Safety Administration and the Department of

20 Transportation of Ford's decision to have customers come in

21 and exchange tires in Saudi Arabia?

22 A. No, we did not.

23 Q. Why?

24 A. We did not think it was necessary under law and because we

25 were doing what we felt was an owner satisfaction program

0184

1 to enhance the reputation of Explorers in the marketplace

2 that we did not need to notify them. We had checked all

3 the databases. There was no evidence of an issue anywhere

4 in the United States, Canada and so therefore, we did not

think that we had any reason to notify them.
Q. And when you say no evidence of an issue what evidence did you look for?
A. We checked all of the corporate reporting systems that we had internally including the MORS, the CQIS the warranty databases. We did a very thorough investigation of what we knew about the performance of the 16-inch tire. There were no reports from any sources in the United States. We confirmed with Firestone of their warranty adjustment data rates. They reported to be actually running below the average adjustment rate for other tires and so we took an action in Saudi Arabia that we thought was appropriate for the customer base. Very, I was very upset at Firestone's responsiveness on the whole issue. I wouldn't say that I was angry with Firestone because I certainly understood why that their position was that there must be some level of local market influence as the tires were performing, but certainly I as the engineering director at Ford, could not allow to be people to be at risk as a result of the operation of their vehicle under what I felt were reasonably foreseeable circumstances in Saudi Arabia.

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Q. And this was clearly a situation in Saudi Arabia involving the tires on the vehicle that was putting people at risk?
A. Certainly there was strong evidence that it was putting people at risk, yes.
Q. Did you consider and did you look at the lawsuits in the

United States when all of this arose to see whether or not people were being put at risk on Ford Explorers equipped with these Firestone tires in the U.S.?

A. At the point in time that we made the decision due to the recall in Saudi Arabia, no, I did not specifically ask whether or not there were any lawsuits against Ford on the subject combination of Explorer and 16-inch tires.

Q. Did you ask Firestone what percentage of their adjustments, the failed tires that were turned in, were tread separations on these particular lines of tires?

A. No, we did not ask that specific question.

Q. Did you at some point ask them whether they had an unusual percentage or number of tread separations as an overall percentage of their failures?

A. We asked many times from Firestone as to what was going on and particularly when NHTSA opened the investigation up against the family of Wilderness and ATX tires, Wilderness AT and ATX tires. Within a week of when that investigation was opened up in early May I sat with the Firestone people and asked them for their data so that we could jointly

0186

respond to NHTSA. And that was about the middle part of May of this year and Ford finally received that data on the 31st, 28th of July of this year.

Q. Did it -- well, let me ask -- strike that. Let me ask this question.

In Saudi Arabia the tires that were provided on

the Explorers in that country were tires made here in the United States; is that correct?

A. Yes, that's correct.

Q. And those Wilderness tires were no different by design than those that were being sold to consumers here in the U.S.?

A. That's correct.

Q. Your distinguishing factor, yours being Ford's, on the vehicles in Saudi Arabia was different environmental conditions; is that correct?

A. Yes, it was.

Q. Now going back to this document just a minute, it says "first, they feel" and again, we are talking about Firestone, "they feel United States DOT will have to be notified of the program."

Did you ever ask anybody once you found out about this document what it was about this situation in Saudi Arabia that made Firestone think that the Department of Transportation would have to be notified?

A. Prior to me making the decision to do the action in Saudi

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Arabia I got advice and counsel from the OGC staff that is collocated with my program teams, and they advised me that we did not need to notify NHTSA. When I read this document quite frankly, I took it that Firestone was just stalling Ford, and this was one of their stall tactics in hopes that we would not do a unilateral action and go to Goodyear tires.

MR. WOODROW: Object and move to strike.
BY MR. TURNER:
Q. So when you first saw this document your interpretation of this sentence where it says "Firestone feels that U.S. Department of Transportation will have to be notified of the program since the same product is sold in the United States," you interpreted that to be a stalling tactic by Firestone because why?
A. Because the discussions that I had with our Office of General Counsel people said we have a good story here, okay, and we can go do this action and if NHTSA should hear of it and loop back on us, we have a good story as to why we saw no need to notify NHTSA, no defect trend here in the United States by all reporting sources we looked at.
Q. Well, if you had a good story why didn't you tell them?
A. We could have. It was not a big pivotal, it's not as if we spent hours arguing this point. We spent less than minutes arguing this point. Say, is it our legal obligation if we

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do something in Saudi Arabia for what we believe to be unique to Saudi Arabia, is it our legal obligation under the Federal Motor Vehicle Safety Act to notify NHTSA, and the response was it is not.
Q. I understood you could have, but my question was, if you had such a good story, Mr. Baughman, why didn't you pick up the phone and call the Department of Transportation and tell them? I mean, there has got to be a reason.

A. First of all, it would not be my responsibility to pick up the phone and call them.
Q. Okay. I'm talking about Ford.
A. And I don't remember any long discussion or debate about would we talk to NHTSA or would we not talk to NHTSA.
Q. Okay. Setting aside whether there was a long debate. If you had such a good story, if Ford had such a good story, why didn't somebody at Ford tell NHTSA?
MR. PLATT: Object to the form of the question. He has told you about three times he is not the person that would have done it. You are asking had him to speculate.
MR. TURNER: Well, maybe he doesn't know the answer. He can say I don't know.
MR. PLATT: I think he said that several times.
THE WITNESS: We have actions that take place on vehicles that we sell around the world, some of which are the same as vehicles produced in the United States, some of

0189

which are different. And when we have a field action on those vehicles we wrestle with this issue all the time. And the issue is just because a component happens to be common with one that's used in the United States, if it's performance is different by local market conditions, okay, what is our obligation under the Federal Motor Vehicle Safety Act to inform NHTSA. And I was informed that we had no obligation and so I didn't spend any time arguing the other case should we tell NHTSA. I mean, you will see the

same thing when you get to shock absorbers in Venezuela. I mean, we don't consider it to be a safety-related defect and we had no reason to tell NHTSA.

BY MR. TURNER:

Q. But we do know that from Exhibit Number 8 Firestone, at least according to this sentence, had a different view than Ford, correct?

MR. WOODROW: Objection, lack of foundation. Object to form.

THE WITNESS: Since I'm not the author of that sentence I would hate to speculate what the author meant.

BY MR. TURNER:

Q. You don't have to do any speculation. It says they, Firestone, feels that the Department of Transportation will have to be notified of the program, right?

MR. WOODROW: Objection, lack of foundation.

0190

THE WITNESS: Well, Mr. Turner, I'll tell you that I know those two guys that wrote those letters to each other were at least 10,000 miles away from Dearborn, Michigan. And I find it quite remarkable that they can talk so factually about what some lawyer from Firestone or some lawyer from Ford said, when in reality I don't believe they were even in the loop. They were probably the third or fourthhand receivers of a message.

BY MR. TURNER:

Q. I understand what your explanation of the document is. But

you have to understand as well that we didn't write this document. People at Ford wrote this document, correct?
A. That is correct.
Q. And when you, and when citizens, common, average every day people read this sentence you would agree with me that when it says "Firestone feels that the United States Department of Transportation will have to be notified of the program" that was not what you were told by the Ford lawyers, right?
A. I was told nothing with respect to Firestone's position by the Ford lawyers.
Q. But you were told by your lawyers that in their opinion you did not have to notify the Department of Transportation?
A. That is correct.
Q. All right. Then it says "since the same product is sold in the United States, second, they are afraid that the Saudi

0191

government will see this as a recall and react dramatically including prohibiting the import of the current original equipment manufactured tire, OEM tire."
Did I read that correctly?
A. You certainly did.
Q. In fact, once the government of Saudi Arabia became aware of all of this later on down the road, they did in fact, begin to prohibit?
A. They did exactly what is suggested there, yes.
Q. Exactly what Firestone suggested once the government found out about it in Saudi Arabia, they said no more Firestone

12 tires are coming in of this kind, right?

13 A. Correct.

14 Q. Now did you ever talk with anybody at Firestone about

15 Firestone's concern that the government of Saudi Arabia, if

16 they found out about this, would stop the tires from coming

17 in?

18 A. Never. And quite frankly, I wouldn't waste my time having

19 that conversation.

20 Q. Why?

21 A. Because once I concluded that Firestone was not going to

22 support what Ford was going to do in the region, their fate

23 was their own.

24 Q. Then it says "they believe the best course of action for

25 the vehicles already in the market" and we are talking

0192

1 about Explorers, correct?

2 A. Yes.

3 Q. "Is to handle the tire issues on a case-by-case basis."

4 Did I read that correctly?

5 A. Yes.

6 Q. Did you ever participate in the discussion with people from

7 Firestone about just handling this as a case-by-case?

8 A. Throughout this whole investigation I never was

9 face-to-face with any Firestone individual.

10 Q. You never attended a meeting with anybody from Firestone?

11 A. Never.

12 Q. The second page of this document refers to Corey

13 MacGillivray. Do you recognize that person?
14 A. No, I don't, but I'm told he works for Ford in the Office
15 of General Counsel.
16 Q. Last Monday apparently this person talked with the lawyer
17 at Ford last Monday about the proposal, "he didn't think
18 that working on a case-by-case basis with the owners of the
19 damaged vehicles presented a problem, but he," the Ford
20 lawyer, "was concerned about the implications of the owner
21 letter (similar to Firestone's concerns.) He was going to
22 check with one of his colleagues to get more info, period."
23 Were you aware that Mr. MacGillivray, the lawyer
24 from Ford Motor Company, was communicating with any of
25 these people at Firestone?
0193
1 A. No, I was not.
2 Q. You were not aware of whether or not the lawyers within
3 Ford expressed to the lawyers within Firestone that we
4 agree with you, that if we have to do this plan in Saudi
5 Arabia we have to notify the United States Department of
6 Transportation?
7 MR. PLATT: Object to the form of the question,
8 you are just making that up. You say he said that, he
9 didn't say that.
10 MR. TURNER: No, I'm not.
11 MR. WOODROW: Object to the form and lack of
12 foundation.
13 MR. TURNER: But I'll address your speaking

14 objection.

15 MR. PLATT: Go ahead.

16 MR. TURNER: I will be more than glad to. I

17 think the proper thing to do is to say, object to the form

18 of the question.

19 MR. PLATT: It wasn't good enough for that

20 question.

21 BY MR. TURNER:

22 Q. You would agree with me though, wouldn't you, Mr. Baughman,

23 that according to this paragraph when you read it, this

24 appears to say that Ford engineer, I mean, the Ford lawyer

25 was agreeing with the Firestone lawyer?

0194

1 MR. PLATT: Object to the form of the question.

2 THE WITNESS: What I find very interesting is

3 that this Corey MacGillivray or whatever his name is, was

4 never present at any of the discussions. There were at

5 least a half a dozen technical reviews on this subject, not

6 one was he ever present at. And I don't even know what he

7 does in the Office of General Counsel. And so I find it

8 very peculiar that there were a set of conversations that

9 were going on in a different domain outside of the domain

10 in which these decisions are reached. And then documented

11 in a letter written by two guys that are halfway around the

12 world to each other. Okay, the whole letter is a little

13 disturbing that way. But I guess I can remember make the

14 make the statement that irregardless of everything that is

said there, I was going to protect the customers of the
Ford Motor Company. And if that meant sending a letter to
NHTSA, I'd send a letter to NHTSA. If that meant doing
something else I would have done it. I was going to
protect the customers of Ford Motor Company.
BY MR. TURNER:
Q. I appreciate that and I understand it.
A. I did it in Saudi Arabia, I did it in Venezuela, I did it
in GCC and I did it in the United States.
Q. I appreciate that and I understand what you are saying.
Let's go back to the document.

0195

If you read this in a common language, would you
agree with me that this appears to say that the Ford
lawyers were agreeing with the Firestone lawyers that if
you carry out this plan in Saudi Arabia you need to tell
the government in the United States?
MR. PLATT: Object to the form of the question.
The document speaks for itself.
THE WITNESS: If you read it at face value it
suggests that some attorney at Ford, not involved in the
process, not involved in the discussion, is making an
opinion that is contrary to the opinion that was expressed
by the representatives of the OGC, who participate with me
in this CCRG tech review process.
BY MR. TURNER:
Q. Have you ever gone to Mr. MacGillivray and asked him

whether he made these comments?
A. No.
Q. Does he still work at Ford?
A. I presume he does.
Q. Are you critical of this statement if, in fact, Mr. MacGillivray did make that statement?
A. No, I think attorneys are always entitled to have an opinion. Okay. And I just judge this as an opinion of somebody. My only surprise is is that he's not involved in the, was not involved in the direct process so he's kind of

0196

an outsider giving an opinion, but maybe that's not even strange in this world as well.
Q. Do you know why Mr. MacGillivray was involved in discussions with the Firestone people at all, assuming this document's right and he was?
A. I have no idea if he is product liability lawyer or what his role in the company is. I really don't know.
Q. And you've made no effort since you've found out about this document to even find out what role he had in the company?
A. No, none whatsoever. I asked John Thomas earlier today whether or not he was a lawyer in the Office of General Counsel, and John replied that he was.
Q. You would agree with me, would you not, that if in fact, this document is correct, that people at Ford in the legal department, talked with people at Firestone in the legal department, and they did, in fact, agree about not telling

17 the government in the United States about this plan, that
18 that would not be right?
19 A. No, I'm afraid I don't agree with you. I've got a document
20 written by a couple of cats 10,000 miles away from Dearborn
21 alleging a couple of legal discussions that took place
22 absolutely, positively out of their sight, their sound, and
23 at best that's second or thirdhand knowledge that they have
24 written down there.
25 Q. And these two cats you are talking about, are
0197
1 Mr. MacKinnon; is that right?
2 A. Yep.
3 Q. Is he a Ford employee?
4 A. Yes, he is.
5 Q. And Mr. Sellnacht, right?
6 A. Yes.
7 Q. Is he a Ford employee?
8 A. As I understand, I've never met either one of the
9 individuals.
10 Q. Where is he located?
11 A. I think they are both located in Saudi Arabia in Dubai.
12 Q. You think both these are located in Saudi Arabia and were
13 located in Saudi Arabia in March of 1999?
14 A. I believe so, I may be wrong on MacKinnon, but I'm pretty
15 sure they are both located in Dubai.
16 Q. And just to make sure crystal clear, have you talked with
17 Mr. MacKinnon or Mr. Sellnacht or have you made an attempt

to talk with them about the contents of the document?
A. I have no reason to contact them on the context of the document.
Q. So the answer is, no, you have not made any contact?
A. I have not made any contact.
Q. Nor any effort to contact?
A. Nor any effort to contact.
Q. Okay. Now with regard to testing whose responsibility was

0198

it to carry out high speed durability testing of the Wilderness tires on the Explorer and the ATX tires on the Explorer to ensure that those vehicles performed safely and that those tires could withstand the forces required by the Explorer?
MR. PLATT: Object to the form of the questions, multiple.
THE WITNESS: By the requirements specified in FMVSS 109?
BY MR. TURNER:
Q. Pardon me?
A. By the requirements specified by FMVSS 109 or by the requirements specified in our DVPNR?
Q. Fair enough. Let's first start with 109.
A. It is Firestone's responsibility to run that test and certify to Ford that it meets the requirements of FMVSS 109.
Q. At 26 psi?

MR. WOODROW: Object to the form, lack of foundation.

THE WITNESS: You've asked me a detailed question that is hard for me to remember. I believe the FMVSS overload test is run at the rated inflation pressure. Yes, 26 psi.

BY MR. TURNER:

0199

Q. And how about the other form of testing the non-FMVSS high speed durability DVPNR testing?

A. Well, we run a number of tests as part of the Ford DVPNR, and included in that is a high speed test, which in that period of time was a test that was run for a sustained 200 miles run at 100 miles an hour at the actual vehicle loading condition on all four wheels and at the rated inflation pressure which was 26 psi.

(Deposition Exhibit 9 was marked.)

BY MR. TURNER:

Q. Exhibit Number 9 is an affidavit of James Avouris from September of this year.

A. Yes, I'm familiar with it.

Q. Did you participate in obtaining that affidavit from Mr. Avouris?

A. No, but I certainly wish I had.

Q. Why?

A. Because the person we sent out to obtain the affidavit was unfamiliar with the actual test protocol that has been used

in the company, which involves using a mule as a test vehicle. And consequently, this individual did not catch the fact that Mr. Avouris actually made an incorrect statement saying that the tires actually were tested on an Explorer.

Q. So you would agree with me that having read Exhibit 9,

0200

Mr. Avouris's affidavit, which was, by the way, this was provided to Congress, correct?

A. Yes, I was there.

Q. You would agree with me that this affidavit is not correct?

A. It is only incorrect with respect that it was tested on an Explorer as opposed to tested on a mule.

Q. Okay. Let's clarify that a little bit, it was confusing. The test referenced in this affidavit, Exhibit Number 9?

A. Yes.

Q. Was performed on a mule?

A. Was performed on a F-series mule.

Q. Not an Explorer?

A. Not an Explorer as referenced in Mr. Avouris's. And all the test report records for all the years that I have gone back and looked at, is these mules were always used, and in fact, Mr. Tandy remembers that this test was conducted on the mule he was there the summer doing the J-turn and CU testing when this test was actually run.

Q. Okay.

A. So we are very high confidence that it was done on a mule

despite Mr. Avouris's suggestion it was done on an Explorer prototype.

Q. Given Mr. Platt's earlier objection to my questions including other people's testimony, I have to object that that part of your answer where you provided us with

0201

Mr. Tandy's knowledge. I'm sure Mr. Tandy is going to be a witness in these cases, so he can testify as to his knowledge.

But if I'm understanding you correctly the documents that supposedly support the testing in Exhibit Number 9 that Mr. Avouris describes, have been destroyed; is that correct?

A. It is my understanding that they've been destroyed.

Q. Now is that true for all of these tests for all of the year model Explorers?

A. No. We can find very little documentation on tire testing done for the original Explorer. The exception to that are selected documents that were captured as a result of discovery in other legal cases prior to this summer when the Firestone issue surfaced. We do have and we have provided to NHTSA and to Congress all of the documentation that we've pulled together involving tires that came on the 1995 Explorer, and when the Wilderness AT tire replaced the 15-inch ATX II.

Q. Did you go back to see whether or not you could find the testing for the 1992 Explorer?

22 A. Yes.

23 Q. Were you able to find that?

24 A. Yes, we found selective documents that were tested in

25 support of a program that was referred to as 1992 Explorer.

0202

1 Q. And were those tests likewise conducted on a mule?

2 A. I am told that the tires that were being looked at, known

3 as the low rolling resistance tires, failed a J-turn

4 analysis that was conducted and consequently work on that

5 low rolling resistance tire was ceased. My presumption is

6 it was ceased before the high speed endurance test was run.

7 There would have been no need to run the high speed

8 endurance test on a tire that never went into production.

9 Q. Okay. So as far as you know there was never any testing

10 done after the 1989 testing referred to by Mr. Avouris and

11 the testing done by the engineers at Ford on the UN105

12 program, there was never any high speed durability testing

13 done in the interim; is that correct?

14 A. My presumption is because I can find some of the test

15 documents associated with what was referred to as a 1992

16 Explorer, 1993 Ranger tire proposal, which was also

17 referred to as the low rolling resistance tire, that I find

18 some documents and yet don't find the high speed durability

19 document, my presumption is that the high speed durability

20 was not run. I presume otherwise I would have found the

21 entire collection as we did for the 1995 Explorer.

22 (Deposition Exhibit 9 was marked.)

23 BY MR. TURNER:

24 Q. Now, let me show you what has previously been provided to

25 me and this has EXPA 1136 through 1142.

0203

1 MR. PLATT: EXP what?

2 BY MR. TURNER:

3 Q. EXPA 1136 through 42. And it's dated April 28, 1992. And

4 ask you if you can recall having seen that before in all of

5 your work.

6 A. No, I don't recall seeing this document.

7 Q. If you will flip back toward the back you will see a tire

8 construction referred to as SL598J.

9 A. Yes, I noticed that.

10 Q. Can you tell us with which tire that was?

11 A. I believe the 598J, can I refer to a --

12 Q. Certainly.

13 A. I just can't in my mind keep the construction numbers --

14 Q. I can't either.

15 A. 598J was that low rolling resistance tire that never made

16 it into production.

17 Q. Have you seen this document before?

18 A. I don't think I've seen this exact one.

19 Q. Do you see a high speed durability test referenced in

20 there?

21 A. I see reference to it from a test request standpoint, but I

22 don't see the results as had historically been reported.

23 Oh, there they are. Yeah, this is the typical high speed

24 test report.

25 Q. Would you agree with me that somebody --

0204

1 A. So a test actually was run. Yeah, I have not previously

2 seen this document.

3 Q. And would you tell us at what psi that test was ordered and

4 what psi it was run?

5 A. It appears to have been ordered at 35 and it appears to

6 have been run at 35.

7 Q. Now, can you explain to us, Mr. Baughman, how it is that a

8 high speed durability test that we don't have, that was

9 destroyed, was run at 26 psi when less than two years later

10 or actually about two years later, the same test run on

11 another P235 for the Explorer is run at 35 psi instead of

12 26 psi? Do you have an explanation for that?

13 A. Yes, it's my understanding that as part of the low rolling

14 resistance tire program the plan was to make compound

15 changes to the tire to reduce its rolling resistance and

16 also to increase the inflation pressure to further gain

17 rolling resistance improvements for fuel economy.

18 Q. Actually during that improved rolling resistance tire they

19 decided that any increase in air pressure in the tires was

20 impossible because of the two wheels coming off the ground

21 in the J-turn, did they not?

22 A. I'm told that the CAE analysis for J-turn failed. I never

23 thought to ask the question at what psi.

24 Q. And what they were hoping they were going to be doing, in

25 other words the engineers, what they hoped they would be

0205

1 able to do was to improve the rolling resistance in two
2 ways, number one, by putting air back in the tires,
3 correct?
4 A. I'd say one by changing the construction of the tire.
5 Q. By changing the compounds in the construction of the tire?
6 A. The compounds in the construction of the tire.
7 Q. And the second way was to put air back into the tires back
8 up to 35 pounds of pressure, right?
9 A. I wouldn't word the sentence the way you did, but to
10 increase the inflation pressure. I don't know if to put
11 air back into it. The original tire was always planned to
12 be at 26 psi and that was how it was produced.
13 Q. Well?
14 A. This tire was intended to be a different construction and
15 to try to take advantage of increasing air pressure to get
16 further rolling resistance improvement. And that's not
17 unusual. Any rolling resistance program does that.
18 Q. You are not saying back in the 1980s Ford started out
19 intending to run the tires on the Explorer at 26 psi, are
20 you?
21 A. At some point in time the decision was made the tires were
22 going to be 26 based on ride and handling and other
23 evaluations. I was just objecting to your saying put the
24 air back in. It was conscientious decision to release the
25 Explorer on the P235 to 26 psi and this program was trying

0206

to extract as much rolling resistance improvement and was predicated on a tire compound construction change, plus the opportunity of increasing the air pressure. Obviously, those construction detail changes could offer the same level of ride that was achieved with the original tire at 26 with this tire at 35.

Q. Mr. Baughman, what actually happened in the context of all of these events in the late '80s and early '90s was that when Ford had to deflate the tires down to 26 psi that harmed the rolling resistance of the tire, didn't it?

MR. PLATT: Object to the form of the question.

THE WITNESS: I don't -- I did not participate in any of that development work. I can tell you that the tire construction detail sheets that are on file show that the target for rolling resistance for the original tire at 26 psi were met with the P235 ATX II tire as it was introduced. When the vehicle went into production that tire was at its rolling resistance target value, that's shown on the tire construction detail sheet signed in the spring of 1989.

Q. Jim Engelhart specifically ordered out of a concern over fuel efficiency a decrease in or an improvement in the rolling resistance of the ATX tire, did he not?

MR. PLATT: Object to the form of the question.

THE WITNESS: I have no idea.

0207

BY MR. TURNER:
Q. You've never seen any document that says that?
A. No, the only documents that I've ever seen is that there was activity around this 598 tire. And as I looked through all the documents the trail suddenly ended. I don't know what started the trail, whether it was a direction from Jim Engelhart to improve fuel economy. And I was only told that it didn't pass J-turn. And this document suggests they did a step that I never found the evidence of when we went through all the books that they actually ran the high speed durability test.
Q. And what we do know is that in 1989, according to Jim Avouris, Ford did this high speed durability test and he claims they did it at 26 psi; is that correct?
A. Yes.
Q. But we don't have a document because it has been destroyed, right?
A. That's my understanding.
Q. And we do know that the next time that a high speed durability test was performed on an Explorer tire it was ordered to be run at 35 psi and it was run at 35 psi, correct?
MR. PLATT: Object to the form of the question.
THE WITNESS: Yes, and the next time it was run which was for the 1994 program both the Goodyear and the

0208

Firestone tire were again run and they were both again run

at 26 psi.

BY MR. TURNER:

Q. And are you familiar with the name of the person who ran this particular test, and by this particular one I'm talking about Exhibit 10, can you tell us who ran that test?

A. Who ran the test? The high speed test?

Q. Right.

A. Somebody by the name of Barbour, B-a-r-b-o-u-r.

Q. And can you tell who ordered it from the front sheet?

A. It was ordered by Jerry Mostrog, who was a light truck engineer.

Q. Did you ever ask or did Ford ever ask Firestone to test the vehicle at 26 psi, the vehicle and the tires, of course?

A. In what time frame?

Q. At any point.

A. To test the vehicle. I really don't know how to answer that question.

MR. PLATT: In the J-turn?

THE WITNESS: Having not been involved in the program, I don't really have any firsthand knowledge. I know looking at the completed DVPNRs that Firestone ran the tests that they were required to run and Ford ran the tests they were required to run. So obviously Ford asked

0209

Firestone to run tests or we would not have a certification to FMVSS 109.

BY MR. TURNER:

Q. That's why I was asking that. And in Mr. Martin's deposition it was Exhibit 9 to Mr. Martin's deposition, was a quote from Mr. Lampe, and you know Mr. Lampe at Firestone?

A. Yes, I do.

Q. From USA Today in November of this year. And Mr. Lampe said that Bridgestone/Firestone did no tests at 26 psi, that pressure 26 psi, until Ford requested it in 1998; is that right?

A. I find that very hard to believe given that I believe FMVSS 109 requires the tire to be tested at its rated inflation pressure. And if Firestone didn't do that as Mr. Lampe suggests then they would have been in violation of the Federal Motor Vehicle Safety Act for a long time. I doubt that that's factual.

Q. According to Ford Motor Company's responses to discovery in one of these cases, where -- according to the responses to discovery in one of these cases involving the combination of tread separations and in Explorer rollovers, I want to you assume that Ford Motor Company has identified for us that they knew as of 1997, that Ford knew of 26 lawsuits that were in existence involving a combination of a

0210

Firestone tire failing in a tread separation and an Explorer rolling over resulting in death or serious injury to a consumer?

A. 1999?
Q. 1997.
A. 1997. Okay.
Q. Assuming the information I just gave you is correct that Ford has in fact, told us that, does that surprise you?
MR. PLATT: Object to the form of the question.
THE WITNESS: It's probably more lawsuits than I would have expected not having any knowledge in that period of time of anything going on on Explorer rollovers and tire separations but.
BY MR. TURNER:
Q. Had you known -- I interrupted.
A. But I would follow on to say one of the things that I as an engineer always struggle with in lawsuits is what piece of it is an allegation and which piece of it is factual. Rollovers because of alleged tire separation with no other knowledge would just leave me a little bit perplexed. Based on my historical knowledge of tire I would say, wow, tread separations are really rare event there ought not to be that many lawsuits, but if it was an alleged separation as opposed to an alleged blowout as opposed to an alleged something else, I need to know an awful lot more about the

0211

circumstance, but before I could deal rationally with that information.
Q. I understand, but when we were talking about the CCRG group earlier in the deposition and the only reason I'm asking

this question is because when we talked about Saudi Arabia
eight rollovers in Saudi Arabia managed to get the
attention of the CCRG and this is in 19, what, '98?
A. Yes.
Q. Do you have any explanation for how it is that 26 lawsuits
involving serious injury or death with this combination,
the same combination Wilderness tire and Explorer in the
U.S. has still not at that point in time made it to the
CCRG, can you explain it?
A. No, I can't. I find it very surprising.
MR. TURNER: Let's take about a two second break
and I think I'm through.
VIDEO TECHNICIAN: Off the record at 4:07 p.m.
(Pause in proceedings.)
VIDEO TECHNICIAN: Back on the record at 4:08.
BY MR. TURNER:
Q. Going back to the high speed durability test, Mr. Baughman,
when those tests are run what kind of inspection of the
tires conducted after the tests are completed, if any?
A. I have no specific knowledge with what post test
inspections are conducted on the tires.

0212

Q. So you don't know, for instance, whether they do
shearography to look at the internal components of the
tire?
A. No, I really never asked the question of the tire engineers
of what happens after that test is run.

Q. No, I think we are okay on this.
Could you give us your address please?
A. My work address or home address?
Q. Work.
A. Work. Can I just, you want it on the record?
Q. We just want it for the record.
A. Okay.
MR. WATTS: And phone number too.
THE WITNESS: Well, excuse me, for having to look
it's not the kind of thing I remember.
BY MR. TURNER:
Q. You don't send yourself mail?
A. No, in terms of a mail address it's called the PDC, Product
Development Center, Mail Drop 549, 21175 Oakwood Boulevard,
in Dearborn 48124-4079.
Q. Phone number?
A. (313) 390-7653.
Q. And I presume the witness will read and sign?
MR. PLATT: Sure.
THE WITNESS: Yeah.

0213

MR. TURNER: Questions?
EXAMINATION
BY MR. WOODROW:
Q. Mr. Baughman, my name is Thomas Woodrow. I represent
Bridgestone/Firestone. We met for the first time, I think,
today?

A. Yes.
Q. You mentioned earlier in the deposition, and this is what my note says, is you were the lead investigator regarding the recall, the Firestone recall; is that right?
A. I think I'm probably given much more credit than I deserve, but in the very early days of our investigation I certainly was the lead investigator of going through the data and establishing that a certain population of tires appeared to be overrepresented in the population of claims data that was provided by Firestone.
We rapidly increased the size of the team until we had a total of really six teams working on various issues including the logistics of moving tires around to satisfy our customers, a root cause investigation team, some people who were looking at vehicle dynamics effects.
At that point in time I appointed a team leader for each one of those teams and assumed leadership as the overall project coordinator or something, I don't know what. But I really, I went from being a team leader to being a boss as

0214

the team expanded. At one point in time a couple hundred people. There were just too many people, I needed a substructure to deal with assignments and stuff and so.
Q. And in that substructure did the team leaders report to you?
A. Yes.
Q. Who did you report to?

A. In the team structure?
Q. Or outside the team structure? Did you report to anyone on this project directly?
A. I would say I probably most closely reported to a gentleman by the name of John Rentamaki (ph), who is the Chief of Staff of the Ford Motor Company.
Q. You also mentioned earlier that or made a comment to the effect that when you began looking at these documents six months or so ago which would put us in the June time frame, did you start looking at historical documentation of the issues that we've been talking about today as early as June of this year?
A. With respect to tire development I would have said most of the activity at looking at documents was in the post August 1 time frame. And looking specifically at documents associated with Explorers and rollovers has predominantly been done just very recently with Warren's help in preparing for this deposition.

0215

I focused most of my attention during the earlier part of the summer on the process of proving out the tires and what we knew about the tires as a subject as opposed to the tires in the vehicle from an interaction standpoint. Although I do have a, I appointed a team leader to go work on that tire to vehicle interaction.
Q. And when was that taking place, the tire to vehicle interaction?

A. Clearly by about the third week in August we had fired up that activity. It was really looking at two subpieces. One subpiece was to make sure that there were no tire to vehicle interactions that were undesirable as a result of our authorization with Firestone to put tires other than Firestone-branded tires on vehicles. We wanted to be absolutely sure that there was no, there was no interaction that was not to our liking and that. And Mr. Turner followed that line of questioning called do all tires at 26 psi or 30 psi whatever it was on Explorers.
The second was one was a work stream that was really looking at trying to understand some of the potential vehicle-related issues such as why do 50 percent of the tire failures on the Explorers happen on the left rear tire. So we had some unanswered questions from the vehicle to tire interaction standpoint we wanted to run down as well.

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Q. Were you involved in any activities in earlier than August 1st of this year that related to the performance of Firestone tires on Explorers in the United States?
A. The only ones were, as we continued to see problems, first in Saudi Arabia and later in Venezuela, we had long discussion to actually initiate this study that we did in the Southwestern part of the United States, that as I recall started in I think about May of 199 -- yeah, April or May of 1999 and ran through the summer. And which we

then when we heard the reports of the ATX failures on the 15-inch tires from the TV station in Houston, we augmented that study to also then bring back 15-inch tires and take a look at them as well. But other than that Southwestern study, work did not really spend any time looking at vehicle to tire interactions in the United States.

Did Ford make any conclusions itself arising out of the Southwest study?

A. The conclusions that we reached jointly with Firestone and perhaps in retrospect some of these conclusions were not shortsighted, but perhaps just not technically sound. We brought tires back at fairly high mileage that had seen service in the Southwest, 16-inch tires and sections of them, I think a total of about 243 tires and we sectioned them in multiple places, and we looked for evidence of tire separation. What we saw was small cracks at the edge of

0217

the belt, but not progressing across the skin stock between the two belt layers. We made the assumption that because these tires were at relatively high number of years in service and fairly high mileage, 60,000 miles plus, that those cracks were indicative of what we would expect to see in the tire, okay. And that I think was largely Firestone's conclusion. And the Ford engineers did not disagree with it. And that we would have expected those tires to perform throughout the rest of their useful life without seeing the tread separation. In retrospect now

that we have cut apart many Goodyear and Michelin tires we see that the existence of those cracks, although not unusual, was probably at a higher level of occurrence that than we see in competitive tires.

Q. When did you cut the Goodyear and Michelin tires?

A. In September and October of this year.

Q. Do you still have the sections?

A. If not the physical sections we have photographs of all of them.

Q. Were any documents generated that related to those, to that sectioning and the inspection of the sections?

A. For the Southwest study or for the subsequent one?

Q. Subsequent, Goodyear and Michelin ones is what I thought we were talking about.

A. I know they were all photographed and some of the sections

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may actually still exist, but I mean, I think that the surprise that we saw, was that when we cut apart Goodyear tires that were run at 26 psi on the very same Explorers that the Firestone tires were tested at, we did see cracks. The cracks generally were smaller in length and the cracks generally were found less frequently, although even in the original statistical sampling of only 243 tires even that piece of it now in retrospect is questionable when you are looking for a problem that may exist at 50 parts per million. They said you should have looked at a million tires and you found 50 examples. Well, you couldn't -- you

know, we weren't in that mind-set at that point in time. We thought if we cut apart some tires we will see some evidence of it.

The second conclusion I think we may have been shortsighted on, is that those tires could have finished their useful life without having those cracks propagate and lead to a tread separation. Because even today we don't fully understand the mechanism that causes that crack to propagate and at what rate it propagates. It was probably in retrospect a little bit premature to judge that those tires would reach their useful life. And that was a joint Ford Firestone conclusion, so we share in that error if an error was made there.

Q. Were any written analyses or evaluations done by Ford

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relating to either the Southwest study or to the later September sectioning of Michelin and Goodyear and any other tires or comparing all of those activities?

A. Let me do the Southwest study first. That study was carried out at Ford's request by Firestone. We utilized our dealer bodies to provide tires to bring back, all of the physical examination was in cutting apart of the tires was done by Firestone and the Ford engineers reviewed the findings at a meeting that took place, I believe, in Akron. Firestone was requested to draft a summary document that provided the detail of the Southwest study and a preliminary draft of that version was actually received by

Ford. Subsequently it was rescinded by Firestone and the only document we got from Firestone was a one page letter that said we looked at 243 tires and found no problems.

Q. What about the rest. You said you were going to start with the Southwest, but I really asked you about the subsequent activities undertaken by Ford and whether there was any written evaluation of those results either in and of themselves or in comparison to what was found in the Southwest study?

A. Well, we have the work in progress that we call our root cause work that we shared with NHTSA last week, Monday and Tuesday, and which I presume a copy can be made available to you. We didn't spend a lot of time dwelling on the

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evaluation of the size of the cracks and the number of cracks because the sampling technique is not without some level of question perhaps, okay. But we did do the work. We have physical examples of it. Most of the root cause work is really predicated on other evaluations we did on competitive tires to the Firestone tire.

Q. So the answer to my question is that if there is written evaluation or written information about the sectioning and inspections performed by Ford on competitors tires it is contained in the root cause documentation that was provided to NHTSA, is that your answer?

A. Some of it is in there. A lot of the detail work was not in there.

Q. Are there, is there documentation of the detail work and I mean, pieces of paper with words on them?
A. There may be. I don't know that I've seen any of it directly. We made the assumption right, wrong or indifferent than that everything we presented to NHTSA last Monday and Tuesday, would at some point in time find its way into the media. So we were just guarded about what level of detail we put in. The issue, of course, is have we, with Firestone's help, made a determination of what the root cause of the Firestone problem is. Our sectioning of Goodyear and competitive tires was really only done in an attempt to help lead us to areas that required examination.

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We were looking for areas of differences and then try to understand the differences.
Q. I sure don't mean to make this difficult, because the only thing I'm asking you for, the very narrow intent of my question is just to ask what documentation there is of those activities. That's all. And I hope I'm not been being confusing.
A. Oh, No. No, we will have to go back and see. There isn't a formal test report or anything that has been done. As a matter of fact as we speak we are continuing to section tires and take measurements on tires as we continue to try to understand the root cause.
MR. PLATT: There is a lot of underlying documentation that has already been produced, I believe, as

15 part of the continuing production to NHTSA and it's not
16 done yet.
17 MR. WOODROW: We are going to need to stop for
18 just a minute to switch the tape. I really don't have very
19 much more, but he is just about out of tape there.
20 VIDEO TECHNICIAN: Off the record at 4:24 p.m.
21 (Pause in proceedings.)
22 VIDEO TECHNICIAN: Back on the record at 4:28
23 p.m.
24 BY MR. WOODROW:
25 Q. Mr. Baughman, do you happen to know when Ford first
0222
1 exported Explorers to Saudi Arabia?
2 A. As I recall, and I'm trying to remember the documents,
3 there is a document that was produced in discovery that is
4 the actual recall document that's called the 15D for GCC
5 countries. And back in the volume section there is
6 actually a tabulation by model year and I believe 1997
7 model year was the first year that Explorers were sent to.
8 Q. Okay. In any event the Explorers that were exported by
9 Ford to Saudi Arabia were made in North America?
10 A. That's correct.
11 Q. And do you have any information from any source and I mean,
12 a piece of paper, an E-Mail, something that we can look at
13 and see that Ford made any sort of a specific request to
14 Firestone before those vehicles were exported for a
15 recommendation from Firestone for a particular type of tire

for those vehicles that were going to be exported to Saudi Arabia?

A. I have never seen such a document but one may exist. I have not ever seen it though.

Q. Would it also be routine or normal course of business for Ford to have ordered the 16-inch Wilderness tires from Firestone that were going on other Ford Explorers, simply put those tires onto the vehicles that were being exported to Saudi Arabia and then export those without any discussion with Firestone about where those tires were

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going to be used?

A. No. I probably won't get the number absolutely correct, but Explorers are exported to in excess of 50 countries around the world. And the knowledge that those Explorers were going to be exported to those 50 countries around the world is what gave rise to a unique H speed-rated tire in Germany and a severe duty, a severe service tire for Australia. I presume from that, that Firestone had full knowledge of every place else the vehicle was going to go as well including Saudi Arabia.

Q. And while you presume that, you can't point us today to a document or an E-Mail or a conversation that you know about, that demonstrates that Firestone had knowledge that these particular tires were being put on these vehicles and being exported to Saudi Arabia, am I right?

A. No, I've never seen any particular document that

17 specifically states it.
18 Q. And when we talk about the tires, the Wilderness 16-inch
19 Wilderness tires that were failing in Saudi Arabia Ford
20 concluded and Firestone concluded that those tires were
21 failing for, as Mr. Turner put it, environmental, unique
22 environmental factors; is that correct?
23 A. I think that was the Firestone recommendation as to why the
24 tires were failing. I think there was a small amount of
25 skepticism from the Ford people that that was explaining
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1 everything that we were seeing in Saudi Arabia.
2 Q. Well, you've told us today a couple of times that were you
3 were present in Washington D.C. during the Congressional
4 hearings that took place earlier this year, right?
5 A. Correct.
6 Q. And Mr. Nasser testified to Congress during those hearings,
7 didn't he?
8 A. He certainly did.
9 Q. And he testified that 16-inch Wilderness tires made by
10 Firestone were world class quality tires, didn't he?
11 A. Based on the data that we have received from Firestone in
12 terms of claims information when compared against the
13 universe of 16-inch tires reportedly produced by Firestone
14 those tires appear to be performing at very, very good
15 levels the concept of world class tires is a little bit
16 beyond my scope even though Mr. Nasser used those words.
17 Q. Okay. And really he used those words or words just like

those to describe not only the 16-inch Wilderness tires, but the 15-inch Wilderness tires made at Joliet, Wilson and if they were, in Oklahoma City and Laverne; is that correct?

A. That is correct.

Q. Yes. Okay. You talked earlier also, Mr. Baughman, about the consumer complaint line or that was one of the sources of information that Ford relies on in getting data from the

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field about problems or potential problems; is that right.

A. Yes.

Q. And do you know as you sit here today with respect to the consumer complaint line, am I using the right term for that?

A. Yes.

Q. Is there a section or a component of that that tire-related complaints are put into?

A. In terms of the database or in terms of a physical group of people who answer tire-related calls?

Q. Really in terms of how that information is stored or recorded.

A. It is categorized by some very broad categories of the vehicle. I'm not sure if tires are a distinct category or if they are wheel and tire-related things that are put together as groupings. But yes, there are groupings, large groupings of issues on the vehicle.

Q. Okay. And do you know if within the database that would

make up these consumer complaints would there be distinctions within that of particular types of tire problems?

A. I don't think so. Historically, although we are now putting in place a system that will distinguish between levels of problems that would separate a tire separation reported problem or a blowout from a cosmetic defect, so

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that we would be more quickly able to spot a problem in that data.

Q. So as far as you know before the current time period there was no such distinction, but you are working on one now?

A. Correct.

Q. Okay. Do you know, Mr. Baughman, what percentage of Explorer rollover accidents involve a tire-related disablement or failure?

A. No, not directly. I do know that we went into the Fatal Accident Reporting System that NHTSA runs and we looked at all Explorer fatal accidents and there apparently is a portion of the report form that allows the investigating officer to indicate whether or not there was a tire-related issue involved with what became a fatal accident, and that in only 5 percent of the cases that are reported in the Fatal Accident Reporting System is a tire-related issue checked by the officer investigating the accident. We don't know that that's terribly reliable, however, because it's obviously dependent on the operator.

What's also troublesome is in very few cases do they ever annotate the tire failure or what mechanism the tire was involved, let alone record the brand or DOT code or anything else on the tire. So unfortunately, it's very much kind of a dead end trail when you go down there and try to do any investigation.

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Q. Any other source of information besides the FARS data that tells you, reliable or not, that 5 percent are related, of rollovers are related to tire disablements?

A. I didn't say, oh, you asked questions about rollovers. My statement with respect to FARS is all accidents. There is a subset in there that are fatal rollover accidents and the data just gets to be so diluted that it's pretty hard to tell. I don't remember a number for what portion of rollover related were also tire related.

Q. And irrespective of the cause of a rollover do you have any information that tells you how many times a Ford Explorer has rolled over?

A. The number of times it rolled when it had an accident or?

Q. No, no, how many Ford Explorers have been involved in a rollover situation since the Explorer began as a product available to the public in 1991?

A. I'm sure that data exists and should be available from the FARS accident reporting system, but I must say, I know we looked at it and clearly on the Explorer rollovers are slightly disproportionately represented versus other sport

utility vehicles, but Explorer in total is almost best in class for fatal accidents. And so I've never done that as compared Explorer rollovers to say Blazer rollovers or Cherokee rollovers or Wrangler rollovers as in an absolute sense.

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Q. Ford will almost certainly get some sort of a claim, won't it, after a rollover? I mean, there will be a property damage claim of some sort if an Explorer rolls over there would be a claim, won't there be?

A. I don't know that Ford would necessarily see it. I don't understand an awful lot about accidents, but as I understand it, the Ford Motor Company would consistently tell an individual that they should take their issue up with their insurance carrier.

MR. WOODROW: Okay. I don't think I have any further questions. Thank you.

THE WITNESS: Thank you.

MR. TURNER: A couple follow-ups.

(Deposition Exhibit 11 was marked.)

RE-EXAMINATION

BY MR. TURNER:

Q. First of all, I've given you a document, a fairly thick document from that was produced to me by Ford and it has got a lawsuit number down on the right hand bottom corner could you read that for me?

A. BAAE3096.

Q. And what does the last page say?
A. The last page of the document? Oh, the ending Bates number?
Q. Yes.

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A. Sorry. It ends at 3285.
Q. Do you recognize that document?
A. Nope. Never seen this document before.
Q. And what is the title of that document?
A. 1995 Explorer tire measurements and instrumentation.
Q. Do you know if Ford Motor Company ever hired an independent company to conduct wear testing on the Wilderness AT tires?
A. I have no knowledge.
Q. Okay. Could you turn to the front of that document, the introductory page, and see whether that document identifies that as being testing conducted at Ford Motor Company's test?
A. It would suggest that it was done at Ford's request because it references a Ford release number.
Q. And could you put Exhibit Number 11 sticker on it for me please, sir.
Are you familiar with that kind of testing, tire wear testing?
A. No, actually I'm not.
Q. Were you ever made aware that Ford Motor Company retained an outside consulting company to evaluate the wear characteristics of the Wilderness AT tire for the 1995 and

later model Explorers?

A. No, I was not.

(Deposition Exhibit 12 was marked.)

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BY MR. TURNER:

Q. Do you recognize the videotape next to you there in a red cover that we will mark as Exhibit Number 12?

A. No, the words dolly rollover test don't mean anything to me.

Q. Were you aware that Ford Motor Company conducted a dolly rollover test of a Ford Explorer?

A. I don't know what the word dolly even makes reference to, so obviously, no, I have no knowledge of it.

Q. And so I take it if you have no knowledge of it you've never seen the videotape?

A. Best of my knowledge I've never seen the videotape, but since I don't recognize that as a subject I don't think I ever have.

Q. Would you stick that 12 sticker on that real quick for me?

MR. PLATT: Nobody will ever be able to figure out what it said underneath the sticker.

THE WITNESS: It says the same thing on the end.

BY MR. TURNER:

Q. You made a comment to Firestone's lawyer, just a minute ago, about a concern that was raised at Ford Motor Company about Firestone's explanation for the 16-inch Wilderness tire failures in Saudi Arabia; is that correct?

24 A. Yes.

25 Q. Would you explain what you mean by that?

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1 A. I was told by the people who accompanied the Firestone
2 employees to Saudi Arabia during the investigation of the
3 16 inch that they saw tires that had failed. There was no
4 evidence of a tire repair ever having been conducted to the
5 tire, and when they interviewed the employee of the
6 dealership, who owned the tire, he steadfastly claimed that
7 the vehicle had never been operated off-road, he never
8 drove it at high speeds, he only took it back and forth to
9 work, and he had never operated the vehicle with the tire
10 being underinflated. So there was a disagreement as to
11 whether or not those unique operating circumstances totally
12 described the population of failures that were seen in
13 Saudi Arabia. Not to say that it didn't describe most of
14 the failures, it just didn't describe all of the failures.
15 Q. So there were failures that Ford Motor Company became aware
16 of in Saudi Arabia involving P255/70R16 Wilderness AT tires
17 made by Firestone that were not explainable by reference to
18 these unique environmental circumstances?
19 MR. WOODROW: Objection, lack of foundation.
20 THE WITNESS: If you accepted that the statement
21 by the people being interviewed was 100 percent factual,
22 then yes, it was not fully explained by the unique
23 environmental operating conditions there.
24 BY MR. TURNER:

25 Q. Well, did that concern you with regard to continued

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1 operation in the United States by American citizens of the
2 of these same tires?
3 A. No, it did not. I believe then, and believe now in my
4 heart, that the Firestone tires maybe exceptional ly
5 sensitive in operation in very extreme hot regions of the
6 world. And by that I mean Saudi Arabia as an extremely hot
7 region of the world. It seems that it is creating some
8 accelerated aging of the tire that, that is beyond what we
9 would normally see in the North American market.
10 Q. And resulting in tread separations?
11 A. In my mind when I made the decision to replace all the
12 tires in Saudi Arabia with Goodyear tires I felt that that
13 was a significant contributor to why tire separations may
14 be taking place.
15 Q. And you made that decision with regard to the 16-inch tires
16 based upon a concern that those tires, the Wilderness
17 16-inch tires, were especially sensitive to extremely hot
18 temperatures, ambient temperatures?
19 A. Yes.
20 Q. And you would not consider places in the southern portion
21 of the United States as having operating temperatures that
22 are extremely hot?
23 A. Obviously temperature is a matter of degree. And there are
24 certainly areas of the United States that could see
25 temperatures approaching the kinds of temperatures that we

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saw in Saudi Arabia, but as I understand it, Saudi Arabia is really still at the upper extreme of temperature profiles for sustained periods of time.

Q. Well, do you think that the American public ought to be told if they are going to operate tires, Wilderness tires from plants other than Decatur, and Wilderness 16-inch tires should be told to stay out of those particular areas of the United States?

A. No, I don't believe so. I have examined the Firestone claim data on non-Decatur 15-inch tires, and on 16-inch tires, including the performance of those very same tires through the months of June, July, August and September of this past summer, and there is no evidence of an increasing failure rate on any of those tires.

Q. What about those citizens in this country who have in the context of owning an Explorer equipped with these 16-inch Wilderness tires have suffered tread separations in hot areas of this country, what would your response to those people be?

A. If anything, the troublesome part to me is the data doesn't quite fit together. And I cannot completely rationalize it in my mind. It was similar to the discussion that we had during our last break of how come there is no existence of data on tread separations in Mexico when there are lawsuits. And it seems to me that there are also lawsuits

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here in the United States without recorded data in the database, and I can't tell you whether or not your clients accident is in the database or not in the database, that kind of detail was not provided to us. But I have to be honest with you there appears to be more lawsuit activity than there are reported failures in the database. And that's on the 16-inch tire, for example, and on non-Wilderness 15s. And literally we have handfuls of failures, of non-Decatur produced 15-inch tires, handfuls in the Firestone Database.

Q. So you've literally got handfuls?

A. Yes, handfuls.

Q. And what about those clients like Donna Bailey, for instance, who was a passenger in a vehicle whose treads separated and the tire was made at the Wilson, North Carolina facility, have you got any response to the tread separation on the tire involving, a tire made from a facility other than Decatur when the tread separation, in fact, occurs in a hot portion of the country?

MR. PLATT: Object to the form of the question.

THE WITNESS: I'm terribly saddened by the fact that anyone, at any point in time, is ever injured in one of our Ford motor vehicles with tires manufactured at any plant. And it is certainly a tragic event. And tires, on occasion, very rarely do suffer failure mechanisms, both

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blowouts and tread separations. And from all the data that

we have that was provided by Firestone, both in terms of claims information and location of production and number of tires produced, the non-Decatur 15-inch tire and the 16-inch tire through the end of September continue to operate at failure rates that are very low. They are not zero. They are very low. And I am not here to judge whether or not that failure rate is appropriate or not appropriate. That is something that the tire industry and NHTSA and the Ford Motor Company and the other OEMs are going to have to come to grips with, but certainly the failure rate will never be zero for something that has a fair amount of manufacturing variability and is subjected to all kinds of operating variability, poor repair, good repair, overinflation, underinflation, overload, just all of the things that can happen to a tire. So I don't believe in my heart, the failure rate will ever be zero. Someone like yourself who flies, I think we would all admit intellectually, we understand that occasionally a plane will crash. A very tragic event, but we will never live in a lifetime that any of us will ever see, where there not will not be, you know, a pilot error, a mechanical failure kinds of things that bring aircraft down. So I'm terribly saddened by what happened to your client certainly.

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I would never pretend to make a statement that tires produced at non-Decatur plants might not fail. I

think the issue is, is what is the failure rate and is it abnormal and what do we know about the history of the tire and what it may have been subjected to and is it a random manufacturing issue in the tire or is it something that's systemic. I believe that what we campaigned, with Firestone's help, over the last four or five months was a very systemic issue on a group of tires, a family of tires called ATX, and a specific group of tires that were produced at Decatur, Illinois of the AT flavor.

Q. Your company has not determined a cause of these failures; is that correct?

A. No, our work is still very much in progress. We've made tremendous progress in understanding what we think may be the root cause. Unfortunately, because we are not tire designers and we are not compounders of rubbers and maker of tire, we are only able to conduct our root cause analysis at a certain level. And when we go to peel back the proverbial onion to look at well, what is the root cause of why is the peel strength different in Decatur than in other plants we are very much reliant on Firestone and their root cause work, to then take that issue why is the peel strength different, or why are the stress levels at the edge of the belt different between an ATX and an AT and

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work it down to the right level where they can really answer the question.

Q. And you understand that Firestone has yet to determine the

cause of these failures as well; is that correct?
A. I think Firestone, at least based on the quick look at the document that I reviewed today, seems to be farther along in drawing to a conclusion the root case work than my team's investigation would probably allow us to do. I really believe that the American public will not settle for the shallow answer on root cause. They really will want to have work be done about with a level of thoroughness that stands up to all challenges, challenges from your profession, challenges from the media, challenges from the ex-tire builder who has got his pet theory. I mean, it has got to stand up to all challenges. And I think we are going to have to do more work before it is, that our root cause is robust to all those challenges. I don't think we are there yet. I think Firestone thinks they are almost there. I don't believe we are that close.
Q. And as this work continues you think it's reasonable to continue to allow the American public to operate on these tires despite the fact that we don't know the answer?
MR. WOODROW: Object to the form. It's vague and ambiguous as to what these tires are.
THE WITNESS: I'll go back and say, I was

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extremely gratified last week when we conducted our analysis of the data update that we got for the months of June, July, August, and September of the year 2000. And that it did not show, it did a couple things. One, it

validated the population that was recalled, this summer was the correct population, and also validated the need that we did not need to expand the recall beyond where it was presently.

Q. The data you are referring to is the statistical information Firestone provided?

A. Yes, put through a very sophisticated analysis technique which led us to initially determining the problem and subsequently being able to analyze all kinds of different subsets of the data by model year, production at the plant, by specific size, by all kinds of different variables. And it stands up, the non-Decatur produced 15-inch tire as well as the 16, stands up to all the scrutiny of those analyses.

Q. And the reason I ask these questions is, about the American public, is because you referenced airplanes, for instance, a moment ago, correct?

A. Correct.

Q. This year the Concorde jet, for instance, was grounded following a tire failure that resulted in the death of 150 people in a crash, you are familiar with that?

A. Yes, I am.

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Q. And that plane was grounded after that wreck until they could determine the cause to ensure that it would not occur again. Are you familiar with that?

A. Correct.

Q. Now, we are now approaching 150 people who have died in

tread separation/Explorer rollover crashes and there are a lot of people in this country who don't know whether to continue to operate on Wilderness tires. And my question is why is it that we are continuing to expose the American public to a risk that a Wilderness tire is going to separate due to design when we still don't know the answer to what is the problem with these tires?

MR. PLATT: Objects to the form of the question.

MR. WOODROW: Same objection, object to the form, lack of foundation.

THE WITNESS: But what we do know is how those tires are performing in the field. And they are performing at what would appear to be very reasonable levels of failures, so there is an --

BY MR. TURNER:

Q. I'm sorry.

A. That is fact. I mean, unless the databases in some way have been manipulated to not portray the correct situation and I can't be a judge of that, it is Firestone's database as provided to me. But if that database is factual then

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the facts are that statistically those tires are performing at what is almost of sixth sigma level of capability, if you are familiar with.

Q. Yeah, and the claims data that you are referencing, some of that, the charts that were created are contained in the preliminary report that Ford released this week; is that

7 correct?

8 A. Yes, I think the charts for the media are in that dec. The

9 more important charts are actually not bar charts that show

10 averages, but charts that show rate of change of failure

11 for individual model year or calendar year production of

12 tires.

13 (Deposition Exhibit 13 was marked.)

14 BY MR. TURNER:

15 Q. And Exhibit 13, would you please put that sticker on,

16 Ford's preliminary report for me please?

17 A. Which?

18 Q. I think you've got one that is bound.

19 A. This is my stuff. My dec is not complete with all the

20 information that was provided to NHTSA. I didn't attend

21 the NHTSA meeting, so I didn't get the handouts I believe

22 the dec with the rubber band around it. That has all of

23 the material that was passed out.

24 MR. TURNER: I am putting Exhibit Number 13

25 sticker on the package of information that includes the

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1 color graphs that you provided to me, Mr. Platt, is that

2 okay?

3 MR. PLATT: Sure. It's your package. You can do

4 whatever you want with it.

5 MR. TURNER: I'll mark that as Exhibit Number 13.

6 BY MR. TURNER:

7 Q. Correct me if I'm wrong, but the data that Ford requested

from Firestone included several things. One of which included the total production of at ATX and Wilderness tires; is that correct?

A. I'm only confused by what you mean as raw data.

Q. Did you ask Firestone to provide you with the production numbers for the total production of all ATX, ATX II and Wilderness tires?

A. Tire volumes or claims?

Q. Tire volumes.

A. Yes, we asked them to provide us for all of the production of ATX Wilderness tires by plant, by year.

Q. And did you ask Firestone to give you all claims on all ATX and ATX II and Wilderness AT tires regardless of vehicle, or only those claims that came on Ford vehicles?

A. The initial data submission that Firestone gave us on the 28th of July was the identical database that was provided to NHTSA sometime earlier in July, I don't recall the date that the data went to NHTSA. That database included all of

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the claims on Ford and competitive vehicles on OE and aftermarket tires. Okay. The data was then augmented with the Firestone data submission about a month ago that removed the competitive vehicles out of that and was then just a pure Ford claims database OE tire installation and aftermarket tire installation.

The third data submission which we received about two weeks ago, was the update for June, July, August and

September of this year. So in the first data analysis we had both Ford and competitive vehicles in there. And then in the second submission that was altered, to go from about 2600 total claims down to about 1700 claims, which was a removal of those non-Ford vehicles out of the database.

Q. The reason I asked that is because, and by the way, we didn't put Bates numbers and Bates numbers for Exhibit 13, the Ford submission preliminary report is BDAH 1 through 91 and then there is also attached a chart that appears to be folded up, is that likewise Bates numbered, Warren?

MR. PLATT: I don't know. I didn't look at it.

BY MR. TURNER:

Q. Yes, it is, pages 92 and 93.

When you look at, and let me just pick an example, if you look at Bates page number 9 it is a chart for tread separation claims rate for Firestone P235/75R15 tires and down at the bottom in the left hand corner it

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says data provided by Firestone includes only Ford Motor Company applications.

A. That is correct, that's based on the submission that we got about two weeks ago from them.

Q. And what this chart purports to do is compare the cumulative claims rates using only those claims from Ford vehicles with total production of the ATX and the Wilderness, right?

A. No.

Q. The reason I'm asking this. If you look right above it it says the Firestone production data provided to Ford Motor Company was dated 12/8/00.
A. Yeah, I'm not sure that I know what was used in the denominator, whether it was the total number of tires produced or only those tires that were put on Ford vehicles. And I struggle with the latter because we also included the aftermarket tires in the analysis.
Q. Aftermarket?
A. If you took this chart and held it up to the chart that was used when we announced the recall in early August, they are virtually identical. There is no difference in the data trend between this chart and the prior chart.
Q. So this also includes, and again this, I'm going back to these claims data. We are talking about property damage claims data provided to you by Firestone?

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A. Property damage claims, personal injury claims and lawsuits were the three elements in what we called the claims database.
Q. But it the does not include adjustments?
A. Does not include adjustments.
Q. Has anybody considered lumping in adjustments along with this claims data so you have a better feel for failures?
A. If you include the adjustment data what happens is all of the cosmetic issues on the tire, and all of the wear issues and the other things just overwhelm the tread separations.

Q. Firestone can delineate for you which of those adjustment rates, those adjustment figures, relate to some form of tread belt separation, can they not?
A. I think their adjustment database has failure conditions as part of it. They have got a code in there that ties it to what it is.
Q. In fact, there are several categories of tread separations that can be coded in in the adjustment database, correct?
A. I know in Goodyear's database there are different levels of things that might relate to belt separation in their database, it wouldn't surprise me if it was also true at Firestone.
Q. Has anybody within your company lumped together the property damage claims, the personal injury claims, all of the customer complaints and the tread belt condition codes

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in the adjustment data to determine exactly what the failure rates on all known tread separation claims including adjustments are?
A. You are saying those that did not cause a personal injury or property damage or a lawsuit?
Q. Right. Those people who showed up at a Firestone dealership with a tire in their hand with no tread on it.
A. Not to the best of my knowledge, I don't think anybody has done that.
Q. Wouldn't that give you a better read of exactly what the failure rates are?

A. I would expect this data involving property damage claims, personal injury claims and lawsuits to be reflective of that larger database in total.
Q. But you don't know that because you never looked at it, right?
A. No. Well, have I looked at it, I looked at it from a very high level and I could not spot anything unusual that would have led me to even had an ATX 15 inch problem.
Q. But you would agree with me that the charts contained in Exhibit 13 do not fairly and accurately include all known tread separation events regardless of whether they resulted in property damage, personal injury or customer complaint?
A. If it was a non -- if it was a tread separation that did not involve a claim in Firestone's database this analysis

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would not include it, that is correct.
Q. And to the best of your knowledge up until today has anybody at your company tried to make that analysis?
A. Yes, they have and although this is probably not the best explanation, the causal codes that are in Firestone's adjustment data base with regard to tread separations are not fully understood as to how one code is different from another, and what the basis of the use of one code in a certain condition versus another condition is.
Q. And have you asked Firestone to help with you that?
A. We have asked Firestone to help delineate what is the difference between a separation code A, B, C and an X, Y, Z

code so that we can understand it, yes, we have.
Q. Have they answered your question?
A. If they have, it would have been in the last couple of days.
Q. When did you first ask them?
A. We have consistently asked Firestone for data on the field performance of all the tires sold to the Ford Motor Company since August 23rd of this year in writing and orally.
MR. WOODROW: Objection.
BY MR. TURNER:
Q. Well, when did you first ask them to help you interpret all of these different tread separation codes?
A. The first conversation that I am personally aware of took

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place I think last Monday.
Q. So last Monday was the first time that you personally have any knowledge of anyone from Ford Motor Company asking Firestone to help you interpret their adjustment data codes for belt separations?
A. No, in actual fact this, trying to understand their causal condition codes is not with respect to their adjustment data, it is with respect still to their claims data, which is now showing up with what may be the same adjustment causal code, okay. Previous issues of the data have very clearly delineated tread separations as a noun and blowout as a noun, okay. And now they are showing up with these causal condition codes of which multiple ones stand for

tread separations, but we are still doing data analysis at a claims level, not at a total adjustment level.

Q. Has Ford Motor Company asked Firestone to provide you with all of their adjustment data worldwide for all ATX and ATX II and Wilderness AT tires?

MR. PLATT: Both Ford and non-Ford? All the other manufacturers too?

BY MR. TURNER:

Q. Yes, I'm talking about any tire, any ATX, ATX II or Wilderness AT tire, has Ford Motor Company asked Firestone to give you, Ford Motor Company, all of their adjustment data worldwide for tires of the same green tire

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specification?

A. I think the answer to that would have to be no, and what I'm reacting to is we want to see all of the claims data, not all of the adjustment data. We strongly believe that the claims data is most reflective of the tire performance in the field and the adjustment data will be, will be less specific. There will be more data points, but we don't think the quality of the information will be as good based on the discussions we've had with all the tire manufacturers, because the adjustment data in many cases is controlled and input by an individual who may not have even graduated from high school. And the claims information actually is more data rich and with higher level of integrity than the data that is in the adjustment and it

just has to, it is a locally administered policy on adjustments as opposed to a property damage claim requires justification and other evidence, and consequently the data has more integrity to it. I hate to use those words, but from a statistical analysis standpoint you can analyze more data of less quality or less data of higher quality and which one yields the best analysis. As long as the sample size does not fall too low and we still have over 2,000 data points, okay, in the Firestone claims analysis, even after taking out the competitive manufacturers, we feel very strongly that that is the better of the two databases

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from an integrity, it may be smaller, but with 2,000 data points in we can do all the analysis we need to do.

Q. And the reason that you question the reliability of the adjustment database is because there may be an uneducated worker at Firestone store in Texas who can't tell when a tread of a tire came off?

A. He may not have been fully trained to observe all of the things that he needs to observe before he made the decision to write down that it was a causal code associated with tread separation. As I'm sure all of you know, a tire run flat on the rim will cause the tire to separate. So if the tire guy looking at the tire doesn't look for evidence of scruffing of the sidewall, perhaps damage to the wheel, perhaps a cut through of the sidewalls, and just writes down tread separation, that is not the tread separation

that is causing the issue in the field. That is a tread separation as a result of running the vehicle with a flat tire over a period of time. And it's that, those kind the of interpretations that are important. Because we are not as concerned about the cases where the guy had a flat tire and he drove it to the corner gas station with no air and ended up sawing the tire in half, as opposed to those tread separations which occurred at speed, okay, and was a complete delamination of the top belt of the tire.

Q. Are you telling me then that this data that Firestone

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provided you that every one of those property damage claim tires was inspected by somebody at Firestone?

A. I'm told that Firestone did the best they could to validate the data and they believe that where it says tread separations that that was the likely cause of what happened. There is some degree of uncertainty in the data. There is a fair number of claims that are in the database where it says unknown, but even if you throw away the unknowns as bad data and if even if you throw away a third of the ATX failures or a third of the Decatur Wilderness failures, you still end up with the same conclusion. These tires are failing at an unusual rate with a very unusual shape to the rate of failure occurring.

Q. I guess the problem I'm having with the methodology, I guess is the best way to put it, is that you are basically dealing right now with property damage claims and personal

17 injury claims that Firestone has given you that total what?
18 A. A little over 2,000 claims.
19 Q. And you don't think it would be important if there are
20 another 50,000 tread separations in the adjustment database
21 over and above your 1,703 to evaluate how frequently these
22 tires are, in fact, coming apart in the real world?
23 MR. WOODROW: Object to the form.
24 MR. PLATT: Asked and answered, Tab about three
25 times. You are just beating this subject to death.
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1 THE WITNESS: I think your suggestion is
2 undoubtedly a good one, okay. There is probably some
3 insight to be gained by doing that analysis. Quite
4 frankly, we are much more interested in understanding the
5 data sets associated with the other tires that went on Ford
6 vehicles that were produced from tires that were produced
7 at Decatur. So we have prioritized our data analysis going
8 back through and looking at the June, July and August
9 update was very important because it validates the original
10 campaign scope, and also, I think validates that we don't
11 need to expand the recall. But I must tell you that all
12 Decatur may be at risk and I need to go through that. I
13 have to do that before I start getting reports of accidents
14 and deaths on other tires.
15 Q. Did Ford take these 1700 and some odd damage claims
16 provided to you by Firestone and weed out those that
17 Firestone concluded were due to underinflation?

A. I don't recall anything in the database that had underinflation as a criteria. The only exception criteria that was there was if there had been any evidence of a tire puncture and repair.
Q. So if the tire punctured and repaired, regardless of where the tread separation started in relation to the puncture and repair, was that one taken out of the database?
A. No, we left it in the database.

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Q. So you haven't taken anything out of the database that Firestone gave you?
A. We have taken nothing out of the database that Firestone gave us.
Q. Did Firestone take anything out of the database before they gave it to you?
A. Initially?
Q. Yes.
A. They told me they took nothing out of the database before they gave me the initial database.
Q. So the database that you are working with should include all alleged tread separations, regardless of whether they were due according to Firestone, to underinflation, puncture repairs or design or manufacturing?
A. Right. Yes, I believe so. We got the same database that NHTSA originally got.
Q. So potentially you are including in your database that you are using, claims, property damage and personal injury

claims that may be tread separations that do, in fact, relate to punctures and repairs, for instance?
A. We may be, and I would suggest to you that that is appropriate. I do not think it is a realistic expectation that somebody who has a small nail puncture a tire, and he goes and he has that tire properly repaired and subsequently has a tread separation, that either the Ford

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Motor Company or Firestone can claim no fair, that tire had a nail puncture. Because we do not specify that tires cannot be repaired, nor does Firestone. They have very specific guidelines as to what can be repaired and what procedures must be used. But I think just because a tire may have been previously repaired and had a tread separation you can walk away from it, I don't think that is appropriate for either one of us to do.
Q. Do you believe based upon what you've learned and you've learned a lot, I take it, since you've been involved in this about tires that you didn't already know?
A. More than I ever wanted to know unfortunately.
Q. I can imagine. Have you learned anything about the, from a tread separation and tire standpoint, have you learned anything about whether or not it is -- strike that and ask this a different way.
Have you become convinced, based upon what you've seen, that you can look at a tire whose tread has come apart and make a conclusive conclusion that that failure

was due to being operated 2 or 3 psi underinflated?
MR. WOODROW: Object to the form.
THE WITNESS: Nothing that I know of in a root cause work would allow me to look at a tire that has failed and draw the conclusion that it had been underinflated by a small amount.

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BY MR. TURNER:
Q. And let's put a range on a small amount.
A. That's really difficult because we've looked at lots of tread separations from tires that have been returned. We have simulated tread separations on a rig data and run those tests and swept various psi range, and that data's encompassed here. We start to see differences in the way the tires perform with differences as small as 3 psi. We see the failure mechanism sometimes change, predominantly the failures of blowouts, and suddenly predominantly the failures become tread separations, but it seems to vary with manufacturer or tire manufacturer. And it's my opinion that the Firestone 15-inch tires are not robust against variations and inflation pressure and in operating condition, load and speed.
Q. And the tires you are talking about are not robust, include all Wilderness AT 15-inch tires and 16-inch tires?
A. I think my statement would be more strongly focused at the 15-inch tire than the 16-inch tire. Our evaluations of the 16-inch tire would suggest those tires by design, whether

intentional or by luck, run cooler than the equivalent 15-inch tire at the same operating conditions.

Q. Do you think the consumer should be advised that a Wilderness 15-inch tire made in a plant other than Decatur is not robust?

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MR. WOODROW: Object to the form.

THE WITNESS: Robustness is a relative term. The Decatur tires by the root cause evaluations that we've done appear to be very lacking in robustness to what are real world operating conditions, and I think that's why the curve looks like it does in the data. The non-Decatur tires are certainly different, and even though they may generate more heat, even though they may see cracks at the belt edges, the skim stock peel strength is significantly different and that may be the difference between why one set of Decatur tires perform one way and the non-Decatur tires perform another way. Despite the fact that from a design standpoint of the belt package they may both be the same.

Q. Based upon the data that I've seen, not only in your Exhibit 13, but in some of the other information that we've seen that Ford has produced and that Firestone has produced, there does appear to be a difference between Wilderness tires made in Decatur and Wilderness tires made in Wilson, do you agree with that, from a tread separation standpoint?

A. We see differences in the data and we are in the process of examining what differences, what physical differences exist in the tires between Decatur and Joliet and Aiken and Wilson.

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Q. But the Wilderness tires from Wilson, for instance, are also failing at greater rates than other kinds of tires being produced by other manufacturers, are they not?
A. I have only seen the Goodyear test data, their failure rate data at a very high level. And I am unable at the level of data that I saw from Goodyear, which I do not have physical possession of, I am unable to really determine the relative failure rates of the Goodyear tires versus the non-Decatur Wilderness tires.
Q. There are more tread separations of the Wilderness tires from plants other than Decatur and the Goodyear tires that Ford put on the Explorer, are there not?
A. I don't know that to be true. I have, as I say, I've only seep the Goodyear data at a very high level. And as you may know, Goodyear supplied all of their equivalent data on property damage lawsuits and property damage personal injury claims and lawsuits to NHTSA, but Goodyear requested confidentiality of that data and therefore, we have not seen it. If I had seen it, I would do exactly the same analysis that I've done in the Firestone data, and it would give me a reference point by which to judge the non-Decatur Wilderness AT tires. I have no reference point to judge

it.
Q. And if the non-Decatur Wilderness tires are separating at twice the rate of the Goodyear tires would that concern
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you?
MR. PLATT: Object to the form of the question.
MR. WOODROW: Same objection.
THE WITNESS: Twice the rate of what we presently know about the non-Decatur 15-inch Wilderness tires would probably not upset me.
MR. PLATT: Let's take a break. This few minutes has turned into an hour.
MR. TURNER: I'm just about through. You can take a break if you want to.
MR. PLATT: What is just a few?
MR. TURNER: Maybe two or three more questions. Keep going, okay.
MR. PLATT: We can live with that.
BY MR. TURNER:
Q. How about three times the rate?
MR. PLATT: Object to the form of the question.
THE WITNESS: I mean the non-Decatur Wilderness tires are performing at a level of performance approaching six sigma capability, six sigma being three parts per million failure rate. Other people have used the word world class tires and we think based on everything we know those are world class kind of numbers.

I don't mean to wish you any evil, but the private airplane that you are flying back in isn't six

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sigma capable. Okay. It's operating somewhere between five, five and a half, six sigma. And the airplane that Warren is going to get on is running at probably six and a half to seven sigma capability.

BY MR. TURNER:

Q. But the information that you are working with, Mr. Baughman, is less than all of the available information because of confidentiality, right?

A. Confidentiality with Goodyear? Yes.

Q. Yes.

A. We have been very hopeful that NHTSA would quickly take the Goodyear data, do the very analysis that we had done on the Firestone data and establish a peer group evaluation that would say state of the art of 15-inch tires used on sport utilities, the failure rate is X and if you are greater than X you might want to think about doing something. And if you are less than X you are probably okay. That is the way we would, you know, we would do lots of things. Let's go back to commercial aircrafts, all right. I mean, the reason why the U.S. carriers perform better than the foreign carriers is not by accident. Right, it is by training, it's by maintenance and a whole bunch of stuff. And I don't know about you, but when I fly anywhere around the world I'm on a U.S. flag carrier. I don't try to spend

25 a lot of time on those other guy's planes, okay, even

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1 though the food may be better.

2 Q. And this three parts per million figure you gave me a

3 minute ago, that's claims data, correct?

4 A. That would be based on claims data, yeah.

5 MR. TURNER: I believe that's all the questions I

6 have.

7 MR. WOODROW: I do have a couple of minutes. You

8 need to take a short break?

9 COURT REPORTER: Just a couple of minutes, two

10 minutes?

11 MR. WOODROW: I have a couple of minutes of

12 questions, I don't know how long the answers are going to

13 be.

14 THE WITNESS: Okay, I'll give you short answers.

15 VIDEO TECHNICIAN: Off the record then at 5:29;

16 is that right?

17 MR. WOODROW: No.

18 THE WITNESS: Let's keep going.

19 RE-EXAMINATION

20 BY MR. WOODROW:

21 Q. Just very quickly, Mr. Baughman, if I can. The Exhibit 8

22 that we looked at before, which is the letter involving the

23 two cats, as you called them, who are 10,000 miles away.

24 A. Sorry, I'll apologize to them personally when I see them.

25 Q. I know you will probably never going to hear the end of

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that, but this Mr. Sellnacht, am I saying his name right, do you know?

A. I do not personally know him.

Q. Okay, it is his letter and he's reporting this comment about Firestone legal having major reservations about an issue. Do you know whether he talked to anyone at Firestone legal?

A. No, I really don't know. My speculation has been all along that that letter is capturing probably second or thirdhand information.

Q. And that's precisely the point I wanted to ask. Mr. Sellnacht may not even have talked to anyone at Firestone legal. He may be reporting that something that someone told him about what that person talked to Firestone legal about, right?

A. I think that's highly likely.

Q. And this document, if I recall, was provided to Congress just the day before one of the hearings took place; isn't that right?

A. That documentation was provided with all the documentation we provided to Congress and it was just a couple days before the actual hearings.

Q. All right. And initially when Ford provided this to Congress the paragraph on the second page that Mr. Turner asked you about that was highlighted and mentioned Corey

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MacGillivray, that was black marked out with a marker when you all gave it to Congress, wasn't it?

A. I don't honestly know.

Q. You don't remember that?

A. No, I don't. Was it redacted or whatever that word is you guys use, redacted? I don't know.

Q. I thought you were there and may have remembered that, but you don't recall anything about that?

A. No. No, as a matter of fact the process of providing documentations to Congress was just one step short of unbelievable, given the time frame that they give gave us to pull what was 70 plus boxes of documentation, and as I think you probably know, their ended up a couple documents that had nothing to do with Firestone tires when one of the Congressmen started waving around a document that said we also were have having Continental tire issues someplace in the world. I mean, that's how bad the discovery process was that it sweeped up things that are were non-Firestone non-Explorer. But when somebody gives you 48 hours to pull everything you know together, that's probably a probable outcome.

Q. Also with respect to Saudi Arabia, you told Mr. Turner that your concerns about the conclusions that were reached about those tires were based on what a couple of your people learned in talking to someone in Saudi Arabia; is that

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right?

A. The investigation was made jointly, and as I understand it, there were two people from Firestone and two people from Ford and they reviewed all of the vehicles and the tires and the people, I think jointly. They didn't go off in two separate, there weren't two separate investigations. What troubled the people that went to Saudi Arabia was the fact that in their minds it was not inconclusively proven that the operating conditions and the poor tire repair and the underinflation explained everyone of the issues that they saw. That was the nagging bit of doubt that they brought back from Saudi Arabia.

Q. And that was what they reported to you?

A. That was what they reported to me.

Q. Based on what was reported to them by individuals who were involved with these vehicles and tires in Saudi Arabia?

A. As reported by people who were physically the owners and the drivers of these vehicles, and who claimed that they had not exposed their vehicle to these very unusual, other than the heat, they had not exposed their vehicles to these operating conditions.

Q. Throughout all the months that you've been working on this are you aware of the adjustment rate for all adjustment conditions for these Firestone recall tires over the entire life that these tires have been in production?

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A. I have looked at the numbers and looked at them actually by plant, by month of production, and it was just a sea of

numbers. Each one of the numbers by month was usually 100th of a percentage point kind of number. I mean, they were very small numbers and sometimes the numbers were 1s and 2s and occasional 3s and then they would go back a way again. So it was very difficult to draw any conclusion from that.

MR. WOODROW: That's all I have. Thank you.

THE WITNESS: Okay.

VIDEO TECHNICIAN: Is that it?

Deposition concluded at 5:35 p.m.

(The deposition was concluded at 5:35 p.m.)

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CERTIFICATE

STATE OF MICHIGAN)

3) SS:

COUNTY OF WAYNE)

4

5 I, PATRICIA J. HYLAND, Certified Shorthand

6 Reporter, a Notary Public, hereby certify that I recorded

7 in shorthand the examination of THOMAS D. BAUGHMAN,

8 the deponent in the foregoing deposition; and that prior to

9 the taking of said deposition, the deponent was first duly

10 sworn, and that the foregoing is a true, correct and.

11 complete transcript of the testimony of said deponent.

12 I further certify that request was made for

13 submission of the transcript to the deponent for reading and

14 signature and that such submission was made.

15 I also certify that I am not a relative or

16 employee of or agent of an attorney for a party; or

17 financially interested in the action.

18

19 _____

PATRICIA J. HYLAND, CSR-0453, RPR

20 Registered Professional Reporter

21

Notary Public, Wayne County, Michigan

22

My commission expires: 2/23/03

23

Dated: This 23rd day of December, 2000.

24

25