

IN THE UNITED STATES DISTRICT COURT
FOR THE **COURT NAME REDACTED**

Case # **REDACTED**

NAMES REDACTED,

Plaintiffs,

-vs-

FORD MOTOR COMPANY, INC., a
foreign corporation,

Defendant.

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

WITNESS NAME REDACTED

Ritz Carlton Hotel
Salon 6
Dearborn, Michigan

Exact Date Redacted, 1995
9 o'clock a.m.

1 people, and you didn't want your name on it?

2 A. No, that's not true. I had --

3 Q. Isn't it true that you have sanitized your own

4 biography to reflect that you did not work on the

5 Bronco II program?

6 A. Absolutely not.

7 MR. **Name Redacted**: Thank you. Let's take a

8 break for lunch, and we'll get back on the record at

9 2 o'clock.

10 VIDEO TECHNICIAN: We're off the record.

11

12 (A lunch recess was taken at 1 o'clock p.m.)

13

14 VIDEO TECHNICIAN: We're beginning tape No.

15 3 of the deposition. We're back on the record.

16 MR. **Name Redacted**: Thank you, Mr. **WITNESS NAME REDACTED**.

17 I have no further questions at this time.

18 MR. GOODMAN: I have a few questions.

19 MR. **Name Redacted**: All right, Mr. Goodman.

20 EXAMINATION

21 BY MR. GOODMAN:

22 Q. Mr. **WITNESS NAME REDACTED**, my name is Avery Goodman, and I

23 represent a number of people who were injured in

24 Bronco II rollovers.

25 I'm going to ask you some series of

1 questions. Sometimes a lawyer, although he tries
2 his best to make a question clear, sometimes it's
3 not a hundred percent clear.

4 If at any time you don't understand the
5 question that I'm asking you, please let me know and
6 I will try to state it in a way that you do
7 understand. Okay?

8 A. Okay.

9 MR. GOODMAN: Did you lose me on all of
10 what I just said?

11 VIDEO TECHNICIAN: No, I have another mike.

12 MR. GOODMAN: Oh, okay.

13 BY MR. GOODMAN:

14 Q. All right. Back in 1981 or 1982 I believe you had a
15 -- some discussions with a Mr. Drotar about
16 Bronco II axles, is that correct?

17 A. About Bronco II?

18 Q. The axles of the Bronco II.

19 A. Yes.

20 Q. Could you tell me about that?

21 A. We basically were trying to identify the changes
22 that would be necessary to the axles to widen the
23 track.

24 We had made a recommendation that we would
25 widen the track, and so we needed to extend the

1 length of the axles. There were rear axles
2 involved, and front axles.

3 Q. And when was this?

4 A. This would have been probably -- probably in the '81
5 or earlier timeframe.

6 Q. Was it January '81, the middle of '81?

7 A. Let's see. Probably end of '80, '81, somewhere in
8 that timeframe, when we were discussing the track
9 width revisions that we were proposing to make to
10 the vehicle.

11 Q. And why were you proposing to make track width
12 revisions?

13 A. Well, within the package of the vehicle we were
14 making a smaller vehicle, and we felt it was a good
15 idea to make the track as wide as we could and the
16 vehicle as -- the center of gravity of the vehicle
17 as low as we could while still providing all the
18 function -- the functionality that we desired for
19 the vehicle for its intended market usage.

20 Q. Okay, and why did you want to make the track of the
21 vehicle as wide as you could?

22 A. I think it's generally accepted that a wider track
23 is favorable -- is one of the factors. There's a
24 lot of factors that affect stability, but a wider
25 track enhances stability, and a lower center of

1 gravity tends to enhance stability.

2 Q. And conversely, a higher center of gravity reduces

3 stability?

4 A. Conversely, there is -- there are a lot of factors

5 to take into consideration. Suspension --

6 Q. All other things being equal.

7 A. -- shock absorbers -- well, they're never all --

8 they never are all equal, but --

9 MR. **Name Redacted**: I'd like to caution both of

10 you to not speak at the same time. That is hard for

11 the court reporter to get it down.

12 MR. GOODMAN: And I agree with you.

13 BY MR. GOODMAN:

14 Q. All other things being equal, Mr. **WITNESS NAME REDACTED**, isn't

15 it true that a higher center of gravity will reduce

16 the stability of a car?

17 A. The --

18 MR. **Name Redacted**: Object to the form.

19 THE WITNESS: Well, all other things never

20 are all completely equal, and the height of the

21 center of gravity is generally dictated by

22 functional considerations.

23 But as engineers, within a given type of

24 vehicle we generally -- we generally try to maximize

25 the track width and keep the center of gravity

1 height so that all the functions of the vehicle will
2 still be capable of doing that.

3 BY MR. GOODMAN:

4 Q. And you try to maximize the track width and you try
5 to lower the center of gravity as much as you can in
6 order to increase the stability of the car, isn't
7 that true?

8 A. Well, it's one -- it's one of the factors that will
9 help the stability of the vehicle.

10 But in the limit, as those numbers change,
11 the vehicle changes its type characteristics.

12 So, for example, a passenger car which
13 might have a track width over center-of-gravity
14 height of one number and a utility vehicle which
15 might have a slightly lower number, if I make the
16 utility vehicle like the passenger car, it no longer
17 is a utility vehicle. So --

18 Q. I'm going to have to strike your answer as non --
19 move to strike your answer as nonresponsive, and I'm
20 going to ask you the question again.

21 Isn't it true that all other things being
22 equal, a wider track width and a lower -- and a
23 lower center of gravity will make the car more
24 stable, and a narrower track width and a higher
25 center of gravity, all other things being equal,

1 will make the car less stable?

2 MR. **Name Redacted**: Object to the form. It's
3 compound, incomplete hypothetical.

4 THE WITNESS: Okay. Well, all other --

5 BY MR. GOODMAN:

6 Q. Yes, or no.

7 A. All things are never equal, so there is not a yes-no
8 answer to that question.

9 Q. So you cannot give me an answer to my question?

10 A. I don't want to give you a specific answer to the
11 question, because all things are never equal.

12 That is just a simple geometric box that
13 you're describing. That isn't actually the make-up
14 of a complete vehicle.

15 Q. Let me ask it this way then:

16 Isn't it true that when you were attempting
17 to increase the track width and lower the center of
18 gravity as much as you could in 1980-'81, as you
19 previously testified, your purpose in doing that
20 was, according to you, to increase the stability of
21 the vehicle as much as you could?

22 A. I said it would enhance the stability of the
23 vehicle.

24 Q. All right. Now let me ask you about the stamped
25 axle versus the forged axle.

1 Was there a discussion about that?

2 A. Yes, there was.

3 Q. Tell me about that.

4 A. Well, the stamped axle started with the full-size
5 F-Series program as a potential cost-reduction
6 opportunity, and there were difficulties in
7 manufacturing it to meet the tolerances that we
8 needed, and there was discussion about backing away
9 from the stamped axle in the full-size F-Series and
10 going to a forged axle, okay?

11 The 4x4 originally had -- the 4x4, big
12 F-Series, had a forged axle, and a stamped axle in
13 the 4x4, and we planned a new family of stamped
14 axles for the big F-Series, and we planned
15 originally to have stamped axles both for the 4x2
16 and 4x4 versions of the Yuma and the Bronco II.

17 Q. In fact, did you have stamped axles? Were they
18 eventually installed in Bronco II?

19 A. The Bronco II 4x4 has stampings to make up the
20 axles, okay?

21 The 4x4 originally had stamped axles, and
22 then subsequently changed to forged axles.

23 Q. I see. And when was it changed?

24 A. The -- I believe that we went into production with
25 forged axles on the Bronco II for the 4x2.

1 Q. For the 4x2?

2 A. For the 4x2. The 4x4's were always stamped axles,

3 so that you could have a -- it was an ideal

4 situation for having a stamping that could hold the

5 differential gear, like the stampings in the center

6 of a regular rear axle.

7 Q. So have the -- do the 4x4's -- have they always had

8 stamped axles throughout the entire period that the

9 Bronco II was sold?

10 MR. **Name Redacted**. Objection. I think that

11 misstates his testimony.

12 I think he said that the 4x4 had forged

13 axles.

14 BY MR. GOODMAN:

15 Q. All right. Let me see -- maybe I didn't understand

16 you correctly.

17 Did you say that the 4x4 had forged axles?

18 A. The 4x2 had forged axles, okay, and the 4x4 had

19 stamped axles, and the 4x4 always had stamped axles.

20 Q. The 4x4 always had stamped axles?

21 A. On the front suspension, and a conventional

22 combination stamping tube-Hotchkis rear suspension.

23 Are you talking about the front suspension?

24 Q. I'm talking about all the axles on the car.

25 A. Okay. Well, the front suspension was a Twin-I-Beam

1 suspension with stampings on the 4x4 and originally
2 was conceived as having stampings on the 4x2.

3 We went back to forged axles on the 4x2.

4 The rear axle was always a Hotchkis, which is a
5 stamped -- combination of stampings and castings on
6 the center section and tubes, was basically a rigid
7 axle supported on semi-elliptic leaf springs on the
8 rear.

9 Q. Okay. So the 4x2, the rear axle, is a stamped axle
10 or a forged axle?

11 MR. **Name Redacted**: Objection. Misstates his
12 testimony.

13 MR. GOODMAN: Well, I'm asking him --

14 THE WITNESS: Ask the question again.

15 BY MR. GOODMAN:

16 Q. All right. What type of axle, stamped or forged,
17 was on the Bronco II 4x2?

18 A. Which end, front or rear?

19 Q. Rear.

20 A. The rear, it was the same kind of axle. It's a
21 Hotchkis conventional axle, single rigid axle.

22 Q. Is it a stamped axle?

23 A. It's a combin -- it's not -- the stamp doesn't
24 really apply. It's a conventional rear axle. It
25 has tubes that go into combinations of stampings and

1 castings with a differential carrier and half-shafts
2 that go out to the wheel ends.

3 Q. But it is not a forged axle?

4 A. There isn't any such -- there isn't one that I know
5 of, a rear-drive rear axle. It's just a
6 conventional rear-drive rear axle, same as found on
7 hundreds and hundreds of trucks.

8 Q. Okay.

9 A. Or millions of trucks.

10 Q. Were you present -- well, were you working at Ford
11 at the time the 4x2 was being designed?

12 A. We started to work on the 4x2, and the 4x2 was
13 conceptualized at the time I left the company.

14 I'm not sure it was a complete program. It
15 came in later. But we had -- had identified that we
16 would use various parts of the Yuma, which was the
17 Ranger 4x2 front suspension on the Bronco II, a
18 modification of that.

19 Q. And whose decision was it as to what type of rear
20 axle would be used on the Bronco II 4x2?

21 A. Well, there was a group that was responsible for the
22 rear axle design, and we were kind of responsible
23 for the handling and suspension. So it was a
24 combination effort for us to decide -- if we wanted
25 to change the track width, we'd have to talk to the

1 guys that released the axle to change the axle
2 width, or whatever we wanted changed to that. So it
3 was kind of a combination effort.

4 Actually there were three people involved.
5 There was Dave Chamberlain, I believe, was vehicle
6 programs, I think Nick Kazan may have had the axle
7 -- I'm not sure exactly who that was -- and then
8 there would have been ourselves in the suspension
9 design group.

10 Q. What were the relative advantages and disadvantages
11 of the forged axle versus a stamped axle?

12 MR. **Name Redacted**: For which axle, the front or
13 the rear?

14 MR. GOODMAN: For the rear.

15 THE WITNESS: Well, there is no forged axle
16 on the rear. There is no forged axle. It's just a
17 conventional Hotchkis rear suspension on the front.

18 BY MR. GOODMAN:

19 Q. Okay. Maybe I'm misunderstanding. Let me back up.

20 You testified in -- on October 25th, 1993
21 in the Diaz versus Ford Motor Company case that --
22 and I quote:

23 "We were going to put a stamped axle in the
24 vehicle instead of a forged axle."

25 You were asked the question: "Was that on

1 light trucks or some other vehicle?"

2 Your answer was: "Light trucks."

3 The question was: "Would that have
4 included the Bronco II?"

5 Answer: "It did include the Bronco II."

6 Question: "Was that idea of yours ever
7 implemented at Ford?"

8 Answer: "It wasn't my idea, it was his
9 idea, and we worked on it and it failed and we
10 cancelled it."

11 Could you tell me what you were talking
12 about?

13 A. Okay. We cancelled using a stamped axle on a
14 conventional 4x2 as a viable way to build the
15 vehicle, and the reason we did that is because it
16 was made out of about 1/8-inch-thick high-strength
17 light-alloy steel that had to be formed in a
18 13-station triaxial huge press, and we couldn't
19 actually roll the axle over and hold dimensional
20 integrity while we formed it without serious issues.

21 So we had to cancel the program and go back
22 to one of two things; we could either go back to a
23 forged axle, which is -- was the technology we've
24 used for 30 years on front axles, Twin-I-Beams, or
25 we could put a 4x4 suspension in, which is

1 stampings, and just eliminate the guts of the drive
2 shafts and the gears.

3 Q. All right. And what you have just described to me
4 is with relation to the front suspension?

5 A. It's all front suspension, yes.

6 Q. Okay. Now with respect to the rear suspension,
7 could you describe what type of axle exists or was
8 installed as part of the two-wheel-drive version of
9 the Bronco II?

10 A. Ford Motor Company has a whole series of axles.
11 They go by the size of the ring gear. They have
12 like eight-inch, eight-and-a-half inch, nine-inch
13 and so on, and that refers to the diameter of the
14 big ring gear that is driven by a pinion that goes
15 to the drive shaft that goes from the back of the
16 engine to the front of the axle, and that ring gear
17 is driven -- that ring gear is driven around.

18 Then there's another cyclic set of gears
19 that makes up what is known as a differential cage,
20 which is generally on a casting that drives two
21 half-shafts. And what these do -- this allows
22 torque to be applied to the two half-shafts, but in
23 the event that you're going around a corner the
24 wheel that has got the least traction will get no
25 power and will spin or turn a different velocity so

1 that you don't drive both wheels at the same speed
2 going around the corner.

3 And that's a conventional -- what we call
4 rear axle. Live rear axle is another terminology
5 we would use.

6 Q. I guess what I meant to ask you -- and maybe I
7 didn't ask it clearly, metallurgically what type of
8 axle is used on the rear of the Bronco II?

9 A. Okay. An axle is a complex subassembly, if you
10 like, or assembly made up of probably 50 or 60
11 different components that include steel half-shafts,
12 cast-iron machined ring gears, cast-iron cage,
13 nodular iron or some other iron or steel beveled
14 gears, a stamped cover, a cast center section,
15 bearings that are made of steel, rubber seals,
16 stamped weldments on tubular welded extensions that
17 move out from the center cage to the outboard
18 carriers, sometimes stamped and sometimes cast, that
19 carry the brake assembly that holds the wheel in
20 that has the studs.

21 So that is the basic description of an
22 axle.

23 Q. In the case of the rear axle of the 4x2 Bronco II --
24 and you said sometimes it may be forged, sometimes
25 it may be cast as to one respect of that axle --

1 what was it in the case of the rear axle of the 4x2?

2 A. Whatever Ford's conventional technology is in that

3 whole area, that axle is --

4 Q. You personally don't know then?

5 A. -- universally -- it's universal technology, and I

6 don't know specifically, exactly what that material

7 is, of what -- I don't even know what specific

8 component you're referring to.

9 Q. All right, then. I'll go on then.

10 Now, Mr. **WITNESS NAME REDACTED**, you gave your first

11 testimony on the subject of the Bronco II back on

12 July 9th, 1990, is that correct?

13 A. I believe that's correct.

14 Q. All right. And prior to that date you had given

15 testimony in only one other case, and that was

16 involving Ferro Manufacturing, is that correct?

17 A. I may have given testimony when I worked at Ferro.

18 I don't remember specifically. It may have been a

19 latch case.

20 Q. You gave testimony concerning a door lock

21 manufactured by Ferro Manufacturing, is that

22 correct?

23 A. That's probably right. I've almost forgotten about

24 that.

25 Q. And Ferro made body panels and doors for the auto

1 industry, is that right?

2 A. No. They made window regulators and seat tracks and
3 recliners and latches and remotes and various other
4 mechanisms.

5 Q. Bear with me just a moment.

6 All right. Now, after -- at the time you
7 gave that deposition in the Ferro case, you were
8 already working with your own -- you had already
9 opened your own firm, **WITNESS NAME REDACTED** & Associates, is
10 that correct?

11 A. I don't remember when I gave that case -- can you
12 tell me the date?

13 Q. I believe that was in 1984.

14 A. What date in 1984?

15 Q. Oh, I don't know the date. I don't have that.

16 A. Well, I don't remember if I gave that testimony
17 before I left Ferro or after, but I started my own
18 business in the fall of 1984.

19 Q. All right.

20 A. I believe that testimony that you're referring to is
21 while I worked at Ferro as Vice President of
22 Engineering.

23 Q. Okay. Your business, **WITNESS NAME REDACTED** & Associates, was
24 started about six years before you had given your
25 first Bronco II deposition, is that correct?

1 A. That's correct.

2 Q. And you worked for Ferro Manufacturing for a little

3 less than two years, is that correct?

4 A. That's correct.

5 Q. And before that you worked for Ford Motor Company,

6 the defendant in this case, is that correct?

7 A. That's correct.

8 Q. And you worked for Ford about nine years, is that

9 correct?

10 A. That is correct.

11 Q. And you first went to work at Ford in 1972, is that

12 true?

13 A. That's correct.

14 Q. And you left Ford right around July or August of

15 '82, is that right?

16 A. Yes.

17 Q. And when you left Ford you were the Supervisor of

18 Suspension Design, is that correct?

19 A. That is correct.

20 Q. And the primary business of **WITNESS NAME REDACTED** & Associates

21 at the time you opened up and now is consulting work

22 performed for businesses involved in supplying the

23 auto companies, is that correct?

24 A. And the auto companies themselves.

25 Q. Okay. And you had gotten a little business from

1 Ford after you left, is that correct?

2 A. That's correct.

3 Q. But by the time your deposition was taken on July

4 9th, 1990 you didn't have any contracts at all with

5 Ford, is that correct?

6 A. Well, I had done substantial business in the prior

7 year, but those contracts had completed, and I

8 hadn't actively been approached by Ford to do any

9 further business at that point.

10 Q. So you had no contracts whatsoever at that point;

11 that's true, isn't it?

12 A. Not that were firm contracts in hand, that's

13 correct.

14 Q. Now, sir, when you were subpoenaed to go to that

15 deposition were you contacted by Ford or were they

16 contacted by you, or what happened?

17 A. Ford contacted me and notified me of the deposition.

18 Q. Okay.

19 A. Or Ford's lawyers contacted me.

20 Q. All right.

21 A. Or Ford's legal counsel representing Ford.

22 Q. And did you at some point write to them a faxed

23 letter? I believe it's dated June 20th of 1990.

24 MR. **Name Redacted**: I think that's already been

25 marked as an exhibit.

1 MR. GOODMAN: Has it? That's right, it has
2 been. I wonder if I could have that exhibit. I
3 don't remember what the number is. Why don't we
4 just use that one?

5 MR. **Name Redacted**: That's Exhibit 17, if I'm not
6 mistaken.

7 THE WITNESS: (Indicating)

8 MR. GOODMAN: All right. Why don't we put
9 this up on the screen?

10 MR. **Name Redacted**: Please note my objection to
11 the incompleteness of this document, as it does not
12 contain attachments referenced.

13 BY MR. GOODMAN:

14 Q. Now, you wrote this letter to a man by the name of
15 Art Anderson, is that correct?

16 A. That's correct.

17 Q. And the letter, as we said, is dated June 20th,
18 1990, is that correct, the date?

19 A. That's correct.

20 Q. And which is about three weeks before the date of
21 your deposition on July 9th, 1990, is that correct?

22 A. That's correct.

23 Q. And you wrote, and I quote:

24 "We've attached some copies of purchase
25 orders/invoices which reflect our fees. Our present

1 rate for short contracts for new business is \$5,000
2 a day. Long-term contracts are \$4,000 a day.

3 I feel I should be reimbursed my current
4 rate. I would suggest that you retain our services
5 to assist you in preparing myself, in Ford's favor,
6 as we discussed per our phone conversation of
7 6/18/90.

8 I believe that fees of \$2,000 per half-diem
9 and \$4,000 per diem plus reimbursement of reasonable
10 expenses is appropriate based on the evidence
11 attached."

12 Is that a correct reading of what you
13 wrote?

14 A. That's what was transmitted, yes.

15 Q. All right. Now, that letter went from you -- your
16 office -- to the office of the Ford lawyer,
17 specifically to the office of Mr. Art Anderson, is
18 that correct?

19 A. That is correct.

20 Q. And you suggested to Ford that they retain your
21 services to assist them in preparing you to testify,
22 and I quote, in Ford's favor, unquote.

23 That is what the letter says, isn't that
24 right?

25 A. I don't believe there's quotes around the "in favor."

1 Q. Well, why don't we let you have a copy of the
2 letter, and I will direct your attention to the
3 third paragraph.

4 Could you read that paragraph to me, sir?

5 A. "I feel I should be reimbursed my current rate. I
6 would suggest that you retain our services to assist
7 you in preparing myself, in Ford's favor, as we
8 discussed per our phone conversation of 6/18/90."

9 Q. All right. So I did read that correctly, did I not?

10 A. You quoted it as if there were quotes around the
11 "in Ford's favor" and there are no quotes.

12 Q. I'm sorry. Those are my quotes. I'm quoting you.

13 A. Those are your quotes, correct.

14 Q. All right. The fact of the matter is, Mr.

15 **WITNESS NAME REDACTED**, that you were telling Ford essentially
16 if they paid you these fees you would agree to
17 testify in their favor?

18 A. I agreed to testify to tell the truth and nothing
19 but the truth and it's certainly that my testimony
20 is favorable to the -- my opinions regarding the
21 stability and the handling of the Bronco II, which
22 is in Ford's favor as opposed to in the
23 plaintiffs' favor.

24 Q. You say that you intended to tell the truth, is that
25 right?

1 A. That's correct, as I swore at the beginning of every
2 deposition.

3 Q. In fact, isn't it true that you were prepared for
4 your deposition on July 9th, 1990 for a total of
5 over 16 hours by Ford's lawyers?

6 A. I reviewed documents for 16 hours of -- documents
7 that I had so that Ford's lawyers would know which
8 documents I had knowledge of and which ones I did
9 not have knowledge of, given that this was the first
10 time that this matter had been discussed for many
11 years since the work was done.

12 Q. The truth of the matter is, Mr. ****WITNESS NAME REDACTED****, that
13 if Ford had not -- had refused to pay you the \$4,000
14 or \$5,000 that you were demanding you would not have
15 testified -- and I quote in your words -- in their
16 favor, isn't that right?

17 A. The truth of the matter is, with no knowledge of
18 whether I would be paid or not, and without knowing
19 what the compensation was, I did my duty and told
20 the truth, explained the sources of the
21 documentations and my opinions without actually
22 having any commitment on anybody's part as to what I
23 would or would not be compensated, except that my
24 position was simply that I wanted to be paid what I
25 would be being paid if I wasn't doing these

1 depositions.

2 Q. Mr. **WITNESS NAME REDACTED**, you are aware from the earlier
3 examination done by Mr. **Name Redacted** that Ford started
4 preparing for this litigation way back about 13
5 years ago, in 1982, by collecting documents?

6 MR. **Name Redacted**: Object to the form. It's
7 argumentative and it's wholly without any basis
8 in fact, and is a figment of your imagination,
9 Mr. Goodman.

10 MR. GOODMAN: All right. Let me back up a
11 little bit.

12 BY MR. GOODMAN:

13 Q. Mr. **WITNESS NAME REDACTED**, you are aware that Ford collected
14 documents relating to the Bronco II, are you not?

15 A. I am aware of that, yes.

16 Q. All right. And they collected documents relating to
17 the Bronco II because they knew that there was the
18 probability of litigation concerning that vehicle,
19 isn't that right?

20 MR. **Name Redacted**: Objection to the form. There
21 is no foundation.

22 THE WITNESS: Given that there have been
23 lawsuits against numerous vehicles in these segments
24 over the years with attempts by plaintiffs' counsel
25 to find some defect in the vehicle which, in my

1 view, does not exist, okay, they basically -- I do
2 not believe that there is -- that there is any basis
3 for anything other than -- what I was doing was
4 simply recounting what -- exactly what happened,
5 okay, during the course of the development of the
6 vehicle and the decisions that were made and the
7 support of those decisions.

8 BY MR. GOODMAN:

9 Q. Mr. **WITNESS NAME REDACTED**, let's try to get to the truth of
10 this matter, okay?

11 Now the day of your deposition you were
12 required by Subpoena Duces Tecum issued out of the
13 Federal Court to produce any and all records in your
14 possession, isn't that correct?

15 A. That is correct.

16 Q. But you did not produce the letter that we've just
17 discussed, isn't that also correct?

18 A. Insofar as this letter was produced to Ford counsel,
19 Ford was in possession of this letter and Ford --
20 and Ford had all documentation regarding anything
21 that I have done --

22 Q. Isn't it true, sir --

23 A. -- on the Bronco II. So I don't know what you're
24 trying to get to here.

25 Q. Isn't it true, sir, that you were also in possession

1 of that letter?

2 In fact, you were in possession of the
3 original, since you had to put the original in the
4 fax machine to get it to the other side.

5 A. Well, clearly.

6 Q. And you did not produce that at your deposition on
7 July 9th, 1990, and as a matter of fact, this letter
8 has not seen the light of day until a few months
9 ago --

10 MR. **Name Redacted**: Object.

11 BY MR. GOODMAN:

12 Q. -- isn't that true?

13 MR. **Name Redacted**: Object to the form of the
14 question as argumentative.

15 THE WITNESS: This document was provided to
16 Ford's attorneys. All the documents that have been
17 provided to any counsel in any litigation have been
18 provided by Ford or Ford's counsel -- or counsel
19 representing Ford.

20 I have basically provided all documents
21 that I have in my possession to the best of my
22 ability to comply with all orders requiring
23 production of documents. So --

24 BY MR. GOODMAN:

25 Q. Mr. **WITNESS NAME REDACTED**, you were required by that Subpoena

1 to produce all records in your possession, is that
2 correct?

3 MR. **Name Redacted**: Objection, calls for --
4 BY MR. GOODMAN:

5 Q. Is that your understanding of the Subpoena?

6 MR. **Name Redacted**: Objection, calls for a legal
7 conclusion.

8 THE WITNESS: Okay.

9 MR. **Name Redacted**: Do you have a copy of the
10 Subpoena here, by the way, Mr. Goodman, so we're
11 confident we're talking about what the Subpoena
12 says, not what you think it says?

13 MR. GOODMAN: Well, I think the witness can
14 remember what the Subpoena says.

15 THE WITNESS: There's been quite a few
16 subpoenas, and I don't recall specifically what it
17 is, and I have attempted in good faith to provide
18 any documentation that has been requested. I've
19 allowed attorneys to go through my files and access,
20 without any involvement from me, my files, and
21 produced them to counsel as even a part of this
22 deposition. And I have drawn upon -- for counsel to
23 determine whether in fact I have in fact complied
24 with the requirement.

25 BY MR. GOODMAN:

1 Q. Now, sir, you produced a box at that deposition that
2 you claimed had been stored in your basement for
3 years since you had left Ford Motor Company, isn't
4 that true?

5 A. That's correct.

6 Q. And you claim that the documents went back to 1973,
7 when you started working for Ford, isn't that true?

8 A. I believe they did, yes.

9 Q. Why in the world were you keeping a box of documents
10 from Ford Motor Company in your basement, sir?

11 A. Well, they weren't all Ford Motor Company. I had a
12 box of interesting documents. I planned to write
13 books about various things.

14 I was fairly prolific when I worked at Ford
15 and authored numerous papers, and in this box or two
16 or three boxes that I had, that I referred to as my
17 junk file, I had various SAE papers that I had
18 written, various works of authorship, various
19 diagrams and other things that I thought maybe I'd
20 draw upon in the future, and this was a place that I
21 stored stuff that I thought would be of interest.

22 So I had this box in my basement. I think
23 a lot of engineers have a box that has artifacts
24 from their career.

25 Q. In fact, sir, you delivered the items in the box to

1 Art Anderson the day before the deposition, isn't
2 that right?

3 A. That's correct.

4 Q. And the Art Anderson you delivered those items in
5 the box to is the same Art Anderson, the same Ford
6 lawyer that you had written to demanding \$4- to
7 \$5,000 per day to testify in favor of Ford, isn't
8 that true?

9 MR. **Name Redacted**: Object to the form. It's
10 argumentative.

11 THE WITNESS: This is just a clarification
12 of a phone conversation, where I wanted to know how
13 I was going to be compensated for the time taken to
14 give this testimony, which would be time taken away
15 from my core business.

16 BY MR. GOODMAN:

17 Q. The Art Anderson that you delivered those items to
18 was, was he not, the same Art Anderson that you
19 wrote that letter to?

20 A. I did write the same letter to Art Anderson, yes.
21 It was the same person.

22 Q. Okay. Now, before the plaintiffs, who had
23 subpoenaed the documents, had ever gotten a chance
24 to look at your so-called junk box, these -- this
25 box had already been reviewed by the Ford lawyers,

1 isn't that right?

2 A. I don't know what they did with it. I assume they
3 looked at what was in there.

4 Q. And the fact is, sir, you have been paid a great
5 deal of money ever since that deposition to get you
6 to testify in favor of Ford Motor Company, isn't
7 that true?

8 A. I think about 1.5 percent of my sales have been
9 related to testimony, and the other work that I've
10 done has nothing to do with Bronco II litigation,
11 has all been earned, and has provided excellent
12 value to my customer.

13 Q. Isn't it true, sir, that since you wrote that letter
14 Ford has paid you over \$140,000 in testifier fees?

15 A. I don't know what the total number is. It's in the
16 -- one of the exhibits.

17 Over six years, maybe five -- or however
18 long it has been going on, I suppose it could be
19 that much.

20 Q. Now, at the time you left Ford, sir, in July of
21 1982, the first Bronco II hadn't even rolled off the
22 assembly line, isn't that right?

23 A. That's correct.

24 Q. And isn't it true, sir, that when you left Mr. Roger
25 Stomant took over your old job?

1 A. That's correct.

2 Q. And did you know that -- do you know Richard Antoun?

3 A. Richard Antoun worked for me.

4 Q. Okay. So you know him?

5 A. Of course.

6 Q. Did you know that Richard Antoun has identified

7 Roger Stornant as a fellow Ford employee who

8 assisted him in sanitizing the Bronco II documents?

9 MR. **Name Redacted**: Objection to the form. That

10 is -- misstates testimony in the record.

11 THE WITNESS: I do not know of any activity

12 between Mr. Antoun and Mr. Stornant subsequent to my

13 leaving Ford Motor Company.

14 BY MR. GOODMAN:

15 Q. Okay. So you don't know whether or not Mr. Stornant

16 assisted Mr. Antoun, in Mr. Antoun's words,

17 clarifying certain documents?

18 A. I have no specific knowledge of the specific events

19 that took place with regard to any documents.

20 Q. Mr. **WITNESS NAME REDACTED**, isn't it true that in 1972 to '73

21 you were involved in rollover research?

22 A. I was.

23 Q. And that research was intended to assist Ford in

24 opposing the proposed rollover resistance standards

25 that NHTSA wanted the industry to comply with at

1 that time -- or was proposing that the industry
2 comply with?

3 A. That work was aimed at increasing our understanding
4 of the factors involved, and whether or not the
5 potentially proposed NHTSA standards would have any
6 degree of correlation to the incidence of rollovers
7 and injury caused by rollovers.

8 Q. Do you have any understanding of what Ford's
9 position was at that time concerning Federal Motor
10 Vehicle Safety Standards as they relate to rollover?

11 A. The position was put together by a combination of
12 people.

13 MR. **Name Redacted**: I want to -- if I may,
14 **Name Redacted** -- object to the form of the question, in that
15 it improperly assumes that in fact there ever has
16 been a Federal Motor Vehicle Safety Standard
17 related to rollover.

18 MR. GOODMAN: Let me clarify that and reask
19 the question.

20 BY MR. GOODMAN:

21 Q. Do you have any idea of what Ford's position was
22 with respect to the proposed federal rollover
23 standard that was being proposed at that time?

24 MR. **Name Redacted**: What time are we talking
25 about, Avery?

1 MR. GOODMAN: '72, '73.

2 THE WITNESS: The Notice of Proposed
3 Rulemaking, which is a way that the government
4 notifies industry that they are looking at -- which
5 does not mean they're committed to, but means
6 they're looking at or investigating the possibility
7 of promulgating a standard for any particular thing
8 is a process of due notice to industry, where
9 industry responds to the government -- individuals,
10 companies, institutions -- and the government
11 collects up that documentation.

12 The process used at Ford was that the
13 Automotive Safety Office would collect opinions from
14 individuals from throughout the company, and as a
15 kind of a collaborative effort would form a position
16 paper that would then be reviewed with other people
17 within Ford and the Office of General Counsel, and
18 that would then take a position as to the viability
19 or the lack of viability of the approach the
20 government was proposing in those -- what we call
21 NPRM's, or Notices of Proposed Rulemaking.

22 And I was familiar with the notice, I
23 provided input to the response, and am somewhat
24 aware of the general nature of the response that
25 Ford made at that time, which advocated caution, I

1 believe, in promulgating rollover standards because
2 of difficulties in correlating the simplistic
3 parameters the government was proposing to the
4 actual events. And that was the position, I
5 believe, that was taken at that time.

6 BY MR. GOODMAN:

7 Q. Isn't it true, Mr. **WITNESS NAME REDACTED**, that Ford's position
8 was that no federal motor vehicle rollover standard
9 prescribing minimum rollover resistance was needed?

10 MR. **Name Redacted**: Object to the form, it -- to
11 the form of the question. It grossly
12 over-simplifies the subject matter, and is
13 misleading.

14 THE WITNESS: Well, the dissertation and
15 the response was many pages, containing numerous
16 arguments, and I think that the best way to
17 understand what Ford's position was would be to read
18 the response in its entirety, and to understand it
19 in its entirety.

20 MR. GOODMAN: Can we go off the record for
21 just a second?

22 VIDEO TECHNICIAN: Going off the record.

23

24 (A recess was taken)

25

1 VIDEO TECHNICIAN: We're back on the
2 record.

3 BY MR. GOODMAN:

4 Q. Sir, isn't it true that a letter arose out of your
5 work and the work of others with respect to that
6 rollover project that we were just discussing; the
7 letter to the National Highway Traffic Safety
8 Administration?

9 A. Our response --

10 Q. Yes.

11 A. -- to the notice? Yeah, there was a response.

12 Q. And that was a project, I think we've established,
13 you were working on in '72 to '73, is that correct?

14 A. I was doing some research on the effect of
15 suspensions and sliding campers and tires and other
16 parameters on rollover propensity, and trying to
17 understand the mechanisms that induced rollover.

18 Q. And you recall reading the response that Ford gave
19 -- the official response that Ford gave to the
20 government at that time?

21 A. You know, I did read it, you know, 20 years ago,
22 yeah.

23 Q. Now, let me represent to you that one of the -- that
24 on page 2 of that response it states under the title
25 of "Characteristics of Different Vehicle Classes --"

1 it states in the third paragraph that -- and I quote
2 from the letter from Ford:

3 "Passenger cars must be forgiving of all
4 manner of unskilled driving situations that
5 precipitate when panic-motivated evasive maneuvers
6 of drivers of widely varying abilities ... Ford
7 passenger cars are designed to forgive or, in the
8 extreme, to slide out rather than roll over on flat,
9 level pavement."

10 Do you remember that?

11 A. I do remember that.

12 Q. Now, that's what you believed, isn't it?

13 A. No, it is not, and I've also testified that I
14 believe that is a noble objective, but not practical
15 in the real world, given that it is possible to trip
16 and roll over passenger cars as a result of loss of
17 control, and I have testified with regard to that
18 specific remark in other cases.

19 Q. That was the official consensus of opinion at the
20 Ford Motor Company in 1972 to '73, wasn't it?

21 A. It may have been a position of Ford Motor Company,
22 but it was not necessarily a position or an opinion
23 that I shared.

24 Q. That was the position of Ford Motor Company before
25 they were being sued on Bronco II cases, isn't that

1 right?

2 A. It was a passenger-car-biased opinion that I have
3 always disagreed with.

4 Q. And that's what Ford Motor Company believed,
5 however, before it started planning for litigation
6 in the Bronco II cases, isn't that right?

7 MR. **Name Redacted**: Object to the form of the
8 question. It's argumentative, assumes facts not in
9 evidence.

10 THE WITNESS: Some individuals at Ford
11 Motor Company believed that, and maybe they wrote
12 that and put that in, okay? However --

13 BY MR. GOODMAN:

14 Q. And that was the consensus --

15 MR. **Name Redacted**: Avery, please let him finish
16 his answer.

17 BY MR. GOODMAN:

18 Q. Please do.

19 A. However, there were others of us that basically
20 worked in other vehicle areas that did not believe
21 that that was universally applicable to the entire
22 population of vehicles.

23 Q. All right. But that was the consensus of opinion at
24 that time at the Ford Motor Company, wasn't it?

25 A. Well, if I look at consensus and I say that that is

1 a majority -- there was no vote taken, and I'm not
2 aware that that was a consensus decision.

3 That was a position that emanated from a
4 group of people in the car group that was not
5 necessarily agreed with with other people, including
6 myself, within the company.

7 Q. So is it okay when people get injured and killed
8 in rollovers of trucks, but not okay when people get
9 killed or injured in rollovers of passenger cars?

10 MR. **Name Redacted**: Object to the form of the
11 question. It's argumentative.

12 THE WITNESS: The vehicles that we're
13 talking about, the propensity for rollover and the
14 likelihood for rollover is influenced by numerous
15 factors, and it's always unfortunate if there is a
16 death or injury to a particular individual.

17 However, as vehicles become more
18 truck-like, a loss-of-control situation can -- can
19 cause -- and that's the primary cause -- the
20 loss-of-control situation, can cause a rollover to
21 occur, for example in a heavy truck or a big bus or
22 an Econoline van or a Chevy van or a U-Haul vehicle
23 or any vehicle as you move up into that category.

24 The higher the vehicle, the -- possibly the
25 slightly higher propensity for rollover.

1 But there are a lot of other factors, and
2 the event that precedes rollover is a loss of
3 control, which is a driver-induced phenomenon.

4 So, you know, it is not possible to design
5 all vehicles that the public wants and needs utility
6 for not to roll over.

7 MR. GOODMAN: I'm going to move to strike
8 the answer as nonresponsive.

9 BY MR. GOODMAN:

10 Q. Mr. **WITNESS NAME REDACTED**, do you feel that it is okay for the
11 truck division to design vehicles that roll over but
12 not okay for the car division of Ford to design
13 vehicles that roll over?

14 MR. **Name Redacted**: Object to the form of the
15 question. That's --

16 MR. GOODMAN: It's a simple yes or no
17 question.

18 THE WITNESS: It isn't a simple yes or no,
19 because --

20 MR. **Name Redacted**: **Witness Name Redacted**, let me -- let me note
21 an objection that it is argumentative and impossibly
22 vague.

23 MR. GOODMAN: I think it follows naturally
24 from his earlier comment that the car division was
25 behind the statement -- official statement of Ford

1 Motor Company to the National Highway Traffic Safety
2 Administration in 1973.

3 THE WITNESS: Well, the fact is that
4 passenger cars and light trucks and heavy trucks and
5 all manner of vehicles will roll over under certain
6 circumstances both on and off pavement pursuant to a
7 loss-of-control situation.

8 And there is no implicit commitment that
9 it's possible to make either a passenger car or a
10 light truck completely immune from the possibility
11 of a rollover event.

12 BY MR. GOODMAN:

13 Q. Mr. **WITNESS NAME REDACTED**, would you agree with me that there
14 was no incentive for Ford to lie in 1973 when it
15 wrote that letter?

16 MR. **Name Redacted**: Object to the form of the
17 question.

18 THE WITNESS: I'm not going to speculate on
19 Ford. Ford is a reputable company that doesn't lie,
20 that has rendered opinions from time to time that
21 are not in universal agreement with the entire
22 industry.

23 BY MR. GOODMAN:

24 Q. Would you agree that when they wrote the letter to
25 NHTSA they had no incentive to lie about the way a

1 vehicle should perform?

2 A. The individual --

3 MR. **Name Redacted**: I object to the form of the
4 question.

5 MR. GOODMAN: Your objection is noted. Now
6 let the witness answer the question.

7 MR. **Name Redacted**: It's argumentative. It's
8 argumentative.

9 THE WITNESS: Ford Motor Company doesn't
10 prepare those responses. Individuals that work for
11 the company prepare those responses in their best
12 judgment.

13 Many of these issues are -- there is not
14 universal agreement. As a matter of fact, as part
15 of the testimony in that response, to my
16 recollection, was some discussion pertaining to the
17 lack of universal agreement on an acceptable
18 criteria for measuring rollover, alluding to the
19 lack of general consensus, and also one of the
20 arguments for not promulgating a rollover
21 regulation.

22 BY MR. GOODMAN:

23 Q. Mr. **WITNESS NAME REDACTED**, but that was not my question.

24 My question was -- could you read back the
25 question?

1

2 (The previous question was read by the reporter)

3

4 MR. **Name Redacted**: Object to the form. It's
5 argumentative in terms of the word "lie."

6 We're not talking about -- we're talking
7 about a position on a regulatory issue, not a
8 statement of whether something is or isn't.

9 MR. GOODMAN: Would you please stop
10 testifying for the witness?

11 The witness can testify for himself, Mr.
12 **Name Redacted**.

13 I realize you would like to -- if we
14 lawyers could give the testimony, it would be
15 wonderful, wouldn't it? We wouldn't need clients,
16 we wouldn't need witnesses, we wouldn't need
17 anything.

18 We have a witness here who is perfectly
19 capable of giving us an answer.

20 MR. **Name Redacted**: Well, Mr. Goodman, I'm going
21 to continue to make my objections as I deem them
22 appropriate. I don't think that is testimony. I
23 think that is explaining so that a reviewing court
24 can understand what is going on.

25 So this --

1 MR. GOODMAN: Well, all of your
2 objections --

3 MR. **Name Redacted**: -- abuse of the process will
4 not see the light of day in a courtroom.

5 MR. GOODMAN: All of your objections are
6 reserved, as you know, except to form, and what
7 you're doing is attempting to clue the witness into
8 what he should say next, and that's objectionable,
9 and I wish you would stop that. I'm going to ask
10 you to please stop it.

11 THE WITNESS: An opinion -- which is what
12 you're referring to -- an opinion rendered in a
13 document that was produced by some individuals and
14 given to the government, is neither truth nor fact.
15 It is an opinion, precisely that, it is an opinion,
16 and it has no -- it does not necessarily have to
17 have universal agreement.

18 If there is disagreement with an opinion,
19 it does not make the opinion a lie. It just means
20 that there is dissent or disagreement with the
21 opinion.

22 I believe that, given that passenger cars
23 have been seen -- and I've seen them myself, and
24 I've seen data and I've seen test data where I've
25 seen passenger cars rolled over and trucks rolled

1 over as a result of loss-of-control situations both
2 on and off pavement, I believe that the opinion is
3 an opinion that I do not share, and I believe others
4 like me do not share it.

5 So it is not a matter of truth or a lie,
6 and you have asked this question regarding this
7 opinion in the context of Ford lying or not lying,
8 and I believe that is irrelevant to a statement of
9 an opinion.

10 An opinion is not a fact. It is precisely
11 that, an opinion rendered at a point in time.

12 BY MR. GOODMAN:

13 Q. Right. And that was Ford's opinion, the consensus
14 of opinion at Ford before they began litigating
15 Bronco II rollovers, isn't it?

16 A. As I have told you now several times, it was an
17 opinion that was principally promulgated by the
18 passenger car individuals that I do not believe is
19 borne out by subsequent facts, and I believe was not
20 shared by many of us in the truck part of the
21 organization.

22 Q. And as to those in the car part of the organization
23 who evidently, as you say, had that opinion, they
24 weren't being paid \$3 million to give testimony in
25 favor of Ford, were they?

1 A. I've not ever been paid \$3 million by anybody not
2 -- to give favorable testimony about Ford.

3 The \$3 million that I have been paid was
4 earned through value received in completely
5 unrelated work which had a high level of value for
6 Ford Motor Company, and the individuals that awarded
7 me those contracts had no influence over awarding me
8 those contracts or not awarding me those contracts
9 because of the work I was doing with Bronco II
10 litigation. They have no relevant bearing.

11 Q. Now, sir, even way back in 1973 there were certain
12 tests which were being considered in order to
13 determine the basic stability of a vehicle, isn't
14 that true?

15 A. There were hypotheses that certain tests may have
16 some bearing, yes, and there have been, for a number
17 of years, various tests --

18 Q. And one --

19 A. -- attempted and tried.

20 Q. And one of those tests even way back in 1973 was the
21 J-turn test, isn't that true?

22 A. Well, actually there is no such thing as a --
23 specifically a J-turn test.

24 The J-turn is a general term indicating a
25 uni-directional ramp steer which can be applied with

1 a wide range of external factors.

2 So a J-turn does not simply define a test.

3 It describes one type of maneuver.

4 Q. Do you recall that you gave -- I think you already

5 stated you gave a deposition on July 9th, 1990,

6 correct, in the Rosenbusch case?

7 A. Correct.

8 Q. Do you remember when you were asked the question on

9 page 30:

10 "Question: All right. Now there were

11 certain tests that you looked into in 1973 -- as

12 part of your duties in 1973 that would indicate the

13 propensity for a vehicle to roll over?"

14 And your answer at that time was: "Yes."

15 Is that correct?

16 A. That's correct.

17 Q. As it was today. And then you were asked the

18 question:

19 "What were those tests?"

20 And your answer was: "The primary test

21 that we developed was a test designed to support a

22 theory on the effect of lateral G forces at the

23 center of gravity of the vehicle on the way the

24 chassis and the vehicle structure behaved as the

25 vehicle underwent lateral inertial forces which

1 could be of sufficient magnitude to cause the
2 vehicle to roll over."

3 Do you recall that?

4 A. Well, I mean, you have an accurate copy of what I
5 said.

6 Q. Okay. Well, that's correct --

7 A. Sounds correct.

8 Q. -- today as much as it was then?

9 A. Sure.

10 Q. Okay.

11 MR. **Name Redacted**: Do you have a copy of the
12 transcript, Mr. Goodman, that you could show the
13 witness if you're going to ask him about it?

14 MR. GOODMAN: Well, I have it on my
15 computer here.

16 BY MR. GOODMAN:

17 Q. You were then asked on page 31 -- the question is:

18 "All right. What are the names of those
19 tests? I'm talking about actual vehicle testing.
20 Maybe we're talking about different things, I'm not
21 sure. For instance, there's a J-turn test, isn't
22 that right?"

23 And your answer was: "There were various
24 tests, yes."

25 And then on the bottom of page --

1 MR. **Name Redacted**: I'm going to object to you
2 reading the Rosenbusch transcript, Mr. Goodman.

3 If you have a question for him, or if
4 you --

5 MR. GOODMAN: All right. I'll ask --

6 MR. **Name Redacted**: -- you're going to impeach him
7 with something from prior testimony, then why don't
8 you do it? But just to read the transcript is a
9 waste of everybody's time, sir.

10 BY MR. GOODMAN:

11 Q. Isn't it true, sir, that the J-turn test was one of
12 the tests that was being used in 1973 to determine
13 rollover stability?

14 A. We ran J-turn tests, yes, we did.

15 Q. Okay.

16 A. Not necessarily just to determine rollover
17 stability, just to see what happened.

18 I think I've testified that one of the
19 reasons we did those tests was as a single-step
20 input that allows us to use simple math models to
21 try and correlate to some of the multiple
22 independent variables that we can change to
23 determine the correlation of the math model to the
24 test results to see if we have qualitative and
25 quantitative agreement.

1 Q. So the fact of the matter is, Ford was using J-turn
2 tests back in 1973, isn't that right?

3 A. So was everybody else.

4 Q. Exactly. And, sir, isn't it true that the SAE, or
5 the Society of Automotive Engineers, now recommends
6 the J-turn test as a standard in determining
7 rollover resistance?

8 A. I don't know what the current recommendation is.

9 Q. And you recall the ramp steer test?

10 A. Yes.

11 Q. And that was another test to determine rollover
12 resistance, wasn't it?

13 A. I just testified -- and let me clarify for you, to
14 prevent belaboring the point -- all of this testing,
15 I testified in my prior testimony, was largely used
16 by me in concert with the Bronco II testing to
17 correlate mathematical simulations that would allow
18 me to qualitatively decide on, can I -- should I
19 make bigger stabilizer bars? How big should the
20 front bar be? How big should the back bar be? What
21 kind of spring rates should I use? What's the
22 effect of certain changes?

23 And it was a part of a -- an effort to
24 understand and increase the state of the art of
25 -- understanding of vehicle dynamics.

1 Q. And what was the purpose of those proposed changes?

2 A. What proposed changes?

3 Q. That you just described.

4 A. They weren't proposed changes. I told you they were

5 independent variables. They were parameters where

6 we were studying how to combine different sets of

7 those parameters to satisfy the full functions of

8 the vehicle, which include drive, steering,

9 handling, load-carrying compatibility, ability to

10 handle rough road and rough terrain, to negotiate

11 high obstacles; a full complement of things that

12 have to be traded off in terms of producing a

13 vehicle for the intended market function.

14 Q. In fact, sir, you earlier testified that in 1972

15 to '73 you were working on a response to the federal

16 government's standard -- or proposed standard for

17 rollover resistance, isn't that true?

18 A. This was long before I was ever working on a

19 Bronco II, and we were trying to increase the

20 understanding of the state of the art at that time.

21 Q. You were trying to understand rollover resistance,

22 weren't you?

23 A. We were trying to understand the impact of various

24 suspension and chassis parameters and vehicle

25 hard-point parameters on vehicle characteristics in

1 a wide variety of maneuvers in 1973, and the
2 information that we generated was provided to the
3 Automotive Safety Office to help them in preparing
4 their response to the government's Notice of
5 Proposed Rulemaking.

6 Q. So it related to rollover resistance, didn't it --
7 all of those tests?

8 A. It -- there was a bearing on rollover resistance.

9 We subsequently published our work in the SAE.

10 Q. All right. And the reverse ramp steer test that you
11 did in 1973, that's the same as the J-turn test,
12 isn't it?

13 A. No, it is not.

14 Q. All right. What is it then?

15 A. Well, in the J-turn test I steer one way and I wait
16 and see what happens.

17 And a reverse ramp steer is, I steer one
18 way and then wait some period of time and steer the
19 other way and then steer back to center, or any
20 combination of angle, time, put in a sine wave, a
21 square wave, or any other kind of combination, so I
22 have a known -- a known input that is reversed, and
23 then I can simulate that in my computer and try and
24 correlate that to what happened when I actually ran
25 the test.

1 Q. Do you recall that in July of 1990 -- July 9th --

2 you were under oath, sir?

3 A. I do.

4 Q. And you were under an oath to tell the truth, is

5 that correct?

6 A. That's correct.

7 Q. Just as you're under an oath to tell the truth

8 today, correct?

9 A. That's correct.

10 Q. And there was a court reporter there, correct?

11 A. That's correct.

12 Q. And she was taking down everything that you were

13 saying?

14 A. That's right.

15 Q. Just as she's taking down everything you're saying

16 now?

17 A. That's correct.

18 Q. On that day, on page 33, line -- starting on line 7,

19 you were asked the following question:

20 "All right. So when we talk about the ramp

21 steer test and the J-turn test we're talking about

22 the same thing?"

23 Answer: "Essentially, yes."

24 Was that your testimony? Does that refresh

25 your recollection?

1 A. Why don't you read the whole thing in its full
2 context?

3 MR. **Name Redacted**: You just asked him about a
4 reverse ramp steer. Now you're asking him about a
5 ramp steer.

6 MR. GOODMAN: All right. Well, maybe
7 that's a distinction --

8 THE WITNESS: Can we get a time-out here
9 for a minute? I'd like to talk to you, okay? Can
10 we --

11 BY MR. GOODMAN:

12 Q. Well, why don't you answer the question first?

13 A. You're mixing things up, okay?

14 Q. All right. Tell me if I'm mixing things up. I'm
15 just a lawyer.

16 Now evidently there's a difference between
17 the reverse ramp steer maneuver and the ramp steer
18 maneuver.

19 The ramp steer maneuver is the same as the
20 J-turn, but the reverse ramp steer is different; is
21 that correct?

22 A. A ramp steer input is a single input in one
23 direction. A J-turn is a kind of a ramp steer
24 input, a single ramp steer.

25 A reverse ramp steer is where the steering

1 is moved in one direction, and then through center

2 to the other direction, and then back to center.

3 Now --

4 MR. **Name Redacted**: Avery, I think it's also --

5 I'm going to object to you reading from your

6 computer.

7 I think you need to show the witness his

8 previous testimony, and we need to have an

9 opportunity to look at it in its overall context.

10 This is not fair, and is not in accordance

11 with the rules.

12 THE WITNESS: I'd like a time-out, anyway.

13 MR. **Name Redacted**: Fine.

14 THE WITNESS: I'm getting --

15 VIDEO TECHNICIAN: We're off the record.

16

17 (A recess was taken)

18

19 VIDEO TECHNICIAN: We're back on the

20 record.

21 BY MR. GOODMAN:

22 Q. We were talking about different types of tests.

23 Isn't it true that some people construe

24 what Ford calls -- or you call a reverse ramp steer

25 test -- another name for that is an

1 obstacle-avoidance test?

2 A. It could be considered an obstacle-avoidance test,
3 although we don't know that a double ramp steer is
4 -- exactly correlates to the way a person would
5 steer a vehicle.

6 A double ramp steer, we're putting in an
7 input in one direction in a certain degree, and then
8 we go exactly the same degrees the other way, and
9 then we come back to center.

10 And these are all quasi-simplistic input
11 measures that allow us to correlate the outputs to
12 what happens in a computer simulation and allow us
13 to produce a -- you know, quote, repeatable test.

14 But just like -- you know, in the real
15 world I doubt you have ever put in 360 degrees of
16 steering input and held it there, fixed, against the
17 stop with your foot on the throttle and waited to
18 see what happened.

19 I doubt you have ever precisely put 50
20 degrees in one way, 50 degrees in the other way, and
21 come exactly back to center.

22 You're in a -- when you're driving a
23 vehicle you're in a closed loop with the vehicle
24 -- driving the vehicle. So these tests are somewhat
25 arbitrary in nature.

1 So when you use things like, does this test
2 -- this double-ramp reverse correlate exactly to an
3 accident-avoidance maneuver, in the loosest sense
4 you could say there may be some correlation, some
5 people might call it that, but it's not exactly the
6 same thing.

7 Q. All right. But, sir, in the study of vehicle
8 dynamics, ramp steer, reverse ramp steer, they're
9 all tests which are used to determine the general
10 stability characteristics of different vehicles,
11 isn't that true?

12 A. They're not used specifically to determine the
13 stability so much as they're used to characterize
14 the response of the vehicle.

15 Q. They're not used to determine stability?

16 A. Well, they could be potentially used in some cases
17 to consider stability, but they'd also be used to
18 look at the response parameters of the vehicle, not
19 necessarily what I would call limit stability or
20 threshold of loss-of-control stability.

21 So again, stability is a very general term.

22 Q. Well, isn't it true that reverse-ramp-steer and
23 single-ramp-steer inputs are tests that are done to
24 evaluate stability in the automotive industry?

25 A. They're used to evaluate sublimit, and possibly in

1 some cases limit stability and vehicle response
2 characteristics.

3 Q. All right, sir. Isn't it true that some people
4 refer to another type of test called a lane-change
5 test, and they call it a ramp steer; is that
6 correct?

7 A. Well, a lane change is closer to a reverse ramp
8 steer, because you steer one way and then you steer
9 back again to get into the next lane. So that's a
10 rapid lane change.

11 Q. But in fact the lane-change tests and the reverse
12 ramp steer which you just described are different
13 tests, aren't they?

14 Lane change is changing to one lane and
15 then going straight. Reverse ramp steer is changing
16 and then going back into the lane that you just
17 changed out of, isn't that right?

18 A. That would be a reverse ramp, right.

19 Q. Okay. And the reason these tests are done are for
20 analytical or comparative purposes, isn't that
21 right?

22 A. Well, they're done to evaluate the vehicle's
23 response characteristics, to compare different
24 alternatives of one to another, and make both
25 quantitative and qualitative judgments about the

1 behavior of the vehicle.

2 Q. So they're done for analytical and comparative
3 purposes, correct?

4 A. That's one of the purposes of doing them, yes.

5 Q. Which is another way of saying that they evaluate
6 the basic stability characteristics of a car, isn't
7 that right, on a fundamental basis?

8 A. Well --

9 MR. **Name Redacted**: Object to the form.

10 THE WITNESS: Stability is one of the
11 things that is evaluated when doing these
12 evaluations if that is one of the design outcomes
13 when the tester writes the test expectation that
14 that is what he is looking for, and it depends on
15 the degree of magnitude of input.

16 For example, I might do a single-ramp-steer
17 input at a certain speed and a certain steering
18 input, where I'm more interested in the yaw-rate
19 response and the yaw-damping characteristics of the
20 vehicle than any divergent loss of stability.

21 BY MR. GOODMAN:

22 Q. All right. But the information revealed in these
23 types of tests show fundamental characteristics that
24 are likely to show up in a lot of different
25 situations, and that's why you do the test, isn't

1 that right?

2 A. They provide a repeatable way to characterize the
3 vehicle and, yes, they can be compared to otherwise
4 subjective impressions about a vehicle and other
5 kinds of maneuvers, and attempted to be correlated
6 in some cases.

7 Q. All right. Now --

8

9 (A discussion was held off the record)

10

11 BY MR. GOODMAN:

12 Q. Isn't it true, Mr. **WITNESS NAME REDACTED**, that the Bronco II
13 failed most of the J-turn tests that were performed
14 on it between January and May of 1982 at the Arizona
15 Proving Grounds?

16 MR. **Name Redacted**: Object to the form.

17 THE WITNESS: Well, there wasn't --

18 MR. **Name Redacted**: Misstates the record.

19 THE WITNESS: There wasn't a "fail," a
20 "go - no-go" criteria, so performance of subsequent
21 generations of vehicles, based on changes that were
22 made for example to stabilizer bars and tires
23 and other things, could have behaved differently
24 from earlier tests to later tests, which had been
25 quite normal with the development of the vehicle.

1 BY MR. GOODMAN:

2 Q. Isn't it true, sir, that from January to May of 1982

3 J-turn tests were performed on the Bronco II at the

4 Arizona Proving Grounds?

5 MR. **Name Redacted**: Objection to the form,

6 misstates the record.

7 Avery, I don't want to get into a talking

8 objection, but if you're going to be talking about

9 tests --

10 MR. GOODMAN: All right. Let me --

11 MR. **Name Redacted**: If you're going to be talking

12 about tests that are reported in documents, I'm

13 going to insist that you show him the document so he

14 can understand what you're talking about, so we can

15 have an opportunity, for the record, to be clear

16 here about what vehicle is being tested, because

17 there were -- as you know, there were a lot of

18 different tests done on different prototypes.

19 BY MR. GOODMAN:

20 Q. Mr. **WITNESS NAME REDACTED**, isn't it true that J-turn tests

21 were done from January to May of 1982 on the

22 Bronco II, which Ford characterizes as a prototype?

23 A. There were tests done on prototype vehicles that

24 included J-turn and other testing, yes.

25 Q. And, isn't it true that of these vehicles that Ford

1 characterizes as a prototype, these Bronco II
2 vehicles flunked most of those tests?

3 MR. **Name Redacted**: Object to the question as
4 argumentative, misstates the record.

5 THE WITNESS: I don't recall any report
6 that referred to a Bronco II as having flunked a
7 test against a criteria.

8 One of the issues with those tests is,
9 there wasn't an absolute criteria that you could
10 flunk.

11 There were differences between different
12 configurations that were tested in those tests, and
13 some vehicles performed -- with certain features
14 performed differently than others.

15 But I wouldn't say the word flunked is an
16 appropriate word compared to what we were doing in
17 those tests, which was largely trying to collect
18 data and understand the impact of differences in the
19 vehicle chassis experimentally with hardware, and we
20 were using some of that data to go back and
21 correlate back to our math models. That's what we
22 were doing.

23 Q. Isn't it --

24 A. We weren't really going against a "go - no-go,"
25 "flunk" test.

1 Q. That's what your testimony is.

2 Isn't it true, sir, that the Bronco II was
3 in a condition in May of 1982 wherein it was unfit
4 to be released to the public?

5 A. In May of 1982 the vehicle, I believe, the way we
6 were testing it and driving it, was pretty good.

7 We felt there were some improvements that
8 could be made by increasing roll stiffness, and we
9 were working on an ahead-of-front-axle stabilizer
10 bar -- I testified to Mr. **Name Redacted** about that
11 earlier today -- and increasing the stiffness
12 overall in roll with an added rear stabilizer bar.

13 So we felt there were opportunities for
14 further improvement in May of 1982.

15 Q. So you claim that the Bronco II was performing well
16 in May of 1982?

17 A. Well, I think at that time it was probably better
18 than the image vehicle, and -- but we felt there was
19 further room for improvement.

20 Q. Mr. **WITNESS NAME REDACTED**, isn't it true that the Bronco II --
21 whatever you want to call it, prototype or the
22 production model or whatever it is -- is in fact a
23 short-wheelbase vehicle designed for off-road use;
24 isn't that a fact?

25 A. It's a short-wheelbase vehicle that would be

1 considered to be a compact utility vehicle, that is
2 a flexible-use vehicle.

3 One of its purposes and one of the
4 advantages of the vehicle, it is capable of being
5 taken off-road and having good ground clearance,
6 good ramp and good departure angles, making it very
7 versatile in those particular environments, as well
8 as being a perfectly safe and stable vehicle on
9 highway pavement.

10 Q. Isn't it true, Mr. **WITNESS NAME REDACTED**, that the
11 Bronco II is a short-wheelbase vehicle designed
12 for off-road use?

13 A. It is not only designed for off-road use. It is --
14 it's a vehicle where off-road use is one of the
15 functions that the vehicle is capable of performing.

16 Q. You testified again in the deposition taken on July
17 9th, 1990 -- and you were under oath that day, is
18 that true?

19 MR. **Name Redacted**: Well, Mr. Goodman, do you have
20 a copy of the transcript that you can put in front
21 of us here?

22 MR. GOODMAN: Yes, as a matter of fact I
23 do. I wonder if I could have the page --

24 MR. **Name Redacted**: The Rosenbusch -- Let's --

25 MR. GOODMAN: Page No. 48.

1 MR. **Name Redacted**: Let's do that, if that's what
2 you're trying to do here.

3 I think we can agree that if Mr.
4 **WITNESS NAME REDACTED** gave either trial or deposition
5 testimony that he was under oath.

6 THE WITNESS: I don't think we have to
7 agree, Paul. It's a matter of the record that we
8 were under oath.

9 MR. **Name Redacted**: Yes. Well, I just --

10 BY MR. GOODMAN:

11 Q. I'd like you to take a look at page No. 48, and I'm
12 going to --

13 MR. **Name Redacted**: Could I see the whole
14 transcript, please, Mr. Goodman?

15 MR. GOODMAN: Well, I'll tell you what --

16 MR. **Name Redacted**: It's okay with me.

17 MR. GOODMAN: You've got a lot of notes in
18 here, though.

19 MR. **Name Redacted**: I'm not going to look at
20 Hike's notes.

21 MR. GOODMAN: As a matter of fact, if we're
22 going to do that, let's put the page back, so we
23 don't lose it. (Indicating)

24 THE WITNESS: Do you want to just take a
25 time-out for a second?

1 I just found this page, just sitting on
2 here, okay?

3 This is the page I pulled out of this
4 Exhibit No. 19, and said it's not a purchase order.

5 Do you want me to stick it back with that?

6 It wouldn't be complete. But I just saw it
7 sitting there.

8 MR. **Name Redacted**: What you referred to is what
9 has been marked as Exhibit A49 by Mr. **Name Redacted**.

10 MR. **Name Redacted**: Whatever is required to make
11 it complete.

12 Let's go ahead and put it back there. Why
13 don't you insert it where you think it should be?

14 THE WITNESS: Well, I don't think it
15 belongs. I mean, it's just a piece of paper. It's
16 like a summary of something we did, and it was with
17 -- I believe it was with A5.

18 MR. **Name Redacted**: Okay.

19 THE WITNESS: I'll put it back there, if
20 you would like, but I just found it there.

21 MR. **Name Redacted**: Thank you.

22 MR. **Name Redacted**: Could we have the previous
23 question and answer read back?

24

25 (Record read)

1 (A discussion was held off the record)

2

3 MR. **Name Redacted**: Is that where you're going,
4 Mr. Goodman?

5 MR. GOODMAN: That's where I'm heading.

6 Let me start over again.

7 Are we on the record or off the record?

8 VIDEO TECHNICIAN: We're on the record.

9 MR. GOODMAN: All right.

10 BY MR. GOODMAN:

11 Q. Mr. **WITNESS NAME REDACTED**, you recall your deposition, as you
12 have stated. You were under oath then, the same as
13 you're under oath now. You stated that you
14 recognize that.

15 There was a court reporter taking down your
16 testimony, and on that day, on page 48, line 15, you
17 stated, and I quote:

18 "The Bronco II is a short-wheelbase vehicle
19 designed for off-road use for a high level of
20 maneuverability --"

21 MR. **Name Redacted**: I think you need to read the
22 question that preceded that answer, Mr. Goodman,
23 which starts at line -- page 48, line 3.

24 Would you please do that?

25 The question sometimes has something to do

1 with the answer that is given.

2 MR. GOODMAN: All right.

3 THE WITNESS: Here, from line 6, is where
4 you want to start.

5 MR. **Name Redacted**: Well, let's --

6 BY MR. GOODMAN:

7 Q. Mr. **WITNESS NAME REDACTED**, you were asked the following
8 question.

9 "Question: All right. Would increasing
10 the length of the wheelbase of the Bronco II have
11 increased or would -- let me start over again.

12 "Would increasing the length of the
13 wheelbase of the Bronco II, as it existed when you
14 left Ford Motor Company, have decreased the
15 likelihood or propensity for it to be in a sideways
16 position so that it would be going in a position, a
17 sideways position down the intended path of travel?"

18 Answer from the --

19 MR. **Name Redacted**: Okay. I'm going to object
20 here in that the question that is asked in the
21 Rosenbusch deposition is not the same question that
22 you're -- that you have just asked him, which was
23 whether or not the Bronco II vehicle is a vehicle
24 that is intended for off-road use.

25 So I don't -- I think you're just spinning

1 your wheels here and wasting a lot of time,

2 Mr. Goodman.

3 MR. GOODMAN: Well, I think you're
4 interrupting and disrupting the answer of the
5 witness and leading him into saying what you want
6 him to say.

7 MR. **Name Redacted**: Well, I --

8 MR. GOODMAN: I'm asking him a simple
9 question, Mr. **Name Redacted**.

10 MR. **Name Redacted**: Well, I --

11 MR. GOODMAN: I'm asking, is the Bronco II
12 a short-wheelbase vehicle designed for off-road use.

13 He's now said it isn't. He stated in July
14 of 1990 that it was.

15 MR. **Name Redacted**: Well, you know, he didn't --
16 he didn't say that it wasn't. He said that was one
17 of its uses.

18 So I think --

19 BY MR. GOODMAN:

20 Q. Let me ask you this --

21 MR. **Name Redacted**: -- there is a lot of sound and
22 fury here signifying nothing, Mr. Goodman.

23 BY MR. GOODMAN:

24 Q. Let me ask you this, Mr. **WITNESS NAME REDACTED**:

25 Is the Bronco II a short-wheelbase vehicle?

1 A. Yes, it is.

2 Q. All right. And is it designed for off-road use?

3 A. One of the things it's designed for is to be able to
4 go off-road.

5 Q. All right. Now, isn't it true, Mr. **WITNESS NAME REDACTED**,
6 that a competent auto engineer would expect that
7 real-life on-track obstacle-avoidance testing would
8 be done on a car prior to the release to the public?

9 A. The driving of a vehicle with the testing that we do
10 in P6101 has enough severe lane changes and --

11 Q. Mr. **WITNESS NAME REDACTED** --

12 A. -- other maneuvers to do that, and that is the test
13 that we do.

14 Q. That's not the question that I asked you.

15 I asked you, isn't it true that an auto
16 engineer would expect that real-life on-track
17 obstacle-avoidance testing would have been done on
18 the Bronco II before it was released to the public;
19 isn't that true?

20 A. I would expect that an automotive engineer would
21 expect that there would have been some maneuvers
22 done on the vehicle as a part of the driving and the
23 signoff of the vehicle to verify its acceptability
24 in real-world driving situations.

25 Q. So is that a no or a yes?

1 A. With the caveats that I placed in my answer, it's a
2 yes, with those caveats.

3 Q. All right, sir. Let me ask you this:

4 Would you have expected some
5 obstacle-avoidance maneuvers with severe inputs to
6 be tested with the actual production vehicle before
7 it was released? Is that correct?

8 A. I would have expected the vehicle to have been
9 evaluated by some drivers, and with large steering
10 inputs, and representative of what a real driver
11 might do with the vehicle in the real -- in the real
12 world, yes.

13 Q. Would you have expected some obstacle-avoidance
14 maneuvers with severe inputs be tested with the
15 actual production vehicle before it was released?
16 Is that correct?

17 MR. **Name Redacted**: Objection.

18 BY MR. GOODMAN:

19 Q. Yes or no?

20 MR. **Name Redacted**: It's been asked and answered.

21 BY MR. GOODMAN:

22 Q. Well, is that a yes?

23 A. I would expect some assessment of the vehicle's
24 maneuverability and stability in
25 accident-avoidance-type driving that a driver would

1 experience in the real world as a part of the
2 driving assignment for the vehicle, yes; as a way
3 the driver would really drive the vehicle.

4 Q. Isn't it true, sir, that severe handling maneuvers
5 would have been -- would normally have been expected
6 in testing?

7 A. The testing protocol for signing --

8 MR. **Name Redacted**: I'm going to object in that
9 the question is vague.

10 MR. GOODMAN: Well, the witness seems to
11 understand it.

12 BY MR. GOODMAN:

13 Q. So please continue.

14 MR. **Name Redacted**: What do you mean by -- what do
15 you mean by severe?

16 MR. GOODMAN: I think the witness
17 understands what I mean, and I think he should
18 answer the question as he was beginning to answer.

19 MR. **Name Redacted**: What do you mean by severe,
20 Mr. Goodman; could you help us with that?

21 MR. GOODMAN: I mean however "severe" is
22 taken in the context of an engineer who is listening
23 to the word "severe," and this way that the witness
24 uses the word "severe" himself.

25 THE WITNESS: Severe to me would be at G

1 levels, you know, .5 G's and up in -- in
2 close-to-limit driving, the kind of driving that
3 would be described and validated in the P6101
4 procedure that typically development engineers use
5 when evaluating the handling of vehicles.

6 BY MR. GOODMAN:

7 Q. Isn't it true, sir, that the ADAMS computer
8 simulation program was experimental back in 1982?

9 A. It was a breakthrough, in that it did things that we
10 had never tried to do with simulation before, and
11 so, yes, it was experimental.

12 Q. All right. Now wouldn't you agree, sir, that a
13 consumer's expectation of how a particular vehicle
14 will perform is based, to a large degree, on the
15 purpose for which he is buying the vehicle?

16 A. Restate the question.

17 Q. Wouldn't you agree that the expectation of a
18 consumer as to how a vehicle will perform is based,
19 to a large degree, on the purpose for which he is
20 buying the vehicle?

21 A. Well, the purpose for which a consumer buys a
22 vehicle would be independent to that particular
23 consumer.

24 As a manufacturer of a vehicle, we have to
25 determine the functions that we're going to try to

1 provide for a -- for a particular vehicle.

2 If the consumer's perception of what we
3 have provided and what he is looking for match, then
4 I guess he'll buy the vehicle. And if they don't,
5 he won't. So --

6 Q. Well, let me ask you this:

7 If, when Ford sold the Bronco II, it
8 implied that it could be used primarily as an
9 on-road passenger-carrying vehicle, and as a
10 complete substitute for a passenger car, then, sir,
11 isn't it true that Ford would have been
12 misrepresenting the intended function of the
13 Bronco II as it was designed by you and the other
14 Ford engineers?

15 MR. **Name Redacted**: Objection to the form of the
16 question. It's argumentative and it's vague.
17 There's a lack of foundation.

18 THE WITNESS: The physical characteristics
19 of the Bronco II as a compact utility vehicle make
20 the vehicle appear, look and behave differently than
21 a passenger car and have certain capabilities that
22 are different than a passenger car that I believe
23 are innately obvious to the consumer purchasing that
24 vehicle, those differences being short overhang, so
25 you don't get hung up on obstacles, those

1 differences being high ground clearance, so that you
2 can maneuver over obstacles, those differences being
3 short wheelbases, so that you can maneuver around
4 tight areas without getting hung up as easily, and
5 also possibly being able to maneuver trailers and
6 other things easier.

7 So I think the consumer is aware, when he
8 looks at that vehicle, at those innate differences.
9 He can see those differences, and it's one of the
10 things that has attracted the consumer to the
11 versatility and utility of the whole -- what we
12 would call the sport utility or the compact utility
13 segment.

14 Q. Mr. **WITNESS NAME REDACTED**, when you say that he would see the
15 utility in towing a trailer, what do you mean?

16 A. Well, I've got a guy, for example, that puts a
17 pontoon boat in for me every year, and he happens to
18 have a Bronco II -- or had a Bronco II.

19 And I said, "well, what do you like about
20 the Bronco II?"

21 He said, "well, he said, Dave, when you're
22 pulling one of these 28-foot pontoon boats behind
23 your vehicle, if you have got a nice short-wheelbase
24 vehicle like a Bronco II, you know, that is a
25 terrific way to maneuver around in tight spaces and

1 maneuver the trailer around. So it gives me great
2 maneuverability. So this vehicle is terrific for my
3 particular use, doing that with it."

4 Q. How would you hook up a Bronco II to a trailer?

5 A. You put a hitch on the back of it.

6 Q. Anything else?

7 A. Well, it depends on the rated load of the vehicle.

8 You might add oil coolers or whatever else you
9 thought you might have to add to it.

10 Q. Well, when you're towing a 28-foot -- whatever it
11 was.

12 A. It's a super-lightweight pontoon. But this guy is
13 dealing with --

14 Q. Suppose I'm towing a 2,000-pound trailer. What do I
15 need to do?

16 A. I don't know whether a 2,000-pound trailer is rated
17 for all uses in a Bronco II the way we finally
18 released it, but I think you would basically --

19 MR. **Name Redacted**: Don't speculate, Mr.

20 **WITNESS NAME REDACTED**.

21 MR. GOODMAN: Well, let's hear what he has
22 to say.

23 BY MR. GOODMAN:

24 Q. What would you basically --

25 MR. **Name Redacted**: Well, I'm instructing him not

1 to speculate. There is no evidentiary value in
2 speculation, Mr. Goodman. You want him --

3 MR. GOODMAN: He's not speculating.

4 MR. **Name Redacted**: Do you want him to speculate?

5 MR. GOODMAN: I don't want him to
6 speculate, but he's about to give me an answer to
7 what he would do if it was rated for that.

8 BY MR. GOODMAN:

9 Q. I want you to assume for the following question that
10 the Bronco II is rated to carry or to tow a
11 2,000-pound trailer.

12 What would you do to hook it up?

13 A. The -- there is a protocol at Ford, a general
14 product acceptance specification for rating the
15 vehicle for trailer-towing that involves computer
16 calculations of the ability for the vehicle to haul
17 the rated weight of the trailer up a grade; that's
18 one of the criteria.

19 There are some evaluations that may take
20 place with the -- with a trailer on the vehicle, and
21 those are the basic evaluations to make sure that
22 the engine and axle and power train will pull, and
23 that the weight ratings on the axles with the tongue
24 load of the trailer are capable of being handled by
25 the vehicle.

1 And those are the basic criteria that

2 determine acceptability for --

3 Q. Okay.

4 A. -- trailer towing.

5 Q. Assuming that the Bronco II has been rated as

6 accessible for towing 2,000-pound trailers and I was

7 going to tow a 1,730-pound trailer, how would I go

8 about towing it? How would I hook it up?

9 A. Well, you'd basically have to get a hitch that was

10 rated for that capacity -- and I'm not sure 2,000

11 pounds -- I'm not sure of what it was -- actually

12 ended up rated to tow. But if the manufacturer's

13 plate --

14 MR. **Name Redacted**: Are we talking about a 4x4 or

15 a 4x2, Mr. Goodman?

16 MR. GOODMAN: I'm talking about a 4x2.

17 THE WITNESS: If the trailer plate -- if

18 the vehicle was rated to --

19 MR. **Name Redacted**: Objection, lack of foundation.

20 BY MR. GOODMAN:

21 Q. Please continue, Mr. **WITNESS NAME REDACTED**.

22 A. If the trailer -- if the vehicle was rated to haul a

23 certain trailer, then the GAWR limits -- as a

24 consumer, I have a responsibility to make sure I

25 don't exceed the front and rear GAWR ratings of the

1 vehicle when I'm operating the vehicle.

2 Q. Gross axle weight?

3 A. Gross axle weight. So depending on the tongue load
4 on the trailer I may have to reduce the amount of
5 load I can put in the vehicle in order to be able to
6 pull the trailer.

7 But the -- there's a Consumer Information
8 Awareness Act that requires publication of maximum
9 front and rear GAWR's that I believe was in force
10 when we were putting out the Bronco II.

11 Q. How would I attach -- how do I attach a trailer to a
12 Bronco II with a hitch?

13 Are you familiar with the trailer-tow
14 bumper?

15 A. The trailer-tow bumper is rated for very
16 light-weight Class One, I believe it is, trailers,
17 so you can't pull a 2,000-pound trailer with that
18 bumper.

19 Q. Well, isn't it true that Class One is 2,000 or
20 below?

21 A. I don't remember what the ratings are. But the base
22 hitch is -- I don't remember what the limitations
23 are, but it would be --

24 MR. **Name Redacted**: Don't speculate, if you don't
25 know.

1 THE WITNESS: Okay. Well --

2 BY MR. GOODMAN:

3 Q. Based upon your knowledge as an engineer.

4 A. Okay. Basically it's the responsibility of the
5 consumer to understand the limitations of either a
6 factory-installed bumper or any aftermarket
7 equipment he puts on to make sure it has the rated
8 capacity for trailer towing.

9 Q. Do you know how you would hook up a trailer to a
10 Bronco II?

11 A. I don't specifically know how the hitch is actually
12 attached either to the frame or to the bumper. I
13 haven't actually done it personally. I wasn't
14 actually involved with trailer towing on the
15 Bronco II.

16 Q. Do you think you have to take any special
17 precautions with a Bronco II when you're towing a
18 trailer, as --

19 MR. **Name Redacted**: Objection.

20 BY MR. GOODMAN:

21 Q. -- opposed to towing it with other cars?

22 MR. **Name Redacted**: Based on his previous answer,
23 there is a lack of foundation.

24 THE WITNESS: I don't specifically know, on
25 the Bronco II.

1 BY MR. GOODMAN:

2 Q. So if I gave you a Bronco II and I said, tow a
3 trailer with it, you wouldn't know how to go about
4 doing it?

5 A. Well, first of all, I'd probably look in the
6 Owners Manual, I'd look at the GAWR plates, I'd look
7 at what is the load I want to carry, I'd look at the
8 bumper, I'd determine what the maximum hitch load
9 would be on what I wanted to tow, and then I -- if I
10 needed a different hitch -- a different trailer-tow
11 device installed I'd probably go to a hitch or --
12 place or to a dealer and get advice on what kind of
13 hitch to put on the vehicle.

14 Q. Have you ever towed a trailer?

15 A. Yeah, I do. I just towed one to Mackinac and back.

16 Q. Did you do it with a Bronco II?

17 A. I did it with a Ford Explorer.

18 Q. Okay. And how heavy was the trailer?

19 A. It was a Sea-Doo trailer. It was very light, and I
20 just had bicycles on the trailer. So I used the
21 factory hitch.

22 Q. Is that the trailer-tow bumper hitch?

23 A. I used -- it was integral with the bumper, very
24 light-weight.

25 Q. How much did the trailer weigh?

1 A. About 600 pounds, 500 pounds at the most.

2 Q. Do you know how much the trailer weighed?

3 A. I'm pretty certain that's the amount it weighed. I

4 checked on the tongue weight. I don't remember the

5 exact numbers.

6 Q. Did you ever weigh it yourself?

7 A. I didn't weigh it, no.

8 Q. Do you think it is reasonable to expect a consumer

9 to weigh a trailer?

10 A. If you're pushing the level of -- if you're pushing

11 the level of being at the limit, I would think it

12 would behoove you to get on some scales and find out

13 what your trailer weighs, yeah, or at least to make

14 some reasonable effort to calculate what the load

15 should be.

16 Q. But you didn't do that when you towed this trailer,

17 did you?

18 A. Well, it was rated to carry Sea-Doos, okay? I know

19 what the weight of the Sea-Doos are and what that

20 trailer is.

21 Had I been pulling two Sea-Doos, I had

22 lined up to have a new Reese two-inch 3,500-pound

23 hitch put on the vehicle.

24 I have a trailer-tow package on the

25 vehicle.

1 Since I was only pulling bicycles, and
2 using the Sea-Doo trailer to pull bicycles, I didn't
3 have that hitch installed yet.

4 Q. Have you ever towed anything else?

5 A. I've towed big power boats.

6 Q. How much did that weigh?

7 A. 2,500 pounds.

8 Q. What were you towing it with?

9 A. A 350.

10 Q. And what did you do to hook it up?

11 A. I think there were surge brakes on the trailer, and

12 I can't remember the -- it was a long time when I

13 towed that.

14 Q. So you don't remember?

15 A. Well, I hooked it up, put safety chains on it, okay?

16 I'm not sure if I had equallizing bars on

17 there or surge brakes. It was a friend of mine's.

18 Q. What's the purpose of having brakes, surge brakes?

19 What are surge brakes?

20 A. Well, they're brakes that, when the vehicle

21 decelerates, the loads applied by the hitch from the

22 vehicle stopping and the trailer trying to keep

23 moving forward activates brakes on the trailer

24 wheels, so that the overall performance of braking

25 is not degraded excessively.

1 When you have a trailer without brakes, the
2 braking performance of the vehicle is decreased by
3 the additional mass of the trailer.

4 Q. And what is the -- what type of practical effect
5 does that have on you as a person towing a trailer?

6 A. Well, the stopping distance is increased
7 in proportion to the ratio of the added weight of the
8 trailer compared to the vehicle weight.

9 Q. Okay. And you mentioned stopping distance. Is
10 there anything else?

11 A. Well --

12 Q. If there isn't, then that's fine.

13 A. If the trailer is properly set up and the tongue
14 loads are correct and so on.

15 Q. So basically the brakes, from your point of view,
16 are there to help stop the vehicle?

17 A. The surge brakes on the trailer?

18 Q. Right.

19 A. That's the principal purpose of them.

20 Q. Any other purposes?

21 A. They can -- they can improve the stability under
22 braking if they work properly.

23 Q. How is that?

24 A. You don't have the vehicle braking and the trailer
25 not braking applying forces to the back of the

1 vehicle.

2 Q. Mr. **WITNESS NAME REDACTED**, there was a meeting about the
3 Bronco II between you and a number of other people
4 and Mr. Polling, is that correct?

5 A. That's correct.

6 Q. And the major topic was rollover problems being
7 experienced with the Bronco II and the ADAMS
8 simulation program?

9 MR. **Name Redacted**: Objection. Object to the form
10 of the question.

11 MR. GOODMAN: Let me restate it.

12 BY MR. GOODMAN:

13 Q. The major topic was the rollover problems being
14 experienced with the Bronco II, is that correct?

15 MR. **Name Redacted**: Object to the form of the
16 question.

17 THE WITNESS: The topic wasn't rollover
18 problems with the Bronco II.

19 We talked about rollover, we talked about
20 rollover in the context of the entire vehicle
21 population, and we talked about the work that we had
22 done on the new simulation, and we also did discuss
23 how we'd use that simulation to validate the
24 Bronco II, our work in progress on the Bronco II,
25 and the fact we were proceeding with the Bronco II.

1 BY MR. GOODMAN:

2 Q. Mr. **WITNESS NAME REDACTED**, a person driving a short-wheelbase
3 vehicle like a Bronco II has to drive it very, very
4 cautiously at high speeds, isn't that right?

5 A. If a driver loses control of a shorter wheelbase
6 vehicle at very high speeds, it may -- he may have
7 more difficulty recovering than a longer wheelbase
8 vehicle, okay?

9 But the basic stability characteristics of
10 the vehicles themselves within reasonable operating
11 parameters for the public roads are -- you know,
12 short- and long-wheelbase vehicles can co-exist
13 perfectly peacefully.

14 For example, I believe a Bronco II
15 wheelbase isn't that much different from a
16 Porsche 911, so -- a Porsche 911 is generally
17 recognized as being a pretty good car.

18 Q. Mr. **WITNESS NAME REDACTED**, isn't it true that you recommended
19 the adoption of an increased track width for the
20 Bronco II immediately before you left?

21 A. No, I recommended that a couple of years before I
22 left and implemented it and enacted it. I didn't
23 recommend any changes just before I left the
24 company. All the changes I recommended were put in
25 place.

1 Q. Isn't it true that before you left Ford you met with
2 Greg Rourke and informed him that you wanted to
3 increase the track width to increase stability, and
4 then both of you took the idea up to Ford's upper
5 management; isn't that true?

6 A. That was a couple of years before I left Ford. That
7 was when we had the paper vehicle, and that's when
8 we went through the five alternatives of -- not
9 alternatives, but alternate scenarios, if you will,
10 and we recommended scenario two or three, which was
11 to widen the front and rear track.

12 And that was long before I left the
13 company. That was before we ever even had a
14 prototype Bronco II.

15 Q. And you recommended that because you believed that
16 by widening it, you would have greater stability,
17 isn't that right?

18 A. I just thought it would be possible to do, and I
19 thought stability would be better, would be one of
20 the factors. Generally, as I testified before,
21 is that -- given the basic vehicle package, given
22 everything you try to do is -- making the track
23 width as wide as is reasonable and making the center
24 of gravity as high or as low as is reasonable to
25 still satisfy all the functions is generally

1 something we do when we design vehicles.

2 Q. Isn't it true that you wanted a real increase in the
3 stability index in order to increase safety from
4 rollover?

5 MR. **Name Redacted**: Objection to the form of the
6 question. It's vague and it's argumentative, and at
7 what point in time?

8 MR. GOODMAN: Any point in time.

9 THE WITNESS: When we -- when the program
10 was transferred to us I think the stability index of
11 the Bronco II was around about 2 -- 1.8, 1.85 or
12 something along that line, and we looked at other
13 vehicles in this segment, and that seemed to be a
14 little lower than we could achieve and still stay in
15 the same segment size.

16 So we made recommendations on the track and
17 CG that would take us to a 2-plus, maybe a 2.05 or a
18 2-plus, and it seemed like it was feasible to do
19 that for fairly nominal cost at the inception of
20 this program.

21 And so we made that recommendation, and
22 that's what we went with, and I think the stability
23 index of the Bronco II is probably very close to the
24 stability index of an Econoline van or an Aerostar
25 or my current Explorer that I drive around today.

1 So stability index is not the only factor
2 that affects stability. It's a factor, but it's
3 only -- it's constrained by vehicle -- by the
4 vehicle market segment.

5 Q. Mr. **WITNESS NAME REDACTED** --

6 MR. **Name Redacted**: Mr. Goodman, if you would
7 please allow him to finish his answer before you
8 interrupt him.

9 MR. GOODMAN: If he would give me
10 responsive answers it wouldn't take as long.

11 BY MR. GOODMAN:

12 Q. Mr. **WITNESS NAME REDACTED**, the literature at the time that the
13 Bronco II was being developed showed clearly, did it
14 not, that the Jeep CJ was an outlier and differed
15 from other vehicles in its class because of the
16 frequency of fatal rollover accidents?

17 A. Okay. What you're saying is that the Jeep was an
18 outlier in fatal rollover accidents, is that
19 correct?

20 Q. Isn't that true?

21 MR. **Name Redacted**: Let's have the question read
22 back, please.

23 THE WITNESS: Ask me the question again.

24 BY MR. GOODMAN:

25 Q. All right. Isn't it true that the literature at the

1 time -- or that it was common knowledge at the time
2 that the Bronco II was being developed, common
3 knowledge in the industry -- let me just step back.

4 Isn't it true that the literature at the
5 time the Bronco II was being developed showed
6 clearly, did it not, that the Jeep CJ, which was
7 -- that the Jeep CJ was an outlier and differed from
8 other vehicles in its class because of the frequency
9 of fatal rollover accidents?

10 MR. **Name Redacted**: Objection to the question as
11 vague in terms of its general reference to
12 literature, and it's also vague as to a point in
13 time.

14 BY MR. GOODMAN:

15 Q. Isn't that true, sir?

16 A. I think we had an understanding that the -- that the
17 Jeep CJ-5 had higher than, say, passenger car
18 incidents of fatal rollovers.

19 We speculated that the fact there was very
20 little superstructure on the vehicle, that the doors
21 were removable, that the demographics of that
22 vehicle were targeted towards younger, less
23 experienced drivers could have all been factors
24 explaining that higher propensity.

25 We also found when we drove the vehicle

1 that -- that we felt we could have vehicles that
2 drove and handled better directional-stability-wise
3 than the Jeep.

4 So there were numerous factors --

5 Q. Isn't it --

6 A. -- that could explain that outlier, if you will, or
7 that difference in the characteristics of the Jeep.

8 Q. I'm going to ask you the question again and I'm
9 going to move to strike your previous answer as
10 nonresponsive.

11 This is a yes or no question.

12 Isn't it true that the literature at the
13 time showed that the Jeep CJ was having significant
14 rollover problems, and that you engineers at Ford
15 knew that when you were developing the Bronco II?
16 Yes or no.

17 MR. **Name Redacted**: I object to the form of the
18 question and I submit that it's not capable of a yes
19 or no answer. It's vague. You have made no
20 reference to a point in time, you have made no
21 reference to the literature, and you have not
22 defined what it is about the Jeep CJ that you
23 consider to be a problem.

24 MR. GOODMAN: Mr. **Name Redacted** --

25 MR. **Name Redacted**: Well, I mean, it's --

1 MR. GOODMAN: You can object to the form of
2 the question.

3 MR. **Name Redacted**: -- statistics -- I'm trying to
4 help you, Avery --

5 MR. GOODMAN: No, you're not.

6 MR. **Name Redacted**: -- I'm trying to help you.

7 MR. GOODMAN: I don't think you're trying
8 to help me, you're trying to help Mr. **WITNESS NAME REDACTED**.

9 MR. **Name Redacted**: No, no. Mr. **WITNESS NAME REDACTED**
10 doesn't need help, you do.

11 MR. GOODMAN: Well, then don't help him,
12 and don't help me.

13 MR. **Name Redacted**: You do, you -- well, I'll
14 refrain from trying to help you ask a --

15 MR. GOODMAN: Don't try to help me, thanks.

16 MR. **Name Redacted**: -- coherent question.

17 BY MR. GOODMAN:

18 Q. Would you please answer the question, Mr.

19 **WITNESS NAME REDACTED**?

20 A. There were some articles, there were some tests,
21 there were some concerns, some data -- I don't
22 remember specifically -- that indicated that perhaps
23 the Jeep was an outlier in fatal rollovers -- the
24 Jeep CJ-5 was an outlier in fatal rollovers.

25 Q. All right.

1 A. That we were aware of in the timeframe that we were
2 developing the Bronco II.

3 Q. Okay. And in spite of that, the CJ vehicles were in
4 fact used as the image vehicles for the Bronco II,
5 isn't that right?

6 A. The CJ-5 was replaced by the CJ-7, and the "image
7 vehicle" term means that that was a vehicle that was
8 in the segment that we would be competing with, and
9 in fact it was the only vehicle, really, in the
10 segment at the time that was anywhere close to what
11 we were doing.

12 And so we would use that -- image, in this
13 sense, means comparative vehicle that you want to be
14 better than.

15 Q. Isn't it true, sir, that your knowledge of the
16 problems with the frequency of Jeep CJ rollover was
17 in fact the reason why you urged a widening of the
18 track width on the Bronco II?

19 A. No, I don't believe it is, because the
20 stability index, which is the factor -- the track
21 width - center-of-gravity height relationship we did
22 not believe was the only factor -- certainly we
23 don't believe it wasn't the only factor explaining
24 any of the potential concerns with the Jeep.

25 We found -- or we felt as engineers that we

1 -- that the Bronco II would be a more stable vehicle
2 directionally, it would have a superstructure, it
3 wouldn't have removable closures.

4 So there were a number of factors that made
5 the Bronco II, in our view, different than the
6 Jeep CJ.

7 Q. Let me refer you and your counsel to page 77 of your
8 deposition of July 9th, 1990.

9 On that day you were asked the question:

10 "Okay. Tell me when you first became aware
11 of rollovers with Jeeps."

12 Could you tell me what your answer was,
13 sir?

14 Maybe I'll speed this along.

15 Your answer was:

16 "I think the published literature in
17 various dockets -- Ford indicated those types of
18 vehicles were outliers. Some of those vehicles were
19 outliers in rollover accidents."

20 And you were asked: "What do you mean by an
21 outlier?"

22 Your answer was: "A greater number of
23 rollover fatalities per so many passengers miles."

24 And you were asked: "All right."

25 Your answer: "Than other vehicles."

1 MR. **Name Redacted**: I'm going to object to your
2 reading from this deposition. This is entirely
3 consistent with his current testimony.

4 BY MR. GOODMAN:

5 Q. Well, is that correct, sir?

6 A. That's what I think I just said.

7 Q. All right. Now it -- also it states there, as we
8 go on:

9 "Okay. Did you know that at the time you
10 first started working on the Bronco II?"

11 And your answer was: "Yes."

12 And then the next question is: "Is that
13 one of the reasons why you indicated to Ford that
14 you thought that they ought to increase the
15 stability index?"

16 And your answer was: "Yes."

17 Does that refresh your recollection of why
18 you increased the stability index?

19 A. Yes, as it was one of the reasons, okay, but it
20 doesn't say it was the reason.

21 Q. All right.

22 A. You asked me earlier specifically if it was the
23 reason, and I said it was one of the factors.

24 Q. All right. So it was one of the factors?

25 A. And I explained the rationale.

1 Q. Okay. Now, in fact the only thing they authorized
2 you to do at that point were some studies, is that
3 right?

4 A. Who authorized me to do what?

5 Q. Well, I don't know. This is just something again in
6 your prior testimony. Maybe you can tell me.

7 A. Nobody authorized me to do anything. I told them
8 what I was going to do.

9 Q. All right. And the only thing that the management
10 authorized you to do were some studies at that
11 point, isn't that right?

12 A. Nobody asked me to do anything. I did it.

13 Q. No one asked you to do anything?

14 A. No, I did it.

15 Q. All right.

16 A. I just chose to do some studies to see how much we
17 could widen the track and how much we could lower
18 the vehicle and maintain the full functionality of
19 the vehicle.

20 Q. Isn't it true, sir --

21 A. And I told my management that's what I was going
22 to do.

23 Q. Isn't it true, sir, that the most that Ford ever
24 accomplished was a fine-tuning of the suspension
25 system; isn't that right?

1 A. It all depends on your perspective. I think that we
2 made quite a substantial change in the stability
3 index, and I think we made major advances in the
4 tuning of the suspension, not just fine-tuning.

5 Q. Well, didn't you --

6 A. We developed new stabilizer bar concepts, and I
7 think we achieved a very good handling vehicle
8 judging by the P6101 signoff documents, and
9 significantly better than the Jeep.

10 Q. Mr. **WITNESS NAME REDACTED**, isn't it true that the wheelbase on
11 the Bronco II and the wheelbase on the Jeep CJ-7,
12 which you admit was an outlier, are about the same?

13 A. There's hundreds of vehicles on the road with
14 wheelbases similar to the Jeep and the Bronco II.

15 Q. Okay. The wheelbase of the Jeep CJ-7 was 93.6
16 inches, the wheelbase of the Bronco II was 94
17 inches; isn't that right?

18 A. Well, they're both compact vehicles. I would expect
19 the wheelbases to be somewhat similar.

20 Q. And a short wheelbase increases the probability of a
21 vehicle going sideways, isn't that right?

22 A. It's not the only factor, as we've testified
23 numerous times, sir.

24 Q. It is one of the factors, isn't it?

25 A. It is a factor, but not the only factor.

1 The main factor that causes a vehicle to go
2 sideways is the driver losing control of the
3 vehicle.

4 Q. Isn't it true, sir, that cars with wheelbase lengths
5 of less than 100 inches are likely to have
6 fishtailing problems?

7 A. By whose reckoning?

8 Q. Do you know a Linden Scott Hankner?

9 A. I do know Mr. Hankner, yes.

10 Q. And do you respect his skill as an engineer?

11 A. I understand he is a -- he's an analytical
12 individual that has done some computer simulations.

13 Q. All right. Well, let me tell you what he said, and
14 it's -- this is going to be put into evidence at the
15 trial, so I'd like to know what you have to say.

16 In his deposition on January 10th of 1994
17 on page 16, starting on line 15, Mr. Hanker was
18 asked the following question, and I quote:

19 The question was: "Something less than a
20 hundred inches is going to have difficulty
21 controlling in a fishtailing situation?"

22 And his answer was: "Not necessarily, but
23 it has a propensity to. Depends on the weight
24 distribution of the vehicle."

25 Would you agree with that statement?

1 A. Well, I think he summed it all up by saying not
2 necessarily.

3 Q. All right. But it does have a propensity, isn't
4 that right?

5 A. Well, it's all caveated based on the "not
6 necessarily" caveat and the total parameters of the
7 vehicle.

8 As I just testified, there are hundreds of
9 vehicles with wheelbases in this domain, and they
10 have good handling and good directional stability
11 characteristics.

12 Q. Well, isn't it true that a shorter wheelbase vehicle
13 will generally have different handling
14 characteristics than a longer wheelbase vehicle, and
15 that it might rotate faster because it has a lower
16 power moment of inertia; isn't that true, Mr.

17 **WITNESS NAME REDACTED**?

18 MR. **Name Redacted**: Object to the form of the
19 question as vague.

20 MR. GOODMAN: I think it's actually
21 extremely precise.

22 THE WITNESS: Okay. Did you say power
23 moment of inertia?

24 BY MR. GOODMAN:

25 Q. Yes.

1 A. Well, there is no such thing as a power moment of
2 inertia.

3 Q. There is no such thing as a power moment of inertia?

4 A. Absolutely no such thing. There is such a thing as
5 a polar moment of inertia.

6 So whoever wrote "power" didn't know what
7 they were talking about.

8 Q. Well, I think it was you who wrote "power,"
9 actually. Maybe they got what you said incorrectly.

10 A. It's polar moment of inertia.

11 Q. But that's what's on the record in the Mosher
12 deposition.

13 A. Polar moment of inertia and -- is a factor that
14 depends on the overhangs over the wheels and the
15 wheelbase of a vehicle, and it's one of the factors.
16 There's hundreds of factors.

17 Q. Okay.

18 MR. **Name Redacted**: Mr. Goodman, we're getting
19 near the end of the day here, and I think you're
20 simply asking questions that have already been asked
21 of this witness many times before.

22 MR. GOODMAN: Well, I'd like to see what he
23 has to say about these things. I don't think he's
24 really been asked in the same context.

25 MR. **Name Redacted**: Well, we're going to go for

1 eight hours here, which includes the time that we
2 have to do the redirect that is based on Mr.
3 **Name Redacted**'s examination this morning, and I submit
4 that you're wasting everybody's time.

5 BY MR. GOODMAN:

6 Q. Mr. **WITNESS NAME REDACTED**, isn't it true that a high
7 coefficient of friction increases the chance of
8 rollover? Yes?

9 A. And a low coefficient of friction increases the
10 chances of rollover.

11 Q. Well, isn't it true that a paved surface such as
12 concrete on an interstate highway increases the
13 chances of rollover because it has a high
14 coefficient of friction?

15 A. Well, are you trying to say that a high coefficient
16 of friction is bad for rollover?

17 Q. I'm not trying to say anything. I'm asking you a
18 question.

19 A. Okay. A low coefficient of friction is basically at
20 risk for causing a loss-of-control situation leading
21 to a potential rollover, and a very high coefficient
22 of friction and highly sticky tires will allow the
23 vehicle to push closer towards the envelope to the
24 threshold of rollover stability.

25 Q. Now, certainly a vehicle that is towing a trailer is

1 going to get put under more stress in terms of
2 stability than one which is not; is that fair to
3 say?

4 A. I think that it's easier to lose control of a
5 vehicle when it's pulling a trailer if you put large
6 steering inputs in, and especially if the trailer is
7 improperly loaded for the vehicle, or if the tongue
8 load is incorrect, or if the vehicle is driving at
9 excessive speeds.

10 Q. Well, if you have got an unstable vehicle to begin
11 with a trailer doesn't help, does it?

12 MR. **Name Redacted**: Object to the form. It's
13 argumentative. It's vague.

14 THE WITNESS: The presumption that the
15 vehicle is unstable to begin with is -- it would
16 depend on the specific vehicle, the tire pressures
17 of the vehicle, other loads and other factors in the
18 vehicle.

19 So when you're driving a vehicle with a
20 trailer you have to be more careful about not
21 getting into a loss-of-control situation --

22 Q. Isn't it --

23 A. -- in any vehicle.

24 Q. Isn't it true that -- are we still -- isn't it true
25 that a wet surface has a low coefficient of

1 friction --

2 A. Generally.

3 Q. -- and reduces the chance for rollover?

4 A. A wet surface has a low coefficient of friction, but

5 reduces the threshold at which a loss of control may

6 be experienced. So it's more likely to lose control

7 on a low coefficient.

8 Q. Okay. You once stated that you would not recommend

9 the Jeep CJ because it was an open vehicle and there

10 was a high risk of rollover. Do you remember that?

11 A. I don't remember what I specifically said.

12 Q. Well, would you recommend a Jeep CJ?

13 A. What am I recommending it for? To whom? For what?

14 Q. To someone buying a vehicle.

15 A. Well, if you want an open-air vehicle and you want

16 to go off-road and you like that open-air thing and

17 you're prepared to put up with the risks associated

18 with that, then I guess you'd buy one of those

19 vehicles.

20 Q. And there's a high risk of rollover associated with

21 the Jeep CJ, isn't that right?

22 A. Well, actually the data that we had had a high

23 propensity -- not a high propensity, a higher risk

24 -- not a higher risk, higher fatal accident rollover

25 reported incidents.

1 And again with the open nature of the
2 vehicle, the probability of fatality in the event of
3 a rollover is probably greater in that type of a
4 vehicle. So --

5 Q. Frankly speaking, though, you don't know how much
6 lower the risk would be in an enclosed vehicle like
7 a Bronco II, do you?

8 A. I don't know what the risk is per se, but I would
9 think the risk would be higher in an open-structured
10 vehicle than a closed-structured vehicle.

11 But I don't know for a fact, no.

12 Q. All right. And you think that an average person can
13 see the greater risk of an open vehicle like a Jeep,
14 isn't that right?

15 A. I would think that the average person, if
16 questioned, would say that they would feel more
17 vulnerable in an open vehicle than a closed vehicle.

18 Q. The Bronco II is not an open vehicle, is it?

19 A. No, it is not.

20 Q. Has a roof, doesn't it?

21 A. It does.

22 Q. And since it is enclosed, the average person is
23 going to -- is not going to think that he is risking
24 his life when he steps in a Bronco II, is he?

25 A. I think the average --

1 MR. **Name Redacted**: Object to the form. You're
2 asking him to speculate.

3 THE WITNESS: Right. I think the average
4 person knows when he gets into his vehicle and he
5 drives away from the curb -- or even while he's
6 sitting at the curb that there is some element of
7 risk.

8 BY MR. GOODMAN:

9 Q. These are things you have to take into account as an
10 engineer designing a vehicle, don't you?

11 You have to think about what -- how people
12 are going to drive the vehicle, what types of people
13 are going to buy the vehicle and who you're dealing
14 with, isn't that right?

15 A. We try to identify what the person is going to do
16 with the vehicle, and we try to communicate to that
17 consumer what he can and what he cannot do with his
18 vehicle and provide cautionary notes where
19 appropriate about appropriate behavior in handling
20 the vehicle.

21 Q. And even though it's an open vehicle which gives the
22 consumer some idea -- or the average person some
23 idea of the greater risk involved, you still think
24 that the Jeep CJ should be marked unambiguously and
25 that it should be made very clear and specific about

1 the probability or possibility of serious injury and
2 death resulting from rollovers involving that car,
3 isn't that right?

4 MR. **Name Redacted**: Object to the speech posing as
5 a question.

6 THE WITNESS: Okay. That was a -- that was
7 a comment made by plaintiff's attorney, by
8 plaintiff's counsel in a prior deposition, at which
9 I was asked to respond yes or no under great duress.
10 So --

11 BY MR. GOODMAN:

12 Q. And you responded "yes," didn't you?

13 A. Okay. I do recall responding "yes," but I don't --
14 I still don't agree.

15 Q. Now, Mr. **WITNESS NAME REDACTED**, even on a CJ, with its obvious
16 open nature, the label needs to read:

17 "This vehicle has a greater risk of serious
18 injury and death than a passenger vehicle."

19 That's what the label should read,
20 shouldn't it?

21 A. I think this is along the same lines and the same
22 chain of questioning. I think these are again
23 counsel's words, plaintiff's words, forcing a yes-no
24 response.

25 Q. And your answer was "yes"?

1 A. Okay, it may have been.

2 Q. All right. But the label on the Bronco II doesn't

3 read that way, does it?

4 A. Well, you were just talking about a label on a

5 vehicle that was open, right?

6 Q. Um-hum.

7 A. And now we've switched subjects to talking about a

8 Bronco II?

9 Q. Right, right. We've switched subjects.

10 We're still talking about the same topic,

11 but with respect to a different car.

12 A. You were just talking about --

13 Q. You believe --

14 A. Just to clarify -- wait, just to clarify my -- if I

15 might ask a question and clarify what you're asking

16 me, you were just asking me questions that were

17 hypothesized by plaintiff's counsel in a prior

18 deposition of a speculative comment that if a label

19 was to be applied to a vehicle that was open, this

20 is what the label might read, where I responded,

21 well, if you put a label on the vehicle that might

22 be what it might say, and I said, yes, okay?

23 Now you're asking me a question about a

24 closed vehicle, is that correct?

25 Q. I want you to assume -- let me step back for a

1 moment -- that the Insurance Institute for Highway
2 Safety has determined that the Bronco II 4x4 -- 4x2
3 vehicle has a rollover rate of almost two-and-a-half
4 times that of the Jeep CJ-5 -- fatal rollover rate,
5 I might add.

6 Now, wouldn't you agree that a rollover
7 rate -- fatal rollover rate like that, well,
8 obviously is equal to or greater than the CJ-5?

9 MR. **Name Redacted**: Object to the form, assumes
10 facts not in evidence. It's based on hearsay.

11 MR. GOODMAN: Well, it's facts that will be
12 in evidence.

13 THE WITNESS: Well, I don't know what the
14 statistical confidence limits are, what the relative
15 volumes of vehicles are, what the demographics of
16 the driving populations of the two different
17 vehicles are, or to what extent the adverse
18 publicity about the CJ-5's has tempered driving
19 behavior.

20 So there are hundreds of factors that could
21 affect those statistics and --

22 Q. Did you --

23 A. -- I'm not -- I'm not totally familiar, you know,
24 with those facts which have all been brought in
25 after we made the decisions we made on the Bronco II

1 design and development.

2 VIDEO TECHNICIAN: Concluding tape No. 3 of
3 the deposition. We're off the record.

4

5 (A recess was taken)

6

7 VIDEO TECHNICIAN: We're beginning tape No.
8 4 of the deposition. Back on the record.

9 BY MR. GOODMAN:

10 Q. Mr. **WITNESS NAME REDACTED**, isn't it true that you haven't
11 worked for Ford as a direct employee since August
12 of 1982?

13 A. That is correct.

14 Q. And yet prior to your 1990 deposition you met with
15 Ford's lawyers?

16 You felt that it was necessary to be
17 represented by a lawyer, isn't that right?

18 A. Not understanding the nature of this business, I
19 wasn't sure, you know, what my role was as a fact
20 witness or an expert, so --

21 Q. Okay. And you were represented by Mr. Douglas
22 Seitz, correct?

23 A. Well, we talked about this earlier, but Doug Seitz
24 and Art Anderson were Ford's attorneys, and when
25 asked the question, what am I doing here, I said,

1 well, I've been asked to come here by these
2 gentlemen, I assume they're my attorneys, and that's
3 a matter of record.

4 Q. And the same lawyers who were representing Ford
5 Motor Company and paid by Ford Motor Company
6 were also representing you, and they were at that
7 very same time representing Ford Motor Company
8 against the plaintiffs in that deposition, isn't
9 that right?

10 MR. **Name Redacted**: Object to the form.

11 THE WITNESS: Well, I --

12 BY MR. GOODMAN:

13 Q. The deposition of July 9th, 1990.

14 A. I assume that, but I don't know. I'm involved as a
15 fact and expert witness, so I guess I'm not sure I'm
16 in need of legal counsel.

17 Q. And prior to that deposition you reached an oral
18 agreement, did you not, with Ford that called for
19 your being paid \$5,000 per day, although it was not
20 yet reduced to writing except for that letter dated
21 June 20th, 1990?

22 A. We communicated our rates, and for short-term
23 contracts I had noted that my rates were \$5,000 a
24 day and \$4,000 per diem for long-term contracts, and
25 I had some comments about structure for depositions

1 as -- pricing, provided that Ford minimize my
2 involvement and the disruption of my base business
3 by trying to cooperate as much with me and with
4 plaintiffs' counsel to minimize the duplicity and
5 unnecessary nature of keeping on -- going on and on
6 with these depositions.

7 Q. And in fact there is no evidence that you have ever
8 signed off -- or that you ever signed off on the
9 Bronco II until after Ford started paying you, isn't
10 that right?

11 A. There are program reports that preceded or predated
12 the time I left. There was one in July and one
13 earlier where we had done a signoff trip. I believe
14 one trip was to Traverse City, another trip was at
15 the Dearborn Proving Grounds, where we had subjected
16 the vehicle to various handling maneuvers and
17 compared it to the Jeep CJ-5 and judged -- and
18 rendered an opinion as the vehicle -- as to where
19 the vehicle was at in terms of its handling
20 capabilities.

21 And that document typically was prepared by
22 vehicle development, and I provided input to that,
23 which is a part of due process that was in place at
24 that time.

25 Q. But you did not sign off on the vehicle, did you?

1 A. I evaluated the vehicles, which were prototypes at
2 that time, and provided my ratings, and I endorsed
3 the findings of the report.

4 Q. But you did not sign off on the vehicle, did you?

5 A. What do you mean specifically by sign off?

6 Q. You were not there, in fact, when the vehicle was
7 finally signed off into production, isn't that true?

8 A. Okay, all right. In the timeframe that -- after I
9 left, no, I did not come back and sign off the
10 vehicle that went into production.

11 Q. Now you left Ford Motor Company in 1982 because
12 Ferro Manufacturing offered you a substantial pay
13 raise, is that correct?

14 A. That is correct.

15 Q. And you were going from a salary of 54,000 the year
16 you left Ford to a salary at Ferro of 65,000, is
17 that correct?

18 A. Plus bonuses, plus a company car, plus an expense
19 account.

20 Q. And you said you stayed there until 1984, when you
21 started your own consulting company, **Witness Name Redacted**
22 **WITNESS NAME REDACTED** & Associates, right?

23 A. That's correct.

24 Q. And you said that your first client was Ferro?

25 A. That's correct.

1 Q. Now the first time you had any business from Ford
2 Motor Company prior to 1990 and that letter that you
3 sent to Mr. Art Anderson, the first time was in
4 1985, isn't that right, or is that what you say --
5 that's what you claim?

6 A. I believe it's the '85-'86 timeframe, yes.

7 Q. And you claim you were working on a small sports car
8 or something like that, is that right?

9 A. The GN34.

10 Q. And you claim you were paid about 50,000 for that,
11 is that right?

12 A. Yeah, I think that it was less than that.

13 It was probably 40,000, but those were the records
14 that we talked about, and I think it was later than
15 we had just mentioned. I think that was in '86-'87
16 that that work was done, with the Rodriguez exhibits
17 that we declared earlier here.

18 Q. And isn't it true that each time you obtain a
19 contract with Ford -- isn't it true that you have to
20 generate a source letter?

21 A. Yes. I do not have a standing contract with Ford,
22 and generally I'm not a preferred vendor to Ford,
23 and I choose to competitively bid each new job based
24 on the services that I can offer and the value that
25 I can add.

1 Q. And as to these alleged payments from Ford, you in
2 fact have no -- you cannot produce any checks or
3 written agreements or anything else to document that
4 beyond those that have already been gone over by
5 Mr. **Name Redacted**, isn't that right?

6 MR. **Name Redacted**: Object to the form.

7 THE WITNESS: I have produced, I believe,
8 all of the documents that relate to payments
9 received by Ford. And the stuff you have just
10 referred to was in '85, I believe was actually in
11 '86 or '87. I was off by a calendar year.

12 BY MR. GOODMAN:

13 Q. Now you claim, don't you, that testifying in
14 Bronco II cases costs you \$5,000 per day -- or
15 \$4,000 per day, is that right, in terms of your
16 lost time?

17 A. Five grand a day.

18 Q. And you claim that it takes you away from other
19 lucrative work that you claim you could do except
20 for the fact that you have to be here, is that
21 right?

22 A. That is correct.

23 Q. The truth is that you're here because it happens to
24 be very lucrative for you, isn't that right?

25 A. If I wasn't here I would be a lot better off,

1 because I would not be distracted by the -- by the
2 fatigue and the nature of these types of
3 depositions, and I would be able to spend this time
4 focusing on my main business, and I believe that
5 this process actually hurts my main business,
6 doing this.

7 Q. Well, isn't it true that you have been paid millions
8 of dollars since you made this agreement with Ford?

9 A. The fact that I've been paid 3 million-plus dollars
10 by Ford since 1989, 1990 is completely independent
11 of anything that I have had to do with the
12 Bronco II.

13 Q. Well, sir, you are aware that plaintiffs have taken
14 the depositions of hundreds of Ford engineers; you
15 do know that?

16 A. I understand that, yes, but -- I don't know that
17 it's hundreds, but several, anyway.

18 Q. Scores; let's put it this way.

19 A. Okay.

20 Q. And you were only one of those engineers, isn't that
21 right, that worked on the Bronco II?

22 A. That's correct.

23 Q. And many of these depositions were taken by
24 videotape so as to save these engineers the time and
25 trouble of coming back to the courtroom to testify.

1 Did you know that?

2 A. That's correct.

3 Q. And in fact your own deposition in 1990 was taken by
4 videotape, isn't that right?

5 A. That's correct.

6 Q. And there was nothing whatsoever stopping
7 you or Ford from saying whatever it is that you
8 needed to say right there and then in 1990 about the
9 Bronco II, was there?

10 A. No, there wasn't.

11 Q. You could have preserved all the testimony you
12 wanted to give for all eternity on that videotape,
13 couldn't you?

14 A. Well, I believe that the testimony that I've given
15 and each time I've been requested to appear for
16 depositions requested by plaintiffs and trials has
17 been essentially consistent since the very first
18 deposition.

19 Q. And, isn't it true, sir, that you have attended
20 trials on numerous occasions and given testimony
21 therein?

22 A. There have been, I believe, six trials.

23 Q. And there was nothing stopping Ford from simply
24 having your deposition played, and in fact it was
25 played in all of those trials, wasn't it?

1 MR. **Name Redacted**: Object to the --

2 THE WITNESS: I --

3 MR. **Name Redacted**: Object to the question. This
4 is improper cross-examination.

5 THE WITNESS: I have no knowledge as to
6 Ford's motivation to call me to those trials, other
7 than the fact that in the formative stages and
8 in decision-making phases of what we decided to do
9 with the Bronco II I was the design supervisor in
10 suspension design, that I guided Ford management
11 through many of the decisions that led to the final
12 product.

13 BY MR. GOODMAN:

14 Q. Isn't it true, Mr. **WITNESS NAME REDACTED**, that in 1990 Ford
15 supplied you with 70 percent of your business?

16 A. 1990, that's possible. I mean, we, again, don't
17 have to speculate. We have a schedule here that
18 specifically defines -- that I've provided to you.

19 Q. All right. And the remaining business you had was
20 with the Budd Company and with Exxon, isn't that
21 right, sir?

22 A. Budd and Exxon were clients, yes.

23 Q. And the Budd Company makes stampings for the Big
24 Three automakers, isn't that right, sir?

25 A. That is correct.

1 Q. And your services were recommended to Budd by Ford,
2 isn't that right, sir?

3 A. Ford -- Budd was aware of the services I performed
4 for Ford and retained me to perform services for
5 them I believe because they were impressed with what
6 I had done at Ford.

7 Q. And the stampings they make are for Ford Motor
8 Company, isn't that right?

9 A. Well, they're not only for Ford, but they also make
10 stampings for GM, and frames and -- for other
11 companies.

12 Q. And your initial contact with Budd was through the
13 auspices of Ford Motor Company, isn't that
14 right, sir?

15 A. I became exposed to the Budd Company through work I
16 did with Ford, yes,

17 Q. And isn't it true that your work for Exxon involved
18 polypropylene plastics that they were trying to sell
19 to Ford Motor Company?

20 A. They were trying to sell to Ford Motor Company and
21 to others.

22 Q. Let's put it this way: Isn't it true that virtually
23 all your business stems in one way or another back
24 to Ford Motor Company?

25 A. No, it isn't true, but a large percentage of it is

1 because of the knowledge base and the information
2 that I've built up that relates to doing business
3 with Ford Motor Company.

4 Q. Isn't it true, sir, that 99 percent of your business
5 comes either directly from Ford or from companies
6 that are completely dependent upon Ford to sell the
7 particular product that they have hired you to be
8 involved in?

9 A. A large portion of the business is with Ford and
10 Ford suppliers, and in fact we've made that a
11 strategic mission, because I believe the work that
12 we do is so strategically important in the quality
13 area that we don't feel it would be ethical to
14 consult with GM or Chrysler on how to do, for
15 example, a vehicle in one year when we just
16 consulted with Ford Motor Company on that.

17 So we actually have a policy of not working
18 for companies in any commodity group if we're
19 already working for another company that has a
20 similar commodity.

21 So if I'm working with a die caster of
22 magnesium, I won't work with another company who
23 calls me just to try and find out what that other
24 company is doing, and this has helped us, I think.

25 Q. Isn't it true, sir, that your primary reason for

1 leaving Ford Motor Company in 1982 was the hope that
2 you would make a lot of money and fund payments on a
3 yacht that you had paid six figures for; isn't that
4 true?

5 A. I bought a yacht that cost \$100,000 that was in
6 charter, and the charter fell through, and in order
7 to keep my commitment with the bank I needed to make
8 more money.

9 Q. And you collect racing cars also, isn't that right?

10 A. I do collect -- not racing cars, but I have a small
11 -- very small car collection.

12 Q. In fact, when you were a boy back in England you
13 used to watch with awe as the Lotus Cortinas raced
14 around the track at Goodwood, isn't that right,
15 Mr. **WITNESS NAME REDACTED**?

16 A. I didn't watch with awe, but I did watch the inside
17 front wheels lift up around the S's at Goodwood.

18 Q. And isn't it true that you have dreamed of owning
19 race cars ever since then?

20 A. I don't own race cars. I'm in sports cars;
21 gentlemen's sports cars.

22 Q. Isn't it true you dreamed about owning sports cars?

23 A. I haven't actually dreamed about it. I mostly dream
24 about women, but

25 Q. Isn't it true that you saw the rich people at --

1 MR. **Name Redacted**: Mr. Goodman, it's -- we've now
2 been going for eight hours, Mr. Goodman, and
3 exploring Mr. **WITNESS NAME REDACTED**'s dream life is very
4 interesting to all of us, but I don't know what it
5 has to do with this lawsuit, sir.

6 MR. GOODMAN: I have just a few questions,
7 two or three more.

8 MR. **Name Redacted**: I submit that you're wasting
9 time and we're going to miss our airplanes and this
10 is all self-indulgent, Mr. Goodman.

11 I would appreciate it if you would -- if
12 you have some questions that haven't been asked and
13 answered a whole bunch of times already, I'd
14 appreciate it if you would ask them.

15 BY MR. GOODMAN:

16 Q. Isn't it true that you watched the race cars -- the
17 rich people, I'm sorry.

18 Isn't it true that you watched the rich
19 people charging around doing whatever they liked at
20 Goodwood when you were a boy?

21 A. I don't know so much that there were many rich
22 people around. There were a bunch of young kids
23 like me going there to watch the Jags and the Healey
24 3,000's whipping through the S's. It was a lot of
25 fun.

1 We'd ride our bicycles over there and watch
2 them and one day wondered if we might own sports
3 cars like that, I suppose like many boys in America.

4 Q. And you saw them charging around and doing whatever
5 they liked, isn't that right?

6 A. I think they were operating under a highly
7 definitive set of rules, trying to win a race.

8 Q. Now when you were -- you were asked earlier about
9 the P6101 testing done in 1993. Do you recall that?

10 A. Yes.

11 Q. And Mr. **Name Redacted** was there, isn't that right?

12 A. I don't specifically remember Paul being there, but
13 he could have been there.

14 Q. And isn't it true that 900 pounds of ballast was
15 added to the car on the floorboards in a loaded
16 condition?

17 A. I think I testified that I can't remember the exact
18 configurations that I saw being tested.

19 I think there were two vehicles that were
20 being evaluated, and I did see the placement of the
21 shot bags -- which I think were steel shot bags --
22 on the load floor and in the foot wells and in the
23 seats, and that was somewhat similar to the way we
24 placed shot in the vehicles when we were testing GVW
25 back when I was at Ford in the 1970's and early

1 `80's.

2 Q. Bronco II vehicles do not come factory-equipped with

3 900 pounds of lead shot on the floorboards, do they?

4 A. No, they don't.

5 Q. In fact, as a yachtsman, could you tell the jury

6 what ballast is used for in a sea-going vessel?

7 A. Well, the ballast is provided to provide a positive

8 riding moment and it is generally placed below the

9 center of gravity and below the center of pressure

10 of the vehicle, so that -- or of the boat, so that

11 when a wind force -- a windshear force lateral to

12 the direction of the sail is trying to heel the

13 boat, the positive riding moment counters that force

14 to maintain the boat in a --

15 Q. Stable position?

16 A. -- in a condition which will return when the force

17 is removed to a vertical condition.

18 However, even with a boat there is a point

19 at which the over-turning moment will go over and

20 the boat will turn over, and there actually -- and

21 those diagrams are produced.

22 In other words, even a monohull or a

23 catamaran has a point of metastability, where it

24 will turn over.

25 Q. Mr. **WITNESS NAME REDACTED**, ballast is put in a boat in order

1 to stabilize the boat, isn't that true, sir?

2 We all know that.

3 A. The ballast that is put in a car to test GVW is to
4 load the tires and the axles, which is this primary
5 factor --

6 MR. **Name Redacted**: I think in --

7 THE WITNESS: -- in stability. It has
8 nothing do with the reason why we put ballast in a
9 boat.

10 BY MR. GOODMAN:

11 Q. Isn't it true that you ballasted-down that Bronco II
12 for purposes of that test in order to reduce its
13 propensity to roll over?

14 A. No way. The ballast is put in the vehicle close to
15 loading up the axles to their maximum GAWR's, so
16 that we can determine based on -- if you look at SAE
17 papers that I wrote that talk about the coefficient
18 of friction at the pavement and the stiffness of the
19 tires, worst-case directional stability is with the
20 maximum load on the tire, and this is to evaluate
21 vehicle stability characteristics as a functional
22 load as the primary factor.

23 The fact is, the center of gravity of the
24 vehicle is a little close to -- very close to the
25 load floor of the vehicle, and placing -- even

1 placing the ballast at the H-point, which is just on
2 the seat a couple of inches above the floor, makes
3 very minimal difference from a stability point of
4 view.

5 The basic thing we're doing with the
6 ballast is, we're changing the axle loads and the
7 loads on the tires.

8 Q. If you add 900 pounds of lead shot to a Bronco II,
9 do you know what the gross vehicle weight -- did you
10 do -- let me step back for a moment.

11 Did you test both a 4x2, or two-wheel-drive
12 Bronco II, and a four-wheel-drive Bronco II in these
13 1993 tests?

14 A. I believe both were tested, yes,

15 Q. And did you know that the maximum gross vehicle
16 weight according to Ford of a 4x2 Bronco II was
17 3,750 pounds?

18 A. I don't know what -- I don't remember what the
19 GVW specifically is.

20 Q. Tell us what gross vehicle weight is, sir.

21 A. The gross vehicle weight is the maximum allowable
22 weight of the combined vehicle, occupants and cargo
23 --

24 Q. And what is curb weight?

25 A. -- with full -- the curb weight is the vehicle

1 -- generally it's rated with 33-percent-and-a-third
2 and higher option rates.

3 I believe it's with fuel and without any
4 occupants and without any payload.

5 Q. Now, if the curb weight of the Bronco II -- or if
6 the completely unloaded weight of the Bronco II 4x2
7 is 3,040 pounds and you add 900 pounds to that, you
8 come up with 3,940 pounds, isn't that right?

9 A. Well, that's mathematically obvious, yeah.

10 Q. All right. And if Ford has stated that the maximum
11 loading of a 4x2 Bronco II is 3,750 pounds, then by
12 adding 900 pounds of weight you're going beyond the
13 maximum loading, aren't you?

14 A. That's correct.

15 Q. All right. Now, sir, in order to do that and make a
16 car handle properly, you would also have to change
17 the springs, wouldn't you?

18 A. Not necessarily.

19 Q. Didn't you -- isn't it a fact that you changed the
20 springs on that 1993 test of the 4x2 Bronco II?

21 A. I don't remember what the exact vehicle
22 configurations were, but it's quite common to test
23 the vehicle with additional weight at maximum rear
24 GAWR, and if in order to get the vehicle up to
25 maximum rear GAWR you have to go over GVW, there are

1 times when we test at overloaded conditions, when we
2 evaluate the vehicles in overloaded conditions.

3 So the general guidelines for GVW and GAWR
4 are that the maximum allowable weight of the vehicle
5 is the GVW, and the maximum load under any operating
6 condition on any axle is based on how you
7 distributed the load in the vehicle.

8 Q. Let me ask you this: If I were to take that 900
9 pounds of weight and put it on the roof of the
10 vehicle, isn't it true that that would make the
11 vehicle roll over more easily?

12 A. Well, it will probably -- it will probably change
13 the stability characteristics of the vehicle, if it
14 was right up on the roof, but the 900 pounds of
15 vehicle, we have -- I believe we had -- if we had
16 allowable roof racks it would have probably been
17 just like an Explorer and limited to 50 or even 100
18 pounds of maximum load on the roof, and the rest of
19 the load would be expected to be distributed fairly
20 closely to either the load floor or the H-point of
21 the seats, which is just above the cushion of the
22 seats, about where your hip point is, which is
23 roughly the center of gravity of a human being. So
24 --

25 Q. Would you --

1 A. -- there is a whole lot of difference between
2 putting a shot bag four inches below the seat or
3 five inches below the seat on the floor and putting
4 it 30 inches above the H-point on the roof, which is
5 definitely something that we did not ever advocate,
6 was putting 900 pounds on the roof.

7 Q. Because 900 pounds on the roof would make the car
8 roll over, wouldn't it?

9 A. I don't know what 900 pounds on the roof is, but --

10 Q. Just as 900 pounds on the floor will stabilize it,
11 isn't that true?

12 A. You're making trite, simplistic assumptions about
13 -- on a relative basis we can calculate exactly what
14 the effect is and what the difference is in the
15 center-of-gravity height between those.

16 First of all, there is no -- there is very
17 minimal difference, probably less than a half-inch
18 -- maybe three-quarters of an inch difference in the
19 center-of-gravity height by placing that ballast on
20 the floor. I doubt if it is even that much. But it
21 is a minimal -- it is a minimal amount.

22 Q. Have you had the opportunity to review the testimony
23 given by a Ford expert by the name of Michael
24 Holcomb?

25 A. I don't even know Michael Holcomb, and I haven't

1 seen his testimony, to my knowledge.

2 Q. Have you reviewed the testimony given by a Ford
3 engineer by the name of Mr. McClure?

4 A. I know Mr. McClure, but I haven't read any of his
5 testimony.

6 Q. He was at that P6101 testing also, wasn't he?

7 A. He was there, I believe, but -- I haven't looked at
8 other people's testimony. I have just given my
9 testimony.

10 Q. In fact, when you add 900 pounds of lead shot you
11 create a vehicle that was not the type of vehicle
12 that was delivered to the consumer, isn't that
13 right?

14 A. It's not exactly the same, but that wasn't what the
15 purpose of the testing was.

16 Q. In fact it was a dishonest test, wasn't it?

17 A. It's not a dishonest test. It's a way to get the
18 vehicle to GVW. There is no deliberate intent to --
19 if the vehicle handles well with 900 pounds placed
20 as it was placed in that vehicle, then it's going to
21 be a pretty good handling vehicle if the load is
22 put, you know, three inches higher on the seat.

23 It's just not that big of a difference,
24 because the first-order effect is going to be the
25 distribution fore and aft of the weight, which is

1 fairly close, and the second-order effect is going
2 to be that minor difference in the height.

3 I just don't believe, as a vehicle
4 dynamicist, that the effect would be more than, you
5 know, two or three percent.

6 Q. But you made sure that that effect existed in those
7 tests, didn't you?

8 A. What do you mean by "made sure"?

9 Q. You put it on the floorboards.

10 A. It was just the easiest place to put it.

11 MR. GOODMAN: No further questions.

12 MR. **Name Redacted**: Okay. I want to switch places
13 with one of you guys.

14 Let's go off the record a minute.

15 VIDEO TECHNICIAN: Going off the record.

16

17 (A recess was taken)

18

19 VIDEO TECHNICIAN: We're back on the
20 record.

21 EXAMINATION

22 BY MR. **Name Redacted**:

23 Q. Mr. **WITNESS NAME REDACTED**, for the record my name is Paul

24 **Name Redacted**. I represent Ford. We've met before.

25 A. Yes.

1 Q. Now, could you get Exhibit 12 in front of you, sir?

2 A. (Indicating)

3 Q. Did you prepare that, Mr. **WITNESS NAME REDACTED**?

4 A. No, I did not personally prepare this. My

5 accountant that works in my company and handles my

6 financial matters, Roseanne Spicuzzi, prepared this.

7 Q. Were you personally involved in any respect in the

8 preparation of Exhibit 12?

9 A. Only in terms of defining what the column headings

10 would be.

11 Q. So you gave some instructions and asked that this be

12 prepared from your records, is that correct?

13 A. Well, this is -- this is an extract from a document

14 that I have provided to you that contains additional

15 information --

16 Q. Right.

17 A. -- that was redacted, and this is a summary from

18 that.

19 Q. Right. But I'm understanding -- we're just talking

20 about the data that is on Exhibit 12.

21 A. That's correct.

22 Q. Okay. Now when you have the column that says

23 "FMC-Legal," what is that, sir?

24 A. That is the total fees that I have charged over the

25 last one, two, three -- four years, four fiscal

1 years that my company has operated that I have been
2 -- I have received in compensation from Ford Motor
3 Company or plaintiffs directly or indirectly
4 associated with legal counsel that I have given
5 regarding Bronco II testimony.

6 Q. Okay. And that's depositions such as Mr. Goodman's
7 here, where you sit here and debate about the effect
8 of 900 pounds of shot, whether it's lead shot or
9 steel shot or whether it should be on the seat or on
10 the floor, in the load area in the back of the
11 vehicle, is that right?

12 A. That's correct.

13 Q. Now, do you know how many depositions you have
14 given, Mr. **WITNESS NAME REDACTED**?

15 A. Well, I would say 10 to 20, or something like that.

16 I don't -- I haven't kept track.

17 Q. Okay. Do you get asked the same questions over and
18 over and over in those depositions?

19 A. All the time.

20 Q. Is that fun for you?

21 A. No, it is not.

22 Q. Have your answers changed in any material respect
23 since 1990 to today in terms of the substance of the
24 opinions and the recollection of the facts that you
25 recall concerning the design and development and

1 testing of the Bronco II?

2 A. No, they have not.

3 Q. Do they sometimes change at the margin?

4 A. I --

5 Q. Do your answers sometimes change in terms of minor
6 details?

7 A. Well, I keep trying to get -- I keep being thrown
8 questions out of the blue, and I keep trying to
9 remember out of all these depositions, you know,
10 what the background was for the question, and -- and
11 I think I might have been caught up a couple of
12 times where my understanding of the question asked
13 the second time was slightly different from the
14 first time.

15 But for the most part my answers and my
16 feelings on the subject have not materially changed
17 since the first deposition.

18 Q. Okay. Mr. **WITNESS NAME REDACTED**, could you get Exhibit 17 in
19 front of you?

20 A. I have it. (Indicating)

21 Q. Okay. Now, there has been at least an implication
22 -- and I think a pretty clear attempt to create an
23 inference that -- with Exhibit 17 that you were
24 bargaining with Ford for favorable testimony for
25 them, is that correct?

1 A. No, it is not correct.

2 Q. Okay. What did you mean when you said in the third
3 paragraph of Exhibit 17 that you would -- "I would
4 suggest you retain our services to assist you in
5 preparing myself, in Ford's favor, as we discussed
6 per our phone conversation of June 18, 1990"?

7 A. What I meant by that was that it would take time for
8 me to look at documents that I will have to -- these
9 documents are very old; they go back 15, 20 years.
10 And being able to take the time to reread through
11 these documents and recall what I had done at that
12 time, and to be able to also look at other documents
13 as an expert that I might be shown in testimony, and
14 to advise counsel as to my knowledge and my feelings
15 would take time, and this would be time taken away
16 from my basic business.

17 And my comment "in Ford's favor" simply means
18 that in this particular situation I'm a witness for
19 Ford and working basically on behalf of Ford. I'm
20 certainly not working directly for the plaintiff,
21 and I certainly believe fundamentally, as I have
22 stated numerous times, that the Bronco II is a safe
23 and stable vehicle, and that -- and that I believe
24 that my opinion -- which has nothing to do with
25 payment, and my earlier depositions were given

1 without any knowledge of whether I would be paid or
2 not, stating the facts, I have -- the truth and
3 nothing but the truth, and -- however, they happen
4 to be, I believe, consistent with sound industry
5 practices and development processes that justify the
6 acceptability of producing the Bronco II under the
7 pressures that existed at the time that we developed
8 the Bronco II, which is substantially the nature of
9 the testimony I give.

10 So the "in Ford's favor" does not mean I'm
11 going to change anything about what I'm saying.

12 Anybody who knows me knows that it's hard
13 to get me to say something that I don't believe in
14 anyway.

15 But it's simply saying that I'm prepared to
16 spend my time doing this, but by the way, I want to
17 be reimbursed at what I think I'm worth on the open
18 marketplace, and if you don't want me to do this I'd
19 just as soon go sell my services to somebody else on
20 the open marketplace for something else other than
21 litigation.

22 Q. Mr. **WITNESS NAME REDACTED**, I believe that you testified that
23 you spent approximately, oh, 16 hours reviewing
24 documents and otherwise preparing to give your first
25 deposition in this Bronco II -- with regard to

1 Bronco II, is that right?

2 A. I think plaintiffs' counsel advised me that I had

3 submitted an invoice for 16 hours of work in

4 preparing and reviewing the documents, okay?

5 Q. Okay. I'd like to direct your attention to

6 Exhibit 18.

7 A. Okay.

8 Q. Is that a letter that you authored?

9 A. Yes, it is.

10 Q. Does that letter explain your understanding of what

11 your role was in the claims being asserted by

12 plaintiffs' lawyers that the Bronco II was not a

13 safe and stable vehicle?

14 MR. GOODMAN: Objection to the form of the

15 question.

16 THE WITNESS: I believe that that letter

17 explains my rights to be paid for the work that I

18 did, and providing factual and truthful testimony in

19 several depositions to Ford Motor Company -- to

20 various plaintiffs in depositions defined in those

21 addenda to that report, which I think were

22 Klemetsrud, Koester and Rosenbusch.

23 BY MR. **Name Redacted**:

24 Q. Okay. Would you please read into the record -- let

25 me do this.

1 MR. **Name Redacted**: Do we have another copy of
2 this, Hike?

3 MR. **Name Redacted**: I think so. You should in
4 your -- it should be the last document in your file.

5 THE WITNESS: (Indicating)

6 MR. **Name Redacted**: Let's put that up.

7 MR. **Name Redacted**: You're going to have him
8 read the whole letter to the jury, aren't you?

9 MR. **Name Redacted**: I'm going to have him read the
10 second paragraph of the letter. The whole letter
11 has already been read.

12 BY MR. **Name Redacted**:

13 Q. Would you please -- I'd like to have the first page
14 of this letter shown to the jury now, and Mr.

15 **WITNESS NAME REDACTED**, I'd like you to read the second
16 paragraph if you would, sir.

17 A. This letter is addressed to Fred Gade at Ford Motor
18 Company, Office of General Counsel, and I said in
19 the second paragraph:

20 "Your attorneys, Art Anderson in
21 particular, have done a very good job in minimizing
22 my time wasted in assisting me in preparing for
23 these depositions so that my testimony is accurate
24 and appropriately reflects decisions made during the
25 process of designing and developing the Bronco II up

1 until the point I left Ford Motor Company in 1982."

2 Q. Okay. Now, Mr. **WITNESS NAME REDACTED**, I believe that if you

3 would -- let's put this up.

4 The invoice that you enclosed with that

5 letter to Mr. Gade was for \$6,000, was it not?

6 A. That is correct.

7 Q. And that was for \$2,000 for a half-day for the

8 Rosenbusch deposition, is that right?

9 A. That's correct.

10 Q. And it was \$2,000 for a half-day for the Klemetsrud

11 deposition, is that correct?

12 A. That's correct.

13 Q. And then there was an additional \$2,000 for a

14 half-day for the Coester, C-o-e-s-t-e-r, deposition,

15 is that correct?

16 A. That was a "K," wasn't it? Koester?

17 Q. Yes. Did I say "C"?

18 A. You said "C."

19 Q. Okay, excuse me. It is a "K."

20 And that was the first invoice that you

21 sent to Ford Motor Company, isn't it?

22 A. I believe it is, yes.

23 Q. And that was the -- going back to Exhibit 12, that's

24 the \$6,000 that's shown as being received during

25 1992, is that right?

1 Check Exhibit 12, Mr. **WITNESS NAME REDACTED**.

2 A. Yeah, I think that took me three months to get -- or

3 more to get paid. I don't know when I got that

4 check, but it took a long time to get paid.

5 Q. Okay. Well, just check and confirm, if you will,

6 on Exhibit 12 what was the --

7 A. That was \$6,000. That was the total funds I

8 received in 1992, basically two years after my fax

9 to Art.

10 Q. Okay.

11 A. Two years after the fax that I sent to Art Anderson

12 telling him what I wanted to be paid for this

13 testimony -- or for the time taken to give this

14 testimony.

15 Q. Mr. **WITNESS NAME REDACTED**, am I missing something? Did you

16 not charge Ford for two days of reviewing documents

17 to prepare for these depositions?

18 A. I don't know. I don't think so.

19 Q. Okay. Did Mr. Art Anderson ever tell you what to

20 say about the Bronco II, or suggest to you that you

21 tell a certain story or put a certain spin on your

22 recollection?

23 A. All that Art did was show me documents that he

24 expected, to see if I knew about those documents.

25 I told him, I know about that one, I'm a

1 little hazy on that one, I read through some of
2 those documents, had some recollection on some, hazy
3 recollection on others, I did not recollect other
4 documents.

5 The bulk of the documents that I did
6 recollect I could recount, and was able to recall
7 what I had done and -- in the context of those
8 documents, and it was really a one-way conversation,
9 and I told Art what my observation was with the
10 documents, and then the next day -- or whenever we
11 gave the depositions, and that's basically how it
12 operated.

13 Q. So my question is, did Art Anderson ever try to tell
14 you what to say about the Bronco II?

15 A. No. All Art Anderson -- and any of the other
16 attorneys that I've ever talked to from Ford or
17 representing Ford have simply asked me what my
18 opinion is.

19 Q. Okay. Now --

20 A. Or what the facts are. That's the only
21 recollection.

22 Q. Did Mr. Fred Gade ever tell you what to say about
23 the Bronco II?

24 A. Never.

25 Q. Did Mr. Fred Gade say, Mr. **WITNESS NAME REDACTED**, if you

1 testify in our favor and put a favorable spin on it
2 to Ford we're going to see that other people in the
3 company send you a lot of consulting business?

4 A. Never.

5 Q. Okay. Did Mr. Art Anderson ever say to you, Mr.

6 **WITNESS NAME REDACTED**, if you will agree to help us cover up
7 the truth about the Bronco II and spin the Bronco II
8 story we'll see that other parts of Ford Motor
9 Company send you a lot of consulting business and
10 we'll make you a rich man?

11 A. What is there to cover up?

12 Q. Okay.

13 A. The answer is no, never.

14 Q. Okay. Did -- now I've represented you in
15 depositions before, have I not?

16 A. Yes, you have.

17 Q. And I've called you as a witness at trial, is that
18 right?

19 A. Yes, you have.

20 Q. Have I ever tried to put words in your mouth,

21 Mr. **WITNESS NAME REDACTED**?

22 A. No, you have not.

23 Q. Have I ever told you that if you play ball and help
24 spin this story right I'll promise you that you will
25 get a lot of future business and a lot of money from

1 Ford Motor Company?

2 A. I don't believe you have the capacity to influence

3 the purchase orders that I've received in any way.

4 Q. Okay. Do you believe that Mr. Gade has the capacity

5 to influence those purchase orders?

6 A. No, I do not.

7 Q. Do you believe that Mr. Anderson has the capacity to

8 influence those purchase orders?

9 A. No, I do not.

10 Q. Could you please explain why not?

11 A. You don't work directly for Ford. You have no line

12 of command to these people.

13 The people that have issued these purchase

14 orders to me have to take this money out of their

15 budget, they have to justify it to their management,

16 their management has to sign off that they're

17 getting value for the services provided, and it is

18 very difficult to sell these kinds of contracts

19 without providing value to the customer.

20 Q. Now does Mr. Gade, in your opinion, have the ability

21 to go and cause hundreds of thousands of dollars of

22 consulting business to be challenged -- or channeled

23 to your firm in consideration for your so-called

24 agreement to testify, quote, in Ford's favor, close

25 quote?

1 A. There's no such communication or any -- anything
2 that I can recall or that has happened that would
3 indicate anything of that kind has occurred with
4 respect to these contracts.

5 Q. Okay. Let's talk about the Exhibit 12 a little bit.
6 Now, you didn't personally review the
7 entries that were -- or the documents and the
8 numbers that went in to make up Exhibit 12, did you?

9 A. No, I did not.

10 Q. Okay. And you have done work directly for Ford, is
11 that correct?

12 A. Yes, I have.

13 Q. And you have also done work for companies that do
14 business with or on behalf of Ford?

15 A. Yes, I have.

16 Q. And one of those companies is Carron & Company, is
17 that right?

18 A. That's correct.

19 Q. And that was one of the jobs that you did before you
20 sent the June 20, 1990 letter?

21 A. That was in the '86-'87 timeframe.

22 Q. Okay. Please explain to the jury what is the
23 business of Carron & Company, and what was it that
24 Carron & Company was doing for Ford Motor Company
25 that you -- in which you participated.

1 A. Carron & Company received the chassis design
2 contract to -- and the vehicle prototype build,
3 testing and development contract for the current
4 Explorer, the Explorer that went into production in
5 1990.

6 Q. Okay.

7 A. That was very successful. And that contract was
8 awarded -- the work began in 1986 on that program.

9 Q. Okay.

10 A. So Carron & Company had to take the information from
11 the body engineering -- the clay, and had to develop
12 a chassis that would meet all the requirements.

13 That's an all-new chassis, new suspension, new --

14 Q. When you say "chassis," I would pronounce that
15 "chassis."

16 A. Chassis, right. C-h-a-s-s-i-s.

17 Q. Okay. And that's the wheels, the --

18 A. The wheels, the suspension --

19 Q. -- suspension --

20 A. -- shock absorbers, brakes, spare-tire mounting.

21 And they would then also have to coordinate
22 with the body engineers, and they would also make
23 all the prototypes, including the body pieces, and
24 build those vehicles and run through a thing we
25 called DVP&R testing and development and tweaking of

1 the vehicle to meet all the functional image -- we
2 call them functional image criteria for that
3 vehicle; so
4 for noise and wind noise and water leaks and
5 vibration.

6 Q. Mr. **WITNESS NAME REDACTED**, during this point in time was the
7 body engineering function at Ford Motor Company
8 organizationally separate from the light truck
9 organization?

10 A. They had Light Truck that had the vehicle
11 responsibility, and the whole body organization was
12 a completely separate entity under a completely
13 separate management group.

14 Q. And the people at Ford Motor Company that made cars
15 as opposed to pickup trucks and utility vehicles,
16 that was another separate organization, is that
17 right?

18 A. That's right. And the body engineers that designed
19 the bodies for the trucks also designed the bodies
20 for the cars.

21 Q. Okay, but -- so we really had three separate
22 organizational divisions or entities, is that right?

23 A. Ford was organized at that time around Truck
24 Operations, who basically coordinated the complete
25 vehicles and sometimes used outside subcontractors

1 like Carron & Company to do work when they didn't
2 have enough engineers to do the work that was
3 required. They had Body Engineering, that designed
4 the body structure, the interior trim, the seats,
5 the seat belts, the instrument panel and fascia.
6 Okay?

7 Q. Okay.

8 A. Then you had a chassis group that was principally
9 car, but also made some commodities that may or may
10 not have been used on the trucks, like steering
11 columns, okay, for example, and certain corporate
12 brake boosters and other electrical components and
13 things like that.

14 And then you had the engine group and
15 transmission group that made the engines and
16 transmissions that -- some would be unique to truck,
17 and some would be engines that -- like the 302 V8
18 that would be common to cars and to trucks.

19 So you're organized around functional
20 responsibility areas.

21 Q. And does each of these functional responsibility
22 areas have separate management then?

23 A. I think they basically had different -- they broke
24 down at the vice president level, so there were
25 -- different vice presidents at that company ran

1 these different entities, reporting to the operating
2 committee, which would have been -- at this time
3 would have been Polling and --

4 Q. Now when you were at Ford you were working in the
5 light truck organization, is that right?

6 A. That's correct.

7 Q. Now, prior to June 20th of 1990 you did work for
8 Ford Motor Company, is that right?

9 A. That's correct.

10 Q. What were the functional organizations within Ford
11 that you worked for during that period?

12 A. The only group that I worked for prior to that was
13 the Special Vehicles Operations Group, which was
14 basically a car-based group that was developing the
15 GN34 sports car.

16 Q. Right.

17 A. And I worked for Carron & Company on the Explorer.

18 Q. Okay. Now, in 1988 you show on Exhibit 12 that you
19 had almost \$300,000 in income or revenue that you
20 earned from Ford Motor Company that year.

21 A. 235,000.

22 Q. 235?

23 A. Um-hum.

24 Q. Okay. My eyes are failing me.

25 What were you doing in 1988 to earn

1 \$235,000 from Ford Motor Company, and why did you
2 get value for that money?

3 A. Well, because of the work that I had done for Carron
4 & Company and the promising nature of the work that
5 we had done, which was I think quite liked by Ford,
6 and there was quite an awareness of what we were
7 offering. We started working on things like the
8 steering column project for Jim Campbell. We were
9 going to do a new passive-restraint air bag/steering
10 column that had to be produced in the next 30 months
11 to make deadlines for NAG management and HIC value
12 and crash protection, and so they --

13 Q. What is HIC value?

14 A. The Head Injury Criteria. So it was going to have
15 an air bag actually in the steering column that
16 would -- was the air bag column; that's a corporate
17 column.

18 And Neal Russler recommended Jim Campbell
19 hire us to come in and help them go through a
20 quality-function-deployment exercise to do the
21 quality planning necessary to have a successful
22 outcome with this very complex new
23 completely-across-car-and-truck column that was
24 going to go throughout Ford Motor Company.

25 So it was very -- that was a fairly sizable

1 chunk. It was about a fifth of that work. I don't
2 know. When we add it all up it may be \$40- or
3 \$50,000.

4 Then we did some work on the next
5 generation Ranger, where we did an analysis that
6 would determine that we needed all new greenhouse in
7 structure in order to meet the quality criteria.

8 So we helped them to avoid the pitfall of
9 doing a new vehicle with just a facelift, and we
10 delayed that program one year so they could do an
11 all-new door greenhouse based on the analysis we
12 performed. That might have been another 40- or
13 50,000.

14 There were various contracts that we did
15 that totaled up the -- I don't remember what they
16 all were, but we got \$250,000 worth of business
17 then.

18 Q. Now, in -- at least in 1988 you were doing more work
19 for companies other than Ford, is that right?

20 A. That's right. I was doing a lot of work with
21 Rockford Products and Exxon. And I don't know when
22 Exxon exactly came in, but my supplier base was
23 largely small, struggling companies or start-up
24 companies that made parts for the automotive
25 industry. Some of them made parts for GM, Chrysler,

1 some were Ford.

2 In this timeframe there was quite a
3 variety, and I probably had about a dozen different
4 clients that I was working on, small contracts, you
5 know, \$20,000, \$30,000, a lot of training and that
6 type of thing.

7 We did develop some new course-ware. And
8 then also in '88 the other big piece of the pie was
9 the training for all of purchasing and the training
10 for all of the body and chassis engineering.

11 That was the one big dep exhibit, I think
12 13, that we marked with Ron Reger and Hugh Poore.

13 Q. Okay. Could you explain the training that you
14 performed for Ford purchasing?

15 A. Well, because I had gotten a lot of experience
16 working hands-on in these early years at my company
17 with suppliers in a quality area, I had become
18 somewhat of an expert, acknowledged in using these
19 two indices which are now -- have very widespread
20 use in the industry, CP and CPK. I was kind of the
21 --

22 Q. What are these two indices, Mr. **WITNESS NAME REDACTED**?

23 A. The CP index is an index that compares the process
24 capability of manufacturing processes to the
25 specification, which then tells you how good you

1 could be.

2 And the CPK looks at the location of the
3 process and compares the tail of the distribution
4 that is biased towards the closest specification to
5 where that closest spec is versus your target, and
6 calculates two indices.

7 When those two indices are the same the
8 process is perfectly centered and we have the best
9 ideal situation.

10 So we were able to promote the simple
11 nondimensional parametric analysis, where we could
12 look at hundreds of processes simultaneously and be
13 able to determine how good or bad they were without
14 getting into a 45-minute analysis of every single
15 thing.

16 So it was a strategic edge I felt Ford
17 needed, and I was able to sell what I was doing to
18 Dave Travis.

19 I happened to work my way in to -- to show
20 them this. They were very excited about it.

21 And then that led to probably about a half
22 of that -- the other half of that 235,000 really was
23 the body and the purchasing training.

24 And then that led into I think the engine
25 contract and to other contracts, and then -- and

1 then the supply base, which I'd seen I needed that
2 stuff, started to be interested in that stuff, and
3 then I swung back to working more with the supply
4 base now on these quality -- the CP and CPK training
5 and so on.

6 Q. All right.

7 A. Which was a core part of our business for about six
8 or seven years.

9 We still teach that course. As a matter of
10 fact, on Friday I will teach that course again.

11 It's still a very good course.

12 We've upgraded it now so that we can teach
13 the seminar material in about 25 percent of the
14 time. So -- sorry.

15 Q. Now, Mr. **WITNESS NAME REDACTED**, we've -- you've talked about
16 the training that you provided to Ford purchasing to
17 improve their performance and the quality of the
18 goods and services that are provided to Ford, right?

19 A. Right.

20 Q. And this was a job that you had before you became
21 involved in Bronco II, is that right?

22 A. That's correct.

23 Q. Okay. Now you also did some training for the Body
24 Engineering Division of Ford Motor Company, is that
25 right?

1 A. There was some training going on for them, too, yes.

2 Q. This was in 1988 as well?

3 A. Body and chassis, '88, and ran into '89, I believe.

4 Q. And this was before you became involved giving

5 depositions in Bronco II litigation at the request

6 of plaintiffs' lawyers, is that right?

7 A. That is correct. And in this phase we were exposed

8 to something like 4,000 of Ford's engineers and

9 managers, the very top managers in engineering and

10 the very top people in purchasing. We were able to

11 get exposure of the kinds of services we had to

12 offer.

13 These courses were all regarded as

14 expensive, but very, very valuable to the company.

15 Q. Okay. Explain briefly, if you would -- and bear in

16 mind that the ladies and gentlemen of the jury are

17 not intimately familiar with the process of

18 designing or building automobiles -- what it was

19 that you did for the body engineers at Ford Motor

20 Company in 1988 and 1989.

21 A. Well, I tried to get them to think a different way

22 about quality and to understand their role in

23 controlling the outcome of quality by paying

24 attention in the engineering phase of the program

25 instead of leaving quality to be solved by the

1 manufacturing organization.

2 So I tried to make a significant difference
3 in changing a paradigm that left manufacturing to
4 solve quality problems and make the engineers
5 accountable by using these two indicators, the CP
6 and CPK, and also various other processes.

7 Now all this stuff was -- I felt was
8 proprietary to me and was protected by the contracts
9 that I had worked on, and so this was very -- this
10 was very pivotal in my strategy to influence Ford's
11 future quality. And we believe some of the work
12 that we did back then has helped Ford maintain a
13 quality leadership position in the industry by using
14 some of these methods and some of this training that
15 we've given.

16 Q. Now, Mr. **WITNESS NAME REDACTED**, your amount of Ford business
17 in 1989 and 1990 declined somewhat, but your overall
18 business of your firm was up significantly each
19 year, is that correct?

20 A. That's correct. And that's because the -- we got a
21 lot of inquiries from interested suppliers, and we
22 got busy and we got filled up with non-Ford
23 business.

24 Q. Okay.

25 A. I'm talking about in 1989 and 1990 --

1 Q. Okay.

2 A. -- where Ford business dropped down to 6.2 percent
3 of our total business.

4 Q. All right. Then in 1991 your Ford business picked
5 up again, is that right?

6 A. Yes. What happened in 1991 is that Ford recognized
7 that they were going to be noncompetitive with the
8 new Ranger because they didn't have much pizzazz,
9 and a styling property had been developed by Andy
10 Jacobson that was a yellow property that was the
11 Splash.

12 And Ford realized that if they wanted to
13 maintain leadership in the compact segment they
14 would need to -- they would need to produce this
15 Splash vehicle in about 13 months from concept to
16 customer.

17 And they went back -- and they had done a
18 study of how to accomplish this, and they actually
19 felt they couldn't accomplish it.

20 And then they went back and looked at the
21 Explorer and the runaway success of the Explorer,
22 and they traced back some of the success of the
23 Explorer to be in the early work that we had done in
24 setting the quality plan forth on that, plus the
25 work that we had done with supply base and plus the

1 work that we'd done on the training of purchasing
2 and engineering.

3 And this being a body program they asked us
4 if we would consider managing the quality part of
5 this program.

6 Now, a successful outcome of this program
7 meant leadership in the Ranger segment, which is
8 advertisable, it meant having a product
9 simultaneously launched in the '92 timeframe with
10 the Ranger, '91-'92 timeframe with the Ranger, and
11 representing millions of dollars.

12 So we at this point were able to leverage
13 out -- not only our rate up, based on the work that
14 we had done, but we were also able to complete this
15 work and achieve a successful conclusion of this
16 work.

17 Now actually, this was a two-step process.
18 The same thing that happened with the Splash also
19 happened with the F150 flare-side, which actually
20 came before it.

21 I'm sitting here looking at the Ranger
22 flare-side.

23 But preceding that contract we had a
24 contract to do a flare-side for the F150 to compete
25 with the Chevy CK.

1 So at the nine-month point it was so clear
2 that the F150 flare-side was a runaway success, and
3 I think we were attributed with being major players
4 as a part of that success, that kicked us off on the
5 flare-side.

6 So we had about three years where we had
7 about \$300-, \$400,000 of business a year that came
8 almost exclusively from helping them do things in
9 very record time to bring new vehicles to market.

10 There were really more body programs than
11 there were chassis, which was my prior expertise,
12 and that's what those programs were.

13 Q. Okay. Now, Mr. **WITNESS NAME REDACTED**, this work regarding the
14 F-Series pickup truck and the Ranger compact pickup
15 truck was work that was initiated after you became
16 involved in giving depositions in Bronco II cases,
17 is that right?

18 A. That's correct.

19 Q. Okay. Did the work on either the F-Series pickup
20 truck or the Ranger pickup truck have anything
21 whatsoever to do with the fact that you had been
22 asked to give depositions in Bronco II litigation?

23 A. I don't believe there was any connection at all with
24 what I was doing on the Bronco II and this work.

25 I mean, this work had to come out of

1 somebody's budget, and we had to deliver on -- a
2 tangible end result, which we did, and it's quite
3 highly regarded work, I believe, in Ford.

4 And I'm not even sure that Phil Colorino --
5 who actually put this through for example on the
6 F150 flare-side and the Splash -- had knowledge of
7 any of the details associated with anything we were
8 doing with Ford in the litigation area.

9 I mean, he may have been peripherally aware
10 that we were an expert witness, but I don't think it
11 had any bearing -- or there was any influence
12 brought to bear on awarding us this contract, or any
13 of these other contracts, for that matter -- any of
14 these contracts in here. (Indicating)

15 Q. Okay. Now, Mr. **WITNESS NAME REDACTED**, you have obviously been
16 paid a significant amount of money by Ford Motor
17 Company over the last six or eight years, is that
18 right?

19 A. That is correct.

20 Q. Okay. Does all of that money go into your pocket
21 personally?

22 A. No, it does not.

23 Q. Could you please explain that to the jury?

24 A. Well, we have maintained a very high overhead level
25 in my company. As a matter of fact, we've had a

1 very difficult time for the last couple of years
2 because we're a little over-capitalized.

3 But we have approximately a
4 half-million-dollar training facility that is
5 recognized as maintaining a leadership position in
6 that technology for at least the last three years.
7 And we have a very advanced engineering center that
8 has state-of-the-art engineering capabilities for
9 problem-solving.

10 The courses we offer have been electronic
11 for well over 10 years now. We've been absolute
12 leaders in the use of electronics at presentations.
13 We have piloted that for Ford.

14 So all of those things that we have done
15 have been very capital-intensive. We've generally
16 been leaders. We've generally invested first.

17 And basically about a third of our revenues
18 goes towards support-staff payroll, and about a
19 third goes to capital, and about a third of the
20 total revenues is what is -- goes to myself and my
21 wife.

22 And then a good portion of that we've
23 reinvested back in capital assets that we have
24 leased back to the company.

25 So this has provided a salary for us, but

1 essentially -- essentially a lot of the money that
2 we've earned has been reinvested in development
3 technologies, that we're about to change our whole
4 approach on.

5 We're about to -- as I talked to you, Paul
6 -- we're about to change our whole business
7 strategy.

8 Q. Mr. **WITNESS NAME REDACTED**, when you do work for Ford, have
9 there ever been instances where your clients within
10 the Ford organization have challenged you on
11 invoices that you have sent to them?

12 A. Yes, they have.

13 Q. Okay. Have there been instances where you have sent
14 an invoice to Ford and Ford has said, I'm only going
15 to pay part of that, or, I'm not going to pay it
16 at all?

17 A. Yeah. We just did a -- we just did a contract which
18 was a gross misunderstanding, an abuse of our
19 capabilities in our mind.

20 We developed a presentation on niche
21 vehicles for Jack Nassar (ph), for one of the
22 managers at Ford, Dave Valicki (ph), and he wanted
23 \$30,000 worth of work done for \$10,000.

24 We agreed to do three iterations of a
25 presentation for about \$10,000, and we ended up

1 doing the presentation 14 times based on changes
2 made by Ford management, and we ended up eating
3 \$26,000 on that project.

4 And this guy has told me verbally -- and
5 it's in our chronolog -- that he's going to see to
6 it I get no further business from Ford because I
7 wouldn't give him the work property when he wanted
8 it, because there is a major contract dispute here.

9 So, I mean, I do not get every contract. I
10 do not satisfy every single customer. I satisfy 90
11 percent of them, though.

12 And every one is an individual battle to,
13 first of all, get the contract, and then provide
14 proof of delivery, just like any other business.

15 Q. Okay. Now, Mr. **WITNESS NAME REDACTED**, this last situation
16 where you referred to making multiple versions of a
17 presentation, did this occur after you had started
18 giving depositions to plaintiffs' lawyers like
19 Mr. **Name Redacted** --

20 A. This is three months ago.

21 Q. -- and Mr. Goodman in Bronco II litigation?

22 A. This is three months ago. We've written it off.

23 We've written it off.

24 Q. Okay. Mr. **WITNESS NAME REDACTED**, during the course of your
25 business relationship with Ford Motor Company, have

1 you ever been involved in transactions or business
2 with Ford Motor Company that have had a serious
3 adverse financial effect on your company and on you
4 personally?

5 A. Yes, I have.

6 Q. Okay. Would you please briefly describe that to the
7 ladies and gentlemen of the jury? And explain when
8 it -- when in time it happened.

9 A. In about the 1991-'92 timeframe we were working with
10 a company called DeCouper, that was a stamping
11 supplier that owned patents for an adjustable pedal
12 device.

13 And they weren't moving anywhere with it.
14 They weren't able to sell the pedals to Ford or GM
15 or Chrysler, although they had made prototypes for
16 the Viper, and there was some interest in these
17 pedals.

18 So I started looking into this, and it
19 seemed to me that the adjustable pedals offered a
20 significant functional advantage, particularly for
21 short or disproportionate individuals in the design
22 domains we typically don't design vehicles for --
23 which is the sub-five-percent female, 5th percentile
24 female.

25 We generally design vehicles for the 5th to

1 the 95th percentile, and it's one of those cases
2 where you can't please all of the people all of the
3 time, but you try to please 90 percent of them.

4 Q. Okay. Now --

5 A. And --

6 Q. -- did you make -- in connection with pursuing this
7 work, did you make a major investment?

8 A. Well, I talked to people at Ford to try and find
9 people interested at Ford in this technology, and
10 had agreements to proceed to study adjustable pedals
11 in a pre-program for the current FN10, the current
12 Continental. This is about three years before it
13 went into production.

14 And we were getting along pretty well. We
15 got it to the right audience. It was being reviewed
16 at the technical matters meeting as what they would
17 call an added starter.

18 In other words, they're in the middle of
19 the year, we're in a kind of December timeframe, and
20 we're trying to get funds for the following year to
21 fund the pre-program to be able to add these to the
22 new Continental.

23 In order to put these on the new
24 Continental we had to have two things happen; one,
25 we have to have Ford recognize the value of the

1 technology; the second thing we have to have is a
2 program manager on the main program sponsor
3 placement of that technology on his car line.

4 Now a Continental is a very sophisticated
5 vehicle, and is almost unaffordable; it's in the
6 \$45,000 category, and it's priced right on the cusp
7 of being affordable. So that target market won't
8 buy that car.

9 Adding an additional option that costs \$60
10 to \$100 or even \$150 became increasingly
11 unattractive on the Continental.

12 But the interest in the technology was
13 pretty great, but we didn't really have a sponsor.

14 However, we were encouraged by a group
15 called Cross-Car-Line Planning to keep working on
16 this with a supplier.

17 So I brought the supplier of the
18 technology, I brought Ford Motor Company to be aware
19 of the technology, and because we had a high level
20 of engineering expertise, I agreed to develop to
21 meet Ford standards the engineering portion of that
22 program for a fixed contract based on 50 percent of
23 the total funds received from -- by the supplier
24 from Ford for engineering prototypes, given that I
25 would do the engineering and the coordination work

1 and that supplier would provide the hardware and the
2 prototypes as prototypes, and we together would go
3 to Ford and make them work on the programming.

4 Q. Okay. What --

5 A. In 1989 --

6 Q. What investment did you make?

7 A. We invested a million dollars in capital, hardware
8 and equipment and hired half-a-dozen top engineers
9 in the industry ranging in salaries from -- well,
10 basically \$75- to \$150,000 a year. So we made a
11 huge investment in expenditures, and we made capital
12 expenditures.

13 And we were led to believe month-to-month
14 this was a "go" deal.

15 And then in June-July we were told to stop
16 work. We never received a purchase order.

17 And then we were told, well, just hang
18 tight there and we'll probably resume this project
19 in January, and then in October said, we just don't
20 think we've got the money to support this program.

21 And they said, we want you to stop all work
22 and we don't think we're going to resume it for at
23 least a year or two.

24 And they cancelled the program, and I had a
25 million-dollar investment.

1 I had to lay people off, and I'm still
2 recovering from that debt, which is quite
3 substantial. That was quite a hardship.

4 VIDEO TECHNICIAN: We're off the record.

5

6 (A recess was taken)

7

8 VIDEO TECHNICIAN: We are back on the
9 record.

10 BY MR. **Name Redacted**:

11 Q. Mr. **WITNESS NAME REDACTED**, before we broke you were explaining
12 the investment that you had made in connection with
13 the adjustable brake pedal, and I believe you said
14 that you had invested approximately a million
15 dollars, is that right?

16 A. That's correct.

17 Q. Okay. What did you invest that million dollars in?

18 A. Silicon graphics computer work stations and advanced
19 silicon graphics software, and training and
20 development in being able to execute the software
21 and, you know, hiring guys in and bringing them in
22 in a training period before revenues were being
23 generated.

24 Q. And I take it that you made this investment with the
25 expectation of establishing a profitable business,

1 is that right?

2 A. The investment was based on approximately designing
3 adjustable pedals to go into five or six different
4 car lines over a period of about four to five years,
5 and with a total lifetime budget of about \$8
6 million, and about \$4 million of engineering going
7 to us to do the engineering work -- the design and
8 engineering work using these advanced -- we call
9 them advanced CAE, computer-aided engineering
10 methods.

11 Q. Okay. Now, Mr. **WITNESS NAME REDACTED**, did you borrow some of
12 the money to make this investment?

13 A. Yes, I did. I borrowed -- I borrowed about
14 \$500,000, and I borrowed -- I had a cash line equal
15 to 90 days of sales -- expected sales, so about a
16 \$300,000 line of credit. So about \$800,000. And I
17 put \$200,000 in by changing the equity loan in my
18 house and loaning the money back to my business from
19 my personal -- and buying some of the equipment
20 personally and leasing it back to the company.

21 Q. And did this business venture go forward
22 successfully?

23 A. Well, we started off, it looked pretty good, and we
24 didn't receive any payments for about six months,
25 and then it looked like we might get one program,

1 the UA93, and I think we received about \$60,000 in
2 payments that are shown -- that are reflected in
3 here. (Indicating)

4 And then they gave us the notice to stop
5 work, and then we were basically -- it looked like
6 the -- the person said, well, we haven't got a
7 purchase order, so you're out of luck.

8 Q. Now, did this work have anything to do -- anything
9 whatsoever to do with the testimony that you were
10 giving in Bronco II cases?

11 A. Nothing at all. It was an entrepreneurial -- I
12 mean, I could have made maybe a profit of a million
13 bucks on 4 million in sales had the thing gone
14 through. But I ended up -- I lost money.

15 Q. Okay. And this was after you had begun giving
16 testimony in Bronco II litigation, is that right?

17 A. Yes. Yes, it was.

18 Q. And was this within the car or automobile part of
19 Ford Motor Company as opposed to the light truck
20 organization?

21 A. It was in the car part of the organization.

22 Cross-Car-Line Planning was sponsoring this.

23 However, we were trying to get the truck
24 guys to put adjustable pedals on their trucks as
25 well. So we were trying to get the truck guys to

1 buy into the idea of adjustable pedals.

2 Q. Okay. Now, Mr. **WITNESS NAME REDACTED**, there has been a very
3 clear inference, if not explicit statement here that
4 you have been bought and paid for by Ford Motor
5 Company.

6 Did you understand that from Mr. **Name Redacted**'s
7 testimony?

8 THE WITNESS: Well, I think that Ford
9 Motor Company --

10 MR. **Name Redacted**: Objection. I didn't testify
11 to anything.

12 BY MR. **Name Redacted**:

13 Q. From Mr. **Name Redacted**'s cross-examination.

14 A. I think Ford Motor Company -- I think I've done a
15 lot of very good work for Ford Motor Company that
16 has nothing to do with Bronco II litigation, and I
17 think Ford has compensated me for that work.

18 But I think they have -- they have gained
19 more from the work that we have done under these
20 purchase orders than they have paid me. So they've
21 had a good return on their investment and our
22 services.

23 Q. Okay. And did that work that you have done under
24 those purchase orders -- did that have anything
25 whatsoever to do with your testimony concerning the

1 Bronco II vehicle?

2 A. No, it does not have anything to do with it.

3 Q. Has Ford -- or anybody working on behalf of Ford --

4 attempted to influence your testimony concerning the

5 Bronco II vehicle?

6 A. No, they have not.

7 MR. **Name Redacted**: That's all the questions I

8 have.

9 RE-EXAMINATION

10 BY MR. **Name Redacted**:

11 Q. Just a few follow-up questions, Mr. **WITNESS NAME REDACTED**.

12 The letter that Mr. **Name Redacted** had you read

13 from, again addressed to Fred Gade, which I believe

14 is Exhibit -- what, 18?

15 A. 18.

16 Q. All right. He didn't have you read it, but I'd like

17 to have you read, if you would, the first paragraph

18 of that letter.

19 A. Okay. It says:

20 "As you are aware, I have been helping Ford

21 Motor Company in providing depositions which help

22 provide defense for Ford in product litigation

23 regarding the Bronco II rollover regarding events

24 and decisions made during my tenure at Ford in

25 suspension design."

1 Q. All right. And you testified that that exhibit
2 explains your role in the Bronco cases.

3 That, however, is the first thing you talk
4 about in that letter, isn't it; providing a defense
5 for Ford?

6 A. I have been brought to these depositions to talk
7 about what I know about the Bronco II, and I believe
8 that the facts as I see them associated with this
9 case are -- present a favorable light to what we did
10 in developing -- using prudent engineering
11 disciplines and methods and in fact advancing the
12 state of the art in developing the Bronco II.

13 So I believe that the testimony that I have
14 given has in fact been helpful, but the testimony
15 I've given has just been the facts as to what
16 actually occurred when we were developing the
17 Bronco II.

18 Q. But isn't the answer to my question "yes"?

19 That is the first thing you talk about in
20 the letter, is your role in providing a defense for
21 Ford.

22 A. The opening paragraph talks about the fact that what
23 I have done has been helpful for Ford.

24 Q. All right, sir. And the letter that we talked about
25 that you sent to Art Anderson on June 20, 1990 via

1 fax, in which you talked about testifying, quote, in
2 Ford's favor, unquote, why couldn't you just have
3 said, look, I'm a fact witness. I feel a duty to
4 tell the truth about what happened. You don't need
5 to pay me. In this country if we witness something,
6 we'll testify about it.

7 A. Well, actually I felt that this could end up taking
8 a lot of time and it would detract from my business,
9 and I honestly feel that if Ford is going to take up
10 my time -- or these cases are going to take up my
11 time then I should be compensated at what the open
12 marketplace pays me for what I do.

13 I do not want to be here doing this stuff
14 over and over again. I have a very creative project
15 list that -- even today I should be meeting with my
16 clients and preparing for a very important meeting I
17 have tomorrow to develop a next-generation seating
18 concept.

19 And I should not be in here doing this, and
20 I potentially -- because I've not been able to
21 prepare today -- could lose tomorrow a \$300,000
22 business opportunity, because I'm here today instead
23 of paying attention to my core business.

24 And that is a real fact of being here
25 today. It's a hardship for me. I do not want to be

1 here doing this.

2 I'm only here because I want to tell the
3 truth about what is going on, and I want to get out
4 of here and get on with my business.

5 And the only reason I'm here is to just
6 tell what happened, because I was there when we were
7 developing the decisions that led to the widening of
8 the track and the lowering of the center of the
9 gravity and the stabilizer bars and the other things
10 we did that proved the Bronco II out to be a safe
11 and stable vehicle.

12 Q. Mr. **Name Redacted** raised a question -- or I guess asked you
13 some questions along the lines of whether you were
14 asked by anybody at Ford to play ball with Ford.

15 Do you recall that line of questioning?

16 A. Yes, I do.

17 Q. All right. But your letter really told Ford that
18 you were ready to play ball, didn't it, because you
19 said, I'm ready to testify in Ford's favor?

20 A. If you take the letter that I sent Art Anderson --
21 which is a fax that was whipped off to basically
22 accompany a couple of examples of purchase orders
23 that justified my rate, okay, and that was the
24 amount of thought that was given to this -- and you
25 take what I said to Fred, and you take the fact that

1 every time I've been deposed I've sworn to tell the
2 truth and nothing but the truth, and the fact that
3 every deposition and every testimony I've given has
4 been substantially the same about material facts
5 associated with this case, then it happens to be on
6 behalf of Ford and supports the defense case.

7 It certainly, I don't believe, supports the
8 plaintiffs' case.

9 So to that extent, that is what I'm
10 alluding to when I've made these remarks.

11 I'm not a lawyer, and I don't play the
12 games with the words, okay?

13 I am just here to tell the truth about what
14 happened and what is happening with my business, and
15 everything else that I have told you has been the
16 truth and nothing but the truth to the best of my
17 ability.

18 Q. Now, when it was addressed in your testimony in
19 response to Mr. **Name Redacted**'s questions about the various
20 people that signed these purchase orders at Ford,
21 you're not going to suggest to this jury, are you,
22 that if somebody in the Office of General Counsel
23 went to the president of Ford and said, look, we've
24 got to take care of **WITNESS NAME REDACTED** in order to
25 secure favorable testimony from him, you don't --

1 you're not suggesting to this jury that the
2 president of the company couldn't get the word down
3 to each of those purchasing agents, are you?

4 A. I'm not suggesting that that couldn't happen. What
5 I'm telling you is that the probability of that
6 happening is about zero, that the chances that there
7 was any influence over this work, that -- this work
8 that we did stands the test. We've received awards
9 for the quality of work we've done.

10 We have done whole vehicles in a year, when
11 the industry standard is 36 months.

12 We've set the stage by leading these hot
13 teams through the methods I've developed and I used
14 that are proprietary to me to set the standard for
15 how vehicles are going to be developed in the
16 future.

17 We are a paradigm-shifting company that
18 works with a highly focused team to make a
19 difference, and it's got nothing to do with Bronco
20 II litigation.

21 Q. So you think it's wrong for someone to imply that
22 right after your letter -- that because you agreed
23 to testify in Ford's favor that this was the reason
24 why you got eight consecutive purchase orders of
25 \$100,000 each?

1 A. If there was -- if there was any way that that
2 happened, I would give all of the money I've made,
3 if I had it, back. Because there is no way that
4 -- the work I did on these projects was earned and
5 fought for and delivered, okay -- that it had
6 anything to do with that testimony.

7 This was hard work based on 30 years of
8 knowledge in the automotive industry which puts me
9 in a unique position to serve the automotive
10 industry, and we're going to really do some amazing
11 things that are even better than this stuff over the
12 next five years.

13 And I put myself in a level and a league
14 that says, this is what I'm worth and this is what
15 I'm going to get paid.

16 And I don't care if Ford pays me or
17 somebody else pays me, I believe that with the
18 methods I've developed that I can go out and make
19 this money all day long, nothing to do with product
20 litigation, and I shall prove it.

21 Q. All right. The final line of questioning with
22 respect to the comfort pedals and the DeCouper
23 Industries issue, you have talked about the money
24 you borrowed, the money you invested, and the money
25 you say you lost.

1 I want to hand you a letter that appears to

2 -- well, that was provided to me as two sheets.

3 It's shown to be a number of sheets --

4 including the cover sheet, three.

5 It appears to be a letter from you to Tom

6 Robson, Gill Cox and John Melstrom at DeCouper

7 Industries dated April 22nd, 1993 in which you

8 attempt to secure a \$100,000 advance from them.

9 I'm going to hand you this two-page

10 document and ask whether or not you can identify

11 that.

12 A. Okay. This is correct.

13 Q. All right. Did you get the advance --

14 A. No, I did not.

15 Q. -- of a hundred-thousand?

16 A. No, I did not.

17 MR. **Name Redacted**: All right. I'd like to have

18 that document marked as the next sequential exhibit.

19 THE WITNESS: That's a very sore point.

20

21 (Deposition Exhibit No. A20 was marked)

22

23 BY MR. **Name Redacted**:

24 Q. When you say it was a sore point, is your soreness

25 directed toward Tom Robson and his group or against

1 Ford?

2 A. Against Tom Robson and his group.

3 Q. All right.

4 A. He brought nothing to the party and he shared no
5 risk.

6 I felt like I was promoting their
7 technology because I believed in it, and carrying
8 the risk.

9 Q. Now, this was in 1993, right?

10 A. This is in -- what is the date on -- yeah, this is
11 in 1993.

12 Q. And you helped them get the business with Ford?

13 They wouldn't have had that without you, would they?

14 A. The UN93 business?

15 Q. Right.

16 A. No, they wouldn't.

17 Q. All right. And --

18 A. Ford wouldn't have believed they were capable of
19 doing it without us.

20 Q. So they got it because of your connection with Ford,
21 isn't that true?

22 A. They got it because of our technical reputation with
23 Ford, yes.

24 Q. All right. Now, tell me the bottom line in that
25 project.

1 Didn't you invoice Ford, or try to get from
2 Ford about \$499,000 after an audit?

3 A. What happened is, I wrote a letter to Ford, to Neal
4 Russler, who is the guy who made the decision to
5 cancel the program, that I happened to have known 30
6 years ago. He had a cottage -- 25 years ago had a
7 cottage next to mine, and I met him socially a
8 couple of times.

9 And I called him up and I wrote him a
10 letter. I called him up and I then I wrote him a
11 letter.

12 And I says, you know, Neal, I know we
13 didn't have a purchase order, but you were directing
14 us month-to-month, and you know we were proceeding
15 and you know we spent a lot of money, and we thought
16 it was going to be going based on the letters that
17 we received from Ford, from Mr. Macholey (ph).

18 And now I've got a million-dollar
19 investment, I've had to lay off all my staff, and
20 I've got to pay for this equipment.

21 And if I don't get a payment to me of
22 350,000 I'm going to go bankrupt, okay?

23 So I wrote that letter to Russler. And I
24 also, in my letter, tried to maximize the value of
25 the work that we had done, which I think was fairly

1 pivotal in trying to develop an emerging new
2 technology which may be of importance in the future.

3 Now, you have to bear in mind this
4 technology does not exist. Nobody in the world has
5 adjustable pedals on a high-volume car to date.

6 There are risks associated with adjustable
7 pedals.

8 It's a difficult technology. We're
9 integrating the accelerator control, the brake,
10 possibly movable footrests, possibly a clutch on the
11 manual transmission, where it will move back and
12 forth to make people comfortable.

13 This is a very, very touchy, difficult,
14 complex area, currently handled by three completely
15 different groups.

16 So when we went back to Neal and asked him
17 to do this, Neal, I believe, contacted the
18 purchasing organization, says, go in and audit them
19 and see if they really spent the money, okay?

20 So -- now, our contract was with DeCouper.
21 So what happened is -- which became, Comfort Pedals.

22 So they sent the auditors into DeCouper.

23 Now, normally if I write a -- if I write an
24 invoice to DeCouper, that would normally be paid
25 without question. But in order to -- because of the

1 special circumstances associated with my claim on
2 this, they sent the auditors into my place and they
3 went through the time records, the time sheets, all
4 the work that we had done, they went through my
5 investment scenario, the hourly rate, they looked at
6 all the contracts I had with the guys that I hired.

7 And they said, well, Dave, you know what?
8 You started in January, okay? We told you to stop
9 in July. We're only going to allow you six months'
10 depreciation.

11 Well, you've got to understand, this audit
12 is taking place in December, right? And I haven't
13 replaced any business with this right now.

14 So I ended up only getting six months'
15 depreciation allowance on computers that potentially
16 can be obsolete in three years. You know how
17 computers -- they double in power, and three years
18 is about the life.

19 And in fact the software upgrades were
20 costing about 50 grand a month, just to keep the
21 software upgraded. This is a very big expense to
22 keep this thing going.

23 I really didn't know where it was going.

24 And so I submitted an invoice and said,
25 look, guys, I know you've paid this much to

1 DeCouper, 750, but I'm going to appeal to you one
2 more time. I still think you owe me 150 grand.

3 And they said, hey, Dave, we've done all
4 we're going to do, okay?

5 So that was it.

6 Q. So how much did that --

7 A. That was the end of it.

8 Q. So how much of that -- so you got 350 --

9 A. We got half. Our contract was with DeCouper. Half
10 the money went to engineering, the other half went
11 to them for prototypes and testing. And that was
12 the contract I had with DeCouper.

13 They -- soon as they got the check for 750,
14 they wrote me a check for 350, and I took that check
15 and paid down my cash line, that is basically what I
16 did, and paid off the debts that I had accrued.

17 And to this day I still owe \$220,000
18 on the note, so it will take me three more years to
19 pay those notes off, so -- and I've basically laid
20 off all the people in that area, and I just have a
21 couple of trainees working there.

22 And I'm -- I'm really using the equipment
23 towards nonautomotive or personally controlled
24 engineering and designs that I'm going to patent
25 myself that have nothing to do with Ford now to try

1 and recoup my investment.

2 Q. All right. Just a couple final questions.

3 A. Okay.

4 Q. Then the 350,000 you were paid, do you remember
5 which DJB fiscal year that money was received in?

6 A. Well, I've got to believe that this work was '91 and
7 '92. We're during the '93.

8 I think -- I think we received it -- I
9 don't know if we received it in '93 or '94, about --
10 I could go back and look, and check through this and
11 find out when we actually got it.

12 I think it was -- I think it was in '93.

13 Q. All right, sir. Is that reflected in any of the
14 purchase orders that your attorneys supplied me that
15 shows payments or purchase orders from Ford to you?

16 A. I don't know what we -- I don't know what we
17 provided you.

18 I think we provided some information about
19 comfort pedals to you, because you have stuff here.

20 Q. Yes.

21 A. And -- but the purchase orders that I had with
22 DeCouper and invoices to DeCouper, I don't know if
23 all of those have been provided, because they were
24 really with DeCouper, which isn't Ford.

25 Q. All right. Now was that figure of 350,000 included

1 in your summary that is Exhibit A12?

2 A. Yes, I believe it is.

3 Q. All right. And do you know which fiscal year that
4 is in, sir?

5 A. It is in -- I don't know which fiscal year it is in.

6 I think -- I think it's in -- I think it's
7 in '93.

8 I can go back and check that for you.

9 Q. All right. I'm going to --

10 MR. **Name Redacted**: He testified that he gave some
11 instructions, but that he didn't have any detailed
12 involvement with Exhibit 12.

13 MR. **Name Redacted**: Okay, that's right. That's
14 right.

15 BY MR. **Name Redacted**:

16 Q. All right, sir. I'm going to hand you an exhibit
17 that is entitled "Ford Motor Company Purchase Orders
18 to **WITNESS NAME REDACTED** and DJB&A, 1986-1996 Fiscal
19 Years," and ask you -- or first I'll represent to
20 you that this document was based on purchase orders
21 submitted by your attorneys, and -- actually by
22 Ford's attorneys in response to the request for
23 production that was directed to you and Ford.

24 And I'm going to ask you whether or not it
25 appears to reflect the revenue history of DJB &

1 Associates since 1986 --

2 MR. **Name Redacted**: I'm --

3 BY MR. **Name Redacted**:

4 Q. -- with respect to payments and/or purchase orders
5 from Ford.

6 MR. **Name Redacted**: I'm going to object to this
7 exhibit. There is no foundation for it. There is
8 no foundation for the exhibit and there's no
9 foundation that this witness has any knowledge to
10 comment upon it.

11 I'd ask you not to speculate, Mr.

12 **WITNESS NAME REDACTED**.

13 THE WITNESS: Well, this doesn't agree
14 -- this chart doesn't agree with the numbers that my
15 accountant prepared based on moneys we received from
16 Ford.

17 So this chart doesn't agree. These two do
18 not agree.

19 This is the revenues that our records show
20 we received checks for, per my accounting individual
21 that works in my company, Roseanne Spicuzzi, okay,
22 and this chart does not reflect that.

23 And also we have numerous examples where
24 payments from Ford were delayed and did not come in
25 in these -- the purchase orders and actually getting

1 paid are two completely separate things.

2 We get paid generally long after the work
3 has been completed. Sometimes the purchase orders
4 came long after the work was actually done.

5 So this and what we were actually -- this
6 is a reflection of what we were actually paid for
7 work that we did. (Indicating)

8 These purchase orders I can't talk to,
9 without going through the detail. (Indicating)

10 MR. **Name Redacted**: All right. I'm going to ask
11 that it be marked as a deposition exhibit.

12 And I have one final question.

13 That will be Exhibit 21. Thank you.

14

15 (Deposition Exhibit No. A21 was marked)

16

17 BY MR. **Name Redacted**:

18 Q. Final question, Mr. **WITNESS NAME REDACTED**: Is there anyone
19 else in the world who could walk into Ford and tell
20 them that -- after 1990, the middle of the summer,
21 walk into Ford and say, I've made an investment on
22 the strength of what one of your guys told me, even
23 though the letter was marked preliminary, and even
24 though I don't have a purchase order, and get paid
25 \$350,000?

1 A. There's probably other cases of that, where there's
2 investments that have been made like that, I would
3 say, yes.

4 Q. Do you know of any in particular?

5 A. Suppliers are encouraged to make R&D investments
6 that don't pan out, that there are subsequent
7 arrangements. I don't know specifically.

8 I'm not really bothered about -- you know,
9 that those exist, and it's none of my business.

10 But based on my experience of dealing and
11 being led along to assume that something is going to
12 be okay, I've got to believe there are other
13 situations where suppliers have come in and claimed
14 charges and -- and Ford, actually when it gets right
15 down to it, is, I think, reasonably fair and
16 reasonably prudent.

17 I think we -- as an entrepreneur --
18 invested in the adjustable pedals with a full profit
19 motive to try and push a new technology faster than
20 the marketplace is ready to accept it, and we took
21 some entrepreneurial risk.

22 My -- I came close to bankruptcy as a
23 result of taking that risk.

24 I was brought from the brinks of
25 bankruptcy, but it's only very hard work over the

1 last three or four years and new business plans that
2 I've developed that will take me through -- into a
3 non-Ford strategic area that will allow me to
4 recover from this, if everything else in my personal
5 life survives the stress that's been caused by a
6 million-dollar company investing a million dollars
7 and not being able to recoup their investment.

8 Q. But the \$350,000 payment from Ford certainly helped
9 bring you from the brink of bankruptcy, did it not?

10 A. It avoided us from being -- becoming bankrupt, for
11 sure.

12 MR. **Name Redacted**; Thank you. I have no
13 further questions.

14 VIDEO TECHNICIAN: This deposition is
15 concluded. We're off the record.

16

17 (The deposition was concluded at 6:30 p.m.)

18 - - - - -

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1 CERTIFICATE

2

STATE OF MICHIGAN)

3) SS:

COUNTY OF WAYNE)

4

5

6 I, SUSAN SECORD PERRISH, Certified Shorthand

7 Reporter, a Notary Public, hereby certify that I recorded

8 in shorthand the examination of **WITNESS NAME REDACTED**,

9 the deponent in the foregoing deposition; and that prior to

10 the taking of said deposition the deponent was first duly

11 sworn, and that the foregoing is a true, correct and complete

12 transcript of the testimony of said deponent.

13 I further certify that request was made for

14 submission of the transcript to the deponent for reading

15 and signature and that such submission was made.

16

17 -----

SUSAN SECORD PERRISH, CSR-2528, RMR

18

19 Notary Public, Wayne County, Michigan

20 My commission expires: 12/10/98

21 Dated: This 30th day of August, 1995.

22

23

24

25

