

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF MISSISSIPPI
SOUTHERN DIVISION

PHILLIP REMEL AND BARBARA
REMEL,
Plaintiffs,

VERSUS CIVIL ACTION NO: 1:07-cv-126-LTS-RHW

STATE FARM FIRE AND CASUALTY
COMPANY, ET AL,
Defendants.

DEPOSITION OF NEIL B. HALL

Taken at the offices of Hawkins,
Stracener & Gibson, PLLC, 544 Main
Street, Bay St. Louis, Mississippi, on
Friday, October 10, 2008, beginning at
9:41 a.m.

REPORTED BY:

F. Dusty Burdine, CSR No. 1171
Simpson Burdine & Migues
Post Office Box 4134
Biloxi, Mississippi 39535
dusty@sbmreporting.com
(228) 388-3130

T-A-B-L-E O-F C-O-N-T-E-N-T-S

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APPEARANCES:

EDWARD GIBSON, ESQUIRE
Hawkins, Stracener & Gibson, PLLC
544 Main Street
Bay St. Louis, Mississippi 39520
ATTORNEY FOR PLAINTIFFS
MELINDA O. JOHNSON, ESQUIRE
Allen, Cobb, Hood & Atkinson, P.A.
2512 25th Avenue
Gulfport, Mississippi 39501
ATTORNEY FOR DEFENDANT

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STIPULATION

1 It is hereby stipulated and agreed by and
2 between the parties hereto, through their
3 respective attorneys of record, that this
4 deposition may be taken at the time and place
5 hereinbefore set forth, by F. Dusty Burdine, Court
6 Reporter and Notary Public, pursuant to the
7 Federal Rules of Civil Procedure, as amended;

8 That the formality of READING AND SIGNING is
9 specifically NOT WAIVED;

10 That all objections, except as to the form of
11 the questions and the responsiveness of the
12 answers, are reserved until such time as this
13 deposition, or any part thereof, may be used or is
14 sought to be used in evidence.

15 ---
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1 **paper was written to develop a methodology for**
2 **what I call slab claims, when the building is**
3 **totally gone. In the case of the Remel property,**
4 **although the building collapsed, it was still on**
5 **site, so it's technically not a slab claim.**
6 **Technically, I wouldn't use the strict methodology**
7 **of the paper for it. I probably borrowed pieces**
8 **of the methodology doing the analysis.**

9 Q. Okay. And the methodology that you have
10 in the paper pertaining to the slab claims is
11 where you look at the Fujita Scale; is that
12 correct?

13 **A. That's a portion of it. My paper says**
14 **the Fujita Scale is just another tool in the**
15 **toolbox. That's also what the Fujita Scale says,**
16 **is that it's not to be used as a stand-alone**
17 **document.**

18 Q. Okay. And you don't consider the Remel
19 claim a slab claim?

20 **A. Yeah. It's sort of a hybrid. Normally**
21 **you don't have the luxury of having the building**
22 **collapsing on the site. It's normally washed away**
23 **by surge. The fact that it wasn't washed away by**
24 **surge is one reason I have an opinion it was wind**
25 **damage. But it's a hybrid because it -- it was**

1 (Exhibits 1 through 4 were marked.)

2 NEIL B. HALL

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

5 EXAMINATION

6 BY MS. JOHNSON:

7 Q. Will you please state your name for the
8 record?

9 **A. Neil Bradley Hall.**

10 Q. Have you brought any documents with you
11 today? I see you have a folder.

12 **A. Yes. I brought my file material, and I**
13 **was asked to -- I don't know if I was asked. I**
14 **normally bring what I call my Rule 26 information.**
15 **And I was also asked in the notice to bring any**
16 **papers I wrote, so I brought a paper.**

17 Q. Okay. Is that your paper pertaining to
18 Katrina?

19 **A. Yes.**

20 Q. Now, let me ask you the question about
21 the paper that you wrote. Did you utilize
22 anything that you have in the paper in making your
23 decision regarding the investigation of the Remel
24 property?

25 **A. Not directly the Remel property. The**

1 **totally collapsed, but I only had photographs, but**
2 **others were able to get on site and look at the**
3 **damaged condition.**

4 Q. Okay. And among the papers that you
5 have in your folder before you, what are they?

6 **A. They include the Notice of Deposition,**
7 **my report on Remel. This is a -- this is a**
8 **duplicate set of attachments that's in the report.**
9 **This is a copy of thumbnails of all of the**
10 **photographs that I took on site. There were two**
11 **reports I was sent by other engineers; one is Jade**
12 **Engineering, one is Overstreet, a copy of an**
13 **invoice. And because I referenced a report by Dr.**
14 **Fitzpatrick for my timeline of wind and storm**
15 **surge, I brought a copy of that original report.**

16 Q. Okay. Can we get a copy of this or is
17 this for me? Do we need a copy of it? Is this
18 your original file material?

19 MR. GIBSON:

20 Is there a subpoena duces tecum?

21 MS. JOHNSON:

22 I believe so. I mean, here's a copy of
23 it. I marked a copy of the Notice of Deposition.

24 THE WITNESS:

25 Yes. I was asked to bring it with me.

1 I wasn't asked to send a copy ahead.
 2 MR. GIBSON:
 3 Okay. What we'll do is during a break,
 4 we'll let you look at these. I think, with the
 5 exception of the invoice, the paper -- anyway,
 6 there's going to be a few things that you don't
 7 have, but I think most of the things you do.
 8 MS. JOHNSON:
 9 Yes, probably so.
 10 MR. GIBSON:
 11 So why don't you look and see at a break
 12 what you --
 13 MS. JOHNSON:
 14 I do know I need the article. I don't
 15 think I brought a copy of that.
 16 Q. May I see what you have, and I can
 17 clarify it for the record?
 18 **A. Sure.**
 19 Q. You have not revised your report
 20 pertaining to the Remel property since --
 21 **A. No. I have made one change to my paper.**
 22 **I noted on the very last page of the paper, I**
 23 **referred to Dr. Fitzpatrick as being at University**
 24 **of Southern Mississippi. He's at Mississippi**
 25 **State University. Frankly, that was brought out**

1 **yesterday in a deposition. And I changed that,**
 2 **and I'm going to send it back to the Florida Wind**
 3 **Storm network that published the paper.**
 4 Q. And have you made that change on the
 5 copy of the paper I have here today?
 6 **A. Yes. It's on the very last page.**
 7 Q. You did it by way of a typewritten
 8 change?
 9 **A. Yes.**
 10 Q. Instead of handwriting, marking --
 11 **A. Right.**
 12 **MS. JOHNSON:**
 13 **And for the record, the paper we're**
 14 **referring to is Differentiating Between Wind and**
 15 **Flood Damage in Hurricane Katrina.**
 16 Q. Is this your only copy, your original
 17 copy? May I mark this or do we need to get a
 18 copy?
 19 MR. GIBSON:
 20 Let's get a copy. Why don't we make a
 21 stack of things to be copied.
 22 MS. JOHNSON:
 23 All right. And just to clarify --
 24 **THE WITNESS:**
 25 That, as it turns out, is a black and

1 white copy. My secretary, when she puts a hard
 2 copy in the file, prints it out as black and
 3 white.
 4 MS. JOHNSON:
 5 Q. With regard to the thumbnail photographs
 6 that you brought today, are these all the
 7 photographs that you looked at and relied upon and
 8 had in your possession when you authored your
 9 report pertaining to the Remel property?
 10 **A. There were other photographs that**
 11 **Mr. Remel showed me when I interviewed him. I**
 12 **believe -- I made copies of those photos in his**
 13 **possession that I thought were most pertinent. He**
 14 **had a big wad of photos. I looked at them all. I**
 15 **didn't copy them all. Also, I incorporated in my**
 16 **report photos from Jade Engineering.**
 17 Q. From their report, right?
 18 **A. Yes.**
 19 Q. Okay. In looking at this two-page
 20 contact sheet with the thumbnail photographs that
 21 you brought today, do any of those include
 22 photographs that you obtained from Mr. Remel?
 23 **A. Yes. They might be hard to -- normally,**
 24 **I try to keep my thumb in the photo. It let's me**
 25 **know. But in this case, the photos -- starting**

1 **with the fifth photo on the first page, DSC 01909**
 2 **through Photo DSC 01953, all those photos**
 3 **inclusive are either photographs where I'm taking**
 4 **a picture of a photo he showed me or in some**
 5 **cases, such as 1932 and 1934, I'm actually holding**
 6 **up a photo for comparison compared to existing**
 7 **conditions in the background.**
 8 Q. Okay. And these are small. It appears
 9 that 1932 and 1933, with regard to the comparison
 10 photos, those are the only two instances on this
 11 two-page contact sheet where you did that; is that
 12 correct?
 13 **A. There's one more. If you go several**
 14 **photographs, I have the original photo in the**
 15 **center of a larger picture. I don't know if I was**
 16 **shooting down at the table or if I was shooting**
 17 **out at a comparison photo.**
 18 Q. Which number is that?
 19 **A. That's going to be 1936. I think all**
 20 **I'm doing there is holding it up against the table**
 21 **to remind myself that that photo is a comparison**
 22 **photo, 1936.**
 23 Q. Okay. So with that exception, you have
 24 three pictures where you have an original picture
 25 with the actual background pictured. It looks

1 like there are three pictures, four at the top,
2 Numbers 1905 through 1908.
3 **A. And then it picks up again after the**
4 **pictures of his pictures where I'm just walking**
5 **around the house taking photographs.**

6 Q. And that begins at 1953 and ends at the
7 last photo, 1967; is that correct?

8 **A. Yes.**

9 Q. Okay. Now, is this a copy you brought
10 for me to the deposition or do we need to make a
11 copy of this?

12 **A. That's a printout of what's on my**
13 **computer. You can have that copy.**

14 **MR. GIBSON:**

15 **That's fine, yeah. I'd like to make a**
16 **copy.**

17 **MS. JOHNSON:**

18 **Do you mind if I go ahead and mark it?**

19 **MR. GIBSON:**

20 **That's okay.**

21 **MS. JOHNSON:**

22 **For the record's sake, what we've been**
23 **referring to, I'm marking as Exhibit 5, and I'll**
24 **put the sticker on the second page of the contact**
25 **sheet. So it will actually be Composite Exhibit**

1 **5. For the record, I've marked a copy of the**
2 **Notice of Deposition of Neil H. Hall, Ph.D. as**
3 **Exhibit 1. And when we make a copy -- do you want**
4 **me to go on and mark that article?**

5 **MR. GIBSON:**

6 **Go ahead. Can she have a copy of this?**

7 **THE WITNESS:**

8 **Yes.**

9 **MS. JOHNSON:**

10 **I'll mark a copy of the article we**
11 **referred to as Exhibit 6.**

12 **(Exhibits 5 and 6 were marked.)**

13 **MS. JOHNSON:**

14 Q. In looking at the invoice, it appears
15 this invoice is for activity you performed in June
16 of this year, June of 2008; is that correct?

17 **A. That's correct, yes.**

18 Q. Is this the current total for your
19 services in acting as an expert in this matter,
20 \$2,700?

21 **A. Yes.**

22 **MR. GIBSON:**

23 **We ought to go ahead and say that**
24 **Mr. Hall, of course, expects to be compensated by**
25 **State Farm pursuant to the rules for his**

1 **deposition and travel time here today and in the**
2 **collection of any documents and materials he**
3 **collected in the preparation of the deposition**
4 **notice as permitted by the rules. And I hope that**
5 **State Farm will agree to that.**

6 **MS. JOHNSON:**

7 **State Farm will agree depending upon**
8 **receipt of the invoice.**

9 Q. Do you have an invoice with you today as
10 far as how much preparation time it took to
11 compile these documents you've brought for me
12 today?

13 **MR. GIBSON:**

14 **At the end of the depo, we'll get**
15 **together and print one out.**

16 **THE WITNESS:**

17 **Okay.**

18 **MS. JOHNSON:**

19 Q. How much time did it take you to print
20 off the photographs from your computer, which is
21 what I understood you to have done earlier with
22 regard to that, and compile the exhibits that you
23 brought today?

24 **A. Well, usually everything is electronic**
25 **on file, and then I print it out to the hard copy**

1 **as needed. When the deposition hits, I print out**
2 **the hard copy. It's about a half hour to do all**
3 **that work. And then if we're going strictly by**
4 **Rule 26, any color copy is \$1 a page. But if**
5 **you're making a copy and I keep the copy, there's**
6 **no charge.**

7 Q. So we'll be paying \$2 for the two-page
8 contact sheet, right?

9 **A. Yes.**

10 Q. Have you performed any other work that
11 you haven't invoiced for since June 16th, 2008
12 with regard to the Remel property?

13 **A. No.**

14 Q. And it appears on the invoice which --
15 do you want to keep the invoice and us make a
16 copy? How do you prefer?

17 **A. Yeah, please. Let me keep a copy of the**
18 **actual -- I'll forget to put that back in the**
19 **file.**

20 **MS. JOHNSON:**

21 **I'll make this Exhibit 7.**
22 **(Exhibits 7 and 8 were marked.)**

23 **MR. GALLOWAY:**

24 Q. It appears that on June 10th, 2008 --
25 and that's consistent with your report -- you did

1 the travel and site inspection for the Remel
 2 property; is that correct?
 3 **A. Yes.**
 4 Q. Were you also inspecting any other sites
 5 while you were over this way?
 6 **A. I don't know. I don't believe so. In**
 7 **fact, the more I think about it, I think the**
 8 **answer is no, but I'd have to go back to a**
 9 **calendar to check.**
 10 Q. Okay. Approximately how many other
 11 properties in Bay St. Louis have you inspected and
 12 rendered either oral or written opinions on
 13 pertaining to Katrina?
 14 **A. Fifty.**
 15 Q. Any on Leopold Street other than Mr. and
 16 Mrs. Remel's property?
 17 **A. Yes. At the intersection of Leopold and**
 18 **Beach Boulevard was a property. That's the**
 19 **property where I pulled Fitzpatrick's report. It**
 20 **was only, I think, about a half mile down the**
 21 **road, and I felt it was applicable to use his**
 22 **timeline.**
 23 Q. Okay. And it was half a mile towards
 24 the bay, correct?
 25 **A. Yes. It's at the intersection of the**

1 acknowledge that there is, in fact, a slope to
 2 Leopold Street there in Bay St. Louis?
 3 **A. Yes.**
 4 Q. That being this other house was much
 5 lower than the Remel property was situated?
 6 MR. GIBSON:
 7 Objection.
 8 **A. Yes. I don't have it in front of me,**
 9 **but, yeah. It was -- I can't give you a spot**
 10 **elevation, but it was lower mean sea level than**
 11 **the Leopold house.**
 12 MS. JOHNSON:
 13 Q. Than the Remel house?
 14 **A. Than the Remel house, yes.**
 15 Q. In looking at your invoice, Exhibit 7,
 16 it appears on June 16th, you charged an hour for
 17 engineer review. What do you mean by that?
 18 **A. That was -- I passed along, without**
 19 **markup, the charge to me from Giddings Emery, who**
 20 **reviewed the report.**
 21 Q. Okay. And Emery is a licensed engineer
 22 in Mississippi?
 23 **A. Yes.**
 24 Q. And Emery lives in Louisiana, correct?
 25 **A. Yes.**

1 **beach and the bay. I can tell you exactly. Yeah.**
 2 **It was a residence located one-half mile from the**
 3 **Remel property at the beach.**
 4 Q. Okay. Was the property that you're
 5 referring to on Beach Boulevard or on Leopold?
 6 **A. It's at the intersection. The address,**
 7 **I think, is Beach Boulevard, but the house is**
 8 **right at the corner.**
 9 Q. Okay. And was there anything between
 10 the house and the actual bay? In other words, was
 11 there a house across the street from this
 12 particular house?
 13 **A. No.**
 14 MR. GIBSON:
 15 **Objection.**
 16 THE WITNESS:
 17 **It's just the seawall.**
 18 MS. JOHNSON:
 19 Q. So this particular property that you
 20 were comparing to the Remel property was
 21 waterfront?
 22 **A. It's waterfront property. It's only a**
 23 **half mile down the road. And the strongest winds**
 24 **crossed directly over both properties.**
 25 Q. And when you say "down the road," you

1 Q. And works out of your office?
 2 **A. No. He has his own separate office.**
 3 **We're separate entities.**
 4 Q. And how much time did Emery -- actually,
 5 there's no time written here. It's \$200. I
 6 assumed it was for you. How much time did Emery
 7 take to actually review your report?
 8 **A. I don't have a record. I'll tell you**
 9 **that typically if it's an area like Bay St. Louis**
 10 **where we worked together, I review his reports, he**
 11 **reviews my reports. We already have a good feel**
 12 **for the wind and flood conditions. He probably**
 13 **took 15, 20 minutes to review it.**
 14 Q. And why do you review one another's
 15 reports?
 16 **A. We established that as a quality control**
 17 **check on each other's work, regardless of whether**
 18 **or not -- in his case, reviewing mine, regardless**
 19 **of whether or not a PE stamp is required. Not**
 20 **every report is technically an engineering report.**
 21 **Example, if there's only roof damage, a roofing**
 22 **consultant can do the report without a PE stamp.**
 23 **But just for consistency, I have all my reports**
 24 **reviewed either by Gid or another engineer. He**
 25 **has his reports reviewed. I believe mostly he**

1 uses me.

2 Q. Okay. A short answer is it's for peer
3 review unless the engineer stamp is required?

4 A. Yes.

5 Q. Was an engineer stamp required with
6 regard to the report that you issued on the Remel
7 property?

8 MR. GIBSON:

9 Objection to the form. It calls for a
10 legal conclusion.

11 A. I don't know. My policy is I don't want
12 to have to find out if I didn't do it. So never
13 wanting to get that close to the edge that it's
14 required or not, I have them all stamped and
15 reviewed.

16 MS. JOHNSON:

17 Q. Okay. And you've never looked into that
18 since issuing reports on Mississippi properties,
19 whether Mississippi law requires a stamp when
20 somebody's a non-licensed engineer to issue a
21 report?

22 MR. GIBSON:

23 Same objection.

24 A. Separate issue. I have spoken to the
25 executive director of the Mississippi PE board,

1 engineers practice architecture.

2 Other reports may not even require it.

3 For example, if the building was not destroyed,
4 we're not doing engineering calculations and we're
5 looking at damage to assess the amount of damage,
6 that's routinely done by general contractors, by
7 building experts, by roof consultants, none of
8 whom may have an engineering license and none of
9 whom are attacked for providing those reports
10 without an engineering license. So there's
11 reports I've done during Katrina that I
12 comfortably feel don't require a PE license. But
13 I don't even stop to think about it. I have them
14 all stamped just in case.

15 Q. Okay. You're not a general contractor,
16 correct?

17 A. No.

18 Q. You're not a building expert?

19 A. Yes, I am.

20 Q. You are a building expert?

21 A. Yes. By virtue of being an architect, I
22 better be a building expert. And, plus, I
23 constructed buildings for 20 years in the military
24 where I ran the construction crews. So I know the
25 crews, I know constructability as opposed to

1 explained the manner in which my reports are
2 reviewed by a professional engineer in
3 Mississippi. And to the satisfaction of the PE
4 board, they said that that procedure satisfies the
5 requirement for direct supervision.

6 The separate issue is which reports
7 actually require a PE stamp because they would be
8 considered by the PE board as engineering, which
9 reports would not require a PE stamp because they
10 would not be considered to be engineering reports by
11 the PE board. That's an issue that I've never
12 specifically asked because I just decided
13 blanketly to have them all stamped as if they all
14 required that. It may be overkill to have an
15 engineering stamp on every report I've done for
16 Katrina. I don't care. That's my procedure.

17 MS. JOHNSON:

18 Q. Was the report that you issued in the
19 Remel matter an engineering report?

20 A. Again, I don't know. That would be a
21 decision by the PE board in Mississippi. They
22 might very well say so. The architect's board
23 might very well say, hey, this is architecture,
24 not engineering. Mississippi is an incidental
25 practice state; architects practice engineering,

1 designability.

2 Q. Okay. So when you say you built them,
3 you were actually running the crews as opposed to
4 doing the physical labor?

5 A. Correct. Oh, I've swung my share of
6 hammers. But, yeah, as a commissioned officer, if
7 I swung the hammer and my supervisor saw me, he'd
8 tell me to knock it off, let the guys do the work.

9 Q. Okay. And you're not a licensed
10 engineer in Mississippi, correct?

11 A. That's correct. In other states, but
12 not Mississippi.

13 Q. Are you a licensed architect in
14 Mississippi?

15 A. No. In other states, but not
16 Mississippi.

17 Q. If you issued a report that was an
18 architectural-type report, would you also have to
19 have it signed off on by an architect in
20 Mississippi?

21 MR. GIBSON:

22 Objection. It calls for a legal
23 conclusion.

24 A. A question I am not sure of. The
25 Mississippi PE Board, if you look at their rules

1 **and regulations, has specifically listed forensic**
 2 **engineering reports has the responsibility of a PE**
 3 **to supervise and stamp. The architecture board**
 4 **does not have that rule for forensic reports under**
 5 **their rules and regulations.**

6 **I would -- being both an engineer and an**
 7 **architect, I would -- I don't want to use the**
 8 **loophole of the architects let me and the**
 9 **engineers don't. Again, I've gone to the stricter**
 10 **guidance of the engineering board, and I use a PE**
 11 **stamp that somebody supervised my work.**

12 **MS. JOHNSON:**

13 **Q.** Okay. Was there anybody supervising you
 14 other than Mr. Emery in this situation with regard
 15 to the Remel property?

16 **A. No.**

17 **Q.** And did Mr. Emery go out to the Remel
 18 property and do any inspection of his own?

19 **A. Not to my knowledge, no.**

20 **Q.** Do you typically pay Mr. Emery \$200 for
 21 him to spend the 15 minutes to sign off on your
 22 reports? Is that a typical fee, in other words?

23 **A. That's a flat fee. When we started, he**
 24 **and I charged each other \$100. As discovery came**
 25 **in and we wound up looking at more references to**

1 **the reports, we realized that was a little shy.**
 2 **So we both agreed to up it to \$200.**

3 **Q.** Okay. Did you provide Mr. Emery any of
 4 the discovery to review in comparing it with your
 5 report?

6 **A. It's in the conference room when he sits**
 7 **down to do the reviews. He comes over to my**
 8 **office. At the end of the week, there might be**
 9 **more than one to review. I get him a cup of**
 10 **coffee. I give him all the background material**
 11 **and I give him the reports, and I leave him alone**
 12 **to do his job. I come back if he has any**
 13 **questions, and then we're done. To what extent he**
 14 **looked at all the references, you'd have to ask**
 15 **him.**

16 **Q.** So do you know what background material
 17 you gave him when he reviewed your report and
 18 signed off on it?

19 **A. He would have had available either --**
 20 **anything that was in my folder, or if he needed**
 21 **anything else, the secretary would have pulled it**
 22 **off the computer.**

23 **Q.** And I have premarked a copy of the
 24 report that was produced to us as Exhibit 4. Does
 25 this appear to be an accurate copy of what you've

1 brought with you today?

2 I had it Bates stamped, Edward.

3 **MR. GIBSON:**

4 This was the report which was provided
 5 to you by us during discovery?

6 **MS. JOHNSON:**

7 During designation, which technically,
 8 yes, during discovery.

9 **MR. GIBSON:**

10 I suppose, yes.

11 **MS. JOHNSON:**

12 **Q.** Why are some of the photos black and
 13 white?

14 **A. The black and white are photos from the**
 15 **Jade report. They are provided to me in black and**
 16 **white.**

17 **Q.** Okay.

18 **A. Yeah. The only difference is that the**
 19 **copy in my file has Giddings Emery's stamp. This**
 20 **must have snuck out the door to meet a deadline**
 21 **for the attorney. It doesn't have Giddings**
 22 **Emery's stamp on it, but my copy does.**

23 **MR. GIBSON:**

24 I would also note, you might look at the
 25 second photo or the second map in Attachment A,

1 **which is marked as Exhibit 4, it is not a very**
 2 **good copy. You can look at Neil's or look at**
 3 **mine.**

4 **MS. JOHNSON:**

5 Okay. Oh, with just the star, yes, it
 6 did.

7 **MR. GIBSON:**

8 If you want to, we'll make you a copy.
 9 I'm sure you have a good idea of what you're
 10 looking at.

11 **MS. JOHNSON:**

12 We'll substitute.

13 **MR. GIBSON:**

14 I'll get you a copy of this during a
 15 break and we'll make it 4A or something.

16 **MS. JOHNSON:**

17 Okay.

18 **Q.** So with the exception of my map as an
 19 attachment, one of the two attachments under
 20 Exhibit A being illegible and showing only a star
 21 as opposed to the rest of the street and the lack
 22 of a stamp by Mr. Emery, is there any other
 23 difference between what I've marked as Exhibit 4
 24 and what you brought with you today as being your
 25 official report?

1 **A. No.**

2 Q. Okay. Do you know when Mr. Emery signed
3 off on the report, what date?

4 **A. He hasn't dated it. It's normally in a**
5 **timely manner. Sometimes he comes in from the**
6 **field, he doesn't have his stamps with him.**
7 **Sometimes he brings the Louisiana stamp instead of**
8 **the Mississippi stamp or the Mississippi stamp**
9 **instead of the Louisiana stamp. Sometimes on**
10 **occasion, I have put the wrong number. I have put**
11 **the Louisiana number, and he refuses to stamp it**
12 **till I change the page.**

13 **I don't know why that copy is unsigned.**
14 **I would suggest that earlier in the morning, I had**
15 **to get a copy to the attorney and he signed it off**
16 **later in the day. We're pretty good about having**
17 **him sign it off on the same day as me. He's only**
18 **four doors down, so he just comes over and he does**
19 **the work.**

20 Q. Do you know whether or not he actually
21 signed off on it on June 16th, 2008?

22 **A. I can't promise you that's correct. I**
23 **have no reason to believe otherwise.**

24 Q. Do you know if Mr. Emery made any
25 revisions, suggestions, additions to your report

1 documentation of suggested revisions, additions or
2 changes that Mr. Emery did?

3 **A. If I'm in the office, he just talks to**
4 **me about it. He just grabs me out of the other**
5 **room, he shows me something, and then we change**
6 **it. I have no recollection that this occurred in**
7 **this case.**

8 Q. Okay. And if it's otherwise and he
9 makes a handwritten note on it, would you have a
10 copy of that?

11 **A. Yes, I would. And I don't have that in**
12 **the file.**

13 Q. So you don't know if this was a
14 situation as you described for me earlier where
15 you get him a cup of coffee and he's sitting
16 around the conference room table, reviews the
17 report, signs it and gives it to you or whether it
18 was your secretary tracking him down a couple
19 doors down?

20 **A. No, I don't. The only way I would know**
21 **is if there were coffee stains on the report, and**
22 **I don't see any.**

23 Q. All right. I want to get a copy of the
24 executed page to attach as an exhibit. We can
25 make it 4B, I suppose, as well as the corrected

1 when he reviewed it?

2 **A. I don't believe he did because there**
3 **were no changes from the text.**

4 Q. And how would you know if there were any
5 changes in the text?

6 **A. Oh, they would have to come through me**
7 **to do that.**

8 Q. Okay. How would he --

9 **A. If I may, I also noticed I have a**
10 **different signature squiggle on this than the**
11 **other one. Probably what that means routinely is**
12 **that after it gets signed, he leaves. My**
13 **secretary runs down four doors to chase him down**
14 **and prints out and has him sign and stamp. And**
15 **then when I get it, I have to resign to send out**
16 **the final copy.**

17 **So that means that the copy you have**
18 **probably went out earlier in the day, and then we**
19 **substituted the signature page.**

20 Q. Okay. How would you know when you said
21 -- and I think my question was: How would you
22 know whether there was any revision? Would he
23 handwrite any suggestions on the copy of the
24 report he was reviewing? Would he talk to you
25 about it? Would there be any written

1 map. I will give you back your black and white
2 copy.

3 And the last thing I see that you
4 brought with you today for the deposition is a
5 copy of the Dr. Fitzpatrick report for the
6 Leopold --

7 **A. Right. The address is 814 North Beach.**
8 **I think it's Gene Taylor's residence, but it's on**
9 **Leopold Drive.**

10 Q. Okay. And did you also adjust Gene
11 Taylor's house -- or not adjust, excuse me,
12 examine and give expert opinion in Gene Taylor's
13 house?

14 **A. I wrote a report, yes. The expert**
15 **opinion was in the report, yes.**

16 Q. Okay. And did you work with Dr.
17 Fitzpatrick in reaching your conclusion in your
18 report on Gene Taylor's house?

19 **A. I've worked with him on many cases. I**
20 **don't recall -- in the sense of being on the phone**
21 **or on the property together, I don't recall if we**
22 **did that on Gene Taylor's property.**

23 Q. Okay. And who was the attorney who was
24 representing Gene Taylor, if you recall?

25 **A. I don't.**

1 Q. Okay. Did you have to give any
2 testimony with regard to your opinion in Gene
3 Taylor's case?

4 **A. No.**

5 Q. Did you use anything else from your
6 investigation of Gene Taylor's claim in
7 investigating the Remel property?

8 **A. No.**

9 Q. So other than using Dr. Fitzpatrick's
10 opinion from the Gene Taylor case as far as the
11 meteorological aspect of it, you used nothing else
12 from your experience in looking over the Gene
13 Taylor damage or claim as an engineer?

14 **A. Nothing specifically, no.**

15 **MR. GIBSON:**

16 **And by that, I guess you mean documents,**
17 **materials?**

18 **MS. JOHNSON:**

19 Q. Documents, materials, observations of
20 the surrounding area, anything that you took from
21 your experience in looking over Gene Taylor's
22 property that you then used either as a piece of
23 evidence in the Remel property or used as a
24 presumption.

25 **MR. GIBSON:**

1 Objection to the form. And that kind of
2 gets my -- I'm trying not to give a speaking
3 objection. Is the question evidence? Can you
4 divide that question?

5 **MS. JOHNSON:**

6 Absolutely.

7 Q. Was there anything that you observed and
8 took away with you and then used in connection
9 with looking over the Remel property and giving an
10 opinion?

11 **A. That would have been, A, the Fitzpatrick**
12 **report, and, B, the earlier Stennis timeline which**
13 **appeared in both the Taylor report and in my Remel**
14 **report. But the Fitzpatrick report, which uses an**
15 **updated version of the ADCIRC model from World**
16 **Winds, updates the information that's provided in**
17 **the Stennis model, which is provided for**
18 **continuity, but I didn't specifically use it**
19 **because I had better data from Fitzpatrick.**

20 **Any other data at the Taylor location**
21 **would have dealt with the construction of the**
22 **house, its elevation, its susceptibility to flood**
23 **and wind due to exposure. That information was**
24 **transferable to the Remel property because it was**
25 **site specific, so I didn't use it.**

1 Q. Okay. What about observations about
2 general flooding or wind at that area, did you
3 take those with you when looking at the Remel
4 property?

5 **A. Probably in the back of my head, and**
6 **that wouldn't just be -- that would be an**
7 **observation of having toured that area for three**
8 **years after Katrina. There was nothing I recall**
9 **that was specifically on the Taylor site or**
10 **mentioned in the Taylor report that I transposed**
11 **to the Remel residence.**

12 Q. Okay. From your experience in the three
13 years and in your experience in looking at Gene
14 Taylor's property, did you have a preconceived
15 notion when you went to the Remel property as far
16 as whether wind or water was the subjective cause
17 of the damage?

18 **A. I didn't have a preconceived notion as**
19 **to the cause of damage. I had noted a pattern**
20 **that was consistent that there was wind sufficient**
21 **to cause structural damage, preceded storm surge**
22 **sufficient to cause structural damage even at the**
23 **coastline. And I would presume that would even be**
24 **truer as you moved inland.**

25 Q. Okay. And with regard to Gene Taylor's

1 claim, was it your opinion that wind destroyed his
2 house?

3 **A. While I don't have it in front of me,**
4 **I'm reasonably certain I concluded that wind**
5 **substantially damaged the house prior to the**
6 **arrival of storm surge. Without going back to the**
7 **report, I can't tell you if that meant the house**
8 **was economically totalled or if the house was**
9 **totally destroyed. I'd have to check the report.**

10 Q. Was it a slab as by your definition
11 earlier?

12 **A. Yes.**

13 Q. Okay. Do you recall whether there were
14 any houses that were not slabs on Leopold Street
15 from the Remel property towards the bay, which
16 would be east?

17 **A. From my visit with Mr. Remel -- I don't**
18 **recall what I might have said in the Gene Taylor**
19 **report. I do recall in interviewing Mr. Remel, he**
20 **pointed out that there were several houses closer**
21 **to the water that had survived compared to the**
22 **collapse of his house.**

23 Q. On Leopold?

24 **A. Yes.**

25 Q. Okay. And where do you have that

1 documented in your report?

2 **A. On the attachment on the aerial photo**
3 **and on Page 7 where I state the survival of**
4 **similar buildings in the surrounding area, some of**
5 **which were severely damaged by wind, makes it**
6 **highly improbable that flood collapsed the Remel**
7 **residence before a tree fall initiated by wind**
8 **load.**

9 Q. Okay. And when you say that supports
10 your finding that there were other properties on
11 Leopold that survived, meaning there was a
12 structure remaining --

13 **A. Yes.**

14 Q. -- are we talking about east from
15 Mr. Remel's property, from Mr. Remel's property
16 towards Gene Taylor's property at the bay, or are
17 we talking from Mr. Remel's property to the west
18 direction away from the bay?

19 **A. East towards the bay, that's what I'm**
20 **looking at. Because from Mr. Remel's property**
21 **west, I know of no house on Leopold Street that**
22 **was destroyed.**

23 Q. Okay. So from Mr. Remel's property
24 west, there were homes? In fact, the neighbor to
25 his immediate west, there was a portion of the

1 structure remaining, correct?

2 **A. To his immediate west, based on the**
3 **photos he showed me and what I saw, there was some**
4 **damage, but there was no sense of collapse of that**
5 **property. And also the house that was -- oh, how**
6 **should we say -- southwest of him, if you're**
7 **looking at the front of his property, the house**
8 **behind him, that house totally withstood.**

9 Q. And that's on a different street,
10 correct?

11 **A. Yes.**

12 Q. And do you know anything about the
13 elevation of the house directly behind him?

14 **A. Not as a spot elevation. It was about**
15 **the same height. It might have even been a few**
16 **feet lower.**

17 Q. Have you seen any elevation certificates
18 for Mr. Remel's property?

19 **A. No.**

20 Q. Okay. Did you look at any elevation
21 certificates that may have been attached to any of
22 the other engineering reports that you were
23 submitted, Overstreet, Jade?

24 **A. Oh, if they had one, I would have looked**
25 **at it.**

1 Q. But no one submitted a direct production
2 to you of an elevation certificate of the Remel
3 property; is that correct?

4 **A. That's correct. The Overstreet report**
5 **does have a -- it looks like there's an original**
6 **plat survey that does have elevations. I had a**
7 **hard time reading them. I didn't have a**
8 **certificate of elevation, no.**

9 Q. Okay. And in looking at the Overstreet
10 elevation, would you agree with me that
11 Mr. Remel's property gets higher as you get
12 towards the back of it, the direction that we're
13 talking about, this house that survived at the
14 back of his property on the other street? And, in
15 fact, I believe that elevation is 17 feet as
16 opposed to 13.

17 **A. Oh, the back of Remel's house is higher.**
18 **I'm not going to say that's necessarily true as**
19 **you walk further back. In fact, if I have a photo**
20 **of it -- that's the house shown in Photo 18 of my**
21 **report. I think -- I think that property is at a**
22 **lower elevation than the back of Remel's house**
23 **because he and I sat at his table back there while**
24 **we were looking at the photographs. I'm impressed**
25 **that the house in Photo 18 was at a lower**

1 **elevation.**

2 Q. Okay. Photo 18 or 17?

3 **A. Both. I think 17 and -- well, give me a**
4 **second. Let me go back and read my own text.**

5 **No. Photo 19 shows the property which**
6 **is immediately west of the Remel house, and**
7 **there's wind damage at the lower part of the hip.**
8 **Photos 17 and 18 show after Katrina -- no. Photo**
9 **18 -- Photo 17 is a different building. Photo 18**
10 **is the building which is directly south of the**
11 **Remel property. In other words, from his house,**
12 **if you're looking towards where his garage is**
13 **located and you're continuing to look further,**
14 **that's going to be to the south. That's the house**
15 **in Photo 18.**

16 Q. Okay. Now, look back at the elevation
17 certificate, if you will, in Mr. Overstreet's --

18 **A. Okay. That's a construction plot.**
19 **That's not really an elevation certificate. Let's**
20 **pull it out.**

21 **MR. GIBSON:**

22 **Is there an elevation certificate?**

23 **MS. JOHNSON:**

24 **Yes. That's the attachment.**

25 **MR. GIBSON:**

1 **Page which of which?**

2 **MS. JOHNSON:**

3 **It the same elevation certificate, I'm**
4 **sorry. Right there.**

5 **THE WITNESS:**

6 **If I may, what we're looking at on Page**
7 **16 is a survey plat. It's not an elevation**
8 **certificate for flood purposes.**

9 **MS. JOHNSON:**

10 Q. Okay. Next page, 17 of Overstreet.
11 Elevation 17 feet at the back of the property.
12 And you might not be able to see it.

13 **A. Yeah. I can see it, but --**

14 Q. I'll get one faxed over.

15 **A. One second. Yeah. It's unreadable**
16 **because it's a copy of a copy on Page 16. On Page**
17 **17, it's only readable in the -- what we call the**
18 **balloons with the arrows, 13 in the front and 17**
19 **in the back, but even that's kind of hard to read.**
20 **And that's assuming that it correctly identifies**
21 **the information that I can't see, but I have no**
22 **reason to believe otherwise.**

23 Q. Okay. So if the elevation certificate
24 indicates that beyond Mr. Remel's property, it's
25 17 elevation and that it's higher than his at the

1 **A. Oh, that survey only refers to the**

2 **property height directly behind the Remel**
3 **property. It doesn't go off the property lot. If**
4 **I'm going to go down to the next property to the**
5 **rear -- I don't want to say down, that supposes**
6 **it's lower. If I go to the property that we just**
7 **looked at, Photo 18 --**

8 Q. Seventeen.

9 **A. No, no, 18.**

10 Q. Oh, we're looking at a different
11 property now?

12 **A. No, no, no. I said before -- I had said**
13 **17, but then I referred to the text and I meant to**
14 **say Photo 18. Photo 18 is the property behind his**
15 **house. If you got to my text --**

16 Q. Okay. Tell me what page in the report
17 you're referring to the text.

18 **A. On Page 5, I say the damaged building to**
19 **the south, Photo 4, which, again, is photographed**
20 **in Photo 18.**

21 Q. Okay.

22 **A. So Photo 4, I'm looking in the distance**
23 **to the building that's damaged, but I -- it shows**
24 **up again in Photo 18 as a clearer photograph. If**
25 **I may, what did he say was the elevation at that**

1 front where the property meets Leopold Street and
2 Mr. Remel has testified that his neighbor's
3 property is at a higher elevation, and I'm
4 referring to the neighbor's property behind him
5 that we're looking at in Photo 17 in your report,
6 do you have any reason to disagree with that?

7 **A. That his property is a higher elevation**
8 **than the house in the back?**

9 Q. That the elevation of the house in the
10 back is higher than the Remel property by 17 feet
11 versus 13 feet.

12 **A. If I could borrow my original copy with**
13 **the color topographic map, please.**

14 Q. Certainly. I'm sorry.

15 **A. If I could at a break run to a computer**
16 **and pull up this map. I can't tell if he's**
17 **correct or not. My remembrance is that that house**
18 **in the rear was at a slightly lower elevation.**
19 **It's not shown one way or another on the survey**
20 **plat, and I would go to the FEMA topographic map**
21 **to see exactly what happens at that location.**

22 Q. So you would rely on the FEMA
23 topographic map as opposed to a survey prepared by
24 Mr. Chiniche, I think is how you say it? I always
25 butcher his name.

1 **property?**

2 Q. Seventeen feet.

3 **A. Seventeen feet?**

4 Q. Yes.

5 **MR. GIBSON:**

6 Well, I would enter an objection as to
7 -- are we talking about the height of the property
8 or the height of the property grade?

9 **MS. JOHNSON:**

10 It's the property, yeah, where the
11 property is at mean sea level. That's how they do
12 surveys.

13 Q. And let me rephrase my question because
14 I think we got off the question. My question was:
15 Which would be more reliable to you, as an
16 engineer and looking at elevation, Mr. Chiniche's
17 report who actually went out there and did the
18 survey or the FEMA topographic map?

19 **A. Well, it depends on what we're talking**
20 **about, and I can show you why if I look at the**
21 **map, went to the plat one more time. If that's a**
22 **survey plat --**

23 **MS. JOHNSON:**

24 **Can you check your fax machine? I told**
25 **them to fax it. We might have a better copy so we**

1 **don't have to keep going back. Finish your**
2 **answer. I'm sorry.**

3 **THE WITNESS:**

4 **A. Okay. The rear of the -- let's assume**
5 **the rear of the property is 17. Where he has the**
6 **elevation mark at 13 appears to be at the**
7 **beginning of the property lot. There was a sharp**
8 **drop-off to the road. And I recall that you have**
9 **to make a sharp incline up the driveway to get up**
10 **to the property lot.**

11 **So, I mean, you build the floor slab**
12 **level, and there is no cut into the slope at the**
13 **rear of the property. That means the slab at the**
14 **rear of the property is at 17 feet. You're**
15 **building level across the building, which would**
16 **bring the front of the property -- the building**
17 **lot slab to 17 feet. And then there's a four foot**
18 **drop-off in the front yard down to the road, at**
19 **the shoulder level of the road, because the**
20 **driveway does come up about four feet to get to**
21 **the man's house.**

22 **I would contend that the elevation marks**
23 **on the survey plat are correct, but they are**
24 **showing the property lot information. But if you**
25 **take the information exactly at the base of the**

1 **slab, because the house is constructed level, if**
2 **it's 17 foot in the back, it's going to be 17 foot**
3 **in the front. And then you've got a drop-off down**
4 **to the road. And the property lot line at the**
5 **road is where you'd have 13 feet.**

6 **MS. JOHNSON:**

7 **Q. So it's your testimony if at the back of**
8 **a 100-foot long lot, well beyond the back where**
9 **the 17 is on the other property that we're looking**
10 **at pictured in Picture 18, it's your testimony**
11 **that if the property on -- and I believe that's a**
12 **100-foot long lot running the direction of north**
13 **to south that the Remel's have, perhaps 150 -- I**
14 **can't recall their testimony. It's a rather long**
15 **lot. If it is 17 feet at the back, they're going**
16 **to build their slab at the front at 17 feet?**

17 **A. No, no. What you do is you have cut and**
18 **fill. I have no remembrance that if you're**
19 **standing in the back at 17 feet, the back of that**
20 **house is cut into a slope. That means the back of**
21 **the house is at 17 feet. In fact, in my report,**
22 **to be conservative, I use 13 feet as the**
23 **foundation slab height, although it probably was**
24 **higher based on what I just told you.**

25 **Q. And when you're talking about 13 feet of**

1 the foundation, where was the foundation?

2 **A. Well, the foundation is going to be --**

3 **Q. Towards the front of the property, not**
4 **towards the back?**

5 **A. Unless somebody has a better copy than**
6 **my copy, and it might have been clearer on the**
7 **screen than on the computer.**

8 **MR. GIBSON:**

9 **We'll get it. I think there is a**
10 **question pending, though.**

11 **MS. JOHNSON:**

12 **Yes.**

13 **Q. So you don't know where the foundation**
14 **for the actual home was on that lot?**

15 **A. Well, no. It's a survey plat of the**
16 **property line. The property is a wider swath than**
17 **the building footprint. I used the lowest**
18 **information of 13.06 feet, and then I even went**
19 **lower to 13 feet as the foundation slab height so**
20 **I would err on the side of allowing flood to get**
21 **to the property early.**

22 **In fact, I didn't have a certificate of**
23 **elevation, and I would suggest that in all**
24 **likelihood that the foundation slab height was**
25 **higher than 13 foot because you're probably, even**

1 **if you have cut and fill, are going to average**
2 **between 13 in the front and 17 in the back. So**
3 **you're going to probably wind up with about 15**
4 **foot as the height.**

5 **And then if they didn't cut into the**
6 **site, the slab is more likely at the 17 foot**
7 **elevation. But I don't know that based on this**
8 **slab. So to argue against wind and in favor of**
9 **flood, I used the lowest possible elevation for**
10 **the finished floor, and I used 13 feet. And even**
11 **using 13 feet, I still concluded that the building**
12 **was damaged by wind.**

13 **MR. GIBSON:**

14 **All right. Let's go off the record and**
15 **get a collection of what copies need to be made.**

16 **(Off the record.)**

17 **(Exhibits 4A and 4B were marked.)**

18 **(Exhibit 9 was marked.)**

19 **MS. JOHNSON:**

20 **Q. Having gone on a break, I had the office**
21 **fax over a copy of the elevation certificate which**
22 **has at the back page of it -- and I've marked that**
23 **as Exhibit 9 to the deposition. If you'll look at**
24 **the back page with me. Would you agree this**
25 **appears to be the actual survey that we were**

1 referring to that was marked up in the Overstreet
2 report; is that correct?

3 **A. Yes.**

4 Q. Okay. And can you see what the
5 elevation marks are now with a little bit cleaner
6 copy of this particular plat of survey?

7 **A. Yes, but the -- yes. There's two marks
8 that are outside the property lot and one mark
9 inside the property lot.**

10 Q. Okay. Let's start with Leopold Street.
11 Would you agree with me at Leopold Street, it
12 appears that Mr. Chiniche has the elevation at
13 Leopold, it looks like probably in the middle of
14 the street?

15 **A. Yeah. That probably is taken at the
16 crown of the road.**

17 Q. It's approximately 13 feet, six inches?

18 **A. Yes.**

19 Q. And it looks like there's also --

20 **A. Well, 13.06 feet.**

21 Q. Okay. And then we have middle of the
22 lot, approximately another elevation, can you see
23 what that is?

24 **A. Yes, 14.3.**

25 Q. Okay. And outside the lot appearing in

1 **A. Right. The grade elevation of the
2 ground is as shown, goes from in front of the lot
3 13 feet at the crown of the road and then 17 feet
4 behind the house.**

5 Q. Okay. And can you agree with me that
6 pictured on this survey is a concrete slab,
7 existing concrete slab, would you agree that's
8 probably the Remel residence as it was
9 pre-Katrina?

10 **A. Yes.**

11 Q. Okay. And that's towards the front
12 third of the lot?

13 **A. Yes.**

14 Q. And it looks like, according to the
15 measurements, the lot is 155 feet long?

16 **A. Yes.**

17 Q. Okay. And towards the back of the lot,
18 there's another existing concrete slab. Would you
19 agree with me that's the garage area that we're
20 talking about?

21 **A. Yes.**

22 Q. And so can we make the assumption that
23 the house was at a lower elevation than the garage
24 based on this survey lot plat?

25 **A. Yes.**

1 the direction towards the property where we've
2 seen pictured in your report, Photo 18, can you
3 see what that elevation is?

4 **A. Well, it's that lot. It says 17 feet.
5 I would be concerned that that's just, let's call
6 it, south of the Remel property lot. I think we
7 got a long way to go off the page before we get
8 down to the house.**

9 Q. To the house?

10 **A. Yeah.**

11 Q. Okay. And will you agree with me at
12 least at the back of that lot behind the Remel
13 property the elevation was 17 feet?

14 **A. Yes.**

15 Q. Okay. And would you agree with me that
16 a survey is a pretty accurate representation of
17 elevation?

18 **A. Yes.**

19 Q. Okay. And would you agree with me just
20 based on those three elevations that we do have,
21 the one beginning at the middle of Leopold Street
22 going back, it does appear that the Remel property
23 starts lower and then goes back? We don't know
24 what it is at the very back of the property, but
25 beyond it is 17 feet?

1 Q. Okay. Now, earlier you mentioned that
2 it was your understanding that there were houses
3 that remained between Mr. Remel's property and
4 Gene Taylor's property at the bay; is that
5 correct?

6 **A. Yes.**

7 Q. Okay. And you said you based that on
8 your observation on your inspection and also on a
9 photograph -- or I think an aerial photograph that
10 have you in your report; is that correct?

11 **A. Yes. There's a satellite image from
12 Google Earth.**

13 Q. And what page would that be in my
14 Exhibit 4? And it's Bates stamped, if you'll
15 refer to the Bates stamped page.

16 **A. 900013.**

17 Q. Okay. And where do you see Mr. Remel's
18 property on 900013?

19 **A. I think on this particular map, he's
20 hidden in the trees. But if you --**

21 Q. I'm going to give you a red pen. Mark
22 it, if you will.

23 **A. (Witness complying.)**

24 **MR. GIBSON:**

25 **I'll object to the form of him marking**

1 on any of the documents and furthermore object
2 that he's not a cartographer, not a map man.

3 MS. JOHNSON:

4 Q. Are you a map man?

5 A. I've learned how to fold the one in my
6 glove compartment box.

7 Again, he's hidden by the trees, so I'm
8 going to give you a general area.

9 Q. Are you on Map 13?

10 A. Oh, I'm sorry.

11 Q. You're on a pre-Katrina photo?

12 A. Yes.

13 Q. I was referring to the post-Katrina
14 photo.

15 MR. GIBSON:

16 Have all the copies got that color
17 problem?

18 MS. JOHNSON:

19 Well, mine is. Is yours better? Let me
20 see your report that you brought.

21 MR. GIBSON:

22 He's got it.

23 MS. JOHNSON:

24 No. That's what I marked.

25 MR. GIBSON:

1 was asked both. I'm going to circle the general
2 area, and then I'm going to circle one, two, three
3 properties going towards Beach Boulevard which did
4 survive after Katrina.

5 MS. JOHNSON:

6 Q. Okay. Can you see that first circle you
7 made?

8 A. It's a little tough. It's a glossy --

9 Q. All right. Where is the first big
10 circle you made as far as the general area?

11 A. The general area is over here off
12 Leopold. And, again, because of the trees, I
13 could never actually find him on the site.

14 Q. Okay. Can you make that a little darker
15 for me, if you will?

16 A. (Witness complying.)

17 Q. Okay. And do you know whether he is on
18 this side of the street or on the other side of
19 the street?

20 A. He's on the south side of the street.

21 Q. Okay. Will you put for me just on the
22 outside of that photograph your understanding of
23 the direction of south?

24 A. (Witness complying.)

25 MR. GIBSON:

1 It's not any different than the report
2 that he provided.

3 THE WITNESS:

4 I'm marking in general because since
5 the -- I remember when I looked on the computer
6 that the trees masked the location. So there was
7 no data provided by the before-and-after
8 photographs. For that reason, I never identified
9 it in the report because I couldn't use the
10 information. So I'm going to give you the general
11 area. It's not going to be precisely his house,
12 but my point is, I never used the information
13 because it was unusable. That's why I'm sitting
14 here right now struggling trying to give you the
15 precise location.

16 MR. GIBSON:

17 The question pending, I believe, is were
18 there standing structures.

19 MS. JOHNSON:

20 No. The question is: Please identify
21 the Remel property on the aerial photograph that
22 he was relying upon to say there were structures
23 between it and Gene Taylor's property.

24 THE WITNESS:

25 Well, if I may, I think at some point, I

1 Same objection.

2 MS. JOHNSON:

3 Okay.

4 Q. And for clarification, since we have
5 four circles here, it's the first larger circle
6 that you believe the Remel property is situated in
7 general within, correct?

8 A. Yes.

9 Q. Will you put a Number 1 within that
10 circle?

11 A. (Witness complying.)

12 Q. Okay. And not saying the Number 1
13 indicates exactly where his property is.

14 A. Correct.

15 Q. I understand that. And you understand
16 that the property has one, two, three houses
17 between it and the bay; is that correct?

18 A. Yes, that survived Katrina.

19 Q. All right. I'm going to show you -- and
20 I don't want to get them mixed up because these
21 were exhibits that we used in Mr. Remel's
22 deposition on Monday, what has been marked --
23 well, while we're sitting here and I'm looking for
24 an exhibit that I'm not seeing --

25 MR. GIBSON:

1 I mean, I'm happy to stipulate to the
2 issue.

3 MS. JOHNSON:

4 Okay. That there are no houses between
5 Remels and --

6 MR. GIBSON:

7 I'm happy to stipulate that the street
8 that he marked is Felicity.

9 MS. JOHNSON:

10 Okay.

11 THE WITNESS:

12 If I may, I would have seen that on
13 screen when I did the analysis. Again, since his
14 property was masked and I didn't use it, I didn't
15 bring with me any correlation to the streets or
16 any other properties.

17 MS. JOHNSON:

18 Q. Okay. With regard to the actual
19 property, I'll show you --

20 **A. But if I may, again, even though the**
21 **properties aren't on Leopold, they go towards the**
22 **bay. And the water coming from the bay would have**
23 **hit them before they hit the Remel property.**

24 Q. Okay. And it's your understanding that
25 the Remel property was situated approximately

1 **address an expert not to do something in response**
2 **to a question unless it's a privilege.**

3 MR. GIBSON:

4 You can advise him to.

5 MS. JOHNSON:

6 You can advise him to, but that's
7 absolutely interfering with the deposition.

8 MR. GIBSON:

9 Well, it's a question-and-answer session
10 is what it is, and to instruct him to --

11 MS. JOHNSON:

12 And to have an understanding of where
13 properties are on a map when he's giving
14 testimony? There were properties that remained
15 between the house --

16 MR. GIBSON:

17 He can point, but I'd just advise him
18 not to draw on anymore maps.

19 MS. JOHNSON:

20 Q. All right. With regard to Bates Page 13
21 of Exhibit 4, you have now drawn a circle
22 approximately on the correct street, on Leopold
23 Street, of where you believe the Remel property is
24 situated; is that correct?

25 **A. Sitting here today, yeah. I mean, the**

1 still around about this far from the actual bay
2 itself, meaning within the Area 1, whether we're
3 on the right street or not?

4 **A. Yeah, if we go to the proper street. If**
5 **this is Leopold up here, it's going to be in this**
6 **area directly north of it.**

7 Q. Okay. Would you circle that area for
8 me? And then we'll put a Number 2 within that.

9 **A. (Witness complying.)**

10 MR. GIBSON:

11 **I'm going to just stop at this point.**
12 **Maybe I'm tired for the week, but I'm going to**
13 **object to the form, and I'm going to ask that my**
14 **expert not draw on any documents. It's not a**
15 **proper question. If the question is would he,**
16 **then I'm going to advise him no.**

17 MS. JOHNSON:

18 Well, then, we're going to have to take
19 that up with the Court because there's absolutely
20 no proper objection for a witness, especially an
21 expert witness, who is --

22 MR. GIBSON:

23 **It's a form objection.**

24 MS. JOHNSON:

25 **But there's no privilege for you to**

1 **problem is, is since the map didn't have good**
2 **resolution to provide information, I didn't use**
3 **that particular map in the analysis. And I don't**
4 **have the overlay that shows the street locations**
5 **or the address of his property to give you the**
6 **precise location.**

7 Q. Okay. But even looking at Number 2 now
8 where you think it may, the Remel property may be
9 situated now on Leopold, can you identify any
10 houses on Leopold? And that's the only street
11 we're talking about, between the Remel property
12 and where Gene Taylor's property would be, which
13 would be at the very top where your middle finger
14 is situated right now at the intersection of
15 Leopold and Beach.

16 **A. I recall from being in that area that**
17 **there was at least one house that remained**
18 **standing on Leopold between his house and the**
19 **area. I can't pinpoint it on this photo. I have**
20 **a splice between the two satellite images. I**
21 **can't give you my very best answer without running**
22 **back to the files, but I recall a standing**
23 **structure in that area.**

24 Q. Okay. And was that pertinent to you in
25 coming to your conclusion with regard to your

1 ultimate finding on the Remel property, that there
2 was a structure between the Remel property and the
3 bay?

4 **A. No. Because the structures that I**
5 **looked at for my analysis were the structures at**
6 **the immediate area of the Remel property. I would**
7 **expect structures that were closer to the bay to**
8 **have more likely been destroyed by surge.**

9 **The houses that I photographed in my**
10 **report were at similar elevations and remained**
11 **standing. In fact, the house behind Remel, if it**
12 **was at 17 feet and if you look at the certificate**
13 **of elevation for Remel, his slab was at 13.6, I**
14 **have a house nearly four feet higher elevation**
15 **behind Remel's house that survived surge without**
16 **collapsing compared to Remel's house which**
17 **collapsed at an elevation --**

18 Q. Less?

19 **A. -- that was less.**

20 Q. And that's my point. Would you agree
21 that homes that had lower elevations, given the
22 surge that they were subjected to in this
23 particular area, would be less likely to survive
24 homes that had higher elevations?

25 MR. GIBSON:

1 **13.6, the top of the bottom floor, i.e. the top of**
2 **the slab, is at 14.6. That's as compared to the**
3 **14.3 we were discussing on the survey plat because**
4 **the surveyor has allowed for the height of the**
5 **floor slab. So he has the home, which would be a**
6 **uniform elevation across due to level**
7 **construction, is at 14.6. I used 13 in my**
8 **analysis, which is a foot and a half lower than**
9 **the actual condition.**

10 Q. And he also has 13.6 as the highest
11 adjacent finished grade, correct?

12 **A. That's outside the dirt.**

13 Q. Okay. You mentioned several things in
14 your answer before that. Hydrostatic pressure,
15 you didn't calculate the hydrostatic pressure at
16 the Remel residence, that the Remel residence
17 sustained -- subject to, rather?

18 **A. No. By comparison -- first of all,**
19 **FEMA -- the FEMA 55 Coastal Construction Manual**
20 **says that a hydrostatic load generally is not a**
21 **consideration for the destruction of a house in**
22 **flood.**

23 **Secondly, example, if you go to St.**
24 **Bernard Parish in Louisiana where you had**
25 **hydrostatic pressure due to the height of surge**

1 Object to the form.

2 **A. It's not simply a matter of surge height**
3 **because the surge height goes to hydrostatic**
4 **pressure. Hydrostatic pressure is directly**
5 **related to surge height.**

6 **Okay. But if you're talking about a**
7 **house which has collapsed, now you are also**
8 **talking about hydrodynamic pressure and wave**
9 **activity. I have no indication that the current**
10 **velocity or the wave activity was such that it**
11 **would have demolished that house at that**
12 **elevation. And I used in my analysis a 13 foot**
13 **elevation, when, in fact, I've now seen from the**
14 **certificate of elevation that the house was at**
15 **14.6.**

16 Q. Where did you see that the house was at
17 14.6?

18 **A. The first page of what you showed me in**
19 **that exhibit gives the slab elevation which was at**
20 **13.6.**

21 Q. 13.6, not 14.6?

22 **A. Let me take a look at it for the second**
23 **time in my life.**

24 Q. Okay.

25 **A. The -- okay. The adjacent grade is at**

1 **without waves and without hydrodynamic current**
2 **velocity, the water came up eight to ten feet.**
3 **When the water went down, all the houses were**
4 **still there, precisely because hydrostatic**
5 **pressure without current and wave activity is not**
6 **going to destroy the home in terms of structural**
7 **collapse.**

8 Q. Understood. You didn't calculate the
9 wave activity that the Remel property was subject
10 to, correct?

11 **A. That's correct.**

12 MR. GIBSON:

13 **Objection.**

14 MS. JOHNSON:

15 Q. You also didn't calculate the
16 hydrostatic load that was subjected upon the Remel
17 residence, correct?

18 MR. GIBSON:

19 **Objection.**

20 **A. Calculate the hydrostatic load? No,**
21 **because I had no reason to.**

22 MS. JOHNSON:

23 Q. Okay. If Mr. Remel has testified that
24 there were no remaining structures between his
25 property and the bay, do you have any reason to

1 disagree with that testimony?

2 MR. GIBSON:

3 Objection. That does not properly
4 characterize Mr. Remel's testimony. Do you mean
5 on Leopold Street?

6 MS. JOHNSON:

7 Q. On Leopold Street.

8 **A. On Leopold Street, I'm still thinking**
9 **there was one structure that withstood. I may be**
10 **over by a street. Mr. Remel knows the area better**
11 **than me. But it would be a house at about the**
12 **equivalent elevation above sea level. And I would**
13 **suggest that if there were houses destroyed**
14 **between Mr. Remel's house and the water, even if**
15 **they were all gone, that doesn't say they were all**
16 **gone due to flood. Some of them might have been**
17 **gone due to wind, as I determined in the house**
18 **that was closest to the bay.**

19 Q. Okay. My question is: If Mr. Remel
20 testified that there were no houses or remaining
21 structures standing between his home and the bay
22 on Leopold Street, would you have any reason to
23 disagree with him?

24 **A. A slight remembrance otherwise; but more**
25 **likely than not, he's correct and I'm wrong.**

1 Q. Okay. Show me the photo, if you had
2 any, of this structure that remained on Leopold
3 Street between Mr. Remel's property and the bay if
4 you took a photo.

5 **A. No, I don't. I have photos in my file**
6 **of the house I'm talking about. If it's not on**
7 **Leopold, it's a street or two over. I**
8 **specifically remember discussing it with Mr. Remel**
9 **as an example of houses that I know of that**
10 **remained standing closer to the coastline. I may**
11 **be incorrect that it was on Leopold.**

12 Q. Okay. And if there are structures
13 remaining on Felicity Street, as you have three
14 houses that appear circled on Page 13 of Exhibit
15 4, we don't know as we sit here today what the
16 elevation of those properties were, correct?

17 **A. No.**

18 Q. Okay. Now, it's my understanding that
19 you met with Mr. Remel during your site
20 inspection; is that correct?

21 **A. Yes.**

22 Q. Okay. How long were you on site during
23 that inspection?

24 **A. I billed for about two hours on site.**
25 **I'm a better engineer than I am a businessman. I**

1 **might have been there longer, but no more than**
2 **three hours on site.**

3 Q. And when you say you billed for two
4 hours on site, there was actually three hours, so
5 you're accounting one hour for travel between --

6 **A. Yes. That includes travel and site**
7 **inspection.**

8 Q. And that would be travel between Slidell
9 to Bay St. Louis?

10 **A. Right. Subtracting out 30 minutes each**
11 **way, that leaves two hours, and it might have been**
12 **more or less.**

13 Q. And that inspection would have been June
14 10th, 2008?

15 **A. Yes.**

16 Q. And there was actually nothing remaining
17 on the property of the structure, the home
18 structure, when you did your inspection, correct?

19 **A. There was a structure that he was**
20 **rebuilding that was there. And then there was**
21 **also a new garage structure behind it, yes.**

22 Q. So there were two new structures, but
23 none of the preexisting structures from Katrina
24 were on site when you did your inspection?

25 **A. That's correct.**

1 Q. So you were never able to physically
2 look at the remaining of the roof structure?

3 **A. No.**

4 Q. Outside of what photographs were
5 provided to you by Mr. Remel, correct?

6 **A. That and the photographs taken by Jade**
7 **Engineering.**

8 Q. Okay. And perhaps maybe some in
9 Overstreet?

10 **A. Yeah. Overstreet has photographs.**
11 **They're mostly of trees. He has a couple of**
12 **photographs which in the distance show the remains**
13 **of the Remel property and structure.**

14 Q. Did you make any field notes during your
15 inspection?

16 **A. No.**

17 Q. Okay. How did you keep track of what
18 you learned from Mr. Remel?

19 **A. I took pictures of his pictures, and**
20 **everything else that he told me was accounted for**
21 **in all the information I had.**

22 Q. And, in fact, in your report that's
23 before you, Exhibit 4, that is, would you agree
24 with me that the only documentation of what you
25 gleaned from Mr. Remel appears at Page 2 of your

1 report, or Bates 1, depending on what number
2 you're looking at, and it's at the first top
3 paragraph, Investigative Methodology; would you
4 agree?

5 **A. Yes.**

6 Q. Okay. And that information that
7 Mr. Remel, that you document, gave you on site
8 were the photographs?

9 **A. Yes.**

10 Q. Going back to your opinion in the Taylor
11 claim or litigation, did you have any opinion
12 about whether or not surge caused or contributed
13 to the damage to his home?

14 **A. I don't have the report in front of me
15 and I don't recall. Typically in that area, there
16 was sufficient damage by wind to cause the
17 economic totalling of the structure. That didn't
18 preclude additional damage by storm surge,
19 although you can't kill a dead horse.**

20 Q. Okay. So the answer would be you don't
21 recall whether or not you attributed surge causing
22 any economic damage to Mr. Taylor's property?

23 **A. No. I don't want to be precise about
24 it, but I think I've given a general take, as I
25 recall, for houses in that area which would**

1 **include the Taylor property.**

2 Q. Okay. And in your opinion in the Remel
3 property is that the residence and the garage were
4 economically totalled due to wind occurring prior
5 to, and I assume you meant to say surge?

6 **A. Yes.**

7 Q. If you'll refer to Page 7, third
8 paragraph down, last thing above attachments.

9 **A. Yeah. It looks like I fell asleep at
10 the end of the sentence. In consideration of all
11 the above, the residence and garage are considered
12 economically totalled due to wind occurring prior
13 to the arrival of storm surge, to complete the
14 sentence.**

15 Q. Okay. And that's your opinion as we sit
16 here today?

17 **A. Yes.**

18 Q. Nothing you've gleaned from any other
19 inspections, any other depositions, trial
20 experience has changed your mind as it stands with
21 regard to the Remel property?

22 **A. That's correct.**

23 Q. How do you define economically totalled?

24 **A. Economically totalled, I look at two
25 things; one, in terms of reconstruction. The cost**

1 **of repair, unit cost is always higher than the
2 cost of new construction. So if you try to
3 rebuild a building that's damaged to beyond
4 economic repair, it's going to cost you more than
5 to simply wipe the slab clean and start it over
6 again. So when I'm at that point when I believe
7 that it's going to cost more to repair it than it
8 is to rebuild it, including the demolition cost,
9 that's when I declare it's beyond economic repair.**

10 Q. In the paragraph above that sentence,
11 we're talking about at Page 7 of your report, it
12 appears to me the only reference as far as your
13 conclusion pertaining to the garage; is that
14 correct?

15 **A. Yes.**

16 Q. Okay. And it was your opinion that the
17 garage was damaged by a tree fall caused by wind,
18 correct?

19 **A. Yes.**

20 Q. Do you recall how many trees fell on the
21 garage structure?

22 **A. Unless it's embedded in one of the other
23 reports, no. Just that the tree fall damaged the
24 trusses in the garage.**

25 Q. Okay. Do you know anything about the

1 particular trees that fell on the garage, the type
2 of trees, how they fell, if they were snapped or
3 if they were uprooted and fell upon the garage?

4 **A. The garage trees, no. There's a
5 difference in species between Jade and Overstreet
6 on the tree that hit the main house. I don't
7 recall in the reports that there was any
8 identification of the species of the trees that
9 hit the garage.**

10 Q. Does it matter to you, in looking at the
11 cause of the damage to either the house or the
12 garage, the species of the tree?

13 **A. Hardwood trees are denser wood. The
14 trunk is going to create more impact when it hits
15 the house, and also the hardwood tree is going to
16 have more of a crown. It's going to be easier
17 to -- for the tree damage that hits the house to
18 affect it because of the weight of the tree limbs.
19 But I live in Slidell, Louisiana, and we had
20 softwood pines that came crashing down on houses
21 like a knife through butter.**

22 **So in the final analysis, it doesn't
23 matter too much because even the less dense trees
24 caused extensive damage when they fell.**

25 Q. Okay. So then that's a, no, it doesn't

1 matter to you whether the species is --

2 **A. Well, I don't want it to sound like it**
3 **doesn't matter because I don't care or I don't**
4 **have any appreciation for the, you know,**
5 **importance or the density of the tree.**

6 Q. You don't intend on giving any expert
7 opinions in the field of being an arborist, do
8 you?

9 **A. I'm not an arborist. I'm a licensed**
10 **landscape architect, and I have a master's in**
11 **landscape architecture. I know my trees, but**
12 **not -- the physiology of a tree not as well as an**
13 **arborist, no.**

14 Q. Still focusing on that paragraph of your
15 report pertaining to the garage only, it appears
16 that it was your opinion that the photos in the
17 Jade report indicate sheathing and two trusses
18 were damaged by the impact?

19 **A. Yes.**

20 Q. "Impact" meaning with the trees,
21 correct?

22 **A. That's correct, yes.**

23 Q. All right. And you mentioned that
24 necessitated removal of all the shingles to assess
25 the damage and restore the roof to pre-loss

1 **are adding up.**

2 **Plus, since you have a hole in the roof,**
3 **water, wind-driven rain from the hurricane is**
4 **getting through that opening prior to the time**
5 **storm surge comes in. Now you have the additional**
6 **cost of any attic insulation. I don't know if**
7 **there was an attic to the garage. If there was an**
8 **attic, the insulation and the drywall ceiling has**
9 **got to come out. If there wasn't an attic space,**
10 **then all that water is directly impacting whatever**
11 **the wall covering is and that water is getting**
12 **onto all the contents in the garage.**

13 **So pretty much, you might leave some**
14 **walls standing, but when you take off the roof,**
15 **replace two trusses, you're gutting the interior,**
16 **you're beyond 50 percent of the cost of that**
17 **garage, and it's better to remove it and replace**
18 **it than try to just rebuild on site.**

19 Q. Okay. So you're explaining how you came
20 to conclude that the garage was economically
21 totalled, correct?

22 **A. Yes.**

23 Q. My question was pertaining to the damage
24 in your report that you document that would have
25 to be repaired as a result of wind, correct?

1 condition, correct?

2 **A. Yes.**

3 Q. And is that your opinion -- and that's
4 all you mention in your report concerning what it
5 would take to restore the garage, right?

6 **A. Yes.**

7 Q. Is that your opinion as far as what
8 would be required to restore the garage in livable
9 conditions since it was a living area?

10 **A. Well, if you have to delineate all the**
11 **damage that resulted from wind before the arrival**
12 **of storm surge, you've got to remove the tree.**
13 **You're going to have to get to the damaged**
14 **sheathing. That means you're going to have to**
15 **take off all of the roof covering. Because when**
16 **you take off some of the shingles, you now have to**
17 **match. You're taking off all the shingles, all**
18 **the underlayment, you're taking off a portion of**
19 **the sheathing, you're replacing two damaged**
20 **trusses. You're not going to sister them in the**
21 **field. You're going to replace those damaged**
22 **trusses. In order to replace those trusses,**
23 **you've got to transport them behind the house.**
24 **You're going to have to have a crane take them off**
25 **the truck, put them onto the house. The expenses**

1 **A. Well, there's a middle ground. I don't**
2 **think that's correct. What I wrote in the report**
3 **was the damage that was directly caused by wind,**
4 **but there's ensuing damage and there's an -- and**
5 **then there is a -- so the direct damage is, okay,**
6 **a portion of the roof and two trusses. There's**
7 **ensuing damage, the water gets in. And then**
8 **finally there's repair and constructability. How**
9 **am I going to repair the sheathing? I have to**
10 **take off the shingles. If I take off the**
11 **shingles, I've got to take off the undamaged**
12 **shingles to match. And if I take off the**
13 **sheathing to get to the trusses, I've got to take**
14 **off all the sheathing over those trusses, not**
15 **simply sheathing that was damaged.**

16 **Example, if the sheathing was damaged on**
17 **one slope and I'm taking out two trusses, I've got**
18 **to take out the sheathing on both slopes to take**
19 **out the truss. So you're going to have to start**
20 **to take out undamaged parts of the building to**
21 **repair the damaged parts of the building. That's**
22 **not directly addressed in this paragraph, but it**
23 **would be guidance to a cost estimator in order to**
24 **affect that repair. When he puts together that**
25 **cost estimate, he's going to be over 50 percent of**

1 **the cost of that garage.**
 2 Q. Are you a cost estimator?
 3 **A. I am not a cost estimator in the**
 4 **insurance industry that uses Simsol and Xactimate.**
 5 **By virtue of being an architect, I use Means and**
 6 **Dodge, which are construction estimate systems,**
 7 **and I'm familiar with them. I don't do it in this**
 8 **arena because you need a cost estimator familiar**
 9 **with Simsol, Xactimate to have a comparable**
 10 **estimate to the insurance estimate.**

11 Q. Have you ever been qualified as an
 12 expert cost estimator in any court, state or
 13 federal?

14 **A. No, but there's -- it's part of my**
 15 **architectural training. I mean, I consider myself**
 16 **to be expert in cost estimation by virtue of being**
 17 **an expert in the field of architecture.**

18 Q. But you've never been qualified in any
 19 court of law as an expert in the field of cost
 20 estimating?

21 **A. No.**

22 Q. Okay. Going back, then, to my question
 23 that I got the long explanation, I've heard about
 24 the sheathing and the trusses, you're addressing
 25 only in this paragraph damage that you think was

1 Q. Okay. And earlier you mentioned in your
 2 answer that the contents, I assume, you never said
 3 the word "contents," but the interior would have
 4 been damaged by the hole in the roof before the
 5 surge got there, correct?

6 **A. Yes.**

7 Q. That's depending upon whether or not the
 8 trees fell on the roof prior to the surge actually
 9 making it into the garage, correct?

10 **A. Yes.**

11 Q. Okay. Did you estimate anywhere in your
 12 report a percentage of damage that was done to the
 13 garage by wind versus the percentage of damage
 14 that was done by water?

15 **A. No.**

16 Q. Okay. Have you developed that opinion
 17 and just not documented it in your report?

18 **A. No. I didn't compare wind and flood. I**
 19 **compared the wind damage. In arriving at a**
 20 **conclusion that the garage was economically**
 21 **totalled, I arrived at a conclusion that the cost**
 22 **of the wind damage would be greater than 50**
 23 **percent the cost of rebuilding the property.**

24 Q. Okay. But you never did conclude what
 25 percentage of the economic damage was done by

1 caused by wind, correct?

2 **A. Yes.**

3 Q. Okay. You did not address what damage
 4 was done to the garage caused by surge, correct?

5 **A. Correct.**

6 Q. Can we agree that there was damage done
 7 to the garage by surge, water, flood, however you
 8 want to characterize it?

9 **A. Yes.**

10 Q. Okay. What damage was done to the
 11 garage by flood, surge or water, however you want
 12 to characterize it?

13 **A. To the height of storm surge, to that**
 14 **still water height, everything was inundated by**
 15 **flood water. Everything in the interior would**
 16 **have already gotten wet from the hole in the roof.**
 17 **I anticipate the removal of the exterior siding**
 18 **due to the flood water condition. Unless you can**
 19 **dry it out below 19 percent moisture and there is**
 20 **no warping of the material, that would have to**
 21 **come out.**

22 Q. Okay. So we can agree that at least
 23 flood or surge did contribute to at least some
 24 costs?

25 **A. Yes.**

1 water as opposed to wind?

2 **A. That's correct.**

3 Q. And you don't have that opinion today?

4 **A. I do not.**

5 Q. And the purpose of you going out and
 6 inspecting the Remel's property was to do what?

7 **A. Determine the extent of damage caused by**
 8 **wind and flood.**

9 Q. Okay. Did you have any preconceived
 10 notions or theories before you even arrived on the
 11 Remel property by way of what caused the damage?

12 **A. By virtue of all the reports I've**
 13 **written, I have an impression that the wind that**
 14 **arrived in that area prior to the rise of storm**
 15 **surge would damage, if not substantially damage a**
 16 **structure. In other words, I would not expect**
 17 **there to be no damage due to wind prior to the**
 18 **arrival of storm surge.**

19 Q. Okay. And when you had this idea in
 20 your head or notion in your head before arriving,
 21 did you have Dr. Fitzpatrick's report from the
 22 Gene Taylor area?

23 MR. GIBSON:

24 Objection.

25 **A. The Taylor property was one of the first**

1 **properties I did in that area. I don't have the**
 2 **date of it in front of me, but it was one of the**
 3 **first properties that I investigated in that area.**
 4 **So very early on by virtue of Dr. Fitzpatrick's**
 5 **reports and the work I had done in that area, I**
 6 **had solidified that opinion.**

7 **MS. JOHNSON:**

8 Q. Okay. Did you refer to that particular
 9 report that we've marked as Exhibit 8 to this
 10 deposition? Did you refer to Exhibit 8 of this
 11 deposition, Dr. Fitzpatrick's report pertaining to
 12 the Gene Taylor property, before going to the
 13 Remel property?

14 **A. I had it in my file because I had done**
 15 **that property first. I didn't pull it up and look**
 16 **at it, no.**

17 Q. Okay. What about the Overstreet report
 18 or the Jade Engineering report, did you have those
 19 in your possession before you did your inspection
 20 on June 10th, 2008?

21 **A. I'd have to go back, pull up the PDF and**
 22 **see when it was transferred to my file. As I**
 23 **recall, I think I went to the site and Mr. Remel**
 24 **had copies of the reports at his location. I**
 25 **reviewed them. And then either he gave me a copy**

1 **and I mailed his back or I was then sent a copy**
 2 **from the law office. But I recall that he showed**
 3 **me at least one of the two reports in the field.**

4 Q. Okay. So in looking at Page 2 of your
 5 report under where we've already discussed about
 6 Mr. Remel showing you the photographs, you have a
 7 report by Jade inspection and Overstreet
 8 Enterprises. Those were reports at least shown to
 9 you on site by Mr. Remel?

10 MR. GIBSON:

11 Objection.

12 **A. As I recall, at least one was.**

13 **MS. JOHNSON:**

14 Q. But you may have obtained the other
 15 through his counsel at a later date?

16 **A. Yes.**

17 Q. And did you have any conclusions from
 18 those reports or did you make any conclusions from
 19 either of those reports, Jade or Overstreet, at
 20 the site visit?

21 **A. No.**

22 Q. Have you since in preparing your report,
 23 which is dated June 16, 2008, drawn anything from
 24 either the Overstreet Enterprises or the Jade
 25 Engineering reports in which you relied upon in

1 coming to your conclusion in this case?

2 **A. Number 1, because it's backed up by**
 3 **Mr. Remel, Overstreet's opinion that it was a**
 4 **large red oak tree as opposed to a pine tree**
 5 **stated in Jade, I presumed it was a deciduous red**
 6 **oak tree.**

7 Q. And back to my question: Does that make
 8 any difference to you whether it was a red oak or
 9 a pine tree with regard to your opinion of the
 10 cause of the destruction of Mr. Remel's home?

11 **A. Not much. In my opinion, a tall pine**
 12 **tree would have severely damaged the building.**
 13 **Certainly a tall red oak tree is going to damage**
 14 **it even further because of the density of the**
 15 **wood.**

16 Q. Okay. And the density of the wood is
 17 determined on how much moisture is absorbed within
 18 the pulp of the tree itself, correct?

19 **A. Mostly it's due to the cellulose and**
 20 **lignin content of the tree. That's why a red oak**
 21 **is considered to be a hardwood, and the pine tree**
 22 **is considered to be a softwood.**

23 Q. But moisture levels within the trees do
 24 contribute to their weight or density, correct?

25 **A. Oh, yes.**

1 Q. Anything else in your report that you
 2 grasped onto and relied upon in coming to your
 3 conclusions in the Remel case?

4 **A. Overstreet was very finicky about his**
 5 **azimuth of direction. He took an actual azimuth**
 6 **of the tree. I considered that in my analysis.**

7 Q. Okay. And the azimuth of direction, he
 8 put down a compass and he concluded the tree fell
 9 in the direction to which he observed it?

10 **A. I don't recall. I presume he had a**
 11 **compass. I don't recall exactly how he did it,**
 12 **but he provided an azimuth direction.**

13 Q. Okay. And it was based on how he found
 14 the tree when he inspected the property, correct?

15 **A. Yes.**

16 Q. Do we know whether or not that tree
 17 could have been moved by surge after it fell?

18 **A. I can't preclude it, no.**

19 Q. And, in fact, surge can come in after
 20 some fell and move things about, correct?

21 **A. Yes.**

22 Q. Okay. And, in fact, did you observe
 23 when you went on Leopold Street a number of
 24 properties where the house or the roof itself had
 25 been shifted presumably due to surge?

1 MR. GIBSON:

2 Objection.

3 **A. I don't recall Leopold Street. I can**
4 **say that I've seen that at other locations. The**
5 **shape and the weight of the house are susceptible**
6 **to buoyancy. I have a hard time making in my mind**
7 **that tree float once it's fallen.**

8 **MS. JOHNSON:**

9 Q. Why is that?

10 **A. The big problem is is the rate of the**
11 **rise of the surge. Before you get enough**
12 **hydrostatic pressure underneath that tree, which**
13 **essentially is a cylinder laying on end, you're**
14 **going to have enough water on top of it working**
15 **against that force. I'm not calculating it out,**
16 **but I have a hard time making that tree move due**
17 **to surge.**

18 Q. Okay. And before we sat here today,
19 you've never calculated the hydrostatic pressure
20 or the hydrostatic force on the tree itself?

21 **A. No.**

22 Q. Okay.

23 **A. The other factor is that the tree is**
24 **uprooted. A portion of that root is still -- the**
25 **roots are attached to the soil. The tree is not**

1 **going to be able to free float because essentially**
2 **it's still anchored to the ground at its roots.**
3 **We call that uprooting. It uprooted and fell.**
4 **But some of those roots, if anybody's tried to**
5 **take an -- after Katrina take their tree in their**
6 **yard out, it's a pain to get out all the roots to**
7 **get that tree out of there unless you simply cut**
8 **it off and leave the stump sitting in your yard.**
9 **I have trouble making that tree move due to storm**
10 **surge.**

11 Q. Could the tree not still be connected at
12 the root level and shift any number of degrees,
13 still be connecting as a compass would when you're
14 determining azimuth?

15 **A. Again, I can't say, no. It's got to**
16 **overcome -- the crown is already sitting on the**
17 **roof. As it tries to float, you're going to have**
18 **the friction of the branches resisting sway. And**
19 **then before you get enough -- because -- the crown**
20 **branches provide friction which will resist the**
21 **sway, delay the time when the tree can achieve**
22 **buoyancy. And by the time it might even achieve**
23 **buoyancy, the whole tree is underwater and the**
24 **window of opportunity has passed. I still can't**
25 **get that tree moving.**

1 Q. You can't preclude that the tree may
2 have shifted through the surge or by the surge or
3 as a result of the surge after it fell?

4 **A. If we're talking hydrostatic pressure**
5 **alone, I'm confident it didn't. We'd have to have**
6 **some current velocity component or some wave**
7 **component, which I don't believe was on that site.**

8 Q. So from the beginning of your answer
9 when you said you can't address that because you
10 haven't calculated buoyancy now to the end where
11 you're now confident that tree did not move,
12 you've convinced yourself that possibly, no, that
13 tree did not move; is that correct?

14 **A. Yeah. I mean, as we went through the**
15 **exercise for the first time, yeah, I'll stand by**
16 **what I just said. I haven't done any**
17 **calculations; but qualitatively, I've talked**
18 **myself through all the possible scenarios. I**
19 **don't think that large red oak tree moved between**
20 **the time it fell and the time Mr. Overstreet took**
21 **his compass reading.**

22 Q. And you haven't calculated or seen any
23 evidence as far as what the wave action was at the
24 Remel property from the flood, surge/water?

25 **A. No. There is no measurement by anybody**

1 **at the site at the time of the wave activity. I'm**
2 **just going by everything I've read and understand**
3 **might have occurred at that position.**

4 Q. Did you read the report of Dr.
5 Fitzpatrick in the Gene Taylor property?

6 **A. Yes. I think he allows for up to a**
7 **two-foot wave height. Let me find it.**

8 Q. Page 8.

9 **A. Yes. He allows for a one to two-foot**
10 **wave action, but this is at the Coast. And even**
11 **that, as the waves break across the seawall,**
12 **they're going to break. As they come further**
13 **inland and they move uphill, they're going to**
14 **shoal. They're going to lose kinetic energy.**
15 **They're going to hit a point where there's a**
16 **height restriction to the development of the wave**
17 **compared to the height of the still water. Those**
18 **waves are going to break.**

19 **What we have back by the Remel property**
20 **is broken waves. They've broken due to height**
21 **restriction, they've broken due to impact with**
22 **trees and houses as they come up the road, so to**
23 **speak. And I'm not going to have any wave**
24 **activity to speak of. Maybe a foot of wave**
25 **activity at the Remel residence.**

1 **The problem is that a foot of wave is**
 2 **measured from trough to crest. And about 50**
 3 **percent of that wave, that one-foot wave, is below**
 4 **the still water line. So now I'm down to six**
 5 **inches of wave height above the still water line.**
 6 **That's not going to cause much.**

7 Q. Okay. Is Dr. Fitzpatrick competent and
 8 qualified to determine an estimate for wave height
 9 at a property?

10 MR. GIBSON:

11 Objection.

12 **A. I would defer to him. I consider myself**
 13 **competent as a civil engineer because coastal**
 14 **hydrology is part of civil engineering. Every**
 15 **meteorologist I've been involved with on both**
 16 **sides of the fence in Katrina disputes has weighed**
 17 **in on some aspect of coastal hydrology, whether**
 18 **they learned it by formal training or they learned**
 19 **it during Katrina.**

20 **A man with a Ph.D is competent to read**
 21 **scientific treatises and form his opinion on that**
 22 **matter. Because the waves are -- wind-stressed**
 23 **waves caused by wind so the development of that**
 24 **wave falls under meteorology.**

25 **MS. JOHNSON:**

1 regard to your opinions, the report issued by Dr.
 2 Fitzpatrick regarding Gene Taylor's property or
 3 the opinions of Dr. Fitzpatrick regarding the
 4 Remel property?

5 **A. Remel property.**

6 Q. And all of your opinions that are set
 7 forth in what's been marked as Exhibit 4 are based
 8 on Dr. Fitzpatrick's opinions at the Gene Taylor
 9 property, correct?

10 **A. Yes.**

11 Q. Okay. And you rely at least in some
 12 part of your report on Dr. Fitzpatrick's opinions
 13 in concluding ultimately that this property on
 14 Leopold Street that the Remels own was damaged by
 15 wind prior to surge, correct?

16 **A. Yes.**

17 Q. And along that, I see the timeline that
 18 you have copied in your report of Page 3 from Dr.
 19 Fitzpatrick's report attached as Exhibit 8 at Page
 20 8; is that correct?

21 **A. That's correct.**

22 Q. Do you expect that the sustained wind at
 23 Gene Taylor's house on the corner of Leopold and
 24 Beach Boulevard would be different from the
 25 sustained wind that would be effective at the

1 Q. Okay. Going back to my question: Do
 2 you believe Dr. Pat Fitzpatrick is qualified and
 3 competent to give an opinion as far as expected or
 4 anticipated wave height or wave action at a
 5 property?

6 MR. GIBSON:

7 Objection, asked and answered.

8 **A. Do I believe so? Yes.**

9 **MS. JOHNSON:**

10 Q. Okay. Thank you. And do you believe he
 11 was on point with regard to Gene Taylor's wave
 12 action, his opinion as far as being wave action at
 13 the Gene Taylor property of one to two feet
 14 superimposed on the surge?

15 **A. Yes.**

16 Q. Okay. So you agree with Dr. Fitzpatrick
 17 in that regard?

18 **A. Yes.**

19 Q. Have you seen Dr. Fitzpatrick's report
 20 with regard to the Remel property?

21 **A. No.**

22 Q. Were you aware that Mr. Fitzpatrick
 23 issued a report pertaining to the Remel property?

24 **A. No.**

25 Q. What would be more pertinent to you with

1 Remel property on Leopold Street?

2 **A. I expect it, yes. If there's any**
 3 **difference, it would be explained by Dr.**
 4 **Fitzpatrick, otherwise I would expect it to be the**
 5 **same.**

6 Q. Okay. Would you also expect the wind
 7 gusts to be the same, the exposure of the Gene
 8 Taylor property wind gusts to the Remel property
 9 to be the same?

10 **A. I expect it to be the same. There's a**
 11 **caveat, and that is, as we move inland and we have**
 12 **roughness, surface roughness, arguably we're going**
 13 **to have slightly a drop in the wind speed as we**
 14 **move inland. That's going to be compensated for**
 15 **by an increase in turbulence as we move inland.**
 16 **That's going to have virtually the same affect in**
 17 **terms of behavior of the building structure as**
 18 **it's attacked by wind.**

19 **So this close to the Coast, if I was a**
 20 **designer and beholding the ASCE 7, looking at**
 21 **Exposure C versus, let's say, Exposure B, and I'm**
 22 **trying to get past the building department on that**
 23 **exercise of developing a wind pressure based on**
 24 **exposure as it plops into the equation, I'm going**
 25 **to worry about that.**

1 **In this case, I'm going to go strictly**
2 **by the wind speeds provided by the meteorologist.**

3 Q. Okay. And that's what you, in fact, did
4 with regard to the Remel property, correct?

5 **A. Yes.**

6 Q. Does the exposure between C and B differ
7 between Gene Taylor's property and the Remel
8 property?

9 MR. GIBSON:

10 Exposure between what, C and B?

11 MS. JOHNSON:

12 C and B.

13 **A. It does. I don't know if it does**
14 **significantly in terms of the distance to move**
15 **from one exposure category as per ASCE 7 to**
16 **another exposure category of ASCE 7, which is for**
17 **design purposes.**

18 **Dr. Fitzpatrick points out in his**
19 **reports that there is down draft activity which**
20 **will bring wind gusts at a higher elevation down**
21 **lower to the surface. And based on that**
22 **meteorological fact that he deals with in**
23 **Hurricane Katrina, I don't go through the exercise**
24 **of downplaying a wind speed over a 1,500 foot**
25 **distance as I move inland.**

1 **MS. JOHNSON:**

2 Q. Which of the two, C or B, is the
3 exposure for coastline?

4 **A. The exposure for coastline that we use**
5 **here is Exposure C.**

6 Q. Would you expect that the Remel property
7 would also be Exposure C, being half a mile from
8 Gene Taylor's property?

9 **A. Allow me, I'm going to be finicky in my**
10 **answer because the whole exposure discussion has**
11 **changed between ASCE 7 '98 and ASCE 7 '05.**

12 **Previously -- well, originally we had an**
13 **Exposure D. We've gotten rid of the Exposure D**
14 **for the hurricane coastline based on a paper that**
15 **said that the roughness of the wave activity was**
16 **going to increase the drag coefficient, lower the**
17 **wind speed just about the same as it would**
18 **onshore. They chunked Exposure D. That's still**
19 **on the books in ASCE 7, but there's newer research**
20 **which says that there is a reduction in the drag**
21 **coefficient due to a foam layer that occurs as**
22 **opposed to the height of waves. There's a foam**
23 **layer, and there is a speed up of wind as it comes**
24 **off the water.**

25 **So despite the fact I'm an engineer that**

1 **uses ASCE 7, there's science out there that says**
2 **ASCE 7 for design purposes may not explain what**
3 **happens in a hurricane.**

4 Q. I'm not asking about design purposes.
5 I'm asking as far as exposure that you, as an
6 engineer, would look at as far as determining what
7 a property is subject to by way of wind speed.

8 **A. Well, what I'm trying to say is that as**
9 **an engineer, all I've got going for me is to go**
10 **back to ASCE 7, and that discussion may be moot.**

11 **They also changed from a strict table**
12 **that has A, B, C now to another table where we**
13 **analyze surface roughness. And after we analyze**
14 **surface roughness, we then enter the table A, B,**
15 **C.**

16 **All that said -- well, I'm sorry. This**
17 **is a little convoluted. The problem is is that**
18 **all the information I have as an engineer to bring**
19 **to the table is for design. Design is inherently**
20 **conservative and not necessarily the real world**
21 **what happened on site. That's why I defer to Dr.**
22 **Fitzpatrick. If he tells me on site the wind**
23 **speed was this, I presume he's already considered**
24 **all these exposures, and I use that wind speed**
25 **that he gives me.**

1 Q. Okay. So you didn't figure out the
2 surface roughness at the Remel property in coming
3 to your conclusion, correct?

4 **A. That's correct.**

5 Q. And you're relying on Dr. Fitzpatrick's
6 opinion as far as the wind speed at the Remel
7 property, correct?

8 **A. Correct.**

9 Q. Any you've never been qualified as an
10 expert in coastal hydrology; is that correct?

11 **A. I've never been qualified as an expert**
12 **in coastal hydrology. I consider it inherent in**
13 **civil engineering.**

14 Q. Okay. But in any court of law, nobody's
15 ever qualified and no court has accepted you as an
16 expert in coastal hydrology?

17 **A. That's correct.**

18 Q. You didn't calculate the drag
19 coefficient at the Remel property either?

20 **A. No.**

21 Q. You relied upon Dr. Fitzgerald to do
22 that?

23 **A. Dr. Fitzpatrick, yes.**

24 Q. Sorry, Fitzpatrick.

25 **A. Allow me to say this as well, if I may,**

1 in answer to the previous question.

2 Q. Yes.

3 **A. As the surge is rising up and it's**
4 **covering everything down slope of the Remel**
5 **property, the distance between the Remel property**
6 **and the coastline as you would measure Exposure B**
7 **or C is changing because that coastline is now**
8 **moving towards the Remel property. Things that**
9 **previously provided surface roughness that would**
10 **suggest Exposure B are now underwater. Since**
11 **they're underwater, what previously was Exposure B**
12 **surface roughness is now C.**

13 **So as that water rises to the Remel**
14 **residence, you have shortened the distance between**
15 **the Remel residence and the coastline which you**
16 **wouldn't do in design, but you would have to do in**
17 **the actual analysis of Hurricane Katrina.**

18 Q. To address the Remel property pre-storm
19 surge coming in -- and I don't think I ever got an
20 answer to my question. I got the explanation,
21 which I do not need again. I understand and I'll
22 accept your explanation. We've talked about the
23 exposure of the Gene Taylor property being
24 Exposure C, coastline. Would you agree with me it
25 would not differ for the Remel property given that

1 **A. That's correct. But I want to say is**
2 **that within a certain -- example, if the Remel**
3 **property, even though it was further inland, if it**
4 **was 200 feet behind the Gene Taylor residence,**
5 **that's not going to matter to the ASCE 7 chart.**
6 **They're going to be in the same exposure category.**
7 **If I go back beyond 1,500 feet or some other**
8 **distance, it will matter. I need the books in**
9 **front of me to give you that answer.**

10 Q. And just so we narrow it down -- you
11 brought up D, which we're not talking about -- the
12 two differences in the exposure ought to be C,
13 coastline, or B; can we agree to that, and you
14 just can't tell me without referring to the book
15 whether it was C or B at the Remel property?

16 **A. Yes.**

17 Q. Okay. Thank you.

18 Let's take a break.

19 (Off the record.)

20 MS. JOHNSON:

21 Q. Do you know where the tree was situated
22 in relation to the actual home? And when I say
23 "the tree," I'm referring to the red oak tree in
24 the Remel home.

25 **A. It was located at the southwest corner**

1 it's a half a mile up the road?

2 MR. GIBSON:

3 Objection. I didn't quite -- go ahead
4 and answer the question.

5 **A. Yeah. The reason I'm hedgy is I feel a**
6 **lot -- you know, that's why I got the books on the**
7 **shelf. I don't have ASCE 7 with me. And then the**
8 **question is do you want me to use ASCE 7 today or**
9 **ASCE 7 when the building was constructed. Because**
10 **when they constructed that building and it met**
11 **building code, they didn't use today's ASCE 7**
12 **which has changed the definition of exposures.**

13 MS. JOHNSON:

14 Q. Let me clarify. I don't care about when
15 it was built, and I don't care about today.
16 August 29th, 2005, was the exposure at Gene
17 Taylor's residence the same exposure that was at
18 the Remel property? Simple as that.

19 MR. GIBSON:

20 Exposure to wind?

21 **A. I need ASCE 7 to tell you.**

22 MS. JOHNSON:

23 Q. Okay. So you don't know as you sit here
24 today; you would have to refer back to periodical
25 ASCE 7?

1 **of the house.**

2 Q. Southwest corner prior to falling?

3 **A. Yes.**

4 Q. In other words, that's where the root
5 ball was situated?

6 **A. Yes.**

7 Q. Okay. You mentioned something earlier
8 about --

9 **A. I'm sorry. In Overstreet, he has the**
10 **southeast corner of the home.**

11 Q. Okay. So we're looking at a totally
12 different corner of the home, correct?

13 **A. Yes.**

14 Q. And what are you correcting now with the
15 red pen?

16 **A. I'm sorry. That's an exhibit. I won't**
17 **correct it. I was going to correct the southwest**
18 **to southeast. That's a typo. My analysis follows**
19 **the Overstreet report because I have -- I have it**
20 **collapsing to the northwest, which presumes that**
21 **it initiated at the southeast corner. Somehow as**
22 **a typo, I put southwest instead of southeast.**

23 Q. What page of your report are you
24 referring to?

25 **A. Page 4.**

1 Q. Okay. At what area?

2 **A. In the Overstreet report.**

3 Q. Okay. I see it. So it's your testimony
4 that the large red oak tree would have been
5 located at the southeast corner of the house?

6 **A. Yes, which is consistent with it
7 collapsing to the northwest.**

8 Q. Okay. And where does Mr. Overstreet
9 ever say that the tree collapsed toward the
10 northwest or the northeast? I'm sorry. What did
11 you just say?

12 **A. If you look at Page 3 of the Overstreet
13 report, he has the tree located at the southeast
14 corner and he has it falling to the northwest
15 direction.**

16 Q. Meaning it was falling in the direction
17 of northwest?

18 **A. Yes. It fell from southeast to
19 northwest.**

20 Q. Okay. Now, look at Page 5 of your
21 report, the bottom paragraph. You have the
22 direction based on the Overstreet report giving
23 the precise direction of tree fall at 300 degrees
24 azimuth, or west northwest; would you agree with
25 me?

1 **A. Yes. That's because from the tree
2 trunk, the root ball, to the crown, it's in a west
3 northwest direction, meaning that the wind came
4 from east southeast.**

5 Q. Okay. So you're adding that it was in a
6 west northwest direction as opposed to
7 Mr. Overstreet said it fell northwest?

8 **A. He said northwest, but he also took a
9 specific azimuth of 300 degrees. That more
10 specifically is west northwest. So when he said
11 to the northwest, he's talking the northwest
12 quadrant. When he says 300 azimuth, that more
13 precisely is west northwest direction.**

14 Q. Okay. So you took the 300 degrees
15 azimuth portion and concluded west northwest
16 direction. And it might sound like we're
17 splitting hairs, but that is a different
18 direction, is it not, would you agree, west
19 northwest with just northwest?

20 **A. Yes.**

21 Q. Okay. And which direction would the
22 wind be coming if the tree fell northwest as
23 opposed to west northwest?

24 **A. From southeast.**

25 Q. Okay. Earlier you had mentioned that

1 Dr. Fitzpatrick took into account a Stennis
2 timeline. Is that the same thing as World Winds
3 that you also mentioned?

4 **A. I'm sorry. What page am I on?**

5 Q. It was in some prior testimony you gave.
6 I don't think it's necessarily in you -- it was in
7 one of your answers. In one of the answers, you
8 were referring to Dr. Fitzpatrick's report where
9 he was relying upon a Stennis timeline. Is the
10 Stennis line you were referring to the World
11 Winds, Stennis World Winds timeline?

12 **A. Yes. I don't think I would have said
13 that he relied on the Stennis time lime. He
14 relied on a timeline from World Winds, which has
15 its operational location at Stennis. When we talk
16 the Stennis timeline, we're generally talking the
17 first one that came out of the barrel from Stennis
18 produced by World Winds.**

19 **I never said that Pat Fitzpatrick relied
20 on that. What he relies on is the second
21 generation of World Wind timelines which consider
22 revised H winds data and allows the computer
23 algorithm to be corrected for flood inundation
24 over land as opposed to stopping at the Coast.**

25 Q. Okay. So in Dr. Fitzpatrick's report

1 that's been marked as Exhibit 8, when you're
2 referring to the World Winds data, the timeline,
3 that would be the second generation; is that your
4 testimony?

5 **A. No. I don't have any testimony as to
6 this particular report. This particular report, I
7 can't tell you which one he used. In
8 conversations with him, my presumption has always
9 been that he had a rerun second generation ADCIRC
10 model that he used in reference to his
11 meteorological reports. You'd have to ask him
12 specifically.**

13 Q. Okay. And in your report, do you ever
14 mention the Stennis timeline or World Winds?
15 MR. GIBSON:

16 Objection. The document speaks for
17 itself.

18 **A. Page 3 of my report, I include and it's
19 shown in Attachment C the original Stennis
20 wind/flood timeline from the ADCIRC. And I state,
21 it is enclosed for continuity with other NBH
22 reports. In other words, if I pull it out, I'm
23 going to be asked where did it go.**

24 **But my next sentence is, the Fitzpatrick
25 report uses revised H winds data and an updated**

1 **World Winds ADCIRC model, which means that I'm no**
 2 **longer relying on the original Stennis data. I'm**
 3 **relying on the updated data which Fitzpatrick used**
 4 **in his report.**

5 **MS. JOHNSON:**

6 Q. And the reason being, can we agree, is
 7 the original Stennis data is junk as it is now,
 8 junk science, throw it away if you have it?

9 **MR. GIBSON:**

10 Objection.

11 **A. Junk science presumes that it's based on**
 12 **bad methodology. It's not. It's based on the**
 13 **data that was available from the hurricane**
 14 **research division at the time it was published.**

15 **If this chart is junk science, then the**
 16 **initial data provided by the hurricane research**
 17 **division is junk science. I wouldn't say that.**
 18 **It was preliminary data, the best that was**
 19 **available.**

20 **MS. JOHNSON:**

21 Q. Okay. I may have rephrased that wrong,
 22 but it was preliminary, best that was available at
 23 that time, which was soon thereafter Katrina;
 24 however, it's not something you would rely upon
 25 today, correct?

1 **A. I've relied upon it in cases where I've**
 2 **had nothing else, and something is better than**
 3 **nothing, because it's not totally inaccurate.**
 4 **It's just not as precise as better data. Where**
 5 **there is no other data available, I have said in**
 6 **my reports, I am defaulting to what is available**
 7 **in public domain, and I've used it.**

8 Q. Have you ever given any testimony where
 9 you said you would throw that out if anybody was
 10 relying upon the initial -- not talking about the
 11 second generation -- the initial World Winds
 12 preliminary information out of Stennis?

13 **A. Have I said to throw it out?**

14 Q. That you would throw it out, personally.
 15 Have you ever testified to that in any prior
 16 deposition testimony?

17 **A. If I have, it's only because I had**
 18 **something better in hand.**

19 Q. Okay. So as we sit here today, you
 20 still think data from that initial preliminary
 21 Stennis World Winds report is accurate and
 22 something you can rely on as an expert to base an
 23 opinion on?

24 **MR. GIBSON:**

25 Objection.

1 **A. You know, it's not as accurate as better**
 2 **data. It's not totally inaccurate data, okay?**
 3 **And my point being that if I have nothing else**
 4 **available -- and I clearly state as a caveat that**
 5 **this is the best data I have. That signals to**
 6 **everybody that it's not perfect data. I am using**
 7 **it as the best data I have, then, yeah I would go**
 8 **ahead and use it if I have nothing else.**

9 **MS. JOHNSON:**

10 Q. Is it reliable data?

11 **A. It's reliable within a margin of error.**
 12 **For example, my understanding is the ARA data**
 13 **still used by FEMA and HAZUS relied on the initial**
 14 **H winds data. I don't believe that has ever been**
 15 **corrected with ARA and FEMA.**

16 **So the data is not perfect. It's not**
 17 **the best data. But if it's all you've got, you're**
 18 **not going to ignore it. You're going to try to**
 19 **tease the good information out, leave behind the**
 20 **bad information, and use what's still relevant.**

21 Q. Is the data that's in the initial World
 22 Wind Stennis report reliable? That was my
 23 question. Whether or not anybody else uses it or
 24 whether they discredit it, which I dispute, is it
 25 reliable?

1 **MR. GIBSON:**

2 Objection, asked and answered.

3 **A. Well, there's one percent reliability**
 4 **and 100 percent reliability. Is it 100 percent**
 5 **reliable? No.**

6 **MS. JOHNSON:**

7 Q. I'm not asking 100 percent accurate. Is
 8 there any data out there 100 percent accurate?

9 **A. Well, no. That's my whole point.**

10 Q. I'm asking in a court of law, would you
 11 base an opinion solely on the World Wind data,
 12 preliminary version of it?

13 **MR. GIBSON:**

14 Objection.

15 **A. I need to give a two-part answer, and**
 16 **I'll be very quick. In this case, I would not**
 17 **rely on it because it's less reliable than the**
 18 **other information provided by Dr. Fitzpatrick. So**
 19 **I presume you're asking in a more general sense**
 20 **for other cases as opposed to this case.**

21 **And in a more general sense, I would**
 22 **want to go back to each report and see what else**
 23 **was available. If nothing, nothing, period, was**
 24 **available except this particular hindcast data**
 25 **report, I would use it with the caveat that I**

1 **would identify it as my confidence level is not**
 2 **very high, but it's reliable in the sense that the**
 3 **data is generally correct.**
 4 **MS. JOHNSON:**
 5 Q. Is that data generally accepted as
 6 reliable within your profession currently?
 7 **A. I can't say. I mean, the problem**
 8 **becomes it's a moot scenario. At this point**
 9 **today, I don't anticipate going anywhere and**
 10 **writing a report where I'm stuck relying on the**
 11 **very first preliminary data that came out. But**
 12 **given that data was by a computer model that**
 13 **totally relied on government data from the**
 14 **hurricane research division, although its**
 15 **reliability may not meet an academic dissertation,**
 16 **I would presume that data would meet some level of**
 17 **scrutiny because it was provided by the government**
 18 **as the best available data.**
 19 **Time has gone by. It's no longer the**
 20 **best available data, my confidence level in that**
 21 **data is such that I would no longer use it unless**
 22 **I had nothing else, but I can't give you an**
 23 **instance where I would have nothing else. So I**
 24 **have the luxury of saying I would not use the data**
 25 **because there's other data available.**

1 Q. Okay. And, in fact, the government has
 2 come out and said that's no longer available data,
 3 there's better and that's what you should be
 4 relying on, correct? I think you mentioned
 5 earlier that you didn't think FEMA said that, but
 6 --
 7 **A. No, no, no. We're differentiating two**
 8 **things. The National Weather Service produces the**
 9 **H wind data. FEMA uses data from a private**
 10 **company called ARA, which I believe their**
 11 **algorithm also relies on the H wind data.**
 12 **My understanding of their initial report**
 13 **to FEMA is that ARA also used the early H wind**
 14 **data to get their first report to FEMA.**
 15 **So the old data which has been updated**
 16 **is all out there in government service. It's no**
 17 **longer relied upon, but it's still available.**
 18 Q. Okay. That was my question there at the
 19 end, it's no longer relied upon. With regard to
 20 your initial inspection of the property itself,
 21 not the actual remnants -- we've already gone over
 22 that -- but did Mr. Remel give you any information
 23 pertaining to the construction of this house? Not
 24 the garage. Let's talk about just the house for a
 25 while. It looks like it's at Building Description

1 Page 3, bottom of your report.
 2 **A. Yeah. The information that he provided**
 3 **under building description was the information**
 4 **that I received from him.**
 5 Q. Okay. And that all would be contained
 6 in that one paragraph beginning at Page 3, ending
 7 at Page 4 of your report?
 8 **A. Yes.**
 9 Q. And that's all the information you had
 10 pertaining to the construction of the house
 11 itself?
 12 **A. Yes.**
 13 Q. And you had no information provided from
 14 him pertaining to the construction of the garage,
 15 correct?
 16 **A. Correct.**
 17 Q. Other than that it's a single-story,
 18 detached garage shop building located on a
 19 separate slab on grade foundation?
 20 **A. Yes.**
 21 Q. Okay. And at the time you inspected,
 22 both the garage and the home had been rebuilt?
 23 **A. Yes.**
 24 Q. Okay. Is it important for you in
 25 determining what caused the damage or destruction

1 of a home to know particulars about the
 2 construction of it?
 3 **A. Whatever you can get your hands on is**
 4 **better, surely.**
 5 Q. And how would you get your hands on that
 6 information?
 7 **A. In this case, I'm getting the**
 8 **information firsthand from the homeowner.**
 9 **Previously, I tried to go down to the buildings**
 10 **department, but all their information is**
 11 **disheveled because they went through Katrina.**
 12 **The only other possibility would be if**
 13 **there was a general contractor that had**
 14 **information that I can get original plans because**
 15 **he still had them on his shelf. Except for that,**
 16 **I don't have any other information available.**
 17 Q. Do you know who the general contractor
 18 was for this home 27 years ago?
 19 **A. No.**
 20 Q. Did you seek out that information?
 21 **A. No. I presumed that if it was known, it**
 22 **would be provided to me. It was not provided to**
 23 **me. I'm not a private investigator. If I can't**
 24 **get the information, I don't have it.**
 25 Q. And when you say you presumed, did you

1 ask if it was available?

2 **A. I always ask. I can't tell you**
3 **factually I recall asking, but I always ask are**
4 **there any plans that I can use.**

5 Q. Okay. And who would you ask that of,
6 the owner or the attorney?

7 **A. I would have asked that of the owner**
8 **during the site interview.**

9 Q. And you don't recall whether Mr. Remel
10 had any plans?

11 **A. I don't know if he had any plans. I**
12 **know he wasn't able to furnish them in time for**
13 **the report.**

14 Q. Okay. And you, of course, I take it, no
15 longer went down to the building department to try
16 to get any information, at least at the time you
17 did the inspection on Remel?

18 **A. Correct.**

19 **(Off the record.)**

20 **MR. GIBSON:**

21 **Let me make this call.**

22 **MS. JOHNSON:**

23 **Okay.**

24 **(A recess was taken.)**

25 **MS. JOHNSON:**

1 ceiling joists and rafters?

2 **A. It would in an analysis beyond what I**
3 **would have been able to do otherwise. In other**
4 **words, even if I knew it was stick built or**
5 **trusses, it wouldn't have made a difference in the**
6 **analysis I performed.**

7 Q. And why do you say that?

8 **A. Well, in fact, if we're talking about a**
9 **tree trunk falling on a truss as opposed to a**
10 **stick built rafter, if the truss was a two-by-four**
11 **member -- if the truss had two-by-four members and**
12 **the stick built rafters were two-by-sixes and**
13 **two-by-eights, in fact, the stick built would have**
14 **been stronger than the truss in terms of the**
15 **individual member.**

16 Q. And why do you say that? Just looking
17 at each individual joists or looking at each
18 individual rafter?

19 **A. Based on the cross-sectional area of the**
20 **truss member or the rafter. What we were looking**
21 **at in this case was not whether the roof was**
22 **damaged before it collapsed, but the issue of the**
23 **collapse of the building to the ground in itself.**

24 **So to -- there was no attempt to do a**
25 **detailed analysis of the progressive failure to**

1 Q. Before we took a break, we were talking
2 about the information that you had with regard to
3 the Remel home and the Remel garage. Did you have
4 any particular information pertaining to the type
5 of roof that was on the actual house itself? And
6 I would include photographs with that as well.

7 **A. Other than that it was a shingled roof,**
8 **no.**

9 Q. Okay. What type of shingled roof,
10 gabled or hip?

11 **A. I'm under the impression it was hip, but**
12 **I don't have a photograph that shows that.**

13 Q. Okay. Architectural shingles or
14 asphalt?

15 **A. I don't know.**

16 Q. Do you have any information as to the
17 construction of the roof itself, whether it was
18 constructed using trusses or constructed using
19 regular rafters and joists?

20 **A. No. If it was stick built or**
21 **pre-engineered trusses, I do not know.**

22 Q. Does it matter in determining the amount
23 of damage that could be sustained from a tree fall
24 on a roof whether or not it is constructed of
25 trusses as opposed to constructed with regular

1 **stop at different points in time and tell you what**
2 **was broken. It was an analysis that was done to**
3 **determine if the building was weakened and then**
4 **eventually fell due to the collapse.**

5 Q. Would not the type of construction
6 assist you in determining whether or not the
7 building was weakened?

8 **A. Yeah. If I had a good set of plans,**
9 **then I would know what's called the resistance**
10 **factors of the building. I would then have to**
11 **know more information about the tree to know the**
12 **load factor or the impact. An impact load is 100**
13 **percent normal live load.**

14 **So there's a lot of stuff you can look**
15 **at, but the components of the building would only**
16 **be some of the information I would need to perform**
17 **that higher level analysis. Not having all that**
18 **information, it wouldn't do any good to have**
19 **additional information about the building because**
20 **the resistance of the building is only to be**
21 **compared to the load factors, and I had no**
22 **additional information on the load factors.**

23 Q. And you were not doing that higher level
24 of analysis as you just described?

25 **A. No, I didn't. And it would not be**

1 **possible. There's more information needed to**
2 **achieve that level of analysis.**

3 Q. Okay. And you didn't determine impact
4 load from the tree onto the roof, correct?

5 **A. No, I did not.**

6 Q. Okay. And you mentioned that you would
7 need to know more about the factors of the tree.
8 For example, the size of the tree, correct?

9 **A. Overstreet, I think, had some**
10 **information concerning the -- the circumference of**
11 **the tree at its base was 86 inches circumference.**
12 **He says that. I don't recall any information as**
13 **to height or as to any details about the crown of**
14 **the tree.**

15 Q. Okay. And you don't know what portion
16 of the tree initially impacted with what portion
17 of the house, do you?

18 **A. The photographs I had seen show the**
19 **crown over the house. They weren't detailed**
20 **enough for me to see exactly what point on the**
21 **house versus what point on the tree trunk did the**
22 **tree fall on the house. From the photos I've**
23 **seen, it does look like there was impact between**
24 **the trunk and the tree and not simply the crown**
25 **and the tree.**

1 height of the tree, would be less force upon
2 impact than it would if the tree was a little
3 further out and the impact occurred later in the
4 trajectory towards the house?

5 **A. It's more complicated than that. If the**
6 **tree is further away from the house, I have a**
7 **greater momentum giving me a greater velocity --**
8 **and velocity squared leads to kinetic energy -- of**
9 **the tree falling on the house.**

10 **Some mitigation by the branches which**
11 **will act as shock absorbers which will spread the**
12 **load over different parts of the house when it**
13 **hits as opposed to if the tree trunk hit the house**
14 **and I had more kinetic energy transfer from the**
15 **tree trunk directly onto a portion of the house.**
16 **More likely going to have impact that ruptures**
17 **members, and that will lead to different levels of**
18 **failure throughout the building. I don't know any**
19 **of that detailed information. I do know a big,**
20 **large, red oak tree fell on top of the house and**
21 **the tree collapsed in the same direction as the**
22 **tree fall.**

23 Q. Okay. And do you happen to know how you
24 determine force, what the equation is?

25 **A. The one I was referring to is kinetic**

1 Q. Okay. At what level was that impact
2 that you could discern from the trunk and the
3 house?

4 **A. The photos I saw only indicated that the**
5 **tree fell on top of the property with both the**
6 **crown and a portion of the trunk on top of the**
7 **roof. As to any dimensions, there was too much**
8 **what we call busyness in the photograph to really**
9 **get any scale off it.**

10 Q. And busyness being other debris?

11 **A. There was other debris and just the**
12 **shades and shadows that were on the photograph**
13 **from the crown and the branches of the tree**
14 **itself. It just -- it masked most of the trunk so**
15 **you couldn't tell.**

16 Q. Okay. Do you know how far the tree was
17 situated, the trunk of the tree from the house
18 before it fell?

19 **A. No.**

20 Q. Would that have anything to do with the
21 amount of force?

22 **A. Yes.**

23 Q. Okay. In other words, would you agree
24 with me if the tree was closer to the home and it
25 was falling towards the house, depending upon the

1 **energy, that its force is one-half MV^2 , one-half**
2 **the mass of the tree times velocity squared.**

3 Q. And whether or not, would you at least
4 agree with me, that the distance from the house of
5 the tree in falling that will at least affect the
6 velocity aspect of that equation that you gave me?

7 **A. Yes. But what I'm trying to tell you**
8 **gets complicated, is that if the trunk hits it --**
9 **the trunk is going to hit it first being closer,**
10 **unless it's so far back that the trunk never hits**
11 **it and only the crown of the tree hits it. If the**
12 **trunk hits it first, we're going to have a**
13 **relatively smaller velocity than if the top of the**
14 **crown hits it first because of the acceleration of**
15 **gravity as it comes down.**

16 Q. That was my question.

17 **A. But the mass of the tree hitting it as**
18 **opposed to the dispersion of the mass by the crown**
19 **of the tree, I can't tell you that equalizes each**
20 **other or not. I can't tell you with what I know**
21 **which is a worse scenario, the trunk hit it first**
22 **and went through the roof like a knife through**
23 **butter, as I've seen in Slidell with slash pine,**
24 **or if the crown of the tree hit it with a larger**
25 **impact in terms of the square footage of the roof,**

1 **but in more dispersed force because the branches**
2 **acted as shock absorbers.**

3 Q. Do you know how high the first level of
4 branches were on this particular tree?

5 **A. No.**

6 Q. Okay. In looking at the photos that you
7 have attached to your report and those on Exhibit
8 5, can you point out for me the best photograph
9 you have of the tree on top of the roof?

10 **A. 1945 and 1950 are two pictures that**
11 **best exemplify how the tree fell on the roof.**

12 Q. Are those attached or made a part of
13 your report that's been marked Exhibit 4? Are
14 they included?

15 **A. Yes. 1950 appears as Photo 15, and 1945**
16 **appears as Photo 13 in my report.**

17 Q. At what pages are those photos reported?

18 **A. They're in Attachment B, unnumbered**
19 **pages.**

20 Q. Bates number at the -- oh, I've got the
21 Bates number.

22 **A. Oh, I've got your report. Do you still**
23 **need that?**

24 Q. No. I believe Photo 13 is at Bates 18
25 of your report?

1 **A. Correct.**

2 Q. And then Photo --

3 **A. Photo 15 is also Bates 18.**

4 Q. Okay. I was referring to the actual
5 roof of the home. You've pointed me to what
6 photos Mr. Remel has indicated, or actually the
7 roof of the structure of the garage. Fifteen, I
8 absolutely recall because he testified Monday that
9 his workers were in a crane or a lift-up or
10 something and took that photo from the air.

11 MR. GIBSON:

12 Bucket truck.

13 MS. JOHNSON:

14 Bucket truck, thank you.

15 Q. Photo 1950, or Photo 15 in your report.
16 Do you have any photos -- and I believe the same
17 is true of Photo 13. Both of those being the roof
18 of the garage. As you can see, those are pine
19 trees, and there's more than one.

20 **A. I didn't anticipate he had a turbine on**
21 **his garage, but if I'm incorrect, I'll look for**
22 **more photos.**

23 Q. Okay. Please do. That's my
24 understanding that is actually the garage roof
25 with the pine trees on top.

1 MR. GIBSON:

2 Let me see.

3 MS. JOHNSON:

4 As long as you don't direct him to the
5 photos I'm asking for.

6 See, that's the one from the bucket
7 truck.

8 MR. GIBSON:

9 Uh-huh.

10 **A. Photos 6, 11 and 14.**

11 MS. JOHNSON:

12 Q. Okay. At Bates 16 of your report?

13 **A. Six is on 16.**

14 Q. Okay.

15 **A. Eleven is on 17, and 14 is on 18.**

16 Q. Okay. And for the record, we're
17 referring to Exhibit 4 and Bates Numbers 16, 17
18 and 18 -- or excuse me, 19?

19 **A. No, 14 is on 18.**

20 Q. I'm sorry. It's Photo 14, which is also
21 Bates 18. And just so we're clear on the record,
22 those are the three photos you think best depicts
23 the red oak tree on the roof of the Remel house,
24 correct?

25 **A. Possibly 1913, which I did not use in**

1 **the report, and 1910, which I did not use in the**
2 **report. There is no good single photo taken aback**
3 **which shows the entire tree, crown and the trunk.**

4 Q. Okay. And would you agree with me
5 there's no single photo that shows us what portion
6 of the tree is across what portion of the roof?

7 **A. With the total roof and the total crown**
8 **shown, that's correct.**

9 Q. In looking at the ones that's in your
10 report, if you'll refer to me, Picture 16, flip a
11 couple pages, compare it with Picture 14, and will
12 you agree with me that is the same photograph?

13 **A. I'm sorry. Photo 16 and 14?**

14 Q. Actually 6. I'm sorry. Compare Photo 6
15 with that of Photo 14 in your report.

16 **A. Yes. It's a duplicate photo.**

17 Q. Okay. So we're down now to two
18 photographs in your report, and that's Photo 6 and
19 Photo 11, correct?

20 **A. Yes.**

21 Q. Can you tell me where you see the actual
22 tree or the crown thereof anywhere in Photo 11 at
23 Bates 17?

24 **A. It's not well captured in the**
25 **photograph.**

1 Q. Do you see any hint of the tree in Photo
2 11 on the roof?

3 **A. No.**

4 Q. Okay. So now we're down to you have one
5 photograph in your report of the tree on a portion
6 of the roof, and that would be Photo 6 at Bates
7 16, correct?

8 **A. Yes.**

9 Q. Okay. Can you tell me what portion of
10 the roof that tree impacted with or was across?

11 **A. No, not by the photograph.**

12 Q. And can you tell me that is actually the
13 red oak tree we were referring to there in Photo
14 6?

15 **A. It's got liken on the trunk. It might
16 be a pine. It might be an oak.**

17 Q. It might be an oak different than a red
18 oak, correct?

19 **A. No. It would be either red oak or a
20 pine. It appears to be an oak.**

21 Q. Okay. But we can't see the crown in
22 that photograph, Photo 6, right?

23 **A. No.**

24 Q. And it looks like a portion of the roof
25 has become detached and this trunk is not across

1 the main portion of the roof, correct?

2 **A. Correct.**

3 Q. And, in fact, if you see in the
4 background, would you agree with me it looks like
5 that is another large portion of the Remel home
6 roof?

7 **A. Yes.**

8 Q. And, in fact, it looks like there is a
9 couple vents still on that roof, right?

10 **A. Yes.**

11 Q. And it appears to be perhaps a chimney
12 cap beyond that in between those two vents; would
13 you agree with me?

14 **A. Yes.**

15 Q. Will you agree with me at least the wind
16 did not remove those two vents and that chimney
17 cap from the Remel roof?

18 **A. Correct.**

19 Q. Okay. Do you know whether or not the
20 tree impacted or came close or the crown did to
21 the two vents and the chimney vent?

22 **A. I can't tell. From the fracture of the
23 roof, it looks like the trunk originally broke the
24 area that's broken in the photograph, and then it
25 bounced or rolled off that area because it's not**

1 **longer there.**

2 Q. How is it you conclude that the tree
3 absolutely broke that area as opposed to that
4 breaking apart with the surge or water?

5 **A. Absolutely, I can't conclude either way.**

6 Q. Okay. So based on a reasonable degree
7 of scientific probability, you can't testify that
8 the tree fractured the roof and bounced and broke
9 and bounced away, as you testified earlier?

10 **A. Well, the impact mark is more consistent
11 -- the damage is more consistent with an impact
12 from above breaking the back of that roof than it
13 is with it falling apart due to a collapse due to
14 flood.**

15 Q. Okay. Was it your testimony earlier
16 after we had some good discussion and you thought
17 it through that the tree did not move once it
18 fell?

19 **A. No. I said the tree was -- after it
20 came to rest from the fall was not moved by flood.
21 But if it's impacting on that roof, it can still
22 bounce off to another location and go downslope
23 before it comes to rest from the fall. Once it
24 comes to rest from the fall, I don't believe that
25 it could be uplifted by buoyancy and moved by the**

1 **flood.**

2 Q. Okay. Let's go with that bouncing off
3 the top of the roof and then falling. So would
4 Mr. Overstreet's azimuth calculation for the
5 direction the tree fell then be inaccurate if, as
6 it fell, it hit the roof and bounced and landed
7 elsewhere?

8 **A. By a few degrees. Up to maybe 10
9 degrees, sure. But if it's still secured at its
10 base at the root, it's not going to be able to
11 swivel 90 degrees in either direction.**

12 Q. Okay. And if it's secured at the base
13 of the root, isn't it also probably not likely to
14 bounce and land in a different direction?

15 **A. If it hits a portion of the roof and
16 it's unstable and it's going to move downslope,
17 that's only going to be a few degrees. That's
18 going to be -- it's going to be able to do that
19 and still be secured to the root. I mean, if the
20 root was that strong, it wouldn't have fallen in
21 the first place. But it's not going to rotate 90
22 degrees after it falls in a different direction.
23 You're not going to get the precise azimuth that
24 was taken by Overstreet, but neither you're going
25 to get one so different that it will not allow for**

1 **analysis of what direction the tree fell.**

2 Q. Okay. So you would agree that a tree is
3 not going to move that far bouncing off of a roof
4 to where it's pointing 90 degrees from where it
5 impacted with the roof, correct?

6 **A. Correct, yes.**

7 Q. Okay. What relation in looking at Photo
8 6 in looking at where the roof is broken off
9 there, what degree-wise is the tree lying in, if
10 we assume this is the red oak, from where that
11 roof is fractured? Would you agree that appears
12 to be about a 90-degree difference?

13 **A. No.**

14 Q. Okay. How would you classify it?

15 **A. Well, I can't classify it because the
16 photo is oblique, and I can't tell you exactly
17 what's going on in the photograph. My information
18 from the azimuth is directly from Overstreet. I
19 did not glean it at all from the photographs.**

20 Q. Okay. Not asking about the azimuth, but
21 comparing -- you can see the direction where this
22 tree is pointed, correct?

23 **A. Yes.**

24 Q. And you can see that it's on a very
25 small portion of the remnants of the Remel roof,

1 landed elsewhere. You can't tell me what degree
2 it bounced off and landed elsewhere. And the
3 basis for that conclusion is because you already
4 had your opinion and you're relying on it to come
5 to this conclusion?

6 MR. GIBSON:

7 Objection.

8 **A. No. That would be incorrect. I don't
9 think that portrays what I said I'm doing. Along
10 the way of reaching a conclusion, I looked at the
11 photographs which showed impact to a roof
12 consistent with the impacts that I've seen on
13 maybe two dozen occasions in the Slidell area
14 where there was no flooding and slash pines fell
15 like a knife through butter and crashed through a
16 house or landed on a roof that caused damage.**

17 **My familiarity with that pattern of
18 damage on a roof caused by a tree leads me to
19 believe that this picture shows a pattern of
20 damage caused by a roof landing on a tree (sic).
21 I cannot reconcile it with the damage I would
22 expect to see by flood, if it did, having pushed
23 that building and collapsed it. It would have
24 collapsed the roof and pancaked it, but it
25 wouldn't allow for this rupture, which apparently**

1 correct?

2 **A. Yes.**

3 Q. And you can see where the roof seems to
4 be fractured and heading towards and in between
5 the chimney vent and the two other vents, correct?

6 **A. That's the rupture opening, yes.**

7 Q. Okay. Would you agree with me that,
8 comparing the rupture opening we're looking at in
9 the photo, the tree is lying 90 degrees to it?

10 **A. No. It's an acute angle, and I can't
11 tell you because of the perspective of the
12 photograph. I would need an aerial view to
13 measure that angle.**

14 Q. Then how is it you can tell in looking
15 at this photo that that tree caused that rupture
16 and that rupture was not caused when the roof was
17 moved by flood or surge?

18 **A. Because my opinion is is that pattern of
19 damage that I'm looking at is a pattern caused by
20 impact. The only thing that hit the roof from
21 above that could have caused that impact was the
22 tree.**

23 Q. Okay. So you're basing your conclusion
24 that the tree fell, made this particular damage
25 and then landed elsewhere, bounced off of it and

1 **is an impact from above.**

2 **Since there's only a report of one large
3 tree, a red oak, by Overstreet having hit that
4 roof, I do make the jump to conclude that it was
5 that red oak that caused this damage that I see
6 which looks very much like impact from a tree
7 hitting a roof.**

8 **MS. JOHNSON:**

9 Q. Have you ever seen a house where the
10 roof was totally 100 percent intact post-flood and
11 sitting on the ground?

12 **A. Yes.**

13 Q. Okay. Have you ever seen a house where
14 there was no impact at all from any trees with a
15 roof that was fractured and sitting on the ground
16 post-surge?

17 **A. Yes, but not a pattern that looks --
18 there's different kinds of patterns. This pattern
19 is a puncture from above. The pattern that I
20 would otherwise see would be caused by some
21 lateral movement of the building. Because if it's
22 not a force from above, either a tree or a
23 downburst, it would have to be a lateral hitting
24 the side of the building, racking the building and
25 causing the roof to come down. There might be**

1 **some collateral damage that would break that roof**
 2 **either because of the construction detailing or**
 3 **because of a change in grade elevation. That's**
 4 **not what I'm seeing in this photograph.**

5 Q. Okay. And such a lateral force that
 6 could be forcing on one side of the building, that
 7 could be consistent with flood or surge? Flood or
 8 surge can be a lateral force existing upon a
 9 building, correct?

10 **A. Yes.**

11 Q. Okay. And flood surge coming in
 12 striking one side of the building and racking it
 13 can cause the building to collapse and the roof to
 14 come down and fracture, correct?

15 **A. If we had the right conditions of**
 16 **current velocity, wave activity or water-borne**
 17 **debris, yes.**

18 Q. And we don't know what the right
 19 conditions were, if there were the right
 20 conditions, on the Remel property because you
 21 didn't calculate the velocity or the wave action,
 22 as you testified earlier?

23 **A. I did not calculate it, but I can**
 24 **surmise it qualitatively based on my experience in**
 25 **Katrina and the information that is available.**

1 **There is no reason to believe the current velocity**
 2 **was greater than three feet per second. Even**
 3 **allowing five feet per second, that's not going to**
 4 **collapse this building. There is no indication**
 5 **that there was wave activity at a height that**
 6 **would allow for collapse of this building.**

7 Q. And at what wave height would you
 8 consider enough to collapse a building?

9 **A. The wave height that I would consider to**
 10 **collapse this building? It's a combination of**
 11 **wave height, frequency in seconds of waves hitting**
 12 **the building, are they breaking waves,**
 13 **non-breaking waves and at what current velocity**
 14 **and are they breaking through trees?**

15 **I can't give you a quantitative answer,**
 16 **but if I analyze those four things, and I will,**
 17 **there's not going to be enough wave activity to**
 18 **hit the building.**

19 **If I need wave height, I'm not going to**
 20 **get the wave height needed. Let's say we're going**
 21 **to talk the threshold for damage, it's generally**
 22 **presumed to be three foot waves. Where do I get**
 23 **that from? The FEMA FIRM map.**

24 **FEMA, through their studies, have**
 25 **determined that they will go with the velocity**

1 **zone with three-foot waves because three-foot**
 2 **waves have some significance in FEMA studies as**
 3 **the height at which a wood frame building might**
 4 **start to break up under certain conditions due to**
 5 **a wave height.**

6 **I don't have any indication there was a**
 7 **three-foot wave in this area. In fact,**
 8 **Fitzpatrick says one to two feet. The current**
 9 **velocity, I have no indication it was higher than**
 10 **three feet per second.**

11 **I have a study from LSU in Lake Borgne**
 12 **where the water across Lake Borgne was about three**
 13 **feet per second. I have no reason to believe that**
 14 **coming ashore with a -- we like to talk about**
 15 **exposure as it pertains to surface roughness and**
 16 **slows down wind. That surface roughness also**
 17 **slows down wave. If I have a three foot per**
 18 **second current coming off of the bay, it's going**
 19 **to be less than three feet per second by the time**
 20 **it gets to the Remel house. So I don't have the**
 21 **current velocity I need. I don't have the wave**
 22 **height I need.**

23 **The time of the wave, I would need a**
 24 **long frequency of the wave to push more water**
 25 **between the waves. I have no indication that the**

1 **frequency was greater than three seconds. If**
 2 **we're up to 10, 12, 15 seconds and that wave is**
 3 **pushing a lot more water in front of it, then I**
 4 **have a lot more massive water involved with that**
 5 **wave, that's a consideration. I don't have that**
 6 **to look at.**

7 **I don't have qualitatively any**
 8 **information that leads me to concern that I can't**
 9 **give you a quantitative answer. And then**
 10 **conversely, anybody wishing to prove it's flood**
 11 **should have that information. I see no**
 12 **information presented by any opposing engineer**
 13 **that provides the information that you're asking**
 14 **me to provide as well.**

15 Q. Okay. Have you looked at the reports of
 16 the engineers that have been designated by State
 17 Farm as experts?

18 **A. No. I've looked at the Jade report**
 19 **which was used, I presume, by the adjuster in his**
 20 **adjustment of the claim.**

21 Q. Okay. Do you know who Douglas A. Smith,
 22 Ph.D., PE is?

23 **A. Sure. He's at Texas Tech University.**

24 Q. And you haven't reviewed his report
 25 pertaining to his investigation of the cause of

1 loss at the Remel property?

2 **A. No. His expertise, as I understand it,**
3 **is wind engineering. I don't know if he weighed**
4 **in as far as current velocity and other coastal**
5 **hydrology information.**

6 Q. Okay.

7 **A. I would concede he's capable of doing**
8 **that as a civil engineer.**

9 Q. Okay. What about a coastal and ocean
10 engineer?

11 **A. I'm familiar with Dr. Kriebel from**
12 **Annapolis, Naval Academy in Annapolis, who's**
13 **written reports. I don't know who else there is**
14 **writing reports for coastal hydrology.**

15 Q. Have you reviewed any reports issued by
16 Herman M. Fritz, Ph.D. with regard to the Remel
17 residence?

18 **A. Not to the Remel residence. The name's**
19 **familiar. I might have seen a report elsewhere.**

20 Q. All right. So in answer to the question
21 I asked a couple times ago, you can't
22 quantitatively -- and I understand your explanation
23 for it -- tell me what the wave height was
24 absolutely at the Remel residence, correct?

25 **A. No, I cannot.**

1 **do something to that building. Otherwise if it's**
2 **true that the first wave is going to destroy the**
3 **buildings, let's all go home. But how many videos**
4 **have we seen where the waves keep hitting the**
5 **building, and during the course of the video,**
6 **there's no destruction of the building.**

7 Q. What is the FEMA -- you cited them for
8 the time duration. What is their consideration of
9 time duration as far as can cause fatigue on
10 vertical walls? Thirty minutes, ten minutes?

11 **A. I haven't seen anything in FEMA studies,**
12 **Corps of Engineer studies or elsewhere that**
13 **provide that information.**

14 Q. Okay. How long -- and you've got a nice
15 little timeline in Exhibit 4. How long was the
16 Remel residence susceptible to water on the
17 property, or subject to water on the property?

18 MR. GIBSON:

19 Objection to the form.

20 **A. By the timeline from 8:30 to 1300, with**
21 **wind attacking from different directions, that**
22 **means that the attack of waves on the water would**
23 **come from different directions. And each time**
24 **that -- that means two things. When the wind**
25 **shifts, the wave is chopped up, and you have to**

1 Q. Okay.

2 **A. If there is any SWAN, ST-wave, ADCIRC**
3 **kind of information that's available for wave**
4 **height at that location, I have not reviewed it.**

5 Q. And you indicated earlier that in your
6 opinion, and correct me if I'm wrong, and I'm sure
7 you will, that you can't get total destruction of
8 a building unless there's three-foot waves per
9 FEMA?

10 **A. Okay. Now, please don't begrudge me my**
11 **job. That's a rule of thumb. You can get**
12 **destruction of a building with a lower wave if you**
13 **have enough time and enough susceptibility of the**
14 **structure so that fatigue due to wave activity is**
15 **going to cause that event.**

16 **If you go to FEMA 55 Coastal**
17 **Construction Manual, they remind you that although**
18 **the pressure induced by a wave is greater than**
19 **pressure induced by a wind gust in a hurricane,**
20 **the time duration of the hurricane force might be**
21 **a three-second gust. The time duration of the**
22 **contact of the wave with the vertical wall of the**
23 **building is between .01 to .05 seconds. So you're**
24 **going to have to have repetitive, repetitive,**
25 **repetitive attack by waves over and over again to**

1 **have a period of time for wind to reestablish the**
2 **wave height. Because the waves are not only**
3 **height sensitive, they're time sensitive.**

4 **So if you have, let's say, example, a**
5 **three-foot wave attacking from the east, by the**
6 **time wind attacks from the south, it chops up that**
7 **three-foot wave and you have to reestablish from**
8 **still water height to, let's say, the three-foot**
9 **height, that wave. So for a period of time, that**
10 **wave is no longer three foot and it's attacking**
11 **from a different direction. So it's lost its**
12 **magnitude of force and it's lost that**
13 **repetitiveness to have fatigue on the same part of**
14 **the building.**

15 MS. JOHNSON:

16 Q. All right. My question is: How long
17 was the residence or the slab, assuming that the
18 residence was still there, what was the time or
19 duration that the residence was being subjected to
20 water, whatever the force is? We don't know the
21 waves, I understand that. We don't know the
22 particular size of the wave. But according to
23 your timeline that you have at Page 3 of your
24 report, give me an hour or minute frame from when
25 the --

1 **A. Four and a half hours by this timeline.**
 2 **My follow-on point was that doesn't phase me.**
 3 Q. Okay. Would you consider four and a
 4 half hours being subject to water within the FEMA
 5 direction that you cited to me earlier as far as
 6 what can cause fatigue to a vertical wall?
 7 **A. No. Because, first of all, we're going**
 8 **to have to have about three feet of still water to**
 9 **get a three-foot wave height. So then that means**
 10 **that we're going to have to have on site 16 and a**
 11 **half to 17 foot of water to potentially get a**
 12 **three-foot wave, if it occurred. So now we're**
 13 **down to 9:30 instead of 8:30. Now I'm down to**
 14 **three and a half hours instead of four and a half**
 15 **hours.**

16 Q. And when you say four and a half, you're
 17 stopping at the 1:00 last entry you have, correct?

18 **A. Correct, because that's by the timeline.**

19 Q. And by the timeline, that's 17 feet
 20 above MSL?

21 **A. Yes.**

22 Q. And we don't know when it came below
 23 that four foot -- we don't know when it came below
 24 where the house would have been at 13.4 feet?

25 **A. That's correct. You could extrapolate**

1 **that by the fall of the still water. My**
 2 **suggestion, though, is is that anything after a**
 3 **southerly direction, we're talking about a brand**
 4 **new wave initiating a new wave height from a**
 5 **different direction. It's not going to contribute**
 6 **to the fatigue that we're talking about.**

7 Q. Okay. And you keep talking about wave
 8 height, but taking out wave from the equation and
 9 just say, an example, from the New Orleans area
 10 where we're not talking wave heights, it's a
 11 gradual filling and a gradual release of the water
 12 from the property, in talking about that, would
 13 you agree with me, according to your timeline, the
 14 Remel residence would have been subjected to some
 15 water within it based on the elevations we've
 16 discussed from approximately sometime between 8:30
 17 and 9:30 until sometime after 1:00?

18 **A. Correct. But that goes to hydrostatic**
 19 **pressure, and hydrostatic pressure didn't collapse**
 20 **that building.**

21 Q. And you didn't calculate hydrostatic
 22 pressure in your investigation of the cause of the
 23 loss of this home, right?

24 **A. No. It's difficult to do because I**
 25 **could calculate it if the building was watertight**

1 **and we presume the water was outside pushing in**
 2 **only. The problem is the building is not**
 3 **watertight. It's filling up with water almost as**
 4 **fast as the water on the outside. The inside**
 5 **water hydrostatically is pushing back on that wall**
 6 **and equalizing it, and that's why FEMA says -- and**
 7 **that's what you saw in St. Bernard Parish --**
 8 **nothing collapses due to hydrostatic pressure.**

9 Q. Going back to Photo 6 of your report at
 10 Page 16 of Exhibit 4, can you tell me from your
 11 one photo that we have with a tree -- we're not
 12 sure if that is the tree, but a tree across one
 13 portion of the roof -- what percentage of the roof
 14 we're looking at in Photo 6?

15 **A. We're probably looking at one-third of**
 16 **one side of the roof, so it's about a sixth of the**
 17 **entire roof.**

18 Q. Okay. What side are we looking at,
 19 direction-wise?

20 **A. Based on the tree fall, which was out at**
 21 **the southwest corner -- I'm sorry -- the southeast**
 22 **corner. I'm getting dyslexic. It's at the**
 23 **southeast corner. It fell to the northwest. It**
 24 **would have been the -- if your back is to the**
 25 **street, the front side of the house and the west**

1 **side of the front of the street.**

2 Q. Okay. So what direction are we looking
 3 towards here in the photo? What would be beyond
 4 the two vents and the chimney?

5 **A. Generally put, the rear of the property.**

6 Q. The rear of the property. Back towards
 7 the direction of the garage?

8 **A. Yes.**

9 Q. Okay. And you have the tree being
 10 situated on the southeast corner of the home based
 11 on Mr. Overstreet's report, correct?

12 **A. Yes.**

13 Q. And that would have been the corner of
 14 the home that was closest to the bay from where
 15 the property was located?

16 **A. It's a close call compared to the**
 17 **northeast corner. I don't know the curvature of**
 18 **the bay to draw that line. They're pretty much --**
 19 **the southeast corner and the northeast corner --**

20 Q. Here's this one. It's a little more
 21 legible. And I'm handing you, for the record, the
 22 third page of Exhibit 9.

23 **A. The southeast corner and the northeast**
 24 **corner are no more than a foot apart in difference**
 25 **from the bay. I can't tell you more than that.**

1 Q. Okay. But it's on the east side of the
2 home, which would be the closest to the bay?

3 **A. Yes. Assuming that tree is the tree**
4 **we're talking about and based on the tree fall,**
5 **yes. That's on the side of the bay closest --**
6 **that's the side of the house closest to the bay.**

7 Q. Okay. Now, you gave me the size of the
8 tree earlier in circumference; is that right?

9 **A. Yes.**

10 Q. What was that, again, in Overstreet's
11 report? Eighty-six inches at the base?

12 **A. Yes.**

13 Q. We're not looking at the base of the
14 tree in Photo 6, correct?

15 **A. Correct.**

16 Q. Okay. So we're looking at some portion
17 of the tree above the base and presumably below
18 the crown?

19 **A. Yes.**

20 Q. Do you know what diameter, if that would
21 be consistent with a red oak having a diameter as
22 what we see in Photo 6?

23 **A. No.**

24 Q. Okay. How big would you say this trunk
25 is diameter-wise, circumference-wise, however you

1 feel comfortable in Photo 6?

2 **A. Diameter-wise, between 18 to 24 inches.**
3 **Yeah, diameter-wise.**

4 Q. Okay. Is that consistent with what we
5 would have measured at the trunk by
6 Mr. Overstreet?

7 **A. Twenty-four inches times pi, we're at**
8 **about -- yeah, give or take, that's consistent.**

9 Q. Okay. So no reason for you to not think
10 this is the red oak tree in Photo 6?

11 **A. I'm sorry?**

12 Q. No reason for you to think this is not
13 the red oak tree that we're talking about in Photo
14 6?

15 **A. Well, I mean, unless another tree of**
16 **similar size fell. That is my understanding is**
17 **the only tree that fell across the property. I**
18 **can't tell you from that photograph looking at**
19 **that bark if that's deciduous or softwood.**

20 Q. But you're pretty sure this is the tree
21 that caused the rupture of the house that we see
22 in Picture 6, according to your earlier testimony?

23 **A. Yeah. I mean, according to what I know**
24 **and according to the photos I was given, that's**
25 **the best view I have of what appears to be that**

1 **tree.**

2 Q. Okay. And if that isn't the tree, then
3 we're looking at something else that might have
4 caused the rupture of that roof?

5 **A. If that isn't the tree, then we're**
6 **looking at that tree in that picture caused that**
7 **rupture that is shown in that photograph.**

8 Q. Okay. So any reason to believe that
9 more than one tree came in contact with the roof
10 of the Remel home?

11 **A. From my understanding talking to**
12 **Mr. Remel and based on Overstreet's report, no.**
13 **There was that sole red oak tree.**

14 Q. Okay. Now, you had pointed out one
15 other photograph in the contact sheet as being
16 another photo of the tree. You had mentioned --
17 which photo again? I'm sorry. I wrote it down,
18 but it's among my other markings.

19 **A. I think I had actually mentioned two. I**
20 **think I mentioned Photo 10 and Photo 13.**

21 Q. Okay. And neither of those are in your
22 report?

23 **A. No.**

24 Q. Okay. It looks like Photo 10 is
25 actually Photo 11 in your report. Turn to Bates

1 17.

2 **A. That's correct.**

3 Q. And we agreed with that photo that you
4 can't see the tree anywhere in it, correct?

5 **A. Correct.**

6 Q. Okay. And what was the other one?

7 **A. And then if I may, then 1910 was not one**
8 **of the ones that I showed you on the contact**
9 **sheet. It would have been 1913. You'll have to**
10 **go back and read it. And there would have been**
11 **one other, and it might have been 1916. I don't**
12 **recall.**

13 Q. Okay. 1913 and 1916, is that what you
14 said?

15 **A. Yeah, I think so. I'm looking at little**
16 **tiny thumbnails. I mean, frankly, on the duces**
17 **tecum, if I was asked to produce larger photos, I**
18 **would. I happened to bring this because it was in**
19 **my file material. It's not big enough to analyze**
20 **off of.**

21 Q. Okay. Did you take into consideration
22 Photos 1913 and 1916 in coming to the conclusions
23 you have in your report?

24 **A. Yes. All these photographs were**
25 **reviewed with Mr. Remel in the field. He had a**

1 **stack and he was handing them to me. We were**
 2 **discussing them as he peeled them off like a deck**
 3 **of cards.**

4 Q. Can you produce, then, a better copy of
 5 1913 and 1916? When I say "better copy," meaning
 6 a larger copy that I can look at.

7 MR. GIBSON:

8 I think he brought the -- didn't you
 9 attach to Mr. Remel's deposition 400 photos?

10 MS. JOHNSON:

11 Was it 400 photos? It's whatever you
 12 produced.

13 MR. GIBSON:

14 No. That was the deposition yesterday.
 15 We attached -- can we look at those?

16 MS. JOHNSON:

17 That would be fine, if you can tell.

18 MR. GIBSON:

19 Do you have them? And I'll start --

20 MS. JOHNSON:

21 Yeah.

22 MR. GIBSON:

23 What do you want me to find in here?

24 MS. JOHNSON:

25 Photos 1913 and 1916.

1 THE WITNESS:

2 It was 13 and 16.

3 MR. GIBSON:

4 1913 and 1916. All right. You want me
 5 to find those photographs?

6 MS. JOHNSON:

7 Yes.

8 Q. Okay. And you were the lead
 9 investigator on this building damage assessment,
 10 correct?

11 **A. Yes.**

12 Q. So when in your report it references the
 13 lead investigator, that would have been you?

14 **A. That's me.**

15 Q. Nobody else accompanied you to the
 16 inspection?

17 **A. No.**

18 Q. And I had asked you before and I can't
 19 recall your response whether or not you did any
 20 building damage assessments for any other
 21 properties on Leopold Street. Other than the
 22 Remel property, you mentioned Congressman Taylor's
 23 property. Have you done a building damage
 24 assessment for anyone else other than Congressman
 25 Taylor and the Remels on Leopold?

1 **A. That's the only ones that comes to mind**
 2 **because I brought that meteorological report with**
 3 **me. I don't think so.**

4 Q. Have you ever come to the conclusion
 5 when doing a building damage assessment on --
 6 didn't you say one of the 30 properties that
 7 you've done in Bay St. Louis -- that a home was
 8 destroyed 100 percent by surge?

9 **A. I think we had 50 properties. And 100**
 10 **percent by surge? No, I've never reached that**
 11 **conclusion.**

12 Q. Okay. What's the highest conclusion
 13 you've --

14 **A. Allow me to clarify that. 100 percent**
 15 **meaning that wind didn't damage it; surge came in,**
 16 **and surge damaged it 100 percent? No. Have I**
 17 **found buildings that were substantially damaged by**
 18 **flood, meaning greater than 50 percent damage**
 19 **resulting in what you might call constructive**
 20 **total of the house? Yes.**

21 Q. Okay. So you have found surge to have
 22 been the reason for a house to be economically
 23 totalled, as you use in this report, due to flood
 24 occurring from Katrina, correct?

25 **A. In those cases, I found that flood**

1 **economically destroyed it and wind economically**
 2 **destroyed it. Because due to the diseconomy of**
 3 **repair, you can total it up and have more than 100**
 4 **percent of the damage, wind and flood together.**

5 **In those cases, it was also my opinion**
 6 **that since wind got there first, the economic**
 7 **total occurred due to wind ahead of flood. I stop**
 8 **there and someone else who does coverage decides**
 9 **whether wind or flood is responsible for payment.**

10 Q. Okay. So in answer to my question,
 11 you've never found in the number of cases you've
 12 investigated following Katrina that flood or surge
 13 was the economic cause of the destruction of the
 14 property, the sole economic cause?

15 **A. The sole economic cause? No, I don't**
 16 **believe I have.**

17 Q. Okay. Approximately how many cases have
 18 you performed building damage assessments for
 19 post-Katrina in Mississippi?

20 **A. 500.**

21 **MR. GIBSON:**

22 **Let me just take a break.**

23 **(Off the record.)**

24 **MS. JOHNSON:**

25 Q. Were you aware whether there were any

1 witnesses to this tree falling on the Remel roof?

2 **A. No.**

3 Q. Okay. Have you looked at any videotape
4 of anybody who stayed at their residence at
5 Leopold Street or anywhere in the vicinity of
6 Leopold Street?

7 **A. No.**

8 Q. You had referred to a video earlier.
9 Where was the video taken?

10 **A. Oh, wow. What were we discussing? I've**
11 **seen videos in Diamondhead. I've seen videos in**
12 **Gulfport, in Biloxi, and, of course, over in**
13 **Louisiana. I think the Mississippi videos I've**
14 **seen are Diamondhead, Biloxi and Gulfport.**

15 Q. Okay. You gave me the number of having
16 performed the damage assessments in 500 cases. Is
17 that in Mississippi or in total post-Katrina?

18 **A. Mississippi.**

19 Q. And you also do the same type damage
20 assessment reports for Louisiana properties
21 stemming from Katrina?

22 **A. Yes.**

23 Q. Okay.

24 **A. The caveat is, when I say 500, I'm**
25 **counting assignments received. Sometimes an**

1 **assignment is received, it settles before I do it.**
2 **I have to subtract that out. Some number of that**
3 **is a cost estimates only, no engineering**
4 **assessment. I've got to subtract that out. Some**
5 **stuff is still on the backlog and hasn't been**
6 **done. If I subtract all that out, I'm probably**
7 **talking 400 instead of 500.**

8 Q. So about 400 engineering assessments?

9 **A. 400 engineering assessment reports have**
10 **been issued, yes.**

11 Q. Okay. On any of those occasions when
12 you were requested in Mississippi to issue an
13 engineering assessment, have you had to say, no,
14 my opinion won't be favorable to you?

15 **A. There were one or two cases in**
16 **Pascagoula where a homeowner asked me to look at**
17 **his property and give them a verbal opinion, and I**
18 **stated it was flood. And they said, please don't**
19 **write a report, and they just paid me for time.**

20 Q. Was that one or two of those occasions?

21 **A. I don't really have a record of it**
22 **because I never wrote a report. As I recall, and,**
23 **frankly, as I've been saying in depositions, two**
24 **cases in Pascagoula and one in Alabama.**

25 Q. Okay. Approximately of the 400 cases in

1 Mississippi that you've been asked to do an
2 assessment on, you've given the opinion that flood
3 caused all the damage in approximately three; two
4 cases in Mississippi, one in Alabama?

5 **A. In the Alabama case, flood caused all**
6 **the damage, which was the building was removed**
7 **from its foundation. In the two Pascagoula cases,**
8 **I believe there was some damage by wind, such as**
9 **removed shingles, but my advice to the client was**
10 **my report is probably not going to bring anything**
11 **to the table other than that which the adjuster**
12 **probably paid for in the first place.**

13 Q. Do you know what the adjuster paid for
14 in the Remel instance?

15 **A. No.**

16 Q. Okay. So you have no knowledge as to
17 whether or not the payments for actual wind damage
18 on the residence itself was reasonable or not
19 reasonable?

20 **A. No, I do not.**

21 Q. Okay. Have you ever been retained by
22 State Farm to give a building damage assessment in
23 a post-Katrina case?

24 **A. For Katrina, no.**

25 Q. Okay. In the past, you have been

1 retained by State Farm; is that correct?

2 **A. Yes. I'd say about 3- to 400 times.**

3 Q. And that was over in Louisiana, not
4 Mississippi?

5 **A. That was Louisiana and Texas and a**
6 **couple, I believe, with State Farm Floridian.**

7 Q. Okay. Not Mississippi?

8 **A. There may have been one or two**
9 **pre-Katrina back when I worked for CH&A**
10 **Corporation, but I'm not recalling.**

11 Q. And none of those dealt with
12 post-hurricane evaluation, wind versus water
13 issues?

14 **A. The ones for State Farm Floridean might**
15 **have been post-Opal in the Florida panhandle.**
16 **Other than that, I've worked for State Farm on**
17 **wind and hail claims, but not for hurricane**
18 **claims.**

19 Q. Okay. Was Opal a wind/water storm?

20 **A. Yes.**

21 Q. We had started off talking about the
22 materials you had with you and just glossed over
23 your education and training. And I've seen from
24 other depositions you do have a BS degree,
25 correct, in architecture?

1 **A. I have a BS in architecture, it's a**
 2 **four-year degree, and a bachelor of architecture**
 3 **which is a five-year degree with thesis. It's**
 4 **called the first professional degree.**

5 Q. Okay. And I have premarked as Exhibit 3
 6 to the deposition a copy of your curriculum vitae.
 7 Is that the most current CV that you have?

8 **A. I have one that has maybe one or two**
 9 **additions which I bring with me. This copy is**
 10 **more complete. There's only several changes. I**
 11 **can point them out.**

12 Q. Okay.

13 **A. One under Registrations and**
 14 **Certification, I'm a certified wind network**
 15 **umpire. That's through the Florida windstorm**
 16 **network. Secondly, my current affiliations now**
 17 **include engineers without borders. And, thirdly,**
 18 **on Page 4, I've added my paper differentiating**
 19 **between wind and flood damage in Hurricane Katrina**
 20 **to unpublished papers.**

21 **MS. JOHNSON:**

22 Do you need another copy of this?

23 **MR. GIBSON:**

24 Let's make a copy of that and make it

25 **3A. Can she go ahead and put a sticker on that**

1 and I'll give you a copy of it?

2 **THE WITNESS:**

3 Yes.

4 **MS. JOHNSON:**

5 That's Exhibit 3A.

6 (Exhibit 3A was marked.)

7 **MS. JOHNSON:**

8 Q. Your undergraduate degree is in
 9 architecture?

10 **A. Yes.**

11 Q. And you don't have a degree as an
 12 engineer?

13 **A. No. My undergraduate degree was from a**
 14 **school of engineering, but the architecture**
 15 **portion was certified by NCARB, not ABET, which**
 16 **certifies the engineering curriculums.**

17 That said, I took every course in
 18 engineering that was taken by the undergraduates
 19 in the civil engineering program next door with
 20 the same professor, same curriculum -- they
 21 weren't watered down classes for architects --
 22 except for surveying. My transcript was reviewed
 23 by the State of Minnesota, found to be ABET
 24 equivalent, and I was allowed to take the PE exam.
 25 I passed it on the first try.

1 Q. And you are licensed in Minnesota,
 2 right?

3 **A. Minnesota and Texas as an engineer.**
 4 **Florida and Pennsylvania as an architect.**

5 Q. Okay. And the Texas was by reciprocity
 6 of your Minnesota?

7 **A. Yes.**

8 Q. Okay. You didn't have to retake the
 9 exam or take any additional classes for the Texas
 10 license, correct?

11 **A. Correct. There is no other exam. They**
 12 **give the same exact examination.**

13 Q. Okay. And in Florida, you are licensed
 14 as an architect, but not as an engineer, correct?

15 **A. Yes.**

16 Q. And you did apply to be licensed as an
 17 engineer in Florida, correct?

18 **A. Yes. And Florida has a rule that you**
 19 **had to have graduated from an ABET curriculum.**
 20 **That's a nonstarter for architects. We graduated**
 21 **from the NCARB curriculum. They have no appeal**
 22 **process to review my transcript as did Minnesota**
 23 **so that I could prove to them I took the same**
 24 **exact classes. In fact, had CCNY had a**
 25 **dual-degree program, I took all the courses to**

1 **qualify for the civil engineering degree, but that**
 2 **wasn't offered, so it's a nonstarter.**

3 **In Florida, by state statute, I practice**
 4 **engineering under my architect's license. So it**
 5 **hasn't hurt me from practicing engineering in**
 6 **Florida. I just cannot call myself a professional**
 7 **engineer in Florida.**

8 Q. And you have to have certain peer review
 9 a little more so than what you have to do here in
 10 Mississippi where you just have somebody stamp off
 11 on a report in Florida, correct?

12 **A. I'm sorry.**

13 Q. I'm sorry. Long question. In Florida,
 14 though, when you say you can actually practice
 15 engineering, but you have to do so under their
 16 requirements, those requirements are a little more
 17 strict than what you're facing right now, correct?

18 **A. No. In Florida, I practice engineering**
 19 **under my architectural license. That means I can**
 20 **do the same things as an engineer under my**
 21 **architectural stamp. I do not need any peer**
 22 **review or any type of review by an engineer to do**
 23 **that. It's recognized by law that I know my**
 24 **engineering. But in deference to the Florida PE**
 25 **board, I can't call myself an engineer.**

1 Q. And you have never been qualified as an
2 expert in the field of engineering in Florida,
3 have you?

4 A. Yes, I have. Each time I've gone to
5 trial in Florida, state or federal court, I've
6 been offered as an expert in architecture and
7 engineering and qualified in both fields.

8 Q. In both fields, okay. And you did apply
9 for your engineer license in Florida, though,
10 didn't you?

11 A. Yes.

12 Q. Okay. And it was denied because you did
13 not graduate from an ABET curriculum school?

14 A. I think denied is the right word. They
15 would not -- in the screening process, they would
16 not forward it to review to the PE board because
17 the screener noted that I had gone to an architect
18 school. And by their rules, I didn't go to an
19 ABET engineering school, so it was kicked back.

20 I would like to think that if I had
21 gotten through the screener and to the board, they
22 would have said, gee, he took the exact same
23 courses as the PE program, let's bend the rule. I
24 would like to think that. That may not have
25 occurred.

1 other states other than Minnesota to be licensed
2 as an engineer?

3 A. No. There would be two circumstances.
4 Number 1, those states that allow for ABET
5 equivalent curriculums will allow me based on
6 reciprocity or comity, c-o-m-i-t-y -- I always
7 confuse that with comedy -- from Minnesota. And
8 those states that will not allow ABET equivalent
9 programs -- Florida is the only one that comes to
10 mind. It's not Mississippi. It's not Louisiana.
11 It doesn't matter. Even if I took the -- I've
12 already taken the PE exam. They just stated I can
13 get 110 on that exam, it doesn't matter. I did
14 not graduate from an ABET certified school. If I
15 was a foreign engineer, there is provisions for an
16 appeal for me to get licensed in Florida, but not
17 as a U.S. citizen.

18 Q. Did you testify that you took the PE
19 exam in Florida?

20 A. No. I took the PE exam in Minnesota.

21 Q. Okay. Well, that was my question.
22 You've never taken the PE exam in any other state
23 but Minnesota, correct?

24 A. Well, yeah. But -- the answer is, yes,
25 but the reason is there would be no reason ever to

1 The fact is it didn't occur because the
2 screener kicked it back. I did not appeal it
3 because I practice engineering. The same
4 engineering I would practice under a PE license in
5 Florida, I practice under my architect's license
6 in Florida.

7 Q. Okay. And you have not applied -- or
8 have you applied for a license in engineering in
9 Mississippi?

10 A. I haven't applied directly. I'm opening
11 an NCEES council record and also an NCARB council
12 record for architecture. Once those applications
13 are complete, then it's smoother sailing through
14 any state board because you have that independent
15 council record.

16 I thought that would be a faster way to
17 go. It's actually taking longer than if I had
18 applied directly to the State of Mississippi. At
19 this point, I wish I had, but I'm committed to the
20 counsel record program.

21 Q. Okay. And you have not applied as an
22 architect to be licensed in Mississippi?

23 A. No. Again, I'm going through the NCARB
24 program.

25 Q. Okay. Have you taken the boards in any

1 retake it.

2 Q. I understand. Simple question, and I
3 understand your response. And your MS degree,
4 your master's degree, is in landscaping
5 architecture; is that correct?

6 A. Two degrees, a master of science in
7 systems management. That's operations research,
8 systems analysis, Markov analysis, linear
9 programming, all the computer-driven type
10 decision-making tools for engineers, but it's not
11 an engineering degree.

12 Q. Okay.

13 A. And then I have separately a master of
14 landscape architecture.

15 Q. Okay. And you also have a Ph.D. in
16 urban studies?

17 A. Yes.

18 Q. And that's not an engineering degree
19 either, is it?

20 A. There's aspects where we learn
21 engineering, transportation modeling, urban
22 infrastructure planning. You would also find
23 those courses in graduate programs in engineering,
24 but it's not an ABET certified degree. In fact,
25 ABET rarely certifies graduate programs. They

1 **only certify undergraduate programs.**

2 Q. And it's not an engineering degree, ABET
3 certified or not?

4 **A. Correct.**

5 Q. Okay. How many depositions have you
6 given in Mississippi cases that you did
7 assessments for?

8 **A. I haven't counted them. I would say
9 it's over 30.**

10 Q. And that's stemming only from Katrina?

11 **A. Yes. I've done other Mississippi
12 deposition testimonies, but I'd say 30 for
13 Katrina.**

14 Q. Okay. Any of those courses that you
15 took, either getting your BS in architecture, your
16 MS in landscape architecture or your Ph.D. in
17 urban studies that taught you how to differentiate
18 between the cause of damage to a building from a
19 hurricane?

20 **A. Between a hurricane and flood?**

21 Q. Well, no. Just a hurricane.

22 **A. Just a hurricane?**

23 Q. Yes. Determine the cause of damage to a
24 building as a result of a hurricane.

25 **A. I've taken many short courses that teach**

1 **that. On my college transcripts, I don't know of
2 any colleges that offers those courses at the
3 undergraduate level. No. I did not take any in
4 my program.**

5 Q. Or at the graduate level?

6 **A. Even graduate level, I don't -- I didn't
7 take any. There is a hurricane center at LSU, for
8 example, that might offer some courses.**

9 Q. Okay. Now, you had mentioned earlier
10 that you had had some experience while you were in
11 the military overseeing construction projects,
12 correct?

13 **A. Yes.**

14 Q. And that was project engineering; is
15 that what you said?

16 **A. Well, it's a lot of stuff. You actually
17 have a lot of latitude in the military, A, by
18 choice of assignments, and, B, nobody will stop
19 you from taking on extra duties.**

20 **So, example, when I was the public works
21 officer at a base, I would go down to the
22 engineering department. Traditionally my role
23 would be to supervise the architects and
24 engineers. I would tell the director of
25 engineering, give me some stuff in your backlog,**

1 **no one's going to care if it takes its sweet time**

2 **because I have a day job. I'd like to do some
3 engineering and turn it back in to you as
4 finished designs.**

5 **So I've designed buildings by virtue of
6 having under my control departments of engineering
7 and convincing my subordinate to share with me
8 that work which he was supposed to do instead of
9 me.**

10 Q. Okay. And --

11 **A. I've designed construction jobs that
12 I've turned over to construction crews and design
13 build in the field, such as working with Seabees.
14 You get to go through all the different aspects of
15 design, construction, inspection and repair and
16 demolition. It's called the whole life cycle of
17 building construction when you're in the military.**

18 Q. And when you say you were supervising
19 architects and engineers, they were design
20 architects and engineers, not structural or
21 mechanical engineers, correct?

22 **A. Correct. The construction engineering
23 is what I got to do by virtue of leading
24 engineering troops. I actually lead the
25 construction crews. What I wasn't supposed to be**

1 **doing as my day job in the military was to be a
2 designer on the boards. That was supposed to be
3 my subordinates when I managed civil service, but
4 I managed to do my share of that work by asking my
5 subordinates to share their workload with me so I
6 could stay at the speed on design.**

7 Q. And you never worked with meteorologists
8 in your work, working with the design engineers
9 and architects, correct?

10 **A. No. And not to be facetious, at Hunter
11 Ligget Military Reservation in California, the Los
12 Padres National Forest, the meteorological section
13 actually reported into the engineering company.
14 But that was pretty much I supervised them. I did
15 not technically get involved.**

16 Q. But you didn't have to work with
17 meteorologists in doing the design aspect of the
18 engineering that you were doing, right?

19 **A. Well, the only design aspect would be to
20 go to the military's equivalent of civilian codes,
21 look at the wind design map, take the wind design
22 speed and then apply that to the design of the
23 building. There was no other coordination with
24 the meteorologists because the -- in fact, ASCE 7
25 has 500 years of meteorology run through a Monte**

1 **Carlo simulation to spit out those wind speeds.**

2 Q. Okay. You testified earlier that you've
3 given approximately 50 depositions; is that right,
4 in Katrina cases?

5 **A. Katrina cases in Mississippi, yes.**

6 Q. Okay. What about total? How many
7 depositions have you given, say, in the last five
8 years?

9 **A. I don't count them. I brought with me
10 my -- what's called a Rule 26 for four years back.
11 That, I can tell you. Anything beyond that, I'd
12 have to research because I drop it off after four
13 years.**

14 Q. Okay. And that's what the rule
15 requires, so you're doing the right thing. And
16 I've premarked that as Exhibit 2. Let me hand you
17 that. Is this similar to -- and I believe the
18 date on what I've premarked as Exhibit 2, what was
19 produced with your report, is May 1st, 2008. Is
20 that the most recent copy?

21 **A. No. I'll swap you for October 9, 2008.**

22 Q. Okay. Do you need a copy of that?

23 **A. No, ma'am.**

24 **MS. JOHNSON:**

25 **Okay. So I'm going to mark that, the**

1 **no knowledge of one that was close to this
2 property site.**

3 Q. Okay. And I've noticed in your report
4 you don't say that a tornado knocked the tree down
5 that landed on the Remel roof; is that correct?

6 **A. That's correct.**

7 Q. Okay. Is that your opinion, that a
8 tornado caused or contributed to the loss of the
9 tree?

10 **A. Couldn't tell you, I mean. If there was
11 a tornado or not, that doesn't mean that that was
12 the highest gust. All I know is the tree fell.**

13 Q. And if I asked you, I apologize, but
14 you're not a meteorologist, right?

15 **A. No.**

16 Q. And you have actually that the Remel
17 residence is located approximately -- actually,
18 you don't. I'm sorry. Do you know how far the
19 Remel residence is located from the bay? I was
20 looking at the other property.

21 **A. Possibly I could scale it off a map.**

22 **Sitting here right now, I don't have it in my
23 head.**

24 Q. Okay. Now, you cite at the bottom of
25 Page 2, the last paragraph, the NOAA wind gust map

1 **October 9th, 2008 prior testimony report as
2 Exhibit 2A.**

3 **(Exhibit 2A was marked.)**

4 **MS. JOHNSON:**

5 Q. And this is up to date as of yesterday,
6 correct?

7 **A. Yes.**

8 Q. Okay. And I think in counting what was
9 Exhibit 2, would 100 cases sound appropriate for
10 having given testimony in the last four years?

11 **A. I really have never counted them. I've
12 had attorneys tell me in depositions because they
13 must have counted it, but I -- there it is. I
14 mean, I never counted it in my life.**

15 Q. It is what it is, in other words?

16 **A. Yes.**

17 Q. Okay. Looking at Page 2 of Exhibit 4 of
18 your report, you have reference to tornado
19 warnings in Hancock County. Do you know whether
20 or not there were any tornadoes forecasted to be
21 near the Bay St. Louis area on or about August
22 29th of 2005?

23 **A. I think the closest one that was an
24 official warning was in the bay directly north of
25 the Jourdan River area. Other than that, I have**

1 and also the ARA map as far as reported wind gusts
2 and sustained wind in the particular Bay St. Louis
3 area. Is it accurate that you were not relying on
4 those particular maps, but rather on Dr.
5 Fitzpatrick's summary of the Gene Taylor residence
6 in coming to your conclusion?

7 **A. Yes. I'm comfortable enough that the
8 Fitzpatrick report for the Taylor residence is
9 site specific to the Remel residence as opposed to
10 the NOAA and ARA maps, which are more general to
11 the Bay St. Louis area.**

12 Q. Okay. What time do you believe the
13 residence to have been economically totalled due
14 to wind prior to the surge?

15 **A. I'll explain it, not to be facetious,
16 but at the time when the tree fell on the house.
17 I attempted to be more specific by looking at the
18 wind speed needed to drop the tree and then
19 comparing that to the timeline. That wasn't an
20 effective way to do it, so I'm still comfortable
21 it occurred before the rise of storm surge, but I
22 don't have a precise time on the clock.**

23 Q. Okay. So you discounted what Dr.
24 Fitzpatrick had by way of a timing of the surge
25 and wind and the direction to conclude it fell,

1 but I know it was before the surge, I can't give
2 you a time?

3 **A. Yeah. I didn't discount his timeline.**
4 **What I said -- excuse me. It's bracketed between**
5 **two events. If I attempt to use the EF scale for**
6 **the earliest threshold when a hardwood tree will**
7 **uproot, I get 118 miles an hour. If I take that**
8 **118 miles an hour and apply that to Fitzpatrick's**
9 **timeline, I get 6:45 a.m. But at 6:45 a.m., the**
10 **wind was still blowing from east northeast, which**
11 **doesn't make sense in terms of how the tree landed**
12 **in the azimuth taken by Overstreet. So that's the**
13 **earliest time, but it has problems in terms of the**
14 **azimuth of the tree fall to say 0645 a.m.**

15 **If I go with the direction that the tree**
16 **fell -- and, again, as you say as it landed**
17 **allowing some wiggle room for how it moved, in**
18 **that case, the tree fell after there was enough**
19 **water on the site to participate in the collapse.**
20 **But I don't believe that that collapse pattern is**
21 **indicative of the -- of the conditions that**
22 **existed for the storm surge to cause that event.**

23 **So the latest time it fell would have**
24 **been at about 10:00. So I'm bracketed between an**
25 **early number of 6:45 a.m., an early time of 6:45**

1 **a.m. and a late time of 10:00 a.m. It occurred**
2 **sometime between 6:45 a.m. and 10 a.m., and that's**
3 **as precise as I can get to a time.**

4 Q. Okay. And you don't think it would have
5 occurred earlier than 6:45 or later than 10:00
6 a.m.?

7 **A. Correct.**

8 Q. And why don't you think it would have
9 occurred earlier than 6:45 a.m.?

10 **A. The angle of attack from wind gives me**
11 **more than a 90-degree separation from where the**
12 **tree azimuth was taken by Overstreet.**

13 Q. Do you know what direction the surge
14 would have been coming from towards the Remel
15 property?

16 **A. In general, the surge was obviously**
17 **coming up slope, so there is some variation**
18 **depending on the exact contour, but in general, it**
19 **was being driven by wind and it followed the line**
20 **of wind.**

21 Q. Okay. So according to your testimony,
22 the surge would have been coming towards the Remel
23 property at the same direction the wind was?

24 **A. In general, that's true. To be more**
25 **specific than that, I would need to see the output**

1 **of an ADCIRC model that showed current flow. Flow**
2 **is direction plus velocity. I haven't seen any**
3 **ADCIRC model. I'm generally aware there's one by**
4 **Dr. Slinn from the University of Florida, which I**
5 **don't have access to, and he might have current**
6 **flow which might assist the analysis, but it's not**
7 **available to me.**

8 Q. Okay. So if the surge was on the
9 property at 10:00 a.m., which is what you had
10 testified to earlier, enough to have caused the
11 collapse of the house itself, in and of itself,
12 that surge would have been coming the same
13 direction as the wind, according to your
14 testimony?

15 **A. In general, yes. I have no specific**
16 **information to preclude that. Certainly the**
17 **current velocity at the surface of the water,**
18 **which is where the wave activity is, is in line**
19 **with the direction of the wind. Is there at a**
20 **deeper level a surge being pushed by the storm**
21 **with a different direction? That's possible, but**
22 **I have no knowledge of that.**

23 Q. Okay. And at 10:00 when you have that
24 the water or the surge at that point would have
25 been 22 feet above sea level, that surge then

1 would have been traveling the same way as the
2 wind, which was east southeast, which is the
3 direction of whatever it was that pushed the tree
4 over was coming from, according to the azimuth?

5 **A. Yes.**

6 Q. And you can't say that the tree went
7 over at 10:00 when the wind speed, according to
8 your Dr. Fitzpatrick's numbers here that you have
9 documented at Page 3 of the report occurred at
10 10:00, because then, at that point, the surge was
11 high enough where it could have destroyed the
12 house before the tree went over, correct?

13 **A. Yes. That delimits the latest time.**
14 **It's based on -- yeah. That's the delimitation.**
15 **I'm past the point strictly by the timeline that I**
16 **could say that tree is going to fall over by wind.**

17 Q. Okay. And you had testified earlier
18 that based on the EF scale and hardwood trees
19 being capable of falling over from the roots, I
20 assume, that wind speed is 118 miles an hour?

21 **A. Yes.**

22 Q. Is that gust or sustained?

23 **A. That's gust.**

24 Q. Okay. And the EF scale is taking into
25 account gusts when it makes that or is it

1 sustained wind when they say --

2 **A. No. The EF scale is in gusts. The**
3 **original Fujita Scale was a quarter mile fastest**
4 **wind. Now it's in terms of three-second gusts.**

5 Q. Okay. And according to Dr.
6 Fitzpatrick's summary here, timeline, timetable
7 that you have documented at Page 3 of your report,
8 the first gusts at that speed would have been
9 between 6:30 and 7:00. That's the basis of you
10 6:45 time?

11 **A. Yes.**

12 Q. But it was coming out of the opposite
13 direction from which you would expect it to push
14 over this particular tree?

15 **A. Not the opposite direction. It's coming**
16 **at an angle to the direction that the tree fell.**

17 Q. What angle?

18 **A. It's coming from east northeast. The**
19 **tree fell east southeast. It's off by 45 degrees.**

20 Q. Okay. And the first time the wind comes
21 out of the direction in which the tree fell was at
22 the 10:00 time?

23 **A. The direction in which the tree landed**
24 **as the azimuth was taken is the 10:00 time, yes.**

25 Q. Okay. And it was your testimony earlier

1 **different things that I'm looking at that are**
2 **tools out of a toolbox. And I'm never advocating**
3 **engineering judgment, okay? I have the earliest**
4 **based on the available wind speed at which I**
5 **believe the tree could have fallen. That doesn't**
6 **quite line up with the direction of fall. I have**
7 **the direction of the tree on the ground. And**
8 **albeit, I'm giving a 10-degree latitude for the**
9 **tree moving once it's on the ground. That 10**
10 **degrees, keep in mind, we were talking about the**
11 **buoyancy effect. We weren't talking about it**
12 **bouncing off a roof.**

13 **There's another factor we haven't looked**
14 **at, is the tolerance around the direction of wind**
15 **that we have reported in Dr. Fitzpatrick's**
16 **timeline. If you watch a flag and there's a**
17 **sustained wind from one direction, that doesn't**
18 **stop that flag -- a flag is a poor example of**
19 **exact vortex shedding off a flag pole, and I'm**
20 **sure Dr. Smith will object.**

21 **So let's go with an anemometer or a**
22 **weather vane on top of a roof. I'm going to have**
23 **variations in the direction of wind despite the**
24 **predominant direction which shows up in this**
25 **timeline. There's enough wiggle room -- and I**

1 that it would be only within 10 degrees of where
2 it actually fell, where it landed?

3 **A. Yes.**

4 Q. Okay. Would you agree with me if the
5 tree fell onto the roof at some point between 9:30
6 and 10:00, there would already be water within the
7 house?

8 **A. Yes.**

9 Q. Okay. And thus the water would have
10 already damaged whatever contents were on the
11 floor in the house prior to the tree landing on
12 the roof?

13 **A. Assuming the tree fell between 9:30 and**
14 **10:00, yes.**

15 Q. Okay. So for the tree to have fallen
16 before any of the contents were damaged, the tree
17 would have had to have fallen before 9:30,
18 according to Dr. Fitzpatrick's timetable, correct?

19 **A. Yes.**

20 Q. Okay. But, again, none of the wind
21 speeds that Dr. Fitzpatrick has on his timetable
22 are in the direction of the way the tree fell, or
23 landed?

24 **A. Correct. And if you'll allow me,**
25 **there's a caveat to that. I mean, I have**

1 **don't mean that in the bad sense. There's enough**
2 **wiggle room around that direction to account for**
3 **the tree falling to left or right of where it**
4 **might fall in terms of its direct alignment with**
5 **wind.**

6 **In terms of my engineering judgment, I**
7 **don't believe that flood could have collapsed that**
8 **house in that manner. So I delimit that the flood**
9 **would have been less than three feet above the**
10 **floor level. Three to four feet is when you have**
11 **any type of structural damage due to hydrostatic**
12 **pressure. So 13, that's up to 17 feet. So it's**
13 **occurring before 9:30.**

14 **And then the next factor, the last**
15 **factor -- oh, it's just a consideration that with**
16 **the EF Scale, the time that they give an EF Scale**
17 **is the threshold for damage. If the tree could**
18 **fall at 118 miles an hour, it certainly could fall**
19 **at a higher wind speed.**

20 **All of the wind speeds between 6:30 and**
21 **9:30 are wind speeds at which time that tree could**
22 **have fallen. So I've now narrowed it down to**
23 **between 6:30 to 9:30. I can't preclude that there**
24 **was three feet of water inside the house when the**
25 **tree hit the building and collapsed the structure,**

1 **but I don't believe it was after 9:30 when there**
2 **was three foot of water in the house.**

3 Q. Okay. You mentioned earlier that the
4 reason you don't think Dr. Fitzpatrick's timeline
5 explains when the tree fell based on the direction
6 of the wind he has was because you feel that the
7 collapse pattern was not consistent with surge
8 causing it, correct?

9 **A. No, ma'am. What I said was, at the very**
10 **beginning I went to the EF scale, and the EF scale**
11 **showed me that I would expect that tree to have**
12 **fallen as early as --**

13 Q. 6:45?

14 **A. 6:45 -- well, no. The EF Scale says the**
15 **tree would have fallen as early as 118 miles an**
16 **hour. That's pretty rough because unlike the**
17 **other parts of the EF Scale where lower bound and**
18 **higher bound are based on construction which we**
19 **can tie back to a building code, it's a little**
20 **more philosophical to decide was the tree a**
21 **lower-bound tree or an upper-bound tree.**

22 **So this is by the EF Scale, which is the**
23 **rule I always use, but I'm recognizing it's not**
24 **going to be as precise as with a building because**
25 **Mother Nature built this tree and it's not built**

1 **off an assembly line like we like to think**
2 **buildings are. But the EF Scale, strictly by the**
3 **EF Scale, I'm saying 118 miles an hour. That's to**
4 **be consistent with my other analyses.**

5 **The problem is, is if I go back to**
6 **Fitzpatrick's timeline, I don't have a**
7 **disagreement with his timeline, but that number**
8 **from the EF Scale, if I apply it to his timeline,**
9 **says the tree fell at 6:45 a.m. But at 6:45 a.m.,**
10 **I'm out of whack by 45 degrees with the direction**
11 **of tree fall.**

12 Q. I understand. And not all trees
13 obviously fall, according to the EF Scale, at 118
14 miles an hour, correct?

15 **A. Correct.**

16 Q. And here, in fact, did you not opine
17 that we know that this particular red oak tree
18 withstood 118 miles an hour wind?

19 **A. Yes.**

20 Q. And that's at Page 6 of your report
21 midway down in between the note; we also know that
22 the tree withstood 118 miles per hour wind?

23 **A. Yes.**

24 Q. And in this case, the direction of tree
25 fall is more significant than the EF Scale

1 guidance, correct?

2 **A. Correct.**

3 Q. So using your own words, you're still
4 voting more towards the direction of the wind fall
5 which is 10:00 as opposed to the EF Scale?

6 **A. I'm voting for a later time of fall than**
7 **6:45. So that's why 6:45 is at the earliest limit**
8 **of the time that tree fell. And I have no**
9 **confidence in 6:45; but just as a delimitation,**
10 **6:45 is the earliest one.**

11 Q. Let's look at, then, 8:30. Let's take
12 it a couple hours later within that bracket that
13 you've given us. The wind then is approximately
14 138 miles an hour wind gusts, according to Dr.
15 Fitzpatrick's timeline at the Gene Taylor
16 residence. And we also have that the wind is
17 sustained coming out of the east, correct?

18 **A. Correct.**

19 Q. What degree of difference are we looking
20 at with that time as far as the direction that the
21 tree actually fell? It was 45 degrees at 6:45.
22 What time --

23 **A. Oh, you're talking -- okay. Bear with**
24 **me. I'm constructing a wind rose and filling it**
25 **in. I've divided it -- example, quadrant north to**

1 **east, between that is northeast. That's a**
2 **45-degree angle between north and northeast.**
3 **That's a 22.5-degree angle between north and north**
4 **northeast. I'm trying to use that to keep track**
5 **of everything we're about to say.**

6 **Overstreet has the tree falling with an**
7 **azimuth of 300 degrees. That points within 6 --**
8 **within 7.5 degrees of west northwest. So right**
9 **off the bat, I'm going to be seven degrees off**
10 **because I'm taking that 300 degrees and I'm**
11 **converting it to west northwest. That's how we**
12 **line up with the nearest direction that we're**
13 **going to talk about, west northwest. It's**
14 **actually 292.5 degrees.**

15 Q. That's the direction the tree fell, not
16 the direction the wind was coming from?

17 **A. Right. The tree fell 300, but we're**
18 **going to call that 292.5 so I can line right up**
19 **with west northwest.**

20 Q. Okay. Will you circle that for me on
21 there, west northwest?

22 **A. (Witness complying.)**

23 Q. There you go.

24 **A. Okay. I'll give you this page. It's**
25 **the back page of my Map Quest to get here.**

1 **MS. JOHNSON:**

2 **And I'll mark that as Exhibit 10.**

3 **(Exhibit 10 was marked.)**

4 **THE WITNESS:**

5 **We started out with 0645, which is based**
6 **on -- if the Enhanced Fujita Scale says the tree**
7 **would have fell at about 118 miles an hour, that**
8 **occurred at about 6:45, actually. Okay. I used**
9 **from the EF Scale 120 miles per hour, close to**
10 **118, south southeast direction.**

11 **MS. JOHNSON:**

12 **Q. Okay. Now you're looking at sustained**
13 **wind?**

14 **A. Well, no. Oh, that's my problem. Okay.**
15 **I usually go hide in the corner and do this stuff**
16 **as opposed to being watched, so bear with me.**

17 **Okay. I had looked at 118 miles per**
18 **hour on the EF scale which dropped the tree. I**
19 **equated that -- again, I'm not being precise --**
20 **115 mile per hour gust on Fitzpatrick. That**
21 **occurred at 6:30. I said 6:45 because it was**
22 **after 115. So that's going to be -- the wind is**
23 **coming from east northeast. I'm marking with an**
24 **arrow the letter "A" equals about 118 miles per**
25 **hour EF Scale.**

1 **Fitzpatrick has the wind blowing from the east at**
2 **8:30. First let me make sure that I didn't**
3 **transcribe in error.**

4 **Okay. Looking at Page 8 of the Henning**
5 **(sic) report, unless he has an error in his graph,**
6 **I transcribed that properly. But then what he's**
7 **saying based on his analysis, the winds coming**
8 **from -- and this is why it's a snapshot. The wind**
9 **is coming from the east at 8:30, then it comes**
10 **from south southeast at 9:30, but then it moves**
11 **back a little more towards the east and comes from**
12 **east southeast at 10:00.**

13 **Now, there's a chance he typoed south**
14 **southeast and east southeast. That would be more**
15 **agreeable to the wind uniformly shifting from east**
16 **to south.**

17 **Q. Okay. Well, let's assume that**
18 **Dr. Fitzpatrick was accurate --**

19 **A. Correct.**

20 **Q. -- when he did his report for Gene**
21 **Taylor's property.**

22 **A. Right. Well, I did -- I presumed the**
23 **same and I kept that information. So if that**
24 **information -- and keeping that in mind, what did**
25 **you just ask me?**

1 **Q. And then put, if you will, 6:45, 0645.**

2 **A. Yeah, 0645.**

3 **Q. Okay.**

4 **A. And you asked me how far was that out of**
5 **whack. Let's see.**

6 **Q. That's 45 degrees out of whack, right?**

7 **A. Yes.**

8 **Q. Okay.**

9 **A. Okay. You next asked me what about --**

10 **Q. 8:30, which would be winds out of the**
11 **east.**

12 **A. If it came out of the east, it's 22.5**
13 **degrees out of whack with the azimuth of the tree**
14 **on the ground.**

15 **Q. And if it's coming out at 9:30 south**
16 **southeast, how far are we off the track, or out of**
17 **whack, as we've been referring to?**

18 **A. I'm sorry. I lost the question. At**
19 **10:00 --**

20 **Q. 9:30. I'm sorry.**

21 **A. Is it 9:30?**

22 **Q. Winds coming south southeast.**

23 **A. Okay. Here's where I don't know if it's**
24 **a typo or if the wind shifted as we talked about**
25 **the wind shift. Because Henning -- not Henning.**

1 **Q. At 9:30, how far off degree-wise?**

2 **A. At 9:30, we're 90 degrees off -- no.**
3 **I'm sorry. Compared to the azimuth, we're 45**
4 **degrees off. We're 45 degrees off compared to the**
5 **direction of the trees that fell.**

6 **Q. Okay.**

7 **MR. GIBSON:**

8 **Can we take a break?**

9 **MS. JOHNSON:**

10 **Yes.**

11 **(Off the record.)**

12 **MS. JOHNSON:**

13 **Q. Are you finished with Exhibit 10?**

14 **A. I'm done if you're done.**

15 **Q. I'm done. Moving on. Okay. We talked**
16 **about the roof. Does it matter to you whether or**
17 **not the roof -- well, I asked you that, whether**
18 **the roof was stick built or trusses by way of the**
19 **cause of the collapse of the residence?**

20 **A. I don't think it's going to be very**
21 **important in terms of cause of collapse. If the**
22 **building had survived and you're repairing the**
23 **roof, it might go to the cost of repair, but the**
24 **building is totalled.**
25

1 Q. Okay. Did you have any information
 2 about --
 3 **A. Well, the only other possible thing is**
 4 **if it was stick built and it had a stick built**
 5 **ridge beam. If the ridge beam -- well, even that,**
 6 **that wouldn't matter in terms of collapse, just in**
 7 **terms of the building costs. There's probably**
 8 **some fine tuning of a scenario based on what types**
 9 **of roof support system, but none that comes to**
 10 **mind that's of importance.**
 11 Q. Okay. And in looking at your report, I
 12 overlooked it earlier and I apologize, Page 3 of
 13 it was a timeline. You do indicate that the
 14 Fitzpatrick timeline for the Gene Taylor property
 15 was approximately -- that property was located
 16 only a half mile --
 17 **A. Oh, yes, we said that already.**
 18 Q. -- from the Remel property?
 19 **A. Yes.**
 20 Q. Okay. Do you know anything about the
 21 type of connections given the photographs you have
 22 of the debris of the roofing materials to the
 23 interior walls?
 24 **A. No. I can generally surmise that the**
 25 **house was 27 years old. It was not going to have**

1 **tree from moving the building in a lateral**
 2 **direction.**
 3 Q. Okay. And I think I asked you if you
 4 had any idea about the connections between the
 5 roof framing to the interior walls. Do you have
 6 any idea about the connections of the roof framing
 7 to the exterior walls?
 8 **A. No. By age of construction, I would**
 9 **not -- by the age of construction, unless you had**
 10 **an enlightened contractor, you do not have a load**
 11 **path in terms of today's hurricane-resistant**
 12 **construction from the roof to the foundation.**
 13 Q. Discounting the impact with the tree to
 14 the roof, was there enough surge level in the
 15 vicinity or at the vicinity of the Remel property
 16 to bring it down or cause destruction?
 17 **A. No, not the destruction evidenced by the**
 18 **collapse because the height alone is not going to**
 19 **do it. I need current velocity. I need wave**
 20 **action. Whatever current velocity and wave**
 21 **activity there was, it's lost an awful lot of**
 22 **kinetic energy climbing up that slope, impacting**
 23 **other structures, and it's fizzled out by the time**
 24 **it's gotten to this property.**
 25 Q. Okay. And that would be true if the

1 **the latest hurricane-resistant construction**
 2 **features in terms of Simpson connections or other**
 3 **hurricane-resistant connections, but that's as far**
 4 **as I can go.**
 5 Q. And you don't know whether there were
 6 any hurricane clips?
 7 **A. There might have been what contractors**
 8 **call hurricane clips, which is a small, six-inch**
 9 **piece of metal which are twisted 90 degrees. I've**
 10 **rarely seen all the holes filled with the nails,**
 11 **although if you have four holes, you would expect**
 12 **four nails to go through them.**
 13 **Those clips, if they were issued 27**
 14 **years ago, were before the first ES report by**
 15 **Simpson for hurricane-resistant strapping. So**
 16 **they might look like what Simpson uses today. I**
 17 **can't guarantee you that they performed like the**
 18 **Simpson clips of today.**
 19 Q. Would the clips, whether they were there
 20 or not there or from today or 27 years ago, have
 21 prevented a house that was submitted to 24 feet of
 22 surge from collapsing?
 23 **A. They are designed to prevent uplift.**
 24 **They're not designed to prevent lateral load,**
 25 **which would not preclude either wind, flood or the**

1 property directly to the east of the Remel
 2 property was structurally a total loss to the
 3 point of it being a slab with no tree impact?
 4 **A. Well, what we keep forgetting is that**
 5 **there is wind damage to all these buildings before**
 6 **the arrival of storm surge. And what you're**
 7 **looking at is not the affect of storm surge alone,**
 8 **it's the affect of storm surge to buildings that**
 9 **were weakened by wind before the arrival of the**
 10 **storm surge. A, that's my position on the Gene**
 11 **Taylor property, and that's right down at the**
 12 **coastline. It's certainly my position of more**
 13 **properties inland which were attacked by wind**
 14 **ahead of storm surge. It's also my explanation**
 15 **for why the property fell at the Remel -- I never**
 16 **said wind alone or the tree alone knocked down the**
 17 **Remel property. It weakened it to the point that**
 18 **when the surge came in, it was so much more easier**
 19 **for surge to complete the job started by wind.**
 20 Q. What portion, if any, did the impact of
 21 the tree to the Remel house collapse?
 22 **A. Wind alone, absent storm surge?**
 23 Q. You said you never testified that the
 24 tree impact entirely collapsed the house; is that
 25 correct?

1 **A. Not that I recall, unless I got sleepy**
2 **after lunch. I honestly don't believe I've ever**
3 **said that.**

4 Q. Okay. So what is your testimony? What
5 type of damage did the tree impact cause to the
6 Remel house and where do you have that documented
7 in your report?

8 **A. Page 6 of my report in the first two**
9 **paragraphs of conclusions.**

10 Q. Okay. And of that, it was your opinion
11 that the wind attacked the tree crown, it uprooted
12 the tree, two, at the same time, the wind blew the
13 debris and it breached the south and east windows;
14 is that correct?

15 **A. Yes.**

16 Q. Did you find any evidence of windows at
17 the inspection site? Well, I guess you did not
18 since there was no remnants of the home, correct?

19 **A. No. I mean, in the photographs the**
20 **house is collapsed to the point you're not going**
21 **to tell much about the windows.**

22 Q. Okay. Then how is it you concluded that
23 wind-blown debris breached the south and east
24 windows?

25 **A. Because the wind speed that occurred**

1 **per hour gusts coming from south southeast which**
2 **would hit the south windows at which time water is**
3 **at about -- at that time, it's about five feet,**
4 **four and a half to five feet above the building.**

5 **In the period between 8:30 and 9:30, I'm**
6 **going to have a south southeast component when**
7 **water is below the sill level of those windows.**
8 **Small window of opportunity, but still a window of**
9 **opportunity for about a 140 mile per hour wind to**
10 **hit the south windows before they go underwater.**
11 **At that point, though, I'm starting to look at the**
12 **building collapsing to the ground, so I'm not**
13 **going to go further than that.**

14 Q. And when you say you're looking at the
15 building collapsing to the ground, that's
16 because -- and you have that in your testimony at
17 Page 5 of your report, very bottom, that the rule
18 of thumb is assumed to be four foot above the
19 finished floor is at the point the potential
20 height at which a storm surge can damage a bearing
21 wall.

22 **A. That's not collapse the building to the**
23 **ground. That's the threshold for damage to the**
24 **exterior wall. It generally kicks in at the**
25 **bottom.**

1 **prior to the arrival of storm surge looking at the**
2 **EF Scale, which does not deal with wind-blown**
3 **debris, but just a window breakage, period, it's**
4 **more likely than not that the windows on that**
5 **exposure were damaged by wind.**

6 Q. And at what time did that happen?

7 **A. I don't have a copy of the EF Scale in**
8 **front of me. I think it's 98, 99 miles per hour**
9 **for expected construction windows.**

10 Q. Okay. And at what point would the wind
11 direction have been appropriate to breach the
12 south and east windows on that property?

13 **A. By 6:30 a.m., I have 150 mile per hour**
14 **wind gusts coming -- well, actually, I have 97**
15 **mile per hour wind gust by 5:30 a.m. coming from**
16 **the east northeast direction. That would allow**
17 **for breakage of the windows on the east side. And**
18 **then --**

19 Q. That's at 7:00?

20 **A. By 5:30.**

21 Q. Oh, 5:30?

22 **A. Because the gusts are already at 97**
23 **miles per hour. I believe the EF Scale was 98 or**
24 **98 for glazing breakage.**

25 **And then at 9:30 a.m., I have 145 mile**

1 Q. Okay.

2 **A. You're below the center of gravity**
3 **that's building. That's not going to push the**
4 **building down. It's got to be -- it's got to be**
5 **attacked from above the center of gravity to force**
6 **it down in that direction.**

7 Q. Okay. And then you have back at Page 6
8 at Number 3, in that paragraph, you already say
9 the wind attacked the tree crown, uprooting the
10 tree to the long moment arm of the tree trunk at
11 the same time you have the debris breaching the
12 south and east windows. And you can give me like
13 an hour and a half between the time you say that
14 happened, between 5:30 and 8:30, correct?

15 **A. I'm sorry. You went really fast on me.**
16 **What page are we on and could you repeat the last**
17 **portion?**

18 Q. Page 6 under Conclusion. Second
19 sentence: At the same time as the tree uprooting,
20 you're saying wind-blown debris breached the south
21 and east windows. When I asked you at what time,
22 you said the south windows would be breached at
23 5:30 and the east windows would be at
24 approximately 8:30 a.m., correct?

25 **A. Oh, yeah. At the same time. I'm not**

1 **saying down to the very second. I mean within the**
 2 **same period of time prior to the rise of storm**
 3 **surge. The time I'm talking about is the period**
 4 **of time before storm surge gets there. That's the**
 5 **context of the time I'm talking.**

6 Q. Okay. And the tree collapsed damaged
 7 the southeast corner; is that the right corner or
 8 are we talking southwest corner?

9 **A. What did I do? No, no, no. We should**
 10 **be talking southeast corner. I explained to you**
 11 **previously Page 4 was a typo where I said**
 12 **southwest. That should be southeast. The**
 13 **southeast on Page 6 is correct.**

14 Q. All right. Where you say two lines
 15 down, due to the loss of bracing strength, the
 16 south and east exterior walls collapsed under
 17 impact load, would that have been at or about the
 18 time the tree landed on the roof?

19 **A. Yes, that or shortly after.**

20 Q. In your next paragraph, you indicate
 21 that the tree crown was shielding damage to the
 22 shingles of the roof. Do you have any pictures of
 23 the tree crown anywhere on the roof of the Remel
 24 home?

25 **A. I have close-ups of tree limbs. I have**

1 **no good pulled-back pictures showing the crown.**

2 Q. Then what do you base that opinion on
 3 that the crown sheltered or shielded any damage
 4 from being done to the shingles on the roof from
 5 wind?

6 **A. I think it's more than commonsensical.**
 7 **It's based somewhat on my knowledge of trees, tree**
 8 **crowns and roof construction. If I had the tree**
 9 **which is on top of that roof, to some extent, I**
 10 **have a wind break on top of that roof. And the**
 11 **wind aerodynamically is going to go over the crown**
 12 **once the crown is laying down in front of the**
 13 **roof.**

14 Q. Okay. And whether or not it's breaking
 15 the wind depends on the direction the wind is
 16 coming in relation to where the crown is on the
 17 roof?

18 **A. With a possible exception of it getting**
 19 **-- no, I think it's really a reach to say that if**
 20 **it's coming from the direct opposite direction,**
 21 **which it never did, that it's getting in between**
 22 **the branches.**

23 **I think once that crown -- it acts as a**
 24 **shroud. It's not as good as a blue roof, but it's**
 25 **going to protect that roof from further damage**

1 **because any wind abrasion, any wind uplift is**
 2 **going to be aerodynamically flowing over the crown**
 3 **instead of down at the roof level.**

4 Q. Is an estimate of 105 miles an hour wind
 5 consistent with what you observed from the photos
 6 of the Remel site?

7 **A. 105?**

8 Q. 145 mile an hour.

9 **A. 145?**

10 Q. Yes.

11 **A. 145 mile per hour is consistent with**
 12 **wind collapsing the building, but 145 is after the**
 13 **storm surge rose. So I don't think you can use**
 14 **that as a damage indicator.**

15 **If 145 mile per hour crossed that site**
 16 **after the storm uplifted, the thing I would be**
 17 **looking for would be damage to the roof. But most**
 18 **roofs aren't protected by a fallen tree laying on**
 19 **top of them, so I've lost my damage indicator to**
 20 **show me whether or not 145 mile per hour wind**
 21 **crossed that site.**

22 Q. Okay. Did you see any photographs of
 23 the site of the Remel property that would indicate
 24 to you that there was any shifting or erosion at
 25 the bottom where the house was located, not the

1 garage?

2 **A. No. There are no -- there were no**
 3 **pictures taken that would show that detailing.**

4 Q. Do you know whether or not there was
 5 erosion at the bearing soils of the actual
 6 dwelling itself?

7 **A. No. I presume that there were some soil**
 8 **disturbance where the trees pulled out of the**
 9 **ground. I've seen no pictures nor do I expect to**
 10 **see pictures of serious erosion at the slabs**
 11 **because I don't think that would be supported by**
 12 **the current velocity, the low current velocity.**

13 Q. In looking at Page 6 of your report
 14 under Conclusion, the first paragraph, midway down
 15 beginning with the sentence, Due to a loss of
 16 bracing strength, the south and east exterior
 17 walls collapsed under impact load, what is the
 18 loss of bracing strength to, the exterior walls or
 19 in the attic?

20 **A. Well, in the previous sentence I talk**
 21 **about damage to the roof trusses. It may turn out**
 22 **to be rafters and not trusses. I thought they**
 23 **were trusses, but damage to the roof system. Any**
 24 **damage to the truss or rafters that provides**
 25 **bracing strength to the walls, once you've damaged**

1 **that roof system, you've lost the strength to**
2 **brace the exterior wall system.**

3 Q. Okay. What was the difference between
4 the tree impacts with the garage and the tree
5 impact with the Remel home?

6 **A. It appears to be the kinetic energy**
7 **transfer. The trees at the garage were less mass,**
8 **more crown, less trunk, smaller height, so there**
9 **was less acceleration as they fell, less impact**
10 **load. You know, a couple of the smaller trees**
11 **don't have the same impact load as one large tree.**

12 Q. Okay. But would you agree with me that
13 the garage structure was subject to the same wind
14 force as the Remel home?

15 **A. Generally, yes.**

16 Q. Okay. And given the elevation, we do
17 know it was a bit higher than the home, correct?

18 **A. Yes.**

19 Q. Okay. Would you agree with the wind
20 force at Gene Taylor's house being the same as the
21 wind force at the Remel property?

22 **A. Roughly. I mean, I could allow for some**
23 **denigration of the wind speed because I'm further**
24 **inland, five miles per hour.**

25 Q. Could you allow for 10 miles per hour?

1 **A. I'd defer to the meteorologist, if he**
2 **said so. As I said, the driving tool for the**
3 **analysis is not the reported wind speed compared**
4 **to the EF Scale. It's the general fall of the**
5 **tree and the timing of that fall ahead of the rise**
6 **of storm surge.**

7 Q. What about that would you expect that
8 the wind direction at Gene Taylor's residence
9 would differ from the wind direction at the Remel
10 property a half a mile up the street?

11 **A. Again, allowing the meteorologist to**
12 **make the final call, they're a half a mile apart.**
13 **The Gene Taylor residence is almost due east of**
14 **the Remel residence. The strongest wind virtually**
15 **came from east to west. So in regards to the**
16 **strongest winds attacking both buildings, they**
17 **came from the same direction, albeit there might**
18 **be some denigration of the wind as you go inland.**

19 Q. Would you expect the wind direction to
20 change from the east to south southeast between
21 Taylor's residence and the Remel property?

22 **A. The only events I can think of that**
23 **would cause that to happen would be the**
24 **topographic feature of the surface of the land.**
25 **If the wind was bending around, for example, a**

1 **tree break or a bending around a contour, I can't**
2 **think of any land form that would cause that wind**
3 **to var from straight line wind, except a**
4 **rotational wind, and now I'll defer to the**
5 **meteorologist.**

6 Q. In looking at Page 29 of your report,
7 Exhibit 4, you had referenced earlier when we
8 discussed the preliminary materials that came out
9 of Stennis, is this the chart that you were
10 referring to?

11 **A. Yes. That's the preliminary ADCIRC**
12 **model that was first produced by World Winds at**
13 **Stennis shortly after Hurricane Katrina.**

14 Q. And do you know how far this location is
15 from the Remel property, that being near Bay
16 Street, Bay St. Louis, city hall?

17 **A. No. I discounted the use of it from the**
18 **get-go, so I didn't do any further analysis of**
19 **this matter.**

20 Q. Okay. I think you discussed the
21 Overstreet report and what you relied upon from
22 it. Did you have any criticisms of the Jade
23 Engineering report?

24 **A. My main criticism is they used**
25 **CompuWeather which shows sustained wind. They**

1 **never convert that to wind gusts. Without making**
2 **that calculation, it's hard for any wind engineer**
3 **to analyze a building in terms of wind damage.**
4 **Because ASCE 7 uses three-second gusts to design**
5 **with, then we should consistently use three-second**
6 **gusts to analyze building failure.**

7 Q. Okay. What was that calculation again
8 they did not do?

9 **A. They didn't convert three-second**
10 **gusts -- they didn't convert one-minute sustained**
11 **wind into three-second gusts. In my report, I**
12 **said multiply it by 1.25 because that's what**
13 **CompuWeather does. With CompuWeather, you have to**
14 **purchase separately the wind gust line ala carte**
15 **from the sustained wind line. In ASCE 7 since**
16 **'05, we're using a factor of about 1.27 to convert**
17 **a one-minute sustained wind to three-second gusts.**

18 Q. And you didn't convert the sustained
19 one-minute wind to three-second gusts because you
20 relied basically on what Dr. Fitzpatrick did,
21 correct?

22 **A. Yes. As a meteorologist, if he's**
23 **already made that conversion, he's made it as a**
24 **meteorologist. If you don't have a meteorological**
25 **position in your design, you default to the ASCE 7**

1 **across-the-board conversion factor of 1.27.**

2 Q. And we have no dispute as far as what
3 you believe the storm surge was at the Remel
4 property, correct?

5 **A. I apologize. I was reading something.**

6 Q. You agree with Dr. Fitzpatrick's report
7 as far as the amount of storm surge that the Remel
8 house was subjected to?

9 **A. Yes. I've deferred to his calculations.**
10 **If I may, in reading Jade -- and I have no reason**
11 **to disagree on a factual basis -- they're noting**
12 **that -- I'm sorry. What I've read is of no**
13 **consequence. I retract the beginning of my**
14 **statement.**

15 (Exhibit 11 was marked.)

16 **MS. JOHNSON:**

17 Edward, I'm going to attach a copy of
18 the Jade report.

19 **MR. GIBSON:**

20 Okay.

21 **MS. JOHNSON:**

22 And the Overstreet report will be
23 Exhibit 12.

24 (Exhibit 12 was marked.)

25 **MS. JOHNSON:**

1 **flood. I think that's key to the whole thing. If**
2 **the building was so damaged that flood let the**
3 **roof float away, then that building was**
4 **sufficiently damaged and it was economically**
5 **totalled before the flood water got there.**

6 Q. Anything else you disagree with in Jade?

7 **A. There is some minor stuff. Like they**
8 **said because the shingles aren't severely**
9 **impacted, that shows that there wasn't much of an**
10 **impact by the tree falling on the house. The**
11 **serious impact was the stud wall broke. So if the**
12 **stud wall broke, I'm not going to sweat whether or**
13 **not some shingles got removed. First of all,**
14 **they're underneath the crown and you can't really**
15 **tell. And second of all, it's kind of moot how**
16 **many shingles got scarred if the building is so**
17 **damaged by impact that when flood comes in, the**
18 **roof simply floats off.**

19 Q. Okay. Do you agree with him that the
20 shingles were not severely impacted?

21 **A. I agree with him that the shingles are**
22 **not visibly damaged.**

23 Q. And it's my understanding it's your
24 testimony that the impact of the tree caused the
25 collapse of two walls, and then the surge caused

1 Q. Did you see anything else that you
2 disagree with in the Jade Engineering report?

3 **A. Well, in terms of conclusion, Jade and I**
4 **aren't that far apart in scenario. We both have**
5 **the tree falling first ahead of the collapse due**
6 **to -- we both have the tree falling before flood**
7 **collapsed the building. The difference is, is I**
8 **think the tree damaged the building enough to**
9 **allow for a partial collapse.**

10 A shade of difference, Jade says the
11 tree hit the building, broke stuff; but then when
12 the storm surge came in, because the stud walls
13 were broken, the roof floated away. I suggest
14 that if the roof merely floated away because the
15 water came in, it was broken pretty bad by impact
16 with the tree before the flood water got there.

17 So we're both saying the same thing, but
18 I'm pointing out that absent the tree falling,
19 there was no way that the roof would have floated
20 off the building. It floated off the building to
21 the extent it did because of the impact with the
22 tree which came first.

23 Jade sort of says the same thing, but
24 they don't emphasize that it's because of the wind
25 damage that the building was disassembled by the

1 the collapse of the remaining two walls, correct?

2 **A. No. What I said was there a partial**
3 **collapse due to wind. I can't be very definitive**
4 **about it. Minimally, Jade was out there and found**
5 **these two walls that were damaged. I don't know**
6 **what else you could have found if you looked**
7 **harder. I'm not going to fault him for that. I**
8 **don't know if there was imminent collapse of the**
9 **rest of the debris that they didn't want to send**
10 **an engineer underneath it. I would suggest if it**
11 **was stable, you might have wanted to do it. I**
12 **would have hedged my best, too, sending a guy**
13 **under there to -- under a collapse like that**
14 **without scaffolding or OSHA confined space safety**
15 **harnesses.**

16 Q. Okay.

17 **A. But the bottom line is that I believe**
18 **the building was minimally collapsed to a point of**
19 **being totalled before flood came in. I leave the**
20 **door open to flood might have caused additional**
21 **damage, but we're back to the idea you can't kill**
22 **a dead horse.**

23 Q. Okay. What brought down the other two
24 walls if flood didn't? Because we agree it was
25 collapsed.

1 **A. Oh, once two walls are knocked down, if**
 2 **flood came in, they might very well have taken out**
 3 **the other two walls. That's what I'm saying. I'm**
 4 **not saying they didn't. I'm saying in terms of**
 5 **what totalled the building, I could have two walls**
 6 **standing, if two walls and the roof are down, that**
 7 **building is already totalled.**

8 **Q. I understand. And Overstreet didn't**
 9 **climb up underneath the roof to get the evaluation**
 10 **either, did he?**

11 **A. No, he did not.**

12 **Q. Okay. So that's not something you're**
 13 **criticizing the Jade engineers for not doing, OSHA**
 14 **or otherwise?**

15 **A. No. I mean, frankly, in my business, I**
 16 **probably would have done it for bragging rights**
 17 **because I have a low IQ. If the other guys are**
 18 **smart enough not to do it, more power to them.**

19 **MR. GIBSON:**

20 **We reserve the right to strike that.**

21 **MS. JOHNSON:**

22 **I like it in there.**

23 **THE WITNESS:**

24 **The follow-up point, to be a little more**
 25 **serious about it, is you can't find damage if you**

1 **claims, 1,000 assignments. Assuming, which is not**
 2 **true, that all of them are accomplished -- and**
 3 **I've already pointed out that many were cancelled,**
 4 **many were cost estimates which were only for \$250**
 5 **a pop, many are still on the backlog, but if all**
 6 **\$1,000 of those claims had been billed, the**
 7 **billing would have been two million dollars to my**
 8 **company, not me, over a three-year period.**

9 **Now, A, not all that money has come in;**
 10 **B, some of that money may never come in; C, that's**
 11 **gross to the company, not into my pocket. And**
 12 **then you have to subtract out all the expenses of**
 13 **the company, the other employees, all the**
 14 **overhead. That includes plane tickets, gasoline,**
 15 **lodging, all that type of project expense, turning**
 16 **on the lights in the office, which there's a**
 17 **\$2,000 bill for the leasing. By the time you're**
 18 **done, I got the same car and the same debt I had**
 19 **at the beginning of Katrina.**

20 **Q. Okay. Do you earn money in any other**
 21 **way other than to be a professional witness since**
 22 **Katrina?**

23 **A. I'm a consulting architect and engineer.**
 24 **A lot of that work, I will not deny, is**
 25 **professional witnessing. I provide testimony and**

1 **don't look for it. I'm not going to fault them**
 2 **for not looking for it if it was a dangerous**
 3 **situation. But there's an opportunity cost, and**
 4 **that is finding the rest of the damage.**

5 **MS. JOHNSON:**

6 **Q. And we don't know what the rest of the**
 7 **damage is because you based your opinion on the**
 8 **photos, correct?**

9 **A. Correct. Between the photos and Jade's**
 10 **factual opinion of what happened due to the tree,**
 11 **I got enough damage to declare it a total.**

12 **Q. Okay. What's your fees for testifying**
 13 **in deposition?**

14 **A. In deposition, by my Rule 26, which I**
 15 **provided, is \$300 an hour.**

16 **Q. \$300 an hour. And by trial, is that the**
 17 **same for trial testimony?**

18 **A. Yes.**

19 **Q. And I believe you've testified before**
 20 **you've earned approximately \$1,826,000 in Katrina**
 21 **cases; is that appropriate?**

22 **A. No, that's not what I said. What I said**
 23 **was since Katrina till today, or the date of that**
 24 **deposition, I have brought into my company a**
 25 **certain amount of business, which was about 1,000**

1 **I'm paid for it. That makes me a professional**
 2 **witness, I suppose. My only other income is a**
 3 **military retirement. I had a 20-year military**
 4 **career.**

5 **Q. Okay. So of that two million dollars,**
 6 **and I understand expenses and subtracting it out**
 7 **and it not going, all of it, in your pocket, but**
 8 **other than that, other than your military pension,**
 9 **all your money in the last three years has been**
 10 **earned as a professional witness in**
 11 **Katrina-related cases?**

12 **A. No. I've also said that I do other work**
 13 **besides Katrina, not very much because there's**
 14 **only so many hours in the day. And the**
 15 **professional witnessing is a small portion of the**
 16 **work if the case goes to trial or depos. I've**
 17 **received 1,000 Katrina assignments. Out of that,**
 18 **I've had maybe 60 or 70 Katrina depositions and only**
 19 **three Katrina trials. So percentage-wise most of**
 20 **my money for Katrina is not made in terms of,**
 21 **quote, unquote, professional witnessing.**

22 **Q. It's from doing the assessment?**

23 **A. Yes. The same as every other engineer**
 24 **working on both sides of the fence in Katrina.**

25 **Q. But it's related to cause and effect as**

1 far as damage related to Katrina?
2 **A. As opposed to designing on the boards,**
3 **yes.**

4 Q. Okay. How much of your time is spent
5 designing on the boards non-Katrina related
6 since --

7 **A. Since Katrina, zilch.**

8 Q. And I understand you spoke to a
9 Diamondhead Homeowners Association after Katrina
10 to solicit business, so to speak, as an expert or
11 a professional witness?

12 **A. No. And I didn't do it to solicit**
13 **business. I testified that I was invited to**
14 **speak. I spoke. I'm well aware that any time I**
15 **speak a job may come out of it. I went there with**
16 **no plan to solicit business. I went there with no**
17 **expectation that I got any after it. In fact, the**
18 **only business I got was from -- out of the**
19 **Diamondhead conference, there might have been one**
20 **or two homeowners that came directly to me for a**
21 **job later on.**

22 Q. Have you done any speeches for anyone in
23 Bay St. Louis, homeowners associations, local
24 counsel?

25 **A. I've been asked that question. And what**

1 **the individuals were actually referring to was I**
2 **was tagging along with a Louisiana attorney to his**
3 **own property in Jourdan River Estates, and then in**
4 **the course of looking at his property, we stopped**
5 **by somebody else's property where there were two**
6 **or three members of a Jourdan River Estates**
7 **homeowners group. And that was it. That has been**
8 **portrayed in some depositions as attending a**
9 **meeting of Jourdan River Estate people. That's**
10 **not true.**

11 Q. Okay. Any other meetings in Bay St.
12 Louis that you've attended and spoke as an expert
13 or otherwise to give advice?

14 **A. No.**

15 Q. Okay. You're not a State Farm insured?

16 **A. No -- yeah. On my office, my commercial**
17 **office, I have State Farm insurance.**

18 Q. Did you have a Katrina claim on your
19 home?

20 **A. Yes.**

21 Q. And did you have to go to a lawsuit?

22 **A. No. That wasn't with State Farm. That**
23 **was with USAA.**

24 Q. Okay. And was it a wind versus water
25 issue with regard to your own personal claim?

1 **A. No. It was only wind.**

2 **MS. JOHNSON:**

3 **I appreciate it. I believe that's all I**
4 **have.**

5 **MR. GIBSON:**

6 **All right. Give us a few minutes.**
7 **(Off the record.)**

8 **EXAMINATION**

9 **BY MR. GIBSON:**

10 Q. Dr. Hall, in a nutshell -- we've gone
11 over a lot of ground today. In a nutshell,
12 without being limited to this statement, could you
13 sort of encapsulate your opinion as to the cause
14 of the damage to the Remel home?

15 **A. In a nutshell, there was some minor**
16 **damage due to glass breakage, due to wind in**
17 **conjunction with or followed by the collapse of**
18 **the red oak tree which smashed into the roof,**
19 **damaged sheathing, damaged framed walls, broke**
20 **apart the roof structure at the southeast end of**
21 **the building and somewhat contributed to a partial**
22 **collapse after which a flood to some other extent**
23 **may have completed the collapse. But when wind**
24 **caused the tree to fall damaging the building**
25 **absent flood, the building had already reached the**

1 **point of being economically totalled.**

2 Q. Thank you. Has it been your testimony
3 today that you sort of try to rely on the best
4 evidence possible?

5 **A. Yes.**

6 Q. Okay. And in preparing the report for
7 126 Leopold Street, you relied in part on Dr.
8 Fitzpatrick's report which he prepared for a
9 nearby property, Congressman Gene Taylor's
10 property, correct?

11 **A. Yes.**

12 Q. Okay. Have you had an opportunity today
13 to look at Table 2, the summary of sustained
14 winds, wind gusts and inundation from storm surge
15 that Dr. Fitzpatrick prepared for 126 Leopold
16 Street?

17 **A. Yes. I just briefly looked at it.**

18 **MR. GIBSON:**

19 **Okay. Can I mark that as an exhibit,**
20 **please, ma'am.**

21 **(Exhibit 13 was marked.)**

22 **MR. GIBSON:**

23 **For the record, this is Exhibit 13, the**
24 **Wind and Surge for Hurricane Katrina on 126**
25 **Leopold Street, Bay St. Louis, Mississippi that**

1 **Dr. Pat Fitzpatrick prepared.**

2 Q. I'm going to turn you to Table 2 of the
3 document and ask you to look at it compared to the
4 report for Congressman Taylor.

5 **A. Yes.**

6 Q. You were asked in a number of questions
7 in a number of ways what time the tree fell. And
8 I don't know if you ever arrived at a particular
9 hour and minute, but you sort of gave some
10 opinions as to under what conditions the tree
11 would fall. And what were the best conditions
12 under which the tree would fall consistent with
13 your testimony here today? Do you understand the
14 question?

15 **A. No, I do not.**

16 Q. Was it your testimony today that the
17 tree came to rest in a west northwest position on
18 the roof?

19 **A. Yes. When the azimuth was taken of 300**
20 **degrees, that generally, within I think about**
21 **seven degrees, lines up with a west northwest**
22 **orientation.**

23 Q. Okay. And was it also your testimony
24 today that the tree, once it fell on the roof, it
25 generally fell in that direction? In other words,

1 Q. Okay. So can I conjoin those two
2 opinions, then, that the wind would need to be
3 blowing in excess of 118 miles an hour from
4 generally an east southeasterly direction?

5 **A. Yes.**

6 Q. Okay. And if you were to review
7 Congressman Taylor's report prepared by Dr.
8 Fitzpatrick and the report for 126 Leopold Street
9 prepared by Dr. Fitzpatrick as to the wind speed
10 and the direction of the wind speed with some
11 degree of variation, is the speed direction and
12 time of the wind generally consistent in those two
13 reports?

14 **A. Well, the report for Leopold has east**
15 **southeast wind occurring by 9:30, whereas in the**
16 **Taylor report it doesn't occur until 10:00 a.m.**

17 Q. All right. On Dr. Fitzpatrick's
18 opinion, the conditions that you describe in which
19 the tree must fall, those conditions occurred
20 earlier in the day on August 29th?

21 **A. Correct. At the Leopold Street**
22 **residence at 10:00 a.m., when wind fell aligned**
23 **with the fall of the tree, the wind gusts -- I'm**
24 **sorry. At 9:30 a.m., when there was east**
25 **southeast wind which would have felled the tree in**

1 it didn't move much one way or the other?

2 MS. JOHNSON:

3 Object to the form.

4 **A. Yeah. Giving some allowance for it**
5 **hitting and moving, I would say that's true.**

6 **MR. GIBSON:**

7 Q. Okay. And under what wind conditions
8 would that most likely occur? Does that make
9 sense?

10 **A. Minimally a 118 mile per hour wind gust**
11 **to overturn that tree, so 118 or greater wind gust**
12 **would have caused that to occur.**

13 Q. Okay. In what direction would you
14 expect the wind to be blowing for the tree to fall
15 at that position?

16 MS. JOHNSON:

17 Object to the form. Blowing out of or
18 towards, or either?

19 **MR. GIBSON:**

20 Q. From which direction would you expect
21 the wind to be blowing for the tree to fall as it
22 did, as you opined that it did?

23 **A. Oh, the wind -- in order for the tree to**
24 **fall west northwest, the wind generally should**
25 **have come out of east southeast.**

1 **the direction of west northwest, the wind gusts**
2 **were 140, which were maxed across the site, and**
3 **the storm surge was only at 11.5 feet which was**
4 **not yet at the finished floor level of the house**
5 **on Leopold.**

6 Q. Okay. Thank you. And consistent with
7 wanting to have all the information available at
8 your fingertips, have you taken a moment to look
9 at the report prepared by Doug Smith and
10 Mr. Womble?

11 **A. Yes.**

12 Q. Okay. And I realize you haven't had a
13 chance to review it thoroughly or critique it, but
14 did you find in the report where Smith and Womble
15 reached an opinion as to what caused the tree to
16 fall, whether it was wind or water?

17 **A. Page 4 of his report, he notes in the**
18 **third paragraph, the tree has fallen across the**
19 **back wall of the residence and can be attributed**
20 **to wind action.**

21 **MR. GIBSON:**

22 **I'm going to hand that to you, Mendy,**
23 **and I'm going to mark that as 14.**

24 **MS. JOHNSON:**

25 **These are the two photographs?**

1 **MR. GIBSON:**
2 **The lower photograph is the one that was**
3 **discussed.**

4 **MS. JOHNSON:**
5 **You're going to compare that with the --**

6 **MR. GIBSON:**
7 **The question, yes.**
8 **(Exhibit 14 was marked.)**

9 **MR. GIBSON:**
10 Q. Would you look at Exhibit 5, composite.
11 There was some discussion of Photo Disk 1916.
12 Would you compare that to the lower photograph in
13 Exhibit 14, please?

14 **A. Yes. It's the same photograph, but it's**
15 **enlarged.**

16 Q. Okay. Thank you.
17 Can everybody agree?

18 **MS. JOHNSON:**
19 With what? I'm sorry.

20 **MR. GIBSON:**
21 That this is 1913.

22 **MS. JOHNSON:**
23 It appears to be 1913.

24 **MR. GIBSON:**
25 That will be 15, please.

1 photograph, is there any part of your testimony
2 that you'd like to modify or change today?

3 **A. I'm afraid so. I was looking at a**
4 **picture that was two-by-three. This is about**
5 **five-by-seven. In reference to the wood structure**
6 **in the front, you kept hearing me mutter about the**
7 **liken. In the back of my head, I was saying those**
8 **are some pretty big likens in the scale compared**
9 **to that tree trunk.**

10 **Now that I have a better photo in front**
11 **of me, I can see why. It's not a tree trunk.**
12 **It's the branch of a tree.**

13 **MS. JOHNSON:**
14 **And we're looking at the --**

15 **THE WITNESS:**
16 **Top picture.**

17 **MR. GIBSON:**
18 **The top photo, yes.**

19 **MS. JOHNSON:**
20 **Okay.**

21 **MR. GIBSON:**
22 Q. All right. Let's look at the top photo
23 of Exhibit 14. I'm not sure if you have that in
24 your thumbnails, but --

25 **A. I do.**

1 (Exhibit 15 was marked.)

2 **MR. GIBSON:**
3 Q. And this is a larger version. Does that
4 appear to be the same photo as Disk 01913 that we
5 talked about earlier?

6 **A. Yes.**

7 Q. I'm going to give Ms. Johnson an
8 opportunity -- she wanted to ask you some
9 questions when we got a larger photo, and we never
10 did it for whatever reason, but I want to give her
11 that opportunity.

12 And I'm going to give you another photo,
13 series of photos, and mark it as Exhibit 16. Is
14 that the next one?

15 **MS. JOHNSON:**
16 Yes.
17 (Exhibit 16 was marked.)

18 **MR. GIBSON:**
19 Q. And not to fool you, Dr. Hall, but I
20 believe one of these photographs you looked at
21 today and one you didn't. The one on the top, I
22 believe you looked at earlier.

23 **A. Yes.**

24 Q. And it was marked Disk 01920. Now that
25 you've reviewed a larger version of that

1 Q. You do, okay. From a review of that
2 larger photo, does that give you any information
3 about the house that you didn't have earlier when
4 you were testifying for Ms. Johnson?

5 **A. It appears that running through the**
6 **center of the photograph diagonally is a ridge**
7 **beam. It looks like a double two-by-twelve. And**
8 **there are joists -- well, in this case, rafter**
9 **hangers that come off of that beam, and there are**
10 **stick built rafters which detach from the beam.**

11 Q. Okay. So it does give you some more
12 information than you had when you were testifying,
13 correct?

14 **A. Yes.**

15 Q. Okay. Does that modify or alter in any
16 way your basic opinion that the tree fell on the
17 house and broke the house?

18 **MS. JOHNSON:**
19 Object to form.

20 **A. There is no image of the tree in the**
21 **photo at the top of Exhibit 14. It just shows me**
22 **the condition of damage. Exhibit 15, though,**
23 **gives me a strong indication of what occurred.**

24 **MR. GIBSON:**
25 Q. How so?

1 **A. Well, because it's apparent from the**
 2 **stud wall that its condition of collapse is**
 3 **directly related to the impact with the tree**
 4 **trunk. It's not as if flood caused the collapse**
 5 **of that wall, and then the tree, when it fell**
 6 **hitting the water lightly and then floating down**
 7 **managed, like a game of Tetris, to find this exact**
 8 **location to nestle into. It's obvious that the**
 9 **tree slammed down absent water through the roof**
 10 **and caused the stud wall in Exhibit 15 to lurch**
 11 **forward as the tree came down behind it.**

12 Q. Okay. Thank you. And also earlier
 13 today you testified that you didn't have -- I
 14 don't remember what your testimony was exactly.
 15 Perhaps you can remember. You can't tell what the
 16 wave height was at the Remel site; was that your
 17 testimony?

18 **A. Well, I mean, it was never measured. I**
 19 **can't tell you exactly. I can tell you I have no**
 20 **confidence in any opinion that it was strong**
 21 **enough to cause the collapse of that building.**
 22 **And if there's any information that someone**
 23 **alleges to the contrary, I feel competent enough**
 24 **in my professional view to critically analyze that**
 25 **information and reach an opinion about it.**

1 Q. Okay. And on that note, would you
 2 reserve your right to look at any critical
 3 information that was presented to you on the Remel
 4 site or nearby sites and consider that in forming
 5 an opinion for trial?

6 **A. Yeah. I'd love to. Any information I**
 7 **haven't yet read or reviewed that's contrary to my**
 8 **opinion, I'd certainly like to read.**

9 **MS. JOHNSON:**

10 **And to add to that, I would certainly**
 11 **like to have the opportunity to question Mr. Hall**
 12 **pertaining to it.**

13 **MR. GIBSON:**

14 **Certainly.**

15 Q. All right. Finally, kind of going all
 16 the way back to the beginning, you were asked if
 17 you had ever been admitted as an expert in coastal
 18 hydrology; is that what you were asked earlier?

19 **A. Yes.**

20 Q. Have you ever been offered as an expert
 21 in coastal hydrology?

22 **A. No.**

23 Q. You were also asked if you had ever been
 24 admitted as a cost estimator in a court of law. I
 25 believe the question was had you ever been

1 admitted as a cost estimator, and I believe your
 2 answer was no?

3 **A. Yes.**

4 Q. Have you ever been offered as an expert
 5 in cost estimation?

6 **A. No.**

7 Q. Okay. And have you ever been offered as
 8 an expert in forensics engineering in a Katrina
 9 case in Mississippi --

10 **A. I've been offered as --**

11 Q. -- as you are in this case?

12 **A. Yeah. I've testified in Mississippi**
 13 **courts concerning Katrina, and I've been offered**
 14 **as an expert in architecture and engineering, yes.**

15 Q. And do you know if you ever survived a
 16 Daubert Challenge in the State of Mississippi as
 17 it relates to Hurricane Katrina?

18 **A. I'm still sitting here. I'm not being**
 19 **flippant. It's my understanding -- I participated**
 20 **in maybe eight or nine where -- I guess you call**
 21 **the word quama (sic), a motion to exclude, motion**
 22 **in limine. I'm not sure of the legalese for it.**
 23 **In talking to attorneys in Mississippi and**
 24 **Louisiana, I think it's probably occurred about 20**
 25 **to 25 times. And they've all been rejected by the**

1 **courts.**

2 **MR. GIBSON:**

3 **Thank you. I don't have any further**
 4 **questions for you today.**

5 **EXAMINATION**

6 **BY MS. JOHNSON:**

7 Q. I'm going to follow up with a few
 8 things. Have you ever been tendered as an expert
 9 in forensic engineering?

10 **A. No.**

11 Q. Okay. Has your opinion ever been
 12 designated as a forensic engineer in any case?

13 **A. Bear with me. If I can get back my --**

14 Q. And for the record, you're referring to
 15 Exhibit --

16 **A. I'm sorry. I'm looking at Exhibit 2A.**

17 Q. 2A, which is your list of testimony in
 18 the last four years?

19 **A. Yes. If you'll bear with me, there's**
 20 **something I'm specifically looking for.**

21 **Two things along those lines. I know**
 22 **from a court case that was -- it's on here as**
 23 **Montz versus Louisiana Fair Plan, something along**
 24 **those lines, I was attempted to be offered as an**
 25 **expert in hurricane engineering. And the judge's**

1 opinion was he's an architect or an engineer, we
2 don't need to invent new position descriptions.
3 So an architect or engineer sufficed to be a
4 forensic engineer.

5 **On one specific case, though, Kodrin**
6 **versus State Farm in Louisiana in Federal Court --**
7 **and I'm writing this down as I remember it because**
8 **I don't get to make notes while I'm in the**
9 **courtroom, but I was qualified as an expert in**
10 **architecture and engineering pertaining to**
11 **hurricane damage. That's the closest I've been**
12 **qualified to something that might be called a**
13 **forensic engineer.**

14 Q. Okay. So, in fact, the expertise to
15 which you could testify has been challenged
16 successfully in Louisiana courts and that Montz
17 case, correct, in that the judge said, no, you
18 can't be designated as a hurricane engineer?

19 **A. No, no. I wouldn't have brought it up**
20 **if I thought it was detrimental to myself. What**
21 **the judge's point was was that being an architect**
22 **or an engineer sufficed to cover the ground of**
23 **being qualified to discuss hurricane damage to**
24 **buildings. And he didn't want to open the door to**
25 **inventing new ways to say the same thing.**

1 Q. Okay.

2 **A. That was the judge's intent.**

3 Q. You had been designated -- and I phrased
4 it poorly when I asked the question. You were
5 designated in Montz, if I recall, as a hurricane
6 engineer by the plaintiff, correct?

7 **A. I was offered as an expert in**
8 **architecture engineering and hurricane**
9 **engineering.**

10 Q. And there was a challenge by the
11 opposing side to you being designated as an expert
12 in hurricane engineering, correct?

13 **A. No, ma'am. I don't think the judge -- I**
14 **don't think the opposing side ever got to say**
15 **anything. The judge interrupted and said, if he's**
16 **an architect or an engineer, that makes him well**
17 **qualified to discuss the issue. I don't want to**
18 **invent new position descriptions.**

19 Q. Do you know whether or not a motion was
20 filed in that case challenging --

21 **A. I know they challenged me in the**
22 **courtroom to being there under any circumstance,**
23 **even as an architect or an engineer. They never**
24 **-- I don't have the transcript in front of me, so**
25 **I can't tell you. But, I mean, it's not unusual**

1 **for me to be challenged when I go in the**
2 **courtroom. I have never been denied -- none of**
3 **those challenges to my credentials have ever been**
4 **accepted by a judge in a courtroom.**

5 Q. Okay. And none of them were ever
6 accepted as a forensic engineer? In other words,
7 no state or federal court has ever allowed you to
8 testify as an expert in the field of forensic
9 engineering?

10 **A. I was never offered as a witness -- I**
11 **was never offered as an expert in the field of**
12 **forensic engineering. If I may, if you go to the**
13 **back of FEMA's publication, building performance**
14 **appraisal team for Hurricane Georges, which was**
15 **presented to Congress, I am the only engineer on**
16 **the team whose identified as a forensic engineer**
17 **by FEMA.**

18 Q. Okay. And you don't hold yourself out
19 as giving forensic engineering opinions in the
20 Remel case, right?

21 MR. GIBSON:

22 Objection.

23 **A. I try to avoid using the term "forensic**
24 **engineer" because forensic means in support of a**
25 **legal opinion. I tend to call it failure**

1 **analysis, damage assessment. I am an architect**
2 **and an engineer, and I present myself in that**
3 **manner.**

4 **I'm well aware that a lot of folks, both**
5 **in the legal profession and in the lay profession,**
6 **think of me as a forensic engineer. And a lot of**
7 **architects and engineers have started to adopt**
8 **that terminology. I'm sort of neutral on using**
9 **it. Everyone else calls me a forensic engineer.**
10 **Everyone else calls what I do forensic**
11 **engineering, so be it.**

12 Q. But you don't walk into a court of law
13 and say, Your Honor, this opinion is from me and
14 I'm a forensic engineer?

15 **A. Well, it's not up to me. It's up to the**
16 **attorneys. I've never been offered in that**
17 **manner. My point in bringing out the Montz case**
18 **was the judge's opinion was being an architect and**
19 **engineer covers the ground of what other people**
20 **call forensic engineering. If you're an architect**
21 **or an engineer, you're qualified, move on.**

22 Q. Now, we've attached -- and I believe
23 it's Dr. Smith's opinion, which is --

24 MR. GIBSON:

25 Let's amend. We've got two 14s here.

1 MS. JOHNSON:
 2 All right. The original 14 is your --
 3 MR. GIBSON:
 4 Let's amend. It will be easier for the
 5 record to amend Smith's as 17. Okay. We'll
 6 change that to 17.
 7 MS. JOHNSON:
 8 And then amend any testimony related to
 9 Dr. Smith's report as Exhibit 17.
 10 MR. GIBSON:
 11 I would agree to such an amendment.
 12 MS. JOHNSON:
 13 Whereas, it was previously referenced as
 14 Exhibit 14. I don't think there was much.
 15 MR. GIBSON:
 16 I don't think so either.
 17 (Exhibit 17 was marked.)
 18 MS. JOHNSON:
 19 Q. With regard to your review of Dr.
 20 Smith's report, the first you saw it was when?
 21 **A. Today.**
 22 Q. Today. At what point?
 23 **A. Within the past half hour.**
 24 Q. Okay. So after I finished asking you
 25 questions and we broke for you to go meet with

1 counsel, that's the first time you were ever given
 2 a copy of Dr. Smith's report, correct?
 3 **A. Yes.**
 4 Q. Did you get to review it?
 5 **A. I flipped through it. I started reading**
 6 **it, and I got to maybe Page 4, which is where I**
 7 **found what I looked at. I haven't looked at the**
 8 **attachments, and I haven't read it in full.**
 9 Q. What did you find that was of any
 10 pertinence on Page 4 of Dr. Smith's report?
 11 **A. That was just the information that he**
 12 **concurred that the red oak -- well, he didn't call**
 13 **it a red oak tree. The tree was toppled by wind**
 14 **and that there was damage ensuing to the building**
 15 **from the tree.**
 16 Q. And that was consistent with the Jade
 17 Engineering report?
 18 **A. Yes.**
 19 Q. Okay. Did you look at anything beyond
 20 the first four pages of Dr. Smith's report?
 21 **A. I saw something else in there where I**
 22 **think he was inconclusive as to when the tree**
 23 **fell, before or after flood. I'm not even sure**
 24 **I'm correctly stating that, but that -- I think I**
 25 **breezed passed that part.**

1 Q. Any criticisms of Dr. Smith's report or
 2 his opinions from what you did review?
 3 **A. No.**
 4 Q. How much time did you spend reviewing
 5 it?
 6 **A. Five minutes.**
 7 Q. Okay. Did you review Dr. Fritz's
 8 report?
 9 **A. No, not at all.**
 10 Q. Have you ever seen Fritz's report?
 11 **A. I said before the name is familiar.**
 12 **Frankly, right now on State Farm cases, I'm**
 13 **working against a Dr. Kriebel. In my head, I**
 14 **can't place Dr. Fritz.**
 15 Q. Okay. Do you have any criticisms,
 16 comments or otherwise, observations on the
 17 qualifications of Dr. Smith or Dr. Womble with
 18 regard to their professionalism?
 19 **A. Oh, no. I mean, they're well qualified.**
 20 **Methodologically what I try to do is to look at --**
 21 **in the same analysis, look at wind and flood**
 22 **together. If Dr. Smith is approaching wind**
 23 **engineering from one aspect and Dr. Fritz is**
 24 **approaching coastal hydrology from another aspect,**
 25 **I'm not quite sure if there's a 100 percent match**

1 **between the two methodologies and they don't leave**
 2 **something in the crack. That's better done if you**
 3 **have one individual looking at wind and flood**
 4 **together, in my opinion.**
 5 Q. Okay. And you and Dr. Fitzpatrick who
 6 are designated in this case don't use the same
 7 methodologies, do you?
 8 **A. Oh, no. But neither -- neither -- what**
 9 **I'm talking about is the engineering aspects. Dr.**
 10 **Fitzpatrick is a meteorologist. You asked me am I**
 11 **a meteorologist, no. Neither is Dr. Smith,**
 12 **neither is Dr. Fritz. They're looking at the wind**
 13 **or flood damage to a building from two different**
 14 **ends; one approaching it from wind, one**
 15 **approaching it from flood.**
 16 **What I try to do is I try to look at**
 17 **wind and flood at the same time to make sure I'm**
 18 **not letting anything drop in the crack. I**
 19 **can't -- without reading their reports, I can't**
 20 **promise you something doesn't fall between the**
 21 **crack if the wind guy is looking at flood and the**
 22 **flood guy is looking at wind.**
 23 Q. And you can't say the adverse, that
 24 nothing fell in the crack in that respect, can
 25 you?

1 **A. No. That's why I reserve the right to**
2 **read the report.**

3 Q. Okay. Did you have a request before
4 today knowing you were going to be deposed, hey,
5 does State Farm have experts, can I get their
6 reports?

7 **A. It's a standing request. I may not**
8 **articulate it each and every time. If I don't**
9 **receive it, I presume it's not available.**

10 Q. And you also said earlier, I think, and
11 Edward phrased it in his questioning of you, you
12 like to base your opinion on the best data
13 available; is that correct?

14 **A. Correct. Having the Jade Engineering**
15 **report, which already established what I thought**
16 **was the opposing opinion, I had no anticipation**
17 **I'd have another round of expert reports.**

18 Q. Okay. What about Mr. Fitzpatrick's
19 report when you were looking at this and basing
20 your opinion on the report he did for a property,
21 Gene Taylor's property a quarter mile away from
22 the Remel property, did you think, hmm, does Dr.
23 Fitzpatrick have a report for the Remel property?

24 **A. Frankly, I hadn't received one. I**
25 **presumed there wasn't any. In reviewing**

1 **Fitzpatrick's report for the Remel property, it**
2 **even more supports my position of wind damage. I**
3 **received it only today to look at, but I'm**
4 **confident it in no way changes my position. In**
5 **fact, it reinforces it.**

6 Q. Okay. Has your position changed after I
7 finished questioning you from 9:00 until we
8 recessed, whenever it was, maybe an hour ago,
9 having had the opportunity to look at Dr.
10 Fitzpatrick's report for the first time?

11 **A. No. There is an earlier window for wind**
12 **damage. There is a more direct correlation**
13 **between the tree fall direction and the direction**
14 **of wind from the east southeast, which now occurs**
15 **prior to the arrival of storm surge; whereas, in**
16 **the Taylor property, because it's closer to the**
17 **coastline, I had some water in the house before**
18 **that tree might have fallen.**

19 **Now I'm more comfortable that the tree**
20 **fell before the arrival of storm surge; one,**
21 **because of the timeline that Fitzpatrick has site**
22 **specific to Leopold Street, and, also, the**
23 **blow-ups of the photographs indicate to me that**
24 **that tree hit that roof absent any water covering**
25 **the roof or I would have expected that to somehow**

1 **mitigate the impact.**

2 Q. Did the photographs that we made copies
3 of and attached as, I believe, Exhibits 14 and 15
4 and 16 change your opinion or add to your opinion?
5 You just referenced the blow-ups of the
6 photographs.

7 **A. They reinforce the opinion I originally**
8 **had. I'll be quite frank, when you were asking me**
9 **questions and I was looking at the little tiny**
10 **pictures, you might have noticed I was a little**
11 **hedgy about what I was seeing because they were**
12 **small pictures. Now that I've got them blown**
13 **up -- I almost wish I had a duces tecum. I would**
14 **have brought the blown-up pictures. But now that**
15 **I've seen them blown up, I am comfortable that my**
16 **first shot out of the barrel that's in my report**
17 **is correct. I've lost that temporary lack of**
18 **confidence when I was looking at the small**
19 **pictures and couldn't see the details.**

20 Q. Okay. So when you finished your report
21 June 16th, 2008, did you have blown-up copies of
22 those photos or were you looking at the small
23 contact sheet?

24 **A. No. I wasn't looking at the small**
25 **contact sheet. I admit I didn't blow them up to**

1 **eight-by-ten size on my computer. I was using --**
2 **what I originally saw in the field at the Remel**
3 **house was the three-by-five size, which I photo**
4 **reproduced, and then which I reproduced as a**
5 **smaller two-by-three wallet size in my report.**

6 **You know, I felt good about what I said**
7 **in my report when I said it. Frankly, I was**
8 **having a little bit of second thoughts looking at**
9 **the small photos, which is all I had in front of**
10 **me as you were questioning me. And then when I**
11 **went back to the larger photos, I felt confident**
12 **with what I did in the first place.**

13 Q. Okay. And why didn't you attach the
14 photos that we see on Exhibit 14, 15 and 16 of the
15 deposition to your report if they were important
16 to your opinion?

17 **A. I mean, they were available in**
18 **discovery. I felt that I attached a sufficient**
19 **number of photos. In retrospect, I wish I had**
20 **attached them all. But I attached a**
21 **representative sampling of the photos that I felt**
22 **covered all the bases.**

23 **Frankly, looking at some of these**
24 **blow-ups, Exhibit 15, I think is the most -- when**
25 **you asked me what was the best example of the tree**

1 **that fell on top of the house, assuming I have a**
 2 **thumbnail with me that matches Exhibit 15, I**
 3 **should have said Exhibit 15.**

4 Q. Okay. Do you have a thumbnail that
 5 matches Exhibit 15?

6 **A. Yes, I do.**

7 Q. And what's your number?

8 **A. 1913.**

9 Q. 1913. Okay. And why do you believe now
 10 that Exhibit 15 is the best example of the tree on
 11 the roof -- that's how I asked it earlier -- of
 12 the Remel property?

13 **A. Well, because it obviously is the tree**
 14 **on the roof and it shows an impact in relation to**
 15 **the stud wall that shows the stud wall collapsed**
 16 **in a manner that is best explained by it being**
 17 **collapsed at the point in time when the tree**
 18 **impacted the roof and not something previous to or**
 19 **subsequent to involving a flood impact.**

20 Q. Okay. Do you see any portion of the
 21 shingled roof in the photo of Exhibit 15?

22 **A. No.**

23 Q. Okay. And is this the red oak we're
 24 talking about that fell on the house?

25 **A. Yes.**

1 Q. Okay. Is it the same red oak that we
 2 were talking about earlier in your report, Photo
 3 6?

4 **A. Photo 6?**

5 Q. Yes.

6 **A. No. Well, let me take a look at Photo**
 7 **6. No. Because Photo 6, as it turns out, is a**
 8 **branch. That's the photo with that liken I was**
 9 **starring at. That is not the tree trunk of the**
 10 **red oak.**

11 Q. Okay. So that whole line of testimony
 12 when we went down what photo was most important to
 13 you or best demonstrated the tree on the roof,
 14 that whole line of testimony is now out the window
 15 because that, in fact, is not the tree on the
 16 roof?

17 MR. GIBSON:

18 Objection.

19 **A. That's correct. I was looking at a**
 20 **two-by-three photograph. It was too small detail**
 21 **for me to make out. I should have -- I should**
 22 **have shut my mouth and asked to look at an**
 23 **eight-by-ten picture, and I didn't.**

24 MR. GIBSON:

25 **I would just object real quickly at that**

1 **point. It mischaracterizes prior testimony.**

2 **MS. JOHNSON:**

3 Q. So all the testimony you had that this
 4 branch that we see in Photo 6, it being consistent
 5 with the size as demonstrated by the diameter
 6 reading of Overstreet, is also inconsistent and
 7 now out the window?

8 MR. GIBSON:

9 The same objection. It mischaracterizes
 10 his prior testimony.

11 **A. Yeah. To the extent that I used that**
 12 **photograph as being representative of the size and**
 13 **diameter of that tree, that's incorrect. It is**
 14 **not a 24-inch tree trunk.**

15 **MS. JOHNSON:**

16 Q. Okay. And, in fact, that tree branch
 17 didn't cause the hole in the roof that directs
 18 towards the chimney vent and the two vents on the
 19 roof as you earlier testified?

20 MR. GIBSON:

21 Same objection.

22 **A. That particular branch -- it might be**
 23 **part of the tree that did, but that branch itself,**
 24 **I don't believe did.**

25 **MS. JOHNSON:**

1 Q. Okay. So that damage that we see in
 2 Photo 6, you can't say whether it was caused by
 3 that branch or the tree or something else?

4 **A. Oh, I had an independent opinion aside**
 5 **from this branch in this picture. I believe I**
 6 **stated an independent opinion that the damage**
 7 **shown in the foreground -- in the background was**
 8 **definitely caused by impact from above hitting**
 9 **that roof. As it turns out -- and I said the only**
 10 **thing that hit that roof that I know of was the**
 11 **red oak.**

12 **So the part of my testimony concerning**
 13 **that damage was caused by something that impacted**
 14 **it from above and the only thing I know of that**
 15 **impacted it from above was the red oak, that part**
 16 **of my testimony concerning this photo is the same.**
 17 **What changes is any representation that that limb**
 18 **in the front was directly involved in causing that**
 19 **damage.**

20 Q. Okay. And we don't know if that limb in
 21 the front is still connected to the oak?

22 **A. That, I can't tell from the photo,**
 23 **that's correct.**

24 Q. Can you even tell if that's a limb to
 25 the red oak that we see pictured in Exhibit 15?

1 **A. No, I cannot, because it's not --**
 2 **there's no photo showing it directly attached.**
 3 Q. Okay. If the damage that we see in
 4 Photo 6 to the roof structure, the separation, was
 5 caused by impact from above by the tree, where is
 6 the tree?
 7 **A. Well, the impact doesn't just mean that**
 8 **the tree hit that particular spot. If you can --**
 9 **example, imagine -- bad example, best I can think**
 10 **of. If you have six inches of ice covering a**
 11 **river and something impacts it, you're going to**
 12 **get a crack line further away from that impact.**
 13 **Okay. If you have billiard balls on a**
 14 **table and you hit the cue stick with the front**
 15 **billiard ball, you're going to have a movement and**
 16 **defamation of that ball at the far end, kinetic**
 17 **energy pops it out.**
 18 **I don't have to have a tree in the hole**
 19 **at that location to say that that damage was**
 20 **caused by impact with the tree. That pattern of**
 21 **damage is consistent with impact from above and**
 22 **nothing else I can think of. And there's only one**
 23 **thing that hit that roof, and that's the red oak.**
 24 Q. And your testimony is the impact that
 25 was caused here was from above, correct?

1 **A. The impact that caused that pattern at**
 2 **that location was an impact that hit that roof at**
 3 **an angle from top down and not bottom up, yes.**
 4 Q. Okay. And is it your testimony still
 5 that the tree impacted the roof at that location
 6 from above and then bounced and landed somewhere
 7 else?
 8 **A. Well, no. Because that was what we were**
 9 **talking about prerequisite on this limb being part**
 10 **of that tree.**
 11 Q. Do you think the tree pictured in
 12 Exhibit 15 bounced after it hit the roof?
 13 **A. No.**
 14 Q. Okay. And we don't see the roof
 15 anywhere around Exhibit 15, do we?
 16 **A. It's under the tree.**
 17 Q. And where do you see it under the tree?
 18 **A. There's no way it escaped. I don't have**
 19 **a picture of it under the tree. I have other**
 20 **pictures of it under the tree, but it's under the**
 21 **tree in that photograph.**
 22 Q. Okay. And we see a table on top of the
 23 tree, true?
 24 **A. Sure. There's another photograph that**
 25 **shows a sofa on top of the roof. Those are**

1 **flood-borne items unrelated to the collapse of the**
 2 **tree or the damage depicted.**
 3 Q. Okay. So those items were shifted after
 4 the flood came in and then came to rest in those
 5 spots?
 6 **A. Those particular items are floatable**
 7 **items. I don't even know if they're part of the**
 8 **Remel property.**
 9 Q. Okay. And to say that this tree is
 10 above or on top of the roof, the tree being in
 11 Exhibit 15, is based on your speculation, correct?
 12 MR. GIBSON:
 13 Objection.
 14 **A. Well, concerning that picture, it's**
 15 **based on, A, if the tree fell on -- two things,**
 16 **the pattern of damage to that wall indicates that**
 17 **that occurred when the tree fell. I wouldn't**
 18 **expect that wall to have been free-standing**
 19 **without a roof. So the fact that the wall was**
 20 **pushed over by the tree means that the tree pushed**
 21 **down the roof or that wall never would have been**
 22 **there vertical in the first place.**
 23 **Secondly, I have other photographs, such**
 24 **as on Exhibit 14, which do show the tree from a**
 25 **different angle with the roof underneath it.**

1 **MS. JOHNSON:**
 2 Q. Do you know what angle or what direction
 3 we're facing when we look at Exhibit 15?
 4 **A. If I may with the other exhibit.**
 5 Q. Okay.
 6 **A. No. I can't tell you that.**
 7 Q. Okay. And you can tell by looking at
 8 Exhibit 15 that the tree is on the wall as opposed
 9 to the wall washing up against the tree?
 10 **A. I'm confident that's the case. That**
 11 **tree is on top of that wall.**
 12 Q. Okay. Looking at Exhibit 14, bottom
 13 picture, that's the one where you said you see the
 14 tree on top of the roof, correct?
 15 **A. Yes.**
 16 Q. What direction are we looking at there,
 17 the bottom picture of Exhibit 14?
 18 **A. Since we're looking at the branches,**
 19 **we're pretty much a little bit to an angle looking**
 20 **from the crown back towards the east southeast**
 21 **direction. So pretty much we're looking back**
 22 **towards the direction where wind came from, which**
 23 **by the breakage of the trunks in the background**
 24 **pretty much confirms that. A little bit of an**
 25 **angle to it. We're probably looking more**

1 **northwest to southeast as the camera angle is**
2 **taken.**

3 Q. Okay. We're looking back the direction
4 to where the root ball is?

5 **A. Again, that's -- the tree pointing back**
6 **to the root ball is at an angle to where the**
7 **picture is taken. The tree points west northwest**
8 **to east southeast. That's how the tree points.**
9 **The camera angle points northwest to southeast.**

10 Q. Okay. So if we're looking at the
11 direction from where the wind came, we're also
12 looking at the direction from where the water
13 came, if the wind and the water tracked the same
14 direction, correct?

15 **A. Yes.**

16 Q. Okay. Can you tell what portion of the
17 roof we're looking at, what portion of the
18 residence we see underneath that tree?

19 **A. No. I'm not familiar enough with the**
20 **floor plan to tell you that, no.**

21 Q. Can you tell from looking at the bottom
22 picture of Exhibit 14 how much of the roof is
23 underneath the branches of the red oak?

24 **A. Other than it appears that the crown is**
25 **solidly on top of the roof and not just a glancing**

1 **blow, I can't be more specific than that.**

2 Q. So you can't tell if it's at the end of
3 the roof, corner of the roof or flatly in the
4 middle of it?

5 **A. It appears to be flatly in the middle of**
6 **the slope of the roof from the ridge down to the**
7 **eave. And in general, very in general, I would**
8 **say it covers about one-third of the entire roof**
9 **area. That's from where it first impacts the**
10 **trunk down at the eave to the uppermost branch**
11 **covering that roof.**

12 Q. And looking at the upper picture of
13 Exhibit 14, is this the roof rafter you were
14 testifying to in that it was stick built with
15 joists?

16 **A. As near as I can tell, it's definitely**
17 **stick built unless that's -- because it's a double**
18 **two-by-twelve, I'm assuming it is the rafter beam.**
19 **It may be some other element in the house, but**
20 **certainly it could be the rafter beam being a**
21 **two-by-twelve element. And those are either**
22 **rafters or floor joists attached to a major beam**
23 **which is separated from it.**

24 Q. Okay. And it's separated at or about
25 where the rafter is at the connection?

1 **A. Yes.**

2 Q. And most of them, it appears, were not
3 broken away from the connection rather than
4 separated or pulled?

5 **A. Well, when the roof collapses,**
6 **essentially the rafters kick out. As they flatten**
7 **and as the roof comes down, they're going to move**
8 **away from the center part of the building. The**
9 **exterior walls are getting pushed out. If they're**
10 **in any manner connected to the rafters and the**
11 **rafters are connected to the walls, they're going**
12 **to push out with the walls and separate from the**
13 **ridge beam.**

14 Q. Okay. When you said earlier that the
15 wave height at the Remel residence was never
16 measured, did you see what Dr. Fitzpatrick
17 estimated by way of the possible waves at the
18 house?

19 **A. Yes.**

20 Q. And what was that?

21 **A. One to two feet.**

22 Q. Any disagreement with that?

23 **A. I can't disagree with the range. I**
24 **suspected there was less than two feet. But even**
25 **if it was, you know, being conservative to my**

1 **analysis using his two feet, that gives me a**
2 **one-foot wave height above the still water**
3 **measuring trough to crest, that's not going to be**
4 **significant in terms of damage to the building.**

5 Q. And he also adds that on top of the
6 surge level, correct? He adds one to two feet?

7 **A. Yes.**

8 Q. So in looking at his timeline with
9 regard to this case, which is Exhibit 13, if
10 you'll turn to the table Dr. Fitzpatrick prepared
11 for this case, he's adding the one to two feet on
12 top of what he estimates to be the surge level,
13 correct?

14 **A. Correct.**

15 Q. So when we look at his time for 9:30 in
16 the morning at 11 and a half feet of surge, you
17 can add one to two feet to that, correct, being
18 the wave height?

19 **A. Well, yes.**

20 Q. Okay. Would you agree with me that Dr.
21 Fitzpatrick's table or timeline is inconsistent
22 with the one for the Remel property, what you're
23 looking at, Exhibit 13, is inconsistent with what
24 he prepared for Gene Taylor's residence a quarter
25 of a mile down the road?

1 MR. GIBSON:

2 Objection.

3 **A. It's different, but that doesn't make it**
4 **inconsistent because he's factoring in different**
5 **inland conditions and the time it takes surge to**
6 **get from the coast to that inland position.**

7 **MS. JOHNSON:**

8 Q. Okay. And, in fact, Dr. Fitzpatrick's
9 estimate for sustained wind is 10 miles per hour
10 off of what he estimated for down at Gene Taylor's
11 residence, correct?

12 **A. Yes. In terms of peak sustained wind,**
13 **he differs by 10 miles per hour.**

14 Q. He has them both occurring at 9:30,
15 correct, 9:30 in the morning?

16 **A. Yes.**

17 Q. And on the Remel residence, he says it's
18 110 miles per hour?

19 **A. Yes.**

20 Q. And he also has the wind blowing in a
21 45-degree angle different to what he has it
22 blowing in at Gene Taylor's residence at the same
23 time, correct? Meaning he has it blowing from the
24 south southeast at Gene Taylor's residence,
25 whereas it was blowing east southeast at the Remel

1 **shifting from northeast to south, it would in**
2 **order go through the progression as is explained**
3 **on his Leopold report and it wouldn't jump south**
4 **and then back north as it does on his Taylor**
5 **report.**

6 **Even if it did dip to south southeast**
7 **and then come back to east southeast between 9:30**
8 **and 10:30, as I believe it's just a typo on the**
9 **Taylor report, it's going to have to pass through**
10 **the east southeast to get to south southeast and**
11 **then swing back again.**

12 **You'll have to ask him how that works**
13 **out. I think it's a typo error. And especially I**
14 **think that because it's different on the Leopold,**
15 **which appears that he correctly has it oriented on**
16 **the Leopold. All the more reason to believe it's**
17 **simply a typo on the Taylor.**

18 Q. Would you expect Gene Taylor's residence
19 being virtually waterfront to have a larger storm
20 surge than that experienced at the Remel property?

21 MR. GIBSON:

22 Objection to the phrase "larger."

23 MS. JOHNSON:

24 Q. Taller, higher.

25 **A. In general, yes. I note that he has it**

1 residence?

2 **A. Correct. But if you remember when I**
3 **suggested that there might have been a typo error,**
4 **I suspect there was. And I suspect the south**
5 **southeast that appears in the Taylor residence, in**
6 **fact, should have been east southeast as he**
7 **portrays it in the Leopold. You'll have to ask**
8 **him if that's the case. But if that is the case**
9 **that it's a typo error, then the directions are**
10 **properly oriented in both reports.**

11 Q. Okay. And if it's not a typo and he
12 meant to say south southeast at the Taylor
13 residence and he meant to say east southeast at
14 the Remel residence, would you find that unusual
15 that the wind could be coming out of two different
16 directions at the same time a quarter of a mile
17 apart?

18 **A. It's a slight variance. And it could be**
19 **easily explained if he was looking at NEXRAD radar**
20 **and pixel by pixel following those wind gusts.**
21 **That's something you'd have to take up with him.**

22 Q. And he could very well have a typo on
23 the Remel report and it should say south southeast
24 consistent with the Taylor residence, correct?

25 **A. Less likely so. Because if wind is**

1 **up to 24.5 feet compared to 24 feet. I can**
2 **explain how that might have occurred, but, again,**
3 **you'll have to check with him. If he capped or**
4 **used as the high point for the storm surge not his**
5 **model, but the high water mark that was closest to**
6 **the property, then if FEMA, for better or for**
7 **worse, used a high water mark at the Taylor**
8 **residence that was 24 feet, but had a high water**
9 **mark at the Leopold residence, which was closer to**
10 **the 24.5 feet, using that ground truth data to cap**
11 **his model, that might explain why he has a higher**
12 **mark at Leopold than he does at the Taylor**
13 **residence.**

14 Q. Okay. And when you say at Leopold, he
15 has a 24.5 foot above mean sea level as the peak
16 surge at the Remel residence, correct?

17 **A. Yes.**

18 Q. Okay. So, in fact, he has the Remel
19 property being sustained a good half a foot more
20 of surge than he did down the street on the water
21 at the Taylor residence, correct?

22 **A. Yes.**

23 Q. Okay. And you're saying there's a
24 possibility that the closest FEMA high water mark
25 could be different for the Taylor property and the

1 Remel property?

2 **A. That's one explanation. Because in**
3 **routinely reading his reports, he references the**
4 **FEMA high water mark, and he uses the FEMA high**
5 **water mark as the high point on his model. That's**
6 **something you'll have to ask him.**

7 **Q. Okay. So having looked at now after I**
8 **finished questioning you all day based on your**
9 **opinion that you initially -- or based on the Gene**
10 **Taylor Fitzpatrick report that you initially based**
11 **your opinion on, having reviewed Dr. Fitzpatrick's**
12 **report for the Remel property, have you changed**
13 **your opinion as far as when the tree impacted with**
14 **the house?**

15 **A. I think using -- using the Fitzpatrick**
16 **report for Leopold, especially because it corrects**
17 **that direction to east southeast that might have**
18 **been a typo, I am comfortable saying that between**
19 **-- I'm comfortable with saying that between 8:30**
20 **-- I'm sorry -- 9:30 when we have 140 mile per**
21 **hour gusts, which not only do I have the velocity**
22 **I need to fell the tree, I have the alignment of**
23 **the tree fall with the sustained wind direction at**
24 **9:30. So the wind speed could have allowed it to**
25 **occur sooner, but the other consideration is the**

1 **tree fall, which I think is more important, that**
2 **makes me hold out until the wind aligns with the**
3 **tree fall. That occurs at 9:30.**

4 **At 9:30, when I have wind gusts of 140,**
5 **I do not yet have flood on the ground, which I**
6 **agree with in terms of I said that tree fell on**
7 **the roof before there was water on that roof, by**
8 **that pattern of failure, everything I've been**
9 **talking about now that I have the Fitzpatrick**
10 **report for Remel site specific, I can say that at**
11 **9:30 a.m., that tree fell due to 140 mile per hour**
12 **gusts before storm surge was on the floor. I can**
13 **be more confident of my conclusion in the previous**
14 **report.**

15 **And keep in mind, please, that this**
16 **report for Remel, we actually have a timeline**
17 **where Fitzpatrick has the water coming in even**
18 **higher than the report that I had used when I used**
19 **the Taylor report. Because he has it coming in at**
20 **24.5 instead of 24.**

21 **Q. Okay. What about the 10:00 time? Can**
22 **you preclude that the tree fell at 10:00 as**
23 **opposed to 9:30, which has the same direction from**
24 **which the wind came and gusts up to 135?**

25 **A. I can't preclude it except to say to you**

1 **that I don't need to wait for 130 mile per hour**
2 **gusts when I've already hit 140 at 9:30 a.m. Most**
3 **likely that tree fell with the strongest wind.**
4 **Example, if it didn't fall at 135 at 8:45 a.m.,**
5 **then 135 wind wasn't enough. That 140 mile per**
6 **hour maximum gust was enough. So 135 already had**
7 **a bite at the apple and it didn't knock over the**
8 **tree. 140 knocks over the tree, so then I don't**
9 **need to wait till 10:00 a.m. for 135 again.**

10 **Q. Okay. And when you said at 9:30 water**
11 **had not been over the level of the slab, that's**
12 **not tacking on the one-to-two foot wave height**
13 **that Dr. Fitzpatrick subjects to that, correct?**

14 **A. Well, there was no wave at that point.**
15 **Because if there's no still water on the ground,**
16 **you can't have a wave on top of zero feet still**
17 **water.**

18 **Q. Okay. So we're talking about his surge**
19 **at 9:30 as 11.5 feet above mean sea level?**

20 **A. Yes.**

21 **MS. JOHNSON:**

22 **Okay. Was there any other exhibits that**
23 **you attached?**

24 **MR. GIBSON:**

25 **Let's see. You ended with 12. I've**

1 **attached 13, which was the Fitzpatrick report; 14**
2 **is two photographs; 15 is one photograph; 16 is**
3 **two photographs; 17 is the Smith/Womble Wind**
4 **Report.**

5 **MS. JOHNSON:**

6 **Okay. That's all.**
7 **(Deposition concluded at 5:20 p.m.)**

CERTIFICATE OF COURT REPORTER

I, F. DUSTY BURDINE, Court Reporter and Notary Public, in and for the County of Harrison, State of Mississippi, hereby certify that the foregoing pages, and including this page, contain a true and correct transcript of the testimony of the witness, as taken by me at the time and place heretofore stated, and later reduced to typewritten form by computer-aided transcription under my supervision, to the best of my skill and ability.

I further certify that I placed the witness under oath to truthfully answer all questions in this matter under the authority vested in me by the State of Mississippi.

I further certify that I am not in the employ of, or related to, any counsel or party in this matter, and have no interest, monetary or otherwise, in the final outcome of the proceedings.

Witness my signature and seal, this the _____ day of _____, 2008.

F. Dusty Burdine, CSR #1171
My Commission Expires 4/20/09

ERRATA SHEET

I, _____, do solemnly swear that I have read the foregoing _____ pages of the testimony given by me at the time and place hereinbefore set forth, with the following corrections:

Page:	Line:	Correction:	Reason for Change:
_____	_____	_____	_____
_____	_____	_____	_____
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_____	_____	_____	_____

Witness Signature

Sworn to and subscribed by me, this _____ day of _____, A.D., 2008.

Notary Public, State of Mississippi,
County of _____.

My Commission Expires:
