

Transcript of the Testimony of  
**The Joint United States Coast  
Guard/Bureau of Ocean Energy  
Management Investigation**

Date taken: October 8, 2010  
AM/PM Session

USCG/BOEM Board of Investigation (Re: Deepwater  
Horizon)

***\*\*Note\*\****

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USCG/BOEM BOARD OF INVESTIGATION  
 INTO THE MARINE CASUALTY, EXPLOSION, FIRE,  
 POLLUTION AND SINKING  
 OF MOBILE OFFSHORE DRILLING UNIT  
 DEEPWATER HORIZON, WITH LOSS OF LIFE  
 IN THE GULF OF MEXICO, 21-22 APRIL 2010,  
 FRIDAY, OCTOBER 8, 2010, 8:00 A.M.

\* \* \* \* \*

The Transcript of the Joint United States Coast Guard/Bureau of Ocean Energy Management Investigation of the above entitled cause before Cathy Renee' Powell, a certified court reporter authorized to administer oaths of witnesses pursuant to Section 961.1 of Title 13 of the Louisiana Revised Statutes of 1950, as amended, reported at the Holiday Inn, 2261 N. Causeway Boulevard, Metairie, Louisiana 70001, on Friday, October 8, 2010, beginning at 8:00 a.m.

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1 REPORTED BY:  
 2 CATHY RENEE ' POWELL  
 CERTIFIED COURT REPORTER  
 \* \* \*  
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1 APPEARANCES:  
 2 MEMBERS OF THE BOARD:  
 3  
 4 CAPTAIN HUNG M. NGUYEN  
 5 CO-CHAIR UNITED STATES COAST GUARD  
 6  
 7 DAVID DYKES  
 8 CO-CHAIR MINERALS MANAGEMENT SERVICE  
 9  
 10 JUDGE WAYNE R. ANDERSEN  
 11 UNITED STATES DISTRICT JUDGE (RET.)  
 12  
 13 CAPTAIN MARK R. HIGGINS  
 14 STAFF JUDGE ADVOCATE  
 15 COAST GUARD ATLANTIC AREA  
 16  
 17 JASON MATHEWS  
 18 MINERALS MANAGEMENT SERVICE  
 19  
 20 JOHN McCARROLL  
 21 MINERALS MANAGEMENT SERVICE  
 22  
 23 LTR. ROBERT BUTTS, COURT RECORDER  
 24 UNITED STATES COAST GUARD  
 25

19 WITNESSES:  
 20 CAPT. CARL SMITH  
 Expert witness  
 (Appearing via telephone  
 from Coast Guard Sector  
 Hampton Roads, Virginia)  
 22 JOHN GISCLAIR  
 Sperry Drilling, a division  
 of Halliburton  
 (Donald Godwin, Esq., appeared with,  
 but does not represent Mr. Gisclair)

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1 (PROCEEDINGS)  
 2 CAPT. NGUYEN:  
 3 Good morning. Please be seated.  
 4 JUDGE ANDERSON:  
 5 As the board has advised every  
 6 witness, I want to advise you that you will  
 7 be making statements to a federal agency.  
 8 Making a false statement to a federal agency  
 9 is a violation of federal law, punishable by  
 10 fine or prison.  
 11 Having said that, raise your right  
 12 hand and I will administer the oath to you  
 13 and then we will begin with questions.  
 14 Thank you very much for your  
 15 cooperation. If you have any difficulty  
 16 either hearing us or speaking, just let us  
 17 know and we will try to redo it. Okay?  
 18 THE WITNESS:  
 19 Okay. Who am I speaking with?  
 20 JUDGE ANDERSON:  
 21 This is Wayne Anderson. I am on  
 22 the board --  
 23 THE WITNESS:  
 24 I am not familiar with your name.  
 25 Are you an investigator with the Coast

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1 Guard?  
 2 JUDGE ANDERSON:  
 3 I am a retired judge donating my  
 4 time because this is important.  
 5 THE WITNESS:  
 6 Okay. I know who you are.  
 7 JUDGE ANDERSON:  
 8 But I am retired, so there is no  
 9 chance I will sentence either you or anybody  
 10 in the room.  
 11 CAPT. CARL SMITH,  
 12 having been first duly sworn as a witness,  
 13 was examined and testified as follows:  
 14 JUDGE ANDERSON:  
 15 Now, we first begin with board  
 16 member questions. Would anyone on the board  
 17 like to ask the witness questions?  
 18 CAPT. NGUYEN:  
 19 Before we start, I know I can't do  
 20 anything about my accent, but I will try to  
 21 slow down.  
 22 Is there a Coast Guard  
 23 representative on the other end?  
 24 MR. STATON:  
 25 Yes, sir.

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1 CAPT. NGUYEN:  
 2 Identify yourself.  
 3 MR. STATON:  
 4 James Staton, investigating  
 5 officer with Coast Guard Sector Hampton  
 6 Roads. I have Mr. Smith's Merchant Mariner  
 7 credentials and I can identify him from his  
 8 photograph. His Merchant Mariner credential  
 9 number is 197199.  
 10 CAPT. NGUYEN:  
 11 Can you identify your position and  
 12 spell your name?  
 13 MR. STATON:  
 14 I am a GS-9 here at Sector Hampton  
 15 Roads. I am an investigating officer in the  
 16 Investigations Department.  
 17 James Staton, S-T-A-T-O-N.  
 18 CAPT. NGUYEN:  
 19 Yes, sir, thank you.  
 20 EXAMINATION BY CAPT. HIGGINS:  
 21 Q. Good morning, Captain Smith. This  
 22 is Captain Mark Higgins; I am a Coast Guard  
 23 attorney. I appreciate you being here  
 24 again.  
 25 Based on your experience as a

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1 captain, is the master responsible for the  
 2 safe operation of all equipment on board the  
 3 vessel?  
 4 A. Yes, ultimately so.  
 5 Q. Is a blowout preventer part of the  
 6 equipment on board a Mobile Offshore  
 7 Drilling Unit?  
 8 A. Yes. BOPs are not exchanged  
 9 between vessels; it is part of the vessel  
 10 equipment.  
 11 Q. So would a master of a MODU be  
 12 ultimately responsible for the safe  
 13 operation of that piece of equipment?  
 14 MR. SCHONEKAS:  
 15 I object to the extent you are  
 16 eliciting a legal opinion.  
 17 THE WITNESS:  
 18 Yes.  
 19 JUDGE ANDERSON:  
 20 There was an objection with regard  
 21 to legal opinions. You can express  
 22 opinions, and obviously, if any opinion is  
 23 ever presented to a legal authority such as  
 24 a court, and we know some of this may arise  
 25 in various courts, then that court will have

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1 to resolve the legal issues. So you can  
 2 express your opinions based on the  
 3 regulations and customs that you are  
 4 familiar with, and you will know we are not  
 5 asking you for a legal opinion.  
 6 Please proceed.  
 7 EXAMINATION BY CAPT. HIGGINS:  
 8 Q. Yes. I was asking you for your  
 9 opinion as a master. Your opinion is that  
 10 the master is responsible for the safe  
 11 operation of all equipment aboard his  
 12 vessel. Is that correct?  
 13 A. Yes. Now, we also have to  
 14 remember that in the technological world we  
 15 are in, nobody knows everything, so the  
 16 master has to rely heavily upon the experts  
 17 in their field. In this case, the subsea  
 18 engineers.  
 19 Q. Understood, sir.  
 20 Sir, are you familiar with the  
 21 certification regulations that require  
 22 maintenance to a blowout preventer?  
 23 A. I have no particular expertise on  
 24 that. I know that a BOP has to be tested at  
 25 regular intervals, which is determined by

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1 the national authorities in the area you are  
 2 drilling in.  
 3 Q. Are you familiar with a  
 4 requirement that it be certified every five  
 5 years?  
 6 A. I can't say I am. I have to read  
 7 the rules on that.  
 8 Q. If a regulation stated that it  
 9 needed to be certified every five years and  
 10 it had not been, would that be something of  
 11 concern to you?  
 12 MR. SCHONEKAS:  
 13 I object because the witness  
 14 already indicated he has no knowledge of the  
 15 requirement. So for him to express an  
 16 opinion as to what -- about what should be  
 17 done is not probative of anything since he  
 18 has no information.  
 19 MR. HYMEL:  
 20 Richard Hymel. I object since  
 21 this is your interpretation of what the CFR  
 22 says and I think that needs to be made clear  
 23 to the witness.  
 24 JUDGE ANDERSON:  
 25 When you get a question, we're not  
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1 asking you to formulate an opinion if you  
 2 don't have one.  
 3 There has been an objection that  
 4 if you're not familiar with the rule, how  
 5 can you testify regarding it. And if you  
 6 feel so unfamiliar with the rule that you  
 7 chose not to address a question regarding  
 8 it, you can let us know that.  
 9 However, I do want to remind  
 10 everybody here that one of the goals of the  
 11 board will be to make recommendations to  
 12 agencies, certainly the two agencies  
 13 represented on the board, with respect to  
 14 not only potential future rules, but the way  
 15 people in the agencies enforce various  
 16 rules, so that could involve some education  
 17 as well.  
 18 So now that we have, once again,  
 19 forgotten the question because of  
 20 objections, Captain Higgins, with those  
 21 reservations, can you ask the question  
 22 again?  
 23 And, Mr. Smith, if you have an  
 24 opinion, let us know. If you don't have an  
 25 opinion, let us know; that's fine.  
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1 THE WITNESS:  
 2 Which set of rules are we  
 3 operating under here? Is this ABS, or MMS,  
 4 or what set of rules are we speaking to  
 5 certification here?  
 6 EXAMINATION BY CAPT. HIGGINS:  
 7 Q. Captain, I understand that you are  
 8 not an expert with regard to the regulations  
 9 on the certification of the blowout  
 10 preventer. My question is simply if the  
 11 blowout preventer was not within the  
 12 certification requirements of the regulating  
 13 agencies, would that be important to the  
 14 master of the vessel?  
 15 A. Yes. That is something the master  
 16 should be aware of, and in the ISM process,  
 17 should raise to the company, saying we are  
 18 not in compliance with this particular item.  
 19 Q. Sir, is the blowout preventer an  
 20 important piece of equipment on board a  
 21 vessel?  
 22 A. Yes.  
 23 Q. Captain, are you familiar with the  
 24 term "condition-based maintenance"?  
 25 A. Yes. There's several schemes of  
 Page 11

1 maintenance. One is don't fix it unless  
 2 it's broke. Some people, other systems use  
 3 phased maintenance, where you do items at  
 4 certain times. A lot of BOP maintenance is  
 5 done at the end of the well when you bring  
 6 it back to the surface and you do all of  
 7 your maintenance items.  
 8 Q. Does condition-based maintenance  
 9 relieve the vessel of the certification  
 10 requirements that are included in the  
 11 regulations?  
 12 MR. SCHONEKAS:  
 13 Same objection, calls for a legal  
 14 opinion.  
 15 JUDGE ANDERSON:  
 16 With the same reservation, you may  
 17 answer the question.  
 18 THE WITNESS:  
 19 Without reviewing the regulation  
 20 in question, I really could not give you an  
 21 opinion. Probably not.  
 22 EXAMINATION BY CAPT. HIGGINS:  
 23 Q. In your opinion, should a vessel  
 24 operate a blowout preventer that is not  
 25 certified in accordance with the  
 Page 12

1 regulations?  
 2 MR. SCHONEKAS:  
 3 Same objection.  
 4 EXAMINATION BY CAPT. HIGGINS:  
 5 Q. In your opinion, should a vessel  
 6 operate a blowout preventer that is not in  
 7 compliance with the regulations? Just if  
 8 you know that the blowout preventer was not  
 9 certified in accordance with the  
 10 regulations, would you operate that blowout  
 11 preventer?  
 12 MR. SCHONEKAS:  
 13 Same objection.  
 14 MR. CLEMENTS:  
 15 Transocean joins the objection.  
 16 THE WITNESS:  
 17 No, I would find -- the captain  
 18 may find somebody else to operate the vessel  
 19 in place of myself, but my view is if you  
 20 are not meeting class and regulatory  
 21 requirements, you should not be operating  
 22 it.  
 23 EXAMINATION BY CAPT. HIGGINS:  
 24 Q. Is the captain responsible for the  
 25 safe operation of the vessel, in your

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1 opinion?  
 2 A. Repeating the question, yes, I do.  
 3 Q. Sir, are you familiar with the  
 4 relationship between the master and the OIM  
 5 on board a vessel?  
 6 A. On the vessels and companies that  
 7 I have worked for, I have been the master  
 8 and the OIM, wearing both hats. I am aware  
 9 that Transocean has a different  
 10 organizational structure.  
 11 Q. Captain, so my understanding is on  
 12 the vessels you have operated on, you have  
 13 functioned as both the master and the OIM,  
 14 but you are familiar with situations where  
 15 those are two separate people. Is that  
 16 correct?  
 17 A. I am. That is a company  
 18 organization decision that is done by  
 19 individual companies.  
 20 Q. Yes, sir. If there is both a  
 21 master and an OIM, who is the person in  
 22 charge of the vessel?  
 23 MR. SCHONEKAS:  
 24 I object to the competence of this  
 25 witness. This witness has testified that he

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1 has operated solely as an OIM and a captain.  
 2 Captain Higgins' question asked him to  
 3 express opinions on the operation of where  
 4 that happens separately. So this witness  
 5 lacks the foundation to express that  
 6 opinion.  
 7 JUDGE ANDERSON:  
 8 Well, the objection is because you  
 9 did not operate on a vessel where OIM and  
 10 master were separate people, that you can't  
 11 answer the question. I will go back to what  
 12 I said in the past: If, based on your  
 13 experience, you have an opinion and an  
 14 understanding of practices and custom that  
 15 allows you to answer a question, go right  
 16 ahead. If you think something is so far  
 17 beyond the actual experience that you have  
 18 had, Captain, and you can't answer, which is  
 19 the truth, then let us know that.  
 20 We appreciate knowing more about  
 21 your experience, and I'm sure those who want  
 22 to can evaluate the answer based on that  
 23 experience.  
 24 MR. KOHNKE:  
 25 Judge, if we are going to leave

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1 the ultimate decision as to whether the  
 2 witness possesses the competency to answer  
 3 the question, if we leave that to the  
 4 witness, can we at least require that a  
 5 foundation be laid? We have not laid a  
 6 foundation yet.  
 7 JUDGE ANDERSON:  
 8 I believe that a person who has  
 9 acted as a master on one of these vessels,  
 10 plus as an OIM on one of these vessels,  
 11 could not have gotten to those two different  
 12 positions without an extraordinary amount of  
 13 knowledge in the way that these vessels  
 14 operate. Because as everyone in the room  
 15 knows, those are extremely sophisticated  
 16 positions that require a lot of experience  
 17 to attain. Captain Smith is the first  
 18 person I have met who has actually done  
 19 both.  
 20 So for purposes of this panel, I  
 21 think that those qualifications alone make  
 22 these questions well within the scope of  
 23 what one might think is his experience. So  
 24 I am willing to let the witness judge  
 25 whether or not there is something lacking in

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1 his experience that would make it difficult  
 2 for him to answer the question.  
 3 MR. SCHONEKAS:  
 4 Judge, my objection went to the  
 5 fact that he has not operated under the  
 6 separate systems.  
 7 JUDGE ANDERSON:  
 8 I know you said that, and he has  
 9 acknowledged there is a different one.  
 10 EXAMINATION BY MR. DYKES:  
 11 Q. Captain Smith, this is David Dykes  
 12 from the joint investigation team.  
 13 How many years have you served as  
 14 master of a vessel?  
 15 A. I have held a master's license  
 16 since 1989. I have had an OIM endorsement  
 17 on that license since 1996. I served in  
 18 several different places, both in the North  
 19 Sea, Gulf of Mexico, and the Far East as  
 20 master and OIM.  
 21 Q. In this time frame, how many years  
 22 have you served or worked as a driller on  
 23 any of these Mobile Offshore Drilling Units?  
 24 A. None.  
 25 Q. How many years have you worked as

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1 a toolpusher on any of those Mobile Offshore  
 2 Drilling Units?  
 3 A. None.  
 4 Q. So none of your work has actually  
 5 been done on the drilling side?  
 6 A. No.  
 7 Q. So it is strictly from the marine  
 8 side of the equation?  
 9 A. Well, I am responsible for the  
 10 overall safety of the vessel. I have,  
 11 obviously, a significant background. I am  
 12 required by the job to go to well-control  
 13 training and I spend a significant amount of  
 14 time on the drill floor understanding that  
 15 operation.  
 16 Q. I am trying to make sure I  
 17 understand what your background is as far as  
 18 the actual drilling operations.  
 19 Your experience has been strictly  
 20 based on what other people are telling you  
 21 from the rig floor or from the drilling  
 22 activity?  
 23 A. And through the training process  
 24 that I have been through. I have to  
 25 maintain the well-control certification

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1 every two years just like the drillers do.  
 2 Q. Yes, sir.  
 3 Have you physically participated  
 4 in a well-control event or just from an  
 5 oversight standpoint?  
 6 A. The rigs that I have operated on  
 7 have not had any well-control problems.  
 8 Q. In that event, what role would you  
 9 play? Would you actively participate in  
 10 controlling the choke or calculating the  
 11 well-control sheet, or would you strictly  
 12 oversee that activity by one of the  
 13 toolpushers or the drilling personnel on the  
 14 rig?  
 15 MR. SCHONEKAS:  
 16 I have an objection. This witness  
 17 testified he never actually participated in  
 18 a well-control event, so for him to render  
 19 any opinions, I don't think he is competent.  
 20 JUDGE ANDERSON:  
 21 He is asking what he would do if  
 22 an event arose.  
 23 MR. DYKES:  
 24 I want to know what his training  
 25 has covered as far as how he would respond

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1 in that event.  
 2 JUDGE ANDERSON:  
 3 Also, even though it is a normal  
 4 courtesy to stand up when making an  
 5 objection, because the witness is on the  
 6 phone, if you could get close to a  
 7 microphone when you object, that will  
 8 facilitate things; and certainly I will not  
 9 be offended if you are not standing.  
 10 MR. SCHONEKAS:  
 11 Thank you, Judge.  
 12 MR. DYKES:  
 13 Captain, did you hear that  
 14 question or do I need to repeat it?  
 15 THE WITNESS:  
 16 Would you repeat it, please?  
 17 EXAMINATION BY MR. DYKES:  
 18 Q. Under your current employment, in  
 19 a well-control event, what role would you  
 20 play? Would you actively participate from  
 21 the standpoint of calculating or filling out  
 22 a well-control sheet? Would you be  
 23 participating with your hand on the choke to  
 24 control a kick? What role would you play?  
 25 Or would you strictly rely on the drilling

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1 personnel on the rig floor or those that are  
 2 in charge of the drilling activity?  
 3 A. I would rely on the expertise of  
 4 the people on the drill floor, and also  
 5 the -- we have a man called the rig  
 6 superintendent who is the boss of the  
 7 toolpushers, and he is a very experienced  
 8 driller. It would be strictly oversight,  
 9 maintaining communication with him, making  
 10 sure there is no leaks in the logic, and  
 11 also assessing the situation for do we need  
 12 to take other actions outside the drill  
 13 floor to ensure the integrity of the rig and  
 14 the safety of the well.  
 15 Q. So you would rely on the drilling  
 16 superintendent in that case to make all of  
 17 those decisions and keep you in the loop?  
 18 A. Yes. We are essentially paid the  
 19 same. He is the drilling expert; I do  
 20 everything else and I am looking at the  
 21 overall safety of the operation.  
 22 MR. DYKES:  
 23 Thank you.  
 24 EXAMINATION BY CAPT. HIGGINS:  
 25 Q. This is Captain Higgins again.

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1 MR. SCHONEKAS:  
 2 I join that.  
 3 THE WITNESS:  
 4 That depends on the communication  
 5 process on the Transocean rig, and I am not  
 6 sure how they would notify people of that  
 7 shift.  
 8 JUDGE ANDERSON:  
 9 The witness is not claiming  
 10 perfect knowledge. We know he has not been  
 11 in that experience in terms of his  
 12 employment. I think he is giving his best  
 13 answer based on his knowledge of  
 14 organizational charts and talking to people  
 15 in that position. We know the limitations  
 16 that might create in terms of his testimony.  
 17 But I think that as long as you  
 18 feel you have some understanding, you can  
 19 testify and the board knows you have little  
 20 experience or no experience operating in  
 21 that situation.  
 22 MR. CLEMENTS:  
 23 My problem is looking at an  
 24 organizational chart and speaking with  
 25 someone from Transocean over a beer or

Page 23

1 Are you familiar with situations where they  
 2 have separate OIMs and masters?  
 3 A. I am aware that Transocean  
 4 operates in that manner. My current  
 5 employer is Diamond Offshore, which uses a  
 6 master and OIM, the same person.  
 7 I have also worked for Frontier  
 8 Drilling where I was also master and OIM.  
 9 Q. Are you familiar with the  
 10 relationship between the OIM and the master  
 11 in the situation the way that Transocean  
 12 operates?  
 13 A. I have talked about it with people  
 14 who work with Transocean and I have seen  
 15 their organizational chart.  
 16 Q. Do you know, is the OIM in charge  
 17 in certain situations and the master in  
 18 charge in other situations?  
 19 A. Yes.  
 20 Q. How does one know when it shifts  
 21 from one situation to another in the event  
 22 of an emergency?  
 23 MR. CLEMENTS:  
 24 Objection to the lack of  
 25 foundation.

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1 whatever is one thing, but from the  
 2 testimony in this proceeding, none of the  
 3 employees have had any difficulty or  
 4 confusion explaining who was in charge when  
 5 there was an emergency, when there was a  
 6 kick, when there was a navigation problem,  
 7 or at any time on April 20, 2010.  
 8 If this witness has not talked to  
 9 any of them, then there is no foundation,  
 10 and I really don't think there is any  
 11 relevance to it either.  
 12 JUDGE ANDERSON:  
 13 That might be a conclusion that  
 14 you or perhaps the board will have to reach,  
 15 and I don't mean to evaluate the testimony  
 16 of witnesses now, but we understand the  
 17 limitations to the witness' experience, and  
 18 if Captain Higgins wants to ask him these  
 19 various questions, let's go forward.  
 20 CAPT. NGUYEN:  
 21 This is Captain Nguyen. Let me  
 22 make one comment.  
 23 Yesterday, during the questioning  
 24 of Mr. Oldfather, he is not a Transocean  
 25 employee, but he was aboard the vessel. I

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1 asked him who was in charge of the vessel,  
 2 and he indicated it was the master.  
 3 So there is a data point there as  
 4 far as some confusion as far as the chain of  
 5 command. So I think that is a foundation  
 6 for the line of questions.  
 7 MR. CLEMENTS:  
 8 With all respect, I believe the  
 9 answer was correct in view of the emergency  
 10 that was occurring at the time.  
 11 CAPT. NGUYEN:  
 12 No, sir, he was not on board at  
 13 the time of the emergency, he had left the  
 14 vessel. So it was during the time -- in the  
 15 nonemergency situation, and he said the  
 16 master was in charge of the vessel. So  
 17 there is a data point for possible confusion  
 18 in the chain of command. I wanted to point  
 19 that out.  
 20 EXAMINATION BY CAPT. HIGGINS:  
 21 Q. Can you explain to me what the  
 22 master's responsibilities are with regard to  
 23 well-control?  
 24 MR. SCHONEKAS:  
 25 In what situation?

1 THE WITNESS:  
 2 Well-control is something that is  
 3 done on a continuous basis using the mud  
 4 weights and monitoring the pressures in the  
 5 well. So that is actually done physically,  
 6 hands-on by the driller.  
 7 It is something of interest to  
 8 everybody because, obviously, if the well  
 9 starts running, you have got to do something  
 10 quickly to control that.  
 11 In the case that we're talking  
 12 about, obviously, the well started running  
 13 and a gas kick caused a great deal of damage  
 14 to the vessel. So you are looking at can  
 15 you control the well, can you keep the  
 16 vessel afloat, and can you save the crew.  
 17 All those are the master's responsibilities.  
 18 EXAMINATION BY CAPT. HIGGINS:  
 19 Q. My understanding of your testimony  
 20 is that normal well-control monitoring is  
 21 handled by the drilling personnel, but that  
 22 when it becomes a threat to the vessel, then  
 23 it becomes of immediate interest to the  
 24 master and within his control?  
 25 A. That's with any threat. You know,

1 a vessel bearing down on you in heavy  
 2 weather. It is a threat to the integrity of  
 3 the vessel and the safety of the crew.  
 4 Q. So at some point, the monitoring  
 5 and well-control shifts from the drilling  
 6 personnel to being of immediate interest to  
 7 the master. Is that correct?  
 8 A. I wouldn't say it shifts. I would  
 9 say most of the time, you know, the master  
 10 is doing a whole bunch of things, but when  
 11 well-control becomes an immediate concern,  
 12 then it's your immediate concern.  
 13 Q. Thank you, sir. I'm going to  
 14 shift areas of questioning here.  
 15 Is a dynamically positioned vessel  
 16 a vessel underway, not making way?  
 17 A. Yes.  
 18 Q. Even when it is latched up?  
 19 A. Yes. Being latched up to the  
 20 bottom is not anchored, you are still  
 21 subject to all of the forces of wind and  
 22 current, so -- and the riser column is not  
 23 an anchor.  
 24 Q. So my understanding is that a  
 25 dynamically positioned vessel is a vessel

1 underway, not making way, and therefore,  
 2 there would be a requirement for a marine  
 3 watch. Is that correct?  
 4 A. Yes.  
 5 Q. And who is ultimately responsible  
 6 for that marine watch?  
 7 MR. SCHONEKAS:  
 8 Same objection.  
 9 MR. CLEMENTS:  
 10 Same objection.  
 11 THE WITNESS:  
 12 The master of the vessel.  
 13 EXAMINATION BY CAPT. HIGGINS:  
 14 Q. As part of that marine watch, does  
 15 there need to be a licensed officer in  
 16 charge on the bridge?  
 17 A. Yes, I believe so. You are also  
 18 subject to the safe manning certificate  
 19 which is issued by the flag state, and that  
 20 will tell you what sort of watch personnel  
 21 you have to have.  
 22 Q. So the person in charge on the  
 23 bridge should be a licensed mariner. Is  
 24 that correct?  
 25 A. Yes.

1 Q. So that would be, at a minimum, a  
 2 third mate?  
 3 A. Depending on the class of the  
 4 vessel. All of the DP rigs under U.S. law  
 5 are unlimited tonnage, so you need a third  
 6 mate, unlimited license.  
 7 Q. In your opinion, would it be  
 8 improper to have someone that was not at  
 9 least a third mate in charge on the bridge  
 10 of a dynamically positioned vessel?  
 11 A. Yes, you have to comply with your  
 12 flag state requirements of safe manning, and  
 13 that will say officer in charge of  
 14 navigation watch, licensed. And under the  
 15 U.S. system, that would be a third mate.  
 16 Q. If the person in charge on the  
 17 bridge was not a third mate and was not a  
 18 licensed mariner, but there was a third mate  
 19 as part of the watch, in your opinion, would  
 20 that meet the requirements?  
 21 A. Yes, it would.  
 22 Q. So the third mate would not have  
 23 to be in charge, but would have to be  
 24 present on the bridge; is that correct?  
 25 A. Yes. You might have a senior DP  
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1 operator who may not have a license but who  
 2 is the most experienced on the DP system,  
 3 but your officer in charge of the navigation  
 4 watch has to be licensed.  
 5 Q. Would it be proper to have a  
 6 senior DP officer in charge on the bridge,  
 7 not licensed, and have, subordinate to that  
 8 person, a licensed mariner?  
 9 A. It would meet the requirements of  
 10 safe manning. I'm not sure what "proper"  
 11 is, but it would meet your obligations under  
 12 safe manning.  
 13 Q. Captain, are you familiar with ISM  
 14 certificates?  
 15 A. Yes.  
 16 Q. If an ISM certificate has expired,  
 17 should the vessel be operated?  
 18 A. No. You are not in class.  
 19 Q. Would operating a vessel with  
 20 overdue regulatory certificates be an  
 21 indication of an ineffective Safety  
 22 Management System?  
 23 A. Your statement was not clear.  
 24 Would you say it again, please?  
 25 Q. Yes, sir. Would operating a  
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1 vessel with overdue regulatory certificates  
 2 be an indication of a vessel's ineffective  
 3 Safety Management System?  
 4 A. Yes.  
 5 Q. Is it possible to unknowingly  
 6 operate a vessel with overdue regulatory  
 7 certificates?  
 8 A. It is possible to make such an  
 9 administrative error. Your regulatory  
 10 certificate file is typically about 2 inches  
 11 thick, so you could wind up with one that  
 12 expired and you didn't catch it. You're not  
 13 supposed to.  
 14 CAPT. HIGGINS:  
 15 Thank you very much, Captain.  
 16 JUDGE ANDERSON:  
 17 Any other board questions?  
 18 EXAMINATION BY MR. MATHEWS:  
 19 Q. In your capacity as OIM and  
 20 master, do you usually greet and meet every  
 21 third-party contractor and employee that  
 22 visits the rig?  
 23 A. Not everyone, but many.  
 24 Q. When the helicopter lands, you  
 25 don't go to the deck, check them in and go  
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1 over safety with them, do you?  
 2 A. No, that is usually carried out by  
 3 the safety department rep or -- depending on  
 4 what country you are operating in. It could  
 5 be the safety department guy or sometimes  
 6 the nurse who actually gives the onboard  
 7 safety briefing. Every person who comes on  
 8 is given the safety briefing. That is  
 9 standard procedure. I typically do not do  
 10 that myself, I delegate that.  
 11 MR. MATHEWS:  
 12 Thanks a lot, sir.  
 13 JUDGE ANDERSON:  
 14 Any other board questions?  
 15 EXAMINATION BY CAPT. NGUYEN:  
 16 Q. Captain Smith, this is Captain  
 17 Nguyen. I understand that the master of the  
 18 vessel may not meet and greet every visitor  
 19 to his vessel, but everyone on board the  
 20 vessel should know who is in charge of the  
 21 vessel. Is that correct, sir?  
 22 A. Yes. Typical practice is when you  
 23 get off the helicopter or you are coming  
 24 into the debriefing room, there is a board  
 25 that says who is the OIM, who is the rig  
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1 superintendent, who is the chief engineer,  
 2 who is the safety department head. That's a  
 3 very common practice throughout the  
 4 industry.  
 5 CAPT. NGUYEN:  
 6 Thank you.  
 7 JUDGE ANDERSON:  
 8 Republic of the Marshall Islands?  
 9 MR. LINSIN:  
 10 Thank you, Captain, we have no  
 11 questions.  
 12 JUDGE ANDERSON:  
 13 No questions from the Marshall  
 14 Islands. BP?  
 15 MR. GODFREY:  
 16 Thank you, Judge. We have no  
 17 questions.  
 18 JUDGE ANDERSON:  
 19 Transocean?  
 20 MR. CLEMENTS:  
 21 Yes, Your Honor.  
 22 EXAMINATION BY MR. CLEMENTS:  
 23 Q. Captain Smith, my name is Miles  
 24 Clements. I represent Transocean.  
 25 CAPT. NGUYEN:

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1 Captain Smith, do you have an  
 2 attorney representative with you, sir, on  
 3 your side?  
 4 THE WITNESS:  
 5 Would you say that again, please?  
 6 CAPT. NGUYEN:  
 7 Yes, sir. This is Captain Nguyen  
 8 here. Do you have an attorney representing  
 9 you on the other end of the line, sir?  
 10 THE WITNESS:  
 11 I'm sorry, I am not understanding  
 12 you.  
 13 CAPT. NGUYEN:  
 14 Yes, sir. Do you have a legal  
 15 representative with you?  
 16 THE WITNESS:  
 17 No.  
 18 MR. CLEMENTS:  
 19 Captain Smith?  
 20 THE WITNESS:  
 21 Yes. Go ahead.  
 22 EXAMINATION BY MR. CLEMENTS:  
 23 Q. My name is Miles Clements; I  
 24 represent Transocean.  
 25 If at any time you can't hear me,

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1 please speak up and let us know.  
 2 A. You are coming through medium  
 3 strength but clear.  
 4 Q. Captain Smith, I assume that since  
 5 you testified last, you still have not  
 6 worked aboard any rig that separates the job  
 7 duties of OIM and captain?  
 8 A. Yes. That's correct.  
 9 Q. You were asked today who was  
 10 responsible for the safe operation of the  
 11 vessel, and you were asked some follow-up  
 12 questions about the blowout preventer, and I  
 13 understood you to say that that person would  
 14 be the captain. Is that correct?  
 15 A. Yes.  
 16 Q. Who is responsible for the  
 17 drilling operations aboard that vessel on  
 18 which a separate licensed captain is  
 19 assigned?  
 20 A. I'm not sure I understood your  
 21 question. Could you rephrase it?  
 22 Q. Sure. You testified that the  
 23 captain was responsible for the safe  
 24 operation of the vessel, and I don't think  
 25 that anyone would necessarily disagree with

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1 that, but my question, sir, and I can cite  
 2 you to your previous testimony if you don't  
 3 have it there, is with respect to who is the  
 4 responsible person for the vessel during  
 5 drilling operations. Who would that be?  
 6 A. In the places that I have worked,  
 7 it remained me as the OIM. The senior  
 8 driller, who comes with different titles,  
 9 but rig superintendent is the one that is  
 10 being used with the company I'm with now,  
 11 actually runs that operation. But we talk  
 12 ten times a day.  
 13 Q. Okay. So if I understand your  
 14 answer, on the rigs on which you have  
 15 worked, with regard to drilling operations,  
 16 you would be in charge but wearing your hat  
 17 as the OIM. Is that correct?  
 18 A. Yes.  
 19 Q. And with regard to the navigation  
 20 function of the rig, a DP rig, you would be  
 21 responsible for the safe operation and for  
 22 navigation, but wearing your hat as captain,  
 23 would you not?  
 24 A. Yes.  
 25 Q. All right. Well, aboard the rigs

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1 that you worked on, I understand there is  
 2 someone called a rig superintendent, is  
 3 there not?  
 4 A. Yes, sir, that's correct.  
 5 Q. And does he have more  
 6 responsibilities with regard to the drilling  
 7 operations than you do?  
 8 A. He actually runs the drilling  
 9 operation. That is his job.  
 10 Q. Okay. Well, if Transocean has  
 11 someone running the drilling operation and  
 12 that is his job, and that is all he does,  
 13 but his title happens to be OIM instead of  
 14 rig superintendent, would you have a problem  
 15 with that?  
 16 A. Well, the OIM is a regulatory  
 17 title which grew out of the -- well, on the  
 18 U.S. side, grew out of the OCEAN RANGER  
 19 disaster, and that is the responsibility for  
 20 the safety in the operation of the vessel.  
 21 Q. Aren't we talking about  
 22 terminology here? In terms of actual  
 23 function, wouldn't Transocean's OIM be doing  
 24 the same thing that your company's rig  
 25 superintendent does?

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1 A. For running of the drilling  
 2 operation, yes, that is correct.  
 3 Q. And with respect to running  
 4 navigation, wouldn't Transocean's captain be  
 5 doing the same thing, a Coast Guard licensed  
 6 master, be doing the same thing that you  
 7 would do aboard your rigs in your capacity  
 8 as a Coast Guard licensed master?  
 9 A. Yes.  
 10 Q. All right. You have never worked  
 11 on a rig where the functions were separated.  
 12 I think we have established that, have we  
 13 not?  
 14 A. Yes.  
 15 Q. You don't know from your personal  
 16 experience, then, which system actually  
 17 works better from a functional point of  
 18 view, do you?  
 19 A. In my experience based on many  
 20 years in the military and in oilfield  
 21 operations where I have held command under  
 22 military, merchant marine, and oilfield  
 23 organizations, one of the basics of  
 24 leadership and management and dealing with  
 25 emergencies is you have to have unity of

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1 command. There has to be no doubt who is  
 2 going to be running the operation when  
 3 things really, really get out of hand.  
 4 Having that man be a single  
 5 function I think is a better way to do  
 6 business.  
 7 Q. All right. That's based on things  
 8 you have read, people you have talked to,  
 9 but not based on your own personal service.  
 10 Is that right?  
 11 A. No, it is based on my -- I have  
 12 been going to sea for 40 years in several  
 13 different colors of suits, and I also hold a  
 14 master's degree in business and management.  
 15 I have studied leadership management, marine  
 16 casualties, all sorts of things over these  
 17 years, and one of the critical things is how  
 18 are you going to run your organization and  
 19 how is it built to deal with rapidly  
 20 evolving emergencies. And if you are going  
 21 to try to shift your leadership in the  
 22 middle of a rapidly evolving emergency, you  
 23 are not building the strongest organization.  
 24 Q. Do you believe that when an  
 25 emergency on a deepwater drilling rig occurs

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1 that there ought to be a unified authority?  
 2 A. Yes.  
 3 Q. And if that is what happened on  
 4 the Transocean, that is, the captain was in  
 5 overall authority when an emergency  
 6 developed, would that be consistent with  
 7 what you think is proper?  
 8 A. Yes.  
 9 Q. You have never handled a kick, as  
 10 I understand it?  
 11 A. No. I have dealt with other  
 12 maritime emergencies, both onboard and as a  
 13 search and rescue controller, so I have seen  
 14 a bunch of them.  
 15 Q. But you would be scared to death  
 16 to be on a rig when a kick occurred, would  
 17 you not?  
 18 A. It would be a great time to be  
 19 somewhere else, but that is the  
 20 responsibility that goes with holding the  
 21 job.  
 22 Q. Would you feel better during a  
 23 kick if there was an experienced, qualified  
 24 OIM whose only function aboard the rig was  
 25 to deal with drilling problems and

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1 well-control problems?  
 2 A. I work with a rig superintendent  
 3 who I trust completely to deal with that.  
 4 Q. So the answer would be yes, but on  
 5 your rigs, it would be a rig superintendent  
 6 and not an OIM?  
 7 A. His primary responsibility is the  
 8 safe operation of the well and the drilling  
 9 equipment, so he can focus on that  
 10 exclusively and not look at the other  
 11 factors which may be weighing on the case.  
 12 Q. And you could focus on the  
 13 navigation and other aspects of the  
 14 emergency, could you not, as the captain?  
 15 A. Right.  
 16 Q. I looked at your earlier  
 17 testimony, and I'm not going to read it, but  
 18 I can if there is any confusion and you need  
 19 me to, or if you don't have it in front of  
 20 you, but you were asked some questions, I  
 21 think it was by Captain Nguyen, and you were  
 22 asked whether there was a conflict where the  
 23 master is responsible for the overall safety  
 24 and the OIM is making the final decision on  
 25 what to do with a well-control problem.

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1 Do you believe that there is a  
 2 conflict to have someone in charge of a  
 3 well-control problem and someone else in  
 4 charge of navigation and the emergency?  
 5 A. If you have a serious well-control  
 6 problem, you are dealing with the overall  
 7 safety of the vessel. So I still think that  
 8 having one person responsible for the  
 9 overall safety of the vessel, which might  
 10 include you shut the well in now, I would  
 11 not expect that I would ever have to do  
 12 that, because the drillers are supposed to  
 13 take care of that first. But it might be a  
 14 situation where I have to say, Shut the well  
 15 in now, we're dealing with something else.  
 16 Q. But you would defer to the driller  
 17 first?  
 18 A. The driller is the one who has the  
 19 information and figured out we had a  
 20 problem.  
 21 Q. And you would want to know what  
 22 the rig superintendent thought if he was on  
 23 the floor overseeing the drillers, would you  
 24 not?  
 25 A. Yes, I would expect him to be

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1 there providing his expertise and  
 2 communicating with me, handling the  
 3 situation the best he could and  
 4 communicating with me as far as are we at an  
 5 emergency disconnect, can we try to apply  
 6 another solution to the well-control and  
 7 what do we have to do for the safety of the  
 8 other people on the rig.  
 9 Q. Let me get to where I was going  
 10 with your earlier testimony. Right before  
 11 that answer, you told Captain Nguyen that  
 12 you believed it was a conflict. The  
 13 conflict you actually described was a  
 14 conflict between the owner of the rig, that  
 15 would be Transocean, and who you described  
 16 as the renter of the rig, who would be, in  
 17 this instance, BP.  
 18 You testified previously about the  
 19 pecuniary interests, the cost-cutting  
 20 interests of drilling fast versus the  
 21 interests of Transocean in maintaining the  
 22 integrity of the rig. Do you recall that  
 23 testimony?  
 24 A. Yes.  
 25 Q. All right. Well, clearly, if you

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1 will agree with me, the conflict you're  
 2 describing is of a financial nature between  
 3 BP and Transocean, correct?  
 4 A. There will always be that tension  
 5 between those two groups.  
 6 Q. But you're not saying that within  
 7 Transocean, there is any tension or conflict  
 8 between the OIM, or on your vessels, the rig  
 9 superintendent on the one hand and the  
 10 licensed captain on the other hand. There  
 11 is no conflict there, is there?  
 12 A. I really -- I really can't address  
 13 your question. I have not worked around  
 14 Transocean rigs.  
 15 Q. So your answer would be, then, you  
 16 have no basis whatsoever to say that there  
 17 would be a conflict between Transocean  
 18 personnel along the lines of what you  
 19 described as between BP and Transocean?  
 20 A. No. That is a different issue.  
 21 That is a Transocean internal management  
 22 issue which I really can't address.  
 23 Q. You have no reason to believe  
 24 there is a conflict internally at  
 25 Transocean, do you?

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1 A. I don't know.  
 2 Q. Very good, very good. We do agree  
 3 on that.  
 4 CAPT. NGUYEN:  
 5 Mr. Clements, can you clarify  
 6 conflict? Financial conflict?  
 7 Responsibility conflict? I don't understand  
 8 what you mean by conflict.  
 9 MR. CLEMENTS:  
 10 I was referring to a question that  
 11 I believe you had asked, or had been asked  
 12 by the board, I don't know if it was yours,  
 13 "So if it is a BP vessel and the master is  
 14 in charge and the master and the OIM are not  
 15 one and the same, is there a conflict there  
 16 where the master is responsible for the  
 17 overall safety of the vessel and its  
 18 personnel, and the OIM is making the final  
 19 decision on what to do with well-control  
 20 problems? Is there a conflict there?"  
 21 And he said, "I believe it is."  
 22 That is what I was referring to.  
 23 CAPT. NGUYEN:  
 24 Captain Smith, I think we were  
 25 talking about authority in response to an  
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1 emergency, the conflicts there. We were not  
 2 talking about financial conflict or  
 3 whatever. We were talking about  
 4 responsibility and authority conflicts.  
 5 MR. CLEMENTS:  
 6 But that is the only conflict. I  
 7 am trying to develop that that is the only  
 8 conflict, and that precedes, in his  
 9 testimony, your question. The conflict he  
 10 described was a financial one between  
 11 Transocean and BP, given BP's interest in  
 12 saving money and paying less per day and  
 13 Transocean's interest in maintaining the  
 14 integrity of its rig.  
 15 MR. GODFREY:  
 16 Object to the testimony.  
 17 MR. CLEMENTS:  
 18 I am citing the witness'  
 19 testimony.  
 20 JUDGE ANDERSON:  
 21 We will have a chance after all of  
 22 this testimony to evaluate it, and it seems  
 23 to me since we have Captain Smith on the  
 24 phone, we should focus on the questions and  
 25 answers with him, and later on, there will  
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1 be ample opportunity for us to reflect on  
 2 the substance of his testimony, even though  
 3 we are debating interpretation at this time.  
 4 If you could move forward with  
 5 your questions, I think that would be the  
 6 best use of our time with Captain Smith.  
 7 CAPT. NGUYEN:  
 8 I wanted to make sure. There was  
 9 a question and answer, and your question to  
 10 Captain Smith was there was no conflicts  
 11 within Transocean, and I wanted to --  
 12 Captain Smith said no. I wanted to make  
 13 sure which conflict are you talking about.  
 14 Financial, authority and responsibility  
 15 conflicts?  
 16 If you would rephrase your  
 17 question, if you want to, ask him whether  
 18 there is a conflict in terms of  
 19 responsibility and accountability on board a  
 20 vessel. Maybe that is what Captain Smith  
 21 wanted to address.  
 22 But the question about no conflict  
 23 is kind of broad and I don't think Captain  
 24 Smith's response was very helpful to the  
 25 board.  
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1 MR. CLEMENTS:  
 2 Shall I proceed?  
 3 JUDGE ANDERSON:  
 4 Please.  
 5 EXAMINATION BY MR. CLEMENTS:  
 6 Q. You know Mr. Jimmy, don't you?  
 7 A. Say again?  
 8 Q. Do you know who Jimmy Harrell is?  
 9 A. I know the name.  
 10 Q. Never met him or spoke with him?  
 11 A. I don't believe so.  
 12 Q. How about Captain Curt Kuchta?  
 13 A. No, I don't know him either.  
 14 Q. I take it you have no reason to  
 15 believe that they ever had any conflict in  
 16 their decision making, and specifically with  
 17 respect to the events on the DEEPWATER  
 18 HORIZON on April 20, 2010?  
 19 A. I have no knowledge of that.  
 20 Q. Or whether they have ever had a  
 21 conflict of any kind in discharging their  
 22 duties with respect to navigation on the one  
 23 hand and emergencies and drilling operations  
 24 on the other hand?  
 25 A. No knowledge of either of them.  
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1 Q. Would you concede, sir, that it is  
 2 possible that having two separate people  
 3 devoting 100 percent of their time  
 4 continually to navigation on the one hand  
 5 and emergencies on the other hand might be a  
 6 better approach than having one person  
 7 taking responsibility for both?  
 8 A. That's not my opinion. I have  
 9 worked with one person wearing both hats,  
 10 and the senior driller, rig superintendent,  
 11 just attending to the drilling operations  
 12 and it works very well. There is no doubt  
 13 when the general alarm goes off who is  
 14 holding the keys.  
 15 Q. I think you just described the  
 16 situation on the DEEPWATER HORIZON, but  
 17 Jimmy's title is OIM and your guy's title is  
 18 rig superintendent. Other than that, I  
 19 really don't see any difference. Do you,  
 20 sir?  
 21 A. Well, OIM is a responsibility  
 22 defined in law. So who is actually holding  
 23 that authority.  
 24 Q. So there is a textbook difference,  
 25 you're saying? Or something -- a regulatory  
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1 difference?  
 2 A. Well, if you have a problem,  
 3 somebody is going to wind up at the end of a  
 4 long green table with an investigation  
 5 board. Who is that person going to be?  
 6 Q. Well, that person may be you, sir,  
 7 and it may be your rig superintendent too,  
 8 might it not?  
 9 A. One person is the OIM. He will be  
 10 there in front of the long green table.  
 11 When you get to where things are really,  
 12 really going bad, there needs to be no doubt  
 13 in anybody's mind as to who had the  
 14 authority to say, Pull the plug, let's go.  
 15 JUDGE ANDERSON:  
 16 I think the board members fully  
 17 understand the fact that there are two views  
 18 on how this ought to work.  
 19 In my extensive years sitting on  
 20 the bench, I have never seen a lawyer change  
 21 a witness' mind. So we know what Captain  
 22 Smith's view is, and we know Transocean has  
 23 adopted its organizational structure  
 24 presumably for the best reasons because you  
 25 believe in your experience it works best.  
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1 So I would say you ought to cover  
 2 new information rather than seeing if we can  
 3 change the captain's mind.  
 4 Is there any chance, Captain, we  
 5 are going to change your mind on this?  
 6 THE WITNESS:  
 7 Highly unlikely.  
 8 JUDGE ANDERSON:  
 9 There you go. But we know there  
 10 is another view and that Transocean has many  
 11 successful operations throughout the world,  
 12 so the board will be weighing the merits of  
 13 that.  
 14 EXAMINATION BY MR. CLEMENTS:  
 15 Q. Captain Smith, where are you  
 16 today?  
 17 A. Norfolk, Virginia, at the Coast  
 18 Guard Sector Hampton Roads office.  
 19 Q. Who were you retained by in this  
 20 investigation?  
 21 A. I'm sorry?  
 22 Q. Who were you retained by in this  
 23 investigation, in this proceeding?  
 24 A. I was requested to make my  
 25 testimony available by the board. I am  
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1 doing this as a mariner. I am not really  
 2 retained. I am not under any contract.  
 3 Q. All right. You are not being  
 4 compensated for your time devoted, now on  
 5 two different occasions, to testify?  
 6 A. No.  
 7 Q. Have you done anymore consulting  
 8 work on a compensation basis for BP since  
 9 you testified last?  
 10 A. No.  
 11 Q. But you had before?  
 12 A. On prior cases related to other  
 13 matters.  
 14 Q. They were your client on other  
 15 matters?  
 16 A. I was -- BP on a commercial  
 17 dispute with Daewoo Shipbuilding; I related  
 18 to the THUNDER HORSE; and I consulted for  
 19 the Justice Department on a shipyard  
 20 explosion case.  
 21 MR. CLEMENTS:  
 22 Thank you, sir. I have no further  
 23 questions.  
 24 JUDGE ANDERSON:  
 25 Any questions from Halliburton?  
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1 MR. GODWIN:  
 2 No, Your Honor.  
 3 JUDGE ANDERSON:  
 4 Weatherford?  
 5 MR. LEMOINE:  
 6 No questions, Judge.  
 7 JUDGE ANDERSON:  
 8 M-I SWACO?  
 9 COUNSEL FOR M-I SWACO:  
 10 No questions.  
 11 JUDGE ANDERSON:  
 12 Anadarko?  
 13 MS. KUCHLER:  
 14 No questions.  
 15 JUDGE ANDERSON:  
 16 MOEX?  
 17 MS. KIRBY:  
 18 No questions.  
 19 JUDGE ANDERSON:  
 20 Douglas Brown?  
 21 MR. GORDON:  
 22 No questions.  
 23 JUDGE ANDERSON:  
 24 Mike Williams?  
 25 (No response.)

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1 JUDGE ANDERSON:  
 2 Dril-Quip?  
 3 MR. KAPLAN:  
 4 No questions.  
 5 JUDGE ANDERSON:  
 6 Captain Kuchta?  
 7 EXAMINATION BY MR. SCHONEKAS:  
 8 Q. Good morning, Captain, how are  
 9 you?  
 10 A. All right. Who are you, sir?  
 11 Q. Could be better, but hopefully by  
 12 the end of the day I will be better.  
 13 My name is Kyle Schonekas, and I  
 14 represent Captain Kuchta who is at the end  
 15 of one of these long tables, sir.  
 16 A. Okay.  
 17 Q. You are of the opinion that the  
 18 master and the OIM should be one and the  
 19 same, correct?  
 20 A. That's correct.  
 21 Q. I was not here last time, but I  
 22 have reviewed your testimony. You offered  
 23 the opinion that the IMO required that to be  
 24 the case; is that right?  
 25 A. Yes. I would have to go through

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1 the book again, but on dynamically  
 2 positioned units, the language is that the  
 3 OIM should be a ship master with a license  
 4 endorsed as an OIM.  
 5 Q. In fact, IMO is an acronym for  
 6 what?  
 7 A. International Maritime  
 8 Organization, based in London, part of the  
 9 United Nations.  
 10 Q. Do you know if the Marshall  
 11 Islands is a participant in that  
 12 organization?  
 13 A. I didn't understand your question.  
 14 Q. The Marshall Islands, have you  
 15 heard of them?  
 16 A. Yes.  
 17 Q. Do you know whether or not they  
 18 participate in that organization?  
 19 A. Yes.  
 20 Q. Do you know that, in fact, that is  
 21 not a requirement of IMO, but rather the  
 22 Coast Guard, under federal regulations?  
 23 A. I would have to review the IMO  
 24 rules. I believe the source of it is the  
 25 IMO.

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1 Q. Well, sir, I will refer you to 46  
 2 CFR 15.520. I know you don't have it in  
 3 front of you, but I will read the relevant  
 4 portion.  
 5 "The requirements of this section  
 6 for Mobile Offshore Drilling Units (MODUs)  
 7 supplement other requirements in this part."  
 8 Subpart D states, "A  
 9 self-propelled MODU, other than a drill  
 10 ship, must be under the command of an  
 11 individual who holds a license as a master  
 12 endorsed as an OIM or MMC with master and  
 13 OIM officer endorsements."  
 14 All right, sir. Is that your  
 15 understanding of that requirement?  
 16 A. Okay. I was just handed a copy of  
 17 46 CFR. Would you give me the cite again?  
 18 Q. Sure. 15.520, and I read to you  
 19 subsection D.  
 20 JUDGE ANDERSON:  
 21 You can take whatever time you  
 22 would like to read it and let us know when  
 23 you are comfortable.  
 24 THE WITNESS:  
 25 Okay.

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<p>1 EXAMINATION BY MR. SCHONEKAS:                  2 Q. That requirement is for U.S. flag                  3 vessels, correct?                  4 A. Yes.                  5 Q. In fact, that doesn't relate to                  6 vessels that are licensed under foreign                  7 states; is that right?                  8 A. True.                  9 Q. Have you made a review of the                  10 Marshall Islands' requirements to determine                  11 whether or not it is permissible for the OIM                  12 and master to be two distinct people?                  13 A. Under the Marshall Islands' safe                  14 manning certificate for self-propelled                  15 MODUs, they only use the title of OIM. They                  16 do not have a separate master.                  17 Q. Sir, you have not had the benefit                  18 of this, but I will read to you a letter                  19 from the Republic of the Marshall Islands                  20 dated August 25, 2010, page 2.                  21 "The manning requirements and                  22 subsequent manning levels increased when the                  23 DEEPWATER HORIZON was registered in the                  24 Marshall Islands in December 2004.                  25 Specifically, the manning requirements and                  Page 57</p>	<p>1 Q. IMO. I'm sorry. IMO.                  2 A. Okay. I would have to go back and                  3 review -- I have been working for several                  4 years on that the IMO was the origin of the                  5 requirement for masters' licenses. If the                  6 Marshall Islands wrote the rules that way,                  7 that is up to them.                  8 Q. Well, sir, you have no proof to                  9 suggest that their provision for the                  10 creation of two distinct positions, two                  11 specifically skilled people, is                  12 noncompliant, do you, sir?                  13 A. No.                  14 Q. Now, sir, you have an issue with                  15 it; even though it was perfectly legal, you                  16 don't like this concept of the shifting of                  17 responsibilities. Is that correct?                  18 A. That's correct.                  19 Q. And you believe that it was done                  20 essentially on the fly, right?                  21 A. I don't follow your question.                  22 JUDGE ANDERSON:                  23 You mean in a particular incident,                  24 it was done on the fly, or that the                  25 possibility of dual leadership was created                  Page 59</p>
<p>1 subsequent manning levels increased when                  2 Transocean re-registered the DEEPWATER                  3 HORIZON to Marshall Islands as follows."                  4 It has, "On station, one master,                  5 one OIM."                  6 It goes on, it states, "At the                  7 time of the explosion that occurred on                  8 April 20, 2010, the DEEPWATER HORIZON was                  9 properly manned under national and                  10 international standards for a DPV unit                  11 despite the clerical error on the MSMC by                  12 the maritime administrator that the                  13 DEEPWATER HORIZON was a self-propelled MODU                  14 instead of a DPV unit."                  15 All right, sir. Now, having heard                  16 that, will you acknowledge that, in fact, it                  17 is permissible under the Marshall Islands                  18 that you -- or that it is envisioned those                  19 will be two separate people?                  20 A. It appears that's the way they                  21 wrote their rules.                  22 Q. So you were mistaken, were you                  23 not, sir, when you said that was a                  24 requirement of ISO. Is that right?                  25 A. ISO or IMO?                  Page 58</p>	<p>1 on the fly?                  2 MR. SCHONEKAS:                  3 In the context the witness used it                  4 at the last hearing. He testified that this                  5 transition of authority under the Transocean                  6 system was done "on the fly."                  7 I will give you the testimony if                  8 you like.                  9 CAPT. NGUYEN:                  10 I don't remember, Mr. Schonekas,                  11 but I think the phrase "on the fly" -- I                  12 think I was having a discussion with a                  13 response from personnel from Transocean,                  14 referring to whether they deferred to -- or                  15 who was responsible for emergency response.                  16 I could be wrong.                  17 While Mr. Schonekas is looking for                  18 that document, Captain Smith, early in your                  19 testimony this morning, you indicated that                  20 the decision to have two separate                  21 individuals to serve as OIM and master is a                  22 Transocean policy, correct?                  23 THE WITNESS:                  24 Yes.                  25 CAPT. NGUYEN:                  Page 60</p>

1 So from that, I assume it is your  
 2 understanding that international  
 3 requirements require that those positions  
 4 exist but don't dictate it should be one  
 5 person. Your point is that it is  
 6 Transocean's policy?  
 7 THE WITNESS:  
 8 The Transocean organization is  
 9 different than most of the other people in  
 10 the business.  
 11 EXAMINATION BY MR. SCHONEKAS:  
 12 Q. Captain Smith, let me refresh your  
 13 recollection as well as Captain Nguyen's. I  
 14 want to refer you to page 29 of your  
 15 testimony, line 14.  
 16 "Q. From your perspective, are  
 17 there any issues that this type of  
 18 organization raises?  
 19 "A. Unity of command. Going back  
 20 to leadership 101, you are going day-to-day  
 21 business, the organization has, you know,  
 22 the day-to-day administrative and mechanical  
 23 functions. If you are suddenly thrust into  
 24 an emergency, how you train is how you  
 25 fight. In this organization, they are

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1 shifting responsibility actually on the fly  
 2 in an emergency."  
 3 Do you recall that testimony?  
 4 A. Yes.  
 5 Q. Does that refresh your  
 6 recollection in terms of your perception  
 7 that there is a shift of responsibility "on  
 8 the fly"?  
 9 A. Given the information that I have,  
 10 looks like what happened here.  
 11 Q. Looks like what happened here?  
 12 Tell me what testimony you reviewed that  
 13 would suggest that anyone was injured as a  
 14 result of this shift from the OIM to the  
 15 captain in the event of an emergency?  
 16 A. Your question was that anyone was  
 17 injured as a result of this shift?  
 18 Q. Yes, sir. Was anyone injured?  
 19 A. I don't think that question is  
 20 answerable. I read the testimony of the  
 21 survivors and there was a very distinct  
 22 confusion on their part as to who was in  
 23 charge.  
 24 JUDGE ANDERSON:  
 25 The board, of course, has had lots

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1 of first-hand evidence with respect to what  
 2 actually happened at the time, and the board  
 3 will draw its own conclusions based on that  
 4 first-hand evidence.  
 5 Now, I wasn't at the previous  
 6 hearing, but my understanding is that we are  
 7 hearing Captain Smith as an expert in  
 8 organizational structure and operation of  
 9 MODUs, not as somebody who has particular  
 10 knowledge of the facts of the catastrophe on  
 11 the DEEPWATER HORIZON.  
 12 So I think we will be obligated to  
 13 draw our own conclusions from the facts as  
 14 we see them, and I don't want to put Captain  
 15 Smith in a position, presumably, with not  
 16 having reviewed all of the facts, of  
 17 commenting on what they might be.  
 18 So, Captain Smith, if you want to  
 19 answer questions regarding what happened on  
 20 the DEEPWATER HORIZON, you might, but we  
 21 have heard lots of information from  
 22 witnesses who were involved, and I think we  
 23 will draw our own conclusions from that.  
 24 But I don't think the board is going to  
 25 require you to go beyond your generalized

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1 expert testimony to comment on what happened  
 2 on the DEEPWATER HORIZON unless you have the  
 3 facts on which to base that opinion.  
 4 MR. SCHONEKAS:  
 5 Judge, the witness responded that,  
 6 in fact, he has made a review of the  
 7 witnesses' statements and that he has an  
 8 opinion, or he expressed an opinion as to  
 9 confusion, and I think I have a right to  
 10 probe --  
 11 JUDGE ANDERSON:  
 12 Then I do -- I agree.  
 13 CAPT. NGUYEN:  
 14 Let me interject real quick. The  
 15 board invited Captain Smith to participate  
 16 in this investigation with regard to  
 17 providing background information on MODU  
 18 operations and organization. The board did  
 19 not invite Captain Smith to comment on the  
 20 casualty itself, as Judge Anderson  
 21 indicated.  
 22 I think your question asking  
 23 Captain Smith related to DEEPWATER HORIZON  
 24 should not open the door to everything he  
 25 has been looking at. That is not his

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1 value -- the board's interest in his  
 2 testimony. The board's interest in his  
 3 testimony is only on background information  
 4 on MODU operations and organization.  
 5 So when you open that door, that  
 6 doesn't mean you can go through everything  
 7 you want with the DEEPWATER HORIZON  
 8 regardless of what Captain Smith may have  
 9 read or heard.  
 10 MR. SCHONEKAS:  
 11 Captain, you have asked questions  
 12 and made statements that have been critical  
 13 of my client's activities. I have a right  
 14 to probe the criticisms and the suggestions  
 15 that both the system was inadequate and the  
 16 implementation of the system was  
 17 substandard.  
 18 This goes to those issues because  
 19 if I can show that, in fact, this is an  
 20 academic exercise and it has to do with  
 21 maybe what we would do in the future as  
 22 compared to what actually happened on the  
 23 ship, and whether or not anyone was injured  
 24 as a result of this alleged criticism, I  
 25 have a right to do that, sir.

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1 JUDGE ANDERSON:  
 2 We are not disagreeing with that.  
 3 I am simply saying that we asked Captain  
 4 Smith to testify because of his experience  
 5 and to understand his view regarding the  
 6 command structure of the ship, not because  
 7 of knowledge he might have as to what  
 8 actually happened on the DEEPWATER HORIZON.  
 9 We have heard lots of evidence on  
 10 that, probably more than Captain Smith has  
 11 had a chance to review. So our focus is on  
 12 his expert opinion, as you have seen.  
 13 You have heard all of the  
 14 witnesses, as we have. We will be able to  
 15 draw our own conclusions listening to your  
 16 persuasive arguments about what happened,  
 17 about whether or not the nonunified command  
 18 was helpful or hurtful.  
 19 MR. SCHONEKAS:  
 20 This witness testified he has made  
 21 a review, and as an expert, I have a right  
 22 to probe the things he looked into.  
 23 JUDGE ANDERSON:  
 24 If he testified to that review  
 25 before the board, I think you are correct.

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1 I am just telling you, talking with the  
 2 board members, we are looking to him for a  
 3 general analysis, not a factual review of  
 4 the DEEPWATER HORIZON.  
 5 However, if he has testified to  
 6 it, I think you can move forward. And it  
 7 has to be within the scope of today's  
 8 investigation.  
 9 MR. SCHONEKAS:  
 10 Let me respond, please. I  
 11 requested that you re-call Captain Smith,  
 12 and the reason I did it was my client was  
 13 not named a Party in Interest when he was  
 14 first called.  
 15 JUDGE ANDERSON:  
 16 Good point.  
 17 I have wasted too much time.  
 18 Proceed.  
 19 But understand, Captain Smith, if  
 20 you don't have the factual basis to answer a  
 21 particular question, let us know.  
 22 CAPT. HIGGINS:  
 23 This is Captain Higgins. There  
 24 was more than one request to have Captain  
 25 Smith re-called.

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1 MR. SCHONEKAS:  
 2 I am glad someone else agreed with  
 3 me.  
 4 EXAMINATION BY MR. SCHONEKAS:  
 5 Q. Can you tell me whether or not  
 6 anyone died as a result of this dual system?  
 7 A. No, I can't.  
 8 Q. In fact, sir, if you made a review  
 9 of the testimony, you would determine that,  
 10 in fact, every poor soul who died on this  
 11 rig was either on the drill floor, or a  
 12 toolpusher or a mud engineer, all in close  
 13 proximity to the drill floor. Isn't that  
 14 right, sir?  
 15 A. Based on what I have seen of the  
 16 investigation, that's correct.  
 17 Q. So this issue of dual command had  
 18 nothing to do with these people's deaths.  
 19 Is that right, sir?  
 20 A. You could make that inference.  
 21 Q. Can you show otherwise? Can you  
 22 show me if they had one system where they  
 23 had a guy like you, who was the master of  
 24 the vessel and took a course in  
 25 well-control, it could have in any way saved

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1 these people from being killed?  
 2 A. No, I can't.  
 3 Q. Let's talk about responsibility  
 4 for the vessel. In response to Captain  
 5 Higgins' questions, you were asked if the  
 6 BOP is part of the ship. Do you recall  
 7 that, sir?  
 8 A. Yes.  
 9 Q. And you were asked whether or not  
 10 as part of the ship that the captain is  
 11 responsible for the BOP. Correct?  
 12 A. Right.  
 13 Q. Tell me -- again, you didn't even  
 14 know when a BOP has to be inspected; is that  
 15 right?  
 16 A. That depends on what part of the  
 17 world you are in and the rules you are  
 18 operating in. Are you in Brazil, are you in  
 19 the U.S.? It depends on where you are.  
 20 Q. Where was the DEEPWATER HORIZON?  
 21 JUDGE ANDERSON:  
 22 He knows where it was. If you  
 23 want to him ask him --  
 24 EXAMINATION BY MR. SCHONEKAS:  
 25 Q. Sir, do you know what the

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1 regulations were with respect to the BOP on  
 2 the DEEPWATER HORIZON on April 20, 2010?  
 3 A. No.  
 4 Q. How then, sir, would you know  
 5 whether or not the BOP is up-to-date?  
 6 A. Do you have a planned maintenance  
 7 system? And if the BOP is part of classed  
 8 equipment by the ABS, that would be part of  
 9 your recurring inspections on your ABS  
 10 inspection cycle. Firstly, I would like to  
 11 see the planned maintenance system attached  
 12 to the vessel that is part of ISM.  
 13 Q. Sir, you would look to, would you  
 14 not, the people who are experts in that area  
 15 on your ship, would you not?  
 16 A. Yes. Subsea engineers.  
 17 Q. And that is not unusual to rely  
 18 upon other people within the organization  
 19 who have specialized expertise, correct?  
 20 A. No, not at all. You have to.  
 21 Q. In fact, sir, you would do the  
 22 same thing with regard to radios, right?  
 23 A. Yes.  
 24 Q. And for you, you would  
 25 particularly do that with respect to control

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1 issues -- what is the phrase? Somebody in  
 2 the audience help me.  
 3 Well-control issues?  
 4 A. Yes. I would rely on the  
 5 expertise of some very experienced drillers.  
 6 Q. In fact, sir, the only way for  
 7 you, as the master of a vessel, to be  
 8 apprised of any problem with respect to  
 9 drilling operations would be for them to  
 10 pick up the phone, call you and say, We have  
 11 an issue. Is that right?  
 12 A. Yes.  
 13 Q. Do you know, sir, whether or not  
 14 anybody picked up the phone and called Jimmy  
 15 Harrell and said, Jimmy, get down here,  
 16 we've got a problem?  
 17 A. I have no knowledge of that.  
 18 Q. But you would hold him responsible  
 19 for that; is that right?  
 20 A. That is how it has to work.  
 21 Q. And with respect to Captain  
 22 Kuchta, do you know if anybody called up  
 23 Captain Kuchta and said, Captain, we're  
 24 losing control of this well, get down here  
 25 right away?

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1 A. No.  
 2 Q. I'm sorry?  
 3 A. I don't know.  
 4 Q. But you would hold him responsible  
 5 for that; is that right?  
 6 A. Yes. An issue of that magnitude  
 7 should be communicated quickly.  
 8 Q. Sir, do you know whether or not  
 9 Jason, who was running the drilling  
 10 operation, actually had a conversation  
 11 earlier in the day? Do you recall that?  
 12 A. No. I don't have any background  
 13 on that.  
 14 Q. I want you to assume as an expert,  
 15 sir, that Mr. Williams, Jason Williams told  
 16 Jimmy Harrell, Don't worry, we have got  
 17 it -- I'm sorry. Jason Anderson told Jimmy  
 18 Harrell earlier in the day, Don't worry,  
 19 everything is under control?  
 20 A. Who is this man? What is his  
 21 position?  
 22 Q. Toolpusher on tour, senior  
 23 toolpusher.  
 24 A. Okay.  
 25 Q. I want you to assume that he told

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1 Mr. Jimmy Harrell -- you know who he is?  
 2 A. Yes.  
 3 Q. -- that, We have the situation  
 4 under control, don't worry about it, go on  
 5 about your business. Would you consider  
 6 that to be substandard conduct by the OIM?  
 7 A. He is relying on his people.  
 8 Q. Nothing wrong with that, is there,  
 9 sir?  
 10 A. No. That's how you normally do  
 11 business.  
 12 Q. Once a well-control situation  
 13 arises, is there anything wrong with the  
 14 captain consulting with the OIM about  
 15 whether or not we should EDS? Would you be  
 16 critical of him for consulting with the OIM?  
 17 A. I would expect him to.  
 18 Q. In fact, to do otherwise would be  
 19 substandard, would it not, sir?  
 20 A. Right. If you have got a  
 21 situation like that, you need to get all of  
 22 your options out.  
 23 Q. Were you provided anything, sir,  
 24 that would suggest that, in fact, the  
 25 captain or Jimmy Harrell should not have

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1 relied upon the people who were working  
 2 under them?  
 3 A. No, I have no knowledge of that.  
 4 MR. SCHONEKAS:  
 5 Thank you, sir. That is all I  
 6 have.  
 7 JUDGE ANDERSON:  
 8 Thank you. Jimmy Harrell?  
 9 CAPT. NGUYEN:  
 10 Captain Smith, would you like a  
 11 break at this time?  
 12 THE WITNESS:  
 13 Yes. Could we take five?  
 14 JUDGE ANDERSON:  
 15 We will take ten minutes and  
 16 reconvene at 9:35.  
 17 (Recess.)  
 18 CAPT. NGUYEN:  
 19 Captain Smith, are you there?  
 20 THE WITNESS:  
 21 Yes.  
 22 CAPT. NGUYEN:  
 23 You are still under oath, sir, to  
 24 remind you.  
 25 JUDGE ANDERSON:

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1 Mr. Fanning, who represents Jimmy  
 2 Harrell, will begin his questions.  
 3 EXAMINATION BY MR. FANNING:  
 4 Q. Captain Smith, as you know, I am  
 5 Pat Fanning. I represent Jimmy Harrell, who  
 6 was serving as the OIM on the rig on  
 7 April 20.  
 8 Let me begin by thanking you for  
 9 coming back to participate yet a second  
 10 time. As Captain Higgins indicated, there  
 11 were several people who wanted you to come  
 12 back, and I am one of those people. I want  
 13 to thank you in light of the fact I hear now  
 14 you are doing this for free. I thought  
 15 there was only one person crazy enough to  
 16 subject themselves to this without  
 17 compensation.  
 18 How much experience do you have  
 19 actually serving as a master and OIM in a  
 20 drilling operation? Have you done that a  
 21 lot?  
 22 A. Since 1996.  
 23 Q. You have served in drilling  
 24 operations as both master and OIM?  
 25 A. Yes, drilling construction. When

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1 I was there, I was wearing both hats.  
 2 Q. But you have never been in a  
 3 well-control situation doing that?  
 4 A. No, we have been successful in  
 5 maintaining proper control.  
 6 Q. Knowing you have not been in a  
 7 well-control situation in that capacity, let  
 8 me ask you, are you aware or can you point  
 9 us to any incidents in which a well-control  
 10 situation occurred and there were two people  
 11 serving as master and OIM? Are you familiar  
 12 with any such circumstance?  
 13 A. Off the top of my head, I can't  
 14 give you any particular names. I know as  
 15 part of the well-control training, you study  
 16 the events that occur between your  
 17 well-control schools, but offhand, I could  
 18 not give you a name.  
 19 Q. Putting aside this incident,  
 20 because I believe there is some difference  
 21 of opinion as to how well the system worked  
 22 in this situation, can you point us to any  
 23 situation, sir, you are aware of in which a  
 24 problem existed in a well-control situation  
 25 because of the separate roles?

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1 A. Not specifically, no.  
 2 Q. So as long as you have been  
 3 involved in this, you would theorize that  
 4 that could produce a problem, but you can't  
 5 point us to any incident where it actually  
 6 was a problem, to your knowledge?  
 7 A. Not related to well-control. I  
 8 spent several years as a training team  
 9 leader going to a wide variety of ships for  
 10 military sealift command and in posing  
 11 scenarios for completion drills, including  
 12 conflagration fires, and also attended the  
 13 emergency management training used over in  
 14 the North Sea.  
 15 One of the keys, again, is when  
 16 the emergency organization has to stand up  
 17 in a hurry, it needs to be very clear who is  
 18 doing what.  
 19 Q. In keeping with my question just  
 20 now, in theory, and I assume that those  
 21 exercises, we can classify that as being  
 22 practice, but you are not aware of any  
 23 actual situations where it posed a problem,  
 24 are you?  
 25 A. No, not specifically.

1 you could expect the driller, toolpusher,  
 2 OIM, rig superintendent, whoever it was who  
 3 was making the well-control decisions to  
 4 report back to you and get your opinion  
 5 before they did anything?  
 6 A. Depending on what action was  
 7 required. It might be a go ahead and do  
 8 something now and tell me after you did it.  
 9 Depending on the particular action and  
 10 situation.  
 11 Q. I'm talking about a well-control  
 12 situation with a potential blowout. Would  
 13 you expect the people on the drill floor who  
 14 are responsible for getting the well under  
 15 control to call to the bridge and consult  
 16 with you to get your approval before they  
 17 took action? Or can they go ahead and act  
 18 as they see fit given their experience?  
 19 A. I would expect, if it looked like  
 20 an imminent blowout, that closing the well  
 21 on the BOP would be an action carried out by  
 22 the driller, and that is the driller's  
 23 training. If you think something is going  
 24 bad, then close the well.  
 25 Q. So then, he would not have to

1 Q. If you were on a rig and you were  
 2 serving in both roles, as OIM and master,  
 3 and there was a well-control situation,  
 4 where would you go, sir?  
 5 A. I would go to the emergency  
 6 control center, which is normally located on  
 7 the bridge for DP rigs.  
 8 Q. You would go to the bridge then,  
 9 correct?  
 10 A. Yes.  
 11 Q. And you would be relying entirely  
 12 on other people, then, to make decisions and  
 13 take action as to the well-control, wouldn't  
 14 you?  
 15 A. Yes, but they -- we would be  
 16 communicating continuously to see what  
 17 actions they were proposing, and the key  
 18 question is do you execute an emergency  
 19 disconnect.  
 20 Q. Before we get to the emergency  
 21 disconnect, can we say that these  
 22 well-control situations are time critical,  
 23 people have to act quickly?  
 24 A. Yes.  
 25 Q. So you would be on the bridge but

1 consult with you on that?  
 2 A. No.  
 3 Q. So in that situation, even though  
 4 you are the OIM and the master, you are not  
 5 in charge of well-control, are you?  
 6 A. I am not responsible for the  
 7 action itself, not actually doing it. I  
 8 have to rely on those people.  
 9 Q. You are responsible for it, but  
 10 you are not there taking the necessary  
 11 actions or making the decisions. Am I  
 12 correct?  
 13 A. That's the way it comes out.  
 14 Now, if I believe that the  
 15 situation has gotten completely out of hand,  
 16 I could order to go ahead and execute the  
 17 disconnect sequence, which could be  
 18 initiated either from the toolpusher's  
 19 office, a remote panel, or on the drill  
 20 floor, either place.  
 21 Q. I understand that. Are you aware  
 22 that on the DEEPWATER HORIZON, both the  
 23 master and the OIM had the authority to EDS  
 24 the rig?  
 25 A. Not specifically.

1 Q. Well, then, I won't ask you about  
 2 that.  
 3 MR. FANNING:  
 4 I promised I would be brief. I  
 5 thank you for your testimony.  
 6 JUDGE ANDERSON:  
 7 Steve Bertone?  
 8 COUNSEL FOR MR. BERTONE:  
 9 No questions.  
 10 JUDGE ANDERSON:  
 11 Pat O'Bryan?  
 12 COUNSEL FOR PAT O'BRYAN:  
 13 No questions.  
 14 JUDGE ANDERSON:  
 15 Robert Kaluza?  
 16 COUNSEL FOR ROBERT KALUZA:  
 17 No questions.  
 18 JUDGE ANDERSON:  
 19 And Mike Williams? I realize you  
 20 were out of the room when I called for your  
 21 questions.  
 22 MR. PENTON:  
 23 Yes, sir, I apologize. I was on a  
 24 conference call.  
 25 No questions.

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1 JUDGE ANDERSON:  
 2 Are there any additional board  
 3 questions?  
 4 EXAMINATION BY CAPT. HIGGINS:  
 5 Q. This is Captain Higgins again.  
 6 Have you had the opportunity to review the  
 7 minimum safe manning certificate for the  
 8 DEEPWATER HORIZON?  
 9 A. Not recently. I am not sure that  
 10 I have.  
 11 Q. Some of the questions from  
 12 Transocean were about the manning issue and  
 13 the explanation by the Marshall Islands.  
 14 Have you had a chance to review their  
 15 explanation that while the manning  
 16 certificate said it was a MODU, that it was,  
 17 in fact, manned as a DPV and was at all  
 18 times a DPV?  
 19 A. I have not seen that specific  
 20 document.  
 21 Q. One other question. With regard  
 22 to your testimony as master and OIM, who is  
 23 responsible for the overall safety of a DPV  
 24 when it is latched up? My understanding is  
 25 that it was the master's; is that correct?

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1 A. You said -- was it DPV? I didn't  
 2 catch the term.  
 3 Q. Yes, sir. Who is responsible for  
 4 the overall safety of a vessel, of a DPV,  
 5 when it is latched up?  
 6 A. On a DPG?  
 7 Q. A DPV, dynamically positioned  
 8 vessel, sir.  
 9 A. Oh, okay. The master, yes.  
 10 Q. You testified that --  
 11 A. You are still underway, not making  
 12 way. You just can't -- you have gear  
 13 attached to the bottom. You're restricted  
 14 in your ability to maneuver.  
 15 Q. Yes, sir.  
 16 You testified that in some ways,  
 17 the rig superintendent was the equivalent of  
 18 or similar to the OIM onboard in the  
 19 Transocean situation. Did the rig  
 20 superintendent ever relieve the master of  
 21 that obligation for the overall safety of  
 22 the vessel?  
 23 A. No. Not on the rigs that I have  
 24 worked on.  
 25 Q. So the rig superintendent was

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1 never in charge of the overall operation of  
 2 the vessel, was he?  
 3 A. No. He is the guy who is  
 4 operating all the drilling equipment.  
 5 Q. In your opinion, sir, if there is  
 6 confusion with regard to who is in charge on  
 7 the vessel, could that impair the emergency  
 8 response and decision making?  
 9 A. Yes, it is certainly possible.  
 10 Q. Sir, you said that a key question  
 11 was executing the emergency disconnect  
 12 system. When you were there as the master  
 13 and OIM of that vessel, did you at all times  
 14 have authority to execute that sequence?  
 15 A. Yes.  
 16 CAPT. HIGGINS:  
 17 Thank you, Captain.  
 18 JUDGE ANDERSON:  
 19 Any other board questions?  
 20 EXAMINATION BY MR. BUTTS:  
 21 Q. Good morning, I'm Lieutenant  
 22 Butts. I don't want to ask you about any  
 23 action or inaction of any Merchant Mariner  
 24 or their specific training, but the standard  
 25 of training.

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<p>1 Are you familiar with STCW?                  2 A. Yes. Unfortunately.                  3 Q. Okay. Are you familiar with any                  4 standard for a master, under STCW, to have                  5 specific training for MODUs?                  6 A. Say again the question.                  7 Q. Is there an STCW standard for a                  8 master for MODU service specifically?                  9 Whether it be self-propelled, dynamically                  10 positioned, bottom-bearing, or any of those                  11 other manning strategies, is there a master                  12 training standard specific to a Mobile                  13 Offshore Drilling Unit?                  14 A. I don't know off the top of my                  15 head. I have been trained on the U.S.                  16 system, where to get the endorsement as the                  17 operator, you have to attend the offshore                  18 survival school, stability school,                  19 well-control, and then take a test which is                  20 good for either floating units or                  21 bottom-bearing units, either underway or                  22 drilling. There's about five different                  23 flavors of the endorsement.                  24 Q. Yes, sir. And we are focusing                  25 here on the international, not necessarily                  Page 85</p>	<p>1 a license for nonself-propelled, but they                  2 have gone through the training process for                  3 well-control and stability and the other                  4 issues. They just don't have the                  5 self-propulsion-type thing.                  6 Q. I understand. Now, shifting just                  7 a tad bit, are you familiar with the                  8 training standards for seafarers that serve                  9 on specific types of vessels? I think it is                  10 Chapter 4 of STCW.                  11 For example, there is required --                  12 I am not trying to testify here, but there                  13 is a standard for seafarers for training                  14 onboard tank ships, I believe, roll on/roll                  15 off vessels, and I believe for passenger                  16 vessels. Is there an international standard                  17 for seafarers for service onboard a Mobile                  18 Offshore Drilling Unit, if you know?                  19 A. The only classifications I have                  20 seen are essentially your "other."                  21 Sometimes it is treated as a cargo vessel                  22 because you are carrying certain cargoes for                  23 your client, but most of the time, no.                  24 Q. Would you agree with me that a                  25 traditional ship that carries bulk cargo,                  Page 87</p>
<p>1 the Coast Guard, as was pointed out with 46                  2 CFR.                  3 What about offshore installation                  4 manager? When you open up STCW, the                  5 document itself, is there a standard or                  6 training that an OIM is supposed to meet                  7 internationally?                  8 A. I really can't answer that. The                  9 way my training was done, I met the U.S.                  10 standards, and then my U.S. license was                  11 presented to the Marshall Islands, and the                  12 Marshall Islands said, okay, based on your                  13 U.S. license, we will issue you a Marshall                  14 Islands license at the same grade.                  15 Q. And what about -- I suspect you                  16 will probably have a similar answer -- is a                  17 rig superintendent, someone in charge of                  18 drilling operations, are they required to                  19 have an OIM endorsement, either national or                  20 international?                  21 A. Under safe manning, that is not                  22 really addressed. In practice, you will                  23 find that rig superintendents will typically                  24 have an OIM license. It is not the ship                  25 master endorsed license, it is an OIM only,                  Page 86</p>	<p>1 break bulk, whatever type of cargo, that is                  2 significantly different than a Mobile                  3 Offshore Drilling Unit?                  4 A. Yes, quite a bit different.                  5 Q. Last and final question. Those                  6 services of vessels I mentioned, seafarers                  7 are required to take crisis management                  8 training. In your operations of a Mobile                  9 Offshore Drilling Unit, when you have a                  10 large amount of third-party contractors                  11 onboard, some seafarers, some but not all                  12 familiar with Mobile Offshore Drilling                  13 Units, would it be helpful for the third                  14 mates, the persons assigned to take muster                  15 to have gone through some type of crisis                  16 management training to help them coordinate                  17 in some cases 300 people -- not specific to                  18 the DEEPWATER HORIZON -- but up to 300                  19 people attempting to get into maybe two or                  20 three lifeboats in a confined area?                  21 A. I think the STCW requirements are                  22 pretty complete. I have not seen any                  23 problem with any of my third mates, either                  24 the young ones or the older ones, having any                  25 problem with doing that organization at the                  Page 88</p>

1 lifeboat platform. That is part of your  
 2 marine training and it crosses over very  
 3 readily.  
 4 MR. BUTTS:  
 5 Thank you very much.  
 6 EXAMINATION BY CAPT. NGUYEN:  
 7 Q. In this casualty, there were 11  
 8 persons who were missing. Two of those are  
 9 non-Transocean personnel.  
 10 Now, how many different operators  
 11 have you worked for? I understand you are  
 12 working for Diamond right now.  
 13 A. Yes.  
 14 Q. Who else have you worked for?  
 15 A. Cal Dive, Helix and Frontier. And  
 16 I did contract rig moving. I moved a  
 17 Transocean anchor rig over in Africa one  
 18 time.  
 19 Q. Yes, sir. When a person comes  
 20 onboard a drilling unit, they receive a  
 21 safety orientation, correct?  
 22 A. Yes. As soon as they get off the  
 23 helicopter or the boat, they go through  
 24 orientation.  
 25 Q. What items are covered in the

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1 safety orientation? Are they pretty much  
 2 the same with all of the operators?  
 3 A. They are pretty standard  
 4 briefings. The safety departments of all of  
 5 the offshore operators talk with each other  
 6 very freely, so if you see one company doing  
 7 something, you will probably see the next  
 8 guy doing it pretty quickly after that.  
 9 They will cover the basic layout  
 10 of the rig, what the emergency alarms sound  
 11 like, where your lifeboat is located, what  
 12 is your alternate lifeboat, where the life  
 13 rafts are.  
 14 Usually, it includes a walk around  
 15 the rig so you actually physically go see  
 16 the lifeboat and know where it is and what  
 17 you are supposed to do if you hear an alarm.  
 18 Those subjects are covered -- it  
 19 is a very standard briefing wherever you go  
 20 in the industry.  
 21 Q. You say "standard briefing"; is  
 22 that required by regulation as items that  
 23 are needed to be covered?  
 24 A. Well, in your ISM, you will have a  
 25 briefing for new personnel as part of your

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1 ISM. It tends to be very well developed,  
 2 because the safety departments really take  
 3 that one by the horns and work at it very  
 4 hard.  
 5 Q. Yes, sir. Do you think any items  
 6 need to be added to that orientation that  
 7 are currently not being covered?  
 8 A. No. Most of the briefings tend to  
 9 go 15 to 20 minutes and cover quite a bit of  
 10 material. So I think that system is pretty  
 11 well developed.  
 12 Q. My concern is that, you know, you  
 13 may have a visitor or third-party contractor  
 14 and have something happen within a short  
 15 period of time, and this person may not be  
 16 prepared to, you know, to act. And I think  
 17 the opportunity to get this person -- to  
 18 advise some information to this person  
 19 through this safety orientation, and that is  
 20 why I referenced the non-Transocean persons  
 21 who are still missing, and I --  
 22 A. Yeah. The safety briefing is the  
 23 same flavor for everyone who shows up. So  
 24 every person who gets off that helicopter,  
 25 rig crew or third party, will get the same

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1 safety orientation as they come in.  
 2 Most of the time, if you are  
 3 regular crew, then you get it. If you are  
 4 an occasional visitor and you have not  
 5 gotten the briefing within the regular time,  
 6 three months usually, then you get it again.  
 7 They err on the side of too many briefings.  
 8 CAPT. NGUYEN:  
 9 Thank you.  
 10 JUDGE ANDERSON:  
 11 Captain Smith, is there anything  
 12 you would like to add that you have not had  
 13 a chance to say?  
 14 THE WITNESS:  
 15 Not really. I appreciate the  
 16 opportunity to give some opinions on ways we  
 17 can make the industry stronger. Working  
 18 offshore is a hazardous environment, and we  
 19 want to do it as safely as we can. And I  
 20 know that is what the board is after.  
 21 JUDGE ANDERSON:  
 22 Thank you for your testimony and  
 23 thank you for donating your time to this  
 24 greater cause. You and I and everybody in  
 25 this room have certainly benefited from it.

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1 THE WITNESS:  
 2 You are welcome.  
 3 CAPT. NGUYEN:  
 4 Sector Captain, we appreciate you  
 5 coordinating this activity.  
 6 We will break and reconvene at  
 7 10:10.  
 8 (Recess.)  
 9 JUDGE ANDERSON:  
 10 With respect to Cathleenia Willis,  
 11 who was scheduled to testify at this time,  
 12 she is actually physically in Houston now,  
 13 and she decided to retain her own attorney,  
 14 which caused a mix-up with respect to  
 15 whether or not she needed to be subpoenaed  
 16 and so on. So right now, it is our  
 17 intention to call her at a later time.  
 18 In the event we finish this  
 19 witness' testimony ahead of what we thought  
 20 would be the end schedule of today, you are  
 21 all welcome to stay in the room and work on  
 22 notes and reflections.  
 23 Meantime, even though he may not  
 24 be a privately retained attorney for the  
 25 upcoming witness, Counsel, perhaps you could

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1 state your name to indicate that you will be  
 2 with the witness during his questioning.  
 3 MR. GODWIN:  
 4 Yes, sir, Your Honor, I am Don  
 5 Godwin; I represent Halliburton.  
 6 JUDGE ANDERSON:  
 7 Thank you.  
 8 As the board has advised every  
 9 witness, I want to advise you that you will  
 10 be making statements to a federal agency.  
 11 Making a false statement to a federal agency  
 12 is a violation of federal law, punishable by  
 13 fine or prison.  
 14 JOHN GISCLAIR,  
 15 having been first duly sworn as a witness,  
 16 was examined and testified as follows:  
 17 JUDGE ANDERSON:  
 18 If you could state and spell your  
 19 last name for the record, please.  
 20 THE WITNESS:  
 21 Yes, sir. John Gisclair,  
 22 G-I-S-C-L-A-I-R.  
 23 EXAMINATION BY MR. MATHEWS:  
 24 Q. Mr. Gisclair, by whom are you  
 25 employed?

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1 A. Sperry Drilling. It's a division  
 2 of Halliburton.  
 3 Q. And what is your position?  
 4 A. Inside support service coordinator  
 5 for the Gulf of Mexico district out of  
 6 Lafayette.  
 7 Q. How long have you held that  
 8 position?  
 9 A. Approximately eight years.  
 10 I'm sorry, I have been in inside  
 11 support for eight years. I have been  
 12 supervisor for four.  
 13 Q. Have you had any previous  
 14 positions within Sperry Sun or a subsidiary  
 15 of Sperry Sun?  
 16 A. I was MWD field engineer for  
 17 Sperry for eight years prior.  
 18 Q. Have you had any special training  
 19 for your job, sir, in regards to reading  
 20 logs?  
 21 A. Special training, just mainly  
 22 field experience and the experience of  
 23 looking at these things over the course of  
 24 16 years.  
 25 Q. What is your educational

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1 background?  
 2 A. Degree from the University of  
 3 Louisiana at Lafayette.  
 4 Q. U-LA-LA?  
 5 A. Yes, sir.  
 6 (Discussion off the record.)  
 7 EXAMINATION BY MR. MATHEWS:  
 8 Q. Can you tell us, sir, how are  
 9 these items, the sensor items, monitored on  
 10 any rig you have been associated with?  
 11 A. Yes. The data that is collected  
 12 in the system is generally monitored using  
 13 various realtime displays. It could be a  
 14 realtime log to show us trends, or it could  
 15 be displays that show us the value of any  
 16 given sensor reading at any given moment.  
 17 There are also various tables and  
 18 charts which our system is capable of  
 19 outputting.  
 20 Q. Is the data a direct measurement  
 21 or a calculation?  
 22 A. It varies. Some is directly  
 23 measured, some is directly calculated.  
 24 Q. Can we go through each one, like  
 25 flow?

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1 A. Yes. The flow-in is a calculated  
 2 measurement based on the volume output of  
 3 the pumps plus their stroke rate. The  
 4 flow-out measurement is based on a  
 5 perceived, in our case, the flow-out sensor  
 6 that Sperry uses is an inferred value based  
 7 on fluid level in the return line.  
 8 Q. Okay. And how about volume, such  
 9 as in the tanks?  
 10 A. The pit volumes, the pit volumes  
 11 that Sperry employs are similar to the --  
 12 actually, the same sensor that the flow-out  
 13 uses to calculate. It is a sonic sensor  
 14 that determines fluid level.  
 15 But on the DEEPWATER HORIZON,  
 16 Sperry did not use their own sensors. The  
 17 pit sensors were Transocean's and that data  
 18 was transmitted to us in realtime.  
 19 Q. Was there any calibration, or any  
 20 problems with that transmission in realtime?  
 21 A. For the pit volume?  
 22 Q. Yes.  
 23 A. No, sir, no calibration was  
 24 necessary. Transocean would transmit the  
 25 calibrated values to us.

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1 Q. Who determines where the sensors  
 2 are actually located at on the DEEPWATER  
 3 HORIZON?  
 4 A. In general, that would be the rig  
 5 contractor, Transocean. If we had to rig up  
 6 our own sensors, we would get with  
 7 Transocean and ask if we could put our  
 8 sensors in certain locations, and if they  
 9 could accommodate us, they would. If they  
 10 could not, they would provide alternate  
 11 locations for us.  
 12 Q. Who determines the type of sensor  
 13 that is put in?  
 14 A. The model?  
 15 Q. Yes. Sperry Sun or Transocean?  
 16 A. Sperry determines its own models.  
 17 Q. Can you describe the differences  
 18 between the models that were actually on the  
 19 DEEPWATER HORIZON?  
 20 A. For the flow-out?  
 21 Q. Yes, sir.  
 22 A. The flow-out sensor that Sperry  
 23 used was, as I mentioned, a sonic sensor.  
 24 It determines fluid levels, fluid height in  
 25 the flow return line.

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1 The model name, I believe, is a  
 2 Vegason model sonic sensor. I don't know  
 3 the Transocean model name that they use for  
 4 their flow-out sensor, I just know that its  
 5 type was of a paddle.  
 6 Q. Of the two, which one do you think  
 7 is the most accurate method?  
 8 A. I would say the sonic sensor. It  
 9 has a greater capability of detecting very  
 10 minute flows, whereas the paddle does not.  
 11 They used to employ the paddle, but they  
 12 moved to the sonic sensor years ago.  
 13 Q. Would you be surprised to hear  
 14 that Mr. Guide, the team leader for the  
 15 DEEPWATER HORIZON, he indicated that he felt  
 16 the crew relied more on the Transocean  
 17 paddle-type sensor?  
 18 A. That wouldn't surprise me. It was  
 19 their sensor; I imagine they would trust  
 20 their sensor.  
 21 Q. Have you looked at the information  
 22 for the DEEPWATER HORIZON?  
 23 A. No, we did not store Transocean's  
 24 flow-out sensor data in our database. It  
 25 was given in a percentage, it was not given

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1 in a volume per time. So there was no way  
 2 to directly compare, to do a straight  
 3 comparison of flow-in in gallons per minute  
 4 to a flow-out in gallons per minute, you  
 5 could only get a percentage off of their  
 6 flow sensor.  
 7 Q. You and I have talked before this  
 8 hearing, but the accuracy of the flow-out,  
 9 can you please explain how accurate the  
 10 measurement is?  
 11 A. The sensor that Sperry was using  
 12 was fairly accurate, I would say within 5 to  
 13 10 percent if kept properly calibrated, I  
 14 believe. Its purpose is to identify a flow  
 15 and show flow trends over time.  
 16 Q. The board looked at some data  
 17 where we actually just looked at flow-in and  
 18 flow-out, and we found a discrepancy of  
 19 80 barrels difference over the duration of  
 20 the cement job time-wise. Is it your  
 21 testimony that looking at flow-out versus  
 22 flow-in is not an accurate way to determine  
 23 full returns?  
 24 A. No. The flow-out will give you,  
 25 at least the sensor that Sperry was using

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1 will give you pretty accurate information  
 2 that you are getting flow and it will give  
 3 you pretty accurate information of that flow  
 4 trend, whether you are starting to gain, if  
 5 the flow-out is increasing or decreasing.  
 6 But the flow-out is never intended  
 7 to be an actual measurement of volume. If  
 8 you want to see the volume, the actual  
 9 amounts of a gain or a loss, you would  
 10 always use the pit volumes, you would never  
 11 use the flow-out over a given time.  
 12 Q. But using the 5 to 10 percent you  
 13 just gave me, wouldn't the flow-out and  
 14 flow-in comparison of 80 barrels that we had  
 15 indicated only be a slight difference of 75,  
 16 if you go to the low end, to 70, or if you  
 17 go back to the upper end, maybe 85 to  
 18 90 barrels?  
 19 A. I'm not sure I understand.  
 20 Q. You said there is an accuracy of 5  
 21 to 10 percent of the flow-out, so it can  
 22 actually be greater than -- the value we  
 23 have on our graph being greater, which would  
 24 lower the returns that we saw, or if it was  
 25 actually 5 to 10 percent lower in value than  
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1 what we saw, the loss returns would have  
 2 actually been higher.  
 3 A. Well, that 5 to 10 percent is  
 4 based on properly calibrated flow-out. If  
 5 you have good calibration, you can expect  
 6 over a short period of time it would be  
 7 relatively accurate.  
 8 But the calibration is in need of  
 9 constant tweaking because the flow-out  
 10 sensor is influenced by so many outside  
 11 activities. Just rig movement will affect  
 12 your flow-out reading, whether it's due to  
 13 crane operation, ballasting, sea movement.  
 14 All of these things will affect the fluid  
 15 level in that return line.  
 16 If you start to influence that  
 17 fluid level, you are going to be influencing  
 18 the flow-out data. So they would normally  
 19 be calibrating their flow-out sensor on a  
 20 fairly regular basis, probably every couple  
 21 of days or so, and they would calibrate them  
 22 according to whatever rig activities were  
 23 going on at the time.  
 24 So if they were drilling, say,  
 25 during crane operations and the crane  
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1 operations were throwing their flow-out  
 2 sensor off, they might try to recalibrate  
 3 then.  
 4 Q. Once the data is captured, where  
 5 does it actually go on the rig? Who is  
 6 monitoring it?  
 7 A. The data the Sperry system was  
 8 capturing went into our surface software  
 9 package called INSITE Anywhere. All of the  
 10 data collected by the Sperry sensors,  
 11 whether it was Sperry mudlogging or Sperry  
 12 MWD, all of that was written in realtime to  
 13 this database as well as any data that was  
 14 being transmitted to us, whether it is the  
 15 rig sensors from Transocean or the cement  
 16 data from the cement unit.  
 17 All of this data is collected into  
 18 a single database on a single computer, and  
 19 that data was transmitted from the rig over  
 20 satellite directly into BP's office where  
 21 another host computer also running INSITE  
 22 was receiving it and writing it into its own  
 23 database. That data in turn was then  
 24 transmitted from BP's office to the  
 25 Halliburton facility in Houston, our  
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1 realtime center, where it was, again, stored  
 2 on another computer running INSITE, and we  
 3 had a backup copy there. And one more leap  
 4 from our office in Houston to our operations  
 5 office in Lafayette.  
 6 So in essence, we had four  
 7 identical databases. You make a change on  
 8 the rig, save that change, and that change  
 9 trickles down the chain all the way to the  
 10 end.  
 11 Q. In what format was it transferred  
 12 to BP?  
 13 A. It is a proprietary database  
 14 format. It can only be read if you are  
 15 running the INSITE program. The data  
 16 itself, that can be read by many other  
 17 software packages, ASCII or LAS formats,  
 18 even Excel, but the actual format is  
 19 proprietary.  
 20 Q. So BP would not have the ability  
 21 to do anything but read the data?  
 22 A. In BP's office, they had the  
 23 actual INSITE system running that they could  
 24 do any data processing or displays the  
 25 INSITE system is capable of displaying.  
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1 Q. Would they download raw data?  
 2 A. Yes. The INSITE database is the  
 3 raw data. If they wanted every single data  
 4 point, they could have it in one single  
 5 file.  
 6 Q. Earlier, I had asked you a  
 7 question about when you are trying to look  
 8 at flow-in and flow-out, and you said that  
 9 you have to look at the pit volumes. How do  
 10 you do that when there are multiple  
 11 activities going on on the rig, where you  
 12 are moving fluid from multiple pits to  
 13 another one?  
 14 A. It is difficult. If they are  
 15 transferring fluid to what is determined to  
 16 be the active pit at the time or removing  
 17 fluid from the active pit, then it becomes  
 18 difficult to determine what influences on  
 19 that active pit are due to that fluid  
 20 transfer and what influences are due to well  
 21 conditions.  
 22 So if you are, say, transferring  
 23 fluid to the active system and at the same  
 24 time taking a gain from the well, it is  
 25 difficult to determine that gain because you

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1 do not know the exact rate of the transfer.  
 2 The pump system that moves fluid from one  
 3 pit to another is not monitored for flow.  
 4 Now, the INSITE system at the time  
 5 was storing data for 20 different pits, and  
 6 it is up to the mudlogger to designate in  
 7 the system which pits are active at the  
 8 time.  
 9 For the majority of the time, pits  
 10 9 and 10 were deemed as the active system.  
 11 But if the rig were to switch to, say, pit  
 12 6, then the mudlogger would go in the system  
 13 and say, okay, 9 and 10 are no longer  
 14 active, and they would designate pit 6 as  
 15 the active, and that would be reflected on  
 16 the active pit volume change.  
 17 Q. You brought up something I just  
 18 wanted to touch on. Obviously, you reviewed  
 19 all of the data you have brought along with  
 20 you, but from your review, were you able to  
 21 determine if the Sperry Sun people were  
 22 monitoring the active pits accurately on  
 23 April 20, 2010, prior to the incident?  
 24 Continuously, not accurately.  
 25 Continuously monitoring.

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1 A. They were always monitoring the  
 2 pits. It is up on a display on a computer  
 3 in front of them. If they are watching that  
 4 screen, they will be, in part, watching the  
 5 pit volume.  
 6 Depending on what the operations  
 7 were, the question becomes, well, they can  
 8 see the pit volume change, but can they  
 9 really determine the wellbore conditions  
 10 because of the influences from outside  
 11 activities, such as transfers.  
 12 Q. Specific to the DEEPWATER HORIZON,  
 13 what was your responsibility, sir?  
 14 A. As the inside support service  
 15 coordinator for the Gulf of Mexico, I have a  
 16 team of support personnel who work under me.  
 17 Part of their responsibilities, among  
 18 others, is to help rigs running the INSITE  
 19 system whenever they have any problems.  
 20 Another one of their duties or  
 21 responsibilities is if a customer requires  
 22 realtime data to be brought in onshore, that  
 23 they facilitate that connection and help  
 24 maintain that connection.  
 25 I had one of my team members

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1 actually working within BP's office. He  
 2 helped coordinate and manage the realtime  
 3 data transmission from the rig to the  
 4 office.  
 5 Q. Did you have a person within BP's  
 6 office also that assisted them? And if so,  
 7 what was their name?  
 8 A. That is the person I was speaking  
 9 of, that's Jose ´ Ortiz.  
 10 Q. Outside of BP, did Sperry Sun --  
 11 and out on the rig -- did Sperry Sun have  
 12 individuals monitoring that data 24 hours?  
 13 A. Not the mudlogging. For the  
 14 MACONDO project, BP had granted permission  
 15 for us to receive the data in our Lafayette  
 16 facility for monitoring the MWD operations  
 17 for QC purposes to ensure we would provide  
 18 the highest level of service to BP for this  
 19 particular well.  
 20 Because the MWD operations were  
 21 completed several days or perhaps a week  
 22 prior to the accident, the data was not  
 23 being monitored in the Lafayette facility.  
 24 It was still being received, but nobody was  
 25 watching it because there were no MWD

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1 operations onboard.  
 2 Q. Do you know where the Sperry  
 3 meters were actually located for flow-out  
 4 and flow-in on the DEEPWATER HORIZON?  
 5 A. The flow-in is just a calculation  
 6 based on the pump strokes. So the stroke  
 7 counters were placed directly on the pistons  
 8 of the pumps.  
 9 The flow-out sensor for Sperry was  
 10 located on the return line a couple of feet  
 11 before the return line entered the gumbo  
 12 box.  
 13 Q. Are there alarms on each one of  
 14 the sensors in case there is a noticeable  
 15 difference in volumes between the two?  
 16 A. The Sperry system has the  
 17 capability of setting up an alarm on any  
 18 data that is stored in this database system,  
 19 and the logger will typically set up an  
 20 alarm for what is deemed to be critical  
 21 information, and to see if it crossed  
 22 certain thresholds or if they were not  
 23 receiving data within a certain time period.  
 24 So, for instance, gas. If gas  
 25 were to exceed a certain threshold, the  
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1 computer would give a visual and audio  
 2 alarm. So the mudlogger, if he hears this,  
 3 if he is examining a sample and he hears an  
 4 alarm go off, he can look at his computer  
 5 and see what crossed what threshold.  
 6 Typically, there is not an alarm  
 7 on the flow-in or the flow-out because they  
 8 stop and start so often, you would have  
 9 alarms going off every five minutes, every  
 10 hour.  
 11 Q. So the only indication the  
 12 mudlogger would have if there was any  
 13 possible problem with flow-in and flow-out  
 14 discrepancies would be visual, looking at  
 15 the screens?  
 16 A. If he wanted to identify a gain or  
 17 loss, the alarms are set on the pit volume  
 18 change. So you wouldn't have an alarm on  
 19 the flow-out. But if he wanted some type of  
 20 alarm to let him know they are gaining or  
 21 losing fluid, he would put an alarm on the  
 22 pit volume change, which is typically  
 23 standard operating procedure.  
 24 Q. Can the alarms be turned off as  
 25 well, or bypassed?  
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1 A. Yes.  
 2 Q. Looking at the data from April 19  
 3 and 20, do you know if any of the pit  
 4 volumes or any type of alarm was bypassed?  
 5 A. I can't say. I don't know.  
 6 Q. Have you spoken to any of the  
 7 individuals, like Joseph Keith or  
 8 Ms. Cathleenia Willis or any of the other  
 9 mudloggers out there?  
 10 A. Yes.  
 11 Q. Have they indicated to you that  
 12 anything was bypassed?  
 13 A. No.  
 14 Q. Did you bring any data with you,  
 15 sir, to discuss some of the review?  
 16 A. Yes.  
 17 Q. Let's put -- I want to talk about  
 18 the cement job. Let's start on the late  
 19 evening of the 19th.  
 20 A. We don't have the cement job. The  
 21 data I have today starts just prior to the  
 22 negative test and goes to the end of the  
 23 transmission.  
 24 Q. Have you reviewed the data? Have  
 25 you spoken to anyone about -- from the  
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1 cement job up to the negative test?  
 2 A. Yes.  
 3 Q. Had you indicated any anomalies at  
 4 that time from your review of the data?  
 5 A. No, sir. Not with the cement  
 6 test.  
 7 I mean, pardon me. With the  
 8 cement job and subsequent tests.  
 9 Q. Still talking about for the 19th,  
 10 the negative test, were there any pit  
 11 transfers indicated on the data?  
 12 A. Let's look at this one for  
 13 starters.  
 14 What we are looking at here is the  
 15 time frame from 1420 hours to 1700 hours.  
 16 This is just prior to the negative test and  
 17 then the displacing of the choke and kill  
 18 lines and the booster line, and also pumping  
 19 the spaces and seawater behind it in  
 20 preparation for the negative test.  
 21 What we are looking at on the  
 22 right-hand side, here, here, here and there,  
 23 this is a representation of the pits 1  
 24 through 20. Each column, here, here and  
 25 here and here are four separate pits.  
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1 If a pit is not changing its  
 2 volume, you would expect --  
 3 MR. CLEMENTS:  
 4 Excuse me. Would it be possible  
 5 to ask the witness to stand on the other  
 6 side?  
 7 (Discussion off the record.)  
 8 THE WITNESS:  
 9 Four pits per column. If a pit  
 10 volume is not changing, you expect a  
 11 straight line. This is basically showing us  
 12 how much fluid is in each pit.  
 13 When you see sharp drops such as  
 14 right here on pit 6, this green line, and  
 15 also on pit 7, a sharp drop here on pit No.  
 16 2, that is a fluid transfer.  
 17 You can track certain transfers.  
 18 If you have a transfer that is sharply  
 19 increasing on one pit and at the exact same  
 20 time decreasing on another pit, and you  
 21 lose, say, 200 barrels on one pit and you  
 22 gain 200 barrels on the other at the exact  
 23 same time, you pretty much know that is a  
 24 200-barrel transfer from one pit to another.  
 25 The pit volume change that is

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1 typically monitored is in this column right  
 2 here. It's the red line. If the active  
 3 system is not gaining or losing fluid, you  
 4 expect the pit volume change to stay steady,  
 5 it draws a straight line.  
 6 However, in this instance right  
 7 here, we see a very sharp decrease in the  
 8 pit volume change. This is a loss to the  
 9 active system.  
 10 If we come across to the pit  
 11 representations, we can see that the active  
 12 pits, which were pits 9 and 10 at the time,  
 13 they were transferring fluid to, apparently,  
 14 pit No. 4.  
 15 So looking at this representation,  
 16 you can go back and see what was happening  
 17 at any given time. But because of these  
 18 transfers, it is nearly impossible during a  
 19 transfer of 200 barrels, say, from the  
 20 active system into the auxiliary to  
 21 determine if you are actually gaining or  
 22 losing anything from the hole.  
 23 This is, in fact, the time period  
 24 when they were transferring fluid to the  
 25 DAMON BANKSTON. The transfer had begun, I

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1 believe, a couple of hours prior and it  
 2 ended just past 1700 hours. A lot of the  
 3 fluid transfers you see in this section are  
 4 them moving fluid between pits and then from  
 5 certain pits to the boat.  
 6 EXAMINATION BY MR. MATHEWS:  
 7 Q. So at certain times during the  
 8 operation of transferring from pit to pit, I  
 9 think you said it is nearly impossible for  
 10 the Sperry Sun loggers to actually indicate  
 11 what is going on with flow-in and flow-out?  
 12 A. Well, they can still monitor the  
 13 flow-in and flow-out, but they can't tell  
 14 how much they might have gained or lost.  
 15 Q. Up until the incident, from  
 16 looking at the data, were you able to  
 17 determine by the data when you first saw an  
 18 indication of a well event actually  
 19 occurring?  
 20 A. Without knowing exactly what was  
 21 happening on the rig at every moment, it is  
 22 difficult to call. You can see these traces  
 23 moving from one area of the log to another,  
 24 you can see certain responses on the  
 25 sensors, but you don't know what might have

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1 caused those responses, if they were caused  
 2 by rig activities or well influences.  
 3 Q. Have you ever looked at any type  
 4 of data that indicates what was actually  
 5 going on on the rig?  
 6 A. The "Remarks" column on the far  
 7 right-hand side, these are remarks that I  
 8 personally built postaccident.  
 9 Typically, the mudloggers keep a  
 10 written log of anything and everything they  
 11 are aware of that will influence any of  
 12 these traces, and, in fact, certain rig  
 13 activities that have no influence on the  
 14 data. They still keep a log of what was  
 15 going on on the rig, so if there are any  
 16 questions about what this sensor was  
 17 responding to, they can go back to the  
 18 logbook at any given time to find out what  
 19 was going on.  
 20 MR. GODFREY:  
 21 Excuse me. I don't think we have  
 22 seen this document before with these  
 23 annotations. I apologize if it has been  
 24 distributed, but we don't seem to have a  
 25 copy of that. I don't know if others do,

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1 but it would be helpful if -- we have the  
 2 first one, but not this one.  
 3 JUDGE ANDERSON:  
 4 The words there are difficult to  
 5 read. If you would like to read them while  
 6 he testifies, would it be -- do we have a  
 7 paper copy of this chart?  
 8 MS. BRAGG:  
 9 It was posted electronically  
 10 yesterday, and also, we have hard copies for  
 11 the board.  
 12 JUDGE ANDERSON:  
 13 If there is a hard copy to hand to  
 14 the BP people behind you, that might be  
 15 helpful. And it was posted electronically.  
 16 (Discussion off the record.)  
 17 JUDGE ANDERSON:  
 18 Let's take a break and get a hard  
 19 copy from downstairs.  
 20 (Recess.)  
 21 JUDGE ANDERSON:  
 22 This is what is going on: We are  
 23 sending out the data to our home port, and  
 24 we will go ahead and take our lunch break  
 25 while that's being transmitted. By noon,  
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1 when we reconvene, we will know who was able  
 2 to use the material from the home port.  
 3 MR. GODFREY:  
 4 Judge, I wonder if we might have a  
 5 meeting between the PIIs and the board  
 6 during our lunch break to address the issue  
 7 about the use of this right now.  
 8 JUDGE ANDERSON:  
 9 Let's do it right now.  
 10 (Recess for lunch.)  
 11 JUDGE ANDERSON:  
 12 The plan is for everybody to  
 13 review the Sperry log data -- although they  
 14 say if you want to make God laugh, tell him  
 15 what your plans for the day are -- but our  
 16 plan is to complete the board questioning of  
 17 this witness. Then, after we recess, before  
 18 the board next convenes, people will have  
 19 had the opportunity to examine the annotated  
 20 charts and so on, and we would anticipate  
 21 PII examination of this witness at some  
 22 future date.  
 23 Obviously, the board may think of  
 24 more questions as well.  
 25 MR. DYKES:  
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1 Also, this data, correct me if I  
 2 am wrong, has been uploaded to the home  
 3 port, as well as the raw data received  
 4 through the subpoenas from BP -- from  
 5 Halliburton.  
 6 I invite all of the Parties at  
 7 Interest to take that data and interpret it  
 8 the best way you can by what you see and by  
 9 your experts, if you have any, and we invite  
 10 you to come back to the board and bring that  
 11 back to the board if you choose to discuss  
 12 that.  
 13 THE WITNESS:  
 14 I would like to clarify the  
 15 displays themselves.  
 16 We submitted the file that shows  
 17 the log that goes essentially from midnight  
 18 on the 19th to the end of the transmission,  
 19 2200 hours on the 20th.  
 20 The displays I brought are exact  
 21 copies of that PDF, but only the last seven  
 22 hours or so. I did not go back and produce  
 23 a dozen of these things to show the cement  
 24 and the trip in and trip out.  
 25 So the cement job that was asked  
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1 about prior, the data is in that file.  
 2 MR. DYKES:  
 3 Does everybody understand that?  
 4 Thank you.  
 5 MR. GODFREY:  
 6 We will figure it out. I'm not  
 7 sure I understand what he said, but we will  
 8 figure it out.  
 9 MR. DYKES:  
 10 The hard copy file that is being  
 11 uploaded has this as well as the cement job  
 12 in it. All he did was -- in that larger  
 13 file that Ms. Karis has right there, this is  
 14 just one snapshot of that data.  
 15 MR. GODFREY:  
 16 Thank you.  
 17 MR. GODWIN:  
 18 And we will produce the witness  
 19 again.  
 20 (Discussion off the record.)  
 21 JUDGE ANDERSON:  
 22 Mr. Mathews?  
 23 EXAMINATION BY MR. MATHEWS:  
 24 Q. Earlier, we were talking about the  
 25 discrepancies and I believe you gave me a  
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1 range of between 5 to 10 percent on the  
 2 accuracy. You remember that?  
 3 A. Yes.  
 4 Q. The chart we generated, over my  
 5 left shoulder, at the break. Have you seen  
 6 this before?  
 7 A. Yes.  
 8 Q. We calculated just from  
 9 subtracting the flow-in and flow-out  
 10 variability of the hard data to be an  
 11 estimate of 80 barrels. If you take that 5  
 12 to 10 percent that would give you a lower  
 13 estimate of 72 barrels or if you add the  
 14 10 percent, it would be 88 barrels.  
 15 That is what you are testifying to  
 16 today?  
 17 A. No. The 5 to 10 percent I quoted  
 18 earlier is just a rough idea of how accurate  
 19 these things can be. Every sensor on every  
 20 individual rig can have its own system's  
 21 accuracy or inaccuracy. So when I say the  
 22 sensor is capable of being calibrated  
 23 perhaps within 5 percent, I didn't mean to  
 24 imply that in that specific window, it held  
 25 that accuracy. The only true way to know

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1 how accurate that sensor was at that given  
 2 time was to see your reading prior to  
 3 recalibrating it. Then you calibrate it,  
 4 compare the two data, and then you can see  
 5 on this particular time window the sensor  
 6 was approximately 5 to 10 percent off.  
 7 Q. Are all of the pit levels  
 8 monitored at all times whether they are in  
 9 service or not?  
 10 A. Yes. The pits that were  
 11 transmitted to us, pits 1 through 20, were  
 12 stored in the database at all times. If  
 13 there were any movements in any pit or any  
 14 pit sensor, we may not have valid data on  
 15 it, but it was still stored in the database.  
 16 It was still in our system and still  
 17 displayed on the screen; hence, it was  
 18 monitored.  
 19 Q. If I look at the raw data and get  
 20 a pit volume of, say, let's just give it a  
 21 random number, pit 1, and I get minus  
 22 999.25, what is that going to tell me?  
 23 A. That is a null value. That means  
 24 no data was transmitted for that particular  
 25 pit. Negative 999.25 is essentially an

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1 industry standard to denote a null value.  
 2 So it is basically blank.  
 3 Q. Since we are on that, I was going  
 4 to ask you this later on, but you just  
 5 brought this up and I want to keep going  
 6 with it.  
 7 We have some raw data that was  
 8 subpoenaed and was submitted by Halliburton  
 9 that we received today. Then we have some  
 10 raw data that we received through a subpoena  
 11 from BP, and we had actually also  
 12 received -- well, on April 21, Mr. Dykes was  
 13 actually in BP's office. Do you know  
 14 Mr. Greg Navarette?  
 15 A. Yes.  
 16 Q. Who is that?  
 17 A. He is the MWD service coordinator  
 18 for Sperry that was embedded in BP's office.  
 19 Q. Mr. Navarette actually had an  
 20 e-mail where we requested the data from that  
 21 day, and he had downloaded it and submitted  
 22 it by e-mail transmission to Mr. Dykes.  
 23 The data for the active pits which  
 24 you define as 9 and 10 were BP's data, and  
 25 the data from pit No. 9 was all minus

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1 999.25, and that's also the same data that  
 2 we received later on in their subpoena  
 3 response.  
 4 Is there any reason why that data  
 5 would be different -- for that pit volume  
 6 for No. 9 to be different from the data we  
 7 have from Halliburton?  
 8 A. The fact it came out at negative  
 9 999.25, a null value, tells me that perhaps  
 10 whoever had done the export from INSITE did  
 11 not properly point to the correct pit to  
 12 export it. The data exists in the database.  
 13 We have data for the entire duration of the  
 14 well, especially the last two days.  
 15 So it tells me that whoever did  
 16 the export did not do it properly.  
 17 MR. MATHEWS:  
 18 Thank you.  
 19 EXAMINATION BY MR. DYKES:  
 20 Q. Following up on that, when these  
 21 logs are generated, are they generated  
 22 directly out of the INSITE software?  
 23 A. Yes. You are looking at raw data  
 24 straight from the database.  
 25 EXAMINATION BY MR. MATHEWS:

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1 Q. That is where we are going. The  
 2 data, even with the 999.25, matches the  
 3 actual logs submitted to us by BP as well.  
 4 So you have the minus 999.25. The INSITE  
 5 software printed up the logs and it matched  
 6 the data. Is there something wrong with  
 7 that?  
 8 A. When you say "matched the data,"  
 9 you mean the logs were showing a --  
 10 Q. Yes, sir.  
 11 A. The logs will show only what you  
 12 tell it to show. If you point to pit No. 9  
 13 and say you want to see it on a plot, if  
 14 that pit is null, it would plot a negative  
 15 999.25. The log will not know it is  
 16 incorrect data, it is just going to give you  
 17 what is in the database.  
 18 MR. DYKES:  
 19 So there may have been an error by  
 20 Mr. Navarette in pointing to the data to  
 21 provide to us?  
 22 THE WITNESS:  
 23 I can't say that it was Mr.  
 24 Navarette.  
 25 MR. DYKES:

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1 The e-mail string goes back to  
 2 him, so I am assuming he pulled the data.  
 3 EXAMINATION BY MR. MATHEWS:  
 4 Q. And he responded to the subpoena  
 5 that we have three or four months later that  
 6 actually matches the data that Mr. Navarette  
 7 gave us.  
 8 A. If that is the data that  
 9 Mr. Navarette submitted, I would say he  
 10 skipped over or pointed to the wrong data  
 11 source. Whether it was Mr. Navarette that  
 12 actually established that, or it could have  
 13 been someone else that gave it to him to  
 14 submit.  
 15 Q. Going back to the production and  
 16 cement job, you said you reviewed the data,  
 17 and you said it indicated or that you had  
 18 seen no loss returns. Is that correct, sir?  
 19 A. Yes.  
 20 Q. Can you tell me how you came to  
 21 that conclusion?  
 22 A. Looking at pit volumes.  
 23 Q. Was there any transfer of any pits  
 24 at the time of the cement job to indicate  
 25 that there was any type of discrepancy?

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1 A. During the cement displacement,  
 2 there were transfers and they were accounted  
 3 for.  
 4 But in order to look at the actual  
 5 losses or gains during a cement job or  
 6 cement placement, rather, you want to look  
 7 at the pit volumes from the time you pump to  
 8 the bottom plug to the time you pump to the  
 9 top plug. Over that time period, there were  
 10 no transfers and no significant pit gains or  
 11 losses that would denote that 80 barrels.  
 12 Q. Right before we went to break, you  
 13 were going through, I guess, some of the  
 14 data you review to indicate what you had  
 15 actually seen from the logs to indicate the  
 16 first signs of a well-control event  
 17 occurring. Would you like to go through  
 18 that again?  
 19 A. Yes. I would like to continue my  
 20 clarification about the remarks on the far  
 21 right of the chart.  
 22 Those remarks were gleaned from  
 23 personal interviews I had with our  
 24 mudloggers and one of the cementers. It is  
 25 a combination of that, along with testimony

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1 given to this board, and reports that have  
 2 been submitted to this board by the various  
 3 parties, from the IADC reports submitted by  
 4 BP.  
 5 So the remarks you see in that far  
 6 right-hand column come from a number of  
 7 different sources, and I worked to the best  
 8 of my ability to take those remarks and  
 9 identify the specific sensor responses and  
 10 match them to times.  
 11 Q. Just for my purposes, can you tell  
 12 me the names of the individuals you  
 13 interviewed?  
 14 A. I interviewed Joseph Keith, the  
 15 Sperry mudlogger; Cathleenia Willis, another  
 16 Sperry mudlogger; and Vincent Tabler, a  
 17 Halliburton cementer.  
 18 So on this last display, the third  
 19 display I brought today, we are looking at a  
 20 time frame of 1920 hours to 2200 hours, end  
 21 of transmission being at 2149.  
 22 During this time period, we are  
 23 looking at what is called the end of the  
 24 negative test -- this occurred just after  
 25 2100 hours -- where the pressure on the

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1 standpipe was bled off and they began  
 2 displacing the riser to remove the mud and  
 3 remove the spacer.  
 4 We see a beginning here of the  
 5 pumps on the drill pipe, pumps 3 and 4 were  
 6 lined up on the drill pipe. Pump No. 1 was  
 7 lined up on the riser booster. So we see an  
 8 increase on pump No. 4, also going down the  
 9 drill pipe, and at 2224, we see they brought  
 10 pump No. 1 up on the riser.  
 11 During this time, we see this very  
 12 drastic increase in pit volume change. This  
 13 increase is due to the fact that the rig was  
 14 taking all of the mud out of the hole and  
 15 storing it in pits on the rig.  
 16 MR. GODFREY:  
 17 Object to the statement about it  
 18 being a fact. That is his interpretation  
 19 based on interviews and data, and I think it  
 20 should be clear when he states that.  
 21 JUDGE ANDERSON:  
 22 The board will assume that he's  
 23 giving his interpretation of it, and  
 24 obviously, we are soliciting other comments  
 25 as well.

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1 THE WITNESS:  
 2 So the rig was pumping seawater in  
 3 the hole and taking mud back to the pit  
 4 system. However, the pit source that they  
 5 were using to pump that seawater, the sea  
 6 chest, we were not receiving any pit volume  
 7 data on that pit so there was no way for us  
 8 to do a proper comparison in realtime. We  
 9 could not include that sea chest in the  
 10 active pit system. Otherwise, if we could,  
 11 we could tell whether or not the overall  
 12 active system was gaining or losing.  
 13 Since we had no data to compare,  
 14 and we see this drastic increase of mud  
 15 coming into pits 9 and 10, but we have no  
 16 way of determining, or comparing, actually,  
 17 the volume being pumped from the sea chest.  
 18 So that is why we have the drastic increase  
 19 in the pit volume change.  
 20 At 2034, you see the drastic  
 21 increase stops, and we just have this  
 22 gradual increase on the active pit. What  
 23 had happened here, it appears that pits  
 24 No. 9 and No. 10 were lined up as the active  
 25 system. They filled to capacity, so the rig

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1 switched from 9 and 10 to pit 7. They  
 2 started pumping and started gaining on pit 7  
 3 here.  
 4 When pit 7 filled to capacity,  
 5 they switched to pit 6. They continued with  
 6 pit 6 until they finished with the mud  
 7 displacement. The mud displacement stopped  
 8 at 2108, which is when they shut down to do  
 9 a sheen test. They got a visual, they had  
 10 identified that the mud was out and they  
 11 were getting the spacer back, so they wanted  
 12 to conduct the sheen test to see if it was  
 13 okay to dump that fluid overboard.  
 14 So it was after this point that  
 15 they had shut down -- shortly after they  
 16 shut down the pumps, they transferred  
 17 200 barrels from pits 9 and 10 into pit 6.  
 18 They just essentially made room for another  
 19 200 barrels from 9 and 10 into 6. I don't  
 20 have an explanation for that, but that is  
 21 what appears happened.  
 22 So after they shut down for the  
 23 sheen test at 2108, they conducted their  
 24 sheen test and opened the overboard line,  
 25 closed the gate so that the returning fluids

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1 would not go through the pit system, they  
 2 would not go into the gumbo buster where the  
 3 Sperry sensor was located, it would just go  
 4 to the pump that runs into the Gulf.  
 5 So they brought the pumps up to  
 6 continue displacing. Now, all of the mud is  
 7 out of the hole and they want to get rid of  
 8 all that spacer. 2114 is when they started  
 9 to displace the spacer. At this point, the  
 10 Sperry flow-out filter was bypassed.  
 11 Essentially, all of the fluid that's coming  
 12 out of the hole is not going past our  
 13 sensor, it is not going into the pit system  
 14 and not going past our gas detector, and  
 15 there is no way to actually track pit volume  
 16 changes.  
 17 They continued pumping the spacer  
 18 overboard until 2130.  
 19 As far as indicators, what might  
 20 have been visible to the mudloggers, it is  
 21 very difficult to see in this section  
 22 because there were so many rig activities  
 23 going on at the same time. At 2158 --  
 24 sorry, 2058, they were emptying the trip  
 25 tank to the flow line which increased the

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1 flow-out as perceived by the flow-out  
 2 sensor.  
 3 They were also at this time  
 4 emptying the sand traps into the active pit  
 5 system, which were pits 9 and 10. That is  
 6 why we have this very gradual increase in  
 7 the pit change here.  
 8 After they switched over to pit 6,  
 9 they were still emptying the sand traps into  
 10 pits 9 and 10. That is why we do not see a  
 11 straight, flat line here, it is continually  
 12 climbing over the top.  
 13 Also, we were in the middle of  
 14 crane operations. I mentioned earlier how  
 15 crane operations can cause the flow-out to  
 16 fluctuate.  
 17 MR. GODFREY:  
 18 Objection. He said he mentioned  
 19 it earlier. To whom?  
 20 JUDGE ANDERSON:  
 21 This morning, he mentioned there  
 22 were a variety of activities that can affect  
 23 the sensors.  
 24 MR. MATHEWS:  
 25 I asked him a question about the

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1 accuracy of the flow-out, and he responded  
 2 that there were multiple things that could  
 3 do that, and he talked about how crane  
 4 operations can affect the accuracy of the  
 5 flow-out.  
 6 THE WITNESS:  
 7 So we have the active -- a source  
 8 pit that is not being monitored and included  
 9 in the active pit system.  
 10 A lot of these things combined to  
 11 obscure or completely hide any types of  
 12 gains or losses from the well or gas that  
 13 might be coming out.  
 14 So prior to their shutting down at  
 15 2108, it is nearly impossible, in my  
 16 opinion, that the mudloggers might have been  
 17 able to spot in realtime if they were taking  
 18 a kick.  
 19 In order to try to spot any gains  
 20 or losses over this time period, you would  
 21 have to have a well-documented log of rig  
 22 activities, and then go back into the raw  
 23 data and try to back-calculate what you  
 24 might have gained or lost, subtracting out  
 25 or adding in what might have been influenced

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1 by the rig activities.  
 2 After they shut down at 2108, we  
 3 have this interval. We have a standpipe  
 4 pressure that had climbed. When they shut  
 5 down, the standpipe pressure, it went to  
 6 1000 pounds, and 6 minutes later, the  
 7 standpipe pressure is about 1250. They had  
 8 a 250-pound increase over the 6-minute  
 9 interval while the pumps were off.  
 10 Typically, you would expect that  
 11 with nothing influencing the well or nothing  
 12 influencing the standpipe that it should  
 13 stay flat. It doesn't have to go to zero  
 14 necessarily, it depends on whether or not  
 15 the rig bleeds off the pressure. But the  
 16 fact that it climbed 250 pounds is a  
 17 curiosity.  
 18 Something of that nature is not  
 19 necessarily visible because you will have to  
 20 wait the entire 6 minutes to get an overall  
 21 picture. It is easy to see it on this graph  
 22 here and see you have this obvious slope,  
 23 but if you are watching the screen in  
 24 realtime, you have to wait several minutes  
 25 before you see an actual trend.

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1 So over this time period, we have  
 2 an increase in the standpipe pressure.  
 3 Again, that is a curiosity but if that is  
 4 all you have to go on, that is not a whole  
 5 lot of information, because at this time,  
 6 after they shut down for the sheen test,  
 7 they opened the overboard line so we were  
 8 not getting any flow-out. At least not  
 9 across the Sperry sensor. I believe the  
 10 Transocean sensor was rigged up in such a  
 11 way that it might have still seen the  
 12 flow-out going overboard.  
 13 So we don't have any flow-out; we  
 14 don't have any comparison to the pit volume  
 15 so we can't see a change; we don't have any  
 16 flow going across the gas detector so we  
 17 can't see any gas coming out of the mud.  
 18 So we are pretty close to blind at  
 19 this point. But still, as I mentioned,  
 20 there is a 250-pound increase. If you  
 21 notice it, it might be a curiosity.  
 22 They bring the pumps back up at  
 23 2114 and start staging them up. They bring  
 24 up pumps 3 and 4; two minutes later, they  
 25 bring up pump 1. So they continue pumping 3

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1 and 4 down the drill pipe and they pump 1  
 2 down the riser.  
 3 Two minutes after they brought up  
 4 the booster, they brought up pump No. 2. I  
 5 don't know the reason why they would have  
 6 brought up pump No. 2. At the time, pump  
 7 No. 2 was lined up on standpipe 1. The rig  
 8 had two standpipes. No. 1 and No. 2 were  
 9 how we were receiving the data. Standpipe 2  
 10 was the active standpipe. It is what we had  
 11 used over this time period for pumping down  
 12 the drill string.  
 13 Now, standpipe 1 seems to have  
 14 been isolated. They brought up pump No. 2  
 15 on standpipe 1, and the fluid had nowhere to  
 16 go so the pressure spiked up. That's this  
 17 huge blue spike here, and the pressure  
 18 spiked up and it blew off the pop-up valve.  
 19 As soon as it blew the pop-up  
 20 valve, they shut down pumps 2, 3 and 4. Two  
 21 minutes later, they brought 3 and 4 back up,  
 22 they left 2 down. So 2 stayed down for the  
 23 duration of the job after that. They  
 24 brought 3 and 4 back up and continued  
 25 displacing the riser.

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1 Now, over this time period, you  
 2 can see the stroke count. They were  
 3 bringing it up to 40, 45, 50 and 55 strokes  
 4 a minute. They did not just bring it up to  
 5 one level, they were staging it.  
 6 I can't answer as to why they  
 7 would do that. It is just the drillers that  
 8 know better than I do how you would want to  
 9 pump in these types of situations. But here  
 10 we have toward the end of their pumping,  
 11 between 2126 and 2130, they seemed to have  
 12 reached what might have been their target  
 13 flow rate. It was a similar flow rate to  
 14 what they were displacing the mud with, and  
 15 they had stopped staging up and had  
 16 basically leveled out the pumps.  
 17 During that four-minute period, we  
 18 have a sharp decrease in the standpipe  
 19 pressure. Standpipe 2. Now, they are  
 20 displacing the heavy 16-pound spacer with  
 21 8.6-inch seawater. You would expect, as you  
 22 remove that heavy fluid on the annulus and  
 23 replace it with seawater, a lighter fluid,  
 24 you would expect a standpipe decrease. We  
 25 see that same standpipe decrease appear when

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1 we are displacing the mud.  
 2 However, that decrease over that  
 3 four-minute period seems a little sharp.  
 4 Again, it is just like any trend, you are  
 5 not going to spot this within 10 seconds.  
 6 You will have to get a little bit of data to  
 7 get an idea of where it is going.  
 8 But that sharp decrease in the  
 9 standpipe pressure might have been an  
 10 indicator. In fact, shortly after, you  
 11 know, it was only four minutes of pumping  
 12 and they shut down the pumps.  
 13 As far as the indicators from a  
 14 mudlogging standpoint and what they might  
 15 have and might not have been able to see,  
 16 there is not a whole lot there.  
 17 EXAMINATION BY MR. MATHEWS:  
 18 Q. There were sections we went  
 19 through where you said they were not able to  
 20 monitor due to the sheen tests. Is there  
 21 any role or responsibility that the Sperry  
 22 loggers are all -- at the time, they are  
 23 pretty much blind. Do they communicate with  
 24 anyone any concerns they have during that  
 25 duration?

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1 A. Well, if they see something, you  
 2 know, just like any other monitoring  
 3 operations, if they see anything out of the  
 4 ordinary, just grossly wrong, they are going  
 5 to want to pick up the phone and call the  
 6 driller or whatever party is involved.  
 7 Typically, the driller is their first point  
 8 of contact.  
 9 Q. You said earlier you spoke to  
 10 Cathleenia Willis, Joseph Keith and Vincent  
 11 Tabler. Did any of the Sperry mudloggers at  
 12 any time ever indicate any concerns to you  
 13 that they were not able to actually see or  
 14 monitor the well as much as they wanted to?  
 15 A. Yes.  
 16 Q. And can you explain what they told  
 17 you, sir?  
 18 A. Well, it was in my discussions  
 19 mainly with Mr. Keith that he had said there  
 20 were so many simultaneous activities going  
 21 on on the rig, it was difficult to see  
 22 anything that might have been going on.  
 23 Q. Do you know when he was actually  
 24 on tour?  
 25 A. I believe he got on tour around

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1 1700 hours. Right toward end of the  
 2 negative test is when I believe Cathleenia  
 3 and Joe changed out.  
 4 Q. Did he mention to you that he had  
 5 passed that information on to anybody on the  
 6 rig about his concerns?  
 7 MR. GODFREY:  
 8 Objection. Mr. Keith is an  
 9 available witness. This is now a putative  
 10 expert getting in an interview we have not  
 11 seen and a fact witness' testimony that we  
 12 have not had the opportunity to  
 13 cross-examine.  
 14 JUDGE ANDERSON:  
 15 We are aware of that. We might  
 16 want to add a witness later, but I think  
 17 that the board can inquire as to what the  
 18 source of the information is, and we are  
 19 aware that if it is second- or thirdhand, it  
 20 might not be as reliable as if it were  
 21 firsthand.  
 22 Proceed.  
 23 EXAMINATION BY MR. MATHEWS:  
 24 Q. At any time, did Mr. Keith  
 25 indicate to anyone on the rig his concerns?  
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1 A. No, sir. He expressed his  
 2 concerns to me. He did not say whether or  
 3 not he addressed those concerns to anyone on  
 4 the rig.  
 5 Q. And this is postmortem when he  
 6 addressed those concerns to you?  
 7 A. Yes.  
 8 Q. Did Ms. Cathleenia Willis indicate  
 9 any concerns to you?  
 10 A. One of her concerns was the method  
 11 they were using to transfer fluid to the  
 12 boat; that the transfers that she was aware  
 13 of would have obscured the pit volume  
 14 change, which would in turn have obscured  
 15 their ability to detect gains or losses.  
 16 Q. At any time did she indicate to  
 17 you that they had passed that information  
 18 along to anyone on the rig?  
 19 MR. GODFREY:  
 20 Same objection, Your Honor.  
 21 JUDGE ANDERSON:  
 22 Please answer.  
 23 THE WITNESS:  
 24 I believe she may have mentioned  
 25 to me that she had that discussion, but I  
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1 also believe that she had been interviewed  
 2 by BP and expressed those same concerns.  
 3 EXAMINATION BY MR. MATHEWS:  
 4 Q. For now, I don't have any further  
 5 questions until possibly when you reappear,  
 6 we might have more questions about the  
 7 cement job.  
 8 Is there anything you would like  
 9 to say that would give your mudloggers a  
 10 better opportunity to actually have the  
 11 ability or the possibility to see when there  
 12 is an influx?  
 13 Seems like earlier you said it was  
 14 near impossible for them to detect an influx  
 15 from where they were.  
 16 A. Well, for the mudloggers to do the  
 17 proper rig monitoring, first and foremost,  
 18 there has to be excellent communication  
 19 between the mudloggers and the rig crew so  
 20 that they are aware of all of the rig  
 21 activities.  
 22 The second, and a very close  
 23 second would be all of the simultaneous rig  
 24 activities that obscure the data. Not being  
 25 familiar with how rig activities are  
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1 organized and scheduled, I don't know if it  
 2 would have been possible to reschedule some  
 3 of these activities during a less critical  
 4 phase so that during the negative test and  
 5 during the displacement, the pit volumes  
 6 would not have been obscured, or can it be  
 7 done in such a way they could be more easily  
 8 identified.  
 9 It just seems that there were so  
 10 many activities that it made it difficult or  
 11 impossible to monitor. It would be my hope  
 12 that some of those could be, in the future,  
 13 rescheduled intentionally to not interfere  
 14 with rig monitoring.  
 15 Q. That leads into my next question.  
 16 At any level, within your experience with  
 17 Sperry, do y'all participate in the morning  
 18 operations or the day meetings where they  
 19 discuss what is actually going to take place  
 20 on the rig that day?  
 21 A. It depends on the rig. Some rigs,  
 22 some customers require all third parties to  
 23 attend all of the user meetings.  
 24 In the case of the DEEPWATER  
 25 HORIZON, yes, Sperry and all third parties,  
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1 in fact, were typically expected to attend  
 2 all operation meetings.  
 3 Q. In your experience, not speaking  
 4 of the DEEPWATER HORIZON, but in your  
 5 experience, have you ever been made aware of  
 6 any incident where the mudloggers said you  
 7 have got too many operations going on and  
 8 the operator or contractor listened to that?  
 9 A. No, sir, not in my experience.  
 10 MR. MATHEWS:  
 11 Thank you. I have no further  
 12 questions, sir.  
 13 JUDGE ANDERSON:  
 14 Any other board questions?  
 15 CAPT. NGUYEN:  
 16 Thank you, Mr. Gisclair, for being  
 17 here today. Per your counsel, I understand  
 18 you are willing to come back when we  
 19 reconvene?  
 20 THE WITNESS:  
 21 Yes, sir.  
 22 CAPT. HIGGINS:  
 23 One piece of information. We will  
 24 be putting out to all Parties in Interest's  
 25 counsel the schedule from the 7:30 meeting.

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1 CAPT. NGUYEN:  
 2 We are adjourned, and we will let  
 3 you know when we have another session.  
 4 Thank you.  
 5 (Which adjourned the proceedings.)  
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1  
 2 REPORTER'S CERTIFICATE  
 3  
 4 I, Cathy Renee' Powell, Certified  
 5 Court Reporter, do hereby certify that the  
 6 foregoing proceedings were reported by me in  
 7 shorthand and transcribed under my personal  
 8 direction and supervision, and is a true and  
 9 correct transcript, to the best of my  
 10 ability and understanding;  
 11 That I am not of counsel, not related  
 12 to counsel or parties hereto, and not in any  
 13 way interested in the outcome of this  
 14 matter.  
 15  
 16  
 17  
 18  
 19 \_\_\_\_\_  
 20 CATHY RENEE' POWELL, CCR  
 21  
 22  
 23  
 24  
 25

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