

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

USCG/BOEM MARINE 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

\*\*\*\*\*

MONDAY, AUGUST 23, 2010

8:00 A.M.

\*\*\*\*\*

The transcript of The Joint United States Coast  
Guard/The Bureau of Ocean Energy Management,  
Regulation and Enforcement Investigation of the  
above-entitled cause, before Denyce M. Sanders,  
Certified Shorthand Reporter and Registered  
Professional Reporter, Notary Public in and for the  
State of Texas, reported at the Hilton Hobby Airport  
Hotel, 8181 Airport Boulevard, Houston, Texas 77061.

REPORTED BY: DENYCE M. SANDERS, CSR, RPR

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

A P P E A R A N C E S

MEMBERS OF THE BOARD:

CAPT. HUNG M. NGUYEN, CO-CHAIR  
UNITED STATES COAST GUARD

DAVID DYKES, CO-CHAIR  
THE BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND  
ENFORCEMENT

HON. WAYNE R. ANDERSEN

JASON MATHEWS  
THE BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND  
ENFORCEMENT

JOHN McCARROLL  
THE BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND  
ENFORCEMENT

ROSS WHEATLEY  
UNITED STATES COAST GUARD

CAPT. MARK R. HIGGINS  
UNITED STATES COAST GUARD

LT. ROBERT BUTTS  
COURT RECORDER UNITED STATES COAST GUARD

|    | INDEX            |      |
|----|------------------|------|
|    | AUGUST 23, 2010  |      |
|    |                  | Page |
| 1  |                  |      |
| 2  |                  |      |
| 3  |                  |      |
| 4  | APPEARANCES      | 2    |
| 5  |                  |      |
| 6  | NEIL CRAMOND     | 13   |
| 7  |                  |      |
| 8  | BY CAPT. NGUYEN  | 14   |
| 9  | BY MR. MATHEWS   | 54   |
| 10 | BY CAPT. NGUYEN  | 64   |
| 11 | BY MR. McCARROLL | 67   |
| 12 | BY MR. DYKES     | 73   |
| 13 | BY MR. WHEATLEY  | 77   |
| 14 | BY CAPT. HIGGINS | 79   |
| 15 | BY CAPT. NGUYEN  | 80   |
| 16 | BY MR. DYKES     | 89   |
| 17 | BY HON. ANDERSEN | 90   |
| 18 | BY MR. LINSIN    | 91   |
| 19 | BY MS. KARIS     | 94   |
| 20 | BY MR. CLEMENTS  | 102  |
| 21 | BY MS. KIRBY     | 118  |
| 22 | BY MR. GORDON    | 115  |
| 23 | BY MR. FANNING   | 151  |
| 24 | BY MR. SCHONEKAS | 156  |
| 25 | BY MR. CLARKE    | 159  |

|    |                  |     |
|----|------------------|-----|
| 1  | BY MR. PENTON    | 164 |
| 2  | BY CAPT. NGUYEN  | 187 |
| 3  | BY MR. MATHEWS   | 199 |
| 4  | BY MR. DYKES     | 200 |
| 5  | BY LT. BUTTS     | 206 |
| 6  |                  |     |
| 7  | PAUL JOHNSON     | 210 |
| 8  |                  |     |
| 9  | BY CAPT. NGUYEN  | 211 |
| 10 | BY MR. MATHEWS   | 268 |
| 11 | BY MR. McCARROLL | 300 |
| 12 | BY MR. MATHEWS   | 303 |
| 13 | BY MR. LINSIN    | 304 |
| 14 | BY MR. ADLER     | 311 |
| 15 | BY MR. JOHNSON   | 320 |
| 16 | BY MR. GODFREY   | 336 |
| 17 | BY MS. KUCHLER   | 359 |
| 18 | BY MR. GORDON    | 367 |
| 19 | BY MR. FANNING   | 388 |
| 20 | BY MR. SCHONEKAS | 393 |
| 21 | BY MR. CLARKE    | 398 |
| 22 | BY MR. PENTON    | 405 |
| 23 | BY MR. LONDON:   | 424 |
| 24 | BY MR. DYKES     | 426 |
| 25 | BY MR. FANNING   | 427 |

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

BY CAPT. NGUYEN

428

DAUN WINSLOW

437

BY CAPT. NGUYEN

437

BY MR. MATHEWS

501

REPORTER'S CERTIFICATION

529

•-----•

1                   CAPT. NGUYEN: The United States  
2                   Coast Guard & Bureau of Ocean Energy  
3                   Management, Regulation and Enforcement  
4                   investigation is now in session.

5                   Court reporter, let's go on the  
6                   record.

7                   I am Capt. Hung Nguyen, U.S. Coast  
8                   Guard, District 14, Chief of Prevention.  
9                   The Department of Homeland Security and  
10                  the Department of Interior have determined  
11                  that a joint investigation of the April 20  
12                  through 22nd, 2010 explosion and sinking  
13                  of the mobile offshore drilling unit  
14                  DEEPWATER HORIZON, leaving 11 persons  
15                  missing, is warranted.

16                  The Commandant of the Coast Guard,  
17                  along with the director of the Bureau of  
18                  Ocean Energy Management, Regulation and  
19                  Enforcement, formerly known as the Mineral  
20                  Management Service, has designated myself  
21                  and Mr. David Dykes as co-chair of this  
22                  joint investigation which they have  
23                  convened under authority of Title 46 U.S.  
24                  Code 6301 and Title 43 U.S. Code 1348 and  
25                  the regulations thereunder.

1                   The joint investigation shall have  
2                   the powers of both agencies and for the  
3                   public hearing portion of this joint  
4                   investigation shall follow the policies  
5                   and procedure for Coast Guard  
6                   investigation as contained in Title 46 of  
7                   the Code of Federal Regulations part 4 and  
8                   the Coast Guard Marine Safety Manual 4 and  
9                   5.

10                  The gentleman on Mr. David Dykes'  
11                  left is Mr. Jason Mathews, a petroleum  
12                  engineer with The Bureau of Ocean Energy  
13                  Management, Regulation and Enforcement.

14                  The gentleman on Mr. Mathews' left  
15                  is Mr. John McCarroll, the district  
16                  manager, Lake Jackson District, for the  
17                  Bureau of Ocean Energy Management,  
18                  Regulation and Enforcement.

19                  And the gentleman to his left is  
20                  Lt. Ralph Butts, the lead instructor for  
21                  Marine Investigation Program and Coast  
22                  Guard Training Center, Yorktown.

23                  The gentleman on my right is Judge  
24                  Wayne Andersen, retired.

25                  To his right is Mark Higgins, the

1 staff judge advocate for the U.S. Coast  
2 Guard, Atlantic area.

3 And to his right is Mr. Ross  
4 Wheatley, Chief of Investigation Division  
5 at Coast Guard Sector, San Francisco.

6 This Board will submit its report of  
7 findings, conclusions and safety  
8 recommendations to prevent a recurrence of  
9 this type of casualty to the Commandant of  
10 the United States Coast Guard and the  
11 director of Bureau of Ocean Energy  
12 Management, Regulation and Enforcement.

13 This investigation is intended to  
14 determine the cause of the casualty to an  
15 extent possible and the responsibility  
16 thereof. Subject to the final review and  
17 approval of the Commandant of the Coast  
18 Guard and the director of Bureau Ocean  
19 Energy Management, Regulation and  
20 Enforcement to obtain information for the  
21 purpose of preventing or using the effects  
22 of similar casualties in the future.

23 This investigation is also intended  
24 to determine if there is evidence that  
25 incompetence, misconduct, unskillfulness

1 or willful violation of the law on the  
2 part of any licensed officer, pilot,  
3 seaman, employee, owner or agent of such  
4 owner of any vessel involved or any  
5 inspector, officer of the United States  
6 Coast Guard, Bureau of Ocean Energy  
7 Management, Regulation and Enforcement or  
8 other officer and employee of the United  
9 States or any other person caused or  
10 contributed to the cause of this casualty,  
11 or if there is evidence that an actual  
12 violation of any of the provision of the  
13 United States Code or any of the  
14 regulation issued thereunder was  
15 committed.

16 This Board is also empowered to  
17 recognize any commendable actions by  
18 persons involved and to make appropriate  
19 recommendations in this regard.

20 This five-day session will focus on  
21 technical verification, risk assessment  
22 and operational decision-making.

23 I would like to request the  
24 cooperation of all persons present to  
25 minimize any disruptive influence on the

1 proceeding in general and on the witnesses  
2 in particular. We will continue to allow  
3 full media coverage as long as it does not  
4 interfere with the rights of the parties  
5 to a fair hearing and does not unduly  
6 distract from the solemnity, decorum and  
7 dignity of the proceedings.

8 Unless there is a preapproved media  
9 availability, no interviews will be  
10 conducted inside the hearing room or in  
11 the adjacent common area. Any violation  
12 of the guidelines previously agreed upon  
13 may result in the removal of the pool  
14 media representatives.

15 The use of laptops, PDAs or cell  
16 phones to capture video or still  
17 photography during the proceeding is  
18 prohibited.

19 There will be only one official  
20 transcript of this proceeding developed by  
21 the Board. Any other transcript developed  
22 by any other party are for informational  
23 purposes only.

24 When called upon, witnesses will be  
25 placed under oath by Judge Andersen. When

1           testifying under oath, a witness is  
2           subject to the Federal laws and penalties  
3           for perjury and for making false  
4           statements under 18 U.S. Code 1001.  
5           Penalties include a fine of \$250,000 or  
6           imprisonment up to five years or both.

7                     Also, as a reminder, no part of a  
8           report on marine casualty investigation  
9           conducted under Title 46 U.S. Code 6301,  
10          including findings of fact, opinions,  
11          recommendations, deliberations of  
12          conclusion shall be admissible as evidence  
13          or subject to discovery in any civil or  
14          administrative proceedings other than an  
15          administrative proceeding initiated by the  
16          United States.

17                     At this time, the recently-appointed  
18          joint investigation team member and the  
19          court reporter will take their oaths.  
20          Please rise and raise your right hand and  
21          repeat after me.

22                     (Witnesses sworn.)

23                     CAPT. NGUYEN: Prior to receiving  
24          testimony during each session of the  
25          proceeding, we shall call for and receive

1           appearances by counsel for the parties in  
2           interest or for the witnesses.

3                   In the interest of time and  
4           efficiency, we respectfully request  
5           parties in interest to honor the scope of  
6           these five days as we examine other areas  
7           later. We expect parties in interest to  
8           conduct themselves in accordance with the  
9           rules for parties in interest discussed  
10          earlier this morning, a copy of which will  
11          be added to the record at this time.

12                   If procedural questions arise, Judge  
13          Andersen and/or Capt. Higgins will address  
14          the matter and resolve the issue with the  
15          parties in interest.

16                   During these five days of testimony,  
17          we are expecting personal appearance by  
18          each person listed on our witness list,  
19          which is posted on our website.

20                   The sources of information to which  
21          this investigation will require are many  
22          and varied. The investigators' resource  
23          of the United States Coast Guard and the  
24          Bureau of Ocean Energy Management,  
25          Regulatory and Enforcement have made

1 attempts to look at every available piece  
2 of evidence that have any apparent bearing  
3 on the casualty. This Board will hear all  
4 such evidence. Should any person have or  
5 believe he or she has information not  
6 brought forward for which might have maybe  
7 of direct significance, that person is  
8 urged to bring that information to my  
9 attention.

10 At this time, all witnesses are  
11 excused from the hearing except for the  
12 first witness.

13 Judge Andersen, please call the  
14 first witness.

15 HON. ANDERSEN: First witness is  
16 Neil Cramond. Mr. Cramond, would you  
17 stand and raise your right hand.

18 NEIL CRAMOND,  
19 having been first duly sworn, testified as follows:

20 HON. ANDERSEN: If your attorney  
21 would state his name for the record so  
22 that's on the record, that would be  
23 helpful.

24 MR. MONICO: Michael Monico,  
25 M-O-N-I-C-O, of Chicago, Illinois.

1 HON. ANDERSEN: Captain will begin  
2 the questioning.

3 E X A M I N A T I O N

4 BY CAPT. NGUYEN:

5 Q. Good morning, Mr. Cramond.

6 A. Good morning.

7 Q. What position do you hold?

8 A. I hold the maintenance and reliability  
9 accountabilities for BP's oil and gas production  
10 operation in the Gulf of Mexico. I am the marine  
11 authority for, again, BP Gulf of Mexico business  
12 unit.

13 Q. How long have you held this position?

14 A. The marine authority position I've held  
15 for probably four years.

16 Q. Did you hold any others with BP before  
17 this position? What were they?

18 A. Oh, the positions?

19 Q. Yes, sir.

20 A. I worked for BP for almost 30 years.  
21 I've held a number of marine operations-related  
22 positions. I served as a seagoing engineer for 14  
23 years. I have been operations superintendent for a  
24 number of BP's supertankers. I've held a position  
25 of marine and mechanical team lead for a floating

1 production of storage units located in the northwest  
2 shelf of Australia. I have also been the fleet  
3 technical manager for BP's international shipping  
4 fleet. And then I was the regional manager for BP's  
5 Americas shipping activities.

6 Q. What is the scope of your present  
7 duties?

8 A. Present duties as marine authority for  
9 the Gulf of Mexico is to determine the marine risk  
10 of BP's activities in the region and to ensure  
11 mitigations are identified to those identified  
12 risks.

13 Q. Will you briefly outline your  
14 educational background.

15 A. I'm a mechanical engineer specialized in  
16 marine engineering. I hold a Class 1 chief  
17 engineering license for both steam and  
18 diesel-powered plants. I'm a fellow of the  
19 Institute of Marine Engineering, Science and  
20 Technology.

21 Q. Have you had any well-control training?

22 A. No, sir.

23 Q. Have you ever served as a master or  
24 offshore installation manager for deepwater drilling  
25 or production?

1           A.       No, sir.

2           Q.       Do you believe that you have the  
3 appropriate technical background to determine the  
4 suitability of  
5 the MODU for deepwater drilling?

6           A.       When you focus purely on the marine  
7 risk, then I believe I do.

8           Q.       What is the  
9 organization -- organizational relationship between  
10 your position and the senior VP for Gulf of Mexico,  
11 which I understand is currently chaired by Mr. James  
12 Dupree?

13          A.       Mr. Dupree is the business unit leader  
14 for the Gulf of Mexico operations. He has a number  
15 of vice presidents that report to him. I report in  
16 to the vice president of HSE and engineering for my  
17 marine authority accountabilities.

18          Q.       Was there ever a situation involving  
19 deepwater drilling or other deepwater operations  
20 that you had to bring to the attention of Mr. Dupree  
21 or any of his predecessor directly?

22          A.       Not that I can recall.

23          Q.       To your knowledge, did Mr. Dupree ever  
24 visit a MODU while it was engaging in deepwater  
25 drilling in the Gulf of Mexico?

1           A.       I cannot answer that question.  I don't  
2 know.

3           Q.       What is the organizational relationship  
4 between your organization and the VP for health,  
5 safety, security and environment, which I understand  
6 is currently filled by Mr. Steven Flynn?

7           A.       Can you repeat the question?  I didn't  
8 recognize the name.

9           Q.       Mr. Steven Flynn, I understand he's the  
10 VP for health, safety, security and environment.

11          A.       I don't recognize that name in the BP  
12 organization.

13          Q.       In the BP organization?

14          A.       Yes.

15          Q.       What is the organizational relationship  
16 between your position and the Gulf of Mexico health,  
17 safety and environment person in charge, which I  
18 understand is currently filled by Ms. Cindi Skelton?

19          A.       Ms. Skelton is the VP of HSE and  
20 engineering.  Within her organization, there is a  
21 health and safety manager, Mr. Brad Smolen.  I  
22 report directly to Mr. Brad Smolen for my marine  
23 authority accountabilities.

24          Q.       Do you meet with Ms. Skelton?  And how  
25 often do you meet with her?

1           A.        During the -- those accountabilities  
2 with Ms. Skelton are relatively new. So I believe I  
3 met with her just once prior to her appointment in  
4 that role. Previous to Ms. Skelton, my marine  
5 authority accountabilities reported in to the VP of  
6 operations, Mr. Richard Morrison, who I would meet  
7 with on a regular basis.

8           Q.        So, to your knowledge, Ms. Skelton, as  
9 the HSE environmental person for Gulf of Mexico, do  
10 you know if she ever been on a MODU while it was  
11 operating -- engaging in operations in the Gulf of  
12 Mexico?

13          A.        I don't know the answer to that  
14 question.

15          Q.        Did you ever find -- did you ever find  
16 the material condition or the effectiveness of the  
17 Safety Management System of a Transocean MODU  
18 unacceptable for use on a BP deepwater drilling  
19 project? If yes, which was it?

20          A.        Specifically the Safety Management  
21 System?

22          Q.        And the materials condition.

23          A.        I've never assessed in detail the Safety  
24 Management System of a Transocean MODU. I have had  
25 cause to request rectification or repairs to MODUs

1 operated by Transocean over the course of the last  
2 few years.

3 Q. For the Macondo project, who was your  
4 Anadarko counterpart for vessel-related issues?

5 A. I don't know the answer to that  
6 question.

7 Q. Do you know if Anadarko have a marine  
8 authority similar to you, in position to you?

9 A. I don't know the detail to answer that  
10 question. I don't believe they do.

11 Q. How about MOEX Offshore, do you have a  
12 counterpart?

13 A. Again, I could not name a counterpart if  
14 there is one.

15 Q. How about your Transocean counterpart,  
16 who would that be?

17 A. Transocean, I do have in place a marine  
18 manager or have had cause to deal with in the past.  
19 That's Mr. John MacDonald.

20 Q. John MacDonald.

21 MR. CLEMENTS: Captain, we didn't  
22 get that name, what is it?

23 CAPT. NGUYEN: John MacDonald.

24 MR. CLEMENTS: John MacDonald?

25 CAPT. NGUYEN: Yes, sir.

1 MR. CLEMENTS: Thank you.

2 Q. (BY CAPT. NGUYEN) How often did you and  
3 Mr. MacDonald meet during -- for this project?

4 A. Specifically for the Macondo project?

5 Q. Yes, sir.

6 A. We did not meet.

7 Q. Was there a BP-Transocean process in  
8 place to ensure effective resolution of  
9 vessel-related issues? Who had the final say?

10 A. The accountable party for -- for  
11 communicating and dealing with Transocean for the  
12 operation of the rig is the wells team lead.

13 Q. And if there was vessel-related issue,  
14 who have the final say?

15 A. Well, I believe a number of parties have  
16 the final say to -- to stop -- to stop the rig being  
17 operated. I believe I played a role of ensuring  
18 that the risks that are associated with a marine  
19 condition are clearly understood and communicated to  
20 the wells team lead and to the senior leadership  
21 within BP and Transocean.

22 Q. Was there a BP Anadarko and MOEX  
23 Offshore process in place to ensure effective  
24 resolution of vessel-related issues? Is there  
25 bridging document in terms of operations between BP,

1 Anadarko and MOEX Offshore?

2 A. I don't know the answer to that  
3 question.

4 Q. Please describe BP process for selecting  
5 a vessel for deployment in deepwater drilling.

6 A. So there's a number of processes that  
7 are employed by BP. There is a process that is  
8 known as a rig audit, which is a BP protocol  
9 inspection that is progressed and focuses purely on  
10 the drilling activities and drilling equipment and  
11 the utility equipment associated with drilling  
12 operations.

13 In conjunction with that, there is a  
14 marine assessment and marine assurance process that  
15 is executed to a defined timetable. That process  
16 employs the common marine inspection document, which  
17 is a protocol developed by the International  
18 Maritime Contractors Association, IMCA. We executed  
19 that inspection protocol to all the vessels that we  
20 employ in the Gulf of Mexico as a mechanism to  
21 assess the vessel in a -- to a consistent manner.

22 Q. What was your involvement in the  
23 selection of the DEEPWATER HORIZON for the Macondo  
24 project?

25 A. There was no particular conversation in

1 terms of assessing that rig for that particular  
2 activity. The rig was -- was inspected, it had been  
3 through the assessment process and was available to  
4 be used throughout BP's operation. I was not  
5 involved in a conversation particular about Macondo.

6 Q. Was the DEEPWATER HORIZON the only  
7 vessel considered to replace the MARIANAS for this  
8 project?

9 A. I was not part of any conversation. I  
10 cannot answer that question.

11 Q. So you wouldn't know why the DEEPWATER  
12 HORIZON was selected for the Macondo project?

13 A. No, sir.

14 Q. Part of your vetting process, is  
15 employment of a foreign-flagged vessel a selection  
16 criteria?

17 A. Can you repeat the question?

18 Q. Yes, sir. As part of your vessel  
19 vetting process, is employment of a foreign-flagged  
20 vessel a selection criteria?

21 A. No, sir. The selection of a vessel for  
22 a particular mission will be dependent on the -- the  
23 regulations that are in place. We -- there's a  
24 piece of legislation of the Jones Act that we have  
25 to consider and comply with.

1           Q.       So you could have employed an  
2 American-flagged vessel?

3           A.       I can't answer that question.  If one  
4 was available and if it was contracted by BP to do  
5 the work, then it could have been used in Macondo.  
6 I do not get involved in those conversations.

7           Q.       Do you have any concern that under  
8 international MODU Code, the flag state is not  
9 responsible for the drilling system of an operation?  
10 What I mean by that is, if the flag state is not  
11 responsible for drilling system and operation, that  
12 means that they are not part of the safety net for  
13 that --

14          A.       Uh-huh.  So I don't have any concerns on  
15 a personal level.  Flag state, I believe, focuses on  
16 the vessel operations.  There will be other  
17 regulations that govern the drilling activities.

18          Q.       Okay.  Are you aware that in 2005, the  
19 DEEPWATER HORIZON switched flags from Panama to  
20 Marshall Island and Transocean discontinue ABS  
21 certification of the vessel drilling system?  Were  
22 you aware of that?

23          A.       Did you say continued or discontinued?

24          Q.       Discontinued.

25          A.       Discontinued?

1 Q. Yes, sir.

2 A. I was not aware of that.

3 Q. If you're aware of that, would that be  
4 of concern to you in terms of selecting the vessel?

5 A. I expect vessels to comply with  
6 classification society requirements.

7 Q. Do you know that for a Marshall Island-  
8 flagged vessel MODU, Marshall Island does not  
9 require a single individual to serve both as master  
10 and offshore installation manager? Did you know  
11 that?

12 A. I was aware of the organizational  
13 structure that is apparent on MODU in operation. I  
14 was not aware it was a requirement of the Marshall  
15 Islands.

16 Q. If you knew this, would it be a concern  
17 to you? Would you still employ the DEEPWATER  
18 HORIZON?

19 A. I believe so.

20 Q. You believe so that it would be a  
21 concern?

22 A. No, I would still employ the vessel.

23 Q. Did you make a visit to the DEEPWATER  
24 HORIZON to assess its material condition and Safety  
25 Management System prior to selecting it for the

1 Macondo project?

2 A. I did not. That's correct. I did not  
3 select the vessel for the Macondo project. The  
4 vessel was employed by BP and was able to be used  
5 throughout BP's Gulf of Mexico operations.

6 Q. As the marine authority for BP, did you  
7 ever visit the DEEPWATER HORIZON?

8 A. I visited the DEEPWATER HORIZON on two  
9 occasions. Both of them were to complete or to  
10 support Transocean with an incident investigation  
11 and to progress an incident investigation on behalf  
12 of BP. I've never visited the rig to do a formal  
13 assessment.

14 Q. Which incident investigation is this?

15 A. The -- the one where I visited to  
16 progress a BP incident investigation was a day away  
17 from work list that occurred on the vessel, the FAST  
18 BULLET. I believe it was March, 2008. FAST BULLET  
19 was offloading equipment to the rig at the time of  
20 the incident. I then supported Transocean in the  
21 investigation of the -- it was an incident, a  
22 flooding and listing incident. I believe that was  
23 in May, 2008.

24 Q. You assessed Transocean Safety  
25 Management System for the two incidents?

1           A.       No, sir.

2           Q.       As BP marine authority, what is your  
3 knowledge of International Safety Management Code?

4           A.       I'm familiar with the ISM Code, its  
5 requirements and its -- and the obligations of the  
6 vessel owner and operator and the master. I have  
7 served as designated person ashore in compliance  
8 with the ISM Code for a number of vessels within the  
9 BP international shipping fleet. My role as a fleet  
10 technical manager for the international shipping  
11 fleet required me to ensure that a fleet of oil and  
12 gas vessels complied forward with the ISM Code.

13          Q.       To your knowledge, is BP's Safety  
14 Management System is in compliance with the ISM  
15 Code?

16          A.       The BP Safety Management System?

17          Q.       Yes, sir.

18          A.       In particular, which BP Safety  
19 Management System?

20          Q.       There should be only one Safety  
21 Management System, correct?

22          A.       So the ISM Code as it applies to BP's  
23 international shipping fleet, the Safety Management  
24 System --

25          Q.       Yes, sir.

1           A.       -- employed on those vessels is in full  
2 compliance with the ISM Code. So then when you look  
3 at the BP operations for oil and gas production  
4 offshore Gulf of Mexico, there is no requirement to  
5 comply with the ISM Code; therefore, the Safety  
6 Management System is different.

7           Q.       Yes, sir, I understand.

8           A.       Okay.

9           Q.       Is it fair to say that the ISM, the  
10 International Safety Management Code, is similar  
11 to ISO 9001 party management standards for marine  
12 operation?

13          A.       That is correct.

14          Q.       What happens when a vessel does not have  
15 a valid safety management certificate? Can it  
16 operate?

17          A.       I believe there is a requirement that  
18 the vessel ceases operation until the owner/operator  
19 or the individual vessel returns to compliance.

20          Q.       If a company document of a compliance is  
21 withdrawn by the administration, can any of its  
22 vessel operate?

23          A.       I believe they cannot.

24          Q.       So is it very important for senior  
25 managers to have -- be knowledgeable of the ISM

1 Code; is that correct?

2 A. Yes, sir.

3 Q. And it's important for the company and  
4 its vessel to be in compliance with the  
5 International Safety Management Code; is that  
6 correct?

7 A. It is a requirement and an obligation.

8 Q. The ISM Code -- a while ago, you say  
9 it's obligation of the owner/operator and the  
10 master. When -- what is your understanding of a  
11 definition of underway for a vessel according to  
12 code reg, the international regulation on -- for  
13 navigation? What's the definition of underway?

14 A. So long as the vessel is in operations  
15 in international waters or close-in waters, it means  
16 a vessel that is -- it's in operation and under  
17 navigation.

18 Q. If I tell you the definition is that it  
19 is a vessel not in anchor, not tied to a fixed  
20 structure ashore or aground, would that be the  
21 definition?

22 A. I can -- I support that definition, yes.

23 Q. So if a dynamically positioned --  
24 positioning vessel, would that be considered  
25 underway or not underway?

1 A. I believe it's considered underway.

2 Q. Underway?

3 A. Yes, sir.

4 Q. Now, when a vessel underway, who's in  
5 charge of that vessel?

6 A. The captain.

7 Q. Does ISM Code make a distinction between  
8 drilling and marine operations, or does it just  
9 refer to operations in general?

10 A. The ISM Code is a regulation that  
11 applies to a vessel irrespective of its particular  
12 mission.

13 Q. So the ISM Code is relating to the  
14 Safety Management System and it cover all  
15 operations, including drilling, as you understand?

16 A. As I understand it, yes.

17 Q. A while ago, you talked about these  
18 various audits that BP performed, conduct in vetting  
19 a vessel. If a drilling contractor like Transocean  
20 is in compliance with all coastal international  
21 regulation, why is it necessary for BP to conduct  
22 audits like the one that you conducted in September,  
23 2009?

24 A. We conduct those assessments in addition  
25 to the normal statutory and regulation structure

1 that the owner/operator must comply with just as a  
2 means of verification that the standards are being  
3 maintained on the vessel. The CMI, the assessment  
4 is conducted on every third-party vessel that is  
5 employed by BP in the Gulf of Mexico region.

6 Q. Based on your experience, would it be  
7 fair to say that you are knowledgeable of the ISM  
8 Code?

9 A. Yes, sir.

10 Q. Would you define for me what it means by  
11 major nonconformity?

12 A. A major nonconformity, I believe, is an  
13 observation that the policies, procedures, or  
14 execution of those policies and procedures by the  
15 operator is not in compliance with the code.

16 Q. Okay. If I -- if I -- if I indicate  
17 this about what a major nonconformity mean, would  
18 you agree me: A major nonconformity is an  
19 identifiable deviation that poses a serious threat  
20 to the safety of personnel or the ship or serious  
21 risk to the environment that requires immediate  
22 corrective action; would you agree with that?

23 A. I can support that definition, yes, sir.

24 Q. Okay. You're aware of the result of BP  
25 rig and maritime assurance audit conducted in

1 September, 2009, were you aware of that audit and  
2 the results?

3 A. Yes, I am.

4 Q. Okay. Let me list these items, and if  
5 you tell -- please tell me whether you consider it  
6 as a major nonconformity under the ISM Code.

7 There -- an annual health and safety  
8 plan was not in place.

9 A. I don't know whether that is a major  
10 nonconformance.

11 Q. Not all relevant Transocean personnel on  
12 the rig were knowledgeable of the drilling and well  
13 operation practice and associate engineering  
14 technical practices.

15 Would that be a major nonconformity?

16 A. Again, I'm not -- I can't define whether  
17 or not that is a major nonconformity. It's been a  
18 while since I did assessments under the ISM Code.

19 Q. Work permitting process was inadequate?

20 A. The term "inadequate" would lead me to  
21 believe that is not a major nonconformity. If a  
22 process was not in place, that would be a  
23 nonconformity.

24 Q. Any further dilution of experienced  
25 personnel would be detrimental to the performance of

1 the rig?

2 A. I don't believe I would define that as a  
3 major nonconformity.

4 Q. There was no competence assurance system  
5 in place?

6 A. The fact that there is no process in  
7 place, that may well be considered a nonconformity.

8 Q. As reported during our 2008 audit,  
9 comprehensive checks to verify proper operation of  
10 the anticollision system were still not being  
11 periodically undertaken.

12 A discrepancy relating to the  
13 anticollision system, which I would assume, as a  
14 marine person, you would think that fairly serious  
15 it's not being periodically undertaken as was  
16 required?

17 A. I am not quite sure which equipment  
18 that's referring to as anticollision. If that is a  
19 navigation defect, I believe that may be a  
20 nonconformity. If it's dealing with the drilling  
21 equipment or other items where there's not  
22 noncollision equipment, then maybe that is not a  
23 nonconformity.

24 Q. Despite previous recommendation, it  
25 would not be demonstrated that all critical digital

1 and analog drilling instrumentation has been  
2 calibrated?

3 A. Potentially would be a nonconformity.

4 Q. A review of the maintenance management  
5 system indicated there was significant overdue  
6 planned maintenance routines in excess of 30 days.  
7 These totaled 390 routines, which corresponded to  
8 3,545 man-hours. Many of the jobs were  
9 high-priority designation, and it is unclear why  
10 Transocean did not plan some of these for the hour  
11 service period.

12 Do you consider that the amount of  
13 work and there's no plan in place to address these  
14 high-priority -- these high -- have been designated  
15 high-priority items?

16 A. I don't believe that would be a  
17 nonconformance.

18 Q. Control alarms and defeats and bypasses  
19 were not well managed. In fact, no single person  
20 could account for which alarms were separate, were  
21 overridden or indeed for what reason.

22 Would that be a major nonconformity?

23 A. If there is lack of a process to  
24 identify whether those inhibits and alarms have been  
25 modified, I believe that would be a nonconformance.

1           Q.       Taking all of these items in total, will  
2 you consider that it, in total, would be a major  
3 nonconformity with one, two, three, four, five, six,  
4 seven, eight, nine items I've just listed here,  
5 would it be considered as a major nonconformity  
6 under the International Safety Management Code?

7           A.       I don't know if I can answer that  
8 question.  Again, I'm not a sort of a -- I'm not a  
9 recently- experienced auditor for the ISM Code.  
10 There are obvious implementation issues with -- with  
11 the execution of the SMS system, I believe, from the  
12 items you've identified.

13          Q.       Even if you're not in a position to  
14 identify that these -- all these items in total is a  
15 major nonconformity, would all these items concern  
16 you as far as the readiness and suitability of the  
17 DEEPWATER HORIZON to employ -- to be employed for  
18 this Macondo project?

19                   Obviously it was employed.  Why --  
20 would these items concern you?  If they wouldn't  
21 concern you, why?

22          A.       I think the items raised raise issues  
23 with the Safety Management System that needs to be  
24 addressed to ensure full compliance with both the  
25 ISM obligations and Transocean's internal policies

1 and procedures.

2 Q. Did you bring these discrepancy to the  
3 attention of Mr. Dupree?

4 A. No, sir.

5 Q. Did you bring these discrepancy to the  
6 attention of Ms. Skelton?

7 A. No, sir.

8 Q. Did you bring these discrepancy to the  
9 attention of anyone in BP for action?

10 A. The report as executed was -- was  
11 discussed with both the senior leadership on board  
12 the rig and the Transocean onshore senior  
13 leadership. It was also brought to the attention of  
14 the wells team lead within BP.

15 Q. Okay. What's the result of the  
16 discussion? Was there a work list generated? The  
17 audit report, was that the work list?

18 A. The audit that was -- the assessment  
19 that was conducted identifies a number of conditions  
20 that need to be followed up and verified that they  
21 are closed out.

22 Q. When? Before the employment or after  
23 the employment?

24 A. There are a number of different  
25 timeframes that are identified with the condition

1 list. There was a review was completed by myself  
2 and my team associated with the draft report that  
3 came out where we looked at some of the conditions  
4 and we identified a number that concerned us that we  
5 requested were rectified prior to the vessel going  
6 back to operation.

7 Q. So if I -- so when the DEEPWATER HORIZON  
8 begins operation for the Macondo project, you -- BP  
9 satisfied that the DEEPWATER HORIZON was in -- was  
10 suitable for operation?

11 A. There was a number of different  
12 assessments and time frames identified from when the  
13 assessment was done in September through to March,  
14 which were -- we looked at the progress of  
15 Transocean in correcting the conditions that had  
16 been recorded as part of the assessment.

17 Q. But by the time it was employed for the  
18 project, you were satisfied -- BP was satisfied with  
19 the progress made?

20 A. I guess. At March, when the second  
21 verification visit was conducted by a member of my  
22 team, I believe 63 of the 70 marine conditions that  
23 were recorded in September have been progressed to  
24 closure. And there was actions in place to close  
25 out the remaining 7.

1 Q. Did Anadarko participate in the  
2 selection of the DEEPWATER HORIZON for the Macondo  
3 project?

4 A. I don't know the answer to that.

5 Q. Did you share the results of your audit  
6 with Anadarko?

7 A. I did not.

8 Q. Do you know if anybody in BP shared a  
9 result with Anadarko?

10 A. I don't know the answer to that  
11 question.

12 Q. Do you know if Anadarko did an  
13 independent audit of the DEEPWATER HORIZON for the  
14 Macondo project?

15 A. I don't know the answer to that  
16 question.

17 Q. Did MOEX Offshore participate in the  
18 selection of the DEEPWATER HORIZON for the Macondo  
19 project?

20 A. I don't know the answer to that  
21 question.

22 Q. Do you know if anybody bring the results  
23 of your audit to the attention of MOEX?

24 A. Again, I don't know the answer to that  
25 question.

1 Q. Anadarko and MOEX are partners with BP  
2 for this project, correct?

3 A. Correct.

4 Q. So when you conducted your audit to  
5 determine the suitability of the vessel, nobody  
6 talked?

7 A. So the -- in my mind, the accountable  
8 party for engaging with partners and for looking at  
9 the -- the overall assessment that was done as the  
10 wells team lead, I offer support for marine related  
11 issues and risks and conditions to the wells team.

12 Q. So your communication to Mr. Dupree, who  
13 is the business unit manager, that the DEEPWATER  
14 HORIZON was suitable for this project?

15 A. There was no direct communication to  
16 Mr. Dupree.

17 Q. If he was the one who's the -- he was  
18 the one inter- -- interacting with MOEX Offshore and  
19 Anadarko, how did he make a decision that this  
20 vessel was suitable if -- based on what -- what  
21 information?

22 A. So if I had deemed the vessel  
23 unsuitable, that would have been formally  
24 communicated to the individuals who are accountable  
25 for employing the rig to BP business. That is

1 usually a communication that would go to the wells  
2 team lead or into the D&C business line, or if it's  
3 a -- another vessel that we're employing where we  
4 deemed it unacceptable, it would go to the project  
5 manager or to the line manager where that vessel is  
6 being --

7 Q. So do you make a report, or in the  
8 absence of a report, is there a report?

9 A. So there are different sort of  
10 mechanisms whereby I may deem a vessel to be  
11 unacceptable. It's not purely these assessments.  
12 It might be there has been an operational condition,  
13 and that, sir, would be a documented report or maybe  
14 a -- a communication to the individual wells team  
15 lead or to the project manager.

16 Q. Ultimately, what convinced BP, Anadarko,  
17 MOEX Offshore to select the DEEPWATER HORIZON for  
18 the Macondo project?

19 MS. KIRBY: Objection. Lack of  
20 foundation. I don't believe he can  
21 actually testify on behalf of Anadarko and  
22 MOEX.

23 HON. ANDERSEN: You can testify if  
24 you have actual knowledge, but you do not  
25 need to guess or speculate. If you don't

1           have knowledge, then you cannot assume  
2           that.

3           A.       I don't know. I was not party to any  
4 discussion of why the HORIZON was specifically used  
5 for the Macondo.

6           Q.       (BY CAPT. NGUYEN) When was the status  
7 of the identified discrepancy -- the discrepancy  
8 identified in the September audit at the time of the  
9 casualty? What items -- of the nine items I listed,  
10 how many of those items have been corrected and what  
11 were they?

12          A.       So there's a long list of items that you  
13 came up. The action items that were contained  
14 within the report, the specific conditions?

15          Q.       The nine that I indicated. Can you tell  
16 me which one of those -- and I can repeat them --  
17 that had been corrected by the time of the casualty.  
18 Was there an annual health safety plan in place?

19          A.       I don't know the status of that.

20          Q.       What's that?

21          A.       I don't know the status of that  
22 condition.

23          Q.       Would all relevant Transocean personnel  
24 on the rig knowledgeable of drilling and well  
25 operation practice and associated engineering

1 technical practices?

2 A. So I don't know the status of that one.

3 Q. How about work permitting process, is it  
4 in place and working?

5 A. Again, that would not fall directly  
6 under the marine authority's obligations, that would  
7 be more -- so the action items and the reports are  
8 addressed to the wells team leader. I would support  
9 him in the marine conditions that are associated  
10 with the report.

11 Q. But your group is the one who got --  
12 conducted this -- this audit?

13 A. No, sir.

14 Q. Your group did not conduct the -- the  
15 rig and maritime assurance audit?

16 A. No, sir.

17 Q. Who -- who initiated that -- that audit?

18 A. The audit is initiated by the wells team  
19 leader in line with policies, procedures, and the  
20 time frames that are indicated from the marine side  
21 by myself. The assessment was completed by a  
22 central team that conducts assessments of MODUs to  
23 the protocols on behalf of BP.

24 Q. Who is the well team leader for the  
25 Macondo project?

1           A.       Mr. John Guide is.

2           Q.       So he should have full visibility and  
3 awareness of the status of the Horizon with regard  
4 to -- relating to this audit?

5           A.       Yes, sir.

6           Q.       How about control of alarms and  
7 bypasses, are they well managed by the time of the  
8 casualty?

9           A.       I believe a number of the -- the  
10 specific alarms inhibits that were called out as  
11 part of the assessment were closed out.

12          Q.       How about these 390 routine items  
13 corresponded 3,545 man-hours, how many of  
14 those -- what was the number of items?

15          A.       On the maintenance side, I don't know  
16 the status of the condition.

17          Q.       How about the digital and analog  
18 drilling instrumentation? Are they -- have been  
19 fully -- properly calibrated and up to date?

20          A.       I don't know that. If that's particular  
21 to drilling equipment, I have no accountability.

22          Q.       On March 23, 2005, a fire and explosion  
23 occurred at the BP Texas City refinery in Texas  
24 City, killing 16 worker and injuring more than 170  
25 others.

1                   Are you aware of that incident?

2           A.       I am aware of that incident.

3           Q.       The Chemical Safety Board conducted an  
4 investigation, and one of the conclusions was the  
5 cost cutting, failure to invest and production  
6 pressure from BP group executive managers impaired  
7 process safety performance at Texas City.

8                   What did -- what did -- in your  
9 group, what -- what is your knowledge of -- what did  
10 BP do with to ensure -- what did BP do to address  
11 that conclusion in terms of ensuring the safety of  
12 offshore deepwater drilling operation?

13          A.       In relation to drilling operations.

14          Q.       Yes, sir.

15          A.       I can't answer that question. I have  
16 limited knowledge and experience in drilling  
17 operations and activities.

18          Q.       Okay. How about in your own operation  
19 that you responsible for, what did BP do or you  
20 did -- BP did or you did that addressed that -- that  
21 concern, cost cutting, failure to invest, production  
22 pressure from BP group executive managers, impair  
23 process safety performance?

24          A.       So in recent years, the process that I  
25 have outlined whereby we do an assessment of a

1 vessel, in addition to the classification and the  
2 statutory requirements by executing the industry  
3 standard IMCA CMID at BP's cost. That was one  
4 initiative that was taken in the marine field in  
5 recent years.

6 Q. On July 11, 2007, on his first  
7 deployment trip the BP THUNDER HORSE, the largest  
8 floating drilling and production platform at the  
9 time, listed more than 22 degrees and almost sank in  
10 the Gulf of Mexico.

11 What -- what did you do at the  
12 marine authority to ensure that didn't happen again?

13 A. So at the time of the incident, I was  
14 not marine authority. There was no marine authority  
15 identified as a position across the BP group. I was  
16 brought in from the shipping organization to support  
17 the Gulf of Mexico business in dealing with  
18 the -- the incident and to identify the marine risks  
19 that associate with the business. And that, again,  
20 is part of the same conversation of whereby over the  
21 last few years, we have built a process to use the  
22 IMCA CMID protocol as a means of assessing vessels  
23 that are used by BP's Gulf of Mexico business, and  
24 this is in addition to the statutory classification  
25 and flag-state requirements.

1 Q. When a marine casualty -- major marine  
2 casualty such as the near sinking of the THUNDER  
3 HORSE, what is BP process to -- and lesson learned  
4 and ensure improvement made to its Safety Management  
5 System?

6 A. So there was a formal investigation and  
7 corrective actions identified.

8 Q. Okay. In terms of corrective action,  
9 are you aware of any corrective action to improve  
10 the Safety Management System resulting from the  
11 THUNDER HORSE casualty?

12 A. So one of the actions was the  
13 establishment of a marine authority structure across  
14 the BP group and the enhancement of marine  
15 personnel, marine skills within each business, to  
16 address the marine risks within the business.

17 Q. How many Transocean vessels owned a  
18 contract with BP at the time of the DEEPWATER  
19 HORIZON casualty?

20 A. I believe there were four.

21 Q. After the casualty, did BP conduct a rig  
22 and maritime assurance audit on any of the remaining  
23 Transocean vessel on contract?

24 A. Post the incident, no.

25 Q. How many on contract -- are still in

1 contract with BP?

2 A. The marine assessments are all up to  
3 date, in line with the identified time frames.

4 Q. How many -- how many Transocean vessel  
5 are still on contract with BP?

6 A. Globally?

7 Q. In the Gulf of Mexico.

8 A. Gulf of Mexico, there are -- excluding  
9 the Horizon, there's three rigs on contract.

10 Q. Okay. How about globally?

11 A. I cannot answer that question.

12 Q. And did BP do any rig maritime assurance  
13 audits of all three Transocean vessel testing on  
14 employment -- in employment with BP?

15 A. Post the incident?

16 Q. Yes, sir.

17 A. No.

18 Q. DNV in Marshall Island recognize the  
19 organization issued the ISM safety management  
20 certificate to the DEEPWATER HORIZON; is that  
21 correct?

22 Were you aware -- were you aware of  
23 the result of the May 2007 audit?

24 A. No, sir.

25 Q. Why not?

1           A.           Again, maritime authority.  So the ISM  
2 assessment is a relationship between the flag state  
3 and the operator.  I did not receive a copy of the  
4 full report.

5           Q.           The DNV is a recognized organization for  
6 flag state, but the results should be conducted --  
7 the audit conducted on your vessel, and the result  
8 and the certificate achieved is communicated with  
9 your company, you're the maritime authority, and you  
10 say it's between the DNV and Marshall Island?

11          A.           So I don't view that the DEEPWATER  
12 HORIZON is my vessel.  The operator is Transocean.  
13 The relationship and the obligation to meet flag  
14 state and classification statute requirements rests  
15 with Transocean.  I can request copies of  
16 documentation from Transocean only.  I don't believe  
17 I'm allowed to communicate directly with  
18 classification society and flag state around the  
19 status of a vessel.

20          Q.           Sir, I did not ask that.  I'm asking,  
21 were you aware of the results of that audit?

22          A.           No, sir.

23          Q.           As the marine authority who vetted  
24 vessel for employment, should you look at the result  
25 of various statutory class surveys and audits?

1           A.       I have occasionally done random audits  
2 of the classification status of each of the vessels  
3 and employment, but it's almost an ongoing  
4 requirement to carry out inspection and various  
5 assessment of flag states. So, I would expect that  
6 the status of those inspections is covered as part  
7 of the assessment that was done in September, 2009.  
8 If there's any serious anomalies, anything that has  
9 not been closed out, it should be recorded in these  
10 assessments.

11           Q.       So when a -- when a vessel that you  
12 contract, you only randomly review their record?

13           A.       The -- the classification society  
14 records, yes, or we would look at them when we do  
15 the CMID assessment. I don't look at them on a sort  
16 of day-to-day, week-by-week basis of where the  
17 status of the classification or flag state  
18 requirements are. I expect the operator to -- to  
19 meet those obligations.

20           Q.       How about ABS as a Marshall  
21 Island-recognized organization and they issued an  
22 IMO MODU Code to the DEEPWATER HORIZON in 2006, are  
23 you aware of the -- are you aware of the results of  
24 that au- -- that inspection before you selected --  
25 before BP employed DEEPWATER HORIZON?

1           A.       I believe the vessel was already in  
2 employment by BP at that time, but I did not see the  
3 outcome of that -- of that report.

4           Q.       As a maritime authority and as a  
5 professional mariner, do you think there is adequate  
6 government oversight of recognized organizations  
7 that are authorized to issue statutory document such  
8 as the IMO MODU Code or the ISM Code certificate to  
9 a vessel? Do you think there's adequate government  
10 oversight?

11          A.       I don't believe I can answer that  
12 question.

13          Q.       Do you think in this particular case,  
14 this being a coastal state, which the United States,  
15 should just accept statutory document issued by a  
16 flag state, in this case Marshall Island, without  
17 question?

18          A.       Again, I don't believe I'm in position  
19 to answer that question.

20          Q.       Based on your knowledge, do you know  
21 what are the contributing causes to this casualty?

22          A.       I don't believe I have sufficient  
23 information to be able to offer answers to that  
24 question.

25          Q.       I'm going to ask you a number of

1 questions relating to improvement to prevent  
2 something like this from happening again.

3                   Based on your knowledge of this  
4 casualty and the state of industry, to enhance the  
5 effectiveness of the safety net for offshore oil  
6 exploration and production, should the government  
7 governing federal regulation be more restrictive?

8           A.       Again, I don't believe I'm in a position  
9 to answer that question without going and doing some  
10 further evaluation of exactly what we see in flag  
11 states.

12           Q.       Should industry capabilities for  
13 offshore marine firefighting be enhanced?

14           A.       Again, I don't believe I'm in a position  
15 to answer that question.

16           Q.       Should the Coast Guard manage regulation  
17 to require an operating MODU to have a standby  
18 vessel with fast rescue craft?

19                   In this case, the vessel, an  
20 offshore supply vessel, the DAMON BANKSTON, was  
21 critical to the rescue of 115 survivor.

22           A.       Uh-huh.

23           Q.       So would you -- should the Coast Guard  
24 manage regulation to require a standby vessel with  
25 such capability?

1           A.        So, again, I'm -- I'm not party to the  
2 detail information of how the BANKSTON supported the  
3 incident. I believe a vessel of this type is  
4 required to have a rescue craft available on board.  
5 Again, I don't believe I'm in a position to give you  
6 that detail.

7           Q.        Should the Coast Guard update the  
8 standard for primary lifesaving equipment to reflect  
9 the actual average size and weight of a person  
10 working offshore currently provided for 165 pound?  
11 Survey results show that about 220.

12                        Do you think the Coast Guard should  
13 update that standard?

14           A.        I believe that is something that needs  
15 to be addressed within the industry. That is  
16 something that...

17           Q.        Should the Coast Guard and the Bureau of  
18 Ocean Energy Management, Regulatory Enforcement  
19 develop comprehensive regulation to ensure proper  
20 oversight of more complex floating offshore  
21 installation, including the BP THUNDER HORSE or  
22 ATLANTIS?

23           A.        Can you repeat that question?

24           Q.        Yes, sir. Floating offshore  
25 installations such as the THUNDER HORSE and

1 ATLANTIS, do you agree that it's more complex than  
2 the -- for example, the DEEPWATER HORIZON, DEEPWATER  
3 HORIZON only dealing with drilling. THUNDER HORSE  
4 both drilling and production. Should there be more  
5 comprehensive regulation developed for these more  
6 complex system vessels?

7 A. Again, I don't believe I'm in a position  
8 to fully answer that question. There is a effective  
9 regime of regulatory oversight in place for those  
10 facilities.

11 Q. In terms of risk-based decision-making  
12 targeting vessels, should the Coast Guard implement  
13 a port state control type vessel targeting system  
14 for the Gulf of Mexico?

15 You're familiar with the Coast Guard  
16 port state control program, aren't you?

17 A. Yes, sir.

18 Q. Should we implement something similar to  
19 the port state control program -- targeting program  
20 that we have for the port -- for the Gulf of Mexico  
21 operations?

22 A. So this is for foreign-flagged vessels  
23 in particular?

24 Q. Yes, sir.

25 A. Again, I believe any sort of assessments

1 that are going to enhance the operations on a vessel  
2 I believe is a good thing, and certainly the Coast  
3 Guard can add value to assessments and processes.

4 Q. Based on what you know about this  
5 casualty, should the International Maritime  
6 Organization amend the whole code to improve  
7 construction and equipment standard for  
8 structural -- for structural fire protection and  
9 firefighting capabilities?

10 A. I don't believe I'm in a position to  
11 answer that question.

12 Q. Should the International Maritime  
13 Organization amend the MODU Code to require a single  
14 individual to serve both as master and offshore  
15 installation manager?

16 A. Again, I think there's merit in terms of  
17 making that evaluation, but I'm not in a position  
18 to -- to say yes or no whether that is  
19 a -- something that should be progressed.

20 Q. Should the IMO amend the International  
21 Safety Management Code to require government audit  
22 their recognized organization audit management  
23 system? Because right now, ABS and DNV and MOEX and  
24 other organizations will all do -- conduct a  
25 statutory inspection and issue a certificate. Do

1 you think that's adequate -- that the code should be  
2 amended to require government oversight of those  
3 organization party management systems?

4 A. Again, I'm not in a position, I don't  
5 think, to provide a full and complete answer.

6 Q. Do you have any recommendation that you  
7 think that would enhance the effectiveness of the  
8 safety net for the offshore oil production --  
9 drilling production?

10 A. There's nothing I can think of.

11 CAPT. NGUYEN: Thank you. I have no  
12 further questions at this time.

13 HON. ANDERSEN: Mr. Dykes?

14 Is the witness comfortable?

15 E X A M I N A T I O N

16 BY MR. MATHEWS:

17 Q. Mr. Cramond, earlier this morning, you  
18 were asked a question basically to give the scope of  
19 your job responsibilities, and I think you said that  
20 you would identify the marine risks for BP and then  
21 mitigate -- offer mitigations to address those  
22 risks; is that correct, sir?

23 A. Yes, sir.

24 Q. Can you please briefly and high level  
25 tell me what risk is?

1           A.       Risk is -- is the -- the relationship  
2 between a -- a consequence that happens as part of  
3 an operation and the potential of that consequence  
4 occurring.

5           Q.       So the likelihood of an event occurring  
6 multiplied times the consequence?

7           A.       That's one way to -- to term it.

8           Q.       Okay. Can you please tell me  
9 just -- you keep referencing the CMID, and there was  
10 multiple mitigations or adrift timelines. Were  
11 those mitigations addressed by April 20th?

12          A.       From the marine conditions that were  
13 identified in the September, 2009 assessment, I  
14 believe there were 70 marine-specific conditions.  
15 63 had been addressed, 7 were in progress to be  
16 progressed. And that was verified during a visit to  
17 the rig in March of 2010.

18          Q.       And also in that CMID process, I  
19 believe -- if you want to refer to it, it's  
20 BP-HZN-MBI-00136214, should be the third page ahead,  
21 sir. And it begins, "The marine assurance was  
22 captured." It should be highlighted.

23          A.       Yes, sir.

24          Q.       Can you read where it starts  
25 Recommendations, second sentence?

1           A.           "Recommendations from the marine  
2 assurance audits are included in CMID annex, BP  
3 requirements for MODUs report."

4           Q.           Can you continue, please?

5           A.           "If a recommendation is not accepted,  
6 the reason for the decision should be documented,  
7 filed and rig audit group informed. All marine  
8 recommendations from this report must be tracked and  
9 satisfactorily closed out."

10          Q.           Was there any recommendation that was  
11 not accepted by the marine authority in accordance  
12 with this document?

13          A.           No. The conditions were accepted.

14          Q.           To your knowledge, had the DEEPWATER  
15 HORIZON ever been dry-docked?

16          A.           I don't specifically know the answer to  
17 the question. I don't believe it has.

18          Q.           And how long have you been involved with  
19 MODU operations specifically in the Gulf of Mexico?

20          A.           From late 2005-2006.

21          Q.           So would you have a working knowledge  
22 from 2000 to 2005, or was your answer based on 2005  
23 until present?

24          A.           My answer primarily is based on 2005 to  
25 present.

1 Q. Was it scheduled to go to the shipyard  
2 in late 2010, early 2011?

3 A. I don't know the answer to that  
4 question.

5 Q. Do you know as a result of this audit if  
6 a maintenance list had been prepared to address  
7 long-term marine authority issues?

8 A. As a result of the September --

9 Q. Outside of the --

10 A. -- 2009.

11 Q. Outside of the CMID and this audit, was  
12 there a work list that was prepared by your marine  
13 authority group to hand over to Transocean if there  
14 were to be a shipyard?

15 A. No, sir. No.

16 Q. I'm going to refer to the audit that  
17 we've been talking about. Can you refer to page 2  
18 of the document, BP-HZN-MBI-00136212?

19 A. Yes, sir.

20 Q. And I believe the fourth paragraph is  
21 highlighted.

22 A. All right.

23 Q. Can you please read that to me, sir?

24 A. "The audit made a number of findings.  
25 Based on the nature of these findings, i.e., rig

1 floor nonoperational and the potential adverse  
2 effect on rig emergency preparedness and watertight  
3 integrity regarding the marine-related issues, a  
4 recommendation was made to the wells team to suspend  
5 operations until many have been satisfactorily  
6 addressed."

7 Q. Did BP ever suspend operations with the  
8 DEEPWATER HORIZON with that recommendation?

9 A. Yes, sir.

10 Q. They did?

11 A. Yes.

12 Q. And when did they?

13 A. I believe there was request on the 22nd  
14 of September for the rig to return to work, and a  
15 number of items were identified that either have to  
16 be closed out or suitable mitigations addressed  
17 prior to me agreeing that the vessel could go back  
18 to work.

19 Q. And that was handled with Mr. John  
20 MacDonald?

21 A. That was handled with the rig manager,  
22 Mr. Paul Johnson.

23 Q. Paul Johnson. Thank you.

24 I'm going to refer to another page  
25 now, sir. I'm going to go to page 14 of the

1 document, and that's BP-HZN-MBI-00136224, and it's  
2 section entitled "Power Plant."

3 Do you have that in front of you?

4 A. Yes, sir.

5 Q. Can you please read that first paragraph  
6 that's highlighted?

7 A. "Engine No. 1 was overdue since May,  
8 2009, on planned 24,000-hour overall, while engine  
9 No. 4 was overdue since June, 2008, and a planned  
10 24,000-hour overall and 12,000-hour turbocharger  
11 replacement. The maintenance supervisor cites a  
12 lack of manpower as the reason for no progress."

13 Q. Okay. And what did your office  
14 specifically do about this manpower issue?

15 A. It was documented within the report, and  
16 it would have been highlighted to the rig leadership  
17 team as part of the assessment.

18 Q. Did you ever talk to Mr. Paul Johnson or  
19 Mr. John MacDonald as to what the manpower  
20 deficiency was?

21 A. I did not.

22 Q. Would you identify that as a risk?

23 A. I think if the engines were  
24 nonoperational, that would be a considerable risk.  
25 But this was -- there was overhaul outstanding,

1 which, you know, needed to be addressed as part of  
2 Transocean's maintenance workers.

3 Q. What if I told you the No. 4 engine had  
4 been nonoperational for over a month? Would that be  
5 a risk?

6 A. That would be. And I'm not aware that  
7 the engine was nonoperational.

8 Q. Do you receive the BP daily operation  
9 reports?

10 A. No, sir, I do not.

11 Q. Can you read the second-to-last  
12 paragraph we have highlighted, sir?

13 A. "Control of alarms and defeats and  
14 bypasses was not well managed. In fact, no single  
15 person could account for which alarms, et cetera,  
16 were overridden or indeed for what reason."

17 Q. Was this performance acceptable to BP's  
18 risk and rig audit group?

19 A. I believe that was called out, the  
20 condition that needed to be attended to.

21 Q. Then why was it allowed?

22 A. I can't answer that question.

23 Q. I'm going to refer to the next page of  
24 the document I have for you. It's No. 17, and  
25 that's BP-HCN-MBI-00136227, and this goes into the

1 audit report action sheet; is that correct, sir?

2 A. Correct.

3 Q. Can you please give me a high-level  
4 definition of what a Class 1 incident item is?

5 A. Class 1 item is an item that does not  
6 comply with BP policy or standard.

7 Q. Okay. And how about a Class 2, sir?

8 A. A Class 2 is an item that is outside API  
9 legislation and rig owner policies and have high  
10 safety or environmental impact potential.

11 Q. Do you know how many items in BP's --  
12 this specific audit in September of 2009 actually  
13 fell under Class 1 items?

14 A. I don't know the specific number.

15 Q. I counted out 11. Does that sound  
16 accurate to you?

17 A. These rig operations.

18 Q. I'm specifically talking audit, not  
19 marine.

20 A. I don't know whether that number is  
21 accurate or not.

22 Q. If there were 11 that were outside of  
23 BP's policies or standards, would that be acceptable  
24 to you?

25 A. So I have no accountability or

1 experience to comment on the drilling activities.  
2 If it was purely marine, then I would be wanting to  
3 understand what mitigations were in place.

4 Q. Do you know how many items actually fell  
5 on the Class 2?

6 A. No, sir, I don't know that number.

7 Q. I counted those as well, and it was 54,  
8 so I'm not going to ask you to verify that, but  
9 would you think that having 54 items outside of API  
10 standards, legislative standards and Transocean  
11 standards be a risk or policy issue?

12 A. I believe that carries a risk.

13 Q. Are you familiar with BP's golden rules  
14 for safety?

15 A. Yes, sir.

16 Q. Is it true that everyone who works for  
17 or on behalf of BP has the responsibility for the  
18 safety of those around them and themselves?

19 A. Yes, sir.

20 Q. Do you believe that is a safety  
21 deficiency that has 65 items labeled as Class 1 or  
22 Class 2 that fall under or fall outside of BP's,  
23 Transocean's legislative and API standards?

24 A. I believe that that condition would have  
25 to be fully assessed.

1 Q. With all these issues identified within  
2 this audit, do you think there's a fundamental flaw  
3 for BP to pay \$500,000 a day knowing that they have  
4 all these problems with the rig?

5 A. So, again, a lot of the conditions that  
6 apply to the drilling activities, I'm not qualified  
7 to comment on that type of activity. On the marine  
8 side, it was felt that the conditions identified  
9 could be mitigated and followed through with proper  
10 verification.

11 Q. So in your opinion, with this audit, the  
12 marine authority assessment, there was no issues  
13 with safety; they had been addressed in a timely  
14 fashion and that you were satisfied with the end  
15 results by April 20th?

16 A. So on the marine side, there was a  
17 number of verification visits. I was comfortable  
18 with the approach that Transocean had taken in terms  
19 of taking ownership of the conditions and  
20 progressing the closeout.

21 Q. And earlier, you talked about Mr. Paul  
22 Johnson.

23 How often do you interact with  
24 Mr. Johnson?

25 A. Very rarely.

1 Q. Very rarely. Do you know if there's a  
2 differing day rate when there's downtime associated  
3 with the rig?

4 A. I am not familiar with the commercial  
5 terms of -- of the rig or any of the vessels that we  
6 employ.

7 Q. Do you receive any type of bonus or  
8 incentives if a rig is to maintain operations  
9 throughout a year?

10 A. I personally do not.

11 MR. MATHEWS: Thank you, sir, I have  
12 no further questions.

13 HON. ANDERSEN: The captain has a  
14 couple follow-ups, and then we'll go to  
15 other Board members.

16 F U R T H E R E X A M I N A T I O N  
17 BY CAPT. NGUYEN:

18 Q. Mr. Cramond, earlier on in my  
19 questioning of you, I asked you about ISM Code and  
20 particularly the master and his responsibility for  
21 operation, and you -- and you agreed with me that  
22 operation according to ISM Code does not  
23 differentiate between marine and drilling  
24 operations.

25 Do you recall that?

1           A.       Yes, sir.

2           Q.       During these exchanges, you keep telling  
3 Mr. Mathews and the Board here that you're not  
4 responsible for the drilling items.

5                    Can you tell me whether there's  
6 a -- there's some stovepipes going on here that  
7 you're responsible -- there's some people  
8 responsible for certain things like marine  
9 activities, operations, and then some people  
10 responsible for the drilling operation activities,  
11 and it seems like there's no overall arching  
12 bridging of these parties' activities to ensure that  
13 we have an accurate picture of what's going on so  
14 that we can make, you know, effective decision here.

15                   Can you make me feel a little bit  
16 comfortable here that at BP there is these  
17 coordinating -- there are coordinating mechanism in  
18 place to ensure that every aspect is looked at and  
19 everybody can see the -- have the big picture in  
20 mind?

21           A.       So the accountable party for the  
22 operation of a particular vessel or a MODU is  
23 clearly identified. It's the wells team leader or  
24 maybe it's the project manager that is executing a  
25 broad scope of work. A vessel being used to execute

1 that work comes with a standard set of marine risks.  
2 Watertight integrity, navigation, propulsion,  
3 positioning systems, which is the primary focus for  
4 me and for my team.

5                   The particular mission of a vessel,  
6 then, brings different levels of risk and  
7 complication. Some of the systems in support of  
8 drilling operations may also be a support for the  
9 marine risk, and then there might be equipment that  
10 is particular to the one mission.

11                   I see the project manager or the  
12 wells team lead as accountable for encompassing all  
13 of those risks. My primary focus is in  
14 communicating the specific marine risk, watertight  
15 integrity, navigation, station keeping, propulsion.  
16 There is a broad set of supports to those project  
17 managers or to the wells team lead for all of the  
18 aspects of the MODU operation.

19           Q.       So from what I understand is that the  
20 well team leader, in this case Mr. John Guide, he's  
21 the one who have the big picture, including  
22 everything going on on DEEPWATER HORIZON, including  
23 third parties like Halliburton, M-I SWACO, all those  
24 people working, their activities, he should have  
25 full awareness of everything going on, and he's the

1 coordinating authority on all this stuff?

2 A. That is my understanding.

3 CAPT. NGUYEN: Okay. Thanks.

4 HON. ANDERSEN: Any other beard  
5 members?

6 MR. McCARROLL: Yes, I have a  
7 follow-up question.

8 E X A M I N A T I O N.

9 BY MR. McCARROLL:

10 Q. Mr. Cramond, you just said John Guide is  
11 the primary responsible person --

12 A. I believe so.

13 Q. -- to follow up on this audit? Did I  
14 hear you correctly?

15 A. That's correct.

16 Q. Is there some sort of conflict existing  
17 in Mr. Guide's job that he's also responsible for  
18 getting the well drilled timely?

19 A. I don't believe I can answer that  
20 question. I don't know exactly what Mr. Guide's  
21 responsibility -- full responsibilities are.

22 Q. Because if the rig experiences a lot of  
23 downtime due to repairs, it's obvious to me that the  
24 well is not going to get drilled on time. And I  
25 would think Mr. Guide would also be evaluated on the

1 basis of the well being drilled on time.

2 A. I'm not specifically knowledgeable about  
3 Mr. Guide's full responsibilities. That -- you  
4 know, that is a clear understanding that the wells  
5 team lead is accountable for the full conditions  
6 that are identified as part of the rig assessment as  
7 well as the marine element of this assessment. My  
8 team support him in understanding the marine aspects  
9 and in terms of progressing those conditions  
10 to -- to closeout.

11 Q. When you say your team, who is your  
12 team?

13 A. I have a team of marine professionals  
14 who are accountable for, in some instances,  
15 progressing a CMID assessment. In other instances,  
16 they take the report and they assess the conditions  
17 and the risk of those conditions. They have a line  
18 supervisor who is a marine vessels manager that  
19 reports directly to me. So it's a team of about ten  
20 individuals that support this activity.

21 Q. Does one of those individuals report  
22 laterally to Mr. Guide?

23 A. So each of the MODUs or each of the  
24 vessels that's employed BP business will have an  
25 accountable marine advisor that is a dotted line, is

1 a support to the wells team lead or the project  
2 manager.

3 Q. Could you tell us the name of that  
4 individual?

5 A. Time of the assessment in September,  
6 2009, the nominated marine advisor was Mr. Marshall  
7 Perez. Mr. Perez left BP soon after the assessment,  
8 and an MOC was completed to hand over the DEEPWATER  
9 HORIZON accountabilities to Mr. Angel Rodriguez.  
10 The supervisor to each of those advisors remained  
11 the same throughout this period.

12 Q. So do you evaluate these individuals,  
13 Mr. Perez, Mr. Rodriguez, in your position?

14 A. In terms of "evaluate," you're talking  
15 about their professional experience and  
16 competencies?

17 Q. Yes, sir.

18 A. So they were each recruited into the BP  
19 business under the direction of myself so that  
20 experiences, competencies, are seen as applicable  
21 and suitable for the work that they are being  
22 employed to do.

23 Q. Could you speak to their competence?

24 A. So, again, as they are assessed on an  
25 ongoing basis for their competence and their sort of

1 delivery of performance, the -- each of the marine  
2 advisors that we employ are marine professionals in  
3 their own right. They either sail on different  
4 vessels or they have their difference of marine  
5 qualifications.

6 Q. Do you know how much they interact with  
7 equivalent people like Mr. Guide? Is that a daily?  
8 Weekly? Monthly-type interaction? Can you give us  
9 some feel for the interaction there?

10 A. So, again, the actual detail I cannot  
11 describe. They are accountable for ensuring that  
12 there is a regular communication dialogue and  
13 interaction with each of the project teams. It  
14 would be dependent upon the activities that -- in  
15 this case, the rig was performing. I would expect  
16 that Mr. Perez was -- was very busy in terms of  
17 supporting Mr. Guide and the assessment team  
18 offshore during the month of September when the  
19 repair period was being progressed.

20 Q. Would you be able to say whether  
21 Mr. Perez has more than one rig that he's working  
22 with at a time, or is he specifically assigned to  
23 one rig?

24 A. We try to keep them assigned for one  
25 rig. I can't answer that question specifically for

1 last year. I can't recollect.

2 Q. But normally it's one rig per person?

3 A. It will be one rig, but they will also  
4 have other accountabilities. Any one day, I can  
5 have up to 60 vessels, third-party operated vessels  
6 employed in BP business in the Gulf of Mexico. So  
7 the workload is divided up, dependent on expertise,  
8 depending on the workload to make sure that the  
9 right level of support and advice is given to a  
10 wells team lead or to a project manager.

11 Q. Just on speculation, if Mr. Perez  
12 disagreed with Mr. Guide on some situation, whether  
13 action be taken now or later, what would he do?  
14 Would he bring that to your attention, the  
15 disagreement, or some other person?

16 A. So we have a structure in place whereby  
17 conditions that are realized on a vessel are  
18 prioritized in our ranking/scoring system. Anything  
19 that is a priority 1 or 2 is elevated to myself.  
20 Anything that is a less of a condition, Mr. Perez is  
21 accountable for dealing with that himself with  
22 support from his supervisor. If it was a serious  
23 condition and there was misalignment, I would expect  
24 that to be raised to myself.

25 Q. Do you -- do you recall if anything was

1 raised to your attention on HORIZON, between  
2 Mr. Perez and Mr. Rodriguez and Mr. Guide?

3 A. There was a meeting between Mr. Perez,  
4 Mr. Endicott as my -- as Mr. Perez's supervisor and  
5 myself, around some of the conditions that have been  
6 discovered as part of the assessment on what our  
7 action plan was going to be, and this was after  
8 there was a request to return the vessel to work,  
9 and an action plan was developed between those  
10 parties and communicated to Mr. Guide and to  
11 Mr. Johnson.

12 Q. And who was at this meeting? Exactly?

13 A. That was a meeting between myself after  
14 the conditions had been elevated by Mr. Perez and  
15 Mr. Endicott.

16 Q. So you were meeting with those two  
17 individuals?

18 A. Internal BP marine meeting to look at  
19 the conditions and whether or not we felt the vessel  
20 was acceptable to return to work. A recommendation  
21 was made to Mr. Guide and was also communicated to  
22 Mr. Johnson.

23 Q. Was anybody else present at that  
24 meeting?

25 A. Not to my recollection.

1 Q. Their supervisor wasn't present?

2 A. Their supervisor?

3 Q. Mr. Perez or Mr. Rodriguez. Their  
4 supervisors.

5 A. Mr. -- yeah, their supervisor, Mr. Troy  
6 Endicott, was present, but not --

7 Q. Oh, Mr. Endicott was present?

8 A. I think the conversation was between  
9 Mr. Perez, Mr. Endicott as his supervisor, and  
10 myself.

11 MR. McCARROLL: Thank you. No  
12 further questions.

13 HON. ANDERSEN: Any other Board  
14 questions?

15 MR. DYKES: Yes.

16 E X A M I N A T I O N

17 BY MR. DYKES:

18 Q. Mr. Cramond, according to the audit --  
19 and I'm reading from page 2 of the document,  
20 BP-HZN-MBI-0136212, the very first paragraph, the  
21 last sentence states, "The audit was undertaken by a  
22 four-man team from 13 to 17 September, 2009."

23 And in the third paragraph, the  
24 recommendation was made to suspend operations. And  
25 you told us that the operations were suspended on

1 the rig for a period of roughly -- I think on  
2 September the 22nd, you stated that the request was  
3 put in to return to work; is that correct?

4 A. That's correct. On my recollection.

5 Q. So operations were suspended for five  
6 days, basically. The question I have is, on  
7 September the 22nd, when the request was made, had  
8 any verification been made by BP for whatever  
9 corrections had been made up until that point in  
10 time?

11 A. A lot of different questions there, sir.  
12 I'll try to answer them all completely.

13 Q. The main question is, when the request  
14 was made on September the 22nd, had BP verified any  
15 of the deficiencies as being corrected, or was a  
16 request made based on a timetable to get the repairs  
17 made?

18 A. So I believe at the time that a number  
19 of the conditions identified and communicated to the  
20 Transocean rig team by the assessment team had  
21 already been closed out. There were a number that  
22 had been fixed at the time. The conditions that  
23 were being identified would have been communicated  
24 to Transocean almost on an ongoing basis between the  
25 13th and the 17th, which gave them the ability to

1 begin to progress closeout of some of the  
2 conditions.

3                   On the 22nd, the conversation was  
4 primarily focused around watertight integrity. I  
5 believe you made the comment that the vessel was out  
6 of service, but obviously the vessel is still  
7 afloat. There are a number of systems that you  
8 cannot take out of service. In particular, the  
9 vessel was -- was not drilling, which was the only  
10 operation that maybe wasn't being conducted.

11           Q.       They suspended operations.

12           A.       That's correct. So the focus of the  
13 mitigations and the conditions being progressed that  
14 I requested on the 22nd primarily were around  
15 watertight integrity.

16           Q.       You also stated that there were a number  
17 of verification visits made after the audit in  
18 September of 2009. How does BP document these  
19 verification audits or visits? Is there -- is there  
20 a field report written up when your personnel go out  
21 to do the verification visits?

22           A.       So between September and October, the  
23 marine advisor nominated to the rig had a internal  
24 spreadsheet whereby he recorded the conditions that  
25 he was focusing on and recorded the actions that

1 have been taken and commented on those post his  
2 verification visit in October.

3                   After October, we adopted the  
4 Transocean spreadsheet which was owned by Mr. Paul  
5 Johnson whereby we completed the verification of the  
6 actions and the status as communicated by  
7 Transocean.

8           Q.       Earlier, you stated with some of  
9 Capt. Nguyen's questions that the captain is  
10 responsible for the safety of the vessel and the  
11 crew. And we understand now that the well team  
12 leader is -- has the overall picture from BP's side  
13 of the equation.

14                   Is there a process within the  
15 organization for making sure that the wells team  
16 leader communicates with the captain of the vessel?

17           A.       From the BP wells team leader to the  
18 captain of the vessel of the HORIZON? I believe the  
19 communication is -- is -- is primarily through the  
20 OIM. So, again, the OIM on the vessel will have  
21 accountability again for these broader aspects of  
22 the whole activities or operations of -- of the rig.

23           Q.       But is there -- okay. Is there a  
24 process in place where the wells team leader will  
25 communicate with the OIM directly, or do they just

1 strictly go through the company man on board?

2 A. I can't completely answer that question.

3 HON. ANDERSEN: Any other Board  
4 questions?

5 MR. WHEATLEY: Just briefly, sir.

6 E X A M I N A T I O N

7 BY MR. WHEATLEY:

8 Q. Sir, in response to Mr. Dykes' questions  
9 about those items that were corrected before the  
10 vessel was put back into service, you indicated they  
11 dealt with watertight integrity.

12 Do you recall specifically what  
13 those issues were that you were concerned about?

14 A. So, again, a lot of detail contained in  
15 the report. Some of it was associated with  
16 watertight dampers that were contained within the  
17 insulation ductwork on board. A number had failed  
18 an operational test by the assessment team.

19 There was a serious issue with the  
20 watertight doors, whereby post operation by the  
21 crew, the watertight doors were opening by  
22 themselves.

23 There were deficiencies in the bilge  
24 and ballast systems that prevented water that would  
25 collect into the columns. They were unable to pump

1    them out.

2                            I think that primarily was the focus  
3    that we had.

4            Q.        Now, am I correct in understanding that  
5    these items were corrected to your satisfaction in  
6    that five-day period, or was there a timetable  
7    established over which they were required to be  
8    corrected?

9            A.        So some of the items were corrected and  
10   some of the items Transocean provided a change in  
11   procedure, an MOC document whereby I put in place  
12   temporary operating procedures and assessed the  
13   risks prior to the temporary operating procedure and  
14   post the temporary operating procedure.  And, in my  
15   view, as a short-term measure for a risk, a  
16   watertight integrity risk that was a base risk, they  
17   were acceptable mitigations as a short-term risk.

18           Q.        Do you recall what the duration was to  
19   do complete correction of those issues were, the  
20   longest timeline?

21           A.        I can't remember the details of each one  
22   of those, but...

23           Q.        Was it weeks?  Months?  To address some  
24   of these issues?

25           A.        I think for the watertight integrity, it

1 was weeks and months, it was not certainly longer  
2 than.

3 MR. WHEATLEY: Thank you, sir, I  
4 have no further questions this morning.

5 CAPT. HIGGINS: Just a couple  
6 questions, sir.

7 E X A M I N A T I O N

8 BY CAPT. HIGGINS:

9 Q. Did marine safety fall within your  
10 marine operations in terms of the safety of the  
11 crew, or is that the captain's responsibility?

12 A. In terms of personal safety or -- I'm  
13 not quite sure what you mean by marine safety.

14 Q. The safety of the personnel on board,  
15 yes, sir.

16 A. So in terms of, again, is the risk or  
17 potential dangers from the marine operations? I  
18 believe that does, yes.

19 Q. Were there operations that were outside  
20 of the marine operations that would also impact on  
21 the safety of the people on board?

22 A. So drilling operations, anything around  
23 sort of maintenance, which is outside of the sort of  
24 marine arena? I believe that as part of the Safety  
25 Management System, the captain is accountable to

1 ensure that those risks are addressed.

2 Q. Did you have any shared responsibility  
3 for those risks, or did that rely only on the  
4 captain?

5 A. Do I have any shared responsibility for  
6 the Transocean risks?

7 Q. For the risks that you saw were outside  
8 of specifically marine operations.

9 The point I'm trying to make is that  
10 a number of things that could affect the safety of  
11 the personnel on board which were operating within  
12 the marine operations you're saying now are falling  
13 outside of your cognizance.

14 Who is the linking point between the  
15 different sections? Is it the captain, or is there  
16 someone below that that's responsible for overall  
17 safety on board the rig?

18 A. On board the rig? I believe the  
19 overarching accountability falls to the OIM.

20 MR. WHEATLEY: Thank you.

21 HON. ANDERSEN: Captain?

22 F U R T H E R E X A M I N A T I O N

23 BY CAPT. NGUYEN:

24 Q. Based on the interaction between you and  
25 Mr. Dykes, I'm still concerned about this in the

1 sense that -- my concern is that it seemed like the  
2 companies are emphasizing the drilling operation.

3           So, for example, you've got a well  
4 team leader who has overall picture of what's going  
5 on from the operator side, the BP side, and his  
6 communication is through the offshore installation  
7 manager who is responsible for the drilling aspect  
8 of it, whereas the captain's over here, he's  
9 responsible for the safety of his vessel and the  
10 people on there and, you know, preventing pollution  
11 to the environment, and he has very little say about  
12 decision to be made, he has very little awareness of  
13 what's going on in terms of risk, and tell me if  
14 I'm -- the picture in my mind is wrong.

15           A.       I believe what you've outlined is an  
16 accurate picture. There are a number of different  
17 activities and departments that are in place  
18 on -- on a rig such as this, a complex. It's a  
19 complex vessel with a very complex mission. The  
20 view I have is that the OIM is accountable for the  
21 coordination of each of those departments on board  
22 the rig. So that might be the drilling department.  
23 That might be the HSE department, that might be the  
24 maintenance department, and, also, one of those is  
25 the marine department.

1                   So the OIM is accountable for making  
2                   sure that the risks or the requirements of each of  
3                   those departments is understood and communicated,  
4                   and then the captain has particular accountabilities  
5                   for the safe navigation, keeping the vessel afloat,  
6                   and for dealing with the flag states and the  
7                   classification society requirements.

8                   Q.           I think that's where we have the  
9                   problem. I mean, if the captain -- the captain is  
10                  in charge, according to the ISM Code. He's  
11                  responsible for the operation and the safety of that  
12                  vessel, and -- and he's, according to the -- the  
13                  arrangement we have right now, is that he's only  
14                  responsible for navigation, dealing with class  
15                  society and regulatory people and stuff. I think  
16                  that's one of the problem we have here. I mean, he  
17                  should be the guy who in charge -- I mean, we're  
18                  going to hold him accountable. If we're going to  
19                  hold Capt. Kuchta accountable, we've got to make  
20                  sure that he has the awareness, he have been -- you  
21                  know, involvement in all this stuff. You can't just  
22                  say, you know, some code saying that he's  
23                  responsible, I'm going to hold him accountable; is  
24                  that correct?

25                  A.           I believe what you've described there is

1 correct.

2 Q. Okay.

3 A. Again, I'm not intimately familiar with  
4 the way Transocean operate their rigs. I see the  
5 captain as a -- this is a standard structure in the  
6 oil and gas industry. The -- the captain or the  
7 senior marine person is one of the key leaders in  
8 terms of executing the operations of that vessel,  
9 and he has the added ability to employ conversations  
10 with the designated person, sure, if he feels that  
11 the system is inadequate or that he's not being  
12 listened to.

13 Q. When you say "standard," does that mean  
14 that BP has this dual command structure in place,  
15 too, for each vessel, or is it just Transocean when  
16 you say standards of practice?

17 A. So it's a standard practice for the  
18 industry. So, again, as I made the comment based on  
19 the structure that's in place for oil and gas  
20 production facilities. That is an OIM, that is the  
21 senior leader offshore production.

22 Q. But this is a drilling vessel.

23 A. This is a drilling vessel, so the  
24 particular mission of this vessel is drilling.

25 Q. That's right.

1           A.           The particular mission of some of the  
2 floating structures that BP has in the Gulf of  
3 Mexico is oil and gas production. But they have a  
4 senior marine representative on board.

5           Q.           This vessel is a MODU, is underway, the  
6 captain is responsible for the overall safety of the  
7 vessel, the crew and preventing risk to environment.  
8 He should be the decision-maker. He should be the  
9 one who involved in all the decision. He have the  
10 final say that he hold --

11                       MR. FANNING: Excuse me, Captain.  
12                       If you want to finish your question, I'll  
13 hold my objection.

14                       HON. ANDERSEN: Well, let him finish  
15 his question, please, and then if you have  
16 an objection to it before he answers, you  
17 may do that.

18           Q.           (BY CAPT. NGUYEN) The question I have  
19 for you is, BP-owned vessel, do you have a single  
20 individual that -- who is the captain serving both  
21 as captain and OIM or do you have a split  
22 arrangement like what we've seen on DEEPWATER  
23 HORIZON?

24                       HON. ANDERSEN: Any objection to  
25 that?

1                   MR. FANNING: I don't have an  
2                   objection to the question of is this a  
3                   standard practice to have an OIM and a  
4                   captain separate, but all of the prefacing  
5                   remarks about the responsibility for the  
6                   safety, the OIM is responsible for the  
7                   drilling operation, and that's separate  
8                   from the marine operation. So for the  
9                   Captain, this Capt. Nguyen here, to say  
10                  that the master of the vessel is  
11                  responsible for the safety and all of the  
12                  decisions on the rig is just incorrect and  
13                  inaccurate.

14                 HON. ANDERSEN: Well, ultimately,  
15                 people are going to be able to present  
16                 information to the Board about how you  
17                 think things ought to be or how you think  
18                 things are. Obviously the Board is not  
19                 going to trick a witness. So if a Board  
20                 member has a preference or an  
21                 understanding, he's certainly welcome to  
22                 say that to assist the witness in  
23                 answering the question. But the only  
24                 question here was whether or not  
25                 you -- whether or not in your opinion the

1 captain has the sole authority for all  
2 these matters or whether or not it's a  
3 dual authority and whether or not BP has  
4 people in place to exercise that.

5 (Counsel confers with witness.)

6 MR. SCHONEKAS: Judge, I would ask  
7 that the question just be read back,  
8 because that's not my recollection.

9 HON. ANDERSEN: Good idea. Let the  
10 captain rephrase it.

11 Q. (BY CAPT. NGUYEN) The ISM Code say that  
12 the master responsible for the operation of the  
13 ship, of the vessel, the safety of personnel and  
14 prevention of protection of the environment,  
15 correct?

16 A. That's correct.

17 Q. All right. And in the ISM Code, it does  
18 not differentiate between drilling and marine  
19 operation, it just say operation, which, to me and  
20 to you, it means all operation; is that correct?

21 MR. SCHONEKAS: I'm going to object  
22 to the extent he's asking for a legal  
23 opinion from this witness.

24 CAPT. NGUYEN: No, I'm stating  
25 what's in the book. It's not a legal

1 interpretation here.

2 HON. ANDERSEN: But the -- the  
3 witness, it's his business to oversee the  
4 operation of these vessels, so you can  
5 state your opinion -- it might not be the  
6 same as the captain's -- and what your  
7 operational understanding is. But you  
8 don't have to make up or guess. And  
9 obviously the Board and others at some  
10 point in time will get to resolve  
11 conflicts if there -- if conflicts exist.  
12 Probably others will do that.

13 So what's your answer to his  
14 question?

15 A. So I don't believe I have direct  
16 responsibility for the operation of this vessel.

17 Q. (BY CAPT. NGUYEN) No, sir. I'm  
18 asking --

19 A. Okay. I think a statement was made.  
20 But I -- I agree with -- with your observation and  
21 your comment that I believe the ISM Code applies to  
22 the operation of the vessel irrespective of the  
23 particular mission that the vessel is designed to  
24 perform. Whether it's construction, whether it's  
25 drilling, whether it's simply a offshore support

1 vessel. I believe the ISM Code covers the whole  
2 operation.

3 Q. That's right. So the captain is  
4 responsible for the safe drilling operation?

5 A. The safe operation of the vessel.

6 Q. That's right. Okay. Now, and -- and we  
7 agree that the standard in the industry right now is  
8 that the captain does not have full visibility on  
9 what's going on in terms of the drilling operation  
10 and he doesn't have a lot of involvement in the  
11 drilling operation; is that correct?

12 MR. SCHONEKAS: Objection.

13 Compound.

14 CAPT. NGUYEN: This is between the  
15 witness and myself, please.

16 A. So the only thing I can comment for  
17 broader industry, which is, the structure that's in  
18 place I believe is a common structure --

19 Q. (BY CAPT. NGUYEN) Common structure.

20 A. -- that is adopted by the industry.

21 Q. Yes, sir. Now, when we are going  
22 through these discrepancies resulting from the  
23 September, 2009 audit and I asked you whether a  
24 major nonconformity under the ISM Code or not, as a  
25 former captain report, if I was aware of those

1 items, it would be significant concern to me whether  
2 I would issue an order to shut down the operation.

3                   Now, what is your -- and the  
4 government does not have visibility relating to  
5 these audits, company audits, so what's your  
6 recommendation, should we -- is there any way that  
7 we can change it so that the government would have  
8 greater visibility of what's going on so that we can  
9 intervene appropriately? Do you have any  
10 recommendation on that, sir? I'd greatly appreciate  
11 if you have any suggestion.

12           A.       I don't believe I can offer any  
13 recommendations at this time. I would have to look  
14 at the matter in more detail.

15                   F U R T H E R   E X A M I N A T I O N  
16 BY MR. DYKES:

17           Q.       On your drilling facilities such as  
18 THUNDER HORSE and ATLANTIS, do you have two  
19 individuals, one for the operation itself and then  
20 one for the marine unit such as the captain and an  
21 OIM or do you just have one individual in charge of  
22 the operation?

23           A.       So the OIM license is a license  
24 that's -- that's identified by the Coast Guard that  
25 has a marine aspect to it.

1 Q. So you only have one person in charge?

2 A. Completely in charge, yes.

3 Q. Okay. You don't have two individuals  
4 such as an OIM and a captain?

5 A. Not a captain as such, and I think  
6 the -- the distinction is that those facilities do  
7 not sail.

8 Q. Okay.

9 A. But there is a marine team lead that is  
10 accountable for running the marine department.

11 Q. And he reports to the OIM?

12 A. Yes, sir.

13 MR. DYKES: Thank you.

14 E X A M I N A T I O N

15 BY HON. ANDERSEN:

16 Q. When the captain asked about how you  
17 were doing on the various audit items with respect  
18 to the control of alarms and defeats and bypasses,  
19 you said that you seem to recall that some were  
20 closed out.

21 Do you recall whether some were not  
22 closed out, and, if so, which those were?

23 A. So I think as part of the questioning,  
24 there was a reference to inhibits within the power  
25 generation system, which I cannot recollect whether

1 they were closed out. There were some other  
2 inhibits that were recorded as part of the  
3 assessment which were followed up and were closed  
4 out.

5 HON. ANDERSEN: Okay. Any other  
6 Board questions?

7 What we intend to do is allow the  
8 Marshall Island to ask any questions, if  
9 their representatives do, and then we'll  
10 take a brief break and get to the parties  
11 in interest, beginning with BP.

12 And if each attorney could state his  
13 name for the record before asking  
14 questions, that would be helpful.

15 MR. LINSIN: Thank you, Judge. My  
16 name is Gregory Linsin, representing the  
17 flag state of the Republic of the Marshall  
18 Island.

19 E X A M I N A T I O N

20 BY MR. LINSIN:

21 Q. Mr. Cramond, you testified earlier that  
22 you at this point don't have a full understanding as  
23 to the causes of this casualty; is that correct?

24 A. That's correct.

25 Q. Based on what facts you do understand

1 that may have contributed to this casualty, do you  
2 have any recommendations that you are able to make  
3 within your sphere of responsibility that would  
4 mitigate the risks of such a casualty occurring  
5 again?

6 A. So without knowing the specifics of the  
7 incident, I don't believe I'm in a position to  
8 comment on that.

9 Q. Are -- are you aware of any changes or  
10 adjustments within your sphere of responsibility  
11 that you believe would reduce the risks of such a  
12 casualty occurring in the future?

13 A. I have nothing specific to offer. Once  
14 the cause of the incident is fully understood, then  
15 there should be a lesson learned and maybe a review  
16 process to progress; but at the moment, I cannot  
17 offer an answer to the question.

18 Q. Is your group, the Gulf of Mexico marine  
19 group, involved in that internal assessment now?  
20 Are you making those assessments for rigs that you  
21 have under operation in the Gulf today?

22 A. No. Not at the moment.

23 MR. LINSIN: I have nothing further.  
24 Thank you.

25 HON. ANDERSEN: Okay. We take a

1 ten-minute break, and want to keep moving  
2 forward. Thank you very much.

3 (Break.)

4 HON. ANDERSEN: The witness is still  
5 under oath in our normal one oath per  
6 proceeding rule. Mr. Monico had a  
7 statement he'd like to make before we  
8 begin the questioning by BP.

9 MR. MONICO: Thank you. Captain,  
10 there's one point of clarification. I'm  
11 not certain, but my notes reflect that you  
12 indicated that the THUNDER HORSE incident,  
13 where it listed, was in July of '07. I  
14 think it was July of '05.

15 CAPT. NGUYEN: Yes, I agree. Thank  
16 you.

17 HON. ANDERSEN: Okay. Does BP have  
18 any questions for this witness?

19 MS. KARIS: We do. Thank you.

20 Good morning. Hariklia Karis,  
21 H-A-R-I-K-L-I-A, K-A-R-I-S, counsel for  
22 BP.

23 May I proceed, please?

24 HON. ANDERSEN: Yes.

25 MS. KARIS: Thank you.

## E X A M I N A T I O N

1  
2 BY MS. KARIS:

3 Q. Mr. Cramond, I want to follow up and ask  
4 you some questions about a couple of the topics that  
5 you discussed this morning.

6 Focusing first on the rig audit that  
7 was performed in September of 2009. That report is  
8 titled "Rig Audit/Marine Assurance Audit."

9 Can you tell us whether there were  
10 various components of that audit? Beyond what you  
11 were doing.

12 A. There were various components.  
13 The -- the rig audit process focuses primarily on  
14 the -- the drilling equipments and drilling  
15 operations. The activity that was completed in  
16 September, 2009 was actually a follow-up to a rig  
17 audit assessment that had previously been completed.

18 In addition to that follow-up  
19 process, there was a marine assessment done which  
20 was to the -- the protocol of the common marine  
21 inspection documents as prescribed by the  
22 International Maritime Contractor Association, IMCA,  
23 which is a standard industry assessment for marine  
24 vessels. And in addition, there was some work  
25 completed to verify the condition of the dynamic

1 positioning system. So there were a number of  
2 upgrades to the equipment that holds the vessel on  
3 location and the power generation that is provided  
4 to those -- to the equipment that holds the vessel  
5 on location, and there were a number of verification  
6 actions were carried out to ensure those upgrades  
7 had been successfully completed.

8 Q. What does the marine assurance component  
9 cover different from the rig audit component?

10 A. In terms of equipment?

11 Q. Yes, sir, please.

12 A. So it's primarily focussed on watertight  
13 integrity, navigation systems, the pure marine  
14 operational aspects and the equipment that supports  
15 that.

16 Q. And with respect to your  
17 responsibilities, what areas did they fall in? Were  
18 they on the marine side or the rig audit side?

19 A. Marine side.

20 Q. Now, you were asked a couple of  
21 questions regarding certain of the items or findings  
22 in that audit. Can you tell us, for the marine  
23 side, what follow-up your team did following the  
24 audit that was conducted in September of 2009?  
25 First generally.

1           A.           So prior to the vessel returning to  
2 operation, there was a number of areas were  
3 identified for either closure or mitigations being  
4 implemented by -- by Transocean, and they were very  
5 sort of general in nature, and some of the  
6 verification to ensure that they had been  
7 implemented prior to returning to operations was  
8 completed by BP representatives on board the rig.

9                       There was a follow-up verification  
10 visit to the rig by one of the marine advisors  
11 within my team in September -- sorry, in October,  
12 2009 to focus on the immediate closure of some of  
13 the actions or conditions that had shorter time  
14 frames, and then there was a additional visit in  
15 March, 2009, again, where marine advisors from my  
16 team attended the rig to assess and to verify  
17 closure of some of those conditions by Transocean  
18 and the rig crew.

19           Q.           You were asked by Capt. Nguyen a  
20 question regarding a finding with respect to the  
21 alarms. And this would be at page 14 of the rig  
22 audit.

23                       "Control of alarms and defeats and  
24 bypasses was not well managed. In fact, no single  
25 person could account for which alarms, et cetera,

1 were overridden or indeed for what reason."

2 Do you have that page in front of  
3 you?

4 A. Yes, I do.

5 Q. And did that fall -- did that item fall  
6 within your area of responsibility, the marine  
7 assurance component?

8 A. Don't recollect seeing that as a  
9 condition that was included in the marine CMID  
10 documentation.

11 Q. Now, do you know whether as part of the  
12 follow-up work that Mr. Rodriguez of your team  
13 conducted, whether he confirmed that, in fact, the  
14 alarm override condition had been rectified and the  
15 alarms had been repaired?

16 A. I think that was particular callout for  
17 alarm override and bypass on the fire detection and  
18 gas systems that Mr. Rodriguez did verify had been  
19 progressed.

20 Q. And so by the end of Mr. Rodriguez's  
21 inspection in October of 2009, had the override  
22 condition been resolved to the best of your  
23 knowledge and BP's knowledge?

24 A. Yes.

25 Q. You were also asked some questions from

1 that same page, 14, regarding the engines. Under  
2 "power plant," engine one was overdue since May,  
3 2009, and a planned 24,000-hour overhaul while  
4 engine two was overdue.

5 Did that fall within your area of  
6 responsibility?

7 A. To a degree, it does, whereby the power  
8 generation is required to hold a vessel position  
9 through the dynamic position thrusters.

10 Q. And do you recall whether by April 20th  
11 of 2010, whether that condition had been rectified  
12 to the best of BP's knowledge?

13 A. I can't recollect.

14 Q. Let me hand you a document.

15 MS. KARIS: If I may approach?

16 HON. ANDERSEN: If you want to  
17 identify for all of us what that is, that  
18 would be helpful.

19 MS. KARIS: Certainly. This is a  
20 document -- I'm going to use it strictly  
21 for refreshing his recollection. I don't  
22 believe it's a BP -- excuse me. I don't  
23 believe it's an exhibit. But, for the  
24 record, this is an e-mail from  
25 Mr. Rodriguez to a number of individuals

1 containing the spreadsheet that reports  
2 the items from the September, 2009 audit  
3 and what the current status of those items  
4 was.

5 Q. (BY MS. KARIS) And, sir, I want you to  
6 use this strictly for the purpose of seeing if this  
7 refreshes your memory on whether or not the engine  
8 items that were identified in the report had been  
9 resolved.

10 And if you go to Section 2.4.18, and  
11 that would be the page ending 329.

12 A. That's correct. This is a document that  
13 was owned by Transocean. It does remind me. It  
14 talks about the action as being completed. No. 4  
15 engine is 100 percent complete, all RPMs and turbos.  
16 No. 1 engine has had all but PMs complete, turbos  
17 have been sent for balancing.

18 So it -- it gives an estimated  
19 completion of all the works of the 5th of March. So  
20 it details that the work was done.

21 Q. And so to the best of your knowledge, as  
22 of April 20, 2010, had the engine issues that were  
23 identified as part of the rig audit been completed  
24 based on information Transocean provided?

25 A. Yes.

1 MR. SCHONEKAS: Counsel, can we get  
2 the full Bates number for that?

3 MS. KARIS: Sure. It's  
4 2-7579-BPOS108-026-0000239  
5 through -- actually,  
6 notice all the pages have the same number.  
7 It's approximately a ten-page -- excuse  
8 me -- an 11-page spreadsheet. It's an  
9 e-mail with an 11-page spreadsheet  
10 attached.

11 HON. ANDERSEN: I take it from the  
12 length of that Bates number there's lots  
13 of documents in this matter.

14 MS. KARIS: That's a safe guess.

15 Q. (BY MS. KARIS) Mr. Cramond, the items  
16 that we just identified, along with various other  
17 items that are listed in the spreadsheet, does that  
18 reflect your team's effort to follow up on the items  
19 that were noted in the marine assurance component of  
20 the rig audit?

21 A. It does. The spreadsheet records the  
22 actions and the progress being completed by  
23 Transocean. It was actually a Transocean-owned  
24 spreadsheet, and then the -- the columns that  
25 identified were action items that have been verified

1 by Mr. Rodriguez, that is the verification that was  
2 being progressed by myself and my team.

3 MS. KARIS: I have no further  
4 questions. Thank you.

5 HON. ANDERSEN: Okay. The  
6 next -- next party in interest that can  
7 ask questions is Transocean, and our  
8 current plan is to follow the same order  
9 and rotate it. But as I indicated to the  
10 attorneys to the parties in interest  
11 before we began, being attorneys, they  
12 wanted to gather at 7:00 a.m. We might  
13 change that. So by the end of the day, if  
14 you -- if the -- if the attorneys would  
15 let us know, if you want to change the  
16 order to keep it more uniform, the Board's  
17 open to that. Our goal is to make sure  
18 that everyone knows when their turn is  
19 going to be, that we facilitate things so  
20 that you can each get to ask the questions  
21 that move the investigation forward in  
22 your one shot.

23 Counsel? The floor is yours. Thank  
24 you for your patience.

25

1 EXAMINATION

2 BY MR. CLEMENTS:

3 Q. Good morning, Mr. Cramond. My name is  
4 Miles Clements. I represent Transocean. I'm going  
5 to try and comply with the announced goal this  
6 morning of keeping questions to ten minutes or less,  
7 I assume, but bear with me.

8 Sir, we've heard your title, your  
9 responsibilities, going back, I think, your present  
10 title for four years, and we've heard about the  
11 follow-up rig audit which was performed in  
12 September, 2009. The point I want to make, that was  
13 simply a follow-up. The auditing process that BP  
14 was undertaking of the DEEPWATER HORIZON was an  
15 ongoing process, was it not?

16 A. There's a number of different time  
17 frames that define when we will do certain  
18 assessments. The rig audit element, which pays  
19 particular attention to the drilling equipment and  
20 the drilling operations, the -- the activity that  
21 was completed in September '09 was a follow-up to a  
22 previous rig audit.

23 Q. The year before?

24 A. I believe that's correct, yeah.

25 Q. I believe you called DEEPWATER HORIZON a

1 complex piece of equipment operating in a marine  
2 environment. So the process of maintenance,  
3 auditing, that would be a normal, ongoing process,  
4 would it not?

5 A. I believe that's a true statement.

6 Q. And your role, sir, among other things,  
7 in the Gulf of Mexico would be to confirm compliance  
8 with the safety standards of BP, its own management  
9 system, and to the extent the ISM Code or ISO 9001  
10 would be incorporated in the BP safety system; is  
11 that fair to say?

12 A. I don't think that's a true statement.  
13 I'm not accountable for verifying the operation of  
14 the DEEPWATER HORIZON with BP Safety Management  
15 Systems. I feel that's an obligation of the vessel  
16 operator, not BP.

17 Q. All right. BP is thoroughly familiar  
18 with the condition or was -- was thoroughly familiar  
19 with the condition of the DEEPWATER HORIZON, was it  
20 not?

21 A. So I believe through the assessments  
22 that were conducted, we have a view of what the  
23 condition is.

24 Q. Sure.

25 A. If there was any operational condition

1 there that had not been captured as part of the  
2 processes, I can't comment on those.

3 Q. Sure. Presumably those assessments went  
4 back to 2001 when the DEEPWATER HORIZON first went  
5 under contract to BP, would they not?

6 A. Again, I've not -- I don't believe I  
7 understand the assessments that were done as far  
8 back as 2001.

9 Q. You would expect them to be done at  
10 least so long as BP was operating this rig, would  
11 you not? Would you have any other expectation?

12 A. I wouldn't. Certainly since I've been  
13 involved with the Gulf of Mexico activities, there  
14 have been a number of assessments completed on the  
15 HORIZON since I took a position with the offshore  
16 business.

17 Q. In addition, so long as the DEEPWATER  
18 HORIZON was under contract to BP, there were always  
19 company men aboard, BP company men aboard, were they  
20 not?

21 A. I believe there were a number -- a small  
22 number of BP positions on board the rig.

23 Q. Sure. They were the top positions on  
24 the rig?

25 A. Again, I'm not familiar with the

1 different accountabilities, responsibilities of the  
2 company manager described and how they interact with  
3 Transocean and the offshore personnel.

4 Q. You would expect those BP company men to  
5 be familiar with the condition of the rig on a daily  
6 basis, would you not?

7 A. So, again, I don't know the actual sort  
8 of experience and competency of the company men that  
9 were there. I -- to fully understand the condition  
10 of marine systems, I would not expect a well-site  
11 leader or -- well-site leader to fully understand  
12 that. That's outside primarily of their experience  
13 and competency.

14 Q. You would expect the BP company men to  
15 be within the loop of information with regard to the  
16 marine systems on board the rig?

17 A. I would expect that, yes.

18 Q. Okay. And you would agree, sir, that BP  
19 had a safety interest in the company men being so  
20 informed, would you not?

21 A. That's a true statement.

22 Q. And an economic interest as well?

23 A. So I don't fully understand what you  
24 mean by an economic interest. I have no  
25 accountability, responsibility, or -- or dialogue

1 around costs, commercial and economic, associated  
2 with the rig.

3 Q. Sure. But you do know that operating  
4 the rig, paying the daily rate and the entire spread  
5 of the rig is an expensive proposition and one that  
6 BP is acutely interested in not having shut down for  
7 any safety reasons.

8 Would you agree with me?

9 A. Again, I don't think I can agree with  
10 that all-encompassing statement. You know, there is  
11 a significant focus on safe and reliable  
12 operations --

13 Q. For whatever the reason.

14 A. -- over and above, irrespective of the  
15 vessel that's being employed.

16 Q. The audit -- the safety audit that was  
17 conducted, that we've heard about in September,  
18 2009, the -- the follow-up rig audit, that it was --  
19 made findings and also formulated a plan to -- to  
20 address the laundry list of items, did it not? A  
21 plan with -- with regard to addressing the items  
22 within a timetable in a schedule?

23 A. It listed out conditions and it  
24 identified time frames that -- that those conditions  
25 should be rectified within.

1           Q.       And as quickly as those items in  
2           September, 2009, were identified, they were  
3           communicated to Transocean, were they not?

4           A.       The process is that the assessment team  
5           is supported by the Transocean personnel offshore in  
6           conducting the assessment. Any conditions that the  
7           assessment team would have seen would also have been  
8           visible to Transocean rig personnel, and I believe  
9           there is a formal sort of daily report whereby what  
10          has been progressed and what has been observed  
11          during the day is communicated.

12          Q.       And those items, Transocean would jump  
13          on and seek to knock out as quickly as they could  
14          and as thoroughly as they could, did they not?

15          A.       I -- I cannot confirm or disagree with  
16          that statement. There were a number of action items  
17          were closed out within a very short time frame.  
18          And, again, on the marine side, I was aware that  
19          there were a number of spare parts had been ordered  
20          as the condition had become apparent. Whether they  
21          jumped on, as you say, all of those action items, I  
22          cannot confirm or deny.

23          Q.       Sure. Some took longer than others, but  
24          there was no reason to delay, and however long it  
25          took, it was to the satisfaction of BP, was it not?

1           A.       From the marine-related items.

2           Q.       Yes.

3           A.       The verification was conducted to the  
4 satisfaction of my representatives.

5           Q.       I believe you said that for a period of,  
6 what, five days, beginning in mid-September, the rig  
7 was shut down and repairs and maintenance were done?

8           A.       So the rig was not completing drilling  
9 operations. There were a number of the systems were  
10 still operational.

11          Q.       Sure.

12          A.       To progress the assessments, I believe  
13 inspections that were required by the regulatory  
14 regime as well as upgrade activities to the dynamic  
15 systems.

16          Q.       And when the decision was made to resume  
17 operations, presumably BP was satisfied with the  
18 progress which had been made?

19          A.       Can you define which operations you're  
20 referring to?

21          Q.       The rig was -- the operations were was  
22 suspended for five days, were they not, for some of  
23 these action items to be addressed?

24          A.       There was a conversation around. There  
25 were a number of outstanding conditions associated

1 with watertight integrity, which I requested to be  
2 either rectified or mitigated prior to resuming  
3 operations for BP.

4 Q. It is the prerogative of BP, is it not,  
5 at any time to shut down the rig if it is concerned  
6 about safety violations, isn't that correct, sir?

7 A. I believe that's correct.

8 Q. And would you say that it was the duty  
9 of BP to say so in the event that BP felt that the  
10 rig could not be operated safely?

11 MS. KARIS: Objection. Calls for a  
12 legal conclusion.

13 HON. ANDERSEN: Well, let's qualify  
14 it this way: If in the normal operation  
15 of the -- the arrangement you had with  
16 Transocean, you felt that would be your  
17 obligation, you can let us know. But if  
18 you don't have an opinion with respect to  
19 the underlying legal obligations you might  
20 have, then you can tell us that as well.  
21 So you don't have to guess or speculate,  
22 but if there's an operational  
23 understanding that you have that would  
24 make that your duty, you can let us know  
25 that. But if that's not your

1           understanding or you don't know, those  
2           would be truthful answers as well.

3                       MR. CLEMENTS: Thank you, Your  
4           Honor.

5           A.        I believe I do have a duty that if I see  
6           a condition that should not be bad associated with  
7           the safe operations of this vessel from the marine  
8           aspects or any other, I have a duty to -- to  
9           communicate that to the responsible parties.  
10          There's evidence to show that I have done that on a  
11          regular and ongoing basis during the time I've been  
12          in the position of marine  
13          authority for BP Gulf of Mexico operations.

14          Q.        (BY MR. CLEMENTS) Thank you. And did  
15          you do so between September 22, 2009, and April 20th  
16          of 2010?

17          A.        So there was a period whereby there was  
18          a number of conditions associated with the  
19          watertight integrity that was still apparent. There  
20          was no evidence given to me that the Transocean had  
21          taken the necessary steps, and I communicated that I  
22          was not supporting the rig going back to work until  
23          those conditions were either rectified or mitigation  
24          were put in place to correct the conditions.

25          Q.        All right. And after BP scrutinized the

1 repairs that were identified and could be knocked  
2 out quickly in the 2009 audit, did the rig, in fact,  
3 go back to work?

4 A. I believe it did, yes.

5 Q. Let's talk about 2010. Was the rig ever  
6 shut down in 2010 because you or your department  
7 felt that it could not be operated safely?

8 A. Not from the marine department, no.

9 Q. Okay. You're also aware, sir, or are  
10 you aware that Transocean's safety system includes  
11 what's called safety time outs and stop-work  
12 authority. You're familiar with that?

13 A. Yes, sir.

14 Q. Does the same apply to the company men  
15 assigned to the DEEPWATER HORIZON?

16 A. So BP operates a -- a similar system.

17 Q. Yes. They have the authority to stop  
18 work or call a safety timeout as well, do they not?

19 A. Correct.

20 Q. Okay. Did they do so in 2010, to  
21 your -- to your knowledge?

22 A. I don't have any information to provide  
23 an answer.

24 Q. I'd like to focus your attention, sir,  
25 to the condition of the rig in April of 2010. I

1 believe in questioning by BP's counsel, you  
2 identified a finding, evaluation by Mr. Angel  
3 Rodriguez in March.

4                   Was he the marine operations lead?

5           A.       That's correct. He was the marine  
6 advisor assigned to the DEEPWATER HORIZON.

7           Q.       All right. And you've identified that  
8 there were 63 out of 70 findings that had been  
9 already cured, repaired from the September audit?

10          A.       Correct.

11          Q.       All right. And that, in fact, that  
12 finding of 63 out of 70 repairs completed in the  
13 five-month period was a subject of an e-mail, was it  
14 not, in which BP commended Transocean for  
15 accomplishing this.

16                   Do you recall that, sir?

17          A.       That's correct. That was an e-mail from  
18 Mr. Rodriguez following his visits to the rig  
19 whereby he was -- he particularly called out the  
20 actions by the rig crew and Transocean in closing  
21 out the conditions that had been apparent from 2009.

22          Q.       And he said so to Mr. Guide, to  
23 Mr. Cocalles,  
24 to Mr. Endicott, to Capt. Kuchta and others.

25          A.       So there's a list of people that the

1 e-mail was addressed to. I don't know exactly who  
2 was filling those --

3 Q. Sure.

4 A. -- positions at that time on the rig.  
5 But there is a long list of people at that --

6 Q. Okay. All right. So what we're talking  
7 about here is that 21 days before this casualty, BP  
8 was commending Transocean for the completion of  
9 the -- the tasks, the items identified in the  
10 September audit?

11 A. So the e-mail that Mr. Rodriguez was  
12 referring primarily to the marine conditions?

13 Q. Sure.

14 A. That's a true statement.

15 Q. Okay. And the items which were not yet  
16 completed were put on a six-month diary, were they  
17 not? Some of those were awaiting on repair -- spare  
18 parts that had been ordered, and they were set for  
19 follow-up six months later; is that correct?

20 A. That's correct.

21 Q. Is it fair to say that those items,  
22 those seven items were not deemed to be critical to  
23 the operation of the rig?

24 A. That's correct. Again, from my  
25 recollection, without going through the report --

1 Q. Sure.

2 A. -- and everyone, but that --

3 Q. That's what the e-mail suggests, does it  
4 not?

5 A. It does so.

6 Q. And if they were deemed critical or just  
7 plain important but not critical, BP certainly could  
8 have shorted the time for follow-up from six months  
9 to some shorter time, could it not?

10 A. That's correct.

11 Q. Deemed that that wasn't necessary, six  
12 months would do it, right?

13 A. Six months was felt like a realistic  
14 time frame for having the parts arrive and to  
15 conduct a follow-up verification.

16 Q. And was the belief based on  
17 Mr. Rodriguez's evaluation that there were no major  
18 nonconformities as of 21 days before this casualty?

19 A. When you say "nonconformities," how are  
20 you describing that term?

21 Q. Well, Capt. Nguyen asked you some  
22 questions about nonconformities. I think that was  
23 within the context of the definition of the ISM  
24 Code. You did answer those questions. So to the  
25 extent that you understand what a nonconformity is

1 within the meaning of the ISM Code, as of 21 days  
2 before this casualty, were there any major  
3 nonconformities aboard the DEEPWATER HORIZON?

4 A. I don't have the information to answer  
5 that question. The verification activities  
6 completed were primarily focused on or were  
7 completely focused on the conditions that were  
8 apparent around equipment from the 2009 assessment.  
9 They did not go into nonconformities in association  
10 with the ISM.

11 Q. Certainly no one in your department,  
12 Mr. Rodriguez or otherwise, told you that they felt  
13 there were major nonconformities on the DEEPWATER  
14 HORIZON within this period, 21 days before the  
15 casualty?

16 A. That conversation was not had, but the  
17 focus and the documentation that was provided by  
18 Mr. Rodriguez was focused purely on the conditions  
19 from the 2009 assessment equipment conditions.

20 Q. All right. Did you have any reason to  
21 believe that there were any major nonconformities as  
22 of April, 2010, on the DEEPWATER HORIZON?

23 A. No, sir.

24 Q. With regard to the vessel, the time in  
25 question approximate to the casualty, as far as you

1 knew as BP's Gulf of Mexico marine authority, was  
2 the DEEPWATER HORIZON tight, staunch, strong and fit  
3 for the work that it was performing at the time?

4 A. I believe so.

5 Q. Did anyone at BP ever tell you  
6 otherwise?

7 A. I don't recollect having that  
8 conversation with anyone at BP.

9 Q. And did either of the company men aboard  
10 the rig at the time of the casualty prior to the  
11 casualty ever report to your department or anyone  
12 else to your knowledge at BP that the vessel was  
13 other than fit for the purpose of the work it was  
14 doing for BP at the time?

15 A. Can you repeat the question, please?

16 MR. CLEMENTS: Would you read it  
17 back, please.

18 THE REPORTER: "Did either of the  
19 company men aboard the rig at the time of  
20 the casualty prior to the casualty ever  
21 report to your department or anyone else  
22 to your knowledge at BP that the vessel  
23 was other than fit for the purpose of the  
24 work it was doing for BP at the time?"

25 Q. (BY MR. CLEMENTS) The question concerns

1 what, if anything, the company men would have  
2 reported, or did they report or did they not report  
3 any such concern?

4 A. So I'm hesitating, because, again, I'm  
5 trying to recollect how in the past conditions on  
6 board the DEEPWATER HORIZON or other rigs had been  
7 communicated.

8 Q. Well, it's not a hypothetical --

9 A. Whether it came from the company men or  
10 not.

11 Q. It's not a hypothetical question. It's  
12 simply, did they report to you any concern about the  
13 rig?

14 A. You said prior to this. I think there  
15 had been --

16 Q. Yeah, prior to the casualty.

17 A. I think there had been prior to this.  
18 There was an incident back in 2008, I believe, which  
19 was a  
20 flooding and listing incident where --

21 Q. Sure. I apologize.

22 A. Various concerns were raised, so I  
23 wasn't quite sure how --

24 THE REPORTER: Would you please not

25 --

1 Q. (BY MR. CLEMENTS) I may have got -- my  
2 question concerned April of 200- --

3 HON. ANDERSEN: We have to have only  
4 one person talk at a time, otherwise we  
5 can't get a good record, and I think he  
6 was referring to, let's say, 2010.

7 Q. (BY MR. CLEMENTS) Yeah. It was not a  
8 memory test going back four years. It was -- we're  
9 really talking about the condition of the rig in  
10 April of 2010.

11 A. So nobody reported any such conditions  
12 to me.

13 MR. CLEMENTS: Thank you, sir.  
14 That's all I have.

15 HON. ANDERSEN: Thank you.  
16 Any questions from Anadarko?

17 MS. KIRBY: Yes.

18 HON. ANDERSEN: Thank you,  
19 Mr. Clements.

20 E X A M I N A T I O N

21 BY MS. KIRBY:

22 Q. Good morning, Mr. Cramond.

23 A. Morning.

24 Q. My name is Ky Kirby, and I represent  
25 both Anadarko and MOEX Offshore.

1                   Earlier, you testified that Anadarko  
2 and MOEX Offshore were partners of BP for the  
3 Macondo well. Do you recall that?

4           A.       I believe that to be true, yes.

5           Q.       When you said partners, were you  
6 thinking investors in the well?

7           A.       Yes.

8           Q.       Have you ever seen the operating  
9 agreement by which BP was drilling the well?

10          A.       No.

11          Q.       All right. So do you -- you don't have  
12 any knowledge, then, of whether that agreement  
13 provides to Anadarko or MOEX Offshore any rights  
14 whatsoever to control the operations on the  
15 DEEPWATER HORIZON, right?

16          A.       I have no information for the times in  
17 question.

18          Q.       You do know that BP had a contract with  
19 Transocean that permitted it to use the DEEPWATER  
20 HORIZON for drilling operations, true?

21          A.       Yes.

22          Q.       And that contract obviously super- -- or  
23 preceded the drilling of the Macondo well by some  
24 period of time given that you were auditing the  
25 DEEPWATER HORIZON in September of '09, right?

1 A. Yes.

2 Q. And, in fact, we heard just a moment ago  
3 that that audit was a follow-up from an audit that  
4 was conducted when?

5 A. So the -- the audit associated with the  
6 drilling operations I believe was January 2008.

7 Q. Okay. And do you have any reason to  
8 believe that somehow Anadarko and MOEX became  
9 parties to that contract between Transocean and BP  
10 that existed at least back in 2008?

11 A. I have no information to be able to  
12 answer that question.

13 MS. KIRBY: Thank you. I have  
14 nothing further.

15 HON. ANDERSEN: Thank you very much.  
16 And that was for Anadarko and MOEX  
17 Offshore, correct?

18 MS. KIRBY: Yes.

19 HON. ANDERSEN: Okay. Halliburton?

20 MR. GODWIN: No questions, Your  
21 Honor. Thank you.

22 HON. ANDERSEN: Cameron?

23 COUNSEL REPRESENTING CAMERON: No  
24 questions.

25 HON. ANDERSEN: M-I SWACO?

1 COUNSEL REPRESENTING M-I SWACO: No  
2 questions.

3 HON. ANDERSEN: Weatherford?

4 COUNSEL REPRESENTING WEATHERFORD:  
5 No questions.

6 HON. ANDERSEN: Dril-Quip?

7 COUNSEL REPRESENTING DRIL-QUIP: No  
8 questions.

9 HON. ANDERSEN: Douglas Brown?

10 MR. GORDON: We have questions.

11 HON. ANDERSEN: Okay. Counsel,  
12 could you state your name for the record.

13 MR. GORDON: Yes. It's Steve  
14 Gordon, and I represent Doug Brown.

15 May I approach the witness?

16 HON. ANDERSEN: Sure. For future  
17 reference, counsel gave the attorneys for  
18 the Board -- we got copies of those  
19 documents and his intention to use them  
20 about 40 minutes ago, and we were able to  
21 take a look at them, and counsel advised  
22 us, the Board, that there is no problems.  
23 There could be confidential information,  
24 proprietary information, or who knows what  
25 problem there could be. However, to

1 facilitate the testimony, if an attorney  
2 knows he's going to use a document, or  
3 she, let us know, let the witness know,  
4 certainly the witness' attorney -- in this  
5 case, Mr. Monico -- then could be  
6 reviewing it so that hopefully we can  
7 minimize or eliminate problems before use  
8 of documents during the actual  
9 examination.

10 So I want to thank counsel for  
11 giving is a heads-up on this.

12 MR. GORDON: Thank you.

13 MR. KOHNKE: And, Your Honor, can I  
14 ask -- as I did during the break, can I  
15 ask --

16 HON. ANDERSEN: Sure.

17 MR. KOHNKE: -- if the Board is  
18 going to use documents that the Board make  
19 copies.

20 HON. ANDERSEN: Yes. We're going to  
21 make an effort, as we had examined the  
22 witness earlier this morning, where we  
23 know that we're going to use a document  
24 from which we will ask questions, either  
25 duplicate copies or let you know about it

1           so it's readily obtainable so you don't  
2           have to go hunting through the several  
3           million documents that apparently you-all  
4           have mastered. But we won't tell your  
5           mothers how much you got paid for  
6           mastering them.

7                           E X A M I N A T I O N

8 BY MR. GORDON:

9           Q.           Mr. Cramond, to help you out, I'm most  
10           interested first about the Marshall Islands marine  
11           notice, page 1, pages 6 and 7.

12                       MR. SCHONEKAS: Counsel, could we  
13           get a Bates number?

14                       MR. GORDON: It's on the home port.  
15           There's no number to it. It's just  
16           entitled "Marine Notice," 7- -- Marshall  
17           Islands Marine Notice No. 7-038-2, revised  
18           December, '09.

19           Q.           (BY MR. GORDON) Have you ever seen that  
20           document before, sir?

21           A.           No, sir.

22           Q.           Okay. It was your testimony that one of  
23           your job duties was, I believe, to assess the  
24           certification of the vessel, correct?

25           A.           To ensure the certification is full and

1 complete and up to date.

2 Q. Does that include the minimum safe  
3 manning requirements?

4 A. That may well be part of the assessment  
5 as completed in line with the CMID protocol.

6 Q. And did you do that for the DEEPWATER  
7 HORIZON?

8 A. I can't recall whether or not that was  
9 particularly called out as part of the  
10 documentation.

11 Q. Are you familiar with the Marshall  
12 Islands minimum safe manning requirements?

13 A. No, sir.

14 Q. I will tell you and represent to you  
15 that before you are the most recent minimum safe  
16 manning requirements from the Marshall Islands.

17 MR. SCHONEKAS: Excuse me. I'm  
18 going to object.

19 This witness has testified that he  
20 has not seen the document, nor has he  
21 reviewed it in connection with his  
22 responsibilities. So I suggest that it's  
23 improper to delve further into this topic  
24 with this witness.

25 HON. ANDERSEN: Well, the attorney

1           may wish to ask him with respect to  
2           whether or not, in fact, certain  
3           conditions on the vessel met those  
4           requirements. But it's true that if he's  
5           not familiar with the document, I don't  
6           think it would be fair to cross-examine  
7           him with respect to his knowledge of it.

8                   And even where a witness is familiar  
9           with a document, it's hard to sit up there  
10          and answer questions. It's particularly  
11          hard if there's a document that you're  
12          expected to refer to when answering  
13          questions.

14                   So if a witness is not already  
15          familiar with the document at the time  
16          he's answering questions, either the  
17          witness or the witness' lawyer can let us  
18          know, and we're going to give the witness  
19          whatever time he thinks is necessary to  
20          assimilate the document to be able to  
21          answer questions. But if he's so  
22          unfamiliar with it or it's going to take  
23          so long that we don't think it's fair,  
24          then an objection like that would be  
25          sustained.

1                   So the reason I'm taking this length  
2                   of time to say it is, if any of you intend  
3                   to use documents that you'd like witnesses  
4                   to refer to, you know, it's not a gotcha  
5                   proceeding, we want it to be fair and give  
6                   witnesses a fair chance to answer so  
7                   things will move along smoothly if they  
8                   have a chance to review documents in  
9                   advance of testimony.

10                   But if they don't, this is obviously  
11                   really important to any witness, so we're  
12                   going to take the time for them to read  
13                   something before they have to start  
14                   answering questions on it. If the lawyer  
15                   really in good faith believes that it's  
16                   important to ask questions regarding that  
17                   document, which do you do?

18                   MR. GORDON: Absolutely.

19                   HON. ANDERSEN: There you go.

20                   MR. GORDON: And I think it will be  
21                   fairly quick.

22                   HON. ANDERSEN: Okay.

23                   Q.           (BY MR. GORDON) So have you had a  
24                   chance to at least review slightly the marine notice  
25                   from Marshall Islands.

1           A.           I glanced at the pages that are noted  
2 with the corner folded up.

3                       HON. ANDERSEN:   If he asks you a  
4                       question and you don't think that you've  
5                       had a chance to study it enough to give an  
6                       honest answer, let us know, and maybe  
7                       he'll skip over it or maybe it will be  
8                       important enough so that he'd like to  
9                       pause.   But you don't have to  
10                      answer -- you're not expected to memorize  
11                      this at all.   Okay?

12                      THE WITNESS:   Okay.

13           Q.           (BY MR. GORDON)   All right.   So, just to  
14 review, make sure -- on page 1, it says that it's  
15 from the Republic of the Marshall Islands, correct?

16           A.           Correct.

17           Q.           And it says the subject is the minimum  
18 safe manning requirements for vessels --

19                      MR. MONICO:   We've got to object to  
20                      this.   He has no -- he can't say whether  
21                      that's true or whether it's not.

22                      MR. GORDON:   I'm just saying, it  
23                      says what it says.

24                      MR. MONICO:   But you're suggesting  
25                      that he's confirming that this is the

1 document that you claim it to be.

2 MR. GORDON: I just want to make  
3 sure that the poster board I have here is  
4 what he's looking at.

5 MR. MONICO: But my point is --

6 HON. ANDERSEN: Okay. Here's what  
7 we'll do. You're a licensed attorney, and  
8 you have a professional responsibility.  
9 You can represent to the Board that that  
10 poster is the same as the document, and  
11 we'll take your representation. We don't  
12 need to quiz the witness on it.

13 MR. MONICO: And I have no problem  
14 with that. My problem is, your question  
15 seems to suggest --

16 HON. ANDERSEN: He's going to  
17 proceed that way.

18 MR. MONICO: -- that he can confirm  
19 that this document is what you say it is.

20 MR. GORDON: I will tell you it is  
21 applicable to the DEEPWATER HORIZON as I  
22 understand the DEEPWATER HORIZON was  
23 flagged to the Marshall Islands.

24 Q. (BY MR. GORDON) Is that your  
25 understanding, sir? Sir?

1 A. I'm, again, still scanning the page 1.

2 Q. She was flagged to the Marshall Islands,  
3 correct?

4 A. Yeah, it is a document that looks as if  
5 it is a marine notice issued by the Republic of the  
6 Marshall Islands.

7 Q. Okay. And now I'd like to ask you, you  
8 said that this vessel was a dynamically-positioned  
9 vessel, correct?

10 A. Correct.

11 Q. Can you see from the documents before  
12 you a classification called the DPV on page 6 or 7?  
13 Actually, page 7.

14 A. Can you repeat the question, please?

15 Q. Yes, sir. On page 7, if you'd look, can  
16 you see that the Marshall Islands has set forth a  
17 classification for safe manning called DPV?

18 A. So, again, maybe a difference in terms.  
19 A classification of DP- -- I don't see that.

20 Q. A schedule. A schedule.

21 A. A schedule that references DPV.

22 Q. All right. And can you look on page 6  
23 and see if there is a Schedule A for self-propelled  
24 mobile offshore drilling unit?

25 A. That's correct.

1           Q.       Based upon your experience, what is the  
2 difference between a self-propelled mobile offshore  
3 drilling unit and a dynamically-positioned vessel?

4           A.       A dynamically-positioned notation means  
5 that the vessel is capable of holding itself on  
6 location at one set position.

7           Q.       That's correct. And not to belabor it,  
8 it's underway, but not making way, correct?

9           A.       Underway but not making way.

10          Q.       It's moving through the water but not  
11 over ground, roger -- I mean, correct?

12          A.       So, for certain aspects of the  
13 operation, that would be correct. But then the  
14 vessel is also required to move locations, which I  
15 believe, again, would come under the DPV schedule.

16          Q.       Okay. Now, I will tell you that this  
17 vessel, DEEPWATER HORIZON, the testimony is that  
18 when it's on location, it has the offshore  
19 installation manager in charge.

20                   Is that your understanding?

21          A.       I don't feel I have -- you said that's  
22 part of the testimony.

23                   HON. ANDERSEN: Well, is it your  
24 understanding that that's the truth? When  
25 it's -- when it's stationary, the OIM is

1           in charge.

2           Q.       (BY MR. GORDON) I believe you testified  
3 to that as well.

4           A.       So the OIM has accountability for the  
5 full suite of activities and operations that the  
6 vessel is performing.

7           Q.       Right. He's in command of the vessel  
8 when it's on location.

9           A.       So "command" to me is a reference to the  
10 responsibilities of a master mariner, captain in  
11 command of a vessel, so I respectfully don't agree  
12 with the statement you made. I don't see him as  
13 being in command of the vessel.

14          Q.       Okay. I'm going to ask you to assume  
15 some things as true. Assume with me that the  
16 testimony in this case, this investigation --

17                   MR. SCHONEKAS: Object, Your Honor,  
18 this is a lay witness, not an expert.

19                   HON. ANDERSEN: You can -- let's  
20 hear the question, but no witness needs to  
21 be quizzed about prior testimony, although  
22 certainly references to the witness' own  
23 testimony makes sense to make sure that  
24 we're all on the same page. But obviously  
25 this witness' understanding of the lines

1 of responsibility at certain times during  
2 the operation could be very significant to  
3 the Board.

4 So why don't you tell us what the  
5 premises of your question are, and then if  
6 the witness has an opinion or has had  
7 experience that would bear on that, he can  
8 answer it. But I remind the witness, you  
9 do not need to guess or speculate.

10 THE WITNESS: Okay.

11 HON. ANDERSEN: And if you can keep  
12 the premise simple enough so that the  
13 array of us can follow it, that would be  
14 helpful.

15 Q. (BY MR. GORDON) I'll summarize for you  
16 the entire premise. I would like to determine if  
17 this vessel was properly classified under the  
18 Marshall Islands notice which I believe I can assert  
19 to this panel is the notice that would be applicable  
20 to the DEEPWATER HORIZON on April 20th of 2010. I  
21 just want to figure out if it was classified  
22 properly.

23 HON. ANDERSEN: So if you want to  
24 ask the witness that, he's an expert --  
25 well, he's a mariner in charge of this

1           large fleet. If you have an opinion, then  
2           you can answer that.

3           Q.           (BY MR. GORDON) So my question is,  
4 based upon your review of the marine notice, page 1  
5 as well as the schedules on page 6 and 7,  
6 understanding that the vessel DEEPWATER HORIZON,  
7 prior to sinking, was a dynamically-positioned  
8 vessel, would you agree with me that if it were  
9 classified properly under that document that the  
10 master, according to that document, would be in  
11 command and in charge of the vessel at the time she  
12 is on location?

13                       MR. SCHONEKAS: Objection. Calls  
14 for a legal opinion.

15                       HON. ANDERSEN: Well, this gentleman  
16 has operational understandings, so no  
17 witness, I suppose, can substitute its  
18 judgment for the Board, and in many  
19 respect, even the boards and regulatory  
20 agencies with respect to the law, but he  
21 can certainly testify as to the  
22 understanding he has based on lots of  
23 experience.

24                               Have you had a chance to consider  
25 the question, or -- you can take

1           your -- you can take your time, but you do  
2           not have to guess or speculate.

3           A.       I've considered the question. I'm -- I  
4           don't believe I have sufficient time or sufficient  
5           information to fully answer the question.

6                        In reviewing the document as -- as  
7           provided, my immediate thoughts are that the table  
8           does not reference what I believe the question I'm  
9           being asked to answer. The heading on page 6  
10          details reductions that are applicable in manning  
11          for different modes of operation. It does not  
12          reference who needs to be in charge, who is  
13          accountable. So, at the moment, I respectfully -- I  
14          don't feel I have sufficient information to read the  
15          document and to fully answer the question.

16          Q.       (BY MR. GORDON) First of all, we're not  
17          talking about reductions. Under schedule DPV, the  
18          master is always in charge, whether it's on location  
19          or whether it's moving, correct?

20          A.       So we're referencing the table now?

21          Q.       Yeah.

22          A.       I don't believe that table details that  
23          responsibility. It talks about personnel who are  
24          required to be on board. It does not detail who is  
25          accountable or who is in charge.

1 Q. That's your -- that's your reading of  
2 this document?

3 A. Looking at the document and at the time  
4 frame I have, you know, there's a lot of pages that  
5 detail information prior to just giving me these two  
6 tables.

7 MR. LINSIN: Your Honor, may I make a  
8 request at this point?

9 I am unclear, we are unclear as to  
10 whether counsel is simply asking this  
11 witness to read from a document or to  
12 actually testify about his views or his  
13 opinions based upon his personal  
14 experience. I believe, perhaps, the  
15 latter might be appropriate, but I don't  
16 see it benefitting this Board at all to  
17 have this witness reading a document that  
18 he's not otherwise familiar with.

19 MR. GORDON: I've asked him to look  
20 at the document, take his experience --

21 HON. ANDERSEN: Right.  
22 If -- if -- if you ask -- if Mr. Gordon  
23 wanted to ask a witness based on a  
24 reasonably short part of the document  
25 whether or not, incorporating his

1           experience, he can interpret the document  
2           and help us understand what it means,  
3           you're welcome to do that. But as I said  
4           before, you don't need to guess or  
5           speculate, and obviously there's a number  
6           of other ways that Mr. Gordon and his  
7           client can call to the attention of the  
8           Board the significance of the  
9           commissioning by the Marshall Islands and  
10          what that means.

11                        So now that we've talked so much, I  
12          forgot the question. Let's skip on to the  
13          next one.

14          Q.           (BY MR. GORDON) Okay. No problem.  
15          Let's see if I can get some questions answered, sir.  
16          You can put down the document for a moment.

17                        Is it your belief that when the  
18          DEEPWATER HORIZON was on location that the OIM was  
19          in charge and in command of the vessel; yes or no?

20          A.           Not in command of the vessel. But the  
21          captain being in command of the vessel, the broader  
22          mission-specific operations that were being  
23          conducted, the OIM is accountable for coordinating  
24          each of those activities.

25          Q.           Is it your belief as you sit here that

1 the DEEPWATER HORIZON was properly classified and  
2 manned appropriately on April 20th?

3 A. I have no information that would say  
4 otherwise.

5 Q. All right. And as you sit here for BP,  
6 you do not recall investigating or looking into  
7 whether or not she was properly classified through  
8 the Marshall Islands?

9 A. No, sir.

10 Q. And as I understand it, you are aware  
11 that Transocean's policy that it operates its  
12 vessels under or that when it's latched up -- and  
13 I'll tell you latched up means in the BOP and riser  
14 is down -- that the OIM is in charge of the vessel.

15 You are aware of that, correct?

16 A. Not specifically, no.

17 Q. Okay. Did you also say that the  
18 standard in the industry was that, that you believe  
19 that to be true?

20 A. The standard in the industry is to have  
21 an OIM on board the rig accountable for the full  
22 suite of operations and activities that are  
23 conducted. It's a coordination of the different  
24 departments that are applicable on board the rig.

25 Q. But when something happens, for

1 instance, there has to be somebody in charge, right?  
2 Is it your belief that the captain was in charge  
3 when something happened on the night of April 20th?

4 MR. SCHONEKAS: Object to the vague  
5 nature of something happening. Could you  
6 be more specific?

7 HON. ANDERSEN: I'm going to sustain  
8 that. There's a whole panoply of things  
9 that might occur or that may or may not  
10 have occurred. So if you want to ask the  
11 witness if he has an opinion with respect  
12 to whether or not, for example, the  
13 captain had a duty or the authority to  
14 respond with respect to a particular  
15 contingency, you can do that. And then if  
16 you have an opinion, you can give us your  
17 opinion.

18 So what -- is there a specific  
19 contingency?

20 Q. (BY MR. GORDON) Sure. I'll try.

21 Can you tell me if you think the  
22 captain had the authority to exercise and actuate  
23 the emergency -- the EDS, the emergency disconnect  
24 system?

25 A. For which particular piece of equipment?

1 Q. The blowout preventer, the EDS.

2 A. I would expect the captain has that  
3 authority.

4 Q. Okay. If he was never trained to  
5 operate that EDS, would you be surprised?

6 MR. SCHONEKAS: Objection whether  
7 the witness is surprised or not.

8 HON. ANDERSEN: Well, he -- you  
9 know, he's a person with experience, so I  
10 think that that's a fair question.

11 MR. GORDON: And it's his  
12 expectation I think that I'm more  
13 interested, "his" being BP's.

14 HON. ANDERSEN: Okay. So if you  
15 have an answer, you can let us know.

16 A. So whether he was trained specifically  
17 on that piece of equipment and its operation, I have  
18 no information of whether this particular captain  
19 was trained that way.

20 In terms of having the access to  
21 individuals who were trained, who understood the  
22 operation and being able to give an order to operate  
23 that piece of equipment, I would expect the captain  
24 to have that access.

25 Q. (BY MR. GORDON) Okay. And if the

1 captain did not feel that he had that authority to  
2 order the actuation of the EDS, that would also  
3 surprise BP, correct?

4 MR. WHEATLEY: I object to that  
5 question, Judge. It just seems to me that  
6 is so strikingly hypothetical.

7 MR. GORDON: Well, it's not  
8 hypothetical, it's in the testimony --

9 MR. SCHONEKAS: I object.

10 HON. ANDERSEN: The witness can't  
11 speak for the whole company, but in your  
12 own knowledge, would you expect that the  
13 captain would have access to someone who  
14 could operate that if necessary?

15 A. So I think that is what I previously  
16 stated, that that was the case. If the question is  
17 whether the captain felt he did, I have no --

18 MR. WHEATLEY: That's what my point  
19 was.

20 HON. ANDERSEN: Oh, okay. You  
21 can't -- we're not going to make a witness  
22 guess or speculate with respect to the  
23 subjective knowledge of somebody else.

24 Q. (BY MR. GORDON) It was BP's expectation  
25 that Capt. Kuchta had actual authority to effectuate

1 an order of the usage of the EDS, correct?

2 A. I would expect that.

3 Q. Are you familiar with Pride, the company  
4 called Pride?

5 A. Pride Offshore?

6 Q. Yes. Yes, sir.

7 A. Yes, sir.

8 Q. Do you work with them?

9 A. We have worked with Pride Offshore  
10 drilling in the construction and the contracting to  
11 two new mobile offshore drilling units. Neither of  
12 the rigs that are destined to be in the contract for  
13 BP Gulf of Mexico are in operational service.

14 Q. And are you familiar with the DEEP OCEAN  
15 ASCENSION that is owned and operated by Pride?

16 A. So that term "familiar" is -- myself and  
17 my team, we are conducting a number of assessments  
18 prior to that rig coming to work for BP.

19 Q. And, specifically, it's called the DEEP  
20 OCEAN ASCENSION?

21 A. There's two vessels that we're currently  
22 working on: One is the DEEPWATER ASCENSION and the  
23 DEEPWATER CLARION.

24 Q. Okay. And do you know Capt. Dan  
25 Sheehan?

1           A.       No, sir.

2           Q.       That vessel, that captain operates a bit  
3 different than the Transocean DEEPWATER HORIZON in  
4 that --

5                   MR. SCHONEKAS:  Objection, Your  
6 Honor.

7                   MR. GORDON:  May I finish, sir?

8                   MR. SCHONEKAS:  It's objectionable  
9 in its very form now because he's  
10 testifying, the lawyer is, about what  
11 other people do.

12                   MR. CLEMENTS:  Outside the scope of  
13 his --

14                   HON. ANDERSEN:  Wait just a second.

15                   Let's skip over that.  I mean, the  
16 DEEPWATER ASCENSION is not what's at issue  
17 here, but if the Board members have a  
18 chance to reflect on comparative questions  
19 involving that, then they can let us know  
20 if they feel that might be relevant.

21                   CAPT. NGUYEN:  Can you just explain  
22 what the similarities are?

23                   MR. GORDON:  Yes.  It's my  
24 understanding that Mr. Cramond has  
25 testified that this standard in the

1 industry is the way Transocean set up  
2 their operational system. It's my  
3 understanding that Pride completely is  
4 different in that their captain is the  
5 OIM. He's a licensed master. They're one  
6 and the same person, which are the  
7 questions that you-all were asking. That  
8 was it.

9 HON. ANDERSEN: So, ultimately,  
10 that's been an issue out here. Is there  
11 any question that -- in which --

12 MR. GORDON: Yeah. I can formulate  
13 a question. I can, sure.

14 HON. ANDERSEN: What's your  
15 question?

16 Q. (BY MR. GORDON) It would be, do you  
17 understand that the Pride Offshore drilling DEEP  
18 OCEAN or DEEPWATER ASCENSION, that their captain is  
19 also the OIM, that they're one and the same person,  
20 that that's the way Pride operates?

21 A. I don't have the information to be able  
22 to answer that question.

23 MR. GORDON: Okay. That will be it.

24 Q. (BY MR. GORDON) And are you familiar  
25 with the Transocean GLOMAR EXPLORER?

1 A. No, sir.

2 Q. Would you agree with me, going back to  
3 these documents and your understanding of MODUs  
4 generally, these documents being the marine notice,  
5 that you can have a self-propelled MODU that is not  
6 a DPV, correct?

7 A. Correct.

8 Q. And -- sorry. But you can have a  
9 self-propelled MODU that is DPV, correct?

10 A. Correct.

11 Q. Regarding the marine advisor  
12 Mr. Rodriguez, did you hire him?

13 A. Yes, sir.

14 Q. Can you tell me what he did for a living  
15 before you hired him?

16 A. His previous position prior to coming to  
17 work for BP was, he was -- he was conducting  
18 training for BP systems for one of the suppliers of  
19 equipment.

20 Q. Can you tell me if he holds a master's  
21 license?

22 A. I don't believe he does.

23 Q. Can you tell me if that was a  
24 requirement for BP to hold that position, hold that  
25 license for that position?

1           A.           Not for the regional position that  
2 Mr. Rodriguez was employed in.

3           Q.           And can you tell me when the last time  
4 he sailed on a MODU was?

5           A.           I can't answer the detail of that  
6 question.

7           Q.           Okay. Was that a requirement for being  
8 a liaison between BP and the vessel for audits?  
9 Don't you think it would be a good idea for that  
10 person to have MODU experience?

11                       MR. WHEATLEY: I object to the form  
12 of that question.

13                       HON. ANDERSEN: I'm going to sustain  
14 that objection in that our inquiry is --  
15 in fact, in the rules, we pointed out that  
16 we want to avoid during this evidentiary  
17 stage opinions and assertion. If a  
18 witness, based on his experience, has an  
19 opinion that's relevant to interpreting  
20 some event, that's fine. But we're trying  
21 to focus on what happened here, and  
22 certainly the -- all the Board members,  
23 perhaps other than Capt. Higgins and me,  
24 and maybe just I'm the only one who's not  
25 an expert in lots of these things, are

1           aware of these issues, and -- and there's  
2           certainly going to -- has been and will be  
3           a mechanism to express opinions to the  
4           Board. We would like the examination of  
5           the witness to concentrate on the facts  
6           that he or she knows so that the  
7           fact-gathering process can be advanced,  
8           not necessarily debating who's going to  
9           question to debate what models of  
10          commands, for example, might be best.

11                        So if you could -- you're not going  
12          to be -- I don't think you're going to be  
13          forestalled from suggesting to the Board  
14          that there's other different and maybe  
15          better models, but we ought to focus on  
16          the facts of this particular case.

17                        MR. GORDON: Can we turn to the  
18          other documents now?

19                        HON. ANDERSEN: Sure.

20           Q.           (BY MR. GORDON) Okay. Were you aware  
21          that on December 23rd, 2009, in the North Sea, that  
22          the Transocean vessel SEDCO 711 had a blowout?

23           A.           No, sir.

24           Q.           Then based upon what's happened here  
25          regarding the manning certificates, I'm not going to

1 go into the question regarding the documents that I  
2 gave you, but I would ask you, please, sir, to  
3 assume as true that there was a blowout and the BOP  
4 was actuated and the vessel was evacuated.

5 My question to you is: Acting in  
6 your capacity as BP marine -- I'm sorry, what was  
7 it, marine what?

8 A. Marine authority.

9 Q. -- marine authority for the Gulf of  
10 Mexico. Would that be something that BP would want  
11 to be told about from Transocean?

12 MR. FANNING: Judge, I object. When  
13 he says BP, does he mean this person here  
14 or anyone at BP?

15 HON. ANDERSEN: He can't speak for  
16 anyone at BP, but I think marine authority  
17 for the Gulf of Mexico, if Transocean had  
18 knowledge of an incident such as this in  
19 the North Sea, would you expect to be  
20 told?

21 THE WITNESS: If they were  
22 marine-related findings, yes, I would  
23 expect that to have been communicated to  
24 me through a number of vehicles, either  
25 through BP process or through Transocean

1 process or even through industry.

2 HON. ANDERSEN: Okay.

3 Q. (BY MR. GORDON) Just specifically, what  
4 would be the processes you think they would come to  
5 you from?

6 A. So, again, as I'm not exactly familiar  
7 with the incident whether there are any  
8 marine-related findings here --

9 Q. Assuming there were.

10 A. It could come through the Transocean  
11 marine department, it could come through the D&C  
12 marine department within BP.

13 Q. And do you know the names of the people  
14 that would have probably given you that information?

15 A. So there's a list of people that would  
16 sort of network and communicate lessons such as  
17 this.

18 There is a central, I think I  
19 indicated previously, rig audit function, which is  
20 the group that does the industry engagements and  
21 assessments of the MODUs under contract to BP. So,  
22 again, that is a form of lessons learned and  
23 communicating issues to help BP and the drilling  
24 community.

25 Q. Okay. If, for instance, you had been

1 told about this, both -- sometime before April 20th  
2 you had been told about this December 23rd blowout,  
3 would you have done anything whatsoever --

4 MR. CLEMENTS: This is entirely  
5 speculative. It doesn't --

6 HON. ANDERSEN: I'm going to sustain  
7 that objection because the witness  
8 testified he wasn't aware of this, and we  
9 all know there's so much complexity  
10 involved here that unless you had a chance  
11 to study it, I -- I would not feel  
12 comfortable under oath in holding you to  
13 your answer. However, obviously that is  
14 an issue that the Board can --

15 MR. GORDON: Yeah, I think what I'm  
16 trying to get at is, if he's been told  
17 something egregious had occurred, what  
18 procedures would he do so that, perhaps,  
19 if he's told when he -- a week from now  
20 about something, we can count on that and  
21 avoid these types of occurrences.

22 HON. ANDERSEN: The -- I think -- I  
23 didn't give counsel a full chance to  
24 object, but I think he was going to say  
25 that there's so many variables in

1           casualties and incidents, that unless the  
2           witness knows the extent and the nature of  
3           a particular incident, it's difficult for  
4           him to say what a reasonable communication  
5           of that end response would be.

6                       However, if you have -- if -- if you  
7           or your client have a position or a  
8           recommendation to make to the Board, I'm  
9           sure the Board is going to have a  
10          mechanism to hear what your thoughts are  
11          on how to -- further communication to make  
12          the world safer on a forward-looking  
13          basis.

14                       Next question.

15                       MR. GORDON: That's it.

16                       HON. ANDERSEN: Okay. Thank you  
17          very much.

18                       MR. GORDON: Can I have my documents  
19          back?

20                       HON. ANDERSEN: Yes. Are those  
21          yours or copies?

22                       MR. GORDON: Those are my copies.

23                       HON. ANDERSEN: Okay. Thank you.

24                       Jimmy Harrell?

25                       CAPT. NGUYEN: Good morning,

1 Mr. Fanning.

2 MR. FANNING: My name is Pat  
3 Fanning. I represent Jimmy Harrell, who  
4 was the OIM on the DEEPWATER HORIZON on  
5 April 20, 2010.

6 HON. ANDERSEN: How do you spell  
7 your last name?

8 MR. FANNING: My last name is  
9 spelled F-A-N-N-I-N-G.

10 HON. ANDERSEN: Thank you.

11 MR. FANNING: Sure.

12 E X A M I N A T I O N

13 BY MR. FANNING:

14 Q. Let me ask you first, we talked about  
15 the No. 4 engine and whether it was operational or  
16 nonoperational.

17 Did the No. 4 engine cause the well  
18 to go out of control on April 20, 2010, to your  
19 knowledge?

20 A. I don't have any information that allows  
21 me to answer that question.

22 Q. You don't know if that caused the  
23 explosion on the rig that day? You don't have any  
24 knowledge whether that --

25 A. I have no information that would lead me

1 to have the conclusion on what caused the explosion.

2 Q. Okay. Well, let's skip the other  
3 questions I have and go straight to the bottom line.

4 Wasn't the blowout that occurred on  
5 April 20, 2010, because of a well-control problem  
6 and not because of a marine safety issue? Do you  
7 know that much?

8 MR. GORDON: I object to that  
9 question in that --

10 HON. ANDERSEN: Once again, you  
11 don't need to guess or speculate, but  
12 given your position and the significance  
13 of this whole event, if you've developed  
14 an opinion with respect to whether or not  
15 marine factors were the cause, you can let  
16 us know. And we'd certainly -- the Board  
17 would be interested in knowing.

18 A. So I have no expertise to be able to  
19 sort of understand a well blowout scenario and sort  
20 of the interactions there, but I -- I don't have any  
21 information on -- or sufficient expertise to be able  
22 to give a full and complete answer.

23 Q. (BY MR. FANNING) But you're the marine  
24 authority for BP in the Gulf of Mexico; isn't that  
25 correct?

1           A.       That's correct.

2           Q.       And this was an explosion that occurred  
3 on board a vessel chartered by BP in the Gulf of  
4 Mexico while you were in charge, while you were the  
5 marine authority; isn't that correct?

6           A.       That's correct.

7           Q.       You've never bothered to look and see if  
8 it was a marine safety issue that caused the  
9 blowout?

10                   MR. GORDON:  Asked and answered.

11                   HON. ANDERSEN:  Well, yeah.

12                   We'll -- you can answer that.  However,  
13 your interests might not be identical, but  
14 it's hard sitting up there.  You can ask  
15 him without, you know, punching him too  
16 hard.

17                   MR. SCHONEKAS:  He's ours.

18                   HON. ANDERSEN:  Yeah, I know.

19                   That's a whole other thing.

20                   Okay.  What's the question?

21                   MR. FANNING:  You need me to go back  
22 to the question again?

23                   HON. ANDERSEN:  That's fine.

24           Q.       (BY MR. FANNING)  As the marine  
25 authority -- I'll tone it down a little bit.  As the

1 marine authority for the Gulf of Mexico for BP, you  
2 know, of course, that we had this horrific explosion  
3 and 11 men lost their lives and this terrible  
4 environmental disaster.

5 Did you make any effort to find out  
6 if it was because of a marine safety issue?

7 A. So there's an ongoing investigation by  
8 BP that will identify the root cause of the incident  
9 and will identify corrective actions.

10 Do I personally go and have a  
11 parallel investigation to sort of form [verbatim]  
12 along what's going on by BP, no, I have not, sir.

13 Q. Well, my question was not did you  
14 conduct a parallel formal investigation, but as the  
15 marine authority, wouldn't you have an interest in  
16 knowing if it was something within your authority,  
17 your purview at the company?

18 A. So I've had conversations with  
19 individuals within my team to -- to clarify the  
20 verification that was done around the -- around the  
21 conditions that were apparent, particular  
22 conversation with Mr. Rodriguez, to ensure that the  
23 process he went through to verify those conditions  
24 was as I would expect.

25 Q. So given the information that you had

1 and whatever interviews and questions you asked of  
2 people, do you have any information that leads you  
3 to believe that the cause of the blowout of the well  
4 was a marine safety problem?

5 A. No, sir.

6 Q. Thank you. Let me ask you, do you have  
7 any information that some confusion about who was in  
8 charge of the vessel between the OIM and the captain  
9 on April 20th, do you have any information that some  
10 confusion there was the cause of the well to blow  
11 out?

12 A. No, sir, I have no details.

13 MR. FANNING: Thank you. That's all  
14 the questions I have.

15 HON. ANDERSEN: Thank you very much.

16 Next we have Curt Kuchta.

17 MR. SCHONEKAS: Good morning,

18 Mr. Cramond, how are you today?

19 THE WITNESS: Good morning.

20 MR. SCHONEKAS: Having fun yet?

21 THE WITNESS: Yes.

22 MR. SCHONEKAS: I'll be very quick.

23 HON. ANDERSEN: Only two more hours.

24 THE WITNESS: Okay.

25 MR. SCHONEKAS: I'll be very, very

1                   quick.

2                                   E X A M I N A T I O N

3 BY MR. SCHONEKAS:

4           Q.       This dichotomy between the OIM and the  
5 captain that you've described --

6                   HON. ANDERSEN: I'm sorry, would you  
7 state your name for the record.

8                   MR. SCHONEKAS: Kyle Schonekas.

9                   HON. ANDERSEN: How do you spell  
10 your last name?

11                   MR. SCHONEKAS: S-C-H-O-N-E-K-A-S.

12                   Capt. Nguyen knows me.

13                   HON. ANDERSEN: Thanks.

14           Q.       (BY MR. SCHONEKAS) Sir, this dichotomy  
15 between the OIM and the captain that you've  
16 described as the industry standard, do you recall  
17 that?

18           A.       Yes, sir.

19           Q.       You've worked in the Gulf for how long,  
20 sir?

21           A.       Since 2004 in different roles.  
22 Offshore, I've been supporting the BP business  
23 offshore from 2005, mid-2005.

24           Q.       In those five or six years that you've  
25 been doing this, have you encountered any problems

1 insofar as this division of authority between an OIM  
2 and a captain?

3 A. So when you say "problems," can you --

4 Q. Meaning -- let me be more specific.

5 Are you aware of any accidents or  
6 injuries that have been occasioned as a result of  
7 having an OIM in charge of drilling and the captain  
8 in charge of the boat when it's underway?

9 A. Not that I can recollect.

10 Q. And you've worked with other contractors  
11 other than just Transocean; is that right, sir?

12 A. That's correct.

13 Q. And they have had no problems with this  
14 system; is that right, sir?

15 MR. GORDON: How would he know that?

16 HON. ANDERSEN: Only to the extent  
17 of your knowledge, all right? Are you  
18 aware of any problems?

19 THE WITNESS: Not that I can  
20 recollect.

21 Q. (BY MR. SCHONEKAS) Sir, have you ever  
22 suggested that that system be changed?

23 A. No, sir.

24 Q. Now, I want to ask you, do you know  
25 whether or not Transocean continues to work for BP

1 to this day? Are they conducting operations for BP?

2 A. Yes, sir.

3 Q. How many rigs?

4 A. So it would be -- the response  
5 effort -- so, globally, I -- I have no details to be  
6 able to answer the question. For the Gulf of  
7 Mexico, we have used three Transocean rigs as part  
8 of the response effort around the well site.

9 Q. With respect to the marine operations  
10 undertaken by Transocean on behalf of BP, tell the  
11 panel what changes BP has implemented since this  
12 accident in the marine side.

13 A. Can you repeat the question?

14 Q. There haven't been any changes in the  
15 marine operations -- let me rephrase it.

16 Since this accident, are you aware  
17 of any changes on the marine side or directives that  
18 you have given to Transocean?

19 A. I'm not aware of any changes.

20 Q. And if you believe, sir, that there was  
21 some glaring inadequacy, be it the chain of command,  
22 be it the marine operations, that you had any reason  
23 to believe contributed to this accident, you would  
24 implement that, would you not, sir?

25 A. I think I would complete reviews into

1 whether or not changes needed to be made. But as  
2 previously testified, there was a full and complete  
3 investigation being progressed. They will identify  
4 root causes and nominate corrective actions that  
5 perhaps need to be adopted or reviewed.

6 Q. But as you sit here today, you're not  
7 aware of anything that has changed vis-à-vis the  
8 directions that you have given Transocean; is that  
9 right?

10 A. That's correct.

11 MR. SCHONEKAS: Thank you.

12 HON. ANDERSEN: Thank you very much.  
13 Steve Bertone?

14 MR. LONDON: No questions.

15 HON. ANDERSEN: Patrick O'Bryan?

16 COUNSEL REPRESENTING PATRICK

17 O'BRYAN: No questions.

18 HON. ANDERSEN: Robert Kaluza?

19 MR. CLARKE: Yes. Thank you, Your  
20 Honor.

21 HON. ANDERSEN: Thank you.

22 E X A M I N A T I O N

23 BY MR. CLARKE:

24 Q. Good morning, sir.

25 A. Good morning.

1 Q. Thank you for being here.

2 My name is Shaun Clarke, and I  
3 represent Bob Kaluza. Bob was a well-site leader on  
4 THUNDER HORSE who agreed to step in for someone else  
5 for four days on the DEEPWATER HORIZON.

6 Do you know Bob?

7 A. No, sir.

8 Q. The THUNDER HORSE is also in the Gulf of  
9 Mexico, correct?

10 A. Correct.

11 Q. And so is it under your area of  
12 authority?

13 A. The marine activities, again, come under  
14 my oversight. And in addition, I have some  
15 maintenance and reliability accountabilities for the  
16 BP-operated oil and gas facilities.

17 Q. And as I understand it, BP owns THUNDER  
18 HORSE, but it's operated by a Pride International  
19 crew?

20 A. So you're referring to in particular  
21 the --

22 Q. Drilling?

23 A. -- the drilling. Yes, I believe that to  
24 be the structure that's in place, correct.

25 Q. Whereas the DEEPWATER HORIZON is owned

1 and operated by Transocean, correct?

2 A. I believe that to be correct.

3 Q. Now, Capt. Higgins and Capt. Nguyen  
4 asked you questions earlier about who sort of looked  
5 at the overall picture for the -- the DEEPWATER  
6 HORIZON or referred to a linking point.

7 I'd like to ask you, is there  
8 someone who's responsible to be a linking point  
9 between the different vessels, such as THUNDER HORSE  
10 and DEEPWATER HORIZON, to ensure that the crews are  
11 performing missions in the same way on those  
12 vessels?

13 A. In particular to the drilling activities  
14 or...

15 Q. Yes.

16 A. So there -- there are difference  
17 of -- line accountabilities within the D&C function,  
18 the drilling and completions function within BP's  
19 Gulf of Mexico business that each of the rigs or  
20 each of the rigs that are on the BP production  
21 facilities all report in to the online management  
22 system.

23 Q. And do you know if a guy like Bob Kaluza  
24 coming from THUNDER HORSE, working with the Pride  
25 crew, when he comes on DEEPWATER HORIZON, is he

1 going to know that that crew performs procedures in  
2 the same way as the one he normally works with?

3 MR. FANNING: I object, Judge. He's  
4 already said he doesn't even know  
5 Mr. Kaluza. How is he going to know what  
6 he would know if he moved around from rig  
7 to rig?

8 Q. (BY MR. CLARKE) I can take Mr. Kaluza's  
9 name out of the question and --

10 HON. ANDERSEN: Okay. So let's  
11 assume the question without his name.

12 A. So, specifically, I have no  
13 accountabilities or expertise in drilling  
14 operations, I think, to be able to answer that  
15 question.

16 Q. (BY MR. CLARKE) So the answer is, you  
17 don't know whether there's any uniformity required  
18 among different rigs in the way crews perform the  
19 missions?

20 A. I don't know if there is or if there  
21 isn't. I -- I'm not involved in that aspect of  
22 operations. I have no experience to --

23 Q. By "missions," you meant drilling  
24 missions.

25 A. Yes.

1 Q. Who would be a person who would know  
2 that?

3 A. So that a number of different sort  
4 of -- either the -- the different communities there  
5 within the BP D&C function, the wells team leads,  
6 all part of the same management structure. There  
7 are different accountable parties for different  
8 aspects of the BP drilling operations, whether it is  
9 from their platform rigs, whether it's an  
10 exploration well or whether it's a production well  
11 or reporting in primarily through the vice president  
12 of D&C for Gulf of Mexico.

13 Q. But you don't know specifically who that  
14 would be, who could say whether the procedures are  
15 uniform, the drilling procedures are uniform among  
16 different rigs in the Gulf?

17 A. I don't have the information to really  
18 provide an answer to that.

19 Q. Counsel for Transocean asked you and you  
20 indicated that the BP company man has authority to  
21 stop a job for safety reasons; is that correct?

22 A. I believe that to be the case, yes.

23 Q. Am I correct that on a BP job, anyone  
24 has the authority to stop a job for safety reasons?

25 A. That's a correct statement, yes.

1 Q. So it's not just the company man, it's  
2 anybody on the rig could stop it?

3 A. There's an expectation that anyone that  
4 sees an unsafe act or condition initiates a  
5 stop-the-job conversation.

6 MR. CLARKE: Thank you, sir.

7 HON. ANDERSEN: Thank you very much.  
8 Mike Williams?

9 MR. PENTON: Yes, Judge. Ronnie  
10 Penton on behalf of Mike Williams.

11 HON. ANDERSEN: How do you spell  
12 your last name?

13 MR. PENTON: P-E-N-T-O-N.

14 HON. ANDERSEN: Thanks.

15 E X A M I N A T I O N

16 BY MR. PENTON:

17 Q. Good morning.

18 A. Good morning.

19 Q. I want to get one area of questioning  
20 out of the way real quick about this flag state  
21 document, just a couple on that.

22 What I want to know is, is that does  
23 the marine authority for the Gulf of Mexico for BP  
24 look to manning requirements as prescribed, if they  
25 are prescribed, by the flag state for the DEEPWATER

1 HORIZON?

2 A. I think part of the -- the process that  
3 we employed with the IMCA CMID is to ensure that the  
4 manning requirements are in compliance with flag  
5 state or statutory or regulation requirements, so I  
6 would expect that that was performed.

7 Q. And I listened while you were looking at  
8 the document, and I think you were unfamiliar with  
9 it.

10 Am I right about that?

11 A. That's correct.

12 Q. Is there someone else on your  
13 professional team that, say, would be responsible  
14 for knowing about that?

15 A. The particular requirements of the  
16 Marshall Islands?

17 Q. Yes.

18 A. There might well be an individual within  
19 my team that's more knowledgeable on the individual  
20 flag state requirements.

21 Q. As we sit here today, sir, do you know  
22 the minimum safe requirements for manning for the  
23 DEEPWATER HORIZON as of April the 20th, 2010?

24 A. No, I don't have the details.

25 Q. Thank you, sir.

1 I want to talk to you a bit about  
2 the September, 2009, audit.

3 A. Yes, sir.

4 Q. At page 14 of that audit, I think the  
5 quoted language was, "Control of alarms and defects  
6 and bypasses were not well managed. In fact, no  
7 single person could account for which alarms, et  
8 cetera, were overridden or indeed for what reason."

9 Do you recall that -- that text?

10 A. Yes, sir.

11 Q. All right. I also want to direct your  
12 attention to page -- in conjunction with the  
13 statement in the audit. At page 32 of that audit,  
14 reference 2.3.1 -- if you don't have it, you can  
15 look at mine.

16 A. Do not have page 32.

17 MR. PENTON: May I approach?

18 HON. ANDERSEN: Sure.

19 A. Yes, sir.

20 Q. (BY MR. PENTON) All right. Could you  
21 just please tell us what that reference says so that  
22 we could -- I could ask you a question?

23 A. So page 32, which is on the audit report  
24 action sheet, "A formal system to manage alarm  
25 inhibits and control of defeats and bypasses was not

1 in place for vessel management systems, drilling  
2 control systems and related PLCs."

3 Q. Okay. And then there's a block next to  
4 it; is that correct?

5 A. That's correct.

6 Q. And what is the title of that block on  
7 that spreadsheet?

8 A. "Recommendations."

9 Q. And what were the recommendations of the  
10 BP audit team, sir?

11 A. "Formal management system to be  
12 implemented for alarm inhibits and control of  
13 defeats and bypasses."

14 Q. Okay. May I have it back?

15 A. It's unclear to me which section of the  
16 full documentation from September, 2009, this one  
17 comes from. Is that the follow-up rig activity, or  
18 is that the marine activity?

19 Q. Well, it is what it is. It's page 32,  
20 and it's Bates number 0008902 and in that order.

21 A. Okay.

22 HON. ANDERSEN: So with that number,  
23 if anyone on the Board or any of the other  
24 parties in interest want to reference that  
25 to put it in context, including the BP

1 attorneys, they'll have an opportunity to  
2 do that.

3 Q. (BY MR. PENTON) So after reading the  
4 observation and then the recommendation and then the  
5 audit team advised completion within one month, I  
6 didn't -- I'm sorry, I didn't have you read that,  
7 but you know that, correct?

8 A. Yes, sir.

9 Q. And I think, with those two documents in  
10 mind, I think you testified that you met with  
11 Mr. Rodriguez about this audit, correct?

12 A. Correct.

13 Q. And you met with him about the three or  
14 four alarm inhibit-related observations of BP,  
15 correct?

16 A. Correct.

17 Q. And I think you said that Mr. Rodriguez  
18 assured you that the alarm-related observations had  
19 been remedied; is that correct?

20 A. So the particular action item I believe  
21 that Mr. Rodriguez was focused on was applicable to  
22 the fire and gas and ESD systems; and, so, again,  
23 without seeing the full suite of documents, I'm a  
24 little confused as to whether or not we're taking  
25 action items from different sections of the report.

1 Page 14 is underneath the -- the section of  
2 particular to power plants.

3 Q. It sure is. It sure is. And then in  
4 the chart section of the audit report, it kind of  
5 go -- each reference number goes into the various --  
6 various systems. For instance, 2.3.1 talks about  
7 alarm inhibits as it relates to VMS, right, vessel  
8 management systems; is that correct?

9 A. Correct.

10 Q. Drilling control systems and related  
11 PLCs, correct?

12 A. Correct.

13 Q. So there are three areas that they kind  
14 of umbrella, correct, for -- in terms of alarms  
15 inhibits, correct?

16 A. That's correct.

17 Q. So I guess the threshold question is  
18 this: Can you tell us, is there a document, is  
19 there some work product that communicated to the BP  
20 marine authority that, in fact, the recommendation  
21 that a formal management system is to be implemented  
22 for alarm inhibits and control of defeats and  
23 bypasses?

24 A. We can repeat the reference number,  
25 please?

1 Q. Yes. 2.3.1.

2 A. So the simple answer is, no, it is not  
3 included in the marine focus conditions that myself  
4 and my team focused on closing out. Again, I think  
5 there's -- there's -- it's coming in different  
6 documents.

7 Q. I see.

8 A. That is aimed as part of the rig aspect,  
9 the drilling operations and equipment side of the  
10 assessment that was done.

11 Q. I appreciate your answer. I'm not  
12 trying to confuse you. I just need to understand  
13 the document.

14 Can you please tell us, though, what  
15 document you utilized to determine that, in fact,  
16 this reference does not relate to the marine  
17 authority's responsibility with respect to this  
18 audit?

19 A. So the -- the process that was completed  
20 in September, '09, included the common marine  
21 inspection document, the -- the IMCA protocol, and  
22 that has a list of conditions and action items  
23 associated with that marine assessment, the second  
24 set of action items that referred to the follow-up  
25 rig operations assessment.

1 Q. Is that a particular document that you  
2 can identify for us, or is it just in the materials,  
3 generally?

4 A. For the marine aspect?

5 Q. Yes.

6 A. So it's -- the report completed, a  
7 marine CMID to order protocol I think it was  
8 revision number 7. It documented an annex document  
9 that relates specific to MODU as a vessel or as  
10 mission aspect of the vessel. And then there is an  
11 action tracking sheet that supports those two pieces  
12 of documentation.

13 Q. So those are collateral documents to  
14 this audit, the follow-up documents of this audit?

15 A. There was -- yes. That's -- they were  
16 part of the documentation that was provided by the  
17 assessment team.

18 Q. I understand. You didn't author this  
19 document, you may not know, but when they used the  
20 phrase "vessel management system," is that a -- is  
21 that a phrase that you relate to the marine side as  
22 opposed to the rig side?

23 A. So that's -- again, it  
24 is -- it's -- it's not a simple answer. There are  
25 some pieces of equipment on board the rig that I

1 would classify as purely marine pieces of equipment.

2           On the same side, there are pieces  
3 of equipment that I would say are purely drilling  
4 pieces of equipment, and then there are systems and  
5 controls that support both of those aspects of  
6 operations. The power generation system is one of  
7 those. The vessel management system would be a  
8 process that administers the generators. So there's  
9 areas in the middle that support both aspects,  
10 whether it marine or whether it --

11           Q.       So there are some individualized issues,  
12 one's rig, one's clearly vessel, and there are some  
13 concurrent overlaps that are a little of both?

14           A.       Correct.

15           Q.       Let's talk about that. The general  
16 alarm system is absolutely a marine safety piece of  
17 equipment or a system; is that correct? Or a  
18 vessel?

19           A.       That's correct.

20           Q.       And on the DEEPWATER HORIZON, it's true  
21 that this general alarm system was intended to  
22 notify all personnel on board of whether or not  
23 there's a fire, correct?

24           A.       That would be one function of an alarm  
25 system.

1 Q. Whether or not there was combustible gas  
2 on the vessel, correct?

3 A. Again, another function of the fire and  
4 gas system.

5 Q. And whether or not there was toxic gases  
6 on the vessel, correct?

7 A. Correct.

8 Q. Now, if, in fact, the general alarm did  
9 not function on the DEEPWATER HORIZON, is it your  
10 testimony that that is not a marine safety issue?

11 A. I would expect the general alarm to be  
12 included within the marine aspects of the  
13 assessments that were done. I don't recall a  
14 condition being recorded that associated with the  
15 general alarm.

16 Q. Now, you talked about your role in the  
17 BP investigation. Has it been limited to talking to  
18 Mr. Rodriguez?

19 A. So I have no formal role in the BP  
20 investigation.

21 Q. That's my understanding, you don't; is  
22 that correct?

23 A. That's correct.

24 Q. Now, what I want to know is, is that  
25 have you talked to members of your team who

1 may -- let me ask it like this: Are there members  
2 of your team for which you're responsible as the  
3 marine authority for BP in the Gulf of Mexico that  
4 have any role in the investigation of this casualty?

5 A. No, sir.

6 Q. And that's including Mr. Rodriguez; is  
7 that correct?

8 A. That's correct.

9 Q. Has the -- who is the BP investigative  
10 body or arm that is investigating this casualty?

11 A. So there is a central team that's been  
12 formed under the leadership of Mark Bly, who is  
13 accountable for safety and operations for group  
14 operations.

15 The individual team members, I do  
16 not know the list. There is one individual that is  
17 part of that investigation, which is the -- the  
18 manager of the team that did the assessment in  
19 September, 2009. That is Mr. Norman Wong.

20 Q. Wong?

21 A. Yes. Who is the head of the BP rig  
22 audit function.

23 Q. Thank you.

24 The marine authority for the Gulf of  
25 Mexico for which you are responsible -- correct?

1           A.       Correct.

2           Q.       -- does not have a single member on that  
3     investigative team?

4           A.       That's correct.

5           Q.       Have -- has that ever been explained to  
6     you why that's so?

7           A.       No, sir.

8           Q.       Well, let me ask you this: Those people  
9     that are on this team, Mr. Bly and others, Mr. Wong,  
10    did they have any responsibility whatsoever for the  
11    DEEPWATER HORIZON before April the 20th, 2010?

12          A.       So, again, I'm not party to the full  
13    makeup of the team. The only individual that I know  
14    that is part of that team is the head of the rig  
15    audit group, Mr. Norman Wong. It was his team  
16    members conducted the assessment in September, 2009,  
17    providing the report to the wells team lead and  
18    myself.

19          Q.       Is today the first time that you've  
20    heard anyone suggest that the general alarm system  
21    was not functioning at the time of this casualty?

22                   MR. CLEMENTS: I object. Counsel  
23                   said that once before. I know that is his  
24                   contention in the case, but that's not  
25                   been established, and this document does

1 not say the alarms were not functional,  
2 simply references a management system to  
3 implement.

4 MR. PENTON: I'm asking questions --

5 HON. ANDERSEN: Each question lends  
6 to if this is the first time you've heard  
7 that suggestion, you can say yes or no to  
8 that and then we'll move on. But we  
9 understand the -- as to whether or not  
10 that's true, counsel has a good objection.  
11 But whether or not you ever heard anybody  
12 suggest that before today, you can testify  
13 to it.

14 A. So recorded in the documentation -- and,  
15 again, I'm trying to clarify some different  
16 terminology.

17 HON. ANDERSEN: Well, and we've  
18 talked again --

19 Would you repeat your question?

20 MR. PENTON: I'll try.

21 HON. ANDERSEN: Or only the part you  
22 want answered.

23 MR. PENTON: Okay.

24 Q. (BY MR. PENTON) Is this the first time  
25 that anyone has suggested to you that there is a

1 question as to whether or not the general alarm  
2 system was or was not functioning on April the 20th,  
3 2010?

4 A. So just to the point of clarity for me  
5 so I can answer the question completely. What do  
6 you classify as the general alarm system?

7 Q. Okay. Well, the general alarm system  
8 generally -- I thought we had gone over that -- is  
9 to notify personnel on board of fire, combustible  
10 gas and toxic gas, correct?

11 A. Okay.

12 Q. All right. So we start with that. Has  
13 anybody ever told you that before today?

14 A. So there was a condition recorded in the  
15 assessment that there were a number of defects  
16 associated with the fire and gas system. There was  
17 a number of inhibits and overrides apparent at the  
18 time of the assessment in September, 2009.

19 Q. Okay.

20 A. So including the general alarm system in  
21 the fire and gas system, then I was aware, yes.

22 Q. Yes. And the general alarm system is  
23 part and parcel of that, the fire and gas system,  
24 correct?

25 A. Again, different people might use

1 different terminology, but I think for -- for what  
2 you're suggesting, that's a true statement.

3 Q. Thank you.

4 Other than September, 2009, do you  
5 know whether or not the general alarm systems as it  
6 relates to the fire and gas system was functioning  
7 on the DEEPWATER HORIZON on April the 20th, 2010?

8 A. Can you say that question again, please?

9 Q. Yes. Do you know whether or not the  
10 general alarm system as it relates to the fire,  
11 combustible gas and toxic gas systems was active and  
12 functioning on April the 20th, 2010, at the time of  
13 this casualty?

14 A. So I don't know whether it was active on  
15 April -- the day that you said.

16 Q. Yes.

17 A. There was verification that the system  
18 was operational from the visits of Mr. Rodriguez in  
19 March, 2010, that the system was free of alarms and  
20 overrides, from his assessment, his inspection of  
21 the fire and gas alarms.

22 Q. Now, that was a March, 2010 visit; is  
23 that correct?

24 A. That's correct, sir.

25 Q. And is there a document from

1 Mr. Rodriguez on that visit?

2 A. So there's a Transocean spreadsheet that  
3 records the recommendation and the condition that  
4 was apparent in September. There is a list of the  
5 actions that were performed by Transocean personnel  
6 and the responsible party of performing those  
7 actions, and then there's a sign-off box that  
8 Mr. Rodriguez has inspected, verified that system on  
9 board the vessel when he visited in March.

10 Q. And that's what you testified to  
11 earlier.

12 A. Correct.

13 Q. Thank you, sir.

14 Now, let's talk about two systems  
15 that -- that you were asked about earlier, just a  
16 couple questions.

17 The ESD system, do you know what  
18 that is, generally?

19 A. ESD stands for emergency shutdown.

20 Q. Now, is any part of the emergency  
21 shutdown system, or the ESD system, a part of the  
22 marine side of the -- of the vessel as opposed to  
23 the rig side?

24 A. So the ESD function was included in the  
25 same action item or condition that was recorded that

1 I described previously. So fire, gas detection,  
2 enunciating alarms and then performing shutdown  
3 actions would be all part of the same system.

4 Q. So that would, in your mind, relate back  
5 to the March, 2010 visit by Mr. Rodriguez?

6 A. Correct.

7 Q. Okay. Now, do you have knowledge  
8 whether or not the ESD systems, in fact, functioned  
9 during the casualty of April 20, 2010?

10 A. I have no information to be able to make  
11 that determination.

12 Q. The same questions, really, with the EDS  
13 system, the emergency disconnect system. Is that  
14 system peculiarly a marine safety issue, the  
15 functioning of a disconnect system of a dynamic  
16 positioning vessel?

17 A. It is a key safety system of the mission  
18 side of the vessel. I would expect it to be proven  
19 and determined to be operational as part of the  
20 ongoing operation on the vessel, proving that the  
21 systems are functioning.

22 Q. Can you tell me when the last time was  
23 there was an inspection of the EDS systems on board  
24 the DEEPWATER HORIZON and what the result was?

25 A. I do not have that information to be

1 able to provide you with an answer.

2 Q. Is that documentation within your filing  
3 system with the marine authority?

4 A. I would expect that if that's relating  
5 specifically to the BOP and the unlatching mechanism  
6 that it would fall primarily under the drilling  
7 operations side of an assessment.

8 Q. When you say "primarily," are we talking  
9 about maybe some overlap? Is the emergency  
10 disconnect system for the vessel to break away from  
11 over the well a marine safety function?

12 A. I would expect the initiation of that  
13 system to have been part of the marine function.  
14 They need to have the capability, and the capability  
15 needs to be proven as operational.

16 Q. Are you aware that there were attempts  
17 made to disconnect the DEEPWATER HORIZON from this  
18 well?

19 A. No, sir, I don't have any details around  
20 the -- the incident.

21 Q. You've never heard that?

22 A. No, sir.

23 Q. Have you asked that question?

24 A. No, sir.

25 Q. You know that it exploded, it burned and

1 it sank?

2 A. That's correct.

3 Q. And you never -- you never asked that  
4 question about disconnect systems to anyone? After  
5 the casualty, of course.

6 A. I have not gone and challenged or  
7 questioned anybody specifically around the incident  
8 or the details on that night. It was a conversation  
9 with Mr. Rodriguez to confirm the verification  
10 process he went through and to get clear in my mind  
11 around how the verification was performed. Further  
12 inquiries as you've described there, I have not got  
13 into that detail.

14 Q. Mr. Rodriguez's -- thank you, sir.

15 Mr. Rodriguez's inspection of the  
16 DEEPWATER HORIZON in March of 2010, was he  
17 accompanied by anyone else?

18 A. I don't believe he was.

19 Q. Is -- is Mr. Rodriguez an electronic  
20 engineer or an electronic technician?

21 A. Is he qualified for that type of  
22 equipment?

23 Q. Yes, sir.

24 A. Probably not, no.

25 Q. Is he qualified for vessel management

1 systems?

2 A. He has experience in the operation and  
3 the use of vessel management systems.

4 Q. Is he trained on the -- on the Kongsberg  
5 systems of the DEEPWATER HORIZON?

6 A. I believe he does have particular  
7 expertise in Kongsberg-related dynamic positioning  
8 systems.

9 Q. Other than Mr. Rodriguez on your team,  
10 who else has that kind of expertise?

11 A. So I have a team that's made up of a  
12 wide set of different marine professionals from  
13 different parts of the industry.

14 Q. I'm sorry, I didn't mean to interrupt  
15 you.

16 A. Okay. Classification surveyors,  
17 individuals who have served in different positions,  
18 different marine positions on drill rigs and other  
19 associated vessels. Personnel that have served  
20 offshore with BP in the oil and gas production  
21 aspect of the business. So there's a broad set of  
22 marine expertise.

23 Q. Thank you.

24 Other than the Transocean  
25 spreadsheet that you've referenced in terms of the

1 checklist items and the open items, I think there  
2 were some six-month items, correct?

3 A. There were some items that were going to  
4 continue to be progressed and closed out following  
5 the March visit, yes.

6 Q. Yes. Thank you.

7 Is there a document that  
8 Mr. Rodriguez completed contemporaneous with doing  
9 the systems check in March of 2010?

10 A. There was a spreadsheet that was prior  
11 to that in October, 2009, where during his first  
12 visit, he had his own record of how actions had been  
13 progressed and how he had verified them. So there  
14 is a second spreadsheet, which the use of was  
15 suspended after the October visit, to focus purely  
16 on the single spreadsheet that was owned by  
17 Transocean.

18 Q. And is that first spreadsheet in the  
19 custody of the marine authority of the Gulf of  
20 Mexico?

21 A. Did I have a copy?

22 Q. Yes.

23 A. Yeah, I did.

24 Q. Are there any other documents that he  
25 would have completed that would let us view the

1 types of checks he did and on what systems?

2 A. Not for Mr. Rodriguez that I'm aware of,  
3 no.

4 Q. From anybody else through the marine  
5 authority?

6 A. So there is documentation that relates  
7 to mitigations and closeouts performed by Transocean  
8 to the watertight integrity conditions that were  
9 apparent. They are in change proposals and MOCs  
10 within the Transocean SNS system.

11 Q. But other than Transocean, I'm  
12 interested in BP documents right now. I'm  
13 interested in marine authority documents  
14 specifically.

15 MR. CLEMENTS: Your Honor, with all  
16 due respect, I think this is pure  
17 discovery.

18 HON. ANDERSEN: I'm going to sustain  
19 that objection in terms of -- there's lots  
20 of other ways to -- rather than through  
21 this hearing in which a lot of us are tied  
22 up to determine whether or not documents  
23 that might have a bearing exist.

24 MR. PENTON: Well, Judge, with all  
25 due respect, that is one -- potentially

1           one document on a very critical  
2           inspection. Maybe I'm unclear about that.  
3           HON. ANDERSEN: Okay, then this one  
4           document, but -- but I think my concern  
5           is, I don't want everybody going through a  
6           list of possible documents that might or  
7           might not exist to see what they might  
8           want to obtain through lawsuits  
9           subsequently or proceedings in a discovery  
10          mode. But we'll -- we'll give you this  
11          one.

12                           Okay. What's the one?

13          Q.           (BY MR. PENTON) Well, it's any  
14          inspection document that Mr. Rodriguez  
15          completed -- I'm assuming -- and you told me he's  
16          the only person who did that inspection for the  
17          marine authority -- and confirmed that the alarm  
18          systems were functioning in March of 2008, that he  
19          checked the inhibits, the defeats, the bypasses and  
20          all that.

21                           Is there any inspection document is  
22          my only question.

23                           HON. ANDERSEN: 2010, you mean?

24                           MR. PENTON: Yes, a March, 2010.

25          A.           Not that I'm aware.

1 MR. PENTON: Thank you, sir.

2 HON. ANDERSEN: Thank you very much.

3 Now, the witness is employed by BP.

4 Is there any brief follow-up that you  
5 might want to make?

6 MS. KARIS: There is not.

7 HON. ANDERSEN: Okay. Thank you.

8 Then the Board is -- questions are open  
9 for the Board to ask.

10 Everybody -- are you comfortable  
11 still?

12 THE WITNESS: I'm good, thank you.

13 HON. ANDERSEN: Well, given the  
14 situation.

15 F U R T H E R E X A M I N A T I O N

16 BY CAPT. NGUYEN:

17 Q. Mr. Cramond, a few follow-up questions  
18 for me.

19 Now, we talk industry standard. To  
20 your knowledge, unless industry standard is  
21 incorporated by reference in international and  
22 domestic regulation, they are not authorized  
23 substitution for regulation.

24 Do you agree?

25 MR. SCHONEKAS: I have to object,

1           Your Honor.  He's asking essentially for a  
2           legal interpretation from this witness in  
3           terms of whether or not regulations can be  
4           supplanted by industry standard.

5                   HON. ANDERSEN:  Well, a legitimate  
6           focus of the Board, particularly if it's  
7           going to make recommendations for the  
8           future, is the understanding of how  
9           regulations interact with a person's work  
10          experience, and this witness has  
11          substantial, extensive work experience.  
12          So you're not -- you're not going to be  
13          held to a this is the correct legal  
14          answer, but it's important for the Board  
15          to understand what your understandings  
16          are, because the Board may be making  
17          recommendations to the -- to the  
18          departments that have constituted the  
19          Board as to changes in regulations so  
20          people can understand what they are.

21          Q.           (BY CAPT. NGUYEN)  Let me rephrase that.  
22                            Can you ignore regulation and just  
23          follow industry standards?

24          A.           No, sir.

25          Q.           So if the governing international

1 regulations for responsibility and manning of a  
2 MODU, this vessel, that -- that, one, the master is  
3 responsible for the safe operation of the vessel and  
4 prevention of pollution to the environment, can  
5 vessel have the OIM be in charge instead while he's  
6 on the station?

7 A. I don't believe so. The operator and  
8 the vessel is required to comply with regulatory and  
9 statutory requirements. It's from maritime law and  
10 from my experience.

11 Q. If the ISM code required that a single  
12 Safety Management System which cover all operation  
13 aboard a vessel, can you have a vessel management  
14 system that may be dealing with just repairs be a  
15 substitute for a Safety Management System which  
16 address all aspect of safety aboard a vessel?

17 A. I don't believe so.

18 Q. Are there any BP-owned or contracted  
19 vessel that do not have a master in charge while  
20 it's on station right now?

21 A. So the definition of vessel is I think  
22 clear, the --

23 Q. Let's correct. Of a MODU on station  
24 right now. A BP-owned or contracted MODU on  
25 station, are there any without a master in charge

1 now?

2 MR. WHEATLEY: You mean in the Gulf  
3 of Mexico, Captain?

4 CAPT. NGUYEN: Yes, sir, we can  
5 limit it to the Gulf of Mexico.

6 A. So none that I'm aware of.

7 Q. (BY CAPT. NGUYEN) So when you talk  
8 about industry standard, you're talking about a  
9 master in charge of the -- and responsible for the  
10 safety of the vessel operation and then the OIM is  
11 responsible for coordinating activities of various  
12 departments; is that your -- I just want to make  
13 sure I understand correctly.

14 A. That's the way I view the  
15 responsibilities and the structure on a MODU; yes,  
16 sir.

17 Q. So when you say "industry standard," you  
18 don't mean the master is in charge while a vessel is  
19 underway; when it goes on the station, the OIM is in  
20 charge. You don't mean that the industry standard,  
21 do you? I just want to make clear.

22 A. Can you say it again using different  
23 phrases?

24 Q. Yes, sir.

25 When you say "industry standard,"

1 you mean the master is in charge of the overall  
2 operation and the safety of the vessel and then the  
3 OIM is responsible for coordinating activities, not  
4 having the master responsible for the vessel  
5 operation while it's underway, and then when it get  
6 on station, the MODU get on the station, then the  
7 OIM will take over, that's not what you meant,  
8 right?

9 A. So the way I understand it is, the OIM  
10 is always the senior operations representative on  
11 board coordinating the different departments that  
12 are apparent on the MODU of which the marine  
13 department headed by the captain accountable for  
14 navigation and safe operations and compliance with  
15 marine regulations is a report to the OIM.

16 Q. The master report to the OIM, not the  
17 other way around?

18 A. That's the way I understand.

19 Q. Even when vessel is underway?

20 A. I'm thinking back several years where  
21 that was the case whereby the -- we even didn't have  
22 an OIM on board for a production facility, a  
23 vessel-shape production facility that was sailing  
24 from one port to another. There was no OIM on  
25 board. So the master then would have the overriding

1 decision.

2 Q. But a master would have maybe OIM  
3 endorsement; is that right?

4 A. Not necessarily.

5 Q. Now, I asked you about recommendation on  
6 how the government would have better awareness of  
7 the material condition and personnel status on board  
8 a vessel so we could intervene appropriately, and  
9 you didn't have any suggestion for -- for us. Are  
10 you -- I'm sure you, as a mariner and also as marine  
11 authority for the Gulf of Mexico, BP for the Gulf of  
12 Mexico, you are aware of Coast Guard regulation for  
13 reportable casualty?

14 A. Yes, sir.

15 Q. Okay. So would you -- per 46 Code of  
16 Federal Regulation 4.03-1, just for clarity's sake,  
17 one of the items in here -- and maybe you can inform  
18 that true or not, but any circumstance that might  
19 affect or impair a vessel's seaworthiness service or  
20 route, would that be an item that you -- would be  
21 reportable to the Coast Guard or -- for this  
22 regulation?

23 A. So reportable to the Coast Guard?

24 Q. Yes.

25 A. Again, I would say classification

1 society also have a responsibility to be informed of  
2 that.

3 Q. Okay.

4 A. And potentially flag state, depending on  
5 the condition.

6 Q. All right. So you are a licensed  
7 mariner; is that correct?

8 A. I have chief engineer's qualifications.

9 Q. Yes, sir. Now, the result of the  
10 September, '09 audit concern you enough that you  
11 recommended that DEEPWATER HORIZON would not be  
12 placed in service until some discrepancy was  
13 corrected; is that my -- correct?

14 A. It related to conditions that were  
15 apparent around the watertight integrity of the  
16 vessel.

17 Q. Right. So if that's the case, should  
18 those discrepancies have been reported to the Coast  
19 Guard?

20 A. In line with the CFR that you have  
21 outlined, I see there is an obligation for the  
22 vessel operator and the vessel captain to report  
23 that to the Coast Guard, yes.

24 Q. All right. As a licensed officer, do  
25 you have a duty to report it to the Coast Guard?

1           A.           Yes. I believe the -- the master has an  
2 obligation to report deficiencies to the Coast  
3 Guard.

4           Q.           With U.S. like you, Mr. Cramond, Neil  
5 Cramond, as a licensed officer, aware of these  
6 condition, do you have a duty to report it to the  
7 Coast Guard?

8           A.           I don't believe so. The  
9 responsibilities that I have for BP in coordinating  
10 my role of marine authority, the obligation clearly  
11 rests on the vessel operator and the senior  
12 personnel, marine personnel on the vessel.

13          Q.           So if you -- okay. So do you think  
14 Mr. -- Mr. Jimmy Harrell as a licensed officer on  
15 board of DEEPWATER HORIZON, he should be aware of  
16 these conditions? Because, as you indicated, it was  
17 communicated from the well team leader to the  
18 offshore installation manager, should Mr. Jimmy  
19 Harrell -- does Mr. Jimmy Harrell have a  
20 responsibility to report to the Coast Guard?

21                       MR. CLEMENTS: Judge, first I'm  
22 going to object to the compound nature of  
23 the question. Should he have known,  
24 should he have reported, does he have an  
25 obligation. First I think we ought to

1           establish whether Mr. Jimmy Harrell was  
2           even the OIM at the time that the  
3           deficiencies were noted and whether this  
4           witness has any knowledge that he was  
5           aware of these deficiencies before we talk  
6           about should he report it.

7           MR. KOHNKE: Judge, can I make one  
8           further comment?

9           HON. ANDERSEN: Sure.

10          MR. KOHNKE: There are -- people  
11          work hitches offshore. They work 21 and  
12          21. It hasn't been established who might  
13          have had the knowledge that the captain's  
14          referring to. This is way afield of where  
15          we ought to be. And you wouldn't know  
16          that because you haven't been in these  
17          hearings, and I'm saying this only to  
18          bring you up to date. It has been -- it  
19          is beyond dispute that all of these crews  
20          worked 21 and 21, and this Board is  
21          assuming, or at least the Captain's  
22          question is assuming that these  
23          one -- this one individual, Jimmy Harrell,  
24          is there all the time. It's just not the  
25          case. So we don't have that foundation

1           laid.

2                   HON. ANDERSEN:   Okay.   With that  
3           background in mind, the Captain obviously  
4           can proceed to ask questions.   If you  
5           could break them into portions so that the  
6           witness can more easily answer them,  
7           that's helpful.   And if there's a  
8           supposition such as this gentleman was on  
9           duty at the time, we can ask the witness.

10           Q.           (BY CAPT. NGUYEN)   I made a mistake.   I  
11           acknowledge that.   Okay.

12                   As the master of the HORIZON,  
13           whoever it is at the time of this audit, as a  
14           licensed mariner, should that person have reported  
15           to the Coast Guard?

16                   MR. SCHONEKAS:   Object to the  
17           opinion nature.   Just note my objection  
18           for the record.

19                   CAPT. NGUYEN:   It's based on a  
20           regulation, not supposition.   I don't  
21           understand what your reason is.

22                   MR. KOHNKE:   It's based on this  
23           witness' agreeing with the Captain as to  
24           what this witness thinks this regulation  
25           means.

1                   HON. ANDERSEN: We understand that  
2                   different people may -- you know, all  
3                   these regulations are written by people.  
4                   Okay? So there's a certain amount of  
5                   guesswork and imperfection that provided  
6                   us all with a living. So the -- so, but  
7                   the witness, all that requires of the  
8                   witness is that he give us the basis for  
9                   his understanding, and it's -- it is  
10                  important to the Board, because you are a  
11                  very important person in terms of marine  
12                  operations, and if he's confused about  
13                  something, maybe that will result in  
14                  clearer regulations or clearer lines of  
15                  authority.

16                  So his opinion, whether it's  
17                  legally, quote, correct or not is not as  
18                  important as his understanding in terms of  
19                  the safety issues. So I apologize for  
20                  extending the interruption.

21                  CAPT. NGUYEN: Oh, no problem.

22                  Q.           (BY CAPT. NGUYEN) I think I heard you  
23                  right. Licensed officers, safety officers, offshore  
24                  installation manager, master and the chief engineer.  
25                  Other personnel with license -- holding a license,

1 whether it's Coast Guard or Marshall Islands  
2 license, do they have a duty to report it to the  
3 Coast Guard according to the requirements in the  
4 code -- federal regulation?

5 A. I believe that's a true expectation. I  
6 would go further as well in there were a number of  
7 conditions that were recorded as part of the -- as  
8 part of the assessment that I would expect maybe  
9 classification society to have been made aware of as  
10 well as maybe the flag state authority in addition  
11 to I believe the question was, was the Coast Guard  
12 in line with the CFR requirements.

13 Q. Right. So classification society for  
14 the purpose of classification, if it's related to  
15 the class, they can let the class know, but the next  
16 line of -- in terms of regulatory response be --  
17 should be the flag state that need to know what's  
18 going on, and if it's applicable to Coast Guard  
19 regulation, that will be -- also need to be  
20 understood, correct?

21 A. I agree with the way you've put those in  
22 a hierarchy, yes.

23 Q. But when you -- maybe expectation in  
24 terms of class society, where it's a requirement, at  
25 least in this case for U.S. Coast Guard; is that

1 correct? It's not an expectation? Part of the code  
2 regulation.

3 A. I believe it's part of regulation to  
4 inform class society as well as equipment is out of  
5 service or is defective and nonoperational. So  
6 I -- I agree, again, with the words you're using, is  
7 the Coast Guard is the regulation; but I think it's  
8 a little bit more stronger than maybe an expectation  
9 purely to make classification society on flag states  
10 where, again, I think there's more -- there's some  
11 regulations there as well that require it.

12 CAPT. NGUYEN: Thank you, sir.

13 HON. ANDERSEN: Any other Board  
14 members?

15 FURTHER EXAMINATION

16 BY MR. MATHEWS:

17 Q. Later on this week -- later on this  
18 week, we're going to talk to an individual within BP  
19 about a term he used called a risk reward equation.

20 Are you aware of any such equation  
21 within BP?

22 A. No, sir, I've never heard that term  
23 before.

24 Q. Does BP take certain risks to get a  
25 reward?

1           A.       Does BP takes certain risks to get a  
2 reward. I don't --

3           Q.       Such as 65 items identified in a audit  
4 that were outside of BP-Transocean legislative, API  
5 standards?

6           A.       No, I --

7           Q.       That you continued operations, there was  
8 obviously risks taken.

9           A.       I think the operations that we execute  
10 in the Gulf of Mexico, you know, there is always a  
11 degree of risk. It's around identifying adequate  
12 and full mitigations to those risks to continue to  
13 operate.

14          Q.       But, to your knowledge, there's no  
15 defined equation as to what is acceptable and not  
16 acceptable?

17          A.       I've never been made aware of anything  
18 along those lines.

19                   MR. MATHEWS: Thank you.

20                   F U R T H E R   E X A M I N A T I O N

21 BY MR. DYKES:

22          Q.       Mr. Cramond, I want to refer back to  
23 page 17 of that audit, Bates number  
24 BP-HZN-MBI-00136227.

25                   Halfway down the page, the paragraph

1 starts, "The second digit in the numbering system  
2 indicates the functional area of the issue is based  
3 within," and there are six topics, beginning with  
4 "health, safety and safety management" and ending  
5 with "mechanical handling."

6 Now, throughout your testimony,  
7 you've talked about this audit and your area of  
8 responsibility being the marine aspect of the audit  
9 and there being rig aspects of the audit.

10 Based on this category of functional  
11 areas, I see "drilling and well control," I see  
12 "marine," and then I see "health safety, safety  
13 management, technical services, environmental and  
14 mechanical handling."

15 I -- I see multiple areas here, but  
16 I'm hearing you say that there are just two  
17 functional areas as a result of the audit.  
18 How -- who -- who divvies up these punch list items  
19 to make sure they get corrected?

20 A. So the -- the assessment team defines  
21 which of the conditions that they have noted fall  
22 into which category here. It's the wells team lead  
23 is accountable for each of the action items that are  
24 generated, whether they fall into any of these  
25 categories. I'm accountable for supporting him in

1 terms of understanding the risk or whether the  
2 closure is full and complete, primarily for the  
3 items that fall under category No. 4, "marine."

4 Q. Okay. According -- according to the  
5 audit -- and I don't know if it's in -- yes, I think  
6 it's on page 4. Identifies the audit team, Kevan  
7 Davies handling drilling and technical, Gordon  
8 Richard handling HSE, Richard Cox handling the  
9 marine, and Barry Hayward handling technical and  
10 marine.

11 And I'm still unsure, how did you  
12 take that list and divvy it up? Because when I read  
13 through that punch list items, I see "drilling" and  
14 "marine" in each one of those individual sections.  
15 So who -- who is responsible for separating that  
16 list out and saying, "Okay. Drilling and  
17 completion, this is your part of the audit. Go make  
18 sure these -- these recommendations are implemented  
19 or completed. And, Marine, here are your functions.  
20 Go make sure they're taken care of"?

21 A. So all of the conditions are addressed  
22 to the wells team leader, to Mr. Guide in this case.  
23 I am then accountable for providing the expertise,  
24 the resource and the experience to ensure that they  
25 are closed out completely. It's specific that

1 the -- the assessment is done on behalf of the wells  
2 team leader. The numbering system that's in the  
3 different reports and the different action sheets  
4 call out which ones have second digit No. 4, which  
5 certainly is the main focus of -- of my team to  
6 ensure they are understood and they are mitigated  
7 and they're tracked to closure.

8 Q. Okay. But I also see that when I go  
9 through looking at mechanical handling, for example,  
10 the deck cranes on the HORIZON would fall under the  
11 marine system; is that correct to make that  
12 assumption? Because they are ABS inspected cranes,  
13 and under the cargo -- cargo gear registry? Would  
14 that be part of the marine system?

15 A. We don't usually focus on the deck  
16 cranes that are in support of the specialized units  
17 for the drilling operations. Maybe if they're sort  
18 of general lifting equipment, that would then fall  
19 more to the marine side. If it's part of the pipe  
20 racking system or the specific lifting equipment  
21 that's in support of the drilling operations within  
22 the derrick, again, my -- myself and my team have no  
23 expertise in terms of following those actions to  
24 closure and understanding what the risks are.

25 Q. Okay. So back to my first question.

1 Who divvies up the list? Because coming from the  
2 production side of the equation, from an operator's  
3 side of the equation, I look at that list and go,  
4 ABS, that's a Coast Guard issue. That's a marine  
5 issue. That goes to you, because it's not inside  
6 the derrick and it's not necessarily used strictly  
7 for derrick operations. So I'm trying to make sure  
8 I understand that none of these items fall through  
9 the crack when they're divvied up.

10 A. So the assessment team leader formulates  
11 the report that is approved by the head of rig  
12 audits where he divvies up or allocates the  
13 numbering system and the categorization to each of  
14 the conditions.

15 Q. Okay. And then I take it that since  
16 this goes back to the wells team leader, John Guide,  
17 that he is responsible for making sure all of these  
18 punch list items are completed?

19 A. That's the way I view the process, yes.

20 Q. Okay. Do you report to John Guide in an  
21 administrative chain of command?

22 A. No.

23 Q. Who do you report to?

24 A. So for my marine authority  
25 responsibilities, I report up the engineering and

1 HSE line. Traditionally, I have had a support  
2 dotted-line approach to each of the VPs for the  
3 marine risk that is in their individual pieces of  
4 business.

5 Q. So that would put you reporting to Pat  
6 O'Bryan?

7 A. So Pat O'Bryan would be one of the  
8 functions that if I was concerned about marine risk  
9 within his area, I would go and have a conversation  
10 with Pat O'Bryan or maybe further down the D&C  
11 function. Maybe it was particular to one rig, maybe  
12 it was particular to one operator. There were  
13 different people that I could raise my concerns to.  
14 And that's the same for the construction vessels  
15 that we employ in the Gulf of Mexico. There are  
16 nominated leadership positions that I can go and  
17 raise concerns and have those concerns rectified.

18 Q. There's been some questions raised here  
19 today about the classification of the HORIZON, the  
20 DEEPWATER HORIZON. Is it classed as a mobile  
21 offshore drilling unit, or is it classed as a  
22 dynamic positioning vessel?

23 A. I don't have the full details or the  
24 certificate to fully answer that question. It has  
25 dynamic positioning capabilities, I would expect it

1 to be classed appropriate to the equipment it has.

2 Q. So are you familiar with the  
3 classification requirements on how ABS may classify  
4 it or the way the flag state may classify it?

5 A. There's been some information put in  
6 front of me today that I need to go and further  
7 review.

8 MR. DYKES: Thank you.

9 HON. ANDERSEN: Any other questions?

10 LT. BUTTS: Yes, Your Honor.

11 E X A M I N A T I O N

12 BY LT. BUTTS:

13 Q. Sir, something just struck me there when  
14 you mentioned Mr. O'Bryan's name.

15 Does your shop, does your office  
16 provide any analysis of trends that are across the  
17 board in BP operations as far as safety on the rigs?

18 A. No, sir.

19 Q. So you would not have passed any bullets  
20 or any talking points, then, to any BP  
21 representative that would have been possibly  
22 visiting the DEEPWATER HORIZON for a leadership  
23 visit?

24 A. No, sir.

25 Q. All right. And just following up, if

1 you don't mind, did BP take over any  
2 responsibilities to the ISM Code?

3 A. In terms of the operation of the  
4 DEEPWATER HORIZON.

5 Q. Yes, sir.

6 A. I believe that we do not. The code is  
7 clear in terms of who is accountable and the  
8 obligations. I'm not aware that BP have any  
9 responsibilities for the DEEPWATER HORIZON in line  
10 with the ISM Code.

11 Q. And as you were explaining the addition  
12 of the marine authority within BP, it struck me that  
13 you're almost following Rule 12 in the ISM for  
14 Transocean by doing audits and so on, so I just want  
15 to make clear to us so we understand that BP didn't  
16 assume any roles or responsibilities for compliance  
17 with the ISM Code; is that true?

18 A. That's a correct assumption, as I see  
19 the assessment that we do is the employment of an  
20 industry guideline for assessing the condition of a  
21 vessel, and then the particular mission of a vessel  
22 in no way removes any obligation or responsibilities  
23 of the operators to perform that expectation or all  
24 of the responsibilities in line with the ISM Code.  
25 The IMCA CMID is Transocean or a member of IMCA, so

1 they have signed up to the inspection protocol, and  
2 the protocol actually permits the vessel operator to  
3 do the inspection and the assessment and to provide  
4 the records to a charterer.

5           So it's not necessarily always  
6 performed as in this case of a charterer going out  
7 and doing an assessment on a vessel that way. It  
8 can be done either way.

9           Q.       Okay. So -- so this can be used as a  
10 tool. Could it be -- could the results of your  
11 common marine inspection document be used, then, by  
12 Transocean, the contractor in this case, I guess,  
13 for an internal audit or a management review?

14          A.       I don't think it fulfills the  
15 ISM-defined requirements of an assessment of a  
16 vessel or a management review --

17          Q.       Okay.

18          A.       -- in line with the ISM Code  
19 expectations, but I would expect the findings of the  
20 assessment to be recorded in the Transocean Safety  
21 Management System.

22          Q.       Sure.

23          A.       Trends, sort of anomalies, whether or  
24 not they're serious, whether they're recurring ones,  
25 would then be able to be interrogated by Transocean

1 within their Safety Management System.

2 Q. Okay. Thank you. And just to sum up  
3 the final point. Chief engineer, 30 years of  
4 experience in the industry. The results of an  
5 audit, whether it be a follow-up, an initial, a  
6 final or a closed agency action, are these the  
7 results of an efficient and effective ISM safety  
8 management program?

9 A. I would expect that there are some  
10 deficiencies within an ISM compliance Safety  
11 Management System that resulted in those conditions  
12 being apparent as part of a third-party assessment  
13 of a vessel.

14 Q. Okay.

15 A. Certainly around watertight integrity,  
16 which was the one area that concerned me. Those  
17 deficiencies should not be there.

18 LT. BUTTS: Thank you very much.

19 HON. ANDERSEN: Any other questions?

20 The chairman will let us know when  
21 he wants us to reconvene, and I do want to  
22 thank the witness and his preeminent  
23 attorney for giving us of your time.

24 CAPT. NGUYEN: Mr. Cramond, thank  
25 you for being here. Are there any

1 questions that we have not asked you or  
2 any information that you would like to  
3 provide to the Board?

4 THE WITNESS: There's nothing I  
5 believe that I need to provide.

6 CAPT. NGUYEN: Yes, sir. If we need  
7 for you to appear before the Board, will  
8 you make yourself available?

9 THE WITNESS: I will make myself  
10 available, yes.

11 CAPT. NGUYEN: Thank you, sir.  
12 You're dismissed.

13 MR. WHEATLEY: Thank you, Captain.

14 CAPT. NGUYEN: We'll reconvene at  
15 1:15. Thank you.

16 (Break.)

17 HON. ANDERSEN: Mr. Johnson.

18 Before I swear in Mr. Johnson, if  
19 any attorney wants to make an objection or  
20 a statement from your chairs and you want  
21 your name to appear on the record, when  
22 you begin stating your name -- when you  
23 begin making your objection, state your  
24 name so the court reporter can get it.

25 PAUL JOHNSON,

1 having been first duly sworn, testified as follows:

2 EXAMINATION

3 BY CAPT. NGUYEN:

4 Q. Mr. Johnson, thank you for being here.

5 What position do you hold?

6 A. Rig manager-performance.

7 Q. How long have you held this position?

8 A. Roughly around six years. Roughly six  
9 years.

10 Q. Thank you, sir.

11 Did you hold any other positions  
12 with Transocean before this position? What were  
13 they?

14 A. Yes. I started with the company as a  
15 roustabout offshore and progressed through the ranks  
16 to senior tool pusher OIM. And then I came onshore  
17 as a rig manager.

18 I subsequently was promoted to  
19 what's called a sector manager in Azerbaijan for  
20 about 20 months or so and then came to the Gulf of  
21 Mexico mid-August of last year.

22 Q. As an OIM, was that just strictly with  
23 Transocean or with another company?

24 A. I've only worked with Transocean.

25 Q. What is the scope of your duties as the

1 rig manager?

2 A. My role -- my official role is rig  
3 manager- performance, so my role entails personnel,  
4 training and operational performance for the -- for  
5 the wells we drill.

6 Q. How many deepwater MODUs are you  
7 responsible for?

8 A. Just the one, the DEEPWATER HORIZON.

9 Q. Are you a rig manager for another vessel  
10 right now?

11 A. No, I'm not.

12 Q. Would you briefly outline your  
13 educational background.

14 A. High school education.

15 Q. Do you hold any professional license or  
16 certificates?

17 A. No, I do not.

18 Q. Have you had any well-control training?  
19 If so, when was -- when was this training?

20 A. I've been to numerous well-control  
21 schools, and I'm not sure when the last one was,  
22 probably two -- two years ago, somewhere in that  
23 region. I've been to numerous classes.

24 Q. Is there a requirement for you to go  
25 back every two years?

1           A.        It's not two years, but I'm not sure of  
2 the frequency for rig managers.

3           Q.        What is the organizational relationship  
4 between the organization and that of the offshore  
5 installation manager?

6           A.        The offshore installation manager  
7 reports to me.

8           Q.        Directly?

9           A.        Yes, sir.

10          Q.        What were your expectation of the OIMs  
11 in regard to operating the DEEPWATER HORIZON?

12          A.        My expectations were fairly clear. That  
13 we would conduct safe and efficient operations at  
14 all times. All incidents would be reported, and we  
15 treated everybody with respect.

16          Q.        Prior to the casualty, did you have full  
17 confidence in Mr. Jim Harrell's ability to meet the  
18 responsibility of an OIM?

19                   MR. FANNING: I object that it  
20 implies, of course, that he no longer has  
21 that when you say prior to the accident.

22                   HON. ANDERSEN: We'll take the  
23 question just to refer to a time period,  
24 not that implication.

25                   MR. FANNING: Thank you.

1 A. Can you just repeat the question?

2 Q. (BY CAPT. NGUYEN) Yes, sir.

3 As the rig manager before the  
4 casualty, did you have full confidence in Mr. Jimmy  
5 Harrell's ability to meet the responsibility of OIM?

6 A. Without a doubt. Jimmy was a very  
7 conscientious, competent OIM.

8 Q. What was your organizational  
9 relationship with the vessel master positions?

10 A. Vessel masters, they directly reported  
11 to the OIM under certain circumstances. And then  
12 when we were either in moving mode, you know, when  
13 we were underway, he reported up to myself and to  
14 the asset manager, James Kent.

15 Q. Under what circumstances do the masters  
16 work for the OIM?

17 A. While we're conducting drilling  
18 operations.

19 Q. How about during emergency?

20 A. Are we talking about the experience?  
21 I've only had the one experience of emergency.

22 Q. No. I mean in terms of procedures.  
23 During an emergency, does the master still work for  
24 the OIM -- let's say during a well-control situation  
25 that resulted in an emergency, does the master still

1 work under the OIM?

2 A. During the initial stages of the  
3 well-control situation, before it becomes evident  
4 that we need to go further, the OIM would be in  
5 control. However, if it escalated to an emergency  
6 where we would have fire or a disconnect or  
7 whatever, the captain would then assume  
8 responsibility.

9 Q. Are there clear parameters which that  
10 transition should take place? And what are they?  
11 Situation, I mean, not parameters. Situations.

12 A. My understanding was -- is, should I  
13 say, as soon as the integrity of the vessel becomes  
14 endangered, the master would assume all  
15 responsibilities and become the PIC.

16 Q. And who would make that decision that  
17 the integrity of a vessel is in danger?

18 A. The master and the OIM together, I would  
19 imagine.

20 Q. So you have to come together to make  
21 that decision?

22 A. I'm sure they would come together and  
23 make that decision, yes.

24 Q. What is the written procedure for --  
25 under the Safety Management System? Does it define

1 when that would be -- in what situation, what would  
2 take place for a transition to take place?

3 A. I believe there would be certain  
4 situations where there would need to be a  
5 discussion, and there would be other situations  
6 where it was abundantly clear that the master would  
7 assume responsibility.

8 Q. Are these situations in the form of a  
9 written procedure or policy?

10 A. I haven't seen a written procedure on  
11 the mechanism of a hand over of responsibilities  
12 between an OIM and a captain, no.

13 Q. So as the rig manager before the  
14 casualty, did you have full confidence in Capt.  
15 Kuchta's ability to meet the responsibility of the  
16 vessel master?

17 A. Yes, I did. Again, I believe Curt was a  
18 very competent captain.

19 Q. You indicated that you were an OIM for a  
20 Transocean vessel; is that right?

21 A. And very briefly a jack-up, yes.

22 Q. In that situation, was there two  
23 different positions, the master and OIM, separately?

24 A. It was a jack-up, so there was no  
25 master.

1           Q.       Do you think that it is effective and  
2 efficient to have the HORIZON master not in command  
3 while the MODU is on location?

4           A.       I believe the system in place worked  
5 very well.  It's a very complex machine with a lot  
6 of activities, and having a designated OIM with  
7 operational experience and a master who was still in  
8 charge of everything marine-related worked  
9 efficiently, yes.

10          Q.       How would a third-party contractor such  
11 as Halliburton or M-I SWACO know when that  
12 transition take place and under what situation they  
13 should look for guidance?

14          A.       All -- all communication regarding any  
15 emergency would be coming from the bridge, so I  
16 think with regards to Halliburton or anyone else, it  
17 would just be a different voice over the PA or  
18 giving instructions to emergency response teams.  
19 I'm not sure on a practical sense what indications  
20 there would be for that.

21          Q.       So if there's no written procedure for  
22 when -- how the handoff to take place, is there a  
23 written procedure between various -- to cover  
24 various operations so that things will go smoothly?  
25 Is there -- under HSE side, there's a bridging

1 document, I understand, between BP and Transocean  
2 for safety? Is there a bridging document for  
3 operations that everybody know during what  
4 activities going on, if there's an emergency, what  
5 people and how people would respond? Is there such  
6 a bridging document?

7 A. There is not a bridging document. We  
8 have HSE manual, HSE policies and procedures that  
9 define what we do in certain emergencies.

10 Q. How do you feel about a change of  
11 command between your OIM and your master, Mr. Jimmy  
12 Harrell and Capt. Kuchta, on the night of the April  
13 20th? Are you clear as to who was in charge?

14 MR. ADLER: I'm going to object,  
15 because he was not on the rig.

16 HON. ANDERSEN: Well, if you don't  
17 have an opinion, you don't have to guess  
18 or speculate. But if you have an opinion  
19 or if there's a -- if you are clear or not  
20 clear, you're going to be able to explain  
21 why.

22 A. I'm not sure how the transition went  
23 between the two parties. When the incident  
24 occurred, it knocked out communications. So during  
25 the emergency response, you know, I didn't have any

1 communication with Jimmy or with Curt. So I don't  
2 have an opinion.

3 Q. (BY CAPT. NGUYEN) Since the casualty,  
4 did you query in terms of, you know, the transition  
5 between OIM and the master?

6 A. No, I have not.

7 Q. Mr. Daun Winslow, the Transocean -- I  
8 believe operation managers; is that correct?

9 A. That's correct. Yes.

10 Q. -- was aboard the DEEPWATER HORIZON  
11 during the casualty.

12 Have you discussed the casualty with  
13 him?

14 A. Yeah, we've discussed certain events of  
15 the evening, yes.

16 Q. Did Mr. Winslow have a clear  
17 understanding as to who was in charge of DEEPWATER  
18 HORIZON during the well blowout and subsequent  
19 evacuation of the vessel?

20 MR. ADLER: I'm going to object.  
21 Again, with all due respect, Captain,  
22 Mr. Winslow is the next witness. I think  
23 that question would probably be better  
24 asked of Mr. Winslow, if he had a clear  
25 understanding, as opposed to Mr. Johnson.

1                   CAPT. NGUYEN: But they had a  
2                   conversation, so I'm asking for his  
3                   recollection.

4                   MR. JOHNSON: Can we establish,  
5                   Captain, that that conversation was about  
6                   that topic?

7                   HON. ANDERSEN: If the witness had a  
8                   conversation, you can tell us when and  
9                   where you had the conversation, who was  
10                  present, then you can tell the Board what  
11                  transpired in the conversation.

12                 A.           I've had numerous conversations with  
13                 Daun Winslow, he's in the office next door to me,  
14                 and -- but we haven't discussed how the transaction  
15                 of PIC, person in charge, took place. It's just not  
16                 one of the topics we've discussed, so I don't know  
17                 his opinion on that.

18                 Q.           (BY CAPT. NGUYEN) As the rig manager,  
19                 would that be something that you would be interested  
20                 in?

21                 A.           Would I be interested in?

22                 Q.           In the transition that -- how the -- the  
23                 transfer of command took place during this major  
24                 casualty.

25                 A.           I never gave it much thought, because

1 the instant seriousness of this situation, it never  
2 occurred to me to question how the transition went  
3 between the two personnel. I did ask about the  
4 performance, but not how the transition went between  
5 the two guys; no, I did not.

6 Q. Do you think that the -- the transfer of  
7 command would have -- if it was not done properly,  
8 would that contribute -- would that be a  
9 contributing cause to the casualty?

10 MR. SCHONEKAS: I'm going to object.  
11 It calls for an opinion from a lay  
12 witness. He wasn't even there.

13 HON. ANDERSEN: You want to state  
14 your name so the court reporter gets it.

15 MR. SCHONEKAS: I'm sorry. Kyle  
16 Schonekas.

17 HON. ANDERSEN: The Board believes  
18 you're more than a lay witness. You don't  
19 have to make up an opinion, but if you  
20 have an opinion as a person who's been in  
21 this business for all this time and  
22 overseeing all these people, the Board  
23 would welcome your opinion. And  
24 that's -- so the question can be answered.

25 MR. KOHNKE: Can I ask that the

1 question be read back?

2 HON. ANDERSEN: Sure.

3 MR. KOHNKE: Because I've forgotten  
4 it, and maybe the witness has as well.

5 THE REPORTER: "Do you think that  
6 the -- the transfer of command would  
7 have -- if it was not done properly, would  
8 that contribute -- would that be a  
9 contributing cause to the casualty?"

10 MR. JOHNSON: I'm going to object on  
11 behalf of Transocean. I don't think  
12 there's been any foundation established  
13 that he's done any investigation into the  
14 causal relationship between what happened  
15 and why.

16 MR. ADLER: And if I could, Judge,  
17 if the question is could a bad handoff  
18 have an effect on a potential casualty, I  
19 think that's a fair question to ask him,  
20 but I don't think you can ask him about  
21 this particular incident because he wasn't  
22 there. He doesn't know.

23 HON. ANDERSEN: Well, then -- he's  
24 already stated that. And he might not  
25 have drawn any conclusions from it. And

1 he's -- and as he pointed out, he hasn't  
2 thought about this handoff of authority.

3 However, he might have reflected,  
4 and if his reflection can help enlighten  
5 the Board and help them make good  
6 recommendations, the Board would like to  
7 have them.

8 So answer the question, but just  
9 because you're answering it doesn't mean  
10 you have to sit here and make up an  
11 opinion.

12 A. Okay. To be clear, I -- I'm not sure of  
13 the relationship of the hand over between the two  
14 gentlemen at the time. If the question is, do I  
15 think a bad hand over between a master and an OIM in  
16 an incident could cause confusion, then, yes, I  
17 would.

18 Q. (BY CAPT. NGUYEN) How many Transocean  
19 MODUs that have this huge chain of command still  
20 exist?

21 A. It's my belief all of our BP-operated  
22 vessels, semis and ships have a separate OIM and  
23 master.

24 Q. Do you know if that is industry  
25 standard, that other operator use the same

1 organizational structure?

2 A. I believe it's not a standard but  
3 certainly common with other -- with other  
4 contractors, yes.

5 Q. Which one would that be, to the best  
6 of -- to your knowledge?

7 A. I believe SeaDrill do. Again, I'm not  
8 sure, and I just don't know. Just, it's not  
9 uncommon, and I'd heard of it before, I couldn't  
10 qualify where.

11 Q. But it lists Transocean vessel, that's  
12 their organizational structure you have worked for?

13 A. Yeah, Transocean is the only company  
14 I've worked for.

15 Q. Now, what is your knowledge of -- what  
16 is your knowledge of the International Safety  
17 Management Code?

18 A. I have read the code and am aware of it,  
19 but I don't have an intimate knowledge of the ISM  
20 Code.

21 Q. What is your responsibility in terms of  
22 ensuring compliance, the DEEPWATER HORIZON Safety  
23 Management Systems compliance, with the ISM Code?  
24 What is your responsibility and involvement?

25 A. I have an overall responsibility to

1 ensure we operate to the Transocean management  
2 system, and the ISM Code is embedded into the  
3 Transocean management system. It's a very large,  
4 in-depth management system, so to pick up specific  
5 areas, I would be struggling. But I do have a  
6 marine captain on board to assist in that process,  
7 and we also have ISM Audits to ensure compliance  
8 with the system as well, to the code.

9 Q. Now, the vessel captain is -- under the  
10 ISM Code, the vessel captain is responsible for safe  
11 operation of the vessel.

12 Now, how many management layers  
13 between him and Mr. Steve Newman, I believe, is your  
14 CEO; is that correct?

15 A. That's correct.

16 Q. How many management layers between him  
17 and the vessel master and the CEO?

18 A. Quite a few. I couldn't count them.

19 HON. ANDERSEN: More than four?

20 A. More than four, yes.

21 Q. (BY CAPT. NGUYEN) Do you know whether  
22 each one of those layers has a manager who have  
23 technical background to ensure your Safety  
24 Management System is in compliance with the ISM  
25 Code?

1           A.           I couldn't qualify that, then.

2   Technical qualifications, however, each one of my  
3   superiors is fairly experienced, but I don't know  
4   what their qualifications are.

5           Q.           If -- can DEEPWATER HORIZON continue to  
6   operate without a ship management -- safety  
7   management certificate, can it continue to operate  
8   without one?

9           A.           Continue to operate? Could you say the  
10   question again, please?

11          Q.           Can the DEEPWATER HORIZON continue to  
12   operate without an ISM ship safety management  
13   certificate?

14          A.           I don't believe so, no.

15          Q.           Okay. If Transocean document of  
16   compliance is withdrawn by the administration, the  
17   flag state, can any of its vessel  
18   operate -- continue to operate?

19          A.           I'm not 100 percent sure, but I think  
20   the answer is no.

21          Q.           Okay. And -- and the answer is no, so  
22   do you think that senior manager within Transocean  
23   from the -- the vessel master all the way up to  
24   Mr. Steven Newman should be knowledgeable of the ISM  
25   Code?



1 MR. FANNING: I have an objection.

2 First, Judge, I think you stated  
3 earlier that we weren't going to go back  
4 and visit earlier testimony and educate  
5 witnesses with the testimony of previous  
6 witnesses.

7 Second, the captain didn't just give  
8 him a quote or a statement but  
9 characterized that he didn't know much  
10 about the Safety Management System, and  
11 then he's asking how do you explain that  
12 as though all those facts have been  
13 established, so I object on many grounds  
14 for this type of question.

15 MR. ADLER: And, Judge, I would also  
16 object. It's just asking my client to  
17 speculate.

18 HON. ANDERSEN: First of all, that  
19 was Mr. Fanning, right?

20 MR. FANNING: They know me, Judge.  
21 The guy that yells so much.

22 HON. ANDERSEN: You'll know him by  
23 2:15.

24 Is there a way that you could break  
25 your question down so we can see if there

1 are different elements of that question  
2 the witness has an opinion on?

3 But, once again, you don't need to  
4 guess or speculate. If you have an  
5 opinion with respect to his credentials or  
6 your lack of knowledge regarding them, you  
7 can let the Board know that. If, in your  
8 position, you've drawn a conclusion, that  
9 would obviously be helpful to the Board.

10 I don't want to prohibit you from  
11 answering a question on it if in fact you  
12 do have a -- an opinion rooted in  
13 experience.

14 So, Captain, if you want to ask the  
15 question again.

16 Q. (BY CAPT. NGUYEN) Yes. I'll make it  
17 clearer.

18 If your OIM -- if your OIM doesn't  
19 know much about this vessel Safety Management System  
20 and his ISM training, how do you explain that?

21 MR. FANNING: Well, again, Judge, I  
22 have the same objection. If the OIM  
23 doesn't know much about it is -- how can  
24 you pin that down? How does this witness  
25 know how much is not know very much? It's

1           just impossible for the witness to give an  
2           answer to the question.

3                   HON. ANDERSEN:   Okay.   To move  
4           things along, how much do you think the  
5           OIM should know about these matters?   And  
6           then you can take it from there.

7           A.        The OIM is -- both OIMs are very  
8           knowledgeable on the Safety Management System.   I  
9           can't explain why he couldn't answer the questions  
10          you put to him on the day.   However, I've worked  
11          with these guys for a period of time, and they were  
12          knowledgeable on the Safety Management System.   And  
13          I have to be honest, we never discussed the ISM  
14          Code, so I don't know either OIM's understanding or  
15          knowledge of the ISM Code.   It was not something  
16          that came up in our conversations.

17          Q.        (BY CAPT. NGUYEN)   So when the DNV  
18          surveyor acting as a recognized organization for the  
19          Marshall Islands come aboard to do an ISM Audit,  
20          when they say "ISM," nobody know what you're talking  
21          about?

22                   MR. ADLER:   I'm going to object to  
23           the question as vague.

24                   MR. JOHNSON:   That's not at all what  
25           he testified to, Captain.

1                   HON. ANDERSEN: I'm going to take  
2                   that to mean, what would you expect the  
3                   OIM to know in response to that inquiry?

4           A.        I'm kind of lost what the question is  
5           now.

6                   HON. ANDERSEN: When they come on --  
7                   when the Marshall Islands comes on to  
8                   inspect and ask you about the code, what  
9                   would you expect the people in charge on  
10                  board to know in reference to that  
11                  inspection?

12           A.        I believe that the master and the OIM  
13           would have a knowledge of the ISM Code. The ISM  
14           Code is embedded into our Safety Management System.  
15           It's pretty much all of the code is already embedded  
16           in the Management System, so if you ask him cold on  
17           the day, maybe he's not aware that that's ISM Code,  
18           but he's aware we meet certain criteria.

19                    I would also believe that if DNV or  
20           Marshall Islands or any regulatory bodies was coming  
21           on board to do an ISM Audit, we would have the ISM  
22           Audit criteria there so we could refresh memories  
23           when having the conversation.

24           Q.        (BY CAPT. NGUYEN) Who is your company  
25           ISM-designated person?

1           A.       Jimmy Moore.

2           Q.       Jimmy Moore.

3                        Did Mr. Moore or his predecessor  
4 ever inform you of a breakdown in the Safety  
5 Management System or vessel that you managed, in  
6 this case the DEEPWATER HORIZON, and how did that  
7 situation, if there was one, how did what -- how did  
8 that situation get resolved?

9           A.       I have not had any ISM issues of any  
10 vessels I've been in charge of, so, no, I haven't.

11          Q.       Were you involved in your company ISM  
12 Audit by the American Bureau of Shipping in January  
13 of 2006?

14          A.       No, I did not.

15          Q.       To your knowledge, did any Transocean  
16 senior manager participate in that audit?

17          A.       I have no knowledge of the 2006 audit,  
18 no.

19          Q.       Do you recall ever participating in a  
20 management review as stated in the ISM Code?

21          A.       No, I did not.

22          Q.       Do drill personnel participate in  
23 activities relating to vessel Safety Management  
24 System?

25          A.       Do the drill crew?

1 Q. Yes, sir.

2 A. Yes, they do. That's part of the fire  
3 team.

4 Q. The fire team?

5 A. Yes. All roustabouts are part of the  
6 fire team.

7 Q. So what about when there are casualty or  
8 casualty occur and the ship personnel look at  
9 the -- examine the casualty, the cause, and so far  
10 and so on in terms of try to find resolution and  
11 make improvement or whatever, do the drilling  
12 personnel participate in those activities?

13 A. Yes. I'm sorry I misunderstood your  
14 question. I thought you were talking about engines.

15 But when we have any form of  
16 incident on board a rig, regardless of severity, we  
17 conduct an incident investigation and look for root  
18 cause and remedies to prevent reoccurrence. So  
19 depending on the nature of the incident, whether  
20 it's solely marine or drilling or whatever, the  
21 right personnel are involved in that investigation  
22 and the lessons learned are shared.

23 Q. On August 31st, 2005, Transocean  
24 DEEPWATER NAUTILUS sustained damage to its mooring  
25 system and lost approximately 3,200 feet of marine

1 riser and a portion of its subsea well-control  
2 system during Hurricane Katrina.

3 Did Transocean conduct an  
4 investigation, to your knowledge?

5 A. I have no knowledge of that  
6 investigation, but I'm absolutely certain an  
7 investigation would have been held.

8 Q. Are you aware of any lesson learned from  
9 that incident?

10 A. I wasn't even aware of the incident, so  
11 I don't know personally what the lessons are, but  
12 I'm sure there was.

13 Q. Okay. How about the DEEPWATER HORIZON  
14 incident here: On May 26, 2008, due to inadequate  
15 work company system, the Transocean DEEPWATER  
16 HORIZON suffered a major flood and casualty that  
17 cost \$900,200 in damage.

18 Did Transocean conduct an  
19 investigation?

20 A. Yes, they did.

21 Q. Were you a participant in that  
22 investigation?

23 A. No, sir. Just to be clear, I didn't  
24 join the HORIZON or the Gulf of Mexico until  
25 mid-August, 2009. So it was long before my time.

1 Q. Okay. So, to your knowledge, they did  
2 conduct an investigation?

3 A. Yes, sir.

4 Q. What did Transocean learn from that  
5 incident?

6 A. Again, it's been a long time since I saw  
7 the report. And there were numerous lessons  
8 learned. And I do believe one of the issues was  
9 control of work and permitting of work, but I  
10 couldn't state to you what the actual facts were.

11 Q. So if that -- so, as you indicated,  
12 there was changes made to the Safety Management  
13 System to ensure that didn't happen again?

14 A. I don't know if there were, but there  
15 certainly would have been lessons learned and then  
16 actions implemented to ensure and prevent  
17 reoccurrence.

18 Q. Would it surprise you that in September,  
19 2009, when BP did a maritime offshore audit, that  
20 the work permitting system was still inadequate?  
21 Would that surprise you?

22 MR. ADLER: I'm going to object to  
23 any questions about would he be surprised.  
24 I don't see why whether he would be  
25 surprised or not has any relevance.

1 Q. (BY CAPT. NGUYEN) Well, if there was  
2 lesson learned, I would think it would be  
3 implemented so it would not happen again.

4 So if something like that happened  
5 again and it pointed to a work permitting system not  
6 being adequate, does that surprise you?

7 A. I don't know what the issues were with  
8 the work permit system the first time around, and so  
9 it's difficult for me to comment. All I can comment  
10 about is my actions from when I took the rig and how  
11 we progressed forward.

12 Q. On April 26, 2010, due to loss of the  
13 DGPS signal, the Transocean DISCOVERER CLEAR LEADER  
14 had to drydock and caused an estimated \$760,000  
15 damage to the lower marine riser package and marine  
16 riser system.

17 Were you aware of that incident?

18 A. Very vaguely. If you can appreciate,  
19 sir, that was right in the middle of what was  
20 happening at the HORIZON, so I'm not familiar with  
21 the actual facts of the CLEAR LEADER drydock.

22 Q. But did Transocean conduct an  
23 investigation?

24 A. Yes, they did.

25 Q. Do you know if any lesson learned from

1 that investigation?

2 A. I believe there are, yes.

3 Q. Okay. But you don't know exactly what  
4 changes were made to the Safety Management System to  
5 ensure it doesn't happen again?

6 A. No, I don't.

7 Q. Okay. About a month before the  
8 DEEPWATER HORIZON casualty, Transocean commissioned  
9 Lloyds to conduct a survey of the vessel safety  
10 culture.

11 What was your involvement in that  
12 survey?

13 A. They picked four vessels in each region,  
14 I believe it was the plan for the whole company  
15 worldwide, and they selected four rigs in the Gulf  
16 of Mexico, and DEEPWATER HORIZON was one of the  
17 vessels. So I was privy to, like, a pre-meeting, if  
18 you like, where they conducted that and did an  
19 interview with myself onshore prior to going  
20 offshore and conducting the survey.

21 Q. So am I understanding that the selection  
22 of the DEEPWATER HORIZON was random?

23 A. Yes, it was.

24 Q. Are you aware of the results of the  
25 survey?

1           A.           I haven't seen the final, official  
2 report that was given to Transocean management;  
3 however, I was privy to kind of, like, a closeout  
4 meeting conducted by the Lloyds team that were  
5 offshore that they ran through with the OIM and  
6 senior team offshore, and I received a copy of that  
7 report.

8                           HON. ANDERSEN: I'm going to ask the  
9 Board members, our microphones are further  
10 away, so in order for it to be picked up  
11 by the audio system, we need to either  
12 lean towards it or pull it towards us.

13           Q.           (BY CAPT. NGUYEN) Was any result from  
14 that report communicated to you at this meeting, did  
15 any of it surprise you?

16           A.           No, none of it surprised me, and it was  
17 a pretty good report. We got a lot of good,  
18 positive feedback, and we also seen that -- and we  
19 also seen some areas for improvement. So not  
20 surprised, and we took the observations that were  
21 found and started to make headway into improvement.

22           Q.           With this kind of audit, is that a peer  
23 audit that Transocean conduct or is that something  
24 that -- a trend of casualty or complaints or  
25 whatever that caused Transocean to initiate the

1 survey?

2 A. I'm not 100 percent sure of the exact  
3 trigger of this review, and I do believe it's around  
4 safety performance worldwide, and then Transocean  
5 elected to take a proactive step and have a  
6 reputable company like Lloyds from outside come in  
7 and conduct the survey and help us out with stuff  
8 that we may be missing internally. So I believe it  
9 was a proactive effort on Transocean's part to  
10 improve the safety of our operations.

11 Q. So it was proactive, not reactive?

12 A. I believe so, yes.

13 Q. To your knowledge, has Transocean  
14 done -- what has Transocean done to address the  
15 areas of concern that was identified in this report?  
16 Have they done anything?

17 A. I have not seen the official report for  
18 the Transocean company. I only saw a feedback  
19 report for my rig.

20 Q. You you're not aware of any action that  
21 Transocean has taken as a result of the survey?

22 A. No, I don't even know if the report is  
23 finalized and complete.

24 Q. Did you ever participate in or have  
25 knowledge of the result of the Coast Guard

1 inspection of a Transocean vessel?

2 A. Coast Guard have been to the DEEPWATER  
3 HORIZON, but I can't recall the specifics of the  
4 inspection.

5 Q. Have you ever participated in such a  
6 course of an inspection?

7 A. I have not, no.

8 Q. How about inspection by the Minerals  
9 Management Service?

10 A. I've -- I've been on board once when the  
11 MMS came on board for an inspection, so I've been  
12 privy to one inspection while I was there, and the  
13 rest of the -- the other inspections were conducted  
14 when I wasn't on board.

15 Q. When was the last time? What was the  
16 time you're talking about? When was that?

17 A. I'm not sure. I'm going to say January  
18 time, but I can't recall the exact time.

19 Q. 2010?

20 A. 2010. It was either late 2009 or early  
21 2010.

22 Q. How about inspection by the flag state?  
23 Marshall Islands in this case.

24 A. Again, I've not participated personally  
25 in that inspection, but we had conducted a

1 flag-state inspection of the rig.

2 Q. On the Macondo project, did you interact  
3 with any BP employees or other contractors?

4 A. Say that again, please.

5 Q. For the Macondo project --

6 A. Yes, sir.

7 Q. -- who were your BP counterpart?

8 A. Oh, my counterpart was John Guide.

9 Q. What kind of activities and issues did  
10 you interact on?

11 A. Anything to do with the rig or the well  
12 activities would create a conversation between  
13 myself and John Guide.

14 I used to go to BP daily and meet  
15 with John and -- and attend the morning call and  
16 listen to what the plans were for the well and for  
17 the up and coming operations and make sure that we  
18 were ready and prepared and could manage what was  
19 being asked of us.

20 Q. Okay. Do you know what a major  
21 nonconformity under the International Safety  
22 Management Code is?

23 A. I understand what a major nonconformity  
24 is, but I couldn't quote what any of them are.

25 Q. Okay. If I tell you that a major

1 nonconformity is a deviation that poses a serious  
2 threat to the safety of personnel on the ship or  
3 serious risk to the environment that require  
4 immediate corrective action.

5 I'm going to ask you about nine  
6 different items here, and based on that definition,  
7 would you tell me whether it's a major  
8 nonconformity? Okay?

9 A. Okay.

10 Q. All right. There's no annual health and  
11 safety plan in place.

12 A. You're asking me if there was one or  
13 if --

14 Q. No. This is raised in the report, the  
15 audit report. Did you see the audit report by -- as  
16 the rig manager, did you see the September, '09, BP  
17 follow-up rig audit and marine assurance audit?

18 A. Yes, I did.

19 Q. So you're aware of the result of that  
20 audit?

21 A. Yes.

22 Q. So these items are here, are reported,  
23 the result of the audit.

24 So one of the results is that  
25 there's no annual health and safety plan in place

1 for the DEEPWATER HORIZON.

2 Is that a major nonconformity  
3 according to the definition I gave you?

4 A. No. But I believe there was a plan in  
5 place. However, it wasn't demonstrated at the time.

6 Q. How about that not all relevant  
7 Transocean personnel on the rig were knowledgeable  
8 of the drilling and well operation practice and  
9 assorted engineering technical practices?

10 A. No.

11 Q. Equipment isolation improvement process  
12 was inadequate?

13 A. Could be, but depended on what the  
14 inadequacy was, and so it depends on the situation.

15 Q. Well, we're talking about the process  
16 here, we're not talking about a particular piece of  
17 equipment. We're talking about a process. The  
18 process was inadequate.

19 So would that be a major  
20 nonconformity?

21 A. I'm not sure. I wouldn't like to say.

22 Q. Any further dilution of experienced  
23 personnel may be detrimental to the performance of  
24 the rig.

25 Would that be a major nonconformity?

1           A.        If there was further dilution, maybe so.  
2 But there wasn't any further dilution, so, no.

3           Q.        There was no competency assurance  
4 systems in place?

5           A.        Two points: There was a competency  
6 assurance process in place, and I don't know why it  
7 wasn't communicated. I do know the auditors at the  
8 time had a different opinion on what a competency  
9 insurance system should look like; however,  
10 Transocean did have one. And at the time of the  
11 audit, we were running around at 80 percent  
12 compliance.

13                        So if there was none, I would say --  
14 I'm still not sure if the answer would be no, but we  
15 did have a competency assurance system in place.

16           Q.        In 2008, BP also conducted an audit, the  
17 same audit, and they indicated that there are no  
18 verification of proper operation of the  
19 anticollision system. In other words, it's not  
20 still being -- periodically taking place as  
21 required.

22                        Would that be a major nonconformity?

23           A.        It would depend on what the -- what part  
24 of the anticollision system wasn't working, and I'm  
25 not aware of the 2008 audit report.

1           Q.       Despite previous recommendation, it  
2 could not be demonstrated that all critical digital  
3 and analog drilling instrumentation is being  
4 calibrated.

5           A.       Again, I'm not sure of the previous  
6 requests.

7           Q.       No, it's not a previous one, this is the  
8 September 2009 report here, and it's saying that the  
9 previous recommendations -- let me go back. Let me  
10 go down to this one.

11                       Now, did you -- when BP presented  
12 the results to you as the rig manager, what was your  
13 view -- what was Transocean's view of the identified  
14 discrepancies?

15                       So I understand it's between you and  
16 John Guide. If they take this report and hand it to  
17 you with all these discrepancies on there, what's  
18 your view of the discrepancy? Did you challenge  
19 them on any of their findings?

20           A.       Okay. The report was presented to me  
21 from John Guide, and our first action was to have a  
22 look at the report, review it, and then see if we  
23 disagreed or wanted to challenge on any of the  
24 points and also action plans and close out what we  
25 could.

1           So -- so the action we took was to  
2 turn the report into a spreadsheet table format so  
3 we could track accurately, assign responsibilities  
4 for each line item and close out what we could or  
5 put an action plan in place.

6           So once we received the report, we  
7 responded by demonstrate to BP what our plan was  
8 going to be for each line item in the report.

9           It should be also noted that  
10 although the report was given to me, I am  
11 performance and not asset. So I'm the conduit  
12 between Transocean and BP; however, I'm not largely  
13 responsible for the action items.

14           Q.       How many of those items under BP audit  
15 didn't make it over to your work list?

16           A.       Everything went into the work list. We  
17 didn't remove the work list. We transferred the  
18 entire order onto the work list, and then we put it  
19 in the comments section if we challenged this and  
20 also why we challenged that. Although I don't  
21 believe there was many challenges to the report.  
22 The number was very low.

23           The rest of the findings we either  
24 explained or corrected or put a plan in place to  
25 correct.

1           Q.       What was the status of the identified  
2 discrepancy at the time of the casualty? Were they  
3 all clear, 100 percent completed?

4           A.       No, they weren't. And 100 percent  
5 accurate in the numbers, but give or take a couple.  
6 On the rig order, I believe we had 26 items  
7 outstanding. However, all of the 26 actions were in  
8 progress, and none deemed safety critical or  
9 prevented us from carrying out our operations.

10                   And similar for the marine audit, I  
11 think we were down to seven items left on the marine  
12 audit, again, all with action plan in place, whether  
13 it was waiting on parts or waiting for the  
14 appropriate time to do the change or modification or  
15 repair, which would have been in the 2011  
16 out-of-service period.

17           Q.       As a former OIM and also a licensed  
18 officer, are you familiar with Coast Guard  
19 requirement for reportable casualties?

20           A.       Just to clarify, I'm not -- I was never  
21 an officer. I was never an OIM in the U.S. I was a  
22 temporary OIM in Canadian waters into the UK.

23           Q.       Okay. But you are a licensed -- is your  
24 license a U.S. license?

25           A.       No, sir.

1 Q. Now, are you familiar with Coast Guard  
2 reportable -- requirement for reportable casualties?

3 A. I have a vague understanding off the top  
4 of my head.

5 Q. Now, one of the criteria for reporting  
6 is that any circumstance that might affect or impair  
7 a vessel seaworthiness service or route.

8 Now, did BP, when they hand over  
9 this -- the result of this rig audit that they did,  
10 did they say -- did they tell you that you continue  
11 to operate, or did they say, "Hey, we need to  
12 resolve some of these items before you can operate"?

13 A. When we got the report, we sat down and  
14 discussed the report line items, and BP had a number  
15 of items on the report that they wanted to be  
16 rectified before going back to -- back to  
17 operations.

18 We were currently in an  
19 out-of-service period, so the rig was shut down  
20 during maintenance. And before we went back to  
21 work, BP had requested that a number of items to be  
22 rectified and in place.

23 Q. Because they were worried about the  
24 seaworthiness of the vessel?

25 A. I'm not sure if it's the seaworthiness,

1 but probably so. They had concerns and didn't want  
2 to go back to work before certain things were fixed.  
3 As did Transocean. We also elected that there was a  
4 couple of pieces of equipment that we were going to  
5 fix and change before we went back to work.

6 Q. Would that necessitate a report to the  
7 Coast Guard or the flag state that these -- these  
8 discrepancies that affect seaworthiness of all the  
9 continued suitability of the vessel to operate?  
10 Should that have been reported to the Coast Guard or  
11 flag state?

12 A. I'm not sure, so I don't want to be  
13 quoted, but if we -- if we were offshore, past the  
14 12-mile barrier, I didn't think we had to report to  
15 the Coast Guard, but I don't know. I just don't  
16 know.

17 Q. Who would know?

18 A. The captain.

19 Q. The captain.

20 A. He would advise me. As would the marine  
21 authority who had looked at the report as well.

22 Q. So if the condition of the vessel is  
23 such that it meet the reporting requirement of the  
24 Coast Guard regulations, he is the one who is going  
25 to report to the Coast Guard?

1           A.           The captain would advise me, as would  
2 the marine superintendent for Transocean, if there  
3 was a need to report to the Coast Guard.

4           Q.           And who would make the determination  
5 whether it should be made to the Coast Guard?

6           A.           The captain of the marine  
7 superintendent, who is an ex-captain, would advise.  
8 And the notification would come from the rig, from  
9 the captain.

10          Q.           Would he notify you to get approval, or  
11 is it something that he is required to make  
12 notification?

13          A.           The captain doesn't have to request my  
14 approval to give notifications. It's requested by  
15 legislation. He would inform me he's done so, but  
16 he would make the notification.

17          Q.           Did the captain inform you of any of  
18 these items to report to the U.S. Coast Guard?

19          A.           I don't recall.

20          Q.           Were there any changes to the DEEPWATER  
21 HORIZON instructions and procedure to ensure  
22 compliance with the ISM Code for the Macondo  
23 project?

24          A.           I don't believe so, no.

25          Q.           For the ISM Code, "The company should

1 define and document the responsibility, authority  
2 and interrelation of all personnel who manage,  
3 perform and verify work relating to and affecting  
4 safety, and pollution prevention."

5                   Now, according to the protocol, the  
6 master is responsible for the vessel operation and  
7 pollution prevention; is that your understanding?

8           A.       Just from what you've told me now, yes.

9           Q.       Does the master of the vessel engage or  
10 have full awareness of what's going on on the  
11 vessel, including drilling?

12          A.       Yes, he does. And I made sure all of  
13 our team was very close. And every day, we had a  
14 group operations -- and when I say "operations," I  
15 mean everything regarding the vessel every morning.  
16 And in that phone call was myself, the asset  
17 manager, James Kent, the OIM, the captain, chief  
18 engineer, the tool pusher and the safety officer, to  
19 ensure that we're in full communication across the  
20 divisions. It was not an issue anyway, it was just  
21 a step we took to make sure.

22          Q.       So while the DEEPWATER HORIZON on a  
23 station, the master is not the decision-maker with  
24 regard to any operation on the rig?

25          A.       The OIM is in charge of operations;

1 however, any marine-related issues, the master makes  
2 the decision. And the OIM and the master speak  
3 constantly throughout the day over all issues to  
4 make sure they're aligned and they're okay to  
5 proceed.

6 Q. According to the DEEPWATER HORIZON  
7 Safety Management System, please explain how  
8 well-control situations get reported and handled.

9 A. A well-control situation, we had a well  
10 control, and it would be reported to myself by  
11 immediate -- just telephone. However, we have to  
12 report all well-control issues/incidents in our  
13 report system, in GMS. So all well-control  
14 situations are reported on the morning report, and a  
15 separate well-control report is generated.

16 Q. Are drilling operation procedures part  
17 of the vessel Safety Management System?

18 A. Yes, they are.

19 Q. Does Transocean have a written policy  
20 that fire and abandon-ship drills were conducted at  
21 a certain time every Sunday?

22 A. I'm not sure if it's specific on times,  
23 but it says they are to be conducted weekly.

24 Q. Not every Sunday?

25 A. I'm not sure it says Sunday or not. I

1 do know it says weekly, though.

2 Q. Was it general practice on  
3 Transocean-owned vessel?

4 A. The general practice is --

5 Q. On the DEEPWATER HORIZON?

6 A. The general practice is, we conduct the  
7 drills on a Sunday weekend.

8 Q. Do you think that that practice is  
9 prudent and effective?

10 A. Yes, I do.

11 Q. What is Transocean contingency for  
12 fighting a well fire?

13 A. For fighting a well fire, we have fixed  
14 firefighting systems on board the vessel, and that  
15 we have to ensure that they're maintained and  
16 functioning. Once it's outside the vessel, we rely  
17 on the external assistance from the Coast Guard.

18 Q. For your firefighting, you rely on the  
19 Coast Guard?

20 A. If we got into a situation where we  
21 needed external support, we would be -- I'm sure we  
22 would be asking for the Coast Guard and anybody else  
23 for assistance. But the question was what we have.  
24 We have fixed firefighting stations on the vessel  
25 for fighting low-class fire on the unit.

1           Q.       So in this particular case, you have an  
2 explosion and fire, so if it beyond the vessel  
3 capability, your understanding is that the Coast  
4 Guard is going to be the one who come and help, or  
5 is it Transocean have firefighting resources in  
6 place to deal with that?

7           A.       I'm not aware of any external  
8 firefighting resources that Transocean has to call  
9 upon. My understanding was that we would be  
10 requesting the assistance of the Coast Guard.

11          Q.       Okay. Are you aware that there was  
12 firefighting efforts from a vessel that was in the  
13 vicinity of the DEEPWATER HORIZON?

14          A.       That's correct. Yes.

15          Q.       Who -- who ordered those vessel to  
16 conduct firefighting?

17          A.       I'm not sure if it was BP or whether it  
18 was the Coast Guard. But I believe it's one of them  
19 two.

20          Q.       Why is that? Why not Transocean?

21          A.       Because I was in the Transocean incident  
22 command, and we didn't contact the vessel to request  
23 firefighting.

24          Q.       So what did -- so you didn't contact  
25 this vessel and -- isn't that your vessel that was

1 burning?

2 A. I believe that the firefighting efforts  
3 had already started, and I'm not sure where that  
4 call came from. I'm assuming it was from BP  
5 incident command or whether it was from the team on  
6 board the vessel, as in the HORIZON crew that  
7 boarded the BANKSTON. I'm not sure.

8 Q. What is the responsibility of your  
9 incident management center?

10 A. Incident command center.

11 Q. Incident command center. What is the  
12 purpose of your incident command center?

13 A. To supply support for the incident and  
14 help out as best we can to take care of our people.

15 Q. But you're not -- but one of the  
16 function of your incident command center is not to  
17 call in firefighting for your vessel?

18 A. Yes, sir. But there's a lot of people  
19 involved in the incident command, and my sole  
20 responsibility in the incident command was to engage  
21 with the BANKSTON, with the crew. So I was speaking  
22 to Daun Winslow, to Jimmy Harrell, Curt Kuchta and  
23 speaking to them and then relaying that information  
24 to the incident command team.

25 I'm not sure where the request came

1 up, but it was noted that at one point, that DAMON  
2 BANKSTON was providing firefighting assistance to  
3 the HORIZON.

4 Q. But you sound pretty certain that  
5 Transocean did not order any firefighting efforts  
6 for the HORIZON; is that correct?

7 A. Okay. I am not certain that we didn't.  
8 I just -- I was there and don't recall us making the  
9 request. I think it just happened naturally, but I  
10 do not know for sure.

11 Q. But they requested it from you, not from  
12 anyone else in Transocean, right? Because you were  
13 fairly certain that the request came from either  
14 Coast Guard or BP, and I just want to narrow down  
15 that you know that for 100 percent sure that that's  
16 only those two entity was the one.

17 A. There's only three parties involved.  
18 There's BP, Transocean and the Coast Guard.

19 Q. Right.

20 A. What I'm saying is, I was in the  
21 incident command, and I don't recall anybody asking  
22 the DAMON BANKSTON to supply firefighting services.

23 Now, they either did that because it  
24 was deemed obvious that they needed to do so or BP  
25 requested it. Somebody in Transocean may have made

1 the call while I was busy elsewhere, but I don't  
2 recall it.

3 Q. So you don't know for sure who did, or  
4 you know for sure Transocean did not initiate that?

5 A. That's correct. I don't know for sure.

6 Q. Okay. But what is Transocean  
7 contingency plan for fighting a fire? Is that just  
8 the vessel personnel capability and that's it? Is  
9 that their total plan for marine firefighting?

10 A. I don't know specifically.

11 Q. So there may be a plan that you may not  
12 be aware of that may identify resources for marine  
13 firefighting? There may be, but you're not aware of  
14 it?

15 A. I'm not aware of the exact specifics of  
16 the plan for calling in external assistance.

17 Q. But it's not limited to just the  
18 personnel on board the Transocean DEEPWATER HORIZON?

19 A. Oh, no. No, no. Anybody can do it.  
20 The rig itself can call for assistance or the  
21 off-scene command team -- sorry, the shore-side  
22 command team can request it.

23 Q. Prior to the casualty, were there any  
24 well-control situation that concerned you?

25 A. Not so much concerned me. We did have

1 numerous well-control issues throughout drilling  
2 this well, and we had numerous losses that was  
3 proving challenging, and we did take one kick as  
4 well and another ballooning event.

5                   So there were quite a few  
6 well-control issues throughout drilling this well.

7           Q.       Did your OIM communicate of any concern  
8 to you that would require shutdown of the drilling  
9 operation?

10          A.       No, sir.  Although we had challenges,  
11 it's not uncommon in certain wells to prove  
12 troublesome drilling and then challenging; but not a  
13 concern, no.

14          Q.       Prior to the casualty, was it -- were  
15 you aware of any BP operational decision relating to  
16 the well design, installation that concerned you?

17          A.       No, I wasn't.

18          Q.       When BP management swap out a senior  
19 well-site leader from Mr. Sepulvado to Mr. Kaluza,  
20 did you have any concern?

21          A.       Yes, I did, and I raised those concerns.

22          Q.       What concerns did you raise?

23          A.       I challenged BP on the decision.  I was  
24 a little concerned that -- more so, we didn't know  
25 who this gentleman was.  You know, I wasn't making

1 any assumptions on him, I just -- I said, you  
2 know -- asked who was Mr. Kaluza, where does he come  
3 from? Because I heard he come from a platform, so I  
4 was curious about his deepwater experience in a  
5 critical phase of the well.

6 And not so much on the safety front,  
7 because I'm sure all BP well-site leaders are very  
8 experienced. It was, I was concerned on the rig  
9 knowledge and the planning.

10 So I did raise that concern to BP,  
11 and they informed me that Mr. Kaluza was a very  
12 experienced, very competent well-site leader with  
13 numerous years of experience, and it wouldn't be a  
14 concern.

15 Q. After Mr. Kaluza arrived on board,  
16 Mr. Harrell, did he communicate any concern with  
17 Mr. Kaluza's competence or decision-making?

18 A. I don't believe so, no. We talked about  
19 Mr. Kaluza before he arrived with Mr. Harrell, but  
20 not once he arrived, no.

21 Q. How about Capt. Kuchta? Did he  
22 communicate a concern with Mr. Kaluza's competence  
23 or decision-making?

24 A. No.

25 Q. Were you involved in the VIP visit to

1 the DEEPWATER HORIZON on April 20th?

2 A. Only in the form of preparing for the  
3 visit, making sure the guys were aware and ready for  
4 the visit.

5 Q. Since the casualty, my understanding is,  
6 Transocean has initiated an investigation into the  
7 casualty?

8 A. That's correct. Yes.

9 Q. What is your role in the investigation?

10 A. I have no part of the investigation  
11 team. I have been interviewed and -- three times  
12 now. But I'm not involved in the investigation.

13 Q. Has Transocean taken any action against  
14 you?

15 A. No, they have not.

16 Q. Are you on administrative leave status?

17 A. No, I'm not. I'm working full-time,  
18 sir.

19 Q. What are your activities right now?

20 A. I've been covering holiday relief for  
21 other rig managers that have been on vacation and  
22 certain other tasks within the HR operations  
23 department, whatever assistance needed.

24 Q. Based on what you know, do you still  
25 have full confidence in Mr. Jimmy Harrell to serve

1 as the offshore installation manager for a  
2 Transocean deepwater drilling rig?

3 A. Yes, I do. Jimmy was very  
4 conscientious, very competent.

5 Q. Even based on what you know as far as  
6 relating to this casualty, you still have full  
7 confidence?

8 A. For his actions he conducted at the  
9 time, yes. Whether he wanted to go back offshore, I  
10 don't know. But if you're asking about his ability  
11 before the incident and looking back now, still,  
12 yes.

13 Q. This question is based on what you know  
14 about a casualty.

15 Do you still have full confidence in  
16 recommending him to serve as an OIM on another  
17 deepwater MODU?

18 A. I can't answer the question on the  
19 grounds that I'm not sure what his emotional state  
20 is about going back to work. But on his ability,  
21 yes.

22 Q. How about Capt. Kuchta as a master on a  
23 Transocean deepwater drilling unit?

24 A. Again, I believe so. I'm not sure what  
25 Curt's emotional ability is, but his actions and his

1 way he's conducted himself, I think yes. I've seen  
2 the reports and I've watched his testimony, but I  
3 still think Capt. Curt could do a good job as far as  
4 a captain.

5 Q. Transocean initiated -- did this  
6 investigation of the casualty. Do you know whether  
7 they have conducted or initiated an ISM internal  
8 audit for company and vessel Safety Management  
9 System for compliance with the code?

10 A. I don't know.

11 Q. Has Transocean made any changes to the  
12 organization and operation of its deepwater drilling  
13 rigs?

14 A. They put together a special, separate  
15 team, if you like, for the relief wells, and so they  
16 could concentrate fully on that. And then we have  
17 additional resources have been pulled into the  
18 deepwater group to work through the BOP challenges.

19 We have gone forward with the new  
20 regs and NTL-05.

21 Q. Have there been any changes to the  
22 organizational structure, the way things are managed  
23 and executed in terms of operation?

24 A. Right now, there's not been any  
25 organizational change, just additions.

1 Q. How about operation? In terms of BOP  
2 maintenance, things like that, is there any change  
3 in procedures, policies or anything?

4 A. I can only quote for the Gulf of Mexico.  
5 I haven't looked at external. And right now, all of  
6 our vessels are currently not working while they  
7 progress through the NTL-05 regulations. There's a  
8 fair amount of work involved in that too.

9 So the rigs are not actually  
10 operational, so I have yet to see if we change when  
11 we go back to work. I don't know.

12 Q. How many Transocean MODUs and drilling  
13 offshore installations are flagged on the Marshall  
14 Islands?

15 A. I don't know that.

16 Q. Do you know if, since the casualty, has  
17 Marshall Islands conducted or initiated an ISM Audit  
18 on Transocean?

19 A. I don't know.

20 Q. How about on any of Transocean's vessels  
21 flagged under Marshall Islands?

22 A. Again, I don't know. I mean, there may  
23 be a rig maybe scheduled for a regular one, but I  
24 have no idea on additional ones.

25 Q. Based on your knowledge, do you know

1 what are the contributing causes of this casualty?

2 A. No. I still only have half the facts  
3 and have not got the full story, so I'm not ready to  
4 form an opinion on what caused it.

5 Q. I'm going to ask you for some  
6 recommendation, if you -- if you are in a position  
7 to provide, I appreciate it.

8 Based on your knowledge of this  
9 casualty and the state of the industry, to enhance  
10 effectiveness of a safety net for offshore oil  
11 exploration and production, should the governing  
12 federal regulations be more prescriptive?

13 A. I'm not sure about more prescriptive  
14 and -- maybe governed a bit stronger, but I don't  
15 know, to give you the honest answer.

16 Q. How about industry capabilities for  
17 offshore marine firefighting, should they be  
18 enhanced?

19 A. I think I would have to wait for the  
20 final report. I'm still not ready to form an  
21 opinion on that.

22 Q. The DAMON BANKSTON that you mentioned  
23 before was critical to the rescue of 115 survivors.  
24 Do you think the Coast Guard should update a  
25 regulation to require an operating MODU to have a

1 standby vessel with such capability, a fast recovery  
2 rescue craft?

3 A. Yes, I do.

4 Q. Should the Coast Guard update the  
5 standard for primary lifesaving equipment to reflect  
6 individual -- every size and weight of persons  
7 working offshore? Right now, the regulation is  
8 about 165 pounds, and I understand there's a survey  
9 out there that average is about 220.

10 Should we change our regulation?

11 A. I think it's a fair assessment to do so,  
12 yeah. I thought that was already in the process of  
13 happening, but I agree, yes.

14 Q. Now, the floating offshore installations  
15 such as the BP THUNDER HORSE or ATLANTIS are more  
16 complex. DEEPWATER HORIZON is just for drilling,  
17 but there are drilling production and storage and  
18 off-load, and those vessel are much more complex.

19 Do you think there's adequate  
20 regulations in place to deal with those much more  
21 complex vessels?

22 A. I couldn't comment. I have no idea what  
23 the regulations are for the vessels.

24 Q. Should the federal government expand  
25 licensing of other drilling personnel?

1           A.       Can you say that again, please?

2           Q.       Should the federal government expand  
3 licensing of other drilling personnel? Because  
4 right now, the OIM has a -- he has a license, and  
5 there's other individuals.

6                       Should we require licensing of the  
7 driller, subsea engineer, folks like that?

8           A.       I don't have anything on that.

9           Q.       Are you familiar with the International  
10 MODU Code?

11          A.       No, I'm not.

12          Q.       Okay. If I tell you that the MODU Code  
13 which is for MODU design doesn't include requirement  
14 for drilling of subsea wells or the procedures for  
15 their control, do you think it would be a good idea  
16 for the IMO to have standards for those items?

17          A.       I would have to see what kind of  
18 standards were. I wouldn't like to hazard a guess.

19          Q.       How about structural fire protection and  
20 firefighting capabilities for MODU? I mean, this  
21 was a pretty catastrophic fire and explosion, but  
22 should there be any enhancement to what we have in  
23 place for structural fire protection?

24          A.       Okay. I don't really have an opinion.  
25 I kind of leave -- I just don't -- I don't know.

1 I'm not qualified enough to make that call.

2 Q. Right now, the flag state is not  
3 responsible for oversight of the drilling system and  
4 operations. Do you think the MODU Code should be  
5 changed to require flag states to have some  
6 responsibility for the primary operation of these  
7 vessels?

8 A. No, I don't.

9 Q. Should the MODU Code require a single  
10 individual to serve as master and offshore  
11 installation manager?

12 A. Do I think that -- do I think that  
13 should be the case?

14 Q. Yes.

15 A. No.

16 Q. Should International Safety Management  
17 Code require government audit of recognized  
18 organizations such that DNV and Lloyds when it comes  
19 to your vessel  
20 to issue ISM certificates? Do you think the  
21 government should have oversight of those  
22 organizations' quality management system?

23 A. Again, I have no opinion on that.

24 Q. Are there any recommendations that you  
25 think would enhance the safety of the offshore

1 exploration and production?

2 A. Not yet. Not at this time. I'm waiting  
3 to see the full report, and I'll form my opinion  
4 then.

5 CAPT. NGUYEN: Thank you, sir. I  
6 have no further questions at this time.

7 HON. ANDERSEN: Any other Board  
8 members?

9 MR. MATHEWS: Yes.

10 E X A M I N A T I O N

11 BY MR. MATHEWS:

12 Q. Mr. Johnson, I'm going to start off by  
13 just trying to get some clarification from you on  
14 some of the testimony you just gave Capt. Nguyen.

15 Obviously, you came to the Gulf of  
16 Mexico, I think you said, in mid-August, 2009?

17 A. That's correct.

18 Q. And I think you alluded to that you were  
19 a rig manager for six years?

20 A. Yes. I was -- I got promoted to rig  
21 manager six years ago, and then I -- however, in  
22 that time frame, I had an 18-month period where I  
23 was a sector manager, which is effectively like a  
24 country manager, so I had two vessels in my region,  
25 and everybody reported to me. So a step up from rig

1 manager.

2 Q. Okay. Well, where was the other  
3 positions as rig manager? Were they in the Gulf of  
4 Mexico?

5 A. No. I was in the UK, and then I was in  
6 Azerbaijan.

7 Q. And you were very brief, and I think it  
8 was just because you were requested to give a  
9 high-level overview of your responsibilities, and  
10 you said you were involved with the personnel  
11 training and performance; is that correct?

12 A. Yes, sir.

13 Q. Do you have any involvement with  
14 maintenance?

15 A. No. The maintenance is responsible to  
16 the asset side. It's a joint position. You know,  
17 you have rig manager performance and rig manager  
18 asset. And the maintenance fell under the asset  
19 side of the organization.

20 Q. Okay. Do you have any involvement with  
21 the scheduling of the rig?

22 A. Yes, I do.

23 Q. Okay. And what type of scheduling?  
24 Would it be from location to location, or would it  
25 be personnel coming out to perform actions on behalf

1 of Transocean?

2 A. All of the above.

3 Q. Oh.

4 A. And including the maintenance. You  
5 know, the asset manager would come to me and say,  
6 you know, we need to work on this equipment or that  
7 equipment, and then I would look at the well plan or  
8 speak to our counterpart and say, "Can we schedule  
9 this in here or there?" or whatever.

10 Q. So if an audit was to be scheduled, it  
11 would go through you?

12 A. If the audit was to be scheduled from --  
13 if the audit was from the customer --

14 Q. Okay.

15 A. -- BP, it would come through me.

16 Q. But if it was through Transocean as  
17 well, it would --

18 A. No. If it was an ABS or another order  
19 like that on our equipment and stuff, that would go  
20 through the asset group.

21 Q. Okay. Thanks.

22 Do you have any involvement with  
23 regulation, the regulatory side of your industry?

24 A. Yes, depending on what side of the  
25 regulations it was. If it was on personnel or

1 standards and training or management systems, it  
2 would be me. If it was the regulations on equipment  
3 or the asset side of the function, it would go to  
4 the asset manager.

5 Q. Did you have any involvement with MOCs,  
6 configurations of equipment or any type of  
7 modifications made to the equipment?

8 A. The MOCs went through the asset group  
9 because they're -- when we're talking about  
10 equipment; however, James Kent, if there was any to  
11 be signed, he would show me and have me countersign  
12 just to ensure communication was good and I was  
13 aware that things were taking place.

14 Q. Is Mr. Kent your peer?

15 A. Yes.

16 Q. And both of you all report to  
17 Mr. Winslow?

18 A. No. I report to Daun Winslow, who is  
19 operations manager-performance. James Kent reports  
20 to Buddy Trahan, who is operations manager-asset.

21 Q. Did you ever have meetings with Mr. Kent  
22 on a day-to-day basis?

23 A. Every day.

24 Q. And when did you have those? I know you  
25 said earlier you met with Mr. Guide every morning at

1 BP.

2 A. Every morning, we had our rig morning  
3 call. That was a Transocean internal call. That  
4 was at 6:30 in the morning, and that would start  
5 every day, Monday through Friday, to be clear. That  
6 would involve myself, James Kent. We would be in  
7 the same room together, and then we would conference  
8 in the rig, and that would be the OIM, captain,  
9 chief engineer, senior tool pusher and the safety  
10 officer.

11 Q. So if there was any audit maintenance,  
12 regulatory or any type of issue that would come up  
13 through the asset department, it would have been  
14 relayed to you possibly in those meetings?

15 A. Yes, sir.

16 Q. Earlier I think the Captain asked you  
17 something about Hurricane Katrina, but I think he  
18 was referencing Hurricane Ida in 2009.

19 You were the rig manager at that  
20 time, correct?

21 A. Yes, I was.

22 Q. Did you have an emergency disconnect  
23 with the DEEPWATER HORIZON at that time?

24 A. Yes, I did. I was on vacation that  
25 week, but it was my rig at the time. And we did

1 EDS, and right at the peak of the storm, yes.

2 Q. Now, when you say "EDS," did you  
3 activate the BOP stack, the blind shear rams?

4 A. I'm not 100 percent sure off the top of  
5 my head what the configuration was, because at the  
6 time, we were standing by on the possibility of it,  
7 so we had already set the packer. We had already  
8 displayed the riser to water. So whether the blind  
9 rams were already closed or not, I'm not sure. But  
10 we did activate the EDS and unlatch it on the stack.

11 Q. And it did function as planned?

12 A. Yes, it did.

13 Q. I'm going to go into the incident  
14 command because he asked you a few questions about  
15 that earlier.

16 Where exactly were you at in your --  
17 in Transocean's incident command on April 20th or  
18 21st?

19 A. In the command center at the Park 10  
20 offices.

21 Q. And that's Transocean's --

22 A. Transocean's Park 10 offices, yes.

23 Q. And where was BP at, sir?

24 A. BP was at their own offices at Westlake.

25 Q. Did you have any personnel from BP in

1 incident command once y'all opened up shop?

2 A. Somebody from BP did come over.

3 Q. And who was that?

4 A. I have no idea.

5 Q. And when did you finally come together  
6 as a group, both you and BP, to work within one  
7 incident command?

8 A. That, I'm not sure of. We had  
9 the -- best recollection, we had our incident  
10 command we mustered pretty much immediately. BP did  
11 the same in their offices. We sent two individuals,  
12 I believe, from our office to their office, so we  
13 had the effective liaison communication, and  
14 somebody from BP came. I stayed at the emergency  
15 response center to somewhere in the mid-morning. At  
16 that point, I then left the incident command center  
17 and went to New Orleans.

18 Q. Did you have any Cameron representatives  
19 within the Transocean incident command immediately  
20 after the incident?

21 A. I don't recall.

22 Q. Do you know if there was any Cameron  
23 representatives in BP's Westlake 4 office?

24 A. I personally have no communication with  
25 Westlake 4, so I don't know.

1 Q. Was there any concerns within Transocean  
2 about the communication or lack thereof  
3 communication you had immediately after the incident  
4 with BP?

5 A. I'm not aware of any frustration  
6 within -- within the incident command center. And,  
7 however, the frustration was expressed to me from  
8 the DAMON BANKSTON, and their concern was, you know,  
9 that they were having to speak to Westlake and they  
10 were having to speak to Park 10. So they expressed  
11 their concerns.

12 Q. When you say "the DAMON BANKSTON," you  
13 mean Mr. Harrell?

14 A. No. That conversation took place with  
15 David Sims.

16 Q. With BP?

17 A. Yes, sir.

18 Q. Did you have any type of issues with  
19 up-to-date access to drawings of the rig or the BOP  
20 stack or any type of important equipment at that  
21 time?

22 A. I had no part in that part of the  
23 process, I was purely a liaison, and my -- when I  
24 say "liaison," I mean liaison with DAMON BANKSTON,  
25 and I was not allowed any other activities because

1 we had to make sure we could communicate with them  
2 at all times.

3 Q. I just asked you a few questions ago  
4 about the scheduling of the rig with assets. At any  
5 time, did anyone from BP contact you or anybody, to  
6 your knowledge, at Transocean about any delays of  
7 the rig schedule at Mississippi Canyon 252?

8 A. Not about the delays on there. We did  
9 have, you know, conversations about rig schedule and  
10 when we would do the out-of-service period.

11 Q. And when were you going to do the  
12 out-of-service period?

13 A. The out-of-service period was going to  
14 be around May time, 2011.

15 Q. And what was agreed upon both by you  
16 and -- I'm sorry, I keep saying "you" -- but  
17 Transocean and BP?

18 A. And -- yes. I mean, it was only kind of  
19 penciled in because you have to go between wells.  
20 So, you know, the May was the latest we preferred to  
21 do it, so it was going to be somewhere in late first  
22 quarter, early second quarter.

23 Q. On the night of April 20th, we talked --  
24 I think you said you had some conversations with  
25 David Sims on board the BANKSTON.

1                   Did you talk with anyone else, sir?

2           A.       On the DAMON BANKSTON?

3           Q.       Yes.

4           A.       Yeah, I spoke to Daun Winslow, Jimmy  
5 Harrell and Curt Kuchta.

6           Q.       There's a note in the log in front of  
7 you which was provided by Transocean, Bates number  
8 TRN-USCG\_MMS-00038807, and it indicates that there  
9 was a call to BP, Paul Johnson and John Guide.

10                   Do you recall that phone call?

11          A.       Yes. Maybe it will help if I go through  
12 the order of events. It will make it clearer.

13          Q.       Go right ahead.

14          A.       I got a call from Paul King, as it says  
15 there in the first line, at 7 minutes past 10:00,  
16 and his comments were, "You know, I don't want to  
17 alarm you, but we're getting Mayday calls from the  
18 HORIZON."

19                   And my initial action was, well, it  
20 can't be, the rig's not called me or anything, and  
21 I've got my phone right here.

22                   With that, while he was on the  
23 phone, my phone started beeping, and it was the  
24 Coast Guard, and somebody from the Coast Guard -- I  
25 don't recall the name -- said, "Are you the rig

1 manager for the HORIZON?"

2 I confirmed I was, and he said,  
3 "We're having reports of a fire on the HORIZON. Can  
4 you confirm that?"

5 And I said -- I told him I just got  
6 the call from a colleague, that's all I know.

7 I hung up, I then phoned John  
8 Guide -- well, I phoned the rig first, should I say.  
9 There was no line. The line was dead. I then  
10 phoned John Guide and got his voice mail. I'm sure  
11 I left a message.

12 I then at some point -- and I can't  
13 remember the order of events, I'm not disputing it,  
14 it's just what's in my memory -- I got a call back  
15 from John Guide, and he wasn't aware of the issue at  
16 the time.

17 And that's the call I placed to John  
18 Guide.

19 Q. Okay. There was also a note later on  
20 within these documents where Mr. John Guide and I  
21 believe yourself were informed that gas got into the  
22 riser?

23 A. Yes.

24 Q. Who made that call to you?

25 A. I'm really not 100 percent sure. I'm

1 thinking it was Daun Winslow or John, but I really  
2 don't recall. I just -- I can remember the  
3 information I had, but I'm honestly not sure who it  
4 came from.

5 Q. Immediately after the event, who were  
6 the -- was the core person you were speaking with?

7 A. On the DAMON BANKSTON?

8 Q. Yes, sir.

9 A. Daun Winslow.

10 Q. And I know from the records we have that  
11 it looks like you didn't talk to Mr. Jimmy Harrell  
12 until the following morning; is that correct?  
13 Around 11 o'clock?

14 A. I'm not sure of the time frame. I know  
15 I spoke to Jimmy, but I don't recall when.

16 Q. Do you remember any of that phone  
17 conversation?

18 A. Yes, I do.

19 Q. Can you share any of that with us?

20 A. I spoke to Jimmy and I asked how he was,  
21 and he was -- he was upset. By "upset," I mean, he  
22 was -- I thought he was crying, couldn't tell. He  
23 was on the telephone, but he sounded emotionally  
24 upset, and I asked how he was. He told me he was  
25 struggling to see, he's got -- he told me he had

1 insulation in his eyes, and he was struggling to  
2 see, and his hearing was off.

3 And I said, "It's okay, Jimmy."  
4 Just asked again how he was.

5 And then I asked him what happened,  
6 and he said, "I don't know, Paul. She just blew. I  
7 don't know what happened. She just blew."

8 And he started getting -- at that  
9 point, I'm fairly sure he was crying, and so I just  
10 shut the conversation down, and I said, "Don't worry  
11 about it, Jimmy, we'll find that out later on. Just  
12 take care of yourself." And I kind of ended the  
13 conversation at that point.

14 Q. I'm going to move on to some other stuff  
15 now, and it's been -- and maybe you're the correct  
16 person, I'm not sure if you are, but to your  
17 knowledge, is there any Transocean policy -- and  
18 excuse my terminology here because I've heard  
19 different language from multiple witnesses. Its  
20 either lockout, vent, block, or put a BOP stack  
21 component into neutral when you're at the end of the  
22 well and you don't want to risk activating the EDS  
23 to cut casing?

24 A. I'm not aware of that policy.

25 Q. Were you aware of any BOP modifications,

1 sir?

2 A. Modifications, no.

3 Q. Were you ever made aware of any -- I  
4 know you took over in August of 2009. Were you ever  
5 made aware of any -- an auto shear valve was  
6 replaced with a new auto shear valve supplied by  
7 Cameron?

8 A. No.

9 Q. Normally when a modification is made,  
10 who is that handled by with the management chain?  
11 Does it have to go through you, or is it asset, or  
12 is it across the board?

13 A. It would depend on what discipline it  
14 was and what data. If we're talking about  
15 equipment, that would go through the asset group  
16 into technical field support.

17 Q. Do you know if Transocean had ever  
18 utilized a program from Cameron called -- I think  
19 it's CamServe where they would actually send out  
20 people to make repairs and modifications?

21 A. I'm not aware of that.

22 Q. And you're not familiar with the  
23 warranty agreement on the BOP stack that Transocean  
24 has with Cameron?

25 A. No.

1           Q.       There was a letter that was provided to  
2 Congress that it -- from Transocean that was  
3 authored and sent to BP. It pretty much indicated  
4 that with one of the modifications of changing out a  
5 variable bore ram into a test ram would lower the  
6 risk associated with that stack, and we're talking  
7 about management of change earlier.

8                    If there's any modification of  
9 change made to that stack, does a similar letter go  
10 to BP?

11          A.        Could you say that again? Because that  
12 doesn't make sense to me.

13          Q.        Yes, sir. I'm going to show you.  
14 There's a letter -- if you want to flip over to it,  
15 it's got the Transocean logo in the top, left-hand  
16 corner.

17          A.        Yeah, I'm familiar with this letter.

18          Q.        Okay. And I'll give everybody the Bates  
19 number just so we know what we're talking about.  
20 TRN-HCEC-0064131.

21                    And can you read -- I don't know if  
22 I have it highlighted on there for you --

23          A.        Yeah.

24          Q.        -- but the third paragraph, can you read  
25 that for me, sir?

1           A.           "Company acknowledges that the  
2 conversion will reduce the built-in redundancy of  
3 the BOP, therefore, potentially increasing the  
4 contractor's risk profile and corresponding cost  
5 structure."

6           Q.           If there were any other changes that  
7 were made by Transocean, would there be a documented  
8 letter that goes to BP that identifies that there's  
9 an increased risk if there was one?

10          A.           I believe if we were changing the nature  
11 of the BOP and its components, then, yes.

12          Q.           In your involvement with the  
13 investigation that you've done within Transocean,  
14 have you worked alongside Mr. Kent in any type of  
15 audits or any type of assets to assist him?

16          A.           After the incident you mean?

17          Q.           Yes, sir.

18          A.           No. I mean, James Kent has asked me for  
19 information, for clarification for the investigation  
20 board, but that's it.

21          Q.           So you've never done any type of a  
22 review of any type of equipment to assist  
23 Transocean? You solely -- what were you asked in  
24 your investigations? What were they concentrating  
25 on on you?

1           A.       They --

2           Q.       The Transocean people.

3           A.       The official at Transocean investigation  
4 team was asking kind of what would you expect. You  
5 know, what was I doing, what was my involvement,  
6 what did I know, who had I spoken to. And I had  
7 spoken to the -- I had spoken to an investigation  
8 team regarding the emergency response. Spoken to an  
9 investigation team regarding the operational side of  
10 it, the drilling the well, the losses and the  
11 cement, et cetera.

12          Q.       Did you go back and look at the  
13 performance and training records of all personnel on  
14 board?

15          A.       Yes, I did.

16          Q.       Did you find any discrepancies with any  
17 of those?

18          A.       Not discrepancies, but -- just refresh  
19 my memory.

20          Q.       Did you find -- I don't know of any.  
21 That's why I'm asking you.

22          A.       Right.

23          Q.       But did you know of any personnel,  
24 particularly rig crew personnel, that might have  
25 been out of their -- outside of their well-control

1 training requirements?

2 A. None came to light, no.

3 Q. You participated in the morning  
4 meetings, correct?

5 A. Yes, sir.

6 Q. All right. At any time, had they  
7 discussed one of the control pods leaking in late  
8 February or mid-March?

9 A. No, they didn't. Not when I was there,  
10 no.

11 Q. Was it ever made to your attention?

12 A. I wasn't aware of a leak in the pod with  
13 the exception of the test runs. We did have a leak  
14 on the test ram on the open function which was very  
15 slight. However, to put the ram, the test ram in  
16 block, then the leak would obviously stop. And I  
17 was instructed on this, and I communicated this to  
18 BP, explained to them what the leak was and what  
19 position we were at.

20 Where that leak was, if it was in  
21 the pod or not, I don't recall. But I did tell them  
22 about the leak.

23 Q. Was the pad -- I know it was in the  
24 block stage, the test ram?

25 A. Yeah.

1 Q. Was that control pod, in your opinion,  
2 fully operational?

3 A. Yes, it was. Because we could have left  
4 it and it would have just been a slight weep.  
5 However, we didn't. We elected to put it into  
6 block. And, furthermore, the test rams are not part  
7 of well control, they're purely for efficient --

8 Q. Test ram is not part of well control?

9 A. No. The test rams are purely for  
10 efficiency for pressure tests in the BOP.

11 Q. And pressure testing a BOP is not part  
12 of well control?

13 A. Let me clarify that, sir.

14 Q. Go ahead.

15 A. If test -- let's just say the test part  
16 failed to operate at all. We would then lose the  
17 luxury of being able to just close test rams. But  
18 then we would have to run a test block. So, no, it  
19 doesn't -- it's not part of primary well control.

20 Q. There was a study -- I'm sorry, not a  
21 study, but a BOP assurance analysis that was out  
22 before your time that was done on the R&B Falcon  
23 DEEPWATER HORIZON, and one of the recommendations  
24 here is, this was to be made available to all subsea  
25 engineers or personnel on the rig.

1                   We had a subsea engineer,  
2 Mr. Christopher Pleasant, who had no idea what this  
3 was when we showed it to him.

4                   Do you know if this actual document  
5 was on the DEEPWATER HORIZON, sir?

6           A.       It's the first time I've seen it.

7           Q.       Okay. What are some of the  
8 prerequisites? I know you talked about the  
9 performance and some of the personnel and training  
10 requirements of subsea -- that fall under your job  
11 responsibilities.

12                   What are some of the prerequisites  
13 to be a subsea engineer for Transocean?

14           A.       I'm not sure of the exact definition of  
15 what the prerequisites are. However, anyone working  
16 in the subsea department, you know, being promoted  
17 from an assistant to a supervisor, would have to  
18 have X amount of experience, demonstrate the ability  
19 on certain duties and stuff. And the subsea  
20 department -- when I say "department," I mean  
21 onshore, our subsea support would then make  
22 recommendations about this guy is ready or not, et  
23 cetera.

24           Q.       Do you know of any requirements on how  
25 much training they had to receive annually?

1 A. No, I don't.

2 Q. Do you know if they had to go to train  
3 specifically to address the equipment they were  
4 working on?

5 A. We had training schools available for  
6 the subsea engineers. There's numerous different  
7 types of training for them, you know. It's control  
8 systems and hydraulics, whatever the case may be,  
9 MOC systems.

10 So the training was there. They  
11 have certain courses that's on their matrix, but I  
12 couldn't quote off the top of my head what they are.

13 Q. So there is a matrix?

14 A. Yes, sir.

15 Q. Is that something you can provide to the  
16 Board?

17 A. Yes, sir.

18 Q. Are you familiar with the West  
19 Engineering DEEPWATER HORIZON Subsea Equipment  
20 Condition audit?

21 A. No.

22 Q. Bates No. TRN-HCEC-0063449. I know it  
23 was before your time, again.

24 A. This is the first time I've seen this.

25 Q. But earlier, I had asked you a question

1 about scheduling, do you recall, when scheduling  
2 audits?

3 A. Yes.

4 Q. And who was your predecessor? Who did  
5 you --

6 A. Jon Keaton.

7 Q. Jonathan Keaton?

8 A. Yes.

9 Q. I'm going to give you some statistical  
10 findings from this audit. I know you have never  
11 seen this before, but I wanted to see what your  
12 opinion is on it.

13 There were 369 items assessed. 369.  
14 22 of the items in this audit were found to be out  
15 of compliance and low risk of downtime. 204 of the  
16 items were found to be in compliance. And 143 items  
17 were not checked, and mainly because the BOP stack  
18 was on bottom.

19 Now, as a manager in scheduling  
20 these audits, do you think it's a complete audit if  
21 you're only inspecting 40 percent of the components?

22 A. No, I don't think it's a complete audit.  
23 I can understand why you would still conduct that  
24 portion of the audit, so when you get the  
25 opportunity to do the second portion, you can

1 conduct it without redoing the prior. But I don't  
2 know the circumstances around who's on board or the  
3 scheduling.

4 Q. Would you be concerned that 10 percent  
5 of the items that were found in audit that were  
6 inspected were not in compliance?

7 A. Again, it depends what components they  
8 are, how much out of spec. There's a lot of  
9 variables in there to make that assumption, and I  
10 just don't know.

11 Q. And you were in charge of scheduling the  
12 MODUSpec audit?

13 A. No, I wasn't. That's an asset function.

14 Q. Were you involved with the scheduling of  
15 the BP audit?

16 A. No, I wasn't. The BP audit was -- how  
17 do I say it politely? -- thrust upon us at very  
18 short notice because a window arose in BP  
19 scheduling, so it wasn't scheduled.

20 Q. Would you be surprised in the MODUSpec  
21 audit that was conducted on April 1 through April  
22 14, the BOP stack was on bottom again?

23 A. The MODUSpec audit you're referring to  
24 wasn't a MODUSpec audit. That was a rig condition  
25 assessment audit, which is an internal Transocean

1 inspection of our equipment, and it serves two  
2 purposes: One, for us to get a more in-depth  
3 assessment of our equipment; two, the primary reason  
4 behind this inspection is to help us prepare  
5 correctly for the up and coming shipyard period. So  
6 they're always six months to a year ahead of the  
7 shipyard program so we're adequately prepared for  
8 when that time comes.

9 Q. In the BP audit, it mentioned that there  
10 was a safety stand-down that was held during an  
11 out-of-service period for 15 near misses.

12 Are you aware of that?

13 A. I wasn't aware of the 15 near misses. I  
14 was -- it was a joint BP Transocean safety  
15 stand-down, and I'm not sure now, but I think that  
16 was my first visit to the rig. You know, I had only  
17 had the rig ten days, two weeks or something, and  
18 then I went out. But I did participate in that  
19 safety stand-down, and it was not for the HORIZON,  
20 it was a -- it was across the Gulf of Mexico  
21 stand-down on all the BP Transocean -- it was on all  
22 the BP rigs, I believe, but certainly all the BP  
23 Transocean rigs.

24 Q. Do you know who Mr. Steven Bertone is?

25 A. Yes, I do.

1 Q. Did he have any communication with you  
2 about filling or positions for motor man or  
3 engineering rooms?

4 A. It definitely had been discussed, but  
5 I'm not sure if I spoke with Steve Bertone on that  
6 or somebody else, but I definitely had some form of  
7 conversation on that, yes.

8 Q. And what was it -- how did you try to  
9 address that issue?

10 A. Once I took the rig over and, you know,  
11 my first -- pretty much my first job was this audit  
12 list and compile and correct affirmative action, if  
13 you like.

14 And although it's not my  
15 responsibility, I still felt compelled as part of  
16 the group to make sure we addressed it swiftly, and  
17 I think one of the items was very clear, was the  
18 amount of work that was going to be involved for  
19 this, so we installed additional personnel on the  
20 rig to assist in closing out the action items  
21 properly.

22 Q. We had a gentleman by the name of  
23 Mr. Mike Williams testify before us about a  
24 temporary fix where I guess Transocean had some  
25 individuals that weren't designated to a specific

1 rig but would go from throughout your entire fleet.

2 A. Yeah. We have -- there's two different  
3 resources that you can draw on. You have the SWAT  
4 team, which are experts, you know, like your BOP  
5 personnel or certain electricians, and they will  
6 come to help you with specific issues.

7 And you also have what we call a  
8 labor pool, which has a group of personnel which we  
9 can draw upon for whatever the reason, whether it's  
10 we're behind on maintenance or we got people off  
11 because of sickness or whatever. So we have  
12 resources to pull from.

13 Q. Does that labor pool have to meet the  
14 same requirements as the people that work day to day  
15 on the DEEPWATER HORIZON?

16 A. Yes, sir.

17 Q. Do you know if there's any policy on  
18 board or was on board the DEEPWATER HORIZON to  
19 inhibit the general alarm?

20 A. There was no policy, no.

21 Q. Do you know if they actually had the  
22 general alarm inhibited?

23 A. Post-incident, no, I was not aware of  
24 that. I should say, pre-incident, rather, I was not  
25 aware of that. I since learned from the testimonies

1 and so forth that they -- that the alarm was not  
2 inhibited.

3                   To be clear, though, my  
4 understanding as it is today, is, all the alarms  
5 were fully operational and functioning; however,  
6 there was -- you can call it manual mode if you  
7 like. There's an output from the SVC panel that  
8 goes from the alarms to the general alarm. So the  
9 only thing that wasn't in full, automatic mode was  
10 the sounding of the general alarm; however, all  
11 other functions were working correctly, like the  
12 dampeners and the shutdowns.

13           Q.       I'm going to move on to some questions  
14 because the asset manager would probably be better  
15 for some of the BOP-specific questions.

16                   But I'm going to ask you a quick  
17 question about regulations and some API documents.

18                   Are you familiar with API RP 53?

19           A.       I've read it, but I couldn't quote it to  
20 you.

21           Q.       Are you familiar with Section 18.10.3  
22 that is in front of you, if you want to refer to it?  
23 Entitled "Major Inspections."

24                   MR. SCHONEKAS:   Sorry, Mr. Mathews,  
25                   can you show us what it looks like?

1           What's on the cover page?

2                   MR. MATHEWS: The regulation. Sorry  
3           about that.

4           Q.       (BY MR. MATHEWS) Can you flip it to the  
5           second page, sir.

6                   MR. SCHONEKAS: Can we have the  
7           Bates number?

8                   MR. MATHEWS: There's no Bates  
9           number. It's a document, API RP 53,  
10          Section 18.10.3, and it's entitled "Major  
11          Inspections."

12                  MR. SCHONEKAS: It would be helpful  
13          in the future if we could get copies of  
14          any regulations that the Board intend to  
15          use.

16                  MR. MATHEWS: No problem. I spoke  
17          with Mr. Bray about that after the first  
18          witness, and it is our intent to take care  
19          of that today for the rest of this week.

20                  MR. SCHONEKAS: Thank you.

21          Q.       (BY MR. MATHEWS) Can you read what it  
22          says in the first paragraph of 18.10.3?

23          A.       Yes, sir. "After every three to five  
24          years of service, the BOP stack, choke manifold, and  
25          diverter components should be disassembled and

1 inspected in accordance with the manufacturer's  
2 guidelines."

3 Q. Okay. Had you reviewed the BP DEEPWATER  
4 marine audit and MODUSpec audit?

5 A. Yes, sir.

6 Q. Do you know what it said about their  
7 major inspections?

8 A. There was a reference to two or three of  
9 the BOP bonnets had not been overhauled in adequate  
10 time frame.

11 Q. And also I know you weren't familiar  
12 with the 2005 West study that indicated that there  
13 was no plan in place to address the major  
14 inspection.

15 When did the BOP stack have its last  
16 major inspection? Or did it?

17 A. We inspected the BOP during that  
18 out-of-service period, and we inspected all cavities  
19 and the operating system and didn't intend to work  
20 on the BOP during the September, 2009,  
21 out-of-service period, and I have no prior knowledge  
22 prior to that. No knowledge prior to that what we  
23 did here.

24 Q. So would you define that as a major  
25 inspections for API RP 53?

1           A.           We inspected our equipment and we ran  
2 the comments that we received in the order through  
3 our subsea department, and they informed us that we  
4 were okay because our equipment was in spec, being  
5 regularly inspected and tested and was functioning  
6 correctly.

7                           Qualify that, that was the  
8 instructions that was given back from us, because  
9 the recommendation is a recommendation. It says you  
10 should not let -- you shall. And our equipment was  
11 working as designed.

12           Q.           Okay. Are you familiar with the federal  
13 regulations?

14           A.           No, sir.

15           Q.           If you could flip to the first page and  
16 read 250.446A?

17           A.           "You must maintain your BOP system to  
18 ensure the equipment functions properly. BOP  
19 maintenance must meet or exceed the provisions of  
20 Section 17.10 and 18.10, 'Inspections'; Section  
21 17.11 and 18.11, 'Maintenance'; and Sections 17.12,  
22 and 18.12, 'Quality Management' described in API RP  
23 53, 'Recommended Practices for Blowout Prevention  
24 Equipment Systems for Drilling Wells,' incorporated  
25 by reference and specified in 250.198."

1 Q. And you just made [verbatim] something  
2 that came to my attention about APR RP 53 is a  
3 recommended, but we adopt it in the federal  
4 regulations to make it a requirement.

5 Did Transocean or BP perform their  
6 scheduled major inspection?

7 A. We inspected our equipment internally  
8 each time we had the BOP on the surface, and the  
9 equipment was deemed to be in good condition and in  
10 spec.

11 If you're asking me did we do an  
12 external inspection, I don't know the answer to  
13 that. I believe it's no, but I don't know.

14 Q. Did Cameron participate in any of those  
15 inspections, or was it solely Transocean?

16 A. We've had Cameron on board, I know that  
17 for sure, but I couldn't tell you exactly what they  
18 were looking at.

19 Q. Do you know if they were going to  
20 actually perform that in the May 20, '11 dry dock?

21 A. Yes. They were going to be changing the  
22 bonnets out.

23 Q. Are you familiar with the actual survey  
24 to perform a drilling package survey with ABS? Are  
25 you familiar with the cost of that?

1 A. The cost?

2 Q. Yes, sir.

3 A. No.

4 Q. I just have three last questions.

5 Earlier I asked Mr. Cramond what the  
6 day rate on the DEEPWATER HORIZON, if it was  
7 experiencing downtime; was the day rate the same to  
8 BP?

9 A. Not quite. The provisions in the  
10 contract allow for you to have up to 24 hours per  
11 month of downtime, stroke maintenance time. After  
12 that, you would be dropping to a zero rate.

13 However, you could -- if you didn't  
14 use your 24 hours, you could bank it and build it up  
15 to a maximum, I believe, was ten days, but I can't  
16 recall the exact number.

17 Q. At any time in your position as rig  
18 manager, did you ever receive a bonus for  
19 exceeding -- not having X amount of hours of rig  
20 time -- downtime?

21 A. We had -- a part of Transocean bonus  
22 structure was, I believe, an element of, you know,  
23 if you had -- if your rig had X safety record, you  
24 would get a portion in your up time and cash value.  
25 So there were a number of elements to it, and I

1 believe rig up time was one element of that annual  
2 bonus, yes.

3 Q. Had you ever been on long enough to  
4 receive a bonus for that element?

5 A. Not from in the Gulf of Mexico, no.

6 Q. Do you know if the DEEPWATER HORIZON was  
7 ahead of schedule on up time? Was it above the  
8 element that met the performance measure?

9 A. I'm thinking no, but I'm not 100 percent  
10 sure.

11 MR. MATHEWS: Thank you, sir. I  
12 have no further questions.

13 HON. ANDERSEN: Any other Board  
14 questions?

15 E X A M I N A T I O N

16 BY MR. McCARROLL:

17 Q. Just a couple of follow-up questions  
18 real quickly.

19 If there was some sort of  
20 disagreement between you and Mr. Kent on  
21 performance, I assume -- if I understand correctly,  
22 performance is keeping the rig running, drilling,  
23 operating, right? His -- his side is maintenance.  
24 So if there's some disagreement between you and  
25 Mr. Kent, who settled that disagreement and how was

1 it settled?

2 A. In seven, eight months that we worked  
3 together, we never had a disagreement. But if we're  
4 looking for a hypothetical, you know, we came to  
5 loggerheads and couldn't resolve the situation, we  
6 would elevate that up to both our supervisors. I  
7 would go to Daun Winslow, and James would go to  
8 Buddy Trahan.

9 Q. In that same respect, if Mr. Guide had a  
10 problem with the asset manager wanting to go  
11 downtime for maintenance, how would that get  
12 settled?

13 A. John Guide would communicate with  
14 myself, and that conversation comes up regular about  
15 whether that was planned maintenance or whether it's  
16 downtime or whether it's operational, and we resolve  
17 it between John and myself and my counterpart at BP;  
18 and if we can't resolve it, we escalate it up the  
19 chain of command.

20 Q. So if I'm understanding right, it would  
21 go up to Buddy Trahan and Daun Winslow on your side,  
22 right?

23 A. Yes, sir.

24 Q. And above them, is there a vice  
25 president who would then make the final decision at

1 something that would be so complicated that no one  
2 could make the decision?

3 A. No. If any -- if it went to Daun and --  
4 Mr. Winslow and Trahan couldn't make a decision, it  
5 then goes to the Gulf of Mexico general manager of  
6 operations. That's Mr. Bill Sannan, and he oversees  
7 both sides.

8 Q. Bill, what's his last name?

9 A. Sannan.

10 Q. Sannan?

11 A. Yes, sir.

12 Q. And on the opposite side, on BP's side,  
13 if Mr. Guide insisted on keeping the rig running,  
14 just for hypothetical purposes, and y'all disagreed  
15 and you could not come to an agreement, how would  
16 that be worked out up the ladder? Would it go to  
17 Mr. O'Bryan, who would then come over and talk to  
18 Mr. Sannan, or is there some sort of facility for  
19 handling that?

20 A. Each level within our organization I  
21 think is fairly well-mirrored within BP, so if  
22 myself and John couldn't sort it out, then it would  
23 go to David Sims, who would be speaking to Daun  
24 Winslow; and if David Sims couldn't sort it out, it  
25 would go to the next level up.

1 Q. Mr. O'Bryan?

2 A. No. There's a level below that.

3 Q. Okay.

4 A. And then ultimately Pat O'Bryan.

5 MR. McCARROLL: Okay. Thank you.

6 FURTHER EXAMINATION

7 BY MR. MATHEWS:

8 Q. I just have one follow-up question. I'm  
9 going to show you a letter that we received in  
10 response to a subpoena request.

11 And if you can read the second  
12 request. And that was a request from the Board to  
13 Transocean. Can you read that out loud, sir?

14 A. Second request. Request: "All API  
15 5-year recommended certificates for the DEEPWATER  
16 HORIZON blowout preventer components in accordance  
17 with API and original equipment manufacturer."

18 Q. Okay. And can you read the next  
19 sentence, please?

20 A. "Following a diligent search, we did not  
21 locate any documents that are responsive to either  
22 of the requests."

23 Q. So were you in compliance with the  
24 federal regulations?

25 A. Reading that, sir, no.

1 MR. MATHEWS: Thank you.

2 HON. ANDERSEN: Marshall Islands,  
3 any questions?

4 MR. ADLER: Excuse me, Judge.  
5 Perhaps after the Marshall Islands, I have  
6 a few questions.

7 HON. ANDERSEN: Sure. No problem.

8 MR. LINSIN: Thank you, Judge. May  
9 I proceed?

10 HON. ANDERSEN: Sure. Mr. Adler  
11 after you.

12 E X A M I N A T I O N

13 BY MR. LINSIN:

14 Q. My name is Gregory Linsin on behalf of  
15 the Marshall Islands.

16 Mr. Johnson, I have just a couple of  
17 areas I wanted to go back to.

18 You were asked some questions  
19 regarding the division of responsibility aboard the  
20 DEEPWATER HORIZON between the OIM and the master.

21 A. Yes, sir.

22 Q. And if I heard you correctly, when you  
23 were asked these questions initially, you said that  
24 you had not thought to ask about how this transition  
25 of responsibility occurred on the DEEPWATER HORIZON

1 on April 20th of this year; is that correct?

2 A. Referring to the hand over  
3 responsibility between the OIM and the captain at  
4 the incident?

5 Q. Yes, sir.

6 A. That's correct.

7 Q. All right. And am I correct in the  
8 inference in your response that you did not think to  
9 ask about how that hand over went because the  
10 casualty on that night was of such severity that  
11 there would not have been any debate or any question  
12 as to who would have been in command following the  
13 explosion and the eruption of fire on the rig; is  
14 that correct?

15 A. That's correct, yes.

16 Q. You also testified, sir, that it's your  
17 understanding that this division of responsibility  
18 between an OIM and a master is, at least in your  
19 experience, a somewhat common practice within the  
20 industry; is that correct?

21 A. I believe so, yes.

22 Q. All right. And based on your knowledge  
23 of that division of responsibility and in the time  
24 that you have observed these hand overs under  
25 different circumstances, are you aware, sir, of any

1 casualty event that has resulted from or has been  
2 complicated by that process of hand over between an  
3 OIM and a master?

4 A. No. Not at all.

5 Q. As a matter of fact, sir, is it fair to  
6 say that in an emergency situation, it can, in fact,  
7 be very helpful to have two people with significant  
8 experience and judgment bringing back experience and  
9 knowledge to bear on how to respond to an emergency?

10 A. Definitely.

11 Q. You also testified that when you learned  
12 that Mr. Sepulvado was going -- that it was  
13 recommended that he be pulled from the rig and that  
14 Mr. Kaluza was going to be brought out to replace  
15 him, that you had some concerns about that exchange;  
16 is that correct?

17 A. Yes. That's correct.

18 Q. And my -- at least my notes indicate  
19 that those concerns were based on your uncertainty  
20 as to what Mr. Kaluza's experience was and his level  
21 of competence was; is that correct?

22 A. Yeah, I did not know who he was, where  
23 he came from, and it was a key position to be  
24 changing out.

25 Q. Is it also fair to say that this

1 changeout was occurring at a somewhat critical time  
2 in the closeout of this well?

3 A. Not so sure critical, but certainly in a  
4 more challenging part of the well.

5 Q. And you testified that because of those  
6 concerns, you spoke to someone within BP about  
7 Mr. Kaluza's background and his level of confidence;  
8 is that correct?

9 A. Yes, that's correct.

10 Q. And with whom did you discuss those  
11 issues, sir?

12 A. I was primarily speaking to Brett  
13 Coteles, and I know John Guide was away and not  
14 there for sure, and I was speaking to Brett and I  
15 think Joe Neumeyer. There was somebody -- maybe a  
16 couple other people in the room, but they weren't  
17 participating in the conversation, but primarily  
18 with Brett.

19 Q. And when did that -- was it one  
20 conversation you had?

21 A. Yes.

22 Q. When did that conversation occur?

23 A. I don't know when. I'm going to say  
24 three or four days before Robert Kaluza went to the  
25 rig.

1           Q.       And what were you told by Brett Cocales  
2 or others regarding Mr. Kaluza's background and  
3 experience?

4           A.       I was informed that Robert Kaluza was a  
5 long-standing, very experienced deepwater well-site  
6 leader and he had worked many semis and the comment  
7 was, in fact, they thought he had even been on  
8 HORIZON before. So I took that and left.

9           Q.       And your understanding was, he had had  
10 extensive experience on deepwater exploration wells;  
11 is that correct?

12          A.       I didn't get into exploration. My  
13 question was in and around deepwater floating  
14 operations, and I was told he had.

15          Q.       And did you have any discussions or was  
16 it a part of that conversation at all as to what  
17 Mr. Kaluza's competence was to conduct a negative  
18 test or to asses the results of a negative test in a  
19 closeout of a well?

20          A.       I never discussed that, no.

21          Q.       You were also asked some questions, sir,  
22 about the wisdom of requesting that the IMO amend  
23 the MODU Code with regard to oversight for drilling  
24 operations.

25                                   Do you recall that?

1           A.       Yes, sir.

2           Q.       And are you aware -- first of all, are  
3 you aware of the IMO MODU Code and its requirements  
4 for who should have responsibility, what entity  
5 should have responsibility for oversight of drilling  
6 operation?

7           A.       Not -- not exactly, no.

8           Q.       Would it refresh your recollection that  
9 the requirement that is contained within the IMO  
10 MODU Code that the coastal state have responsibility  
11 for oversight drilling operations is actually  
12 derived from the United Nations convention on the  
13 law of the sea and that that component in the IMO  
14 MODU Code was inserted to ensure that that  
15 regulatory structure was consistent with the  
16 international regime established by UNCLOS?

17                   MR. GORDON: I object to that. It's  
18 well outside of this hearing, and it's  
19 sort of what I was doing that was not  
20 popular and objected to.

21                   HON. ANDERSEN: There's some truth  
22 to that, but that's such a long question.

23                           If you have an answer to it, fine,  
24 but there will be a way for everybody, I'm  
25 sure, to submit more extended views to the

1 Board that don't have to be presented  
2 through questions.

3 But if you can remember the  
4 question, you can give an answer.

5 A. No, I'm sorry, can you repeat the  
6 question?

7 Q. I'll repeat the essence of the question.

8 Do you know, sir, whether the  
9 requirement in the IMO MODU Code that oversight for  
10 drilling operations be left to the coastal state, do  
11 you know if that is derived actually from the United  
12 Nations Convention and the Law of the Sea?

13 A. No, I was not aware of that.

14 Q. There were also some questions about the  
15 alarm system on board the DEEPWATER HORIZON, and the  
16 questions were framed with respect to the general  
17 alarm on board the rig.

18 Do you know, to the extent that  
19 there were findings in the audit report in September  
20 of '09 concerning the alarm system and additions to  
21 that alarm system, did that have anything to do with  
22 the general alarm system?

23 A. No. My understanding from that was to  
24 do with some fire detection systems had been  
25 inhibited, and we had to replace the detectors.

1 Q. And is it -- is there any requirement  
2 that the general alarm aboard a rig be automated, to  
3 your knowledge?

4 A. Not to my knowledge. Most systems I've  
5 seen, it goes to a panel, and it's a manned control  
6 room, and then they would activate.

7 Q. Activate the general alarm manually; is  
8 that correct?

9 A. Yes, sir.

10 MR. LINSIN: I have no further  
11 questions, Judge. Thank you very much.

12 HON. ANDERSEN: Mr. Adler?

13 MR. ADLER: Thank you.

14 E X A M I N A T I O N

15 BY MR. ADLER:

16 Q. Mr. Johnson, how many years total have  
17 you worked in the drilling business?

18 A. 20 years.

19 Q. And before you arrived at your current  
20 position, can you tell us again some of the  
21 positions you held during those 20 years?

22 A. Prior to coming to the Gulf of Mexico, I  
23 was sector manager in Azerbaijan for two floating  
24 rigs in the Caspian Sea.

25 Prior to that, I was rig manager in

1 the UK, working with both jack-ups and semis,  
2 different periods in the central North Sea and west  
3 of Shetland.

4 Q. Have you also worked on the drill floor?

5 A. Yes. I started offshore as a roustabout  
6 and came through in a traditional way, if you like,  
7 from a roustabout through the drill floor to driller  
8 and on to senior tool pusher.

9 Q. So you have personal experience with  
10 many of the positions that the individuals on the  
11 DEEPWATER HORIZON were conducting?

12 A. Yes.

13 Q. I understand there's a difference  
14 between the performance side and the asset side.  
15 What is your role, other than scheduling, with  
16 regard to audits?

17 A. Majority of the findings on that audit  
18 were mechanical, if you like, you know, it was  
19 equipment, it was asset-related. So although I  
20 didn't have a direct responsibility for that  
21 equipment, it went through the asset side. It's  
22 still a partnership. So I was involved helping  
23 making sure that they got the right resources, get  
24 additional personnel, and then mainly drive the  
25 process through to make sure we followed up and

1 completed in a timely manner.

2 Q. Were you the person with primary  
3 responsibility for ensuring that items that had come  
4 up in the audit were taken care of?

5 A. No. But there were some items on the  
6 audit that was assigned to me, but, to be honest,  
7 not very many. There were primarily asset  
8 maintenance equipment issues.

9 Q. BP conducted an audit of the HORIZON; is  
10 that correct?

11 A. Yes, sir.

12 Q. During your tenure with the rig?

13 A. Yes.

14 Q. And Transocean, I think you said,  
15 brought in MODUSpec to conduct an audit?

16 A. Yeah, we did the rig condition  
17 assessment audit early April, and we used MODUSpec  
18 personnel for their expertise.

19 Q. And was there also an ABS audit?

20 A. I'm not sure "audit" is the right word,  
21 but we had a -- certainly had our annual ABS  
22 recertification.

23 Q. Okay. And in addition to those three  
24 reviews of the rig's condition, I think you  
25 testified that the Coast Guard was capable of

1 inspecting the rig during the time you were manager?

2 A. Yeah. I believe we had our -- our  
3 annual Coast Guard as well during -- since I've been  
4 with the rig, and Marshall Islands.

5 Q. So Coast Guard would be the fourth and  
6 Marshall Islands would be the fifth review of the  
7 rig's condition; is that correct?

8 A. Yes, sir.

9 Q. At any time in any of those five reviews  
10 of the rig's condition, was the rig shut down for  
11 being in an unsafe condition?

12 A. He weren't shut down for being in an  
13 unsafe condition, we -- the only time where we  
14 didn't go back to work, as stated earlier on, was,  
15 after the BP marine audit, there were certain  
16 findings in there that BP wanted satisfied before  
17 they would allow us to go back to work.

18 However, there was a couple of items  
19 in there that we found that we were going to  
20 rectify. When I say "we," to be clear, Transocean  
21 wanted to ensure we would rectify before we went  
22 back to work.

23 Q. Was there ever a time when you stopped  
24 work, stopped the rig from working because of a  
25 concern you had?

1           A.           Yes.    That refers back to the audit.  
2   The finding came out in the audit.  After our first  
3   pass, we looked at it where we spoke at length with  
4   the OIM, and he described to me what the condition  
5   was at the PRS and what the potential was, and so we  
6   elected to stop and get it fixed.

7                                And then that decision at the time  
8   was going to take us seven to ten days to rectify  
9   because we had to send it into the shop, if you  
10  like.  It subsequently didn't take that long, but  
11  that was the plan.

12          Q.          Did you feel the company supported your  
13  decision to stop the rig from working so that the  
14  situation would be rectified?

15          A.          Yeah.  Most definitely.  And the reason  
16  I recall it clearly, because I went to an operations  
17  meeting, and it was my first operations meeting in  
18  Gulf of Mexico.  And when it came to me, I had to  
19  tell them I was shutting the rig down for five to  
20  ten days and was curious how that was going to be  
21  received, and I got nothing but support.

22                                I was just asked, "Why, what is it  
23  you're doing."

24                                And I explained to them that we had  
25  a bend in the PRS racking arm, and they were fine

1 with that, and we moved on. I was fully supported.

2 Q. Other than that incident, during the  
3 time you've been rig manager, do you feel there was  
4 any equipment on the HORIZON that was -- that its  
5 condition was such that it couldn't be operated  
6 safely?

7 A. No, sir.

8 Q. And up until the time of the explosion,  
9 you feel the HORIZON was in such a condition that it  
10 was being operated safely?

11 A. Yes.

12 Q. Do you feel the company Transocean felt  
13 it was important to keep the HORIZON operating in a  
14 safe manner?

15 A. Without a doubt. It was very clear.

16 Q. And you personally, did you place a high  
17 level of importance on having the rig operated  
18 safely?

19 A. Very much so.

20 Q. Were you familiar or close with the men  
21 and women who were working on the rig?

22 A. Yes. I made it very high on my  
23 priorities to go to the rig and meet the guys  
24 and -- and do my very best to get to know them and  
25 gain their trust.

1                   There was a little bit of the  
2 element of an unknown British guy coming over and  
3 working in the Gulf of Mexico when this team had  
4 been together for so long, so I had to work very  
5 hard at breaking the barriers and gaining the crew's  
6 trust.

7           Q.       Now, you said you participated in these  
8 daily morning meetings with BP?

9           A.       Yes.

10          Q.       How many people other than you from  
11 Transocean were in that meeting?

12          A.       A majority of the time, I was the only  
13 Transocean person at the BP team -- at the BP  
14 office, should I say.

15                   Occasionally, depending on what was  
16 going on, if need be, James Kent would come along,  
17 and if we had asset issues, you know, maintenance or  
18 equipment issues, he would come along. And on the  
19 other end of the telephone, which is why it was a  
20 morning conference call with the rig, and my  
21 leadership team offshore would be in on that call.

22                   So it would be the OIM, tool pusher  
23 and the captain and the RSTC, the safety officer.

24          Q.       Who actually conducted the meetings?

25          A.       BP.

1 Q. And who set the agendas for the  
2 meetings?

3 A. BP.

4 Q. Now, are you a drilling engineer?

5 A. No.

6 Q. Do you have any expertise in well  
7 design?

8 A. No, I don't.

9 Q. Which company was responsible for  
10 decisions concerning the design of this well?

11 A. BP.

12 Q. During the morning meetings, did BP have  
13 representatives present with expertise in well  
14 designs, as far as you know?

15 A. Yes, they did.

16 Q. About how long did the meetings last?

17 A. Generally every day, it was roughly  
18 between 15 and 30 minutes. Sometimes they would go  
19 on longer if there was issues to discuss, but I  
20 think 30 minutes average.

21 Q. And the meetings were held five days a  
22 week?

23 A. Yes.

24 Q. And about how many weeks did you go over  
25 to BP for these meetings?

1           A.       I went every day that I didn't have  
2 something of a high priority on. So, you know, I  
3 didn't miss very many.

4           Q.       If you had to estimate how many morning  
5 meetings at BP you attended, what would your  
6 estimate be?

7           A.       I don't know. 95 percent, something  
8 like that. You know, I didn't miss very many unless  
9 I was on vacation or on the rig.

10          Q.       Prior to the incident on the HORIZON,  
11 did you think you were receiving from BP all the  
12 information you needed to operate the HORIZON  
13 safely?

14          A.       Yes, I did.

15                   MR. ADLER: Thank you, I have  
16 nothing further.

17                   CAPT. NGUYEN: We've been going  
18 pretty long here. Why don't we take  
19 ten-minutes break and come back at 3:35.

20                   (Break.)

21                   HON. ANDERSEN: With respect to  
22 attorneys for parties in interest, first  
23 of all, the first attorneys to question  
24 will be the BP attorneys in our rotation  
25 here.

1                   Secondly, we will not have a  
2                   meeting -- the Transocean attorneys and  
3                   then BP.

4                   We will not have a meeting after the  
5                   session today. We intend to plug on  
6                   through and do the third witness as well,  
7                   even though that might mean going late.

8                   If there's any questions or agenda  
9                   items that the attorneys would like the  
10                  Board to address, if you e-mail Commander  
11                  Bray or Ms. Murphy, then they can be  
12                  getting that information to us. Okay.

13                  Transocean. 7:30 meeting tomorrow  
14                  morning in the same conference room we met  
15                  this morning if any attorneys would like  
16                  to be there for the parties in interest  
17                  and the Marshall Islands.

18                  MR. JOHNSON: Daniel Johnson on  
19                  behalf of Transocean, Your Honor, Captain.

20                  E X A M I N A T I O N

21 BY MR. JOHNSON:

22                  Q.           Mr. Johnson, we share a last name. I  
23                  think the accent probably makes it clear, but just  
24                  for the record we are not related; is that right?

25                  A.           That's correct.

1 Q. A good demonstration.

2 I wanted to ask you, Mr. Johnson,  
3 follow up on some questions from the panel. And  
4 let's begin with API 53.

5 Is it your understanding that the  
6 API is a required set of programs or recommended set  
7 of practices?

8 A. I believe it's a recommended set of  
9 practices.

10 Q. Do you have any legal training in your  
11 background, sir?

12 A. No, I don't.

13 Q. No legal education of any kind?

14 A. No.

15 Q. As to whether or not the federal reg  
16 that was discussed earlier, whether that codified  
17 API 53 as a recommendation or as a required  
18 practice, do you know one way or the other what the  
19 answer to that is?

20 A. No, I don't.

21 Q. I know maintenance issues have been  
22 discussed at length today, and I don't want to  
23 belabor the point too much, but as I understand, you  
24 took over the rig in mid-August 2009?

25 A. That's correct.

1 Q. And that's at or near the time that the  
2 rig was out of service?

3 A. Yeah. I had come to the rig probably  
4 about two weeks before it went to the out-service  
5 period.

6 Q. And as I understand from your testimony,  
7 there were -- there were items related to BP's  
8 audits that BP deemed critical enough to withhold  
9 the rig from going back into service; did I  
10 understand that right?

11 A. Yeah. They wanted certain items  
12 collected before we went back into operation.

13 Q. And you yourself, on behalf of  
14 Transocean, had similar concerns about different  
15 items; is that right?

16 A. Yes. That's right.

17 Q. To your knowledge, did BP  
18 ultimately -- were they ultimately satisfied as to  
19 Transocean resolution of those critical issues?

20 A. Yes, they were. Once we -- we either  
21 corrected the outstanding items that they wanted to  
22 be addressed and our items as well, then we  
23 requested that we go back to work, and the plan was  
24 then approved through BP. And I'm not sure which  
25 side of the marine department it went to. My main

1 correspondence was with John Guide; however, I am  
2 aware it went above John up to Ian Little and also I  
3 believe Harry Thierens before they would sign off  
4 and agree to go back to work.

5 Q. After the DEEPWATER HORIZON went back to  
6 work, did Transocean continue to address the audit  
7 issues that were identified in the reports?

8 A. Yes, we did. We brought additional  
9 resources to the rig to help with the work, and we  
10 conducted a weekly meeting to track progress and  
11 make sure we didn't lose focus of the action items  
12 and then communicated that to BP.

13 Q. Did you ever receive any feedback from  
14 BP as to Transocean's progress on closing out those  
15 audit items?

16 A. Yes, I did. We got verbal commitment  
17 approval, and we got a really good job from the  
18 wells team. They were really pleased with the  
19 amount of effort and the fact that we took ownership  
20 and were striving for closure. And we got written  
21 praise, if you like, from the BP marine authority.

22 Q. Now, I want to be clear. Did you  
23 receive positive feedback about Transocean's  
24 progress, both on the marine side and the nonmarine  
25 side?

1           A.           Yes.    The marine side came from Angel  
2 Rodriguez; and on the rig equipment side, Brett  
3 Cocales, who we met with regularly to review the  
4 audit findings, commended us on our progress and the  
5 amount of effort and time we put into closing out  
6 the items.

7           Q.           If anyone at BP or on behalf of BP  
8 suggests now that BP was unhappy with Transocean  
9 about the progress of resolving the audit issues,  
10 was that ever relayed to you, Mr. Johnson?

11          A.           No.

12          Q.           As far as you know, did BP have the  
13 authority to stop work if they were concerned about  
14 an audit issue impacting safety on the rig?

15          A.           Yes, they did.

16          Q.           Did BP ever threaten you with stoppage  
17 of work on a maintenance issue because of the audit?

18          A.           No.    Once we established what the  
19 criteria was to go back to work and we resolved them  
20 issues, it never came up again about, "Well, if you  
21 don't get X done by a certain date, we're going to  
22 stop."    There was -- we never -- never came up  
23 again.

24          Q.           There's been some discussion about 390  
25 outstanding plan maintenance issues.    Do you have an

1 understanding as to whether that number is accurate?

2 A. I do have an understanding that it  
3 wasn't accurate, and I understand why.

4 Q. Can you tell us on the panel why that  
5 number would not be accurate, sir?

6 A. Just recently prior to the audit, we  
7 changed maintenance systems, the management system,  
8 RMS, and this is a result of the merger. Transocean  
9 has one reporting system; LEXI GSF has another,  
10 which was the RMS versus the Impact that Transocean  
11 had when we merged. The decision was to go to one  
12 maintenance system throughout the whole fleet, and  
13 we changed over to the RMS system.

14 However, when we changed over to the  
15 RMS system, we had issues with duplication. By  
16 that, I mean a certain task, and we needed to fix X  
17 piece of equipment or oil it or maintain it,  
18 whatever it would need, instead of it just being  
19 assigned to a first engineer or a driller or whoever  
20 was responsible for that task. We had multiple  
21 duplications, so it was being assigned to various  
22 people.

23 And we also in the translation of  
24 one system to the next brought in additional  
25 maintenance requirements that wasn't fit for our

1 vessel. By that, I mean equipment that we didn't  
2 actually have. So called to do a maintenance to a  
3 certain standard, and we didn't have that equipment.

4 So they were the two main reasons  
5 why there was duplication in the RMS system.

6 Q. In this new system, this RMS system,  
7 when an item came up for maintenance, when was it  
8 overdue, technically?

9 A. The day it's due. So we track from day  
10 1. So, the very next day, it's overdue by a day.

11 Q. So of those 390 outstanding PMs, there  
12 were some that were duplicates and then there were  
13 others, I gather, that may have been one or two or  
14 just a few days old?

15 A. That's correct. Yes.

16 Q. I think you were asked a question  
17 earlier, right as we were getting to the break,  
18 about you believe -- maybe I misunderstood it, but I  
19 think you said you believed that BP was providing  
20 you all of the information you needed to operate  
21 safely; is that what you said?

22 A. Yes, sir.

23 Q. I think you also testified you're not an  
24 expert in well design; is that true, Mr. Johnson?

25 A. That's correct.

1 Q. What about Jimmy Harrell or any of the  
2 other crew members on the DEEPWATER HORIZON, are you  
3 knowledgeable about whether any of them are well  
4 design engineers?

5 A. Yes, I am; and, no, they weren't. None  
6 of my guys offshore had any well engineering  
7 experience.

8 Q. To be clear, whose responsibility --  
9 between Transocean or BP, whose responsibility is  
10 the well design?

11 A. BP.

12 Q. Which company is responsible for  
13 developing procedures for the completion process?

14 A. BP.

15 Q. Let's talk a minute just about some of  
16 those specific procedures.

17 How about the bottoms-up procedure,  
18 whether to do one, how that is done, is that a  
19 Transocean decision or a BP decision?

20 A. That was a BP decision.

21 Q. What about the use of a long string  
22 versus a liner, is that a Transocean decision or a  
23 BP decision?

24 A. A BP decision.

25 Q. Whether to conduct a cement bond log, is

1 that a Transocean decision or a BP decision?

2 A. A BP decision.

3 Q. Now, the issue of centralizers has been  
4 discussed since this incident. Do you recall anyone  
5 at BP involving you in a discussion about the number  
6 of centralizers to be used on the Macondo well?

7 A. No, I wasn't included in any  
8 conversation or correspondence on the centralizers.

9 Q. Well, let me ask you this, Mr. Johnson:  
10 Did you ever see a report from Halliburton  
11 addressing the number of centralizers to be used on  
12 this well?

13 A. No.

14 Q. Did anyone mention to you that this  
15 report had been issued?

16 A. No, I wasn't aware of it.

17 Q. Even if it wasn't identified as a  
18 Halliburton report, were you at least made aware  
19 that there were some models indicating a severe risk  
20 of upper gas flow?

21 MR. GODFREY: Objection. Misstates  
22 the document. There's no document that  
23 says what the captain just said.

24 My name is Godfrey, for the record.

25 HON. ANDERSEN: I'm going to ask

1           that the lawyers all ask questions. You  
2           can include imbedded facts and  
3           assumptions, but I'm going to ask that you  
4           have a good-faith basis for that either  
5           having been in the record or you being  
6           able to put that in the record in the  
7           future.

8                        So if you -- if you believe you have  
9           a good-faith basis for making that  
10          statement, we'll let the -- but that  
11          doesn't mean the Board believes it's true.

12                       MR. JOHNSON: I appreciate that,  
13          Your Honor. I think the Board has the  
14          document, and I'm comfortable that the  
15          language is close enough. I'll rely on  
16          his answer.

17                       HON. ANDERSEN: Okay. I'm going to  
18          overrule the objection, but that does not  
19          mean the Board will conclude that that's a  
20          valid statement. Okay.

21          A.           Can you ask the question again?

22          Q.           (BY MR. JOHNSON) Sure. Were you made  
23          aware by anyone of any report or any discussion  
24          about a potential risk of severe upper gas flow in  
25          this well?

1           A.       No, I wasn't.

2           Q.       Is this the type of information you  
3 would expect to receive from BP?

4           A.       If there was a genuine concern with  
5 severe gas flow or potential serious well-control  
6 issues, I would expect it to be in the loop and be  
7 communicated.

8           Q.       Mr. Johnson, was there ever a time you  
9 requested a document or information from BP and it  
10 was not provided?

11          A.       Yes. At some point, and I don't recall  
12 when, I did request to -- to receive the BP morning  
13 report daily, but that never happened.

14          Q.       When you made this request and you  
15 weren't provided that document, did you just stop  
16 there, or did you make follow-up requests for the  
17 documents?

18          A.       No. I remember the initial request was  
19 by e-mail, and then I followed up in the meeting and  
20 I asked the second time, and then they brought a  
21 lady called Cindi in, I'm not sure of her surname,  
22 but she was in control of the -- the report and the  
23 systems, because they had just swapped to a new  
24 system and explained to me that due to the new  
25 report and the firewall systems and the approval

1 levels, et cetera, that it wasn't going to be  
2 possible for me to get the report.

3 Q. What about the temporary plug and  
4 abandon, did you request that document, that  
5 procedure?

6 A. The rig requested that, yes.

7 Q. And was that received?

8 A. I'm not sure.

9 Q. Did you actually receive a copy of that?

10 A. No, I did not.

11 Q. And you requested that document?

12 A. I personally didn't request the actual  
13 abandonment plug, but we did request the whole P&A  
14 procedure.

15 Q. And you were not provided that document?

16 A. That's correct.

17 Q. Now, were you given -- now, even though  
18 you requested documents and BP did not provide them  
19 to you, were you given any assurances that they  
20 would relay critical or important information to  
21 you?

22 A. Yes. I mean, I was there every day, and  
23 when the report wasn't -- couldn't come and through  
24 all of our other meetings, you know, it was assured  
25 to me that I would get all the information I needed

1 and just to trust them.

2 Q. So when you testified earlier that you  
3 believed you were getting all of the information  
4 that was necessary to operate safely that applied at  
5 the time that you were operating, does that still  
6 apply now, Mr. Johnson? Do you -- do you believe,  
7 as you sit here today, you received all the  
8 information necessary to operate safely?

9 A. Post-incident, with the things that have  
10 come to light, no.

11 Q. Does Transocean receive any realtime  
12 monitoring information from the rig?

13 A. No, we don't.

14 Q. Do you know whether or not BP receives  
15 any realtime monitoring data from the rig?

16 A. Yes, they do. It's in the conference  
17 room where we have our morning meetings.

18 Q. I'm going to clarify a few issues about  
19 the alarms. And just to be clear, as far as you  
20 know, the general alarm was fully operational at the  
21 time of the incident?

22 A. Yes, that's correct.

23 Q. The incident occurred on a Tuesday; is  
24 that correct, Mr. Johnson?

25 A. I believe so.

1 Q. And I think as was discussed earlier,  
2 there was a practice of having drills performed on  
3 Sunday?

4 A. Yes, that's correct.

5 Q. Would the general alarm have been  
6 functioned on Sunday in accordance with the drill?

7 A. Yes.

8 Q. And did you have an understanding as to  
9 whether or not the alarm functioned and they had a  
10 successful drill the Sunday before this?

11 A. Yes, that was how I was led to believe,  
12 yes.

13 Q. Okay. When the general alarm is in  
14 manual mode, is there someone monitoring the alarms  
15 on the bridge?

16 A. Yes. With this being a BP vessel, we  
17 need to maintain two personnel on the bridge at all  
18 times. So the bridge can never be unmanned, so it  
19 is a permanently-manned station.

20 Q. 24/7, Mr. Johnson?

21 A. Yes, sir.

22 Q. Who's on the bridge, by the way?

23 A. Permanently on the bridge is the senior  
24 DPO and the DPO.

25 Q. And are they licensed by the Coast

1 Guard?

2 A. Yes. I believe so.

3 Q. Now, just to be clear, if the alarm is  
4 in -- the general alarm is in manual mode as opposed  
5 to automatic mode, does that impact at all the ESD  
6 system?

7 A. No. My understanding, what was in place  
8 is, the whole system throughout the rig is  
9 operational as designed.

10 The only thing that is changed by it  
11 being a manual, instead of upon gas detection or  
12 detection of whatever product, it doesn't go  
13 automatically into general alarm. The alarm sound,  
14 and the panels in the control room and the engine  
15 control room and on the drill floor, they get local  
16 alarms in all three stations. And then the DPO or  
17 whoever is on the bridge will then instruct  
18 investigation or find out what's happening and then  
19 decide to hit the general alarm if required.

20 Q. Is the bridge the only place that those  
21 local alarms would be heard or seen?

22 A. No. It would be in the engine control  
23 room and on the drill floor as well, in the  
24 drillers' shack.

25 Q. I just want to ask you briefly some

1 questions about the BOP. I understand you're not  
2 the rig manager for asset.

3 In terms of performance, were you  
4 aware of any issues with the BOP at the time of the  
5 incident that would have impacted its functionality?

6 A. No.

7 Q. Do you know if there's mandatory  
8 pressure function testing on the BOP?

9 A. Yes. We have to do a function test  
10 every seven days, and that's all components on the  
11 BOP, and we pressure test the BOP every 14 days.

12 Q. To your knowledge, had the BOP on the  
13 DEEPWATER HORIZON passed all of those tests leading  
14 up to the incident?

15 A. Yes, they had.

16 MR. JOHNSON: Mr. Johnson, I thank  
17 you for your time. That's all I have.

18 HON. ANDERSEN: BP is first on the  
19 questioning list in our current order.

20 MR. GODFREY: Thank you, Your Honor.

21 MR. CLEMENTS: I think it's ten  
22 minutes, Judge.

23 HON. ANDERSEN: That's three minutes  
24 per book.

25 Obviously, the testimony is

1           important, so as I indicated this morning,  
2           we're not going to be super rigid. But,  
3           obviously, if we go beyond our aspired-to  
4           time, it's going to make it more difficult  
5           later on.

6           The Board is relying upon you --  
7           this attorney and all of you -- to ask  
8           relevant questions that move forward.

9           All right. Thank you, Mr. Godfrey.

10          MR. GODFREY: I haven't even asked a  
11          question yet.

12          HON. ANDERSEN: And we've used up  
13          two minutes of your time.

14          MR. GODFREY: May I proceed?

15          HON. ANDERSEN: Yes.

16          MR. GODFREY: Thank you.

17          E X A M I N A T I O N

18          BY MR. GODFREY:

19            Q.        Mr. Johnson, my name is Rick Godfrey, I  
20            represent BP.

21                    I'm going to hand you a book, and I  
22            promise I'm not going to use all these exhibits with  
23            you, but it may make matters easier when we refer to  
24            them.

25            MR. GODFREY: May I approach, Your

1 Honor?

2 HON. ANDERSEN: Sure.

3 MR. GODFREY: These are all on the  
4 website. They're all marked.

5 Thank you.

6 Q. (BY MR. GODFREY) Is Transocean  
7 responsible for the safety of the DEEPWATER HORIZON  
8 and its crew?

9 A. Yes.

10 Q. Is Transocean responsible for well  
11 control and well-control incidents?

12 A. Yes.

13 Q. On the DEEPWATER HORIZON?

14 A. Yes.

15 Q. Does everyone on board the DEEPWATER  
16 HORIZON that is employed by Transocean have the  
17 authority to stop any action or activity that it  
18 thinks or believes might be unsafe or pose a risk?

19 A. Yes, they do.

20 Q. Who was the DEEPWATER HORIZON's foreman  
21 on April 19th or April 20, 2010?

22 A. Could you repeat that, please?

23 Q. Yes. Who was the foreman for the  
24 DEEPWATER HORIZON on April 19th or April 20, 2010?

25 A. By "foreman," do you mean OIM or

1 drilling -- or tool pusher?

2 Q. Are you familiar with the term  
3 "foreman"?

4 A. Yeah. But we don't use that term  
5 anymore, that's why I need to clarify it.

6 Q. Do you have an e-mail address at  
7 Transocean called DEEPWATER HORIZON foreman?

8 A. Not that I'm aware of.

9 Q. What about the DEEPWATER HORIZON  
10 performance coordinator, do you have one of those?

11 A. No, we don't.

12 Q. All right. With respect to well  
13 control, was there a well-control incident on board  
14 the DEEPWATER HORIZON on March the 8th, 2010?

15 A. I'm not sure of the exact date, but  
16 there was a well-control incident on the Macondo  
17 well, yes.

18 Q. Yes. And can you describe for the Board  
19 what happened on that well-control incident on March  
20 the 8th, 2010?

21 A. If you're referring to the incident  
22 where we took a kick and got stuck? Is it that one?  
23 And then we had to sidetrack.

24 Q. In fact, you took a kick that took your  
25 well-control team about 30 minutes to figure out the

1 kick was happening, right?

2 A. I'm not aware of that, no.

3 Q. Did you give any lessons learned after  
4 that kick that was taken on March 8, 2010?

5 A. We conducted the well-control report,  
6 and I'm still not sure which well-control event  
7 you're referring to.

8 Q. Was there more than one well-control  
9 event on March -- on the DEEPWATER HORIZON at the  
10 Macondo well?

11 A. There was a second event that wasn't  
12 actual kick, but it was a well-control event where  
13 we had ballooning. So I just want to be clear we're  
14 talking about the same event.

15 Q. Was that in October?

16 A. No, that was --

17 Q. Are you aware of a well-control incident  
18 in October, 2010, at the Macondo well?

19 A. We weren't on the Macondo well in  
20 October 20-- --

21 Q. So you're not aware of that one?

22 A. No.

23 MR. CLEMENTS: October 2010?

24 MR. GODFREY: October 2009. Excuse  
25 me.

1 MR. CLEMENTS: Thank you.

2 A. We weren't on the Macondo well in  
3 October, 2009.

4 Q. (BY MR. GODFREY) You're aware of the  
5 March incident, right?

6 A. Again, I'm not sure which one. There  
7 was two well-control incidents.

8 Q. Did you ever discuss those incidents  
9 with BP?

10 A. Yes.

11 Q. Did you ever express to BP the fact that  
12 the drilling control reacted slowly to those  
13 incidents?

14 A. No, I was not aware of the drilling  
15 control acting slowly.

16 Q. Did you ever discuss with BP any  
17 incidents where the Transocean drilling control team  
18 reacted slowly?

19 A. No.

20 Q. Are you aware of an incident in the  
21 North Sea that took place on December the 23rd,  
22 2009?

23 A. I have a brief recent understanding of  
24 that.

25 Q. Could you turn, please, to your exhibit

1 book. Do you have that?

2 A. Yup.

3 Q. If you'd turn to Tab 7, please, which is  
4 a PowerPoint. We've marked it for identification as  
5 BP Exhibit 105.

6 Do you see that?

7 A. Yes, I do. Yeah.

8 MR. SCHONEKAS: Can we get a Bates  
9 number, please?

10 MR. GODFREY: Sure. It's off the  
11 Board's website. I don't think it has a  
12 Bates number. At least my copy does not.

13 Q. (BY MR. GODFREY) Have you ever seen this  
14 PowerPoint before?

15 A. Yes. Very briefly, and within the last  
16 couple of weeks.

17 Q. I'm not going to ask you about that,  
18 then.

19 Let's go the Exhibit No. 8, Tab 8,  
20 BP Exhibit 106.

21 Have you seen this operations  
22 advisory by Transocean with respect to the North Sea  
23 incident?

24 A. Again, same time we saw the PowerPoint  
25 presentation, just recently.

1           Q.       Is it correct that although this is  
2 dated April the 14th, 2010, you did not see the  
3 Transocean advisory about proper well-control  
4 procedures when you're closing out a well until just  
5 recently after the events of April 20?

6           A.       I've seen the proper procedures about  
7 controlling a well many times; what I haven't seen  
8 is this advisory until recently.

9           Q.       I see. Could you look at page 3, for  
10 example, page 3 of 4 of this operations advisory.

11          A.       Yes, sir.

12                   MR. ADLER: I have to object. He  
13 hasn't seen the document, and it appears  
14 to have gone only to North Sea operations,  
15 not where Mr. Johnson was working. It  
16 seems unfair to ask him about this  
17 document.

18                   MR. GODFREY: Actually -- sorry,  
19 Your Honor.

20                   HON. ANDERSEN: Well, it depends.  
21 There can be short statements that he can  
22 assimilate. As I mentioned with prior  
23 witnesses, we don't want to make him guess  
24 or speculate. And if Mr. Godfrey would  
25 point out what you need to read in order

1 to answer the question, if you feel  
2 comfortable that you have enough time to  
3 assimilate what you're going to need to  
4 read to answer the question, then we can  
5 move forward. But that's a subjective  
6 thing. So we don't want to put the  
7 witness in a position where he's skimming  
8 through technical, important material and  
9 then answering questions.

10 So when you're comfortable -- well,  
11 Mr. Godfrey can let you direct your  
12 attention to what he thinks he'll need,  
13 and Mr. Adler can be looking as well to  
14 make sure that he thinks that's fair. And  
15 then when you're comfortable, let us know,  
16 and he can ask the question.

17 MR. GODFREY: Thank you, Your Honor.

18 MR. SCHONEKAS: Can we get a Bates  
19 number on those?

20 HON. ANDERSEN: Do you have a Bates  
21 number?

22 MR. GODFREY: It was posted on the  
23 MBI website. My copy doesn't have a Bates  
24 number.

25 MR. GORDON: Is this the December

1 23, '09 --

2 MR. GODFREY: Yes, that was the  
3 advisory. It's the December 23rd, '09,  
4 yes.

5 MR. GORDON: That's introduced  
6 as -- it's Brown Exhibit -- PII Brown JIT  
7 Exhibit 2.

8 HON. ANDERSEN: Got that? Everyone  
9 got that?

10 Would you repeat it, Mr. Gordon?

11 MR. GORDON: PII Brown USCG-JIT  
12 Exhibit 2.

13 Q. (BY MR. GODFREY) Mr. Johnson, did you  
14 understand this rig advisory to be limited to the  
15 North Sea as compared to all Transocean rigs?

16 A. I believe this is an NRS, which is a  
17 North Sea Advisory. But I only saw it a couple  
18 weeks ago.

19 Q. Well, sir, did you see this in  
20 connection with the DEEPWATER HORIZON incident?

21 A. Sir, as I say, I've seen this in the  
22 last two weeks, that's it.

23 Q. Turn to page 3 of 4, please.

24 A. I'm on 3 of 4.

25 Q. You have that?

1 A. Yes.

2 Q. Would you look at the section about  
3 mandatory actions to take.

4 Do you have that, sir?

5 A. Yes.

6 Q. Do you see that the senior tool pusher  
7 call action was set for June the 18th, 2010?

8 A. Yes.

9 Q. Did you understand these mandatory  
10 actions to take for well-control training applied to  
11 the Gulf of Mexico or not?

12 A. Again, sir, this is a North Sea  
13 Advisory. I have not seen it until two weeks ago,  
14 sir.

15 Q. My question to you, sir, was, did you  
16 understand this well-control advisory to be limited  
17 to rigs operating only in the North Sea by  
18 Transocean?

19 MR. JOHNSON: Your Honor, I think  
20 that you accurately stated that the  
21 witness should have the opportunity to  
22 look at the document, decide whether or  
23 not he's comfortable answering it. He's  
24 answering the question, but counsel is  
25 just continuing to ask the same question

1           again.

2                   MR. ADLER:   And I also have an  
3           objection, Judge.   He's asking if Mr.  
4           Johnson understands, but he's not  
5           referencing a point in time.   He obviously  
6           couldn't have understood anything about  
7           the document if he's only seen it two  
8           weeks ago.

9                   HON. ANDERSEN:   Did you have any  
10          understanding before April of 2010 that  
11          this applied?

12                   THE WITNESS:   I had never seen this  
13          before April 10th --

14                   HON. ANDERSEN:   Okay.   So then why  
15          don't we move on.

16                   MR. GODFREY:   We'll move on.   That's  
17          good enough for me.

18          Q.       (BY MR. GODFREY)   You testified earlier  
19          that when there was a well-control incident, there's  
20          a system within Transocean by which the incident is  
21          reported.

22                                   Do you recall that?

23          A.       Yes.

24          Q.       Is that limited to geographic sectors  
25          only, or is that worldwide?

1           A.           That goes -- that's worldwide. That  
2 goes into management -- management systems, or into  
3 GRS. That's worldwide.

4           Q.           And the reason it's worldwide is so that  
5 all the rigs operating throughout the world for  
6 Transocean can learn about a well-control incident  
7 in a place like the North Sea, right, sir?

8           A.           The reason it's in the report and  
9 system, so the incidents can be gleaned, and then if  
10 the company decides to show any lessons learned,  
11 they will send out either advisories or bulletins,  
12 all that. So whatever is deemed required from the  
13 incident.

14          Q.           And prior to two weeks ago, did anyone  
15 ever suggest to you that there had been an incident  
16 for which lessons were to be learned from the North  
17 Sea, almost loss of a well control?

18          A.           I had not seen this part until two weeks  
19 ago.

20          Q.           Had you heard of it?

21          A.           No.

22          Q.           I see.

23                        Let's talk about rig audits. You  
24 received copies of the rig audit about the time you  
25 took over as the rig and performance manager of the

1 DEEPWATER HORIZON, right?

2 A. Yes.

3 Q. And when you took over, you agreed to  
4 the safety stand-down or the stand-down of the rig  
5 in order to address certain topics, correct?

6 A. That's correct.

7 Q. Had BP not conducted that audit and  
8 provided it to Transocean, Transocean would have  
9 continued to run and operate that rig, correct?

10 MR. WHEATLEY: Objection, Judge.  
11 Clearly calling for speculation at this  
12 point.

13 HON. ANDERSEN: Well, if you have an  
14 opinion, you may give your opinion. If  
15 you don't have an opinion, then you can  
16 say, "I don't know."

17 A. I don't know. Things were brought to  
18 light, we saw them and then we addressed them, so...

19 Q. What audits did Transocean conduct  
20 between August, 2009, and December 31st, 2009, other  
21 than the one that BP conducted and provided to  
22 Transocean? Of the DEEPWATER HORIZON rig.

23 A. I understand. I am not sure if we  
24 conducted any audits during that time frame. I  
25 don't recall.

1 Q. What audits did Transocean conduct from  
2 January 1st, 2010, through March 31st, 2010, of the  
3 DEEPWATER HORIZON?

4 A. By "audits," can I just clarify? Are  
5 you talking about external audits or any audits?

6 Q. External to start with.

7 A. We -- the external audit we conducted,  
8 the rig condition assessment audit, which we used  
9 MODUSpec to assist in, and that was conducted in  
10 April.

11 Q. My question was January 1st, March 31st.

12 A. Oh. Sorry. External audits that we  
13 conducted during that time frame would be none, but  
14 I'm not sure of the exact date of when Lloyds  
15 registered the rig.

16 Q. All right. Now, you did conduct the  
17 MODU audit, right?

18 A. Yes, we did.

19 Q. Okay. Can you turn to your exhibit  
20 book, please. Take a look at the MODU audit, which  
21 I believe is attached as Tab 10. It's been marked  
22 for identification as BP Exhibit 108.

23 Do you have that?

24 A. Yes.

25 Q. Have you seen this audit before?

1           A.       No, I haven't.

2           Q.       You've never seen a MODU audit --  
3 MODUSpec audit for the DEEPWATER HORIZON rig from --  
4 dated April 1st to 14, 2010, before today?

5                   MR. ADLER:   Judge, I'm going to  
6                   object.  He just answered the question,  
7                   and if we're going to go down this road of  
8                   re-answering questions --

9                   HON. ANDERSEN:  Well,  
10                   occasionally -- based on his testimony, I  
11                   think counsel is probably wondering  
12                   whether or not he really meant that answer  
13                   in the sense.  So let's give him a minute  
14                   to take a look at it, and if he hasn't  
15                   seen it, then that's fine.  And I think,  
16                   you know, counsel is moving quickly, and  
17                   the witness admirably is answering  
18                   quickly, but I did not take this to be an  
19                   overly assertive question but rather a  
20                   "are you sure," correct?

21                   MR. GODFREY:  That's correct, Your  
22                   Honor.

23                   HON. ANDERSEN:  All right.

24           A.       I'm aware when this audit took place.  
25 I'm aware of the report.  But I have not seen even

1 to this day this report.

2 Q. (BY MR. GODFREY) Are you  
3 aware -- strike that.

4 In the ordinary course of your  
5 business, would you have expected to receive the  
6 MODUSpec audit?

7 A. Yes, I would. However, this audit was  
8 conducted on the 14th of April, and we since had the  
9 incident 6, 7 days later, so I think that's the  
10 reason why I never received the audit.

11 Q. Did anyone ever mention to you any of  
12 the findings in the audit?

13 A. There were a couple of findings that was  
14 brought to my attention, yes, and one was on crane  
15 shoes, and I can't recall the other. But I never  
16 saw the report. I was informed of that by James  
17 Kent.

18 Q. Other than the crane shoe and some other  
19 one that you don't remember, do you recall any of  
20 the other findings in this MODUSpec audit?

21 A. No. It was the crane shoes was the  
22 issue, and I don't recall any of the others, no.

23 Q. Did you ever provide BP with a copy of  
24 that audit?

25 A. Well, I never received it, so, no, I

1 didn't.

2 Q. Did Transocean?

3 A. No, I don't believe they did.

4 Q. Do you know whether the copy before you  
5 is the final audit, or is that a draft?

6 A. I don't know. I've never seen this  
7 before.

8 Q. Fair enough.

9 Now, you mentioned that the  
10 DEEPWATER HORIZON rig was under contract with BP,  
11 right?

12 A. Yes, sir.

13 Q. And Transocean's obligation was to  
14 provide a functioning and seaworthy vessel, a rig to  
15 BP, right?

16 A. Yes.

17 Q. As far as you know, was the rig  
18 functioning and seaworthy at all times?

19 A. Yes, I believe so.

20 Q. Okay. And if, in fact, under the  
21 contract, Transocean had to shut the rig down for  
22 more than a day, BP no longer had to pay Transocean  
23 the daily rate for that rig; is that correct?

24 A. That's correct.

25 Q. And so if Transocean knew that it had to

1 take 10 or 15 or 20 days off on a job at DEEPWATER  
2 HORIZON to fix things, it would be out 500-and-some  
3 thousand dollars every day except for the first day,  
4 right?

5 A. That's correct, yes.

6 Q. When you reviewed the 2009 audit, did  
7 you ever discuss with anyone any of the particulars  
8 of that audit within Transocean?

9 A. Yes. Yeah, I -- I sat down and showed  
10 my -- my boss Daun Winslow the audit report. We  
11 have to go to technical field support on some of the  
12 issues that was raised for assistance and guidance,  
13 and, yeah, we shared that within Transocean, yes.

14 Q. Did you ever speak with any members of  
15 the crew, any of the maintenance supervisors, the  
16 chief electrician or the chief mate about the audit?

17 A. Every week.

18 Q. Okay. During those conversations, did  
19 anyone on the crew mention something to you called  
20 the blue screen of death?

21 A. No, I've never heard of that until I saw  
22 testimony two, three weeks ago, whenever it was.

23 Q. Okay. Did anyone in the crew mention to  
24 you their concerns about inhibited alarm systems?

25 A. No, they did not.

1 Q. Did anyone in the crew mention anything  
2 to you about problems with the drilling chair or the  
3 screens in the drilling shack?

4 A. Yes, I was aware of the problems with  
5 the drilling shack.

6 Q. As far as you were concerned, did they  
7 fix those before April 20, 2010?

8 A. To the best of my knowledge, yes. But  
9 the issue with the chairs, which was the computers  
10 were freezing due to we established that we had  
11 corrupt files in the system. They were -- the  
12 corrupt files were cleaned, and the missing files  
13 were replaced, and the chairs were back operational.  
14 And we also had replacement chairs to install and  
15 join between wells because we wanted to do extensive  
16 testing, but that was -- it was a backup. I was  
17 under the impression that the chairs were fully  
18 functional again.

19 Q. And did you tell BP, Mr. Guide and other  
20 people, that the issues of significance that you had  
21 learned about or that came to light as a result of  
22 the September, 2009 audit had been fixed and  
23 addressed satisfactorily by Transocean?

24 A. Yes. The process that we adopted as we  
25 had in the early stages when there was quite a few

1 issues there, we had weekly meetings, and John  
2 attended some of them. But mainly it was Brett  
3 Cocalles and Angel Rodriguez.

4           Subsequent to that, they kind of  
5 moved to maybe biweekly or even monthly towards the  
6 end. However, we did insist, because one of the  
7 findings on the report was that there was lack of BP  
8 input in closing out the action. So we addressed  
9 that by ensuring that BP signed off on all the  
10 actions.

11           So John Guide came to me, sat down  
12 with the rig team and reviewed the order closeout  
13 list and signed off on it accordingly.

14           Q.       And Mr. Guide signed off on it because  
15 the rig team from Transocean told him things had  
16 been corrected and fixed, right?

17           A.       We -- we told him what we had done and  
18 when we had done it. And then if BP elected to  
19 verify what they did with some of the systems and  
20 the company men would verify some of the systems as  
21 well and then signed off on them, yes.

22           Q.       And as far as you personally were  
23 concerned, on behalf of Transocean, you were  
24 assuring BP that the items that you were  
25 representing to BP had been fixed had, in fact, been

1 fixed as a result of the 2009 audit, right?

2 A. For the ones that we had said we closed  
3 out or we closed out and gave them our description  
4 of what we had done, yes.

5 Q. Was the Transocean crew, as far as you  
6 know, well trained and experienced?

7 A. Yes. I believe so.

8 Q. So Mr. Ezell, for example, was an  
9 experienced senior tool pusher?

10 A. Yes, he was.

11 Q. Mr. Anderson was an experienced person?

12 A. Yes, he was.

13 Q. Mr. Harrell?

14 A. Yes.

15 Q. All right. They had been involved in --  
16 with the DEEPWATER HORIZON for many years, correct?

17 A. Those three individuals had, yes.

18 Q. They had conducted a variety of tests as  
19 part of the process of closing a well over the  
20 years; is that correct?

21 A. Could you clarify that?

22 Q. Sure. Are you aware of whether or not  
23 Mr. Anderson, Mr. Ezell, Mr. Harrell had been  
24 involved in conducting a number of tests when a well  
25 was being closed out over the years?

1           A.       I have to imagine so, because they're  
2 experienced, but I have not been involved with them  
3 that long. I've only done one well.

4           Q.       I see. Since the time that you've taken  
5 over responsibilities for the DEEPWATER HORIZON,  
6 you've only been involved with one well, Macondo  
7 252?

8           A.       No, we did one well complete, which was  
9 the KODIAK well. And we joined the MC 252 kind of  
10 in last stages. It had already been certified by  
11 another rig, so kind of a well and a half, if you  
12 like.

13          Q.       Who was responsible or would have been  
14 responsible for acting on the MODUSpec  
15 recommendations once they were received had this  
16 incident not taken place?

17          A.       Okay. On this report. The majority of  
18 this report, because it was a rig condition  
19 assessment, it was more about equipment and hardware  
20 and asset. That would have been the asset  
21 department. So James Kent.

22          Q.       That would not have been you?

23          A.       No.

24          Q.       Did Transocean have any regulatory  
25 inspections, to your knowledge, of the drilling

1 package?

2 A. While I had the rig?

3 Q. Yes.

4 A. No.

5 Q. Do you know whether it had any  
6 regulatory inspections of the drilling package prior  
7 to the time that you had the rig?

8 A. Well, I'm not 100 percent sure, but I  
9 believe it may have been -- had a ABS CDS  
10 certification at the very beginning, yes.

11 Q. Do you know when that was?

12 A. I'm not sure. I think, like, 2005,  
13 something like that.

14 MR. GODFREY: I have no further  
15 questions, thank you.

16 HON. ANDERSEN: Okay. Anadarko?  
17 Thank you very much.

18 Could you state your name for the  
19 record.

20 MS. KUCHLER: Yes, sir. I'm Deb  
21 Kuchler. I'm here for Anadarko and MOEX  
22 Offshore.

23 HON. ANDERSEN: Thank you.

24

25

## E X A M I N A T I O N

1  
2 BY MS. KUCHLER:

3 Q. Mr. Johnson, you told us earlier about  
4 the time that I think you used the word you  
5 challenged BP about Mr. Kaluza's rig knowledge.

6 Did that concern that you expressed  
7 to BP go up the chain of command as you told us that  
8 some issues might?

9 A. No. No. This one didn't. I spoke to  
10 the wells team, and they informed me that Mr. Kaluza  
11 had an extensive deepwater mobile unit experience,  
12 so I didn't really see the need to progress it  
13 further.

14 However, I did convey that to my OIM  
15 to make sure he was aware that we were getting a new  
16 guy. Didn't know his history or anything, but they  
17 were telling me he was a deepwater guy and that --  
18 and we would make sure we were aware of that.

19 Q. But it was BP who made the final  
20 decision to bring Mr. Kaluza in with only a short  
21 amount of experience on this particular rig at the  
22 time of the negative test?

23 A. That's correct.

24 Q. Was there anything else you raised  
25 concerns about to BP in the days and weeks before

1 this incident?

2 A. Yes. The other concern that we had was  
3 regarding the decision on the long and the short  
4 string of casing, final string of casing that was  
5 going to be run. And a decision was made very late  
6 in the day about whether we were going to run the  
7 long string or the short string, and we needed that  
8 information to plan accordingly for our side of the  
9 operation, if you like. And we have logistics, and  
10 we need to understand the timing.

11 And we also need to understand, if  
12 we were running on a full string, what the weight of  
13 that case of string is going to be so we can verify  
14 our equipment was fit for that operation.

15 So we did express a concern, and  
16 we -- about finding out about this information on  
17 the long string.

18 Q. Who did you express that concern to at  
19 BP?

20 A. To John Guide.

21 Q. And BP made that final decision also?

22 A. Yes, ma'am.

23 Q. Did that decision go up the chain, or  
24 did Mr. Guide make that decision?

25 A. No -- I'm not sure. I believe it went

1 through the due process.

2 Q. Was there anything else in, say, the two  
3 weeks before the incident that you expressed any  
4 concerns about to BP?

5 A. I don't recall any.

6 Q. Did you have any input as to when or  
7 whether to displace the drilling fluid with seawater  
8 in the day or two before the incident?

9 A. No, we had no input into that.

10 Q. BP made that decision?

11 A. Yes, ma'am.

12 Q. Tell us what you know about the negative  
13 test that was done shortly before this incident.

14 A. I don't have true, accurate facts. It's  
15 speculation on what I've read, so I don't really  
16 have the full knowledge of how the test was  
17 conducted. I know there was two tests, and there  
18 was debate around the first test.

19 Q. Were any discuss- --

20 MR. CLARKE: Your Honor, let me  
21 object that, frankly, the witness did  
22 speculate as to the testimony of others  
23 and ask that the answer be stricken.

24 HON. ANDERSEN: I'll sustain that.  
25 In other words, you're testifying you do

1 recall that there were two tests, correct?

2 THE WITNESS: The only reason I know  
3 there was two tests is from the  
4 testimonies here, not from knowledge.

5 HON. ANDERSEN: So given his lack of  
6 knowledge, I'm going to sustain that  
7 objection.

8 And would you state your name for  
9 the record.

10 MR. CLARKE: Yes, Your Honor. Shaun  
11 Clarke.

12 HON. ANDERSEN: And, ultimately,  
13 would it help the court reporters if you  
14 got cards from the lawyers?

15 THE REPORTER: We just need to know  
16 who's speaking at the time.

17 HON. ANDERSEN: Yes. At the end of  
18 the day, if they have your cards, it will  
19 help with spelling. And if you could give  
20 them to them in alphabetical order, that  
21 would be helpful to them.

22 Q. (BY MS. KUCHLER) Mr. Johnson, I take  
23 it, then, that the subject of when and how the  
24 negative tests were to be run did not come up in  
25 your rig meetings that you held at 6:30 in the

1 morning or at your 10:00 a.m. conferences with BP?

2 A. No. I discussed in the morning -- the  
3 OIM Jimmy Harrell mentioned to me that there was  
4 having discussions on the -- the way the lineup for  
5 the next test but hadn't had a chance to speak to  
6 the company man yet and that he would address. And  
7 I spoke to Jimmy later on in the day, and he  
8 informed me that it was okay and there was no  
9 issues.

10 Q. Okay. So tell me about that discussion  
11 with Jimmy later in the day. What did you say?  
12 What did he say? When was it?

13 A. Around lunchtime -- actually, I'm not  
14 100 percent sure. I spoke to Jimmy, like, three  
15 times that day, and I can't recall which one of the  
16 three conversations it came up in.

17 However, the reason for the call, we  
18 were talking about other things, which was a couple  
19 of the things that was going on in the rig, and then  
20 he mentioned to me that he had spoken to the company  
21 man and they had resolved the issue about how they  
22 were going to line it up and left it at that.

23 Q. Okay. So what did you understand the  
24 issue to be that they had resolved?

25 A. I don't know. I'd be speculating.

1           Q.       And before the incident -- I'm really  
2 not interested or asking you to tell us what you  
3 read in the transcript or anything like that.

4                       Before the incident, did you have  
5 any knowledge about what the pressures were in the  
6 negative test? Like, what pressure was on the drill  
7 pipe and what pressure was on the kill line?

8           A.       No, ma'am.

9           Q.       And so I take it that you don't know who  
10 or how those negative tests were ultimately  
11 interpreted other than Jimmy Harrell said they had  
12 resolved whatever the issue was?

13          A.       That's correct. The resolve of the  
14 issue was long before the test was conducted.

15          Q.       Oh, I see. Did you get any reports from  
16 anybody on your team or from BP after the two tests  
17 had been conducted as to how they were to be  
18 interpreted?

19          A.       No, ma'am. The reporting system that we  
20 use for the rig finished at 3 o'clock, and the last  
21 time I spoke to the rig was around about 4 o'clock,  
22 somewhere around that region, which was a couple  
23 hours before they conducted the test.

24          Q.       Have you ever heard of a term called the  
25 bladder effect?

1           A.       Only in the testimony.

2           Q.       So before you read any of the testimony  
3 from these hearings, you had not heard of the  
4 bladder effect as a way to explain why one might  
5 find 1400 pounds of pressure on the drill pipe and  
6 none on the kill line?

7           A.       No, I haven't.

8           Q.       Who is Jon Keaton?

9           A.       Jon Keaton was the rig  
10 manager-performance before I took over.

11          Q.       On April 21st, which is I think the day  
12 after this incident, did he call to have you and  
13 Mike Williams conduct a risk assessment on shutting  
14 the well in?

15          A.       That wouldn't have been Mike Will- -- I  
16 know at the time of the incident, Jon Keaton was one  
17 of the gentlemen we mentioned earlier on that went  
18 to the BP offices as part of the incident command.

19          Q.       If I may allow the witness to look at  
20 what I believe to be Transocean's event log for  
21 April 21st, 2010, and I'm going to read it into the  
22 record so everybody has an opportunity.

23                    It's at 0531, it says, "John K.  
24 called to have Paul J. and Mike W. conduct the risk  
25 assessment on shutting the well in and e-mail back

1 to BP and do a conference call."

2 HON. ANDERSEN: And your question  
3 is, does that spark a recollection?

4 MS. KUCHLER: Correct.

5 A. I'm trying to bring to mind who "Mike  
6 W." is. I'm sorry. I know who that is.

7 Q. (BY MS. KUCHLER) Can you shed any light  
8 on that as to who was being asked to do what? And  
9 is that you as the "Paul J."?

10 A. Yeah, I believe -- the "Paul J." is  
11 definitely me, and I believe the "Mike W." is Mike  
12 Wright, the operations manager.

13 I know the request came in to  
14 conduct a risk assessment; however, I was busy with  
15 other things and didn't take part in the risk  
16 assessment.

17 Q. Okay. So do you know if the risk  
18 assessment was actually carried out?

19 A. Yes. It may have even come through my  
20 e-mail because of somebody in BP didn't have my  
21 e-mail address. I'm not 100 percent sure.

22 But I didn't read it or review it,  
23 but I know it took place.

24 Q. So could you shed any light on how it  
25 was done or what conclusions were reached as you sit

1 here today?

2 A. No, ma'am.

3 MS. KUCHLER: Those are all my  
4 questions. Thank you.

5 HON. ANDERSEN: Thank you very much.  
6 Halliburton?

7 MR. GODWIN: No questions, Your  
8 Honor.

9 HON. ANDERSEN: Cameron?

10 COUNSEL REPRESENTING CAMERON: No  
11 questions, Your Honor.

12 HON. ANDERSEN: M-I SWACO?

13 COUNSEL REPRESENTING M-I SWACO: No  
14 questions, Your Honor.

15 HON. ANDERSEN: Weatherford?

16 COUNSEL REPRESENTING WEATHERFORD:  
17 No questions.

18 HON. ANDERSEN: Dril-Quip?

19 COUNSEL REPRESENTING DRIL-QUIP: No  
20 questions.

21 HON. ANDERSEN: Douglas Brown?

22 E X A M I N A T I O N

23 BY MR. GORDON:

24 Q. Mr. Johnson, Steve Gordon representing  
25 Douglas Brown.

1                   First of all, you know Douglas  
2 Brown?

3           A.       Yes, I do.

4           Q.       Can you tell me what position he had on  
5 the DEEPWATER HORIZON?

6           A.       Doug was filling the position of first  
7 engineer.

8           Q.       And what kind of seaman was he, from  
9 your experience?

10          A.       I believe -- and let me -- let me  
11 clarify that. Steven [sic] Brown was filling the  
12 role as chief mechanic. However, I think he was  
13 being paid as a first engineer.

14          Q.       Doug Brown.

15          A.       Sorry, Doug Brown. My apologies.

16          Q.       But he was not a licensed first  
17 engineer?

18          A.       That's correct.

19          Q.       And just real quickly, anything that  
20 you've heard that he did or did not do that  
21 contributed to this event, have you heard anything?

22          A.       No, sir.

23          Q.       I'd like to just ask you about certain  
24 documents. I'm sure you have seen them. And one is  
25 called a "Control of Major Emergencies Person in

1 Charge Assessment." It's a Transocean document.

2 Have you seen that before?

3 A. No.

4 Q. Okay. It's marked as PII Doug Brown or  
5 DB 132.

6 MR. GORDON: May I approach?

7 HON. ANDERSEN: Sure.

8 MR. GORDON: And I'm also going to  
9 hand the witness PII DB 155, which is a  
10 summary.

11 Q. (BY MR. GORDON) I need to ask you, take  
12 a chance to look at that, please.

13 MR. SCHONEKAS: Do you have a Bates  
14 number?

15 MR. GORDON: I read it into the  
16 record.

17 HON. ANDERSEN: Mr. Adler, can you  
18 read it from there?

19 MR. ADLER: It's PII DB 155 is the  
20 summary.

21 HON. ANDERSEN: Everybody got that?

22 Thank you.

23 Q. (BY MR. GORDON) Have you had a chance  
24 to look at the summary, sir?

25 A. Yes, sir.

1 Q. Have you ever seen that in your entire  
2 tenure at Transocean? Have you ever seen anything  
3 like that?

4 A. No, I haven't.

5 Q. Okay. Help me out, please. The rig  
6 manager, how many days a month, average, do you go  
7 to the DEEPWATER HORIZON when she was afloat?

8 A. Two to three days a month. Two days  
9 a -- two nights and three days.

10 Q. Okay. Two nights, three days. And that  
11 is what you've done since from August when you  
12 joined in '09 into the Gulf until her demise on  
13 April 20th?

14 A. Yeah. There was one month I didn't go  
15 due to vacation. I wasn't covering for that month.  
16 But other than that, yes.

17 Q. As I understand it, as rig manager, you  
18 are, in essence, the shore-side management of the  
19 vessel; is that a fair assessment?

20 A. For -- as I described earlier on, on the  
21 performance side, there are two of us, so I have  
22 responsibilities for the performance and James Kent  
23 has for the asset.

24 Q. "Performance" meaning the DEEPWATER  
25 HORIZON?

1           A.           "Performance" meaning personnel  
2 training, operations.

3           Q.           And that includes marine and drilling?

4           A.           It means marine with regards to  
5 personnel. However, it could be marine and the  
6 asset when we're talking about the asset of the  
7 vessel itself. Goes to the asset side.

8           Q.           All right. And as I understand your  
9 testimony, you have no realtime data coming to you  
10 from the vessel?

11          A.           That's correct.

12          Q.           So if you only go three days and two  
13 nights a month and you have no realtime data, how do  
14 you know what's going on daily?

15          A.           I know what's going on daily by our  
16 reports. We get a morning report from the OIM, from  
17 the tool pusher and the OIM. We get a maintenance  
18 report from the chief engineer, and we speak daily.  
19 Minimum daily.

20                       Reality, more often than not, it's  
21 probably two to three to four times a day.

22          Q.           On April 20th, were you aware that there  
23 was a meeting, a pretour meeting between the company  
24 men and Mr. Ezell and Mr. Harrell?

25          A.           We had a pretour meeting every shift, so

1 it happens every day.

2 Q. Okay. Specifically, since you've  
3 reviewed the testimony, I think you're aware of this  
4 meeting that has been discussed in the testimony,  
5 correct?

6 MR. CLARKE: Objection. Aware of  
7 having read the testimony, that by  
8 definition makes it hearsay.

9 MR. GORDON: Well, just one second,  
10 Counsel, and I'll straighten it out.

11 HON. ANDERSEN: Okay. Well, why  
12 don't you just -- without the premises for  
13 his knowledge, if you want to ask him if  
14 he's aware that a certain meeting took  
15 place, you can do that. If he's not, that  
16 would end it.

17 If he's aware of it, you can ask him  
18 how he's aware of it, and then everyone  
19 will know the basis for any questions to  
20 him, any answers he might make. Okay?

21 Q. (BY MR. GORDON) Let's try it this way:  
22 As rig manager, do you make sure that you are aware  
23 of the meeting results of each meeting pretour?

24 A. I don't get the minutes of every pretour  
25 meeting, no. However, it is mandated that we

1 conduct a pretour meeting every day, and so I'm  
2 aware there's a meeting every day. But the  
3 specifics of what is discussed every day, no.

4 Q. Is there any rule that you put in place  
5 to be told about the results of the meeting?

6 A. Of the pretour meeting, no.

7 Q. All right. Were you aware -- absent the  
8 testimony, were you aware of the meeting that took  
9 place on April 20th and what was discussed at that  
10 meeting?

11 A. No.

12 Q. Did you receive any contact from the  
13 vessel, be it satellite, telephone, any other  
14 method, from 12 in the afternoon until the vessel  
15 exploded?

16 A. From noon, I think I spoke to the rig  
17 twice. Maybe once. You know, if I spoke to them  
18 around lunchtime-ish, I don't recall exactly. I  
19 never thought about it. And I did speak to the rig  
20 around 3:00, 4 o'clock. I spoke to the rig probably  
21 twice.

22 Q. All right. Let's talk about the first  
23 conversation. Who was it with?

24 A. Both times was with Jimmy Harrell.

25 Q. Okay. In the first conversation, what

1 did Mr. Harrell tell you?

2 A. The first conversation, it was primarily  
3 around the VIP visit that was going to take place  
4 that day and making sure they were prepared for it  
5 and they were having a meeting. And we discussed  
6 how that meeting would take place with the VIPs and  
7 making sure that we were prepared for them.

8 And that's the conversation when  
9 Jimmy informed me that they had resolved the point  
10 on the inflow test.

11 Q. And you don't recall the time that was?

12 A. Not exactly, no.

13 Q. Can you tell me if during that  
14 discussion it was ever discussed that there was  
15 going to be a displacement of salt -- of mud with  
16 the saltwater?

17 A. We didn't discuss that.

18 Q. And the second conversation, when was  
19 that?

20 A. The second conversation was around  
21 between 3:00 and 4 o'clock in the afternoon. I  
22 phoned up the rig, and -- I generally just phone  
23 late afternoon to see if it was okay, how things  
24 were. And had a specific request for Daun Winslow  
25 who was out there. I wanted Jimmy to convey to Daun

1 that I wanted him to do -- I put in place kind of an  
2 audit process, and we had a monthly schedule of what  
3 we were going to be audited.

4 And in that month, it was around the  
5 management of dropped objects. So how the process  
6 worked is, we audited ourselves, as in the rig would  
7 do it. And then on a monthly basis, I would follow  
8 up on their audit findings and verify that they  
9 weren't missing points or it was being addressed  
10 correctly.

11 So I asked Daun Winslow to conduct  
12 the verification part of the drops audit report. So  
13 that was the main reason for the call in the  
14 afternoon.

15 Q. On April 20th, did you anticipate that  
16 the well would be completed by midnight that night?

17 A. To be honest, I don't recall. I don't  
18 recall it. Maybe.

19 Q. Okay. I'll bite.

20 How about the 21st? Do you think it  
21 was supposed to have been totally completed by the  
22 21st?

23 A. When I last spoke to the rig at the 4  
24 o'clock meeting -- you know, we were close to being  
25 finished. You know, we had a negative test to

1 conduct, displacement of the well to seawater and  
2 the cement job.

3                   So the timing, I'm not sure, you  
4 know, whether two days would be enough to do that  
5 phase.

6                   But then we had subsequent cement  
7 jobs after that and a lot of work before we were  
8 complete, so somewhere in the region of three or  
9 four days is more accurate, not a day.

10           Q.       And the reason I ask you is just to be  
11 clear. You were -- the DEEPWATER HORIZON, at the  
12 time of the explosion, would be classified in the  
13 completion phase, correct, of this well?

14           A.       No. It was in the temporary abandonment  
15 phase.

16           Q.       TA. The reference to the December 23rd,  
17 2009 North Sea event, can you tell me -- without  
18 getting into that, can you tell me, when potential  
19 safety problems occur somewhere in the world within  
20 the Transocean framework if there is a system that  
21 you know of that's in place to disseminate that  
22 information quickly?

23           A.       Yes, there is. Depending on the nature  
24 and the remedial action that's required and what's  
25 being found. There's numerous mechanisms to

1 communicate either improvements or opportunity or  
2 corrective actions.

3 Q. Okay. Is there a procedure to get it  
4 out quickly to stop it from happening somewhere else  
5 in the world?

6 A. Again, yes, it would depend on the  
7 nature. You could get a corporate e-mail that's  
8 distributed to every e-mail account. More likely,  
9 though, it would go through a bulletin or an  
10 advisory, and it would go through the system and  
11 then to the rigs.

12 However, there are occasions when  
13 we've had an incident where there are lessons  
14 learned, and incident reports are sent to rigs. You  
15 know, when I say "to rigs," let me clarify. I mean  
16 to each division, and the division disseminates that  
17 information out.

18 Q. All right. And there is the North Sea  
19 division of Transocean, correct?

20 A. Yes, sir.

21 Q. The Asian division?

22 A. Yes.

23 Q. The North American division?

24 A. Yes.

25 Q. And what other division?

1           A.       We have Norway, Middle East, India and  
2 Australia.

3           Q.       Okay.  Is headquarters -- when you see  
4 "headquarters" or "HQS" on a document -- "HQS-OPS,"  
5 what does that tell you?

6           A.       HQS, that means it's coming from  
7 headquarters.

8           Q.       Where is headquarters?

9           A.       The headquarters, we have -- our  
10 executive management are Geneva.  However, the  
11 majority of our support functions, which is safety,  
12 technical training, they are based in Greenway  
13 Pl- -- in Greenway in Houston.

14          Q.       In Houston, Texas?

15          A.       Yes, sir.

16          Q.       Is that where you office?

17          A.       No.  We're in Park 10.

18          Q.       Houston?

19          A.       Houston, yeah.

20          Q.       I'm going to put up here -- this is  
21 marked as Brown Exhibit 2, it's page 1 of 2.  
22 It's -- up here, it says HQS-OPS, and this is the  
23 result of the September 23rd -- I'm sorry, December  
24 23rd, '09 event.  You saw this after the DEEPWATER  
25 explosion, the HORIZON explosion, correct?

1           A.       That's correct.

2           Q.       And can you tell me what a well-control  
3 handbook is?

4           A.       A well-control handbook is a handbook  
5 for our well-control policies and procedures.

6           Q.       And how often is it revised?

7           A.       The main revisions are every six months,  
8 I believe.

9           Q.       When was the last time it was revised?

10          A.       I don't recall. I don't recall the  
11 exact date. Sorry.

12          Q.       Okay. Can you tell me, when it's  
13 revised, is it revised throughout the entire  
14 Transocean framework?

15          A.       Yes. When you make a revision, the  
16 manuals are then updated and then redistributed.

17          Q.       What level of concern does it have to  
18 rise to to make its way into the well-control  
19 handbook for a change in procedure?

20                   MR. ADLER: I'm going to object,  
21 Judge. I don't think he has personal  
22 knowledge --

23                   HON. ANDERSEN: If you know. You  
24 don't have to guess or speculate. But if  
25 you know what the company policy is, you

1                   can let us know.

2           A.        I'm afraid there's too many variables in  
3 that. I don't know.

4           Q.        (BY MR. GORDON) I guess, if it's an  
5 issue of safety and it can protect persons and  
6 property, it will certainly make its way into the  
7 well-control handbook, correct?

8                   MR. ADLER: Judge, I have to object.  
9                   He's asking for something beyond  
10                  Mr. Johnson's knowledge.

11                  HON. ANDERSEN: I'm going to sustain  
12 that in the sense that we can all imagine  
13 different degrees of safety and where you  
14 would draw the line.

15                  If you know, you can let the Board  
16 know. If you're not sure where the line  
17 is drawn or you would need specific  
18 examples before you can answer, you can  
19 let us know that.

20           A.        I don't know what it would take to make  
21 a change in the well-control handbook.

22           Q.        Okay. Let's take 11.2 days of lost  
23 time, over \$7 million loss, and loss of reputation  
24 to Transocean.

25                   Do you think that's severe enough to

1 make its way into the well-control handbook?

2 A. Again, I'm not 100 percent familiar with  
3 the issues that's in there. There may be no actions  
4 that's required to change. It may be a case of  
5 refreshing what we already know. So I don't know.

6 Q. Okay. But in this case, that's not  
7 correct; is that right? There was a change that was  
8 intended.

9 A. I don't recall that. I can't remember  
10 that verbatim.

11 Q. Okay. I'll read it for you.

12 "The following will be added to the  
13 next revision of the well-control handbook."

14 Did you know that?

15 A. I remember that now.

16 Q. Okay. And this had to do with  
17 displacement of mud or drilling mud with saltwater,  
18 right?

19 A. Okay.

20 MR. ADLER: I'm going to object. I  
21 thought we established earlier that Mr.  
22 Johnson didn't receive this and wasn't  
23 aware of it until after the event. So I  
24 object to going into it through Mr. Gordon  
25 when you stopped earlier.

1 HON. ANDERSEN: Does the Transocean  
2 lawyer want to add anything?

3 MR. JOHNSON: I think that we've  
4 covered this, and the extent that he  
5 didn't receive it before the incident and  
6 BP's counsel moved on, so I'm not really  
7 sure why we're retreading the same ground  
8 again, Your Honor.

9 MR. GORDON: This is new ground. I  
10 promise.

11 HON. ANDERSEN: Okay. You can ask  
12 your question; but, once again, no  
13 guessing or speculating. And of course we  
14 want to focus on the incident that brings  
15 us together.

16 MR. GORDON: Thank you, Your Honor.

17 Q. (BY MR. GORDON) All right. So,  
18 basically, now, I'm not sure, has this made its way  
19 into the well-control handbook?

20 A. I don't know.

21 Q. All right. I'm going to hand you this  
22 document which is a copy of this.

23 A. Okay.

24 Q. And it's your understanding that the  
25 DEEPWATER HORIZON was displacing mud with saltwater

1 the day of this event. That's correct.

2 A. Yes.

3 Q. Okay. I would like to ask you, these  
4 lines right here, you're looking at this document,  
5 specifically PII Brown 2, page 1 of 2. And there  
6 are -- there's certain things that Transocean is now  
7 requiring from the December 23rd event, certain  
8 things that the drilling operation at the completion  
9 phase has to do when they're displacing mud with  
10 seawater.

11 MR. SCHONEKAS: Objection, Your  
12 Honor, it misstates what the document  
13 says. It says it will be added on the  
14 next revision to the handbook.

15 MR. GORDON: I'm beyond that. I'm  
16 just trying to find out if they did these  
17 things on April 20th.

18 HON. ANDERSEN: Okay. Whether -- we  
19 don't -- Counsel, do you know whether or  
20 not the handbook on April 20th included  
21 this language?

22 MR. GORDON: I don't know, but this  
23 is the --

24 HON. ANDERSEN: Okay. So we don't  
25 know. Later on, we can find out, I

1           suppose, if it did.

2                       However, if there are items in the  
3 handbook that relate to the displacement  
4 of mud with seawater that Transocean saw  
5 fit to put in its handbook, I think  
6 counsel is entitled to ask the witness if  
7 any of those steps were taken, to his  
8 knowledge, with respect to the DEEPWATER  
9 HORIZON.

10                   MR. GORDON: Can you please tell --

11                   HON. ANDERSEN: Why don't you just  
12 ask the --

13                   MR. GORDON: Okay.

14           Q.       (BY MR. GORDON) Well, I'm going to read  
15 it and there are some points.

16                   "When preparing to displace" --

17                   HON. ANDERSEN: Go point by point so  
18 he has a chance to consider it. We all  
19 understand what you're -- what --

20                   MR. GORDON: I'm going to do that.

21                   But I have to read the sentence. Sorry.

22           Q.       (BY MR. GORDON) "When preparing to  
23 displace a completion fluid which will put the well  
24 under balance, a displacement pumping schedule must  
25 be developed and then followed."

1                                   Do you know, sir, if the DEEPWATER  
2 HORIZON on April 20th developed a displacement  
3 pumping schedule?

4           A.           I don't know.

5           Q.           Okay. Reading on.

6                                   "Monitoring the displaced volume  
7 alone is inadequate and does not satisfy the  
8 requirement for a known monitored column of fluid."

9                                   Did you know that on April 20th?  
10 Did you personally know that?

11          A.           No. I'm thinking hard and clear about  
12 this. No.

13          Q.           Okay. And then it goes on to say, "The  
14 pumping schedule must identify, No. 1, the volumes  
15 to be pumped."

16                                   Do you know if they did that?

17          A.           I don't know what they did.

18          Q.           The planned displacement rates.

19                                   Do you know if they did that?

20          A.           I don't know for sure.

21          Q.           The position of the fluid interfaces at  
22 all times.

23                                   Do you know if they did that?

24          A.           I don't know for sure.

25          Q.           The resultant U tube pressures in the

1 well at all times.

2 Do you know if they did that?

3 A. Again, I don't know.

4 Q. And last -- most importantly, it says,  
5 "The point at which the completion fluid will become  
6 underbalanced with respect to formation pressure."

7 Do you know if they cleaned that  
8 out?

9 A. I don't know.

10 Q. And then finally, just to be fair to  
11 this -- for completion perspective, "completion" in  
12 the sense of completing the paragraph, "During this  
13 process, the integrity of existing mechanical  
14 barriers must be monitored at all times. Any  
15 increase in return flow will indicate that a barrier  
16 may have failed, and the well must be immediately  
17 shut in. There have been situations in the past  
18 where a tested mechanical barrier has failed during  
19 completion operations."

20 Can you please tell me if Transocean  
21 had a policy on April 20th of immediately shutting  
22 in the well if there was any indication that there  
23 was return flow?

24 A. Yes, there is. Any indication of  
25 well-control issues, close the well in.

1 Q. Immediately?

2 A. Yes.

3 Q. Were you aware -- you've seen the  
4 testimony and the expert -- forget his name for the  
5 Coast Guard --

6 A. Can I just go back?

7 Q. Anything you want. Yes, sir.

8 A. Sorry. I've been reading this and  
9 thinking again.

10 Q. Yes, sir.

11 A. You asked me the question if I knew  
12 about whether displacing a volume alone is  
13 inadequate, and I said no, and I was referring to  
14 this; but I do know that you can't rely just on a  
15 volume displacement.

16 Q. You knew that?

17 A. Yes.

18 Q. But apparently Transocean felt it  
19 necessary to put it someday into the well-control  
20 handbook?

21 HON. ANDERSEN: Let's go question  
22 and answer. Okay?

23 Q. (BY MR. GORDON) Can you tell me who  
24 Steve Braniff is? I'm sorry, Barry Braniff.

25 A. Barry Braniff. I'm not sure of his

1 official title, but he's head of well operations.

2 Q. Where does he office?

3 A. He's in Greenway Plaza.

4 Q. With you?

5 A. No, I'm in Park 10.

6 Q. Oh, I'm sorry. Okay.

7 How about Steve Hand?

8 A. Steve Hand is the director of well  
9 operations. He's in Greenway Plaza.

10 Q. And that's who authored this April  
11 document, correct?

12 A. I don't know who authored it, but it  
13 says Steve Hand approved it.

14 MR. GORDON: Thank you so much.

15 HON. ANDERSEN: Mr. Harrell. Thank  
16 you. Sorry to hold you up.

17 MR. FANNING: No problem.

18 HON. ANDERSEN: Just conferring with  
19 the Chair.

20 MR. FANNING: I'm Pat Fanning,

21 FA-N-N-I-N-G. I represent Mr. Harrell.

22 E X A M I N A T I O N

23 BY MR. FANNING:

24 Q. In response to questions from

25 Mr. Godfrey, I heard you say that Transocean is

1 responsible for safety and well control on the rig;  
2 is that correct, sir?

3 A. Yes.

4 Q. And that was your testimony isn't it?

5 A. Yes.

6 Q. Okay. Does well control necessarily  
7 involve issues such as the design of the well,  
8 decisions such as whether or not to use a long  
9 string, decisions as to how many centralizers to  
10 use? Doesn't that all affect your ability to  
11 control the well?

12 A. Yes, it does.

13 Q. And who made those decisions?

14 A. BP.

15 Q. So when you say Transocean is  
16 responsible for the safety and control of the well,  
17 certainly that is subject to those decisions having  
18 been made by BP and operating under BP's plan; is  
19 that correct?

20 A. That's correct, yes.

21 Q. Okay. Thank you. Now, let's talk  
22 about -- I heard something about an EDS occur maybe  
23 during Hurricane Ida? Remember that?

24 A. Yes.

25 Q. Okay. Do you remember Jimmy was the OIM

1 on the rig during EDS?

2 A. Yes, I know Jimmy was the OIM that was  
3 on the tower.

4 Q. Okay. So Jimmy knows how to EDS a rig.  
5 We know that, don't we?

6 A. Yes, Jimmy made the decision to leave,  
7 yes.

8 Q. That's a pretty important decision,  
9 isn't it?

10 A. Yes. But Jimmy's very competent and  
11 made no qualms about making that call.

12 Q. Okay. So on April 20, 2010, when this  
13 incident occurred, had there not been an explosion  
14 that knocked out the necessary equipment, are you  
15 confident that Jimmy could have EDSed this rig?

16 A. Without a doubt.

17 Q. As well as others on the rig could have  
18 done that?

19 A. Yes.

20 Q. Thank you. Now, let's talk about, you  
21 said you had a phone call with Jimmy when he was on  
22 the DAMON BANKSTON, and I think Mr. Mathews helped  
23 us peg it as being sometime in the morning, because  
24 they've got all those sat-phone records, the  
25 government, they know all about phone calls and

1 monitoring them.

2                               So Mr. Mathews is telling us that  
3 around  
4 11 o'clock the next morning, there was a phone call  
5 to you from the DAMON BANKSTON, and he believes that  
6 could have been Jimmy; does that sound correct to  
7 you?

8           A.       I have no recollection of the time  
9 frame, when it occurred, but I do remember the  
10 conversation.

11          Q.       Okay. Have you seen the news media  
12 accounts in Newsweek, Fox News and others that  
13 attribute statements to my client wrongly about  
14 things he allegedly said in a sat-phone  
15 conversation?

16          A.       Yes, I have.

17          Q.       Do you know what I'm talking about?  
18 When he said, you know, "Are you F-ing happy?" and  
19 all that sort of stuff? Do you know what I'm  
20 talking about?

21          A.       Yeah, I've seen it. I've heard it.

22          Q.       Yeah. Is that the conversation you had  
23 with Jimmy that day?

24          A.       No, it wasn't.

25          Q.       In fact, wasn't it quite the opposite,

1 that Jimmy was very emotional about loss of  
2 personnel on the rig?

3 A. Yes. Jimmy was emotional, and -- I  
4 couldn't see him, but, you know, you can tell when  
5 you're on the telephone and somebody's crying or  
6 not. I'm fairly sure he was crying and he was  
7 upset.

8 Q. Okay. When you spoke to Jimmy, did  
9 Jimmy tell you that he had already spoken to anyone  
10 else with Transocean over the phone to report what  
11 happened on the rig?

12 A. No, he hadn't.

13 Q. Okay. Did anyone else give you any  
14 reports, anyone from Transocean, and say, "Jimmy has  
15 already called and told us what happened on the  
16 rig"?

17 A. No.

18 Q. To the best of your knowledge, the  
19 conversation that you had with Jimmy, whatever time  
20 it was the next morning, was that the first contact  
21 that Jimmy had on the phone with anybody from  
22 Transocean?

23 A. To the best of my knowledge.

24 MR. FANNING: Thank you. That's all  
25 I have.

1 HON. ANDERSEN: Thank you very much.  
2 Kyle Kuchta.

3 MR. SCHONEKAS: Mr. Kyle Schonekas.

4 HON. ANDERSEN: Curt, rather.

5 MR. SCHONEKAS: Close. It's an  
6 amalgamation.

7 E X A M I N A T I O N

8 BY MR. SCHONEKAS:

9 Q. Evening, Mr. Johnson. I'll try to be  
10 very quick.

11 Sir, there's been a lot of testimony  
12 about alarms. Do you recall some of that testimony?

13 A. Yes, I believe so.

14 Q. Particularly, there's been a contention  
15 that the general alarm had been inhibited such that  
16 it would only operate manually.

17 Do you recall that?

18 A. Yes.

19 Q. In fact, sir, are you aware that the  
20 Coast Guard issued what's called an NVIC in 1989  
21 addressing alarms and the requirements of alarms?

22 A. No, I'm not.

23 Q. Well, let me refresh you, then, sir, if  
24 I could. The topic is -- and an NVIC is a  
25 Navigation and Vessel Inspection Circular issued by

1 the Coast Guard, and it's intended to apprise boat  
2 owners about certain requirements or  
3 interpretations.

4 MR. MATHEWS: Can you give us a date  
5 on when that was?

6 MR. SCHONEKAS: Sure. August 14th,  
7 1989. The circular number is 2-89. And  
8 it's still listed on the website as being  
9 in effect.

10 Q. (BY MR. SCHONEKAS) The subject  
11 matter -- and I'm going to just read it for you,  
12 sir, for the benefit of the other people who don't  
13 have it is: "Guide for electrical installations on  
14 merchant vessels and mobile offshore drilling  
15 units."

16 And I'm going to draw your attention  
17 to page 39, Section 5.2, entitled "General Alarm,"  
18 paragraph 2.

19 "(2) The general alarm is intended  
20 to be sounded only after a deliberate decision by a  
21 member of the crew."

22 Is that consistent, sir, with the  
23 way the alarms worked on the DEEPWATER HORIZON?

24 A. Yes.

25 Q. It goes on, sir, it says, "The general

1 alarm must be initiated manually and is intended to  
2 be sounded by the person on watch or other  
3 responsible member of the crew after the  
4 determination has been made that an emergency  
5 situation exists which warrants mustering the crew  
6 and passengers."

7                   Again, sir, isn't this, in fact, the  
8 way the HORIZON operated?

9           A.       Yes.

10          Q.       Now, sir, I want to turn to another  
11 topic, and that was the questions by Capt. Nguyen  
12 concerning the suggestion that Capt. Kuchta should  
13 have reported this casualty.

14                   Do you recall that, sir?

15          A.       Yes.

16          Q.       All right. Again, I know you probably  
17 don't know the CFRs off the top of your head, but I  
18 wanted to direct you to 46 CFR, Section 4.0-31. And  
19 it defines "maritime casualty or accident" for  
20 purposes of reporting.

21                   It states, "Section A. The term  
22 maritime casualty or accident shall mean any  
23 casualty or accident involving any vessel, other  
24 than public vessels, if such casualty or accident  
25 occurs on the navigable waters of the United

1 States."

2 I'm going to get to the rest of it  
3 in a second.

4 Sir, you understood, did you not,  
5 that the Gulf of Mexico is not considered a  
6 navigable water of the United States?

7 A. A vague recollection.

8 Q. Right. In fact, what's intended by  
9 that, essentially, are rivers and other bodies of  
10 waters within the continental United States that are  
11 navigable, correct?

12 A. Okay.

13 Q. And it goes on -- thank you for being so  
14 agreeable.

15 HON. ANDERSEN: We'll take that to  
16 mean that that's not your -- you don't  
17 have an independent knowledge of that.

18 THE WITNESS: That's correct.

19 Q. (BY MR. SCHONEKAS) And it says, "The  
20 territories or possessions or any casualty or  
21 accident whether such accident may have occurred  
22 involving a United States vessel which is not a  
23 public vessel."

24 Q. This is not a United States vessel; is  
25 that correct?

1           A.       That's correct.

2           Q.       And this accident didn't occur within  
3 the territorial waters of the United States; is that  
4 right, sir?

5           A.       Yes. From what --

6           Q.       Well, it's not within 12 miles; is that  
7 right?

8           A.       It wasn't within 12 miles; that's right.

9           Q.       Thank you.

10                   All right, sir, I'm going to change  
11 topics again and direct your attention now to the  
12 U.S. Coast Guard National Maritime Center.

13                   Have you ever heard of that, sir?

14           A.       No, I have not.

15           Q.       Well, let me suggest to you, sir, that  
16 that is a -- they maintain, the Coast Guard does, a  
17 website to assist mariners and ship owners with  
18 respect to licensing and ship issues. All right?  
19 And if you go to that website, sir, and you look up  
20 for the definition and description of "an offshore  
21 installation manager (OIM)," it states, "A licensed  
22 officer restricted to service on MODUs, an assigned  
23 offshore installation manager is equivalent to a  
24 conventionally licensed master and is the person  
25 designated by the owner or the operator to be in

1 complete and ultimate command of the unit."

2                   Was that your understanding, sir, of  
3 what an OIM is?

4           A.       Yes.

5                   MR. SCHONEKAS: Thank you. That's  
6 all I have.

7                   HON. ANDERSEN: Thank you very much.  
8 Patrick O'Bryan.

9                   COUNSEL REPRESENTING PATRICK

10                  O'BRYAN: No questions.

11                  HON. ANDERSEN: Robert Kaluza.

12                  E X A M I N A T I O N

13 BY MR. CLARKE:

14           Q.       Good afternoon, Mr. Johnson.

15           A.       Good afternoon.

16           Q.       My name is Shaun Clarke, and I represent  
17 Bob Kaluza.

18                   And first, let me on Bob's behalf  
19 convey to you my most sincere condolences to you on  
20 the loss of your friends and colleagues.

21           A.       Thank you.

22           Q.       You indicated that when BP wanted to  
23 send Bob out to the rig, you had concerns regarding  
24 his knowledge of that rig and its procedures?

25           A.       Yeah, I had no idea who Bob Kaluza was.

1 It was no slight on him, but I had heard he was  
2 coming from a platform, which raised concerns for  
3 me. That's why I followed through with it.

4 Q. And after following through, you did,  
5 nevertheless, agree to have BP send him out to the  
6 rig?

7 A. Yeah. BP assured me that Bob was an  
8 experienced deepwater floating well site leader and  
9 there was no issues.

10 Q. And at the time that you agreed to have  
11 BP send him out there, you knew the crew of the  
12 DEEPWATER HORIZON, correct?

13 A. That's correct.

14 Q. And you indicated you had taken the  
15 time, made an effort to get to know them, correct?

16 A. Yes.

17 Q. And they were a very close group, right?

18 A. Yes.

19 Q. They had been together a long time,  
20 right?

21 A. Some of the crew members had, yes.

22 Q. And some of them in senior positions,  
23 right?

24 A. Yeah.

25 Q. Now, you knew that the team you had out

1 there was experienced on that rig, correct?

2 A. Yes.

3 Q. And you mentioned that this had been a  
4 difficult well, correct?

5 A. That's correct. Yes.

6 Q. So you knew that that team had  
7 experience in working with this difficult well,  
8 correct?

9 A. Yes.

10 Q. And you knew that this team was used to  
11 working together, correct?

12 A. Yes.

13 Q. Now, when the BP company man comes out  
14 there, you want him to work as part of the team too,  
15 don't you?

16 A. That's correct.

17 Q. And teammates have to rely on each  
18 other, correct?

19 A. To a certain degree.

20 Q. Well, given your knowledge of Bob's  
21 experience on the DEEPWATER HORIZON, first, is that  
22 of the crew. You understood when you agreed that he  
23 would go out there, that if it came to issues  
24 related to the rig and its procedures, he would have  
25 to rely on other members of the team, wouldn't he?

1           A.           Not necessarily so.  We -- myself,  
2 should I say, made it knowledgeable to the offshore  
3 team, as in Transocean guys, to Jimmy and everyone,  
4 that Bob was coming and that he was new.

5                       However, it should be noted that the  
6 original drilling super- -- well team leader, well  
7 site leader, was still there.  So if Bob had any  
8 issues, he had his counterpart, his peer was on the  
9 rig, and he would confer with him and also speak to  
10 the rig crew.

11           Q.           Let me ask you:  Can you see any  
12 circumstances in which it would be reasonable or  
13 appropriate for the company man to rely on other  
14 members of the team?

15           A.           Certain things they would rely on on  
16 other members of the team, yes.

17           Q.           And safety is a priority within  
18 Transocean, correct?

19           A.           Yes, it is.

20           Q.           And you're confident this crew knew they  
21 could stop the job if they believed that anything  
22 was unsafe, correct?

23           A.           Yes, I do.

24           Q.           Indeed, as you indicated, Jimmy had not  
25 hesitated in a prior instance to activate the EDS

1 system, correct?

2 A. That's correct.

3 Q. Now, are you aware of any evidence that  
4 any member of the crew indicated after the second  
5 negative test that they believed it was unsafe to go  
6 forward?

7 A. I've got no crew information. It's just  
8 speculation on what I've heard. I've not spoken to  
9 anybody directly on the second inflow negative test.

10 Q. And do you believe -- or based on your  
11 knowledge of this crew and its experience, am I  
12 correct that you don't believe this very close group  
13 that had been together a long time would have gone  
14 forward in an unsafe situation because the company  
15 man who had been there three days told them to, do  
16 you?

17 MS. KUCHLER: Objection. Calls for  
18 speculation.

19 MR. CLARKE: He knows the crew, Your  
20 Honor. Foundation.

21 MS. KUCHLER: Deb Kuchler for  
22 Anadarko and MOEX Offshore.

23 HON. ANDERSEN: I'm going to  
24 overrule the objection.

25 If you have an opinion as to whether

1           or not the crew might communicate  
2           something like that, you can give your  
3           opinion, but we know you have not heard  
4           any statement yourself based on your  
5           testimony.

6           A.       Can you repeat the question so I'm  
7           clear?

8           Q.       (BY MR. CLARKE) Do you believe that the  
9           guys you knew in that crew would have  
10          jeopardized their safety and that of their  
11          colleagues by going forward in an unsafe situation  
12          because the company man who had been there three  
13          days told them to?

14          A.       I believe my crew would never knowingly  
15          go forward with an unsafe situation regardless of  
16          who told them.

17          Q.       Does Transocean have any written  
18          procedure setting forth the manner in which its  
19          crews are to align piping and valves of the  
20          performance of negative tests?

21          A.       I'm not aware of any particular line of  
22          inquiry.

23          Q.       Now, you're worked as a driller and a  
24          tool pusher, correct?

25          A.       That's correct.

1 Q. And both of them have a role to play in  
2 the setup and/or the performance of a negative test,  
3 correct?

4 A. Yes.

5 Q. Based on your experience, are you aware  
6 of any American Petroleum Institute recommended  
7 practice on the manner in which crews should align  
8 piping and valves for the performance of negative  
9 tests?

10 A. I'm not aware of an API reg or not on a  
11 lineup of a negative test.

12 Q. Are you aware of any regulations on the  
13 lineup of the negative test?

14 A. I'm not aware of any federal  
15 regulations.

16 MR. CLARKE: Thank you, sir.

17 HON. ANDERSEN: May we take a brief  
18 break?

19 CAPT. NGUYEN: Mr. Johnson, you need  
20 a quick break, sir?

21 THE WITNESS: Yes, sir.

22 CAPT. NGUYEN: Okay. Why don't we  
23 take a five-minutes break and come back  
24 here at 5:15, please. Thank you.

25 (Break.)

1 MR. PENTON: Ronnie Penton on behalf  
2 of Mike Williams.

3 HON. ANDERSEN: You're still under  
4 oath.

5 E X A M I N A T I O N

6 BY MR. PENTON:

7 Q. Sir, in the first part of your  
8 testimony, you said that the general alarm audibles  
9 were inhibited.

10 Do you recall that testimony?

11 MR. SCHONEKAS: Objection.

12 Mischaracterizes the witness' testimony.

13 MR. PENTON: Well, if I'm  
14 mischaracterizing, he can certainly  
15 correct me.

16 HON. ANDERSEN: Take your time. If  
17 you remember what you said, you can remind  
18 us.

19 A. I believe I said that the output from  
20 the SVC panel from the alarms was in manual mode,  
21 which meant you have to activate the general alarm  
22 manually.

23 Q. (BY MR. PENTON) so that if you do  
24 not -- if you did not activate the general alarm  
25 manually, you would have no general alarm?

1           A.       I believe that's correct.

2           Q.       Now, where did you hear this? Or where  
3 did you see this?

4           A.       When the first testimony came up about  
5 the inhibiting of the alarms, I was unaware of that,  
6 as I said. So I spoke to Mike Dowel, our chief  
7 mate, to verify how the system was set up, and he  
8 informed me that the inhibit from the SVC panel to  
9 the general alarm was in inhibit mode -- was in  
10 manual mode.

11                       I also verified with Tommie Daniels,  
12 the chief electrician, and he told me the same  
13 story.

14          Q.       And did they tell you, including  
15 Mr. Daniels, how long that the general alarm had  
16 been in such an inhibit mode?

17          A.       No. Not specifically. It had been like  
18 that a while.

19          Q.       Did they tell you why?

20          A.       They told us that it was in the manual  
21 mode because of if it was -- went direct to  
22 automatic, you could have false alarms for a number  
23 of reasons, and it would go to general alarm without  
24 warning or indication and that -- and wake people up  
25 and cause disruption and create a further safety

1 issue.

2 Q. So there was no general alarm sounded on  
3 that vessel that evening, correct?

4 A. That is not correct.

5 Q. Okay. Then you tell me, how do you know  
6 there was a general alarm sounding?

7 A. I spoke to Daun Winslow, who told me  
8 there was a general alarm, and I've spoken to three  
9 or four other crew, at least, that informed me that  
10 the general alarm did sound.

11 Q. And you've also -- have you read  
12 transcripts of all these proceedings where others  
13 have testified differently?

14 A. No, I have not.

15 Q. Okay. Thank you, sir.

16 Would you please tell us how the  
17 automated system works? When you have the automated  
18 alarms on and the sensors on for the firing gas  
19 systems, would you please explain to us what your  
20 understanding is of what happens in the automated  
21 mode?

22 A. What happens in the automated mode or in  
23 the mode, you know, is -- that depends on what alarm  
24 goes off or what sensor is triggered, should I say,  
25 either a dampener will close or an alarm -- I'm

1 not -- it's very -- it's a very complex system.  
2 Very wide- ranging. There's a number of different  
3 things. I don't know exactly what that is.

4 Q. A few minutes ago, Mr. Fanning -- and  
5 I'm sure he'll correct me if I misquote him -- but I  
6 think he said something to effect that had the rig  
7 not exploded -- I don't know if he mentioned  
8 Mr. Harrell, but someone could have activated a  
9 manual mode to disconnect the rig.

10 Do you remember that testimony?

11 MR. SCHONEKAS: Objection, Your  
12 Honor. He's confusing two things. He's  
13 confusing the alarm system with the EDS  
14 system.

15 HON. ANDERSEN: If you want to  
16 clarify which you mean.

17 MR. PENTON: Sir, if the witness  
18 thinks I need to clarify, I will, but not  
19 Mr. Schonekas.

20 HON. ANDERSEN: Well, first of all,  
21 we have Mr. Adler here who is here because  
22 if he thinks a question is confusing to  
23 the witness, he is his -- his attorney.  
24 And he can shield him from that. So  
25 please be alert to that.

1                   Otherwise, in the interest of  
2                   everybody getting to get the information  
3                   that you think is relevant -- and I think  
4                   all the lawyers have acted in good faith  
5                   today -- I've repeatedly reminded the  
6                   witness and the previous witness, you  
7                   don't need to answer if you don't have an  
8                   opinion. If a question is confusing, you  
9                   can -- which -- which it can be, it's  
10                  tough to be in that spot, ask that it be  
11                  clarified.

12                  MR. SCHONEKAS: Can we read it back,  
13                  Your Honor?

14                  HON. ANDERSEN: Sure. Or, Counsel,  
15                  why don't you either repeat it or ask what  
16                  question you like to ask.

17                  Q.           (BY MR. PENTON) Well, I think the first  
18                  question I asked you was to help explain to us the  
19                  way the automated systems work, but let me ask  
20                  you -- let me ask you this question: Are the  
21                  automated systems on that rig that are connected and  
22                  tied to the fire and gas systems that detect fire,  
23                  that detect combustible gas and that detect toxic  
24                  gas, in the automated function, which will come  
25                  first? An explosion or an influx of combustible gas

1 onto the rig?

2 A. If you're asking me, without the gas,  
3 there can't be an explosion.

4 Q. Correct. So that's why you have the  
5 combustible gas sensors there, correct, to sense the  
6 volume of gas that may present a combustible  
7 explosion hazard, correct?

8 MR. SCHONEKAS: Judge, let me  
9 object, if I can, and it's relevance. The  
10 reason being is that the Coast Guard has  
11 promulgated a regulation that talks to the  
12 manner in which the general alarm is to be  
13 activated. And what Mr. Penton wants to  
14 do is to suggest that because it was not  
15 automated that that is somehow a  
16 deficiency.

17 MR. PENTON: Judge, I ask that he  
18 make objections to the testimony instead  
19 of testifying. He testified as an expert  
20 witness.

21 HON. ANDERSEN: Okay. I'm going to  
22 overrule the objection. You made your  
23 points on your examination very well about  
24 various regulations, and the Coast Guard  
25 is well-represented, as one can imagine

1 here, extremely well represented.

2 So, you know, I think there's  
3 certain logic in terms of the physics of  
4 these things, and this man is an expert in  
5 the operation of -- of these vessels, and  
6 so if you have an opinion as to how these  
7 various alarms and sensors work and ought  
8 to work, the Board would be happy to hear  
9 it.

10 And obviously if some testimony is  
11 inconsistent, the Board is going to have  
12 to try to figure out what, based on its  
13 experience and evidence, it thinks is  
14 logical.

15 MR. PENTON: Now, I would like Madam  
16 Reporter to read the question back.

17 HON. ANDERSEN: Well, why don't you  
18 ask again. My experience has -- seriously  
19 has been that if we talk more than, say,  
20 43 seconds after asking a question, it  
21 takes longer for the reporter to retrieve  
22 it than it does for the lawyer to ask it  
23 or something approximate to it again.

24 So if you wouldn't mind, even though  
25 I know it's the third time.

1 MR. PENTON: Well, I hope I have  
2 enough objections by Mr. Schonekas on his  
3 presentation here so I can get my  
4 questions answered. And I apologize for  
5 that.

6 HON. ANDERSEN: That's okay.

7 MR. SCHONEKAS: I'll try to oblige.

8 HON. ANDERSEN: This is not like  
9 getting confirmed for a federal judgeship,  
10 it requires a unanimous vote. We don't  
11 expect everybody in the room to agree.

12 So what's your question?

13 Q. (BY MR. PENTON) Okay. We have  
14 established, sir, you and I, that an explosion and  
15 the explosion on this vessel did not occur before  
16 there was sufficient volumes of combustible gas to  
17 explode, correct?

18 A. That's correct.

19 Q. So, had the automated sensor systems and  
20 the fire and gas detection systems been properly  
21 operating on the evening of April the 20th and had  
22 sensed those combustible gases, that automated  
23 system would have began to shut down systems on the  
24 rig to protect it from combustion, fire and  
25 explosion, correct?

1 MR. SCHONEKAS: Objection, Your  
2 Honor. Using the term "properly" --

3 HON. ANDERSEN: Wait. Mr. Adler --  
4 let's start with the witness' lawyer.  
5 Do you have any objection?

6 MR. ADLER: I think it's a compound  
7 question, and it also requires him to  
8 speculate since he wasn't on the rig and  
9 doesn't know how things were set at the  
10 time.

11 HON. ANDERSEN: Okay. I'm going to  
12 sustain it.

13 MR. SCHONEKAS: Thank you, Judge.

14 HON. ANDERSEN: On the next  
15 objection, Mr. Fanning gets to go first.

16 MR. FANNING: I want to go to  
17 Capt. Higgins, I want him to get involved  
18 in this. He's a Judge. I want to object  
19 to him.

20 MR. PENTON: Judge, what am I doing  
21 now?

22 HON. ANDERSEN: Do you have any more  
23 questions?

24 MR. PENTON: Well, I have some very  
25 important questions, and I don't have an

1 answer to the questions.

2 HON. ANDERSEN: Do you have a  
3 simple -- you asked the witness previously  
4 if there had to be gas there before an  
5 explosion, and he --

6 MR. PENTON: Judge, let me try --  
7 and you know you're getting to it when you  
8 have this, but that's okay.

9 Q. (BY MR. PENTON) Let me ask you, sir.  
10 Isn't it true that he --

11 MR. SCHONEKAS: Object, Your Honor.

12 HON. ANDERSEN: He gets an  
13 eight-word speech. All right.

14 Q. (BY MR. PENTON) Isn't it true that had  
15 the automated systems functioned properly on that  
16 rig and sensed that combustible gas, it would have  
17 shut those systems down and protected the rig from  
18 fire, combustion and explosion?

19 CAPT. NGUYEN: Mr. Johnson, let me  
20 interrupt real quick here. Based on  
21 the -- you know, acknowledgment of the  
22 flag state, the MODU Code does not require  
23 automatic activation of the general alarm  
24 to be linked to the toxics and fire and  
25 flammable gas indicator. So that's the

1 basis.

2 There is no requirement for  
3 automatic activation; so, therefore, when  
4 a question asks you was it properly -- is  
5 it properly -- you don't have to -- the  
6 basis is not automatic it's required.

7 Okay? I just want to clarify.

8 A. Okay. To the best of my knowledge in  
9 how I've been informed, the system was not in  
10 inhibit or in bypass mode. The system was fully  
11 operational. And the only function that was in an  
12 inhibit or a manual mode, whichever terminology you  
13 want to use, was the output from the SVC panel for  
14 the general alarm. All the other functions were  
15 still operational: fire dampeners, shutdown of  
16 engines.

17 The only thing that was changed was  
18 the output from an SVC panel to a general alarm  
19 sounding. Nothing else. So that's the rest of my  
20 knowledge.

21 Q. (BY MR. PENTON) Well, sir, I appreciate  
22 your answer. The problem is, is that it's not  
23 responsive to my question. Let me ask it --

24 MR. SCHONEKAS: Objection, Your  
25 Honor.

1                   HON. ANDERSEN:  If the witness'  
2                   testimony is that the alarm was set  
3                   properly in accordance with the -- the  
4                   regulations that control how it ought to  
5                   be set, then it is responsive to your  
6                   question, and a recommendation of the  
7                   Board might well consider recommending  
8                   that those regulations be changed for  
9                   those reasons.

10                  MR. PENTON:  Judge, I have a very  
11                  specific question here, sir, and that  
12                  question is whether or not the automated  
13                  sensor systems for the fire and gas  
14                  systems aboard this vessel were  
15                  intended -- not saying what happened that  
16                  evening, but were intended to sense the  
17                  combustible gas and to automatically shut  
18                  down.  I want to ask -- I'm asking this  
19                  witness, was that the intent of those  
20                  automated systems.

21                  MR. DYKES:  Let me interrupt right  
22                  here for a second.  In the previous  
23                  hearing, we had chief engineer Steve  
24                  Bertone give us the configuration of how  
25                  that system worked.  And he told us in

1           that testimony that the alarm system --  
2           and people need to understand.  There's  
3           two separate parts to this.  You have the  
4           detection, and then you have the  
5           enunciation.

6                     MR. PENTON:  Correct.

7                     MR. DYKES:  And as part of that, the  
8           detection has an automatic function, from  
9           what he told us in that testimony.  The  
10          detection in the automatic system still  
11          performs its intended shutdown functions,  
12          and then you have the enunciation.  And  
13          Steve Bertone gave us his testimony that  
14          said basically what Mr. Johnson just said  
15          here, that the only thing that was in the  
16          inhibited mode was the enunciation part of  
17          the general alarm.

18                    So we're kind of going back through  
19          some -- some testimony that we already  
20          have on the record, and I'm not sure I see  
21          the benefit in rehashing that out again.

22                    HON. ANDERSEN:  Well, do either of  
23          the chairs want to get this question  
24          answered?

25                    MR. DYKES:  Well, sir, let me say

1           this to you: There can very well be  
2           factual disagreement with various  
3           witnesses who testify at this Board.  
4           You're not the judge to be able to shut it  
5           down, and that's not what you're intending  
6           to do.

7                     HON. ANDERSEN: Let's do this --

8                     MR. PENTON: But the automated part  
9           of this system is important to find out  
10          what this witness knows and how it works.

11                    HON. ANDERSEN: I think he's  
12          testified as to how it works. And the  
13          only -- the issue is, did it work, quote,  
14          "properly," and that depends perhaps on  
15          perspective. However, since both the  
16          cochairs have heard this testimony before,  
17          what I suggest you do is, this evening or  
18          tomorrow, if you'd like to make a  
19          presentation to the court -- to the Board  
20          through its attorneys as to why we should  
21          reopen with respect to this testimony, I  
22          think we can.

23                    MR. PENTON: I'll be happy to do  
24          that.

25                    HON. ANDERSEN: There's so many

1 objections to it, and there's the  
2 reservations of the cochairs that I don't  
3 think it's a good use of our time right  
4 now.

5 MR. PENTON: Judge, I'd like to  
6 reserve my right to do that.

7 HON. ANDERSEN: Sure.

8 MR. DYKES: You're trying to get to  
9 the point that if the other alarm systems,  
10 the detection systems, were in the  
11 full-functioning mode, you should have  
12 never had the explosion and so forth. And  
13 we've already come to that point in our  
14 fact-finding portion that that's something  
15 we need to further explore. I'm not sure  
16 Mr. Johnson is the person that we need to  
17 explore there.

18 MR. PENTON: Your comments there  
19 help me move on.

20 MR. DYKES: Thank you.

21 Q. (BY MR. PENTON) Now, let me ask you  
22 this: Who was on the bridge at the time of this  
23 event that should have manually engaged the general  
24 alarm systems?

25 MR. ADLER: I'm going to object,

1 Judge, because I'm not sure Mr. Johnson  
2 knows who was on the bridge.

3 MR. PENTON: If he does.

4 HON. ANDERSEN: If you know, you can  
5 answer. If you don't know, that's --

6 CAPT. NGUYEN: But you should know  
7 what -- which position on there that is  
8 responsible for the activation of the  
9 general alarms, right?

10 THE WITNESS: That's correct. And I  
11 know the positions and I know of one or  
12 two personnel that was on the bridge.

13 Q. (BY MR. PENTON) Who was that, sir?

14 A. It would have been Yancey Clettinger  
15 [sic] I know was on the tour.

16 MR. GORDON: That's Keplinger.

17 THE WITNESS: Sorry.

18 A. But I don't know who the DPO was  
19 actually on board on the shift.

20 Q. (BY MR. PENTON) Okay. Thank you, sir.

21 Do you know whether or not there  
22 were, in fact, BP personnel on the bridge on the  
23 computers?

24 A. I'm not sure.

25 Q. You never heard that?

1           A.       I have heard it, but it's speculation,  
2 and I don't know.

3           Q.       Let me ask you this -- and I only have a  
4 couple more, and you've heard that we're going to be  
5 looking at this later. This is my question: One of  
6 the automated functions of that rig, once it detects  
7 combustible gas, one of the things that occurs  
8 electronically is that certain ventilation systems  
9 are shut down; is that correct?

10          A.       I don't know categorically, but I  
11 believe it certainly shuts down somewhere.

12          Q.       And why, if you know, are those  
13 ventilation systems shut down?

14          A.       The one system that I'm sure of is the  
15 ventilation system into the accommodation, because  
16 you don't want gas going inside the accommodation.

17                    I'm sure there's more, but I don't  
18 know.

19          Q.       Okay. Are there ventilation systems in  
20 the engine room?

21          A.       Yes, there are.

22          Q.       And are you aware of whether or not  
23 those ventilation systems shut down when the  
24 combustible gas infiltrated the vessel?

25          A.       I'm not sure.

1 Q. If the ventilation systems didn't shut  
2 down, would that have presented a combustible source  
3 for that gas?

4 MR. ADLER: I'm going to object,  
5 Judge. It's speculation.

6 Q. (BY MR. PENTON) If you know.

7 MR. ADLER: There's so many  
8 variables involved, I don't know how  
9 Mr. Johnson can give an accurate answer.

10 HON. ANDERSEN: Well, if you feel  
11 comfortable answering, you may, if you  
12 think you have an opinion.

13 A. I'm just not sure, you know, I don't  
14 know where the gas plume -- there's too many things  
15 in there.

16 Q. (BY MR. PENTON) That's fair.

17 Do you know the purpose of the  
18 ventilation system in the engine room? The general  
19 purpose.

20 A. I believe so.

21 Q. And what is that?

22 A. The ventilation for the engines are that  
23 they need air for the engines. You also need to  
24 cool the air or it will get hot. So there's  
25 numerous reasons why you have ventilation in an

1 engine room.

2 Q. Do you know if the automated systems  
3 were connected to the ventilation system of the  
4 engine room?

5 A. Not 100 percent.

6 MR. PENTON: Thank you, sir. That's  
7 all I have.

8 HON. ANDERSEN: Thank you.

9 Any Board members, chairs?

10 MR. DYKES: I've got one.

11 HON. ANDERSEN: First, Transocean,  
12 would you like -- do you have any  
13 follow-up questions?

14 MR. JOHNSON: We have no follow-up.

15 HON. ANDERSEN: Okay, thank you.

16 MR. LONDON: I believe you didn't  
17 call Mr. Bertone.

18 HON. ANDERSEN: Did we miss a  
19 witness?

20 MR. LONDON: Yes. Steve Bertone.

21 HON. ANDERSEN: I called his name.  
22 Steve Bertone. Sorry. Maybe I didn't say  
23 it loudly enough, or maybe I shucked it  
24 off without saying anything.

25 MR. LONDON: Just a couple extra.

1 HON. ANDERSEN: Thank you for  
2 reminding me.

3 E X A M I N A T I O N

4 BY MR. LONDON:

5 Q. Hello, Mr. Johnson. My name is Steve  
6 London, I represent Steve Bertone.

7 Do you know Steve Bertone --

8 A. Yes, sir.

9 Q. -- chief engineer?

10 I just want to ask you a couple  
11 questions. I want to clear this up real quick about  
12 the alarm system.

13 You're familiar with the bridge of  
14 that vessel?

15 A. Yes.

16 Q. Isn't there an alarm panel there?

17 A. Yes.

18 Q. It's monitored 24 hours a day?

19 A. Yes.

20 Q. By DPO?

21 A. Yes, two DPOs.

22 Q. And if an alarm were to act, there's an  
23 audible as well as a visual on that panel?

24 A. Only the panel, there is, yeah.

25 Q. And the audible where anybody on the

1 bridge could hear it?

2 A. Yeah, you can hear it anywhere on the  
3 bridge.

4 Q. So it's instantaneous. The only  
5 difference is, it doesn't set the general alarm off  
6 to the whole vessel; is that correct?

7 A. That's correct.

8 Q. Okay. Sometime yesterday, I believe we  
9 started your testimony, or the day before, I'm not  
10 sure, the Captain -- the Captain started off your  
11 questioning by asking you about the fitness of  
12 certain individuals and the people that you worked  
13 for there. I'd like to ask you the same thing about  
14 Steve Bertone.

15 What's your impression of him as  
16 chief engineer?

17 A. I have a lot of respect for Steve  
18 Bertone. I think he's extremely conscientious,  
19 hardworking, competent chief engineer.

20 Q. Is he an individual that you think makes  
21 a good member of the team for Transocean?

22 A. Definitely.

23 Q. All right. And you believe that his  
24 employment -- he would be suitable to continue his  
25 employment, the same as you discussed Mr. Harrell?

1           A.           Without a doubt.

2                       MR. LONDON:   That's all I have.

3                       Thank you, Your Honor.

4                       HON. ANDERSEN:   Thank you.

5                       Transocean?

6                       Board members?

7                       MR. DYKES:    Yes.

8                       HON. ANDERSEN:   Mr. Dykes.

9                       MR. DYKES:    Promise I'll keep it  
10                      short.

11                      E X A M I N A T I O N

12           BY MR. DYKES:

13           Q.           Earlier today, we talked about the alarm  
14           panels, the gas detection indicators.  You have them  
15           in the engine control room, you have them on the  
16           drill floor and you have them on the bridge; is that  
17           correct?

18           A.           That's my belief, yes.

19           Q.           As far as you could --

20           A.           Yes.

21           Q.           When something triggers enunciation at  
22           those panels, who is responsible for taking action?  
23           Is it persons in the engine control room, the drill  
24           floor or the bridge?

25           A.           The bridge.

1 Q. The bridge. And it would be the person  
2 on tower or on station?

3 A. Whoever was on station. Then they would  
4 make a PA announcement or telephone call, whatever  
5 the scenario was.

6 MR. DYKES: Thank you.

7 MR. FANNING: Just one quick  
8 question.

9 FURTHER EXAMINATION  
10 BY MR. FANNING:

11 Q. Is there any reason you would not want  
12 the general alarm to be set off automatically when  
13 an alarm went off on a panel?

14 A. Yes. The reason why it doesn't  
15 automatically, instantaneously go off is, these  
16 alarm sensors are fairly temperamental. You know,  
17 any number of things can set them off prematurely,  
18 and then we have vast experience of that, you know,  
19 fog set them off, pressure washing, just  
20 deterioration, you know. These alarm sensors are  
21 prone to going off, waking people up at 2:00, 3  
22 o'clock in the morning for false alarms. It's bad  
23 for safety, you know.

24 Disrupting people's sleep  
25 needlessly, that's the main premises behind the

1 general alarm.

2 Q. So it's -- is it your testimony that  
3 it's safer for the bridge to make the decision as to  
4 whether or not to activate the general alarm than to  
5 have to activate it automatically?

6 A. Yes. It's manned by competent, trained  
7 personnel at all times.

8 MR. FANNING: Thank you.

9 CAPT. NGUYEN: Few follow-up  
10 questions.

11 FURTHER EXAMINATION

12 BY CAPT. NGUYEN:

13 Q. Now, a while ago when flag state -- I  
14 don't know whether it justified the new command for  
15 DEEPWATER HORIZON is appropriate -- I understand  
16 it's two better than one that was the focus; isn't  
17 that right? As you remember.

18 A. Kind of, yes.

19 Q. Now, that assumed that both of these  
20 individuals are well-trained and experienced in  
21 emergency response; would you agree with that?

22 A. Yes.

23 Q. Could you explain to me what is the --  
24 does Transocean have a -- I don't know, major  
25 emergency management training program for senior

1 personnel?

2 A. Yes, they do.

3 Q. Can you -- what's the name of the  
4 program, and can you give me a description of how is  
5 that program implemented from the master OIM level  
6 all the way up to Mr. Steve Newman, the CEO?

7 A. I'm not sure how it's communicated up  
8 the way. I couldn't speculate that. The training  
9 is called MEM, Major Emergency Management training,  
10 and we have training in a facility in various  
11 locations. We have a training center here in  
12 Houston that we use. And the certain individuals  
13 that's defined by the training matrix are required  
14 to attend the MEM training.

15 Q. Do you know if Mr. Kuchta received MEM  
16 training?

17 A. I'm not 100 percent sure.

18 Q. How about Mr. Harrell?

19 A. Jimmy -- Mr. Harrell had, yes.

20 Q. How about yourself?

21 A. I have, yes.

22 Q. How about Mr. Winslow?

23 A. I don't know.

24 Q. Next question I have is that you  
25 indicated that the OIM and you do have well

1 designing engineering background; is that correct?

2 A. That's correct.

3 Q. So when a plan or procedure show up on  
4 the rig for execution, how -- how do you know or the  
5 well-site leader know that Transocean already have  
6 input -- input it into -- provide input that you are  
7 satisfied that that plan or procedure is going to be  
8 safe to execute to your satisfaction?

9 MR. FANNING: Excuse me. I think  
10 the Captain's question, with all due  
11 respect, assumes that Transocean has input  
12 into the well-designing process. I think  
13 that's what I got. I don't think that's  
14 the case.

15 HON. ANDERSEN: I don't think the  
16 Captain said that, but --

17 MR. FANNING: Oh, okay.

18 HON. ANDERSEN: -- what he's  
19 interested in is, before they execute the  
20 plan, whether or not -- what, if anything,  
21 you do to assure yourself that it's a good  
22 plan.

23 Q. (BY CAPT. NGUYEN) Does that plan or  
24 that procedure have a Transocean signature on there  
25 or somebody that told you that it's good to go from

1 Transocean?

2 A. No, we don't approve the drilling  
3 program. We receive a copy of the drilling program,  
4 and we review it, and we review it for -- mainly to  
5 see if things that's in the plan comply with our  
6 rig -- you know, we have the physical capabilities  
7 of doing what they're requesting -- and also to  
8 check that if it complies with our well-control  
9 system.

10 A lot of this we rely on, like BP,  
11 to ensure they've done due diligence and it's a safe  
12 well operation. We have to. We rely on their  
13 expertise and their professionalism to say it's a  
14 safe operation to conduct.

15 Q. So, at BP headquarters and facilities  
16 where the well design is developed, there's no  
17 Transocean -- technical representative there to  
18 provide any input to the design?

19 A. That's correct.

20 Q. So if -- so in the absence of a written  
21 procedure or plan coming from BP, I don't know,  
22 headquarters or wherever they do the plan design,  
23 just verbal order from either from the well-site  
24 leader or a well site or well engineer saying,  
25 "Mr. OIM, I want you to do this," you would just

1 take that order without any question?

2 A. No. That's not what I said. We have a  
3 written drilling procedure that comes from BP, and  
4 we execute that as the plan. And it's fairly  
5 detailed, line by line.

6 We're also aware that the MMS have  
7 approved that drilling procedure as well as has had,  
8 like, the second checks and balances, if you like.  
9 We then review it as well and see if there's  
10 anything that at our level of expertise stands out  
11 as this doesn't sound quite right, can you explain  
12 it a little more.

13 So yes, we do heavily rely on our  
14 customers to provide us a safe well plan. But, you  
15 know, we don't just jump in blindly, we go with the  
16 best of our knowledge and ability to conduct that  
17 safely.

18 Q. Now, earlier in your testimony, I asked  
19 you about, you know, the existence of a bridging  
20 document for a different operation by BP -- by  
21 Transocean or BP, third-party contractors. I mean,  
22 it cause me concern that you were saying that you  
23 asked for morning report from BP and you didn't  
24 receive those reports. Is that --

25 A. That's correct.

1           Q.       So if there's a bridging document saying  
2 that, "Hey, you know, you will provide your morning  
3 reports to the OIM," that will be something that  
4 will be in that bridging document, if they exist,  
5 right?

6           A.       I don't recall there being a specific  
7 line item for reports on the morning report, for  
8 example, either in the contract or in the bridging  
9 document between the two management systems that BP  
10 provides.

11                         However, we requested it because  
12 more on a -- on a -- plan our logistics, we like to  
13 make sure our reports are the same, and if there's  
14 any discrepancies between two reports, we need to  
15 flag that and then have a conversation about it.

16           Q.       And I think you clarified, I think, for  
17 Mr. Gordon, that the vessel was not in a completion  
18 operation, it was in a temporary  
19 plug-and-abandonment phase; is that correct?

20           A.       That's correct.

21           Q.       And you said that you had not received  
22 at that time -- right before the casualty, you had  
23 not received a plug-and-abandonment plan from BP?

24           A.       I had not received the  
25 plug-and-abandonment plan.

1 Q. So how about people on board the vessel,  
2 the OIM, did he receive that document?

3 A. I'm not sure if he received the whole  
4 package, but he had received the next step's element  
5 that we were conducting. I don't know in what  
6 format it got through to the rig.

7 Q. Shouldn't -- shouldn't the communication  
8 go to you and then go out to the OIM, or is it the  
9 standard procedure to go directly out to the OIM for  
10 execution?

11 A. No, it went to the wells team, the well  
12 site leader, to the company man on the rig, and then  
13 the company man gave it to the OIM, who's his peer.

14 Q. So you are nowhere in the safety net for  
15 the wire?

16 A. Yes, I should have been copied in on  
17 that, but I never received the document.

18 Q. But there's no requirement for  
19 Transocean for that to be the case. That should be  
20 routed through you for review before going out on  
21 the wire?

22 A. That's correct. That's the normal  
23 procedure. It comes in through me, through to the  
24 OIM. However, on this occasion, we never received  
25 it; but Jimmy, the OIM at the time, had received the

1 section for which we were doing, and his team -- and  
2 the rest of the team had reviewed it and it was  
3 okay.

4 Q. Did he look at it and he already called  
5 you up and say, "I got this and it look okay"?

6 A. Yes, he had, because we were having  
7 numerous conversations about the long string/short  
8 string, which affects what the temporary abandonment  
9 plan looks like.

10 Q. Did you ask him to fax you that copy for  
11 you to look at personally?

12 A. No, I did not.

13 HON. ANDERSEN: Are there any other  
14 questions from any other Board members?

15 CAPT. NGUYEN: Mr. Johnson, are  
16 there any questions that we have not asked  
17 you or any information you can provide to  
18 us at this time?

19 THE WITNESS: No, sir.

20 CAPT. NGUYEN: And if we need you to  
21 appear before the Board again, will you  
22 make yourself available?

23 THE WITNESS: Yes, sir.

24 CAPT. NGUYEN: Thank you, sir, for  
25 your cooperation. You are dismissed.

1 HON. ANDERSEN: Thank you.

2 CAPT. NGUYEN: We can go ahead and  
3 take a ten-minutes break until 6 o'clock  
4 for our next witness. Thank you.

5 MR. FANNING: Captain, excuse me,  
6 before we break -- and I'll address my  
7 comments to Capt. Nguyen and Mr. Dykes,  
8 the co-chair.

9 I'm looking at the schedule, and I  
10 suspect that tomorrow we'll have a rather  
11 short day. I think we're going to have a  
12 few Halliburton witnesses, and my gut  
13 tells me that that might be it, so I would  
14 respectfully request that instead of  
15 working until 11 o'clock and taking a  
16 dinner break, we try to spread it out and  
17 do the three Halliburton witnesses and  
18 Mr. Winslow tomorrow.

19 MR. GORDON: I hate to say I agree.

20 MR. DYKES: Let us discuss that.

21 (Break.)

22 CAPT. NGUYEN: Judge, please call  
23 the next witness.

24 HON. ANDERSEN: Okay. Would the  
25 witness please stand and state your name

1                   and raise your right hand.

2                   MR. WINSLOW:   Daun Winslow.

3                   DAUN WINSLOW,

4   having been first duly sworn, testified as follows:

5                   E X A M I N A T I O N

6   BY CAPT. NGUYEN:

7           Q.       Mr. Winslow, thank you for being here.

8                   Sir, what position do you hold?

9           A.       Operations manager-performance for the  
10   North American division.

11          Q.       How long have you held that position?

12          A.       Since about June, 2006.

13          Q.       Did you hold any other position with  
14   Transocean before this position?

15          A.       Yes.  I hired on with Transocean in  
16   April, 1980.  I've had various positions, assistant  
17   driller, tool pusher.  I worked as a rig manager and  
18   a QHSE manager for the division as well.

19          Q.       So did you serve as an OIM on board a  
20   vessel or just as rig manager?  On a MODU like the  
21   DEEPWATER HORIZON.

22          A.       Yeah, I was designated an OIM in 1991 up  
23   to 2001 where I became a rig manager.

24          Q.       So which vessel were you -- for  
25   deepwater drilling were you on -- served as OIM?

1           A.           DISCOVERER ENTERPRISE through the  
2 design, construction and drilling. And as well as  
3 on the HENRY GOODRICH which was located mostly in  
4 the North Sea.

5           Q.           Yes, sir. As operation  
6 manager-performance, what is the scope of your  
7 duties?

8           A.           I oversee the safe and efficient  
9 operations of five of the drilling units that work  
10 in the Gulf of Mexico, work within the core values  
11 and processes of the company, work with the  
12 operations asset manager to ensure we have proper  
13 maintenance and equipment on the rig.

14          Q.           Yes, sir. Could you briefly outline  
15 your maritime background?

16          A.           Maritime? I was designated as an  
17 offshore installation manager in the UK. I held a  
18 Panamanian OIM's license up until October last year.

19          Q.           Do you hold any -- so the OIM -- so that  
20 OIM license has expired? Is that what you're  
21 saying, sir?

22          A.           Yes, sir.

23          Q.           So you're not holding any other maritime  
24 license?

25          A.           No, sir.

1 Q. Marine license.

2 Could you briefly outline your  
3 educational background?

4 A. Grade 12, and I did a semester of  
5 mechanical/ electrical at a technical college and  
6 two years auto body apprentice.

7 Q. Have you had any well-control training?  
8 If so, when was this training?

9 A. I did a well-control school two months  
10 ago. And prior to that was about six years prior to  
11 that.

12 Q. Is there a minimum requirement for  
13 well-control training for people who -- person who  
14 serve in your position?

15 A. Every four years.

16 Q. Every four years. And the last one was  
17 two months ago, and the one before that was six  
18 years?

19 A. Yes, sir. It was about 18 months to a  
20 year I was a QHSE manager, and I was not required to  
21 hold that.

22 Q. Yes, sir, I understand.

23 Was your trip due to -- I understand  
24 you went out and visited the DEEPWATER HORIZON on  
25 the 20th of April, 2010; is that correct, sir?

1           A.       I did.

2           Q.       Was that a routine visit activity for  
3 you as operations manager-performance?

4           A.       There's a schedule that they put out for  
5 management visibility tours, and it was typically  
6 the third week of every month. There was a  
7 helicopter scheduled for managers and other  
8 individuals within Houston or BP or Transocean  
9 offices to visit the rig.

10          Q.       Prior to visiting the HORIZON, when was  
11 the last management visibility you made and to which  
12 vessel?

13          A.       I did a management visibility run -- we  
14 did one in December to the HORIZON, and I think  
15 there was one in April where we went out to the DD3.

16                   That's all I can recall right now.

17          Q.       Yes, sir. So did anyone order you to  
18 visit the DEEPWATER HORIZON on the 20th of April?

19          A.       Excuse me?

20          Q.       Did any -- was it your own initiative to  
21 go on this trip, or was it somebody that ordered you  
22 to go?

23          A.       No, I wasn't really ordered. It doesn't  
24 necessarily have to be me. Pat O'Bryan was going  
25 out, and our management -- Keelan Adamson was going

1 to go, but he had some other issues he had to deal  
2 with.

3 Bill Sannan is my -- who I directly  
4 report to, the general manager, he was going to go,  
5 but he decided to go to the DD3, so I opted to go to  
6 the HORIZON on that tour.

7 Q. Yes, sir. I understand you say the  
8 third week of every month. How far in advance would  
9 this trip schedule? I understand from you there was  
10 a situation with the previous -- the person that was  
11 actually supposed to go?

12 A. They send out a calendar --

13 Q. Yes, sir.

14 A. -- that has the proposed dates. It's  
15 typically Wednesday and Thursday where you do an  
16 overnight visit. And then we probably in earnest  
17 started planning who was going to go probably the  
18 week before.

19 Q. So for this particular trip, was  
20 it -- how -- before -- how long before that did you  
21 decide to go on this trip?

22 A. Probably four or five days.

23 Q. Please provide us with your -- since you  
24 were on board the vessel, please provide us with  
25 your best recollection of the events.

1           A.       Of the events?

2           Q.       From the time you arrived on the  
3 DEEPWATER HORIZON until the time you disembarked  
4 ashore.

5           A.       Okay. The team of us left Houston early  
6 in the morning, and we all met up in Houma,  
7 Louisiana. We had lunch. We had a 12:30 check-in,  
8 1:30 flight out to the rig. We got out there about  
9 2:30, quarter to 3:00.

10                   I had been out to the rig  
11 previously, and one of the medics that did the  
12 safety orientation, I had given him some improvement  
13 opportunities, so I sat in with the safety  
14 orientation of Mr. Pat O'Bryan because he hadn't  
15 been to the vessel before. Just wanted to see if  
16 they had taken up any of my actions.

17                   We finished the orientation sometime  
18 around 3:30, thereabouts, 4 o'clock, and we  
19 commenced the tour of the vessel.

20                   We originally -- we initially went  
21 up to the riser hand with the skate up near the rig  
22 floor. There was an incident we had on one of our  
23 other installations, and David Sims wanted to make  
24 sure that the HORIZON had picked up on any lessons  
25 learned or have a look at the riser skate and see if

1 there was anything similar with the other incident,  
2 which the HORIZON's sump where this incident --  
3 individual stepped down about 24 inches, he slipped  
4 and dislocated his shoulder. So he just wanted to  
5 see if there was any lesson learned there, and it's  
6 a different breed machine, so it is different.

7 From there, we went up to  
8 the -- into the driller shack, the driller's control  
9 station room, whatever you want to call it. There  
10 was quite a few people in there.

11 Initially went in there. I tapped  
12 Dewey Revette on the shoulder. He was the driller  
13 master.

14 I said, "Hey, how's it going, Dewey?  
15 You got everything under control here?"

16 And he said, "Yes, sir."

17 And there seemed to be a discussion  
18 going on about some pressures or a negative test.  
19 And I said to Jimmy and Randy Ezell, "Looks like  
20 they're having a discussion here. Maybe you could  
21 give them some assistance." And they happily agreed  
22 to do that.

23 We left the driller shack and  
24 wandered around on the decks a little bit, down in  
25 the moon pool area, went down into the columns.

1                   Pat and Dave wanted to see what it  
2 looked like down there, and, you know, they were  
3 aware that we had a little flood incident previously  
4 and just wanted to understand what the machine  
5 looked like.

6                   We did that and got back up into the  
7 galley probably about 6:30 in the evening. I'd  
8 arranged a meeting that we could sit and discuss  
9 things with the individuals who were there. That  
10 started about 7 o'clock. Kind of the -- the goal  
11 post there when we started that meeting, I said it  
12 should take about 45 minutes, and it took about two  
13 hours.

14                   Pretty light-hearted meeting, you  
15 know. We went through the goals for 2010.  
16 Mr. Jimmy went through most of them. We talked  
17 about what we had done for proactive approach and  
18 dropped objects, and there was -- near the end of  
19 the meeting, we talked a little bit about short-term  
20 and long-term maintenance goals that we had with the  
21 rig to see how they kind of fit into the drilling  
22 program in the future.

23                   There was some candid banter going  
24 on. Randy Ezell was given a -- or to receive an  
25 award from the company, an excellence award, because

1 he was nominated by the company, so we kind of  
2 bugged him about that a little bit.

3                   When we left the meeting -- or prior  
4 to the meeting, if I can go back a little bit. I  
5 haven't got my statement with me to -- I'd asked  
6 Jimmy, I said, "Everything all right up on the rig  
7 floor there? Get everything sorted out?"

8                   He give me a thumbs up and said  
9 everything was okay.

10                   CAPT. NGUYEN: Sir, I'm sorry to  
11 interrupt, but is that the -- your  
12 statement in front of you, sir?

13                   MR. ADLER: No, I never brought it.

14                   THE WITNESS: That's all right.

15           Q.       (BY CAPT. NGUYEN) Do you have a  
16 statement that you'd like me to provide you --

17           A.       I think that's okay for now unless you  
18 need me to clarify anything else on that. Like I  
19 say, before the meeting, I had asked Jimmy,  
20 "Everything all right up there?"

21                   He gave me a thumbs up, "Yeah."

22                   We did the meeting, and then there  
23 was kind of a 30-second debate on what we should do  
24 next. And I said, "Well, you know, it's dark out.  
25 Let's go up to the bridge and understand how that

1 works."

2           A lot of the times when people come  
3 up to the installations, they just go tour around  
4 the rig floor and the drilling machine because  
5 that's what it is, and I don't think we give the  
6 credit that we need for the individuals who work the  
7 marine systems and whatnot.

8           So we went up to the bridge, and, of  
9 course, senior DPO and the individuals that were  
10 there on watch, they described how the machine  
11 worked and what they had in front of them and all  
12 the good things there.

13           And we loaded a -- into the  
14 simulator, you know, about 70-knot winds and 30-foot  
15 seas and two thrusters down and then you switch it  
16 into the manual mode and see if the individuals can  
17 maintain the rig on location. And that's to give  
18 them an understanding of how the systems work and  
19 how -- how it all goes together.

20           So I believe Pat O'Bryan, that's who  
21 we loaded up with the most environment; and then  
22 David Sims, we toned down the environment a little  
23 bit.

24           And as they are trying to maintain  
25 location, the senior DPO was trying to give

1 instructions on, you know, how much thrust you have,  
2 how much propulsion you're working with, which way  
3 the rig's actually going.

4                   It was around, I don't know, 9:30,  
5 9:45, something like that, I went down to the --  
6 inside the accommodation. I went to the washroom  
7 and was going to get a half a cup of coffee and  
8 smoke a cigarette.

9                   So I was in the little coffee shop  
10 smoke area there, smoking a cigarette, and I heard a  
11 huge bang. Probably the loudest bang I've heard  
12 offshore in many years. I thought maybe something  
13 like a crane falling off the deck or something like  
14 that.

15                   So I went out of the coffee shop  
16 area into the hallway, and I was going to go up to  
17 the bridge and ascertain what this noise was. And  
18 as I got out of the coffee shop, going to the  
19 accommodation, there's a kind of an intersection  
20 where you can see down to the other end of the  
21 accommodation where the maintenance supervisor's  
22 office, the OIM's office and whatnot.

23                   And then it appears that the -- the  
24 walls were kind of -- you know, it was like an  
25 explosive force coming along, the walls were sucking

1 in and the roof panels looked like they were coming  
2 down.

3 I immediately jumped to the left  
4 there against the bulkhead there and hung onto the  
5 handrail going around inside the accommodation and  
6 kind of got close to the floor.

7 There was kind of a warm breeze, a  
8 whoosh of kind of high-pressure air went by.

9 Then I got up, and once everything  
10 slowed down -- I was kind of shocked and wondered  
11 what was really going on there. And I continued to  
12 the left and turned right, and halfway down the  
13 hallway, it takes you to the helicopter waiting area  
14 where we had arrived on the rig, which is the  
15 forward life boat area, and stood in between the two  
16 life boats and looked up, and that's when I seen the  
17 derrick ablaze, and that's when I kind of figured  
18 out what was going on.

19 There was a few people coming out of  
20 the accommodation. You know, the decks were a  
21 little muddy, slippery. So I helped a few people  
22 over to the boats, and there was some individuals  
23 come out there who I assumed were the ones who were  
24 going to be taking roll call, and I said, "We need  
25 to make sure we get a good head count."

1                   And the answer was, "Yes, yes."

2                   Wanted to see a lot of individuals  
3 coming out of the accommodation.

4                   During that time, I seen Capt. Curt  
5 standing outside, it would have been I guess the  
6 starboard door there, the bridge, the control room,  
7 and he appeared to be waving as if he was saying,  
8 you know, "Go back into the accommodation."

9                   I assumed that he thought that would  
10 be a safe area. From his vantage point, he most  
11 likely seen fire in the derrick and whatnot.

12                   So I ran up the stairs -- there's  
13 two sets of stairs up to where the captain was --  
14 and told him that the accommodation appears to be  
15 severely damaged, from what I see in this short  
16 trip, that we've got to put people in the life  
17 boats. He said, "Okay."

18                   And I heard somebody yelling in the  
19 background that they're jumping overboard. So I ran  
20 back down the stairs.

21                   And in between the two life boats,  
22 on the outside of the handrail, there was an  
23 individual hanging on the outside of the handrail,  
24 and I said, "Hey, where you going? There's a  
25 perfectly good boat here. Do you trust me?"

1                   And he said he didn't know me.

2                   There was another individual that  
3 came walking up beside me. At that time, I didn't  
4 know who it was, but it was -- I found out later it  
5 was Mark Hay, the senior subsea supervisor.

6                   I said, "You trust him?"

7                   He said he didn't really know for  
8 sure at that time, but we coaxed him off the  
9 handrail, and I told him to go ahead and get him in  
10 the boat with everybody else.

11                   I don't know the exact time frame,  
12 but -- I wondered why there was still fire in the  
13 derrick in a blowout situation. I ran up to the  
14 bridge.

15                   As I went inside the door of the  
16 bridge, Curt, the captain, was standing to the left,  
17 and he gave me a real fast rundown, you know, "We've  
18 got no power, we've got no water, no emergency  
19 generator, we've got nothing." You know, it was,  
20 "Can we or should we or we have disconnected."

21                   I said, "Well, if you haven't  
22 disconnected by now, please do."

23                   Then I heard pretty well  
24 simultaneously Chris Pleasant, who I had worked with  
25 before, I recognized his voice as a subsea engineer,

1 saying, "I've already done that. There's nothing  
2 here."

3 And that -- pretty well the same  
4 time, I heard Jimmy, the OIM, who was off to my  
5 right, he said, "Yeah, we must disconnect."

6 And I said, "Well, it looks like  
7 there's nothing else that we can do here now."

8 And I went over and talked to Jimmy  
9 and asked him how he was doing. He said he was in  
10 his room, and he bent over, and next thing he know,  
11 when he stood up, the walls were gone, he couldn't  
12 hear and he couldn't see, he was having difficulty  
13 seeing and hearing.

14 I said, "That's all right. Just get  
15 in the boat with everyone else."

16 We left the bridge at that time and  
17 went down to the boat deck, and there was some other  
18 people coming out of the accommodation and whatnot.

19 We -- I -- there was individuals  
20 there with a megaphone. At that time, the noise was  
21 getting louder and, you know, the fire was a little  
22 bit brighter, whatnot, so I -- I don't know -- I  
23 couldn't hear them on the megaphone, but I  
24 could -- when they took the megaphone away, I could  
25 hear exactly what they were saying. I -- I heard

1 somebody say that we have a man down. We're going  
2 to send out a search party.

3 I said, "Well, don't go too far."

4 A period of time after that, there  
5 was an individual they had brought out of the  
6 accommodation on a stretcher. As we were putting  
7 him in the boat -- I helped put him in the boat -- I  
8 recognized it was Mr. Buddy Trahan. He was the  
9 individual that flew out there on the trip with us.  
10 We got him on the boat.

11 I don't know how long after that,  
12 you know, looking up at the derrick, you can see the  
13 derrick, and everything was ablaze there, and there  
14 was some individuals yelling, "We've got to go.  
15 We've got to go. We've got to go."

16 And I said, "We've got plenty of  
17 time."

18 And right about that time is when  
19 the traveling equipment, the drilling blocks and  
20 whatnot on the derrick fell. They were probably 40  
21 to 50 foot in the air, you know, weigh 150,000  
22 pounds, and they didn't make any noise.

23 So at that time, I instructed the  
24 boat to my right, which would have been the port  
25 survival boat, to depart. They did.

1           I know there were some other people  
2 that came and got in the boat. I don't know the  
3 exact time frame between that and Curt had come  
4 around the corner of the davits, and he said, "We  
5 have other people. Were going to the rafts."

6           And I said, "Don't get in the boat."  
7 And he turned and left.

8           I was standing with one foot on the  
9 survival craft and one foot on the deck, and I  
10 procrastinated for a minute or so, help Curt, was  
11 that a real thing, or go? And the decision we made  
12 at that time was to launch the boat and leave.

13           During the launch, the individual,  
14 the coxswain, he was a bit excited. He kept saying,  
15 "Calm down. Calm down. Calm down," to the  
16 individuals on the boat.

17           And I said, "Well, maybe you should  
18 calm down. Do you know how to launch the boat?"

19           He said, "Yes, sir."

20           So we went through the launch  
21 procedure, you know, holding the cable, releasing  
22 the boat, the hooks.

23           As we steamed away from the vessel,  
24 I told the coxswain that I was going to open the  
25 door, which I was right beside. I wanted to point

1 him to the -- I seen the big work boat over to my  
2 left when we launched the boat, and during the time  
3 that we were coaxing the other individual off the  
4 handrail, you know, I noticed about three other  
5 people in the water swimming. And I noticed that  
6 they had -- there was, like, an FRC.

7                   So my idea at that time was, we want  
8 to get to that big boat. And he said, "Don't open  
9 the door."

10                   You know, I don't know what his  
11 concern was. I told him that everything would be  
12 all right, I'm just going to open it and let him see  
13 because the windows were covered in mud, we couldn't  
14 see out the boat.

15                   So we did do that, and he steered  
16 the boat. I showed him where the bright light was  
17 and where we were going to head to. We started  
18 steaming there, he said he still couldn't see. He  
19 was going to put the water on, maybe rinse the boat  
20 off and put the air onto it, maybe cool the boat a  
21 little bit.

22                   So then when he started steering  
23 that way I told him I was going to get on the  
24 outside of the boat so I could get a -- you know,  
25 that there was a line, I said, "When you run into

1 the boat, get off the throttle."

2 He said, "Okay."

3 And he did say, "No, don't do that."

4 And I said, "Well, you know, somebody's got to tie  
5 it up."

6 So I got outside of the boat, slid  
7 down to the front. We bumped into the BANKSTON.

8 And he didn't get off on the throttle as much he  
9 might have done. We kind of bounced off.

10 And at that time, the guys were kind  
11 of undoing the throwing line, so we did it again,  
12 instructed them, and we did that. I got the rope,  
13 tied it on and opened the door and instructed him to  
14 put some throttle to bring the back end of the  
15 survival craft over against the work boat, which I  
16 was on the outside of the boat when we did that.

17 There was a ladder there, how  
18 fortunate, and the individuals on the BANKSTON  
19 pulled up onto the work boat. I told them we have  
20 some injured individuals on the boat and help them  
21 get off safely and I'd like to go to the bridge,  
22 which I did do.

23 Q. Just let me step back a little bit.

24 Prior to your arrival on DEEPWATER  
25 HORIZON, did you have any discussion with the OIM or

1 the senior tool pusher on any safety or performance  
2 issue?

3 A. Before arriving to the HORIZON?

4 Q. Yes, sir.

5 A. No.

6 Q. After you arrived on board, did you  
7 receive a brief -- a briefing from the OIM or the  
8 senior tool pusher regarding any safety or  
9 performance issue?

10 A. When we first arrived on the vessel in  
11 the helicopter waiting area, the captain and OIM  
12 were there to meet us. Curt said that he'd just  
13 come on the vessel today, earlier than when we got  
14 there. So Jimmy went through a very small briefing,  
15 which they always do, to let you know what's going  
16 on operational or if there's anything -- any crane  
17 lifts going on or any other hazards that might be --  
18 which there was none.

19 Q. But there was no well-control situation  
20 that was discussed prior -- just prior to your  
21 arrival and -- after your arrival with -- with  
22 Mr. Harrell or Capt. Kuchta?

23 A. No.

24 Q. Now, you mentioned a 1900 meeting where  
25 you asked Mr. Ezell and Mr. Harrell to stay behind

1 to assist the driller with whatever situation it was  
2 facing.

3 A. That was when we were actually on the  
4 tour up on the rig floor. And I don't recall all  
5 the individuals that were in there. There might  
6 have been five or six, seven individuals, and it  
7 appeared to me that they were having discussion  
8 about operations, and I didn't feel that it was a  
9 good time for a bunch of tour group to be, you know,  
10 involved with the operation or distract them.

11 And I thought that Jimmy Harrell and  
12 Randy Ezell, who were on the tour with us, you know,  
13 because it was about drilling activities or what  
14 they were doing, the negative test, there was some  
15 pressures didn't seem right, that they would be the  
16 best individuals to stay there.

17 Q. And I believe at the 1900 meeting, did  
18 you ask him what was the situations about and how it  
19 was resolved and whether it was satisfactorily  
20 resolved?

21 A. No, just -- as we were going into the  
22 little meeting room and sitting down, I asked Jimmy  
23 from across the room, "Everything okay on the rig  
24 floor? Did you get everything resolved?"

25 And the answer was, "Yes, everything

1 is okay."

2 Q. I want to ask you a few question  
3 relating to your statement, and I showed you -- I  
4 want you to look at the statement, if you would  
5 like, sir.

6 Now, for today, we have a lot of  
7 discussion about chain of command on board the  
8 DEEPWATER HORIZON, and these are follow-up questions  
9 that have to do with that.

10 Now, you indicated that after the  
11 casualty had occurred, you went to the bridge and  
12 you told Capt. Kuchta that "We need to get in the  
13 boats"; is that correct, sir?

14 A. When I first went up to the bridge,  
15 that's when he appeared to be waving people into the  
16 accommodation. I assumed that he was unaware of the  
17 damage in the accommodation, so I ran up to inform  
18 him there was damage in the accommodation, that we  
19 should probably go to the boats.

20 Q. Okay.

21 A. And he agreed.

22 Q. Is it a Transocean safety management  
23 policy for the senior man -- company man on board to  
24 take over in an emergency?

25 A. No.

1           Q.       So by starting and giving the orders --  
2 and I'm not sure, when you say, "We need to get in  
3 the boat," is that an order or is that just --

4           A.       Relaying information.

5           Q.       Relaying information, yes, sir.

6                         Now, you indicated that Kevin Kuchta  
7 asked you whether he should activate a EDS; is that  
8 what I understand?

9           A.       Yes.

10          Q.       If you're not -- you were not in charge,  
11 why would he ask you for permission to activate EDS?

12          A.       I don't think he was asking me as me  
13 being in charge or anything. I think he was just  
14 gathering information from all angles that he could  
15 to make the proper decisions.

16          Q.       Again, when you were out on the boat  
17 deck and you instructed the coxswain in one life  
18 boat to lower and depart, now, if he was not in  
19 charge of that -- had taken over command, why would  
20 a crew member take order from you to evacuate from  
21 the vessel?

22                         MR. SCHONEKAS: I'm going to object,  
23 Your Honor, calls for speculation in terms  
24 of what this other person understood what  
25 the rationale is.

1                   HON. ANDERSEN: Well, I'm going to  
2                   repeat the ruling I have in the past. We  
3                   have a very senior person who is very  
4                   familiar with the procedures and perhaps  
5                   even helped create them. You don't need  
6                   to guess or speculate, and if within one  
7                   of these questions there's a false  
8                   premise, think carefully before you  
9                   answer.

10                   So, for example, the last answer,  
11                   which was his question to me about the EDS  
12                   was -- I interpreted as gathering  
13                   information, not looking to me for a  
14                   command, shows I think the witness, even  
15                   though everybody here appreciates the  
16                   poignancy and stress of this.

17                   But these -- obviously they're  
18                   important questions, so I'll -- the  
19                   Captain will ask the questions. Listen  
20                   carefully. If -- and reflect. If you  
21                   think you have an opinion or can give an  
22                   answer to it, please do.

23                   MR. KOHNKE: Judge, can I be heard  
24                   on this, please?

25                   I understand what the Court is

1           trying to do, give everybody latitude,  
2           particularly the witness. But this  
3           question is fatally flawed. He's asking,  
4           what did the helmsman think when you gave  
5           him an order?

6                     Now, if there has been no  
7           communication between them, it is rank  
8           speculation. It doesn't serve the  
9           purposes of this hearing. And that's why  
10          I think the objection was made, and I want  
11          to make it now.

12                    He may have an opinion about it, but  
13          can it have any trustworthiness at all?

14                    HON. ANDERSEN: Don't guess or  
15          speculate. If you don't know what he's  
16          thinking, then a fair statement is, "I  
17          don't know."

18                    And he's giving you a narrative that  
19          he said things to -- to other employees on  
20          the rig, and the Captain's wondering why  
21          he did that and what their response was.  
22          And I think that's perfectly  
23          understandable.

24                    So I'll allow the question. Take  
25          your time. You don't need to guess or

1 speculate. If you don't know an answer,  
2 that's fine.

3 MR. ADLER: Judge, I would also ask  
4 that rather than assuming Mr. Winslow gave  
5 an order to someone that the question is  
6 asked if it was an order or just a  
7 suggestion, the circumstances of the  
8 comment that Mr. Winslow made.

9 HON. ANDERSEN: Fine. So we can ask  
10 if he regarded the statement as a command  
11 or a suggestion.

12 Please proceed. You want to repeat  
13 your question?

14 CAPT. NGUYEN: Yes, sir.

15 Q. (BY CAPT. NGUYEN) If you were not in  
16 command, why would the life boat coxswain lower his  
17 boat based on your communication and evacuate away  
18 from the DEEPWATER HORIZON?

19 MR. SCHONEKAS: Same objection.

20 HON. ANDERSEN: Overruled.

21 If you know.

22 A. I only know that when we left the bridge  
23 that we were going to abandon the vessel.

24 Q. (BY CAPT. NGUYEN) If you weren't in  
25 your position as BP operation

1 management-performance, would the coxswain take your  
2 word and leave and lower the boat and release?

3 MR. SCHONEKAS: Same objection.

4 HON. ANDERSEN: Only if he knows.

5 We don't know that these circumstances  
6 didn't happen in other situations many  
7 times. It wouldn't necessarily be  
8 evacuating a life boat, but it could be  
9 that there's situations where this witness  
10 is on a rig and he's telling people what  
11 to do. And if they see him as the boss,  
12 that he would know that. We don't know  
13 that. The Board doesn't know that.

14 So I don't think that's a wildly  
15 speculative question, and the answer is  
16 whatever the witness believes is the  
17 truth. But you don't have to guess.  
18 Okay.

19 A. I don't know why he would take orders  
20 from me. I'm not the master of the vessel. But he  
21 did.

22 Q. (BY CAPT. NGUYEN) Okay. Same thing  
23 with Capt. Kuchta, why he asked you about EDSing if  
24 you weren't in charge?

25 MR. SCHONEKAS: Asked and answered,

1 Judge.

2 HON. ANDERSEN: It was, but it's not  
3 overly repetitive.

4 A. I worked with Capt. Kuchta before, as I  
5 was a rig manager for the DEEPWATER PATHFINDER, and  
6 he probably valued my opinion on what was going on.

7 So, again, I think he was gathering  
8 all the information and facts that he could to make  
9 a proper decision.

10 Q. (BY CAPT. NGUYEN) You told Mr. Harrell  
11 that he should get into the boat with everybody  
12 else. You weren't in charge. Why would he leave  
13 the vessel and --

14 A. Why would he -- why would he leave the  
15 vessel?

16 Q. Yes.

17 A. I think the intent was everybody that  
18 was able and fit to leave the vessel were going to  
19 do that. And I had already said that Mr. Harrell, I  
20 think he was having difficulty seeing and hearing.

21 Q. Yes, sir.

22 A. I didn't order him to get into the boat.  
23 I suggested that "There's nothing else that we can  
24 do here. You might as well get in the boat with  
25 everybody else." It was just in a conversation.

1           Q.       It appeared to me that every time you  
2 communicate to do somebody, suggesting an action or  
3 directing an action, they take action. So I just  
4 want to know whether you were in charge of the  
5 situation because you're a senior Transocean company  
6 man aboard the vessel.

7           A.       I am not and I would not be in charge.  
8 I think, in certain circumstances, the individuals  
9 here in significant --

10          Q.       And you indicated in the lifeboat that  
11 you were in, and as it was lowered, you saw three  
12 survivors in the water; is that correct?

13          A.       It was -- it was prior to that, and when  
14 we were -- the individual was hanging over the  
15 handrail is when I seen the three individuals in the  
16 water. And that's when I'd seen the BANKSTON off to  
17 the left of the port side of the vessel and -- with  
18 a flood light on. That's when I seen the three  
19 individuals in the water.

20          Q.       Was there any -- did anybody have  
21 concern that your boat should go over there and try  
22 to assist those three people in the water instead of  
23 go to the BANKSTON?

24          A.       I can't answer that question. You know,  
25 without --

1 Q. Was there any conversation in the  
2 boat --

3 A. There was no conversations about going  
4 to rescue individuals, no.

5 Q. Just, you say, "We should go over to the  
6 BANKSTON," and that's where it went?

7 A. That's correct.

8 Q. While you were on board the BANKSTON,  
9 did you have any conversation with your supervisor  
10 ashore?

11 A. The first phone call I made was to Paul  
12 Johnson, and I told him that we had evacuated the  
13 HORIZON and were attempting to get a valid head  
14 count.

15 Q. Okay. Did you and Mr. Johnson discuss  
16 any well control for the well blowout?

17 A. Only the fact that there was fire and  
18 whatnot in the derrick and it appears the well had  
19 blowed out. And there was damage within the  
20 accommodation and it was hot.

21 Q. Did you have any conversation with your  
22 supervisors ashore?

23 A. No, I did not.

24 Q. While you were on board the BANKSTON,  
25 did you have any conversation with Mr. Jimmy

1 Harrell?

2 A. The -- when we got on the BANKSTON,  
3 the -- there was myself, Mr. Pat O'Bryan and Dave  
4 Sims. We had decided that somebody would  
5 communicate with the onshore team, and that would be  
6 David Sims, and I would work with the individuals  
7 that predominantly worked with Transocean. So I was  
8 relaying information to the crew members.

9 And at that time, Jimmy Harrell was  
10 down on the main deck with some of the other  
11 individuals. So every hour, I went down there and  
12 let him know what was going on.

13 Q. Did you have any conversation with  
14 Capt. Kuchta while you were on board the BANKSTON?

15 A. Very little.

16 Q. Anything relating to the well blowout?

17 A. Nothing about the well blowout, no.

18 Q. How about search and rescue of  
19 survivors?

20 A. The master of the BANKSTON was relaying  
21 all the information with the Coast Guard and search  
22 and rescue team.

23 Q. And the only conversation you had with  
24 Mr. O'Bryan and Mr. Sims was regarding contacting  
25 the officer ashore; is that right?

1           A.       That's correct.

2           Q.       And were there -- did they -- did  
3 Mr. O'Bryan provide you with any information of his  
4 conversation with the ashore office?

5           A.       No. My main concern was for the  
6 individuals when they got shoreside. You know cars,  
7 clothing, food, notifying the family. That was the  
8 message that I had relayed to them and what we're  
9 doing through the little scribble note, and then  
10 Mr. Sims was doing most of the communication.

11          Q.       While you were on board the BANKSTON,  
12 did you have any communication with the  
13 vessel -- with Capt. Landry, the vessel captain?

14          A.       Yes. And that's just about how many  
15 individuals we were missing and -- you know, and  
16 more or less how is he doing with the search and  
17 with information he was receiving there.

18          Q.       Did you give him any operational  
19 tasking?

20          A.       Mr. Landry? No.

21          Q.       Since you were the Transocean senior  
22 manager on the scene, did you coordinate the  
23 firefighting effort?

24          A.       I wouldn't say coordinating the  
25 firefighting effort. There was some work boats

1 showed up that had some water cannons and whatnot,  
2 and Curt was on the radio with somebody and asked me  
3 if it would be okay to put water on the rig. I said  
4 yes.

5 Q. What was the focus with putting water on  
6 the burning rig?

7 A. Cooling. Structural cooling.

8 Q. Structural cooling?

9 A. Structural cooling. Yes, sir.

10 Q. For what purpose?

11 A. Hopefully, to maintain the integrity of  
12 the vessel. We were still connected to the  
13 wellhead, and if you can keep the vessel afloat.

14 Q. Was there any consideration that the  
15 firefighting water would go inside the vessel and  
16 have an adverse impact on the vessel's stability?

17 A. Yes.

18 Q. And those concerns were from you and  
19 Capt. Kuchta?

20 A. They were from myself and, then,  
21 again -- I'm trying to think of after we left the  
22 BANKSTON even, 11 o'clock, Transocean had a salvage  
23 team that again relayed to me that, you know, "You  
24 need to reduce the amount of water that's going on  
25 the vessel." They were concerned about a draft and

1 whatnot, yes.

2 Q. And initially when you --

3 A. We did relay that information to the  
4 boats that were putting water on the vessel.

5 Q. But, initially, when Capt. Kuchta asked  
6 you about putting firefighting water onto the  
7 burning rig, you said, "Okay," but there was no --  
8 at that time, there was no consideration about the  
9 impact the firefighting water on the vessel --

10 A. We didn't go into great detail there.

11 Q. So how long after the -- after the  
12 explosion and the fire, how long after that did the  
13 concern about stability come into play?

14 A. I believe it was daylight. Probably 8  
15 or 9 o'clock in the morning.

16 Q. Anybody -- so you say that somebody  
17 communicated to the work boat to consider the  
18 stability of the vessel and how to put water on the  
19 vessel?

20 A. I believe that's the time when they  
21 first started putting water on it. And it was  
22 probably 12 o'clock, midafternoon, when we raised  
23 the concern about the amount of water that was going  
24 on there. Some of the boats that first showed up,  
25 the water stream didn't even reach the rig.

1 Q. So at 12 o'clock, that's when the  
2 firefighting efforts started?

3 A. Sometime in there before that, yeah. I  
4 left the BANKSTON about 11:15, 12 o'clock.

5 Q. But this is on the 21st you're talking  
6 about?

7 A. On the Wednesday morning, yes.

8 Q. So in terms of initiating the  
9 firefighting effort from you with Capt. Kuchta to  
10 get that going?

11 A. That's correct. That's right.

12 Q. And then I believe it was Smit for  
13 salvage and firefighting services?

14 A. Yes.

15 Q. Who contacted Smit and asked them to  
16 assist?

17 A. Transocean.

18 Q. And who directed the -- so you told the  
19 work boat to put water onto the rig, and then who  
20 take it over for you?

21 A. Nobody.

22 Q. Nobody?

23 A. Not until the Smit boats actually  
24 arrived -- I didn't bring my notes with me.  
25 Probably about midnight or 1 o'clock in the morning

1 on the Wednesday is when they arrived and actually  
2 took over command of the work boats.

3 Q. Were you in contact with Transocean  
4 Incident Command Center during this time frame when  
5 you were on the BANKSTON?

6 A. Not during the time on the BANKSTON.  
7 It's when I transferred over to the MAX CHOUEST on  
8 the ROV boat I was in communication with Transocean,  
9 yes.

10 Q. So was anybody from the Transocean  
11 Incident Command Center discuss with you about a  
12 firefighting effort?

13 A. Yes.

14 Q. What was the discussion?

15 A. The discussion was cooling on the --

16 THE REPORTER: I'm sorry. Hold on,  
17 please. The natives are getting restless.

18 Could I ask you to speak more into  
19 the microphone, please? I can't hear you  
20 very well.

21 And would you please start your  
22 answer over? I'm sorry.

23 THE WITNESS: What was the question?

24 THE REPORTER: "What was the  
25 discussion?"

1           Q.           (BY CAPT. NGUYEN) What was the  
2 discussion between you and the Transocean Incident  
3 Command Center regarding firefighting?

4           A.           It was Bob McKechnie was a naval  
5 architect and rig builder. We had a discussion, and  
6 he said, "We need to reduce the amount of water flow  
7 on the vessel to reduce down flooding." It was to  
8 be putting water on the columns only for cooling to  
9 maintain integrity of the vessel.

10          Q.           Did you give the order to the  
11 on-scene -- to Smit?

12          A.           I didn't give them any orders. When  
13 they arrived, they took over the efforts with the  
14 work boats that were there.

15          Q.           Yes, sir. But Mr. Bob McConey [sic] --

16          A.           McKechnie.

17          Q.           -- McKechnie, he told you of his  
18 concern, correct? What do you do with his concern?  
19 Do you communicate it to someone?

20          A.           I communicated to the master of the  
21 BANKSTON. And during the time -- or not the  
22 BANKSTON, the MAX CHOUEST. He was doing the  
23 communication with the work boats that were out  
24 there, and they were predominately CHOUEST boats, so  
25 he was communicating with them.

1 Q. So why --

2 A. We told the work boats that were out  
3 there to reduce the amount of water that was going  
4 on the deck, and they were to give us draft markings  
5 every hour so we can ascertain whether or not the  
6 rig was downplaying.

7 Q. Why is it if -- by that time, was Smit,  
8 were they out there already?

9 A. No.

10 Q. So when Smit arrived on scene, did  
11 you -- did they take over from CHOUEST's boat in  
12 terms of coordinating the firefighting effort?

13 A. That's correct.

14 Q. And that would be what date, sir? Do  
15 you know?

16 A. Late Wednesday night, early Thursday  
17 morning.

18 Q. Were BP involved in the firefighting  
19 effort, if you know?

20 A. Not that I'm aware of, other than David  
21 Sims and I, when we were going to go launch the ROV,  
22 the idea would be to have two work boats with water  
23 cannons providing their curtain. So it was part of  
24 the mini risk assessment we did before we brought  
25 another vessel in close to the HORIZON.

1 Q. So what's the purpose of cooling for the  
2 launching of an ROV, is that what you're saying?

3 That's the conversation you had with Mr. Sims?

4 A. That's the only conversation I had with  
5 any BP representative about water.

6 Q. And that was to have an ROV to do what?  
7 Is it to assess the damage underneath the vessel or  
8 to --

9 A. ROV intervention to close the BOP. And  
10 we had to get in close proximity to the HORIZON to  
11 get above the wellhead to launch the ROV.

12 Q. Yes, sir.

13 Let me go back to some background  
14 information. How many layer -- layers of --  
15 management layers between you and the OIM on the  
16 DEEPWATER HORIZON?

17 A. One. That's Paul Johnson, the rig  
18 manager.

19 Q. Do you think you have the appropriate  
20 background to make technical decision relating to  
21 vessel safety and wellhead safety?

22 A. I believe so, through experience, yes.

23 Q. How about Paul Johnson? How about Mr.  
24 Paul Johnson? Does he have appropriate background  
25 to make technical decision to support the OIM on the

1 scene?

2 A. I believe he does.

3 Q. What was your expectation of your OIMs  
4 in regard to operating the DEEPWATER HORIZON?

5 A. They were to work within the core  
6 processes of our company management system.

7 Q. So prior to the casualty, did you have  
8 full confidence in Mr. Jimmy Harrell ability to  
9 execute his duty as OIM of the DEEPWATER HORIZON?

10 A. I did.

11 Q. Based on what you know, do you still  
12 have full confidence in Mr. Jimmy Harrell to serve  
13 as an OIM on a Transocean deepwater drilling vessel?

14 A. I would.

15 Q. How about Capt. Kuchta? Before the  
16 casualty, did you have full confidence in  
17 his -- confidence in his ability to execute his  
18 responsibility as the master of the DEEPWATER  
19 HORIZON?

20 A. I do.

21 Q. Based on what you know, do you have full  
22 confidence in his ability to serve as a master for a  
23 Transocean vessel engaged in deepwater drilling?

24 A. I would. I think it would be very  
25 difficult for him in the Gulf of Mexico with the

1 publicity that went on. For his best interests, he  
2 might be well suited on maybe one of the other  
3 divisions.

4 Q. Now, you said you were an OIM on the  
5 DISCOVERER ENTERPRISE; is that correct, sir?

6 A. That's correct.

7 Q. Is that the only deepwater -- is that  
8 the only vessel engaged in deepwater drilling that  
9 you have been an OIM for?

10 A. I was also an OIM on the HENRY GOODRICH.

11 Q. The HENRY --

12 A. The HENRY GOODRICH. It's a moored semi-  
13 submersible.

14 Q. Is that vessel also a Transocean vessel?

15 A. Yes, it is.

16 Q. So, for both vessel, the DISCOVERER  
17 ENTERPRISE and the HENRY --

18 A. HENRY GOODRICH.

19 Q. GOODRICH. Okay.

20 MR. FANNING: Tires. The Blimp, I  
21 mean.

22 Q. (BY CAPT. NGUYEN) Would they both have  
23 the master in charge for the vessels underway and  
24 OIM in charge for the vessels on the station?

25 A. The HENRY GOODRICH didn't have a master.

1 It was a barge engineer. It was a moored vessel.

2 The -- well, I was an OIM on the

3 ENTERPRISE. There was an OIM and a master.

4 On other drill ships that I've worked on, not

5 necessarily deepwater -- it depends on what you

6 think deepwater is -- they had a master and an OIM.

7 Q. Did you have a clear idea -- were you

8 clear who was in charge and when the transition took

9 place between Mr. Harrell and Capt. Kuchta during

10 the casualty?

11 A. I think the first explosion or bang on

12 the rig, it would be quite clear that the master

13 would be in charge of the vessel during an

14 emergency, fire.

15 Q. So is there a written policy or

16 procedure that a document that Transocean has that

17 identified different situations such as an

18 explosion, that the captain would take over for the

19 OIM?

20 A. In the emergency response manual, it

21 outlines all the different scenarios and the

22 different accountabilities for each of those

23 different scenarios, yes.

24 Q. Would you -- would Transocean provide a

25 copy of that document if I -- I don't know if we

1 have it yet, but if you could provide a copy of that  
2 document, that reference for the Board.

3 MR. KOHNKE: Certainly.

4 CAPT. NGUYEN: Thank you, sir.

5 Q. (BY CAPT. NGUYEN) Do you think the new  
6 chain of command, having a captain, a master in  
7 charge during the emergency phase and the OIM in  
8 charge during the nonemergency phase, do you think  
9 that's effective and efficient?

10 A. I do.

11 Q. Do all third-party -- do all BP  
12 third-party contractors, Halliburton, M-I SWACO or  
13 Coast Guard inspector, inspectors, is it very clear  
14 to them under what situation the captain would take  
15 over for the OIM?

16 A. It should be.

17 Q. How is that -- how is that communicated  
18 to the -- these non-Transocean folks?

19 A. Any individual that goes to any of the  
20 offshore installations are given a safety  
21 orientation, and part of that orientation is having  
22 them understand what their duties are on their  
23 station bill, and their station bill clearly defines  
24 that the master's in charge for all emergencies.

25 Q. But do you find there are

1 situation -- do you take the emergency response  
2 manual and ask them to read them, or is that like a  
3 placard and you hand it out to them and say, "Under  
4 this situation, this is who you're going to look to  
5 for guidance"?

6 A. Part of the tour that you do where they  
7 actually walk you to where your lifeboats are and  
8 whatnot, the RSTC, that's the rig safety training  
9 coordinator, or the medic, whoever gives that  
10 orientation introduction, say that they'll be taking  
11 orders from the captain. The captain's in charge of  
12 the vessel.

13 All the drills, if you want to call  
14 them drills, or education or training that they do  
15 weekly, all the orders are coming from the master of  
16 the vessel.

17 Q. But they know under what condition that  
18 they should be doing that and how?

19 A. I don't know how to answer that  
20 question. But they should be fully aware through  
21 the training and drills that we do.

22 Q. So are you saying that when the general  
23 announcement come up and say, you know, "abandon  
24 ship," people would know that the captain has taken  
25 over?

1           A.           That's correct.

2                           In this incident that happened  
3 here -- there's three levels of well control, and  
4 level 1 well-control incident is a fairly benign,  
5 retained. And the OIM works with the company  
6 representative and the senior tool pusher and  
7 informs the captain to be prepared for any  
8 emergencies. If you have time to go through all  
9 those scenarios.

10           Q.           Could you explain to me your knowledge  
11 of the International Safety Management Code and your  
12 involvement in ensuring compliance with the code?

13           A.           I am. The ISM Code is part of our HS  
14 manual, and a lot of the procedures and policies  
15 that are wrote within that HS manual are wrote to  
16 comply with the ISM Code. That's section 2 of our  
17 HS manual.

18           Q.           Now, according to the ISM Code, who is  
19 responsible for the operation, the safe operation of  
20 the vessel, the safety of the crew, and prevention  
21 of pollution?

22           A.           The OIM is ultimately responsible for  
23 the safety and the welfare of everybody in here as  
24 appointed being the OIM. And within the policies  
25 and procedures as were wrote within the ISM Code, it

1 specifies what information that the master must have  
2 available to him and what he carries out as far as  
3 emergency and marine responses.

4 Q. Is it correct to say that the master is  
5 responsible for the safety of the vessel, the crew  
6 and the prevention of pollution?

7 A. He is responsible.

8 Q. But you just said the OIM was.

9 A. They both are.

10 Q. The code say both the OIM and the master  
11 or just --

12 A. I'm not saying that. But in the ISM  
13 Code, I believe it states that all individuals that  
14 work on there must have their duties and  
15 responsibilities spelled out for them. And part of  
16 it says the master, yes, he is accountable for any  
17 of the pollution and control of the marine  
18 activities on the rig.

19 Q. The code, to your knowledge, does it say  
20 specifically that the master is responsible for the  
21 safe operation -- the safety of the vessel and crew  
22 and prevent pollution? Does it specifically say  
23 that?

24 MR. SCHONEKAS: Judge, I'm going to  
25 object. The code speaks for itself. And

1           if the Captain believes that his testimony  
2           is inconsistent with the code, he can  
3           confront him with the code. But to simply  
4           go back and argue with him about whether  
5           it says it or not isn't probative.

6           CAPT. NGUYEN: Mr. Winslow said he  
7           had knowledge of the ISM Code. I'm just  
8           asking him -- I'm just testing his  
9           knowledge of the ISM Code.

10          MR. KOHNKE: Your Honor, if we were  
11          doing it, you would say, "Sustained. This  
12          is argumentative."

13          It is argumentative. And the fact  
14          that it's coming from the Board doesn't  
15          make it less so.

16          HON. ANDERSEN: Well, first of all,  
17          the Board's the one who has the statutory  
18          responsibility and the order to do the  
19          fact finding. And the Board members know  
20          what information they need in order to  
21          arrive at reasonable conclusions.

22          Now, you know, not every question  
23          can be planned in advance. That's  
24          different than the -- than the  
25          responsibility of a party in interest

1           whose participation is allowed under the  
2           federal law in a marine investigation.

3                       So my own view is that given the  
4           responsibilities of the Board members,  
5           they ought to be given a greater latitude.  
6           And I might say that sometimes where you  
7           fear, as counsel did previously, that  
8           suggestions are commands when, in fact,  
9           perhaps, as your witness testified, they  
10          were suggestions, not commands. But for  
11          the Captain being able to ask that  
12          question, to clarify the witness'  
13          characterization, the Board might conclude  
14          from those statements without the  
15          questions that they were commands.

16                      So I think it's very important to  
17          the parties in interest as well as the  
18          public to know what's going on in the  
19          minds of the Board members as they reach  
20          these conclusions. So they should be  
21          given that broad latitude. Ultimately,  
22          how persuasive answers will be and whether  
23          or not they agree will be seen.

24                      But the witness in this case did  
25          testify about a responsibility of the OIM,

1 and under the code, the responsibility of  
2 the master, and I think the Captain is  
3 trying to figure out what the witness'  
4 understanding was about those  
5 responsibilities, whether they were under  
6 the code or under some practice.

7 So, now that he's had a chance to  
8 think for five minutes while I've carried  
9 on -- I apologize to everybody because  
10 it's getting late.

11 Captain, please proceed. And  
12 obviously, to you, the purpose of the  
13 question is fairly clear, but on the  
14 chance it's confusing to the witness, if  
15 you don't understand or if Mr. Adler  
16 doesn't understand the question, let us  
17 know.

18 Thank you for your patience  
19 everybody.

20 Q. (BY CAPT. NGUYEN) Who is your  
21 ISM-designated person for Transocean?

22 A. Jimmy Moore.

23 Q. Has Mr. Moore ever come to you and  
24 informed you that there's a breakdown in safety  
25 management of a vessel that you managed? And how

1 did the situation get resolved?

2 A. He has not.

3 Q. He has not?

4 A. Has not.

5 Q. Were you involved in the  
6 company's -- your company ISM audit by the American  
7 Bureau of Shipping in 2006?

8 A. No, I was not.

9 Q. To your knowledge, did any Transocean  
10 senior manager participate in this audit?

11 A. I don't know.

12 Q. Now, I'm going to cite a number of  
13 incidents, and I'd like to know whether Transocean,  
14 what lesson learned -- Transocean have regarding the  
15 incident and if anything done to improve their  
16 Safety Management System so that it will not happen  
17 again.

18 So the first one is August 31st,  
19 2005, the Transocean DEEPWATER NAUTILUS sustained  
20 damage to its mooring system and lost approximately  
21 3,200 feet of marine riser and a portion of the  
22 subsea well-control system during Hurricane Ida --

23 CAPT. NGUYEN: Is that right?

24 Q. (BY CAPT. NGUYEN) Were you aware of  
25 that --

1 HON. ANDERSEN: That one was  
2 Katrina.

3 CAPT. NGUYEN: That was Katrina.

4 A. Yes, I'm aware of that incident.

5 Q. (BY CAPT. NGUYEN) Okay. Did Transocean  
6 conduct an investigation into that incident?

7 A. I believe they have, yes.

8 Q. What did Transocean learn from that  
9 incident?

10 A. I believe we adopted more robust key  
11 times, meaning time before the storm gets there and  
12 what do you do for evacuation.

13 I think we joined the joint  
14 committee on mooring to make sure we understood the  
15 standards that we needed to work with or upgrade any  
16 of the vessels we had.

17 Q. So those were incorporated into your  
18 Safety Management System or HSE?

19 A. Not in the HSE management system. It  
20 would have been in the marine operations manual or  
21 operations manual.

22 Q. On May 26, 2008, due to inadequate work-  
23 permitting system, Transocean DEEPWATER HORIZON  
24 suffered a major casualty that cost \$920,000 in  
25 damage.

1                                   Did Transocean conduct an  
2 investigation into that casualty?

3           A.       Yes, it did.

4           Q.       What did Transocean learn from that  
5 incident?

6           A.       We learned that the work-permit system  
7 on the rig was bypassed by an individual, although  
8 we reviewed all the work-permit procedures and  
9 isolation processes with all the crew on board.

10          Q.       Were you aware of the September 2009, BP  
11 maritime assurance audit?

12          A.       Yes.

13          Q.       Were you aware of the -- were you aware  
14 of the results of that audit?

15          A.       I've reviewed the results with Paul  
16 Johnson, and I believe on the trip that we made in  
17 December, John Guide was there present, and we  
18 actually went through all the different audit  
19 findings for that particular audit while we were on  
20 the vessel.

21          Q.       Do you remember one of the discrepancies  
22 was that the work-permitting system on board the  
23 HORIZON was still inadequate? Do you remember that?

24          A.       I don't recall that.

25          Q.       If it was, and the accident happened in

1 2008, and you investigated and you make a change to  
2 your Safety Management System, why was it still  
3 inadequate in September, 2009? Can you explain  
4 that?

5 A. I believe the inadequacy would have to  
6 be spelled out a little bit more, but the  
7 work-permit process was moved up onto the bridge  
8 where it was on clear display for emergencies. I  
9 believe that was an inadequacy that we had. They  
10 were actually displayed down on the lower level of  
11 the deck before you go up into the bridge.

12 Q. So it's up on the bridge, does that mean  
13 that somebody working down below, before they engage  
14 in an activity, do they call up to the bridge and  
15 just get --

16 A. No. No. It's a matter of posting where  
17 all the work permits that are out on the bridge so  
18 in the event of an emergency you have all the work  
19 permits and everything right there where it's a  
20 24-hour manned place.

21 The individuals on the bridge, no,  
22 we didn't call for a work permit.

23 Q. Who approved the work permit on board a  
24 vessel?

25 A. The OIM.

1 Q. The OIM?

2 A. Or his designee.

3 Q. And then it would get posted up on  
4 bridge?

5 A. That's correct.

6 Q. Now, on April 26, 2010, due to loss of  
7 DGPS signal, the Transocean DISCOVERER CLEAR LEADER  
8 had to drydock and cost an estimated \$760,000 damage  
9 to the lower marine riser package and the marine  
10 riser system.

11 The Transocean conducted an  
12 investigation of that incident?

13 A. Yes, it did.

14 Q. What lessons learned did you receive  
15 from that incident?

16 A. I don't have the lessons learned from  
17 that incident as of yet.

18 Q. So that investigation is still ongoing?

19 A. It's either ongoing or it hasn't been  
20 circulated amongst the operations managers.

21 Q. Isn't that a fairly serious situation  
22 that you have a dynamic positioning vessel just  
23 drove off, and this is -- we're talking about four  
24 months later here, and there's no lessons learned  
25 coming out of it that distribute to the field?

1           A.       The lessons learned may have been  
2 distributed, but I have not seen them.

3           Q.       As operation manager, shouldn't you  
4 concern about that and shouldn't you want to know  
5 what they are?

6           A.       Absolutely.

7           Q.       And this is four months later?

8           A.       Yes, sir.

9           Q.       Now, a month before the DEEPWATER  
10 HORIZON casualty, Transocean commissioned lawyers to  
11 conduct a survey of the vessel safety culture.

12                    What was your involvement in that  
13 survey?

14          A.       No involvement.

15                    Pardon me. Pardon me.

16                    Prior to the individuals going out  
17 to the installations, they did -- around the office,  
18 they did interviews with about 25 or 30 individuals  
19 to see their understanding of the Safety Management  
20 System. And as far as the actual audit itself, had  
21 nothing to do with it or arranging it or preparing  
22 that.

23          Q.       Are you aware of the results of that  
24 survey?

25          A.       The only results I've seen were the ones

1 that were the PowerPoint presentation that came from  
2 the HORIZON.

3 Q. Were any of the results surprise you?

4 A. From the HORIZON?

5 Q. Yes, sir.

6 A. No.

7 Q. Has Transocean taken any action to  
8 address the areas of concern that were identified in  
9 the report?

10 A. As far as the company, I'm not aware of  
11 any yet, no.

12 Q. Who was your BP counterpart for the  
13 Macondo project?

14 A. David Sims.

15 Q. How often do you meet?

16 A. He was fairly new to that position, but  
17 I've met him probably 10 or 15 times.

18 Q. How about Anadarko, do you have a  
19 counterpart for Anadarko?

20 A. No, I do not.

21 Q. How about MOEX Offshore?

22 A. No, I do not.

23 Q. I understand that Transocean has  
24 initiated an investigation into the DEEPWATER  
25 HORIZON casualty, correct?

1 A. Yes, sir.

2 Q. Has it been completed yet?

3 A. Not that I'm aware of.

4 Q. What is your role in the investigation?

5 A. None.

6 Q. Do you know if Transocean has conducted  
7 an ISM internal audit of the company?

8 A. Yes.

9 Q. When was this?

10 A. I believe DNV completed it -- I can't  
11 hazard the date, but, yes, we did that.

12 Q. As a result of this casualty?

13 A. Not as a result of the casualty, no.

14 Q. So the DNV audit, you referred to the  
15 one that was conducted on the DEEPWATER HORIZON  
16 or --

17 A. No. DNV are the ones that were  
18 accredited to the ISM Code and ISM audit process.

19 Q. I understand that was the American  
20 Bureau of Shipping that did the company audit. Are  
21 you sure it's the DNV or is it ABS?

22 A. I believe it's DNV.

23 Q. Now, do you remember when that was?

24 A. Earlier this year.

25 Q. But in items of Transocean, have you do

1 an internal audit, ISM internal audit of your Safety  
2 Management System as a result of the DEEPWATER  
3 HORIZON casualty?

4 A. Not that I'm aware.

5 Q. How about flag state, Marshall Islands,  
6 have they initiated an ISM external audit of  
7 Transocean --

8 A. Not that I'm aware.

9 Q. -- Safety Management System?

10 How many Transocean MODUs are  
11 flagged under the Marshall Islands?

12 A. Don't know.

13 Q. You don't know?

14 A. I don't know how many. 10, 20.

15 Q. What are the incentives to flag under  
16 Marshall Islands?

17 A. I don't know.

18 Q. How many MODU -- Transocean MODU  
19 operation in the Gulf of Mexico now? Right now, at  
20 present.

21 A. 14.

22 Q. 14. How many -- how many of the  
23 masters -- how many of these 14 masters, how many of  
24 them have experience at -- as master on a  
25 deep -- how many masters have experience master for

1 deepwater drilling operations more than one year?

2 A. I don't know the answer to that.

3 Q. Would it surprise you that 7 out of 14  
4 have less than one year of experience as master of a  
5 vessel engaged in deepwater drilling operation?

6 A. Would that surprise me?

7 Q. Yes, sir.

8 A. No.

9 Q. Why is that?

10 MR. ADLER: I'm going to object.

11 You want to know why he's not surprised?

12 Q. (BY CAPT. NGUYEN) Not surprised that 7  
13 out of 14 masters have less than one year experience  
14 in master on a vessel engaged in deepwater drilling.  
15 Why is that not a surprise to you?

16 A. I think over the last -- it's my  
17 opinion, over the last five years, there was a lot  
18 of new built drill ships and vessels that come out.  
19 So there's only so many masters in the world in the  
20 deepwater drilling industry. So we have moved  
21 purposely someone to other vessels, and some have  
22 departed and went to work for other companies.

23 Q. So if the master of a vessel engaged in  
24 deepwater drilling is responsible for the safety of  
25 a vessel crew prevention and pollution and these

1 employees have less than one year -- have less than  
2 one year of experience, does that concern you if  
3 they have the overall responsibility for the vessel?

4 A. If they're assigned as a master of a  
5 vessel, they have more than one year experience in  
6 working on the vessels, and they wouldn't be put in  
7 the position of a master if we didn't feel they were  
8 competent to fill the position.

9 Q. Based on your knowledge, do you know  
10 what are the contributing causes of this casualty?

11 A. I don't really have all the facts to  
12 fully understand that. There was gas ignited at the  
13 rig floor, for sure.

14 Q. Now, I want to ask you for your  
15 recommendation for -- comments on some of these  
16 recommendations.

17 The first one is, do you think  
18 that -- should government federal regulation be more  
19 prescriptive?

20 A. No.

21 Q. Should industry capacities for offshore  
22 marine firefighting be enhanced?

23 A. I don't believe so.

24 Q. Should -- as you -- I'm sure you agree  
25 that the fast rescue craft of the DAMON BANKSTON was

1 very -- was critical to the rescue of 115 survivor.

2 Do you agree with that, sir?

3 A. The FRC?

4 Q. Yes, sir.

5 A. No.

6 Q. You don't think the FRC was critical?

7 A. Not for rescuing 115 individuals.

8 Q. Not all of the --

9 A. But it was critical for the individuals  
10 that were in the water. They did a very good job.

11 Q. They didn't go out and help cut lines  
12 that were attached to the burning rig or anything  
13 like that?

14 A. I hear they did.

15 Q. But you don't think the FRC is critical  
16 and should be required by regulation for an  
17 operating MODU?

18 A. I believe you should have one, yes.

19 Q. You should -- you should have --

20 A. That wasn't the question that you asked  
21 me.

22 Q. But should it be a requirement for a  
23 standby vessel with FRC capability for an operating  
24 MODU?

25 A. No.

1 Q. But you said it critical --

2 A. You're talking about a fast rescue  
3 craft, which is a small, inflatable, or another boat  
4 that you lower down for a man overboard is the --  
5 what I thought the question that you asked me, and I  
6 said, yes, they should have one of those.

7 Q. Not attached to a standby vessel?

8 A. No, I don't believe so.

9 Q. Should the Coast Guard update standard  
10 for primary lifesaving equipment to reflect the  
11 actual average size and weight of person work  
12 offshore?

13 Right now, the lifeboat is designed  
14 for 165 pounds, and I understand that there's a  
15 survey out there that the -- the average weight is  
16 about 220.

17 Should the Coast Guard update that  
18 regulation?

19 A. Should they make a regulation?

20 Q. Should they update, increase from 165 to  
21 220?

22 A. I believe they should in the Gulf of  
23 Mexico.

24 Q. Should the Coast Guard develop  
25 comprehensive regulation to ensure proper oversight

1 of more complex floating offshore installation such  
2 as the THUNDER HORSE or ATLANTIS, where the  
3 DEEPWATER HORIZON was only engaged in drilling? As  
4 you know, floating offshore installation, some of  
5 them engaged in drilling, production, storage and  
6 offloading.

7 Do you believe that that's an  
8 adequate regulation in place for those types of  
9 vessel?

10 A. That's out of my expertise.

11 Q. Should the federal government expand  
12 licensing of other drilling personnel, for example,  
13 the driller, assistant driller, subsea engineer?

14 A. Again, I can't answer that.

15 Q. Do you have any recommendation to  
16 improve the effectiveness of the safety net for  
17 offshore oil exploration and production? There's a  
18 safety net for offshore exploration. Do you have  
19 any recommendation to improve the safety net?

20 A. Safety net?

21 Q. Yes, sir.

22 A. I don't understand your question.

23 Q. Safety net would be, for example,  
24 government inspection the coastal state, Coast Guard  
25 and BOEM or flag state or class society involvement

1 or...

2 A. I think there are quite a few class  
3 societies and individuals that inspect the rigs  
4 already. It's a matter of understanding what  
5 they're inspecting and ensure that those things are  
6 there and in place.

7 Q. Yes, sir. Based on position, knowledge  
8 and involvement, which Transocean employees have  
9 greater responsibility than you for the safety of  
10 DEEPWATER HORIZON and the people who work on it?

11 A. None. They're all -- have the  
12 responsibility of safe operations. There is no one  
13 employee more important than the other.

14 Q. I'm not asking important. Who has  
15 greater responsibility than you, based on position,  
16 knowledge and involvement?

17 A. Who has greater responsibility? That's  
18 a pretty broad one. I don't understand what you're  
19 asking.

20 Q. Is it the captain of the vessel? Is it  
21 the OIM, based on his position, his knowledge and  
22 involvement, or is it you, Mr. Paul Johnson,  
23 Mr. Newman?

24 A. I believe the individuals that are on  
25 the installation ultimately are the ones that feel

1 the pain, and they're probably under the most  
2 understanding of everyday work on the rig most  
3 important to them.

4 CAPT. NGUYEN: Thank you.

5 E X A M I N A T I O N

6 BY MR. MATHEWS:

7 Q. Mr. Winslow, earlier in your testimony,  
8 you talked about I guess BP simulation; is that  
9 correct?

10 A. BP simulator, yes.

11 Q. Okay. Who was present on the bridge? I  
12 think you said something like on the effect of the  
13 senior DPO on watch described how the machine  
14 worked.

15 Is that Yancey Keplinger?

16 A. Yes, sir.

17 Q. And who else was there, sir?

18 A. Actually working with it, there was the  
19 two BP gentlemen, myself. Yancey was giving the  
20 instructions on it, and Capt. Curt was there.

21 Q. Do you know a lady by the name of Andrea  
22 Fleytas?

23 A. Andreas --

24 Q. Andreas.

25 A. -- is a BP operator who was on watch at

1 the time. So while Yancey was giving instructions  
2 on the simulator, she was standing watch.

3 Q. Do you know why in her written statement  
4 she had indicated that she had performed the  
5 simulation?

6 A. I haven't seen her statement. I have no  
7 idea.

8 Q. Do you mind if I read this first  
9 sentence?

10 "At 2045, BP personnel and  
11 Transocean personnel from office came up to the  
12 bridge to get more practice on simulator," which  
13 she -- I'm under the impression she was there. Was  
14 she not there?

15 A. She was on the bridge, yes.

16 Q. No. I'm talking about actively  
17 participating in the simulation with you, Mr. Sims,  
18 Yancey Keplinger.

19 A. I don't recall her participation. Like  
20 I say, I left halfway through that to go downstairs.

21 Q. Okay. So she was actively monitoring  
22 the gas alarms at that time?

23 A. Had been monitoring whatever she  
24 monitors during her duties, yes.

25 Q. Okay. Do you recall a general alarm

1 going off at that time, sir?

2 A. After the first bang I heard?

3 Q. Yes, sir.

4 A. I didn't hear. I don't think you could  
5 hear the general alarm where I was at on the forward  
6 boat deck.

7 Q. Did you hear the general alarm after the  
8 explosions?

9 A. Right after, no, I didn't.

10 Q. I'm talking three, four minutes after.

11 A. No.

12 Q. I think you had also indicated that you  
13 had --

14 MR. MATHEWS: I'm sorry, go ahead.

15 (Counsel confers with witness.)

16 A. No, I -- while I was on the boat deck  
17 and during the initial blast that had come through  
18 the accommodation and whatnot, when I went out on  
19 the boat deck, I could not hear very much at all,  
20 and the noise that was coming from the derrick, from  
21 the gas and fire, I don't know if I could hear the  
22 alarm above that noise. So whether it was actually  
23 ringing or not, I could not tell you.

24 Q. (BY MR. MATHEWS) I think earlier you  
25 testified that you had planned to go on the April

1 20th rig visit somewhere around four to five days in  
2 advance; is that accurate?

3 A. Yeah, four to five days. We were having  
4 a debate who would go.

5 Q. And who was actually coordinating that  
6 scheduling, sir? Was it Mr. David Sims?

7 A. It was either David Sims or Chris  
8 Harker, who is equivalent to David Sims, who looks  
9 after the DD3.

10 Q. Had anyone, either one of those  
11 gentlemen, indicated that there was a  
12 person-on-board limit issue with respect to the  
13 operations going on on DEEPWATER HORIZON on April  
14 20?

15 A. No.

16 Q. Was there any indication given to you  
17 when you went out of Houma that you flew out an ad  
18 hoc helicopter because there were not enough  
19 helicopters to supply the demand, the additional  
20 trip to the rig?

21 A. It is an ad hoc -- well, it's not an ad  
22 hoc helicopter. The scheduled helicopter flights  
23 that they have -- it was an afternoon flight, and,  
24 technically, most of the traffic's done in the  
25 morning. So it was a helicopter that BP had on

1 contract that was available for our use.

2 Q. So the ad hoc helicopter wasn't a result  
3 of the increase of activity and number of flights  
4 going to and from the DEEPWATER HORIZON due to your  
5 trip?

6 A. Not that I'm aware of, no.

7 Q. I know -- I'm very well aware that both  
8 the API industry standards and MMS -- I'm sorry,  
9 BOEM regulations don't have any recommendations or  
10 rules on performing negative tests.

11 Does Transocean have a consistent  
12 negative test policy or procedure that they carry  
13 from rig to rig in the Gulf of Mexico?

14 A. No, sir.

15 Q. How about a procedure to off-load mud  
16 while displacing the riser?

17 A. It is wrote within the well-control  
18 handbook that you must monitor the fluids going in  
19 and coming out of the well. There are some  
20 installations that cannot handle all the mud given  
21 the riser volume, so you would be monitoring into  
22 one pit and then pumping it out of another pit.

23 Q. Also I think when you brought up your  
24 meeting earlier, you had talked about I think it was  
25 a 45 minutes that turned into almost two hours?

1 A. That's correct.

2 Q. Did Mr. David Sims give a presentation?

3 A. No, they had no presentation for the  
4 crew.

5 Q. Do you know if you were recognized or  
6 told about how many days it took you to get to  
7 10,000 -- I assume 10,000 feet as opposed to what it  
8 took the MARIANAS?

9 A. Not that I recall.

10 Q. Were you recognized for having a  
11 productive -- nonproductive time percentage?

12 A. Yeah, I believe, you know, it was just  
13 in general conversation. It was that they  
14 were -- the rig's been less than 3 percent downtime,  
15 nonproductive time has been good. The safety record  
16 on the rig. A lot of redundancy going on. It was  
17 just a general conversation.

18 Q. I'm sorry, did you say the downtime was  
19 less than 3 percent?

20 A. Yes.

21 Q. Do you have a bonus incentive that  
22 allows for you to receive any type of monetary  
23 awards based on the downtime of the rig?

24 A. Not from the customer, no.

25 Q. From Transocean?

1           A.       From Transocean, there is a bonus  
2 opportunity, but 95 or 97 percent of that's based  
3 around processes.

4           Q.       And what is a process? Having a well  
5 drilled on time?

6           A.       HSE, environmental damages, dollar value  
7 we put in the coffers of the company.

8           Q.       So at any time, did you delay scheduled  
9 maintenance to keep the downtime less than 3 percent  
10 or whatever the increment may be in your bonus  
11 package?

12          A.       No. I don't believe we're paid for  
13 doing that.

14          Q.       Do you know if there's a separate day  
15 rate when you're experiencing consecutive days of  
16 downtime?

17          A.       There is.

18          Q.       Has there been any pressure by  
19 you -- put on you from the people above you to keep  
20 the rig operating at nondowntime?

21          A.       No. I think the industry, it is a  
22 business, and you want to make sure your machines  
23 are hauling things. If you're a truck driver, if  
24 you don't run, you don't get paid, right?

25          Q.       Would you agree that if you had critical

1 equipment to fix, truck or not, you would stop and  
2 pull over --

3 A. Yes.

4 Q. -- and make the repairs if they were  
5 necessary?

6 A. Absolutely.

7 Q. As part of your job responsibilities, do  
8 you track ABS certifications?

9 A. I don't, no.

10 Q. At any time in your duration at  
11 Transocean, did you -- are you familiar with ABS  
12 rigs surveys?

13 A. Yes.

14 Q. Did you ever participate in them?

15 A. I have done.

16 Q. Are you aware of how much it cost to  
17 have your drilling package surveyed, the initial  
18 building of it?

19 A. For the initial building of a vessel?

20 Q. Yes, sir. Ballpark, \$200-, \$250,000?

21 A. Most likely, or more.

22 Q. Do you know how much it costs to have  
23 that drilling package survey onsite?

24 A. Are you talking about on a new build  
25 situation or during operation?

1 Q. I'm talking about one that's already had  
2 a survey, new build, and is on location for X amount  
3 of years and Transocean requires ABS to come out and  
4 do a survey on your drilling package.

5 A. It would be based on the time of the  
6 individual being there. We would pay them the day  
7 rate to come out and --

8 Q. Roughly about 100,000?

9 A. Five days, \$2,500 a day.

10 Q. So it's only --

11 A. Ten days.

12 Q. It's only dependent upon the day rate of  
13 the people that are surveying?

14 A. Yeah, I believe that there is a fee that  
15 we have for our certifying authorities, whether it  
16 be DNV or ABS.

17 Q. And, I'm sorry, you said it was three to  
18 five days?

19 A. Three to five days.

20 Q. And is the rig down during that time,  
21 sir?

22 A. Not necessarily.

23 Q. So if it is down, though, you have the  
24 amount of the cost, and then you go three to five  
25 days of possible downtime.

1                   Has there been any push from anybody  
2 from your management to forego an ABS drilling  
3 package survey due to the downtime and incremental  
4 cost?

5           A.       No. The ABS are certifying authority,  
6 are continuous machinery surveys that they do. They  
7 don't have to come out and do the whole thing at  
8 once. There's certain times that you could start a  
9 process, and they can come out later as well.

10          Q.       Understood. I mean, we obviously had  
11 the surveys and certificates that they submitted,  
12 but the drilling package survey had not been  
13 submitted until I believe 2005. And what I was  
14 trying to determine, why Transocean would forego  
15 that survey.

16          A.       The CDFS notification?

17          Q.       Yes, sir.

18          A.       I think we believed that within our  
19 planned maintenance systems, we cover all the things  
20 they do with that drilling survey.

21          Q.       Does that planned maintenance system  
22 cover other pieces of equipment that ABS inspects?

23          A.       Every piece of equipment on the rig,  
24 yes.

25          Q.       So you were more comfortable with

1 yourself inspecting that as opposed to the other  
2 equipment on the rig that you rely on ABS and DNV to  
3 come out and survey?

4 A. No. I never said that, no.

5 Q. I'm sorry, I thought that's what you  
6 said.

7 A. No, you asked me why I thought a company  
8 would drop that notation, and I gave you my opinion.

9 Q. Oh, I thought you were talking about  
10 Transocean.

11 A. No. I haven't been directed by  
12 Transocean to drop or not and do an ABS survey.

13 Q. Okay. Are you familiar with the low  
14 marine riser package, LMRP?

15 A. Yes.

16 Q. Did Transocean ever test the LMRP  
17 disconnect?

18 A. Yes, it's functioned on surface.

19 Q. And how did you verify it, sir?

20 A. It's verified through the subsea  
21 engineers that are working on the rig. I didn't  
22 personally go verify it, no.

23 Q. And how long did it take for that LMRP  
24 to disconnect during that function test? I know  
25 it's not inactive, but do you know how long it

1 should take?

2 A. Within 45 seconds.

3 Q. Were you made aware of any modifications  
4 to the DEEPWATER HORIZON BOP stack, sir?

5 A. No, sir.

6 Q. Would you have been made aware of them  
7 if they did occur?

8 A. Yes.

9 Q. Transocean had submitted some -- a list  
10 of modifications to us in response to a subpoena.

11 When did you start, sir? I think  
12 you said --

13 A. June 2006. With this particular team.  
14 The BP account was with my rig.

15 Q. I know you're not familiar with them.  
16 I'm just going to concentrate on one of them right  
17 now, and I'll talk to the BOP later in the week.

18 It says that "some software changes  
19 were made to allow all functions that previously had  
20 been locked out from any of the BOP control panels  
21 on the rig to become unlocked whenever the EDS  
22 command was issued from any of the control panels."

23 Do you recall that?

24 A. No, sir.

25 Q. You don't recall any incident that might

1 have resulted in that type of modification, do you?

2 A. No, sir.

3 Q. I think you testified earlier that you  
4 were involved in the initial intervention of the  
5 DEEPWATER HORIZON BOP stack; is that correct?

6 A. That's correct.

7 Q. Were you made aware of any problems  
8 before you started your intervention?

9 A. No.

10 Q. Were there any hot-stab issues with the  
11 BOP stack?

12 A. Originally, we didn't have a 17D hot  
13 stab. All the vessels in the field had a 17H, which  
14 is a different design of what we used.

15 Q. And where did you get the 17D from, sir?

16 A. It was flowing from the NAUTILUS.

17 Q. And who was providing you with the 17H?  
18 Was that from the CHOUEST?

19 A. The CHOUEST boats were out there, I  
20 believe, and the BOA SUBSEA, I believe they stated  
21 they had one. And there was a couple other ones  
22 they heard on the radio.

23 Q. When did you get the 17D, sir? About  
24 what time or day, morning, afternoon?

25 A. 1 o'clock in the afternoon.

1 Q. On the 21st?

2 A. On the Wednesday. It was shortly after  
3 the BANKSTON -- we maneuvered over to the ENDEAVOR,  
4 and they had flown it over from the NAUTILUS from  
5 there, so it was there when we got there to the  
6 boat, 12, 1 o'clock in the afternoon.

7 Q. Did you have any communication before  
8 you performed any hot-stab operations with  
9 Transocean personnel in Houston?

10 A. Yes.

11 Q. Who were you speaking with, sir?

12 A. Billy Stringfellow.

13 Q. Did Billy Stringfellow indicate any  
14 problems with redline drawing with the BOP stack  
15 that might have indicated that you had a problem  
16 with which you were actually hot stabbing into?

17 A. No, sir.

18 Q. Postmortem, has Mr. Stringfellow  
19 indicated any problems with redline drawings to  
20 indicate that there was any hot-stab functions that  
21 were possibly reversed?

22 A. No, sir.

23 Q. Who else was participating in the  
24 hot-stabbing operation with you immediately after  
25 the event, sir? From Transocean.

1           A.           Mark Hays [sic] and Chris Pleasant. And  
2 then we picked up Ramsey Richards, who was a rig  
3 manager from the DD3. He heard that I was going to  
4 go on the ROV boat. He come out to help reconnect.

5           Q.           Where was he from, again? I'm sorry.

6           A.           DD3 rig manager.

7           Q.           Did the DEEPWATER HORIZON ever inspect  
8 or test the hot stabbing capabilities of the BOP?

9           A.           I believe they did, yes.

10          Q.           And how did they do that? Do they  
11 actually go down and function something, or is it  
12 something that's done when it's not splashed?

13          A.           On surface.

14          Q.           At any time prior to the incident, were  
15 you or anybody within Transocean made aware of any  
16 hot- stab function issues?

17          A.           No, sir.

18          Q.           In some logs provided to the Board which  
19 were taken by Transocean -- I don't know where they  
20 were taken at, if they were taken aboard the DAMON  
21 BANKSTON or if they were from their incident command  
22 in Houston.

23                        "On April 23rd at 2100 hours, the  
24 subsea group was looking for Mr. Mark Hay."

25                        April 23rd was two days, three days

1 after the incident. Was he still out there with  
2 you?

3 A. Yeah. We came off the BOA SUBSEA  
4 Friday, 11:30 in the morning. Whatever date that  
5 was.

6 Q. Do you know why the subsea group was  
7 looking specifically for Mr. Mark Hay?

8 A. While he was on the BOA SUBSEA?

9 Q. I don't know where he was at.

10 A. There was a phone call that come out to  
11 the BOA SUBSEA looking for Mark. I think it was --  
12 I can't remember his first name -- McCormick -- and  
13 they were asking about hot-stab fittings and  
14 whatnot. They asked me to track him down so they  
15 could relay some information to them.

16 Q. What's Mr. Hay's area of expertise? Is  
17 he the --

18 A. Mark Hay is the senior subsea supervisor  
19 off the HORIZON.

20 Q. And he would be the most knowledgeable  
21 person of the BOP stack?

22 A. At the time, yes.

23 Q. Do you know what happened when the ROV  
24 cut the electrical wires on April 22nd to simulate a  
25 loss of communication?

1           A.           That was done from the other subsea ROV  
2 vessel, and Ramsey, who had went over there with  
3 Chris Pleasant, said that they were cutting the PVF  
4 cables and hydraulic lines to simulate the dead man.

5           Q.           What actually happened after they  
6 simulated that dead man?

7           A.           Nothing.

8           Q.           After they tried to simulate the dead  
9 man, did they try to cut the auto shear push rod?

10          A.           Yes. No. I don't believe that vessel  
11 did. They were transferred over to the BOA at that  
12 time, en route over to the I13, I believe it was.

13                        So the MAX CHOUEST, we had to  
14 attempt to cut the rod with the grinder, and it  
15 wouldn't cut it.

16          Q.           What should have happened if it  
17 functioned properly after you cut it?

18          A.           It would have activated the blind shear  
19 rams.

20          Q.           And activated auto shear and closed the  
21 blind shear out?

22          A.           Closed the bind shear out.

23          Q.           And that did not happen, correct?

24          A.           We actually cut the stem on that valve  
25 from the BOA. In my opinion, something moved. But

1 a lot of people that watched the video after that --  
2 I had been up about 49 hours or 52 hours and 40 pots  
3 of coffee, but it appeared to me that something  
4 happened at that time.

5 Q. While you were also operating the ROV,  
6 were you aware of any issues with the glycol  
7 injection port on the lower marine riser package?

8 A. Not that I'm aware.

9 Q. So you didn't see any leaking coming  
10 from that area on the lower marine riser package?

11 A. From what I had seen from watching the  
12 ROV, we were only -- we were limited in seeing what  
13 you were pumping. There's was only one ROV there.  
14 You couldn't mess around with the rest of the  
15 system.

16 Q. Do you know what the pumping capacity of  
17 the ROV associated with the DEEPWATER HORIZON was?

18 A. I'm led to believe it's 3 gallons a  
19 minute.

20 Q. 3 gallons per minute?

21 A. Yes.

22 Q. Do you know, if a well was flowing at  
23 that 3 gallons per minute, would it actually have  
24 the capacity to function in a hot stab?

25 A. I don't know the answer to that

1 question. While I was on the ROV boat, I sure wish  
2 it did.

3 Q. What other actions did the ROV  
4 immediately take that you were with? Did it  
5 actually flow and follow the riser or did it locate  
6 the rig?

7 A. Initially?

8 Q. Yes, sir.

9 A. No. The rig was still attached. The  
10 only thing that we did which was part of the plan  
11 was to have a look at the BOP, cut the open side of  
12 the control lines and then put the stab in it and  
13 close the pipe rams, and they were going to shut the  
14 well in.

15 Q. And you were talking directly with  
16 Mr. Bill Stringfellow, correct, in the incident  
17 command?

18 A. Yes. I was initially. And then after  
19 that, the telephone was transferred directly to the  
20 ROV unit, and it would have been Mark Hay that was  
21 talking directly to them.

22 Q. Where was the ROV unit that --

23 A. On the main deck of the --

24 Q. The boat?

25 A. -- the MAX CHOUEST.

1 Q. Was there any other BP personnel there?

2 A. David Sims was on the bridge with me.

3 MR. KOHNKE: Judge, can I ask, how  
4 late do you expect to be tonight?

5 MR. MATHEWS: I've only got five  
6 questions left.

7 HON. ANDERSEN: I suspect, as soon  
8 as the Board finishes its questions. And  
9 perhaps the Marshall Islands and perhaps  
10 Transocean, then we'll -- but they've kept  
11 it short so far.

12 MR. KOHNKE: It might be 9 o'clock.

13 HON. ANDERSEN: I don't think so.  
14 But the chairs will all consider recessing  
15 before the parties in interest begin  
16 asking questions.

17 Thank you for asking for the  
18 clarification.

19 Q. (BY MR. MATHEWS) At any time during the  
20 intervention, was there any disagreements with  
21 yourself, BP or other people from Transocean about  
22 the hot-stabbing procedures? Or what to do first?

23 A. Not that I'm aware of. The only thing,  
24 they attempted to e-mail me some instructions on the  
25 boat, but they did not arrive. The e-mail system

1 was so slow, you couldn't put that much data  
2 through. So we had verbal instructions from Billy  
3 Stringfellow.

4 Q. Okay. Can you refer to -- I think I  
5 have some logs in front of you. And that's Bates  
6 TRN-USCG\_MMS-00038829.

7 Can you refer to -0844?

8 A. "BP wanted to pump on the rams. Daun  
9 doesn't want to do that with low-flow ROV because it  
10 will burn out the packers and have nothing left to  
11 shut off the well."

12 Q. So BP wanted to do something that you  
13 didn't --

14 MR. FANNING: Excuse me. Mr.  
15 Mathews, I think the court reporter didn't  
16 get that. She's shaking her head.

17 MR. MATHEWS: I'm sorry.

18 MR. FANNING: I know I didn't hear  
19 it.

20 THE REPORTER: Yeah, thank you for  
21 interpreting for me. I appreciate that.

22 MR. FANNING: Just trying to help  
23 you out.

24 THE REPORTER: Yes. I couldn't hear  
25 you, and I have no documents.

1 THE WITNESS: Are you ready now?

2 THE REPORTER: Yes. Go ahead.

3 A. "BP wanted to pump on pipe rams. Daun  
4 doesn't want to do that yet with low-flow ROV  
5 because we'll burn off the packers and have nothing  
6 left to shut off the well."

7 Q. (BY MR. MATHEWS) So what was the end  
8 outcome of that? Did you plan -- did you go forward  
9 with what BP wanted, or did you do what you wanted?

10 A. I believe we did not. We -- we had  
11 requested accumulator bottles and/or some other unit  
12 that could give us more gallons per minute. And at  
13 that time, I felt that the ROV didn't have enough  
14 flow to move the shuttle valves or do whatever it  
15 needed to do at that time?

16 Q. Can you refer and read -0904?

17 A. "Eric Hall called Keith Bouillion to get  
18 clarification on BP personnel. One BP well-site  
19 leader is on the OCEAN ENDEAVOR, Randy Spears, and  
20 another is coming to the OCEAN ENDEAVOR. They want  
21 to go to one of the vessels on location at the  
22 HORIZON, or DWH. We need to know why they are  
23 requesting to come to the BOA, why this wasn't  
24 communicated to TOI and what the intent was."

25 Q. Why did it appear from what I read that

1 Transocean needed to know why BP personnel were  
2 coming to assist in the intervention?

3 A. I believe -- I -- from what I  
4 understand, what I was told on the telephone, that  
5 BP were coming along to assist and understand what  
6 was going on.

7 Q. To your knowledge, was there any  
8 communication issues immediately after the incident  
9 with BP and Transocean during the intervention of  
10 the well?

11 A. Not that I'm aware of.

12 Q. Are you familiar with the intervention  
13 processes of once blind shear comes in contact with  
14 hydrocarbon flow or abrasive sands how long it would  
15 take before it lost its cutting element?

16 A. I don't know.

17 Q. A day or two days? You just don't know?

18 A. Don't know.

19 Q. Also, if you want to refer, I think the  
20 very next log that I have that I want to ask you a  
21 question about is TRN-USCG\_MMS-00038826. Do you  
22 have that in front of you, sir? And I'd like to  
23 refer to 0443.

24 Can you start where it says "BP  
25 concerned"?

1           A.       "BP concerned about who is running the  
2 show."

3           Q.       Can you continue to "take over  
4 mid-morning"?

5           A.       This other where you have it  
6 highlighted?

7           Q.       Yes, sir.

8           A.       "Why isn't BP and TOI together in the  
9 same place? BP fears there is a risk the U.S. Coast  
10 Guard will take over mid-morning."

11          Q.       Why was BP concerned about who was  
12 running the show?

13          A.       I don't know.

14          Q.       Who was running the show?

15          A.       Which one?

16          Q.       That's my next question.

17                   Who was running the intervention?

18          A.       The -- initially, when we left the BOA,  
19 there was myself, David Sims of BP, and two subsea  
20 engineers who were -- they wanted to just take two  
21 subsea engineers that were on the vessel during the  
22 event and go to an ROV boat and do intervention.  
23 And I said that they need to have some individuals  
24 with them, and that's why David Sims and I went.

25                   And on departure from the BANKSTON,

1 Pat O'Bryan had insinuated that I would be the PIC,  
2 person in charge, Transocean's stack, Transocean's  
3 rig. So apparently I was in charge. In the mind of  
4 BP.

5 Q. It also indicated who was lead in the  
6 spill response.

7 Who was leading the spill response?  
8 In that same section you just read from.

9 A. I don't see anything about spill  
10 response in there.

11 Q. "BP was handling the spill and TOI,  
12 Transocean, Incorporated, was handling the  
13 prevention."

14 Do you see that line?

15 A. Yes, I do.

16 Q. Is that accurate, what I just read to  
17 you?

18 A. It is accurate for what is wrote down  
19 here.

20 Q. Is there any reason -- and I'm looking  
21 at April 22nd, which was two days  
22 after -- approximately two days after the incident,  
23 why BP and Transocean were not working together?

24 A. I don't know. I was offshore during  
25 that whole thing, and these logs came from

1 the -- appears to be the Transocean team. I don't  
2 know.

3 Q. And I just have one last question. I  
4 think earlier it was brought to the Board's  
5 attention that y'all had a stand-down around late  
6 September, 2009?

7 A. Yes.

8 Q. In response to the rig audit that BP had  
9 done on the marine assurance?

10 A. I don't know if we had a safety  
11 stand-down at that time.

12 Q. Not a safety stand-down, just a  
13 stand-down -- shutdown.

14 A. Oh, a shutdown.

15 Q. Yes, sir.

16 A. Oh, I believe the planned out-of-service  
17 time there, once it was all completed and everybody  
18 thought we'd go back to work, there was some  
19 deficiencies that BP wasn't happy with, and also we  
20 had some issues with the PRS, the pipe racking  
21 system, that we wanted to fix before we went back  
22 into operation.

23 Q. The question I have, though, is, was  
24 that shutdown during drilling operations, or was it  
25 a shutdown between well to well, or was it a

1 shutdown during nondrilling operations?

2 A. I believe it was between wells.

3 MR. MATHEWS: That's all I have,  
4 sir. No further questions. Thank you.

5 HON. ANDERSEN: Any other Board  
6 questions?

7 CAPT. NGUYEN: Mr. Winslow, will you  
8 be available tomorrow morning to continue  
9 your testimony, sir?

10 THE WITNESS: If I can get somebody  
11 to fill in my day job, I will definitely  
12 be here.

13 CAPT. NGUYEN: Yes or no?

14 THE WITNESS: Yes, I will be here.  
15 My attempt at humor. Thank you.

16 CAPT. NGUYEN: I'm sure a lot of the  
17 attorneys out there say I have none, so I  
18 just --

19 Do you want to take -- go off the  
20 record at this time or wait until tomorrow  
21 morning?

22 MR. KOHNKE: I thought the court  
23 reporter was asking for a break.

24 CAPT. NGUYEN: How long would you  
25 take, sir? I want to make sure everybody

1           -- I'm just wondering, do you think five  
2           minutes? Then the court reporter want to  
3           go with that? Just wondering. If not, do  
4           you want to take a break?

5                   MR. LINSIN: Captain, I'd be happy  
6           to start first thing in the morning.

7                   CAPT. NGUYEN: Okay. Why don't we  
8           do that.

9                   Mr. Winslow, we will recall you  
10          tomorrow morning at 0800.

11                   So the hearing is adjourned. We  
12          will convene tomorrow morning at 0800.

13

14

15

16

17

18

19

20

21

22

23

24

25

## 1 REPORTER'S CERTIFICATION

2 THE STATE OF TEXAS :  
3 COUNTY OF HARRIS :4 I, DENYCE M. SANDERS, a Certified  
5 Shorthand Reporter and Notary Public in and for  
6 Harris County, Texas, do hereby certify that the  
7 facts as stated by me in the caption hereto are  
8 true; that the foregoing pages comprise a true and  
9 as complete and correct transcript of the  
10 proceedings made without the aid of documents. All  
11 names and terms were researched to the best of my  
12 ability.13 I further certify that I am not, in any  
14 capacity, a regular employee of the party in whose  
15 behalf this hearing is taken, nor in the employ of  
16 any party. I certify that I am not interested in  
17 the cause, nor of kin or any counsel to any of the  
18 parties.19 GIVEN UNDER MY HAND AND SEAL OF OFFICE,  
20 on this, the 26th day of August, 2010.21   
22 DENYCE M. SANDERS, CSR, RPR  
23 NCRA Realtime Systems Administrator  
24 Notary Public in and for  
25 Harris County, T E X A S

My Commission Expires: 4-13-13

Certification No.: 4038;

Expiration Date: 12-31-11

24 U.S. LEGAL Support, Inc., 363 N. Sam Houston  
25 Parkway, 9th Floor, Houston, Texas 77060

713.653.7100

JOB NO. 1-96845

| <b>A</b>   |  |  |   |
|--|--|--|---|
| <b>abandon</b> 331:4<br>462:23 480:23  | <b>acceptable</b> 60:17<br>61:23 72:20 78:17<br>200:15,16  | <b>accumulator</b> 522:11  | 311:6,7 401:25  |
| <b>abandonment</b> 331:13<br>376:14 435:8  | <b>accepted</b> 56:5,11,13   | <b>accurate</b> 61:16,21<br>65:13 81:16 247:5  | 405:21,24 428:4,5<br>459:7,11   |
| <b>abandon-ship</b> 252:20   | <b>access</b> 139:20,24<br>140:13 275:19   | 325:1,3,5 361:14<br>376:9 422:9 504:2<br>525:16,18   | <b>activated</b> 408:8<br>410:13 517:18,20  |
| <b>ability</b> 74:25 83:9<br>213:17 214:5<br>216:15 261:10,20<br>261:25 287:18<br>389:10 432:16<br>476:8,17,22 529:11  | <b>accident</b> 158:12,16<br>158:23 213:21<br>395:19,22,23,24<br>396:21,21 397:2<br>488:25   | <b>accurately</b> 246:3<br>345:20  | <b>activating</b> 280:22  |
| <b>ablaze</b> 448:17 452:13  | <b>accidents</b> 157:5   | <b>achieved</b> 47:8   | <b>activation</b> 414:23<br>415:3 420:8   |
| <b>able</b> 25:4 49:23 70:20<br>85:15 92:2 120:11<br>121:20 125:20<br>139:22 143:21<br>152:18,21 158:6<br>162:14 180:10<br>181:1 208:25<br>218:20 286:17<br>329:6 418:4 464:18<br>484:11 | <b>accommodation</b><br>421:15,16 447:6,19<br>447:21 448:5,20<br>449:3,8,14 451:18<br>452:6 458:16,17,18<br>466:20 503:18  | <b>acknowledge</b> 196:11  | <b>active</b> 178:11,14   |
| <b>aboard</b> 104:19,19<br>115:3 116:9,19<br>189:13,16 219:10<br>230:19 304:19<br>311:2 416:14 465:6<br>515:20   | <b>accompanied</b> 182:17  | <b>acknowledges</b> 283:1  | <b>actively</b> 502:16,21   |
| <b>above-entitled</b> 1:19   | <b>accomplishing</b><br>112:15   | <b>acknowledgment</b><br>414:21  | <b>activities</b> 15:5,10<br>21:10 23:17 43:17<br>62:1 63:6 65:9,10<br>65:12 66:24 70:14<br>76:22 81:17 104:13<br>108:14 115:5 131:5<br>136:24 137:22<br>160:13 161:13<br>190:11 191:3 217:6<br>218:4 232:23<br>233:12 241:9,12<br>260:19 275:25<br>457:13 482:18 |
| <b>abrasive</b> 523:14   | <b>account</b> 33:20 60:15<br>96:25 166:7 377:8<br>512:14  | <b>act</b> 22:24 164:4<br>424:22   | <b>activity</b> 22:2 63:7<br>68:20 94:15 102:20<br>167:17,18 337:17<br>440:2 489:14 505:3   |
| <b>ABS</b> 23:20 48:20<br>53:23 203:12 204:4<br>206:3 270:18<br>298:24 313:19,21<br>358:9 493:21 508:8<br>508:11 509:3,16<br>510:2,5,22 511:2,12   | <b>accountabilities</b> 14:9<br>16:17 17:23 18:1,5<br>69:9 71:4 82:4<br>105:1 160:15<br>161:17 162:13<br>478:22  | <b>acted</b> 409:4   | <b>actual</b> 9:11 39:24<br>51:9 70:10 105:7<br>122:8 140:25<br>235:10 236:21<br>287:4 298:23<br>331:12 339:12<br>491:20 498:11   |
| <b>absence</b> 39:8 431:20   | <b>accountability</b> 42:21<br>61:25 76:21 80:19<br>105:25 131:4   | <b>acting</b> 147:5 230:18<br>340:15 357:14  | <b>actuate</b> 138:22   |
| <b>absent</b> 373:7  | <b>accountable</b> 20:10<br>38:7,24 65:21 66:12<br>68:5,14,25 70:11<br>71:21 79:25 81:20<br>82:1,18,19,23 90:10<br>103:13 134:13,25<br>136:23 137:21<br>163:7 174:13<br>191:13 201:23,25<br>202:23 207:7<br>482:16 | <b>action</b> 30:22 35:9<br>40:13 41:7 45:8,9<br>61:1 71:13 72:7,9<br>99:14 100:25<br>107:16,21 108:23<br>166:24 168:20,25<br>170:22,24 171:11<br>179:25 201:23<br>203:3 209:6 239:20<br>242:4 245:21,24<br>246:1,5,13 247:12<br>260:13 277:19<br>292:12,20 323:11<br>337:17 345:7 355:8<br>376:24 426:22<br>465:2,3,3 492:7 | <b>actuated</b> 147:4   |
| <b>absolutely</b> 126:18<br>172:16 234:6 491:6<br>508:6  | <b>accounts</b> 391:12   | <b>actions</b> 9:17 36:24<br>45:7,12 75:25 76:6<br>95:6 96:13 100:22<br>112:20 154:9 159:4<br>179:5,7 180:3<br>184:12 203:23<br>235:16 236:10<br>247:7 261:8,25<br>269:25 345:3,10<br>355:10 377:2 381:3<br>442:16 519:3   | <b>actuation</b> 140:2  |
| <b>abundantly</b> 216:6  | <b>accredited</b> 493:18   | <b>activate</b> 273:3,10   | <b>acutely</b> 106:6  |
| <b>accent</b> 320:23   |  |  | <b>ad</b> 504:17,21,21<br>505:2   |
| <b>accept</b> 49:15  |  |  | <b>Adamson</b> 440:25   |
|  |  |  | <b>add</b> 53:3 382:2   |
|  |  |  | <b>added</b> 12:11 83:9<br>381:12 383:13  |
|  |  |  | <b>addition</b> 29:24 44:1<br>44:24 94:18,24  |

|   |  |  |   |
|---|--|--|---|
| 104:17 160:14<br>198:10 207:11<br>313:23<br><b>additional</b> 96:14<br>262:17 263:24<br>292:19 312:24<br>323:8 325:24<br>504:19<br><b>additions</b> 262:25<br>310:20<br><b>address</b> 12:13 33:13<br>43:10 45:16 54:21<br>57:6 78:23 106:20<br>189:16 239:14<br>288:3 292:9 296:13<br>320:10 323:6 338:6<br>348:5 363:6 366:21<br>436:6 492:8<br><b>addressed</b> 34:24 41:8<br>43:20 51:15 55:11<br>55:15 58:6,16 60:1<br>63:13 80:1 108:23<br>113:1 202:21<br>292:16 322:22<br>348:18 354:23<br>355:8 375:9<br><b>addressing</b> 106:21<br>328:11 393:21<br><b>adequate</b> 49:5,9 54:1<br>200:11 236:6<br>265:19 296:9 499:8<br><b>adequately</b> 291:7<br><b>adjacent</b> 10:11<br><b>adjourned</b> 528:11<br><b>adjustments</b> 92:10<br><b>Adler</b> 4:14 218:14<br>219:20 222:16<br>228:15 230:22<br>235:22 304:4,10<br>311:12,13,15<br>319:15 342:12<br>343:13 346:2 350:5<br>369:17,19 379:20<br>380:8 381:20<br>408:21 413:3,6<br>419:25 422:4,7 | 445:13 462:3<br>485:15 495:10<br><b>administers</b> 172:8<br><b>administration</b> 27:21<br>226:16<br><b>administrative</b> 11:14<br>11:15 204:21<br>260:16<br><b>Administrator</b><br>529:20<br><b>admirably</b> 350:17<br><b>admissible</b> 11:12<br><b>adopt</b> 298:3<br><b>adopted</b> 76:3 88:20<br>159:5 354:24<br>487:10<br><b>adrift</b> 55:10<br><b>advance</b> 126:9 441:8<br>483:23 504:2<br><b>advanced</b> 146:7<br><b>adverse</b> 58:1 469:16<br><b>advice</b> 71:9<br><b>advise</b> 249:20 250:1<br>250:7<br><b>advised</b> 121:21 168:5<br><b>advisor</b> 68:25 69:6<br>75:23 112:6 144:11<br><b>advisories</b> 347:11<br><b>advisors</b> 69:10 70:2<br>96:10,15<br><b>advisory</b> 341:22<br>342:3,8,10 344:3,14<br>344:17 345:13,16<br>377:10<br><b>advocate</b> 8:1<br><b>affect</b> 80:10 192:19<br>248:6 249:8 389:10<br><b>affirmative</b> 292:12<br><b>afield</b> 195:14<br><b>afloat</b> 75:7 82:5<br>370:7 469:13<br><b>afraid</b> 380:2<br><b>afternoon</b> 373:14<br>374:21,23 375:14<br>398:14,15 504:23<br>513:24,25 514:6 | <b>agencies</b> 7:2 133:20<br><b>agency</b> 209:6<br><b>agenda</b> 320:8<br><b>agendas</b> 318:1<br><b>agent</b> 9:3<br><b>ago</b> 28:8 29:17 120:2<br>121:20 212:22<br>268:21 276:3<br>344:18 345:13<br>346:8 347:14,19<br>353:22 408:4<br>428:13 439:10,17<br><b>agree</b> 30:18,22 52:1<br>87:20 88:7 93:15<br>105:18 106:8,9<br>131:11 133:8 144:2<br>187:24 198:21<br>199:6 227:15<br>265:13 323:4 399:5<br>412:11 428:21<br>436:19 484:23<br>496:24 497:2<br>507:25<br><b>agreeable</b> 396:14<br><b>agreed</b> 10:12 64:21<br>160:4 276:15 348:3<br>399:10 400:22<br>443:21 458:21<br><b>agreeing</b> 58:17<br>196:23<br><b>agreement</b> 119:9,12<br>281:23 302:15<br><b>aground</b> 28:20<br><b>ahead</b> 55:20 277:13<br>286:14 291:6 300:7<br>436:2 450:9 503:14<br>522:2<br><b>aid</b> 529:9<br><b>aimed</b> 170:8<br><b>air</b> 422:23,24 448:8<br>452:21 454:20<br><b>Airport</b> 1:22,23<br><b>alarm</b> 97:14,17<br>166:24 167:12<br>168:14 169:7,22<br>172:16,21,24 173:8 | 173:11,15 175:20<br>177:1,6,7,20,22<br>178:5,10 186:17<br>277:17 293:19,22<br>294:1,8,10 310:15<br>310:17,20,21,22<br>311:2,7 332:20<br>333:5,9,13 334:3,4<br>334:13,13,19<br>353:24 393:15<br>394:17,19 395:1<br>405:8,21,24,25<br>406:9,15,23 407:2,6<br>407:8,10,23,25<br>408:13 410:12<br>414:23 415:14,18<br>416:2 417:1,17<br>419:9,24 424:12,16<br>424:22 425:5<br>426:13 427:12,13<br>427:16,20 428:1,4<br>502:25 503:5,7,22<br><b>alarms</b> 33:18,20,24<br>42:6,10 60:13,15<br>90:18 96:21,23,25<br>97:15 166:5,7<br>169:14 176:1<br>178:19,21 180:2<br>294:4,8 332:19<br>333:14 334:16,21<br>393:12,21,21<br>394:23 405:20<br>406:5,22 407:18<br>411:7 420:9 427:22<br>502:22<br><b>alarm-related</b> 168:18<br><b>alert</b> 408:25<br><b>align</b> 403:19 404:7<br><b>aligned</b> 252:4<br><b>allegedly</b> 391:14<br><b>allocates</b> 204:12<br><b>allow</b> 10:2 91:7<br>299:10 314:17<br>365:19 461:24<br>512:19<br><b>allowed</b> 47:17 60:21 |
|---|--|--|---|

|  |  |   |   |
|--|--|---|---|
| <p>275:25 484:1<br/> <b>allows</b> 151:20 506:22<br/> <b>alluded</b> 268:18<br/> <b>all-encompassing</b><br/> 106:10<br/> <b>alongside</b> 283:14<br/> <b>alphabetical</b> 362:20<br/> <b>amalgamation</b> 393:6<br/> <b>amend</b> 53:6,13,20<br/> 308:22<br/> <b>amended</b> 54:2<br/> <b>American</b> 232:12<br/> 377:23 404:6<br/> 437:10 486:6<br/> 493:19<br/> <b>American-flagged</b><br/> 23:2<br/> <b>Americas</b> 15:5<br/> <b>amount</b> 33:12 197:4<br/> 263:8 287:18<br/> 292:18 299:19<br/> 323:19 324:5<br/> 359:21 469:24<br/> 470:23 473:6 474:3<br/> 509:2,24<br/> <b>Anadarko</b> 19:4,7<br/> 20:22 21:1 37:1,6,9<br/> 37:12 38:1,19 39:16<br/> 39:21 118:16,25<br/> 119:1,13 120:8,16<br/> 358:16,21 402:22<br/> 492:18,19<br/> <b>analog</b> 33:1 42:17<br/> 245:3<br/> <b>analysis</b> 206:16<br/> 286:21<br/> <b>anchor</b> 28:19<br/> <b>Andersen</b> 2:7 3:17<br/> 7:24 10:25 12:13<br/> 13:13,15,20 14:1<br/> 39:23 54:13 64:13<br/> 67:4 73:13 77:3<br/> 80:21 84:14,24<br/> 85:14 86:9 87:2<br/> 90:15 91:5 92:25<br/> 93:4,17,24 98:16</p> | <p>100:11 101:5<br/> 109:13 118:3,15,18<br/> 120:15,19,22,25<br/> 121:3,6,9,11,16<br/> 122:16,20 124:25<br/> 126:19,22 127:3<br/> 128:6,16 130:23<br/> 131:19 132:11,23<br/> 133:15 135:21<br/> 138:7 139:8,14<br/> 140:10,20 142:14<br/> 143:9,14 145:13<br/> 146:19 147:15<br/> 148:2 149:6,22<br/> 150:16,20,23 151:6<br/> 151:10 152:10<br/> 153:11,18,23<br/> 155:15,23 156:6,9<br/> 156:13 157:16<br/> 159:12,15,18,21<br/> 162:10 164:7,11,14<br/> 166:18 167:22<br/> 176:5,17,21 185:18<br/> 186:3,23 187:2,7,13<br/> 188:5 195:9 196:2<br/> 197:1 199:13 206:9<br/> 209:19 210:17<br/> 213:22 218:16<br/> 220:7 221:13,17<br/> 222:2,23 225:19<br/> 228:18,22 230:3<br/> 231:1,6 238:8 268:7<br/> 300:13 304:2,7,10<br/> 309:21 311:12<br/> 319:21 328:25<br/> 329:17 335:18,23<br/> 336:12,15 337:2<br/> 342:20 343:20<br/> 344:8 346:9,14<br/> 348:13 350:9,23<br/> 358:16,23 361:24<br/> 362:5,12,17 366:2<br/> 367:5,9,12,15,18,21<br/> 369:7,17,21 372:11<br/> 379:23 380:11<br/> 382:1,11 383:18,24</p> | <p>384:11,17 387:21<br/> 388:15,18 393:1,4<br/> 396:15 398:7,11<br/> 402:23 404:17<br/> 405:3,16 408:15,20<br/> 409:14 410:21<br/> 411:17 412:6,8<br/> 413:3,11,14,22<br/> 414:2,12 416:1<br/> 417:22 418:7,11,25<br/> 419:7 420:4 422:10<br/> 423:8,11,15,18,21<br/> 424:1 426:4,8<br/> 430:15,18 435:13<br/> 436:1,24 460:1<br/> 461:14 462:9,20<br/> 463:4 464:2 483:16<br/> 487:1 520:7,13<br/> 527:5<br/> <b>Anderson</b> 356:11,23<br/> <b>Andrea</b> 501:21<br/> <b>Andreas</b> 501:23,24<br/> <b>and/or</b> 12:13 404:2<br/> 522:11<br/> <b>Angel</b> 69:9 112:2<br/> 324:1 355:3<br/> <b>angles</b> 459:14<br/> <b>annex</b> 56:2 171:8<br/> <b>announced</b> 102:5<br/> <b>announcement</b> 427:4<br/> 480:23<br/> <b>annual</b> 31:7 40:18<br/> 242:10,25 300:1<br/> 313:21 314:3<br/> <b>annually</b> 287:25<br/> <b>anomalies</b> 48:8<br/> 208:23<br/> <b>answer</b> 17:1 18:13<br/> 19:5,9 21:2 22:10<br/> 23:3 34:7 37:4,10<br/> 37:15,20,24 43:15<br/> 46:11 49:11,19 50:9<br/> 50:15 52:8 53:11<br/> 54:5 56:16,22,24<br/> 57:3 60:22 67:19<br/> 70:25 74:12 77:2</p> | <p>87:13 92:17 111:23<br/> 114:24 115:4<br/> 120:12 125:10,21<br/> 126:6 127:6,10<br/> 132:8 133:2 134:5,9<br/> 134:15 139:15<br/> 143:22 145:5<br/> 149:13 151:21<br/> 152:22 153:12<br/> 158:6 162:14,16<br/> 163:18 170:2,11<br/> 171:24 177:5 181:1<br/> 188:14 196:6<br/> 205:24 223:8<br/> 226:20,21 230:2,9<br/> 244:14 261:18<br/> 264:15 298:12<br/> 309:23 310:4<br/> 321:19 329:16<br/> 343:1,4 350:12<br/> 361:23 380:18<br/> 387:22 409:7 414:1<br/> 415:22 420:5 422:9<br/> 449:1 457:25 460:9<br/> 460:10,22 462:1<br/> 463:15 465:24<br/> 472:22 480:19<br/> 495:2 499:14<br/> 518:25<br/> <b>answered</b> 136:15<br/> 153:10 176:22<br/> 221:24 350:6 412:4<br/> 417:24 463:25<br/> <b>answering</b> 85:23<br/> 125:12,16 126:14<br/> 223:9 229:11 343:9<br/> 345:23,24 350:17<br/> 422:11<br/> <b>answers</b> 49:23 84:16<br/> 110:2 372:20<br/> 484:22<br/> <b>anticipate</b> 375:15<br/> <b>anticollision</b> 32:10,13<br/> 32:18 244:19,24<br/> <b>anybody</b> 37:8,22<br/> 72:23 164:2 176:11</p> |
|--|--|---|---|

|  |   |  |  |
|--|---|--|--|
| 177:13 182:7 185:4<br>253:22 256:21<br>257:19 276:5<br>364:16 392:21<br>402:9 424:25<br>465:20 470:16<br>472:10 510:1<br>515:15<br><b>anymore</b> 338:5<br><b>anyway</b> 251:20<br><b>API</b> 61:8 62:9,23<br>200:4 294:17,18<br>295:9 296:25<br>297:22 303:14,17<br>321:4,6,17 404:10<br>505:8<br><b>apologies</b> 368:15<br><b>apologize</b> 117:21<br>197:19 412:4 485:9<br><b>apparent</b> 13:2 24:13<br>107:20 110:19<br>112:21 115:8<br>154:21 177:17<br>179:4 185:9 191:12<br>193:15 209:12<br><b>apparently</b> 123:3<br>387:18 525:3<br><b>appear</b> 210:7,21<br>435:21 522:25<br><b>appearance</b> 12:17<br><b>appearances</b> 3:4 12:1<br><b>appeared</b> 449:7<br>457:7 458:15 465:1<br>518:3<br><b>appears</b> 342:13<br>447:23 449:14<br>466:18 526:1<br><b>applicable</b> 69:20<br>128:21 132:19<br>134:10 137:24<br>168:21 198:18<br><b>applied</b> 332:4 345:10<br>346:11<br><b>applies</b> 26:22 29:11<br>87:21<br><b>apply</b> 63:6 111:14 | 332:6<br><b>appointed</b> 481:24<br><b>appointment</b> 18:3<br><b>appreciate</b> 89:10<br>170:11 236:18<br>264:7 329:12<br>415:21 521:21<br><b>appreciates</b> 460:15<br><b>apprentice</b> 439:6<br><b>apprise</b> 394:1<br><b>approach</b> 63:18<br>98:15 121:15<br>166:17 205:2<br>336:25 369:6<br>444:17<br><b>appropriate</b> 9:18<br>16:3 135:15 206:1<br>247:14 401:13<br>428:15 475:19,24<br><b>appropriately</b> 89:9<br>137:2 192:8<br><b>approval</b> 8:17 250:10<br>250:14 323:17<br>330:25<br><b>approve</b> 431:2<br><b>approved</b> 204:11<br>322:24 388:13<br>432:7 489:23<br><b>approximate</b> 115:25<br>411:23<br><b>approximately</b> 100:7<br>233:25 486:20<br>525:22<br><b>APR</b> 298:2<br><b>April</b> 1:5 6:11 55:11<br>63:15 98:10 99:22<br>110:15 111:25<br>115:22 118:2,10<br>132:20 137:2 138:3<br>149:1 151:5,18<br>152:5 155:9 165:23<br>175:11 177:2 178:7<br>178:12,15 180:9<br>218:12 236:12<br>260:1 273:17<br>276:23 290:21,21 | 305:1 313:17<br>337:21,21,24,24<br>342:2,5 346:10,13<br>349:10 350:4 351:8<br>354:7 365:11,21<br>370:13 371:22<br>373:9 375:15<br>383:17,20 385:2,9<br>386:21 388:10<br>390:12 412:21<br>437:16 439:25<br>440:15,18 490:6<br>503:25 504:13<br>515:23,25 516:24<br>525:21<br><b>arching</b> 65:11<br><b>architect</b> 473:5<br><b>area</b> 8:2 10:11 97:6<br>98:5 160:11 164:19<br>201:2,7 205:9<br>209:16 443:25<br>447:10,16 448:13<br>448:15 449:10<br>456:11 516:16<br>518:10<br><b>areas</b> 12:6 95:17 96:2<br>169:13 172:9<br>201:11,15,17 225:5<br>238:19 239:15<br>304:17 492:8<br><b>arena</b> 79:24<br><b>argue</b> 483:4<br><b>argumentative</b><br>483:12,13<br><b>arm</b> 174:10 315:25<br><b>arose</b> 290:18<br><b>arranged</b> 444:8<br><b>arrangement</b> 82:13<br>84:22 109:15<br><b>arranging</b> 491:21<br><b>array</b> 132:13<br><b>arrival</b> 455:24<br>456:21,21<br><b>arrive</b> 114:14 483:21<br>520:25<br><b>arrived</b> 259:15,19,20 | 311:19 442:2<br>448:14 456:6,10<br>471:24 472:1<br>473:13 474:10<br><b>arriving</b> 456:3<br><b>ASCENSION</b> 141:15<br>141:20,22 142:16<br>143:18<br><b>ascertain</b> 447:17<br>474:5<br><b>ashore</b> 26:7 28:20<br>442:4 466:10,22<br>467:25 468:4<br><b>Asian</b> 377:21<br><b>asked</b> 54:18 64:19<br>88:23 90:16 95:20<br>96:19 97:25 114:21<br>134:9 135:19<br>153:10 155:1 161:4<br>163:19 179:15<br>181:23 182:3 192:5<br>210:1 219:24<br>241:19 259:2<br>272:16 273:14<br>276:3 279:20,24<br>280:4,5 283:18,23<br>288:25 299:5<br>304:18,23 308:21<br>315:22 326:16<br>330:20 336:10<br>366:8 375:11<br>387:11 409:18<br>414:3 432:18,23<br>435:16 445:5,19<br>451:9 456:25<br>457:22 459:7 462:6<br>463:23,25 469:2<br>470:5 471:15<br>497:20 498:5 511:7<br>516:14<br><b>asking</b> 47:20 86:22<br>87:18 91:13 135:10<br>143:7 176:4 188:1<br>220:2 228:11,16<br>242:12 253:22<br>256:21 261:10 |
|--|---|--|--|

|  |  |  |  |
|--|--|--|--|
| 284:4,21 298:11<br>346:3 364:2 380:9<br>410:2 411:20<br>416:18 425:11<br>459:12 461:3 483:8<br>500:14,19 516:13<br>520:16,17 527:23<br><b>asks</b> 127:3 415:4<br><b>aspect</b> 65:18 81:7<br>89:25 162:21 170:8<br>171:4,10 183:21<br>189:16 201:8<br><b>aspects</b> 66:18 68:8<br>76:21 95:14 110:8<br>130:12 163:8 172:5<br>172:9 173:12 201:9<br><b>aspired-to</b> 336:3<br><b>assert</b> 132:18<br><b>assertion</b> 145:17<br><b>assertive</b> 350:19<br><b>asses</b> 308:18<br><b>assess</b> 21:21 24:24<br>68:16 96:16 123:23<br>475:7<br><b>assessed</b> 18:23 25:24<br>62:25 69:24 78:12<br>289:13<br><b>assessing</b> 22:1 44:22<br>207:20<br><b>assessment</b> 9:21<br>21:14 22:3 25:13<br>30:3 35:18 36:13,16<br>38:9 41:21 42:11<br>43:25 47:2 48:5,7<br>48:15 55:13 59:17<br>63:12 68:6,7,15<br>69:5,7 70:17 72:6<br>74:20 77:18 91:3<br>92:19 94:17,19,23<br>107:4,6,7 115:8,19<br>124:4 170:10,23,25<br>171:17 174:18<br>175:16 177:15,18<br>178:20 181:7 198:8<br>201:20 203:1<br>204:10 207:19 | 208:3,7,15,20<br>209:12 265:11<br>290:25 291:3<br>313:17 349:8<br>357:19 365:13,25<br>366:14,16,18 369:1<br>370:19 474:24<br><b>assessments</b> 29:24<br>31:18 36:12 39:11<br>41:22 46:2 48:10<br>52:25 53:3 92:20<br>102:18 103:21<br>104:3,7,14 108:12<br>141:17 148:21<br>173:13<br><b>asset</b> 214:14 246:11<br>251:16 269:16,18<br>269:18 270:5,20<br>271:3,4,8 272:13<br>281:11,15 290:13<br>294:14 301:10<br>312:14,21 313:7<br>317:17 335:2<br>357:20,20 370:23<br>371:6,6,7 438:12<br><b>assets</b> 276:4 283:15<br><b>asset-related</b> 312:19<br><b>assign</b> 246:3<br><b>assigned</b> 70:22,24<br>111:15 112:6 313:6<br>325:19,21 397:22<br>496:4<br><b>assimilate</b> 125:20<br>342:22 343:3<br><b>assist</b> 85:22 225:6<br>283:15,22 292:20<br>349:9 397:17 457:1<br>465:22 471:16<br>523:2,5<br><b>assistance</b> 253:17,23<br>254:10 256:2<br>257:16,20 260:23<br>353:12 443:21<br><b>assistant</b> 287:17<br>437:16 499:13<br><b>associate</b> 31:13 44:19 | <b>associated</b> 20:18<br>21:11 36:2 40:25<br>41:9 64:2 77:15<br>106:1 108:25 110:6<br>110:18 120:5<br>170:23 173:14<br>177:16 183:19<br>282:6 518:17<br><b>association</b> 21:18<br>94:22 115:9<br><b>assorted</b> 243:9<br><b>assume</b> 32:13 40:1<br>102:7 131:14,15<br>147:3 162:11<br>207:16 215:7,14<br>216:7 300:21 506:7<br><b>assumed</b> 428:19<br>448:23 449:9<br>458:16<br><b>assumes</b> 430:11<br><b>assuming</b> 148:9<br>186:15 195:21,22<br>255:4 462:4<br><b>assumption</b> 203:12<br>207:18 290:9<br><b>assumptions</b> 259:1<br>329:3<br><b>assurance</b> 21:14<br>30:25 32:4 41:15<br>45:22 46:12 55:21<br>56:2 94:8 95:8 97:7<br>100:19 242:17<br>244:3,6,15 286:21<br>488:11 526:9<br><b>assurances</b> 331:19<br><b>assure</b> 430:21<br><b>assured</b> 168:18<br>331:24 399:7<br><b>assuring</b> 355:24<br><b>Atlantic</b> 8:2<br><b>ATLANTIS</b> 51:22<br>52:1 89:18 265:15<br>499:2<br><b>attached</b> 100:10<br>349:21 497:12<br>498:7 519:9 | <b>attempt</b> 517:14<br>527:15<br><b>attempted</b> 520:24<br><b>attempting</b> 466:13<br><b>attempts</b> 13:1 181:16<br><b>attend</b> 241:15 429:14<br><b>attended</b> 60:20 96:16<br>319:5 355:2<br><b>attention</b> 13:9 16:20<br>35:3,6,9,13 37:23<br>71:14 72:1 102:19<br>111:24 136:7<br>166:12 285:11<br>298:2 343:12<br>351:14 394:16<br>397:11 526:5<br><b>attorney</b> 13:20 91:12<br>122:1,4 124:25<br>128:7 209:23<br>210:19 336:7<br>408:23<br><b>attorneys</b> 101:10,11<br>101:14 121:17<br>168:1 319:22,23,24<br>320:2,9,15 418:20<br>527:17<br><b>attribute</b> 391:13<br><b>au</b> 48:24<br><b>audible</b> 424:23,25<br><b>audibles</b> 405:8<br><b>audio</b> 238:11<br><b>audit</b> 21:8 30:25 31:1<br>32:8 35:17,18 37:5<br>37:13,23 38:4 40:8<br>41:12,15,17,18 42:4<br>45:22 46:23 47:7,21<br>53:21,22 56:7 57:5<br>57:11,16,24 60:18<br>61:1,12,18 63:2,11<br>67:13 73:18,21<br>75:17 88:23 90:17<br>94:6,8,10,13,17<br>95:9,18,22,24 96:22<br>99:2,23 100:20<br>102:11,18,22<br>106:16,16,18 111:2 |
|--|--|--|--|

|   |  |   |   |
|---|--|---|---|
| 112:9 113:10 120:3<br>120:3,5 148:19<br>166:2,4,13,13,23<br>167:10 168:5,11<br>169:4 170:18<br>171:14,14 174:22<br>175:15 193:10<br>196:13 200:3,23<br>201:7,8,9,17 202:5<br>202:6,17 208:13<br>209:5 230:19<br>231:21,22 232:12<br>232:16,17 235:19<br>238:22,23 242:15<br>242:15,17,17,20,23<br>244:11,16,17,25<br>246:14 247:10,12<br>248:9 262:8 263:17<br>267:17 270:10,12<br>270:13 272:11<br>288:20 289:10,14<br>289:20,22,24 290:5<br>290:12,15,16,21,23<br>290:24,25 291:9<br>292:11 296:4,4<br>310:19 312:17<br>313:4,6,9,15,17,19<br>313:20 314:15<br>315:1,2 323:6,15<br>324:4,9,14,17 325:6<br>347:24 348:7 349:7<br>349:8,17,20,25<br>350:2,3,24 351:6,7<br>351:10,12,20,24<br>352:5 353:6,8,10,16<br>354:22 356:1 375:2<br>375:8,12 486:6,10<br>488:11,14,18,19<br>491:20 493:7,14,18<br>493:20 494:1,1,6<br>526:8<br><b>audited</b> 375:3,6<br><b>auditing</b> 102:13<br>103:3 119:24<br><b>auditor</b> 34:9<br><b>auditors</b> 244:7 | <b>audits</b> 29:18,22 46:13<br>47:25 48:1 56:2<br>75:19 89:5,5 145:8<br>204:12 207:14<br>225:7 227:5 283:15<br>289:2,20 312:16<br>322:8 347:23<br>348:19,24 349:1,4,5<br>349:5,12<br><b>Audit/Marine</b> 94:8<br><b>August</b> 1:12 3:2<br>233:23 281:4<br>348:20 370:11<br>394:6 486:18<br>529:18<br><b>Australia</b> 15:2 378:2<br><b>author</b> 171:18<br><b>authored</b> 282:3<br>388:10,12<br><b>authorities</b> 509:15<br><b>authority</b> 6:23 14:11<br>14:14 15:8 16:17<br>17:23 18:5 19:8<br>25:6 26:2 44:12,14<br>44:14 45:13 47:1,9<br>47:23 49:4 56:11<br>57:7,13 63:12 67:1<br>86:1,3 110:13<br>111:12,17 116:1<br>138:13,22 139:3<br>140:1,25 147:8,9,16<br>152:24 153:5,25<br>154:1,15,16 157:1<br>160:12 163:20,24<br>164:23 169:20<br>174:3,24 181:3<br>184:19 185:5,13<br>186:17 192:11<br>194:10 197:15<br>198:10 204:24<br>207:12 223:2<br>249:21 251:1<br>323:21 324:13<br>337:17 510:5<br><b>authority's</b> 41:6<br>170:17 | <b>authorized</b> 49:7<br>187:22<br><b>auto</b> 281:5,6 439:6<br>517:9,20<br><b>automated</b> 311:2<br>407:17,17,20,22<br>409:19,21,24<br>410:15 412:19,22<br>414:15 416:12,20<br>418:8 421:6 423:2<br><b>automatic</b> 294:9<br>334:5 406:22<br>414:23 415:3,6<br>417:8,10<br><b>automatically</b> 334:13<br>416:17 427:12,15<br>428:5<br><b>availability</b> 10:9<br><b>available</b> 13:1 22:3<br>23:4 51:4 210:8,10<br>286:24 288:5<br>435:22 482:2 505:1<br>527:8<br><b>average</b> 51:9 265:9<br>318:20 370:6<br>498:11,15<br><b>avoid</b> 145:16 149:21<br><b>awaiting</b> 113:17<br><b>award</b> 444:25,25<br><b>awards</b> 506:23<br><b>aware</b> 23:18,22 24:2<br>24:3,12,14 30:24<br>31:1 43:1,2 45:9<br>46:22,22 47:21<br>48:23,23 60:6 88:25<br>92:9 107:18 111:9<br>111:10 137:10,15<br>146:1,20 149:8<br>157:5,18 158:16,19<br>159:7 177:21<br>181:16 185:2<br>186:25 190:6<br>192:12 194:5,15<br>195:5 198:9 199:20<br>200:17 207:8<br>224:18 231:17,18 | 234:8,10 236:17<br>237:24 239:20<br>242:19 244:25<br>254:7,11 257:12,13<br>257:15 258:15<br>260:3 271:13 275:5<br>278:15 280:24,25<br>281:3,5,21 285:12<br>291:12,13 293:23<br>293:25 305:25<br>309:2,3 310:13<br>323:2 328:16,18<br>329:23 335:4 338:8<br>339:2,17,21 340:4<br>340:14,20 350:24<br>350:25 351:3 354:4<br>356:22 359:15,18<br>371:22 372:3,6,14<br>372:17,18,22 373:2<br>373:7,8 381:23<br>387:3 393:19 402:3<br>403:21 404:5,10,12<br>404:14 421:22<br>432:6 444:3 474:20<br>480:20 486:24<br>487:4 488:10,13,13<br>491:23 492:10<br>493:3 494:4,8 505:6<br>505:7 508:16 512:3<br>512:6 513:7 515:15<br>518:6,8 520:23<br>523:11<br><b>awareness</b> 42:3 66:25<br>81:12 82:20 192:6<br>251:10<br><b>Azerbaijan</b> 211:19<br>269:6 311:23<br><b>a.m</b> 1:13 101:12<br>363:1<br><hr/> <b>B</b> <hr/> <b>back</b> 36:6 58:17<br>77:10 86:7 102:9<br>104:4,8 110:22<br>111:3 116:17<br>117:18 118:8 |
|---|--|---|---|

|   |   |   |   |
|---|---|---|---|
| 120:10 144:2<br>150:19 153:21<br>167:14 180:4<br>191:20 200:22<br>203:25 204:16<br>212:25 222:1 228:3<br>245:9 248:16,16,20<br>249:2,5 261:9,11,20<br>263:11 278:14<br>284:12 297:8<br>304:17 306:8<br>314:14,17,22 315:1<br>319:19 322:9,12,23<br>323:4,5 324:19<br>354:13 365:25<br>387:6 404:23<br>409:12 411:16<br>417:18 444:6 445:4<br>449:8,20 455:14,23<br>475:13 483:4<br>526:18,21<br><b>background</b> 15:14<br>16:3 196:3 212:13<br>225:23 307:7 308:2<br>321:11 430:1<br>438:15 439:3<br>449:19 475:13,20<br>475:24<br><b>backup</b> 354:16<br><b>bad</b> 110:6 222:17<br>223:15 427:22<br><b>balance</b> 384:24<br><b>balances</b> 432:8<br><b>balancing</b> 99:17<br><b>ballast</b> 77:24<br><b>ballooning</b> 258:4<br>339:13<br><b>Ballpark</b> 508:20<br><b>bang</b> 447:11,11<br>478:11 503:2<br><b>bank</b> 299:14<br><b>BANKSTON</b> 50:20<br>51:2 255:7,21 256:2<br>256:22 264:22<br>275:8,12,24 276:25<br>277:2 279:7 390:22 | 391:5 455:7,18<br>465:16,23 466:6,8<br>466:24 467:2,14,20<br>468:11 469:22<br>471:4 472:5,6<br>473:21,22 496:25<br>514:3 515:21<br>524:25<br><b>banter</b> 444:23<br><b>barge</b> 478:1<br><b>barrier</b> 249:14<br>386:15,18<br><b>barriers</b> 317:5<br>386:14<br><b>Barry</b> 202:9 387:24<br>387:25<br><b>base</b> 78:16<br><b>based</b> 30:6 38:20<br>49:20 50:3 53:4<br>56:22,24 57:25<br>74:16 80:24 83:18<br>91:25 99:24 114:16<br>130:1 133:4,22<br>135:13,23 145:18<br>146:24 196:19,22<br>201:2,10 242:6<br>260:24 261:5,13<br>263:25 264:8<br>305:22 306:19<br>350:10 378:12<br>402:10 403:4 404:5<br>411:12 414:20<br>462:17 476:11,21<br>496:9 500:7,15,21<br>506:23 507:2 509:5<br><b>basically</b> 54:18 74:6<br>382:18 417:14<br><b>basis</b> 18:7 48:16 68:1<br>69:25 74:24 105:6<br>110:11 150:13<br>197:8 271:22 329:4<br>329:9 372:19 375:7<br>415:1,6<br><b>Bates</b> 100:2,12<br>123:13 167:20<br>200:23 277:7 | 282:18 288:22<br>295:7,8 341:8,12<br>343:18,20,23<br>369:13 521:5<br><b>bear</b> 102:7 132:7<br>306:9<br><b>beard</b> 67:4<br><b>bearing</b> 13:2 185:23<br><b>beeping</b> 277:23<br><b>began</b> 101:11 412:23<br><b>beginning</b> 91:11<br>108:6 201:3 358:10<br><b>begins</b> 36:8 55:21<br><b>behalf</b> 25:11 39:21<br>41:23 62:17 158:10<br>164:10 203:1<br>222:11 269:25<br>304:14 320:19<br>322:13 324:7<br>355:23 398:18<br>405:1 529:14<br><b>belabor</b> 130:7 321:23<br><b>belief</b> 114:16 136:17<br>136:25 138:2<br>223:21 426:18<br><b>believe</b> 13:5 16:2,7<br>18:2 19:10 20:15,17<br>23:15 24:19,20<br>25:18,22 27:17,23<br>29:1 30:12 31:21<br>32:2,19 33:16,25<br>34:11 36:22 39:20<br>42:9 45:20 47:16<br>49:1,11,18,22 50:8<br>50:14 51:3,5,14<br>52:7,25 53:2,10<br>55:14,19 56:17<br>57:20 58:13 60:19<br>62:12,20,24 67:12<br>67:19 74:18 75:5<br>76:18 79:18,24<br>80:18 81:15 82:25<br>87:15,21 88:1,18<br>89:12 92:7,11 98:22<br>98:23 102:24,25<br>103:5,21 104:6,21 | 107:8 108:5,12<br>109:7 110:5 111:4<br>112:1 115:21 116:4<br>117:18 119:4 120:6<br>120:8 123:23<br>130:15 131:2<br>132:18 134:4,8,22<br>135:14 137:18<br>144:22 155:3<br>158:20,23 160:23<br>161:2 163:22<br>168:20 182:18<br>183:6 189:7,17<br>194:1,8 198:5,11<br>199:3 207:6 210:5<br>216:3,17 217:4<br>219:8 224:2,7<br>225:13 226:14<br>231:12,19 235:8<br>237:2,14 239:3,8,12<br>243:4 246:21 247:6<br>250:24 254:18<br>255:2 259:18<br>261:24 274:12<br>278:21 283:10<br>291:22 298:13<br>299:15,22 300:1<br>305:21 314:2 321:8<br>323:3 326:18 329:8<br>332:6,25 333:11<br>334:2 344:16<br>349:21 352:3,19<br>356:7 358:9 360:25<br>365:20 366:10,11<br>368:10 379:8<br>393:13 402:10,12<br>403:8,14 405:19<br>406:1 421:11<br>422:20 423:16<br>425:8,23 446:20<br>457:17 470:14,20<br>471:12 475:22<br>476:2 482:13 487:7<br>487:10 488:16<br>489:5,9 493:10,22<br>496:23 497:18 |
|---|---|---|---|

|   |   |   |  |
|---|---|---|--|
| 498:8 499:7 500:24<br>506:12 507:12<br>509:14 510:13<br>513:20,20 515:9<br>517:10,12 518:18<br>522:10 523:3<br>526:16 527:2<br><b>believed</b> 326:19<br>332:3 401:21 402:5<br>510:18<br><b>believes</b> 126:15<br>221:17 329:11<br>337:18 391:5<br>463:16 483:1<br><b>belive</b> 498:22<br><b>bend</b> 315:25<br><b>benefit</b> 394:12<br>417:21<br><b>benefitting</b> 135:16<br><b>benign</b> 481:4<br><b>bent</b> 451:10<br><b>Bertone</b> 159:13<br>291:24 292:5<br>416:24 417:13<br>423:17,20,22 424:6<br>424:7 425:14,18<br><b>best</b> 97:22 98:12<br>99:21 146:10 224:5<br>255:14 274:9<br>316:24 354:8<br>392:18,23 415:8<br>432:16 441:25<br>457:16 477:1<br>529:10<br><b>better</b> 146:15 192:6<br>219:23 294:14<br>428:16<br><b>beyond</b> 94:10 195:19<br>254:2 336:3 380:9<br>383:15<br><b>big</b> 65:19 66:21 454:1<br>454:8<br><b>bilge</b> 77:23<br><b>bill</b> 302:6,8 441:3<br>479:23,23 519:16<br><b>Billy</b> 514:12,13 521:2 | <b>bind</b> 517:22<br><b>bit</b> 65:15 142:2<br>153:25 166:1 199:8<br>264:14 317:1<br>443:24 444:19<br>445:2,4 446:23<br>451:22 453:14<br>454:21 455:23<br>489:6<br><b>bite</b> 375:19<br><b>biweekly</b> 355:5<br><b>bladder</b> 364:25 365:4<br><b>blast</b> 503:17<br><b>blew</b> 280:6,7<br><b>Blimp</b> 477:20<br><b>blind</b> 273:3,8 517:18<br>517:21 523:13<br><b>blindly</b> 432:15<br><b>block</b> 167:3,6 280:20<br>285:16,24 286:6,18<br><b>blocks</b> 452:19<br><b>blow</b> 155:10<br><b>blowed</b> 466:19<br><b>blowout</b> 139:1<br>146:22 147:3 149:2<br>152:4,19 153:9<br>155:3 219:18<br>297:23 303:16<br>450:13 466:16<br>467:16,17<br><b>blue</b> 353:20<br><b>Bly</b> 174:12 175:9<br><b>BOA</b> 513:20 516:3,8<br>516:11 517:11,25<br>522:23 524:18<br><b>board</b> 1:1 2:2 8:6<br>9:16 10:21 13:3<br>35:11 43:3 51:4<br>64:15 65:3 73:13<br>77:1,3,17 79:14,21<br>80:11,17,18 81:21<br>84:4 85:16,18,19<br>87:9 91:6 96:8<br>104:22 105:16<br>117:6 121:18,22<br>122:17,18 128:3,9 | 132:3 133:18<br>134:24 135:16<br>136:8 137:21,24<br>142:17 145:22<br>146:4,13 149:14<br>150:8,9 152:16<br>153:3 167:23<br>171:25 172:22<br>177:9 179:9 180:23<br>187:8,9 188:6,14,16<br>188:19 191:11,22<br>191:25 192:7<br>194:15 195:20<br>197:10 199:13<br>206:17 210:3,7<br>220:10 221:17,22<br>223:5,6 225:6 229:7<br>229:9 231:10,21<br>233:16 238:9<br>240:10,11,14<br>253:14 255:6<br>257:18 259:15<br>268:7 276:25<br>281:12 283:20<br>284:14 288:16<br>290:2 293:18,18<br>295:14 298:16<br>300:13 303:12<br>310:1,15,17 320:10<br>329:11,13,19 336:6<br>337:15 338:13,18<br>380:15 411:8,11<br>416:7 418:3,19<br>420:19 423:9 426:6<br>434:1 435:14,21<br>437:19 441:24<br>456:6 458:7,23<br>463:13 466:8,24<br>467:14 468:11<br>479:2 483:14,19<br>484:4,13,19 488:9<br>488:22 489:23<br>515:18 520:8 527:5<br><b>boarded</b> 255:7<br><b>boards</b> 133:19<br><b>Board's</b> 101:16 | 341:11 483:17<br>526:4<br><b>boat</b> 157:8 394:1<br>448:15 449:25<br>450:10 451:15,17<br>452:7,7,10,24,25<br>453:2,6,12,16,18,22<br>454:1,2,8,14,16,19<br>454:20,24 455:1,6<br>455:15,16,19,20<br>459:3,16,18 462:16<br>462:17 463:2,8<br>464:11,22,24<br>465:21 466:2<br>470:17 471:19<br>472:8 474:11 498:3<br>503:6,16,19 514:6<br>515:4 519:1,24<br>520:25 524:22<br><b>boats</b> 448:16,22<br>449:17,21 458:13<br>458:19 468:25<br>470:4,24 471:23<br>472:2 473:14,23,24<br>474:2,22 513:19<br><b>Bob</b> 160:3,3,6 161:23<br>398:17,23,25 399:7<br>401:4,7 473:4,15<br><b>Bob's</b> 398:18 400:20<br><b>bodies</b> 231:20 396:9<br><b>body</b> 174:10 439:6<br><b>BOEM</b> 499:25 505:9<br><b>bond</b> 327:25<br><b>bonnets</b> 296:9 298:22<br><b>bonus</b> 64:7 299:18,21<br>300:2,4 506:21<br>507:1,10<br><b>book</b> 86:25 335:24<br>336:21 341:1<br>349:20<br><b>BOP</b> 137:13 147:3<br>181:5 262:18 263:1<br>273:3 275:19<br>280:20,25 281:23<br>283:3,11 286:10,11<br>286:21 289:17 |
|---|---|---|--|

|   |  |   |  |
|---|--|---|--|
| <p>290:22 293:4<br/> 295:24 296:9,15,17<br/> 296:20 297:17,18<br/> 298:8 335:1,4,8,11<br/> 335:11,12 475:9<br/> 512:4,17,20 513:5<br/> 513:11 514:14<br/> 515:8 516:21<br/> 519:11<br/> <b>BOP-specific</b> 294:15<br/> <b>bore</b> 282:5<br/> <b>boss</b> 353:10 463:11<br/> <b>bothered</b> 153:7<br/> <b>bottles</b> 522:11<br/> <b>bottom</b> 152:3 289:18<br/> 290:22<br/> <b>bottoms-up</b> 327:17<br/> <b>Bouillion</b> 522:17<br/> <b>Boulevard</b> 1:23<br/> <b>bounced</b> 455:9<br/> <b>box</b> 179:7<br/> <b>BP</b> 14:11,16,20 17:11<br/> 17:13 18:18 20:21<br/> 20:22,25 21:4,7,8<br/> 23:4 25:4,6,12,16<br/> 26:2,9,16,18 27:3<br/> 29:18,21 30:5,24<br/> 35:9,14 36:8,18<br/> 37:8 38:1,25 39:16<br/> 41:23 42:23 43:6,10<br/> 43:10,19,20,22 44:7<br/> 44:15 45:3,14,18,21<br/> 46:1,5,12,14 48:25<br/> 49:2 51:21 54:20<br/> 56:2 58:7 60:8 61:6<br/> 62:17 63:3 65:16<br/> 68:24 69:7,18 71:6<br/> 72:18 74:8,14 75:18<br/> 76:17 81:5 83:14<br/> 84:2 86:3 91:11<br/> 93:8,17,22 96:8<br/> 98:22 102:13 103:8<br/> 103:10,14,16,17<br/> 104:5,10,18,19,22<br/> 105:4,14,18 106:6<br/> 107:25 108:17</p> | <p>109:3,4,9,9 110:13<br/> 110:25 111:16<br/> 112:14 113:7 114:7<br/> 116:5,8,12,14,22,24<br/> 119:2,9,18 120:9<br/> 137:5 140:3 141:13<br/> 141:18 144:17,18<br/> 144:24 145:8 147:6<br/> 147:10,13,14,16,25<br/> 148:12,21,23<br/> 152:24 153:3 154:1<br/> 154:8,12 156:22<br/> 157:25 158:1,10,11<br/> 160:17 161:20<br/> 163:5,8,20,23<br/> 164:23 167:10,25<br/> 168:14 169:19<br/> 173:17,19 174:3,9<br/> 174:21 183:20<br/> 185:12 187:3<br/> 192:11 194:9<br/> 199:18,21,24 200:1<br/> 206:17,20 207:1,8<br/> 207:12,15 218:1<br/> 235:19 241:3,7,14<br/> 242:16 244:16<br/> 245:11 246:7,12,14<br/> 248:8,14,21 254:17<br/> 255:4 256:14,18,24<br/> 258:15,18,23 259:7<br/> 259:10 265:15<br/> 270:15 272:1<br/> 273:23,24,25 274:2<br/> 274:6,10,14 275:4<br/> 275:16 276:5,17<br/> 277:9 282:3,10<br/> 283:8 285:18<br/> 290:15,16,18 291:9<br/> 291:14,21,22,22<br/> 296:3 298:5 299:8<br/> 301:17 302:21<br/> 307:6 313:9 314:15<br/> 314:16 317:8,13,13<br/> 317:25 318:3,11,12<br/> 318:25 319:5,11,24<br/> 320:3 322:8,17,24</p> | <p>323:12,14,21 324:7<br/> 324:7,8,12,16<br/> 326:19 327:9,11,14<br/> 327:19,20,23,24<br/> 328:1,2,5 330:3,9<br/> 330:12 331:18<br/> 332:14 333:16<br/> 335:18 336:20<br/> 340:9,11,16 341:5<br/> 341:20 348:7,21<br/> 349:22 351:23<br/> 352:10,15,22<br/> 354:19 355:7,9,18<br/> 355:24,25 359:5,7<br/> 359:19,25 360:19<br/> 360:21 361:4,10<br/> 363:1 364:16<br/> 365:18 366:1,20<br/> 389:14,18 398:22<br/> 399:5,7,11 400:13<br/> 420:22 431:10,15<br/> 431:21 432:3,20,21<br/> 432:23 433:9,23<br/> 440:8 462:25<br/> 474:18 475:5<br/> 479:11 488:10<br/> 492:12 501:8,10,19<br/> 501:25 502:10<br/> 504:25 512:14<br/> 520:1,21 521:8,12<br/> 522:3,9,18,18 523:1<br/> 523:5,9,24 524:1,8<br/> 524:9,11,19 525:4<br/> 525:11,23 526:8,19<br/> <b>BP's</b> 14:9,24 15:3,4<br/> 15:10 22:4 25:5<br/> 26:13,22 44:3,23<br/> 60:17 61:11,23<br/> 62:13,22 76:12<br/> 97:23 98:12 112:1<br/> 116:1 139:13<br/> 140:24 161:18<br/> 274:23 302:12<br/> 322:7 382:6 389:18<br/> <b>BP-HCN-MBI-001...</b><br/> 60:25</p> | <p><b>BP-HZN-MBI-001...</b><br/> 57:18<br/> <b>BP-HZN-MBI-001...</b><br/> 55:20<br/> <b>BP-HZN-MBI-001...</b><br/> 59:1<br/> <b>BP-HZN-MBI-001...</b><br/> 200:24<br/> <b>BP-HZN-MBI-013...</b><br/> 73:20<br/> <b>BP-operated</b> 160:16<br/> 223:21<br/> <b>BP-owned</b> 84:19<br/> 189:18,24<br/> <b>BP-Transocean</b> 20:7<br/> 200:4<br/> <b>Brad</b> 17:21,22<br/> <b>Braniff</b> 387:24,24,25<br/> <b>Bray</b> 295:17 320:11<br/> <b>break</b> 91:10 93:1,3<br/> 122:14 181:10<br/> 196:5 210:16<br/> 228:24 319:19,20<br/> 326:17 404:18,20<br/> 404:23,25 436:3,6<br/> 436:16,21 527:23<br/> 528:4<br/> <b>breakdown</b> 232:4<br/> 485:24<br/> <b>breaking</b> 317:5<br/> <b>breed</b> 443:6<br/> <b>breeze</b> 448:7<br/> <b>Brett</b> 307:12,14,18<br/> 308:1 324:2 355:2<br/> <b>bridge</b> 217:15 333:15<br/> 333:17,18,22,23<br/> 334:17,20 419:22<br/> 420:2,12,22 424:13<br/> 425:1,3 426:16,24<br/> 426:25 427:1 428:3<br/> 445:25 446:8<br/> 447:17 449:6<br/> 450:14,16 451:16<br/> 455:21 458:11,14<br/> 462:22 489:7,11,12<br/> 489:14,17,21 490:4</p> |
|---|--|---|--|

|   |   |  |   |
|---|---|--|---|
| 501:11 502:12,15<br>520:2<br><b>bridging</b> 20:25 65:12<br>217:25 218:2,6,7<br>432:19 433:1,4,8<br><b>brief</b> 91:10 187:4<br>269:7 340:23<br>404:17 456:7<br><b>briefing</b> 456:7,14<br><b>briefly</b> 15:13 54:24<br>77:5 212:12 216:21<br>334:25 341:15<br>438:14 439:2<br><b>bright</b> 454:16<br><b>brighter</b> 451:22<br><b>bring</b> 13:8 16:20 35:2<br>35:5,8 37:22 71:14<br>195:18 359:20<br>366:5 455:14<br>471:24<br><b>bringing</b> 306:8<br><b>brings</b> 66:6 382:14<br><b>British</b> 317:2<br><b>broad</b> 65:25 66:16<br>183:21 484:21<br>500:18<br><b>broader</b> 76:21 88:17<br>136:21<br><b>brought</b> 13:6 35:13<br>44:16 306:14<br>313:15 323:8<br>325:24 330:20<br>348:17 351:14<br>445:13 452:5<br>474:24 505:23<br>526:4<br><b>Brown</b> 121:9,14<br>344:6,6,11 367:21<br>367:25 368:2,11,14<br>368:15 369:4<br>378:21 383:5<br><b>Buddy</b> 271:20 301:8<br>301:21 452:8<br><b>bugged</b> 445:2<br><b>build</b> 299:14 508:24<br>509:2 | <b>builder</b> 473:5<br><b>building</b> 508:18,19<br><b>built</b> 44:21 495:18<br><b>built-in</b> 283:2<br><b>bulkhead</b> 448:4<br><b>BULLET</b> 25:18,18<br><b>bulletin</b> 377:9<br><b>bulletins</b> 347:11<br><b>bullets</b> 206:19<br><b>bumped</b> 455:7<br><b>bunch</b> 457:9<br><b>Bureau</b> 1:17 2:5,8,10<br>6:2,17 7:12,17 8:11<br>8:18 9:6 12:24<br>51:17 232:12 486:7<br>493:20<br><b>burn</b> 521:10 522:5<br><b>burned</b> 181:25<br><b>burning</b> 255:1 469:6<br>470:7 497:12<br><b>business</b> 14:11 16:13<br>38:13,25 39:2 44:17<br>44:19,23 45:15,16<br>68:24 69:19 71:6<br>87:3 104:16 156:22<br>161:19 183:21<br>205:4 221:21<br>311:17 351:5<br>507:22<br><b>busy</b> 70:16 257:1<br>366:14<br><b>Butts</b> 2:15 4:5 7:20<br>206:10,12 209:18<br><b>bypass</b> 97:17 415:10<br><b>bypassed</b> 488:7<br><b>bypasses</b> 33:18 42:7<br>60:14 90:18 96:24<br>166:6,25 167:13<br>169:23 186:19 | 245:4<br><b>call</b> 11:25 13:13<br>111:18 136:7 203:4<br>241:15 251:16<br>254:8 255:4,17<br>257:1,20 267:1<br>272:3,3 277:9,10,14<br>278:6,14,17,24<br>293:7 294:6 317:20<br>317:21 345:7<br>363:17 365:12<br>366:1 375:13<br>390:11,21 391:4<br>423:17 427:4<br>436:22 443:9<br>448:24 466:11<br>480:13 489:14,22<br>516:10<br><b>called</b> 10:24 42:10<br>60:19 102:25<br>111:11 112:19<br>124:9 129:12,17<br>141:4,19 199:19<br>211:19 277:20<br>281:18 326:2<br>330:21 338:7<br>353:19 364:24<br>365:24 368:25<br>392:15 393:20<br>423:21 429:9 435:4<br>522:17<br><b>calling</b> 257:16 348:11<br><b>callout</b> 97:16<br><b>calls</b> 109:11 133:13<br>221:11 277:17<br>390:25 402:17<br>459:23<br><b>calm</b> 453:15,15,15,18<br><b>Cameron</b> 120:22,23<br>274:18,22 281:7,18<br>281:24 298:14,16<br>367:9,10<br><b>CamServe</b> 281:19<br><b>Canadian</b> 247:22<br><b>candid</b> 444:23<br><b>cannons</b> 469:1 | 474:23<br><b>Canyon</b> 276:7<br><b>capabilities</b> 50:12<br>53:9 205:25 264:16<br>266:20 431:6 515:8<br><b>capability</b> 50:25<br>181:14,14 254:3<br>257:8 265:1 497:23<br><b>capable</b> 130:5 313:25<br><b>capacities</b> 496:21<br><b>capacity</b> 147:6<br>518:16,24 529:13<br><b>Capt</b> 2:3,13 3:8,10,14<br>3:15 4:2,9 5:1,5 6:1<br>6:7 11:23 12:13<br>14:4 19:23,25 20:2<br>40:6 54:11 64:17<br>67:3 76:9 79:5,8<br>80:23 82:19 84:18<br>85:9 86:11,24 87:17<br>88:14,19 93:15<br>96:19 112:24<br>114:21 140:25<br>141:24 142:21<br>145:23 150:25<br>156:12 161:3,3<br>187:16 188:21<br>190:4,7 196:10,19<br>197:21,22 199:12<br>209:24 210:6,11,14<br>211:3 214:2 216:14<br>218:12 219:3 220:1<br>220:18 223:18<br>225:21 227:8<br>229:16 230:17<br>231:24 236:1<br>238:13 259:21<br>261:22 262:3 268:5<br>268:14 319:17<br>395:11,12 404:19<br>404:22 413:17<br>414:19 420:6 428:9<br>428:12 430:23<br>435:15,20,24 436:2<br>436:7,22 437:6<br>445:10,15 449:4 |
|   | <b>C</b>  |  |   |
|   | <b>C</b> 2:1<br><b>cable</b> 453:21<br><b>cables</b> 517:4<br><b>calendar</b> 441:12<br><b>calibrated</b> 33:2 42:19  |  |   |

|  |   |  |  |
|--|---|--|--|
| <p>456:22 458:12<br/> 462:14,15,24<br/> 463:22,23 464:4,10<br/> 467:14 468:13<br/> 469:19 470:5 471:9<br/> 473:1 476:15<br/> 477:22 478:9 479:4<br/> 479:5 483:6 485:20<br/> 486:23,24 487:3,5<br/> 495:12 501:4,20<br/> 527:7,13,16,24<br/> 528:7<br/> <b>captain</b> 14:1 19:21<br/> 29:6 64:13 76:9,16<br/> 76:18 79:25 80:4,15<br/> 80:21 82:4,9,9 83:5<br/> 83:6 84:6,11,20,21<br/> 85:4,9 86:1,10 88:3<br/> 88:8,25 89:20 90:4<br/> 90:5,16 93:9 131:10<br/> 136:21 138:2,13,22<br/> 139:2,18,23 140:1<br/> 140:13,17 142:2<br/> 143:4,18 155:8<br/> 156:5,15 157:2,7<br/> 190:3 191:13<br/> 193:22 196:3,23<br/> 210:13 215:7<br/> 216:12,18 219:21<br/> 220:5 225:6,9,10<br/> 228:7 229:14<br/> 230:25 249:18,19<br/> 250:1,6,9,13,17<br/> 251:17 262:4 272:8<br/> 272:16 305:3<br/> 317:23 320:19<br/> 328:23 425:10,10<br/> 430:16 436:5<br/> 449:13 450:16<br/> 456:11 460:19<br/> 468:13 478:18<br/> 479:6,14 480:11,24<br/> 481:7 483:1 484:11<br/> 485:2,11 500:20<br/> 528:5<br/> <b>captain's</b> 79:11 81:8</p> | <p>87:6 195:13,21<br/> 430:10 461:20<br/> 480:11<br/> <b>caption</b> 529:6<br/> <b>capture</b> 10:16<br/> <b>captured</b> 55:22 104:1<br/> <b>cards</b> 362:14,18<br/> <b>care</b> 202:20 255:14<br/> 280:12 295:18<br/> 313:4<br/> <b>carefully</b> 460:8,20<br/> <b>cargo</b> 203:13,13<br/> <b>carried</b> 95:6 366:18<br/> 485:8<br/> <b>carries</b> 62:12 482:2<br/> <b>carry</b> 48:4 505:12<br/> <b>carrying</b> 247:9<br/> <b>cars</b> 468:6<br/> <b>case</b> 49:13,16 50:19<br/> 66:20 70:15 122:5<br/> 131:16 140:16<br/> 146:16 163:22<br/> 175:24 191:21<br/> 193:17 195:25<br/> 198:25 202:22<br/> 208:6,12 232:6<br/> 240:23 254:1<br/> 267:13 288:8<br/> 360:13 381:4,6<br/> 430:14 434:19<br/> 484:24<br/> <b>cash</b> 299:24<br/> <b>casings</b> 280:23 360:4<br/> 360:4<br/> <b>Caspian</b> 311:24<br/> <b>casualties</b> 8:22 150:1<br/> 247:19 248:2<br/> <b>casualty</b> 1:2 8:9,14<br/> 9:10 11:8 13:3 40:9<br/> 40:17 42:8 45:1,2<br/> 45:11,19,21 49:21<br/> 50:4 53:5 91:23<br/> 92:1,4,12 113:7<br/> 114:18 115:2,15,25<br/> 116:10,11,20,20<br/> 117:16 174:4,10</p> | <p>175:21 178:13<br/> 180:9 182:5 192:13<br/> 213:16 214:4<br/> 216:14 219:3,11,12<br/> 220:24 221:9 222:9<br/> 222:18 233:7,8,9<br/> 234:16 237:8<br/> 238:24 247:2<br/> 257:23 258:14<br/> 260:5,7 261:6,14<br/> 262:6 263:16 264:1<br/> 264:9 305:10 306:1<br/> 395:13,19,22,23,24<br/> 396:20 433:22<br/> 458:11 476:7,16<br/> 478:10 487:24<br/> 488:2 491:10<br/> 492:25 493:12,13<br/> 494:3 496:10<br/> <b>catastrophic</b> 266:21<br/> <b>categorically</b> 421:10<br/> <b>categories</b> 201:25<br/> <b>categorization</b><br/> 204:13<br/> <b>category</b> 201:10,22<br/> 202:3<br/> <b>causal</b> 222:14<br/> <b>cause</b> 1:19 8:14 9:10<br/> 18:25 19:18 92:14<br/> 151:17 152:15<br/> 154:8 155:3,10<br/> 221:9 222:9 223:16<br/> 233:9,18 406:25<br/> 432:22 529:16<br/> <b>caused</b> 9:9 151:22<br/> 152:1 153:8 236:14<br/> 238:25 264:4<br/> <b>causes</b> 49:21 91:23<br/> 159:4 264:1 496:10<br/> <b>cavities</b> 296:18<br/> <b>CDFS</b> 510:16<br/> <b>CDS</b> 358:9<br/> <b>ceases</b> 27:18<br/> <b>cell</b> 10:15<br/> <b>cement</b> 284:11<br/> 327:25 376:2,6</p> | <p><b>center</b> 7:22 255:9,10<br/> 255:11,12,16<br/> 273:19 274:15,16<br/> 275:6 397:12<br/> 429:11 472:4,11<br/> 473:3<br/> <b>central</b> 41:22 148:18<br/> 174:11 312:2<br/> <b>centralizers</b> 328:3,6<br/> 328:8,11 389:9<br/> <b>CEO</b> 225:14,17<br/> 227:16 429:6<br/> <b>certain</b> 65:8 93:11<br/> 95:21 102:17 125:2<br/> 130:12 132:1 197:4<br/> 199:24 200:1<br/> 214:11 216:3 218:9<br/> 219:14 231:18<br/> 234:6 249:2 252:21<br/> 256:4,7,13 258:11<br/> 260:22 287:19<br/> 288:11 293:5<br/> 314:15 322:11<br/> 324:21 325:16<br/> 326:3 348:5 368:23<br/> 372:14 383:6,7<br/> 394:2 400:19<br/> 401:15 411:3 421:8<br/> 425:12 429:12<br/> 465:8 510:8<br/> <b>certainly</b> 53:2 79:1<br/> 85:21 98:19 104:12<br/> 114:7 115:11 122:4<br/> 131:22 133:21<br/> 145:22 146:2<br/> 152:16 203:5<br/> 209:15 224:3<br/> 235:15 291:22<br/> 307:3 313:21 380:6<br/> 389:17 405:14<br/> 421:11 479:3<br/> <b>certificate</b> 27:15<br/> 46:20 47:8 49:8<br/> 53:25 205:24 226:7<br/> 226:13<br/> <b>certificates</b> 146:25</p> |
|--|---|--|--|

|   |  |   |  |
|---|--|---|--|
| <p>212:16 267:20<br/>303:15 510:11<br/><b>certification</b> 5:11<br/>23:21 123:24,25<br/>358:10 529:1,23<br/><b>certifications</b> 508:8<br/><b>certified</b> 1:20 357:10<br/>529:3<br/><b>certify</b> 529:5,12,15<br/><b>certifying</b> 509:15<br/>510:5<br/><b>cetera</b> 60:15 96:25<br/>166:8 284:11<br/>287:23 331:1<br/><b>CFR</b> 193:20 198:12<br/>395:18<br/><b>CFRs</b> 395:17<br/><b>chain</b> 158:21 204:21<br/>223:19 281:10<br/>301:19 359:7<br/>360:23 458:7 479:6<br/><b>chair</b> 354:2 388:19<br/><b>chaired</b> 16:11<br/><b>chairman</b> 209:20<br/><b>chairs</b> 210:20 354:9<br/>354:13,14,17<br/>417:23 423:9<br/>520:14<br/><b>challenge</b> 245:18,23<br/><b>challenged</b> 182:6<br/>246:19,20 258:23<br/>359:5<br/><b>challenges</b> 246:21<br/>258:10 262:18<br/><b>challenging</b> 258:3,12<br/>307:4<br/><b>chance</b> 126:6,8,24<br/>127:5 133:24<br/>142:18 149:10,23<br/>363:5 369:12,23<br/>384:18 485:7,14<br/><b>change</b> 78:10 89:7<br/>101:13,15 185:9<br/>218:10 247:14<br/>249:5 262:25 263:2<br/>263:10 265:10</p> | <p>282:7,9 379:19<br/>380:21 381:4,7<br/>397:10 489:1<br/><b>changed</b> 157:22<br/>159:7 267:5 325:7<br/>325:13,14 334:10<br/>415:17 416:8<br/><b>changeout</b> 307:1<br/><b>changes</b> 92:9 158:11<br/>158:14,17,19 159:1<br/>188:19 235:12<br/>237:4 250:20<br/>262:11,21 283:6<br/>512:18<br/><b>changing</b> 282:4<br/>283:10 298:21<br/>306:24<br/><b>characterization</b><br/>484:13<br/><b>characterized</b> 228:9<br/><b>charge</b> 17:17 29:5<br/>82:10,17 89:21 90:1<br/>90:2 130:19 131:1<br/>132:25 133:11<br/>134:12,18,25<br/>136:19 137:14<br/>138:1,2 153:4 155:8<br/>157:7,8 189:5,19,25<br/>190:9,18,20 191:1<br/>217:8 218:13<br/>219:17 220:15<br/>231:9 232:10<br/>251:25 290:11<br/>369:1 459:10,13,19<br/>463:24 464:12<br/>465:4,7 477:23,24<br/>478:8,13 479:7,8,24<br/>480:11 525:2,3<br/><b>chart</b> 169:4<br/><b>chartered</b> 153:3<br/><b>charterer</b> 208:4,6<br/><b>check</b> 184:9 431:8<br/><b>checked</b> 186:19<br/>289:17<br/><b>checklist</b> 184:1<br/><b>checks</b> 32:9 185:1</p> | <p>432:8<br/><b>check-in</b> 442:7<br/><b>Chemical</b> 43:3<br/><b>Chicago</b> 13:25<br/><b>chief</b> 6:8 8:4 15:16<br/>193:8 197:24 209:3<br/>251:17 272:9<br/>353:16,16 368:12<br/>371:18 406:6,12<br/>416:23 424:9<br/>425:16,19<br/><b>choke</b> 295:24<br/><b>CHOUEST</b> 472:7<br/>473:22,24 513:18<br/>513:19 517:13<br/>519:25<br/><b>CHOUEST's</b> 474:11<br/><b>Chris</b> 450:24 504:7<br/>515:1 517:3<br/><b>Christopher</b> 287:2<br/><b>cigarette</b> 447:8,10<br/><b>Cindi</b> 17:18 330:21<br/><b>circular</b> 393:25 394:7<br/><b>circulated</b> 490:20<br/><b>circumstance</b> 192:18<br/>248:6<br/><b>circumstances</b><br/>214:11,15 290:2<br/>305:25 401:12<br/>462:7 463:5 465:8<br/><b>cite</b> 486:12<br/><b>cites</b> 59:11<br/><b>City</b> 42:23,24 43:7<br/><b>civil</b> 11:13<br/><b>claim</b> 128:1<br/><b>clarification</b> 93:10<br/>268:13 283:19<br/>520:18 522:18<br/><b>clarified</b> 409:11<br/>433:16<br/><b>clarify</b> 154:19 176:15<br/>247:20 286:13<br/>332:18 338:5 349:4<br/>356:21 368:11<br/>377:15 408:16,18<br/>415:7 445:18</p> | <p>484:12<br/><b>CLARION</b> 141:23<br/><b>clarity</b> 177:4<br/><b>clarity's</b> 192:16<br/><b>Clarke</b> 3:25 4:21<br/>159:19,23 160:2<br/>162:8,16 164:6<br/>361:20 362:10,11<br/>372:6 398:13,16<br/>402:19 403:8<br/>404:16<br/><b>class</b> 15:16 47:25<br/>61:4,5,7,8,13 62:5<br/>62:21,22 82:14<br/>198:15,15,24 199:4<br/>499:25 500:2<br/><b>classed</b> 205:20,21<br/>206:1<br/><b>classes</b> 212:23<br/><b>classification</b> 24:6<br/>44:1,24 47:14,18<br/>48:2,13,17 82:7<br/>129:12,17,19<br/>183:16 192:25<br/>198:9,13,14 199:9<br/>205:19 206:3<br/><b>classified</b> 132:17,21<br/>133:9 137:1,7<br/>376:12<br/><b>classify</b> 172:1 177:6<br/>206:3,4<br/><b>cleaned</b> 354:12 386:7<br/><b>clear</b> 68:4 182:10<br/>189:22 190:21<br/>207:7,15 213:12<br/>215:9 216:6 218:13<br/>218:19,20 219:16<br/>219:24 223:12<br/>234:23 236:13,21<br/>247:3 272:5 292:17<br/>294:3 314:20<br/>316:15 320:23<br/>323:22 327:8<br/>332:19 334:3<br/>339:13 376:11<br/>385:11 403:7</p> |
|---|--|---|--|

|   |   |   |  |
|---|---|---|--|
| <p>424:11 478:7,8,12<br/>479:13 485:13<br/>489:8 490:7<br/><b>clearer</b> 197:14,14<br/>229:17 277:12<br/><b>clearly</b> 20:19 65:23<br/>172:12 194:10<br/>315:16 348:11<br/>479:23<br/><b>Clements</b> 3:20 19:21<br/>19:24 20:1 102:2,4<br/>110:3,14 116:16,25<br/>118:1,7,13,19<br/>142:12 149:4<br/>175:22 185:15<br/>194:21 335:21<br/>339:23 340:1<br/><b>Clettinger</b> 420:14<br/><b>client</b> 136:7 150:7<br/>228:16 391:13<br/><b>close</b> 36:24 245:24<br/>246:4 251:13<br/>286:17 316:20<br/>329:15 375:24<br/>386:25 393:5<br/>399:17 402:12<br/>407:25 448:6<br/>474:25 475:9,10<br/>519:13<br/><b>closed</b> 35:21 42:11<br/>48:9 56:9 58:16<br/>74:21 90:20,22 91:1<br/>91:3 107:17 184:4<br/>202:25 209:6 273:9<br/>356:2,3,25 517:20<br/>517:22<br/><b>closeout</b> 63:20 68:10<br/>75:1 238:3 307:2<br/>308:19 355:12<br/><b>closeouts</b> 185:7<br/><b>close-in</b> 28:15<br/><b>closing</b> 112:20 170:4<br/>292:20 323:14<br/>324:5 342:4 355:8<br/>356:19<br/><b>closure</b> 36:24 96:3,12</p> | <p>96:17 202:2 203:7<br/>203:24 323:20<br/><b>clothing</b> 468:7<br/><b>CMI</b> 30:3<br/><b>CMID</b> 44:3,22 48:15<br/>55:9,18 56:2 57:11<br/>68:15 97:9 124:5<br/>165:3 171:7 207:25<br/><b>Coast</b> 1:16 2:4,12,14<br/>2:15 6:2,7,16 7:5,8<br/>7:21 8:1,5,10,17 9:6<br/>12:23 50:16,23 51:7<br/>51:12,17 52:12,15<br/>53:2 89:24 192:12<br/>192:21,23 193:18<br/>193:23,25 194:2,7<br/>194:20 196:15<br/>198:1,3,11,18,25<br/>199:7 204:4 239:25<br/>240:2 247:18 248:1<br/>249:7,10,15,24,25<br/>250:3,5,18 253:17<br/>253:19,22 254:3,10<br/>254:18 256:14,18<br/>264:24 265:4<br/>277:24,24 313:25<br/>314:3,5 333:25<br/>387:5 393:20 394:1<br/>397:12,16 410:10<br/>410:24 467:21<br/>479:13 498:9,17,24<br/>499:24 524:9<br/><b>coastal</b> 29:20 49:14<br/>309:10 310:10<br/>499:24<br/><b>coaxed</b> 450:8<br/><b>coaxing</b> 454:3<br/><b>Cocales</b> 112:23<br/>307:13 308:1 324:3<br/>355:3<br/><b>cochairs</b> 418:16<br/>419:2<br/><b>code</b> 6:24,24 7:7 9:13<br/>11:4,9 23:8 26:3,4,8<br/>26:12,15,22 27:2,5<br/>27:10 28:1,5,8,12</p> | <p>29:7,10,13 30:8,15<br/>31:6,18 34:6,9<br/>48:22 49:8,8 53:6<br/>53:13,21 54:1 64:19<br/>64:22 82:10,22<br/>86:11,17 87:21 88:1<br/>88:24 103:9 114:24<br/>115:1 189:11<br/>192:15 198:4 199:1<br/>207:2,6,10,17,24<br/>208:18 224:17,18<br/>224:20,23 225:2,8<br/>225:10,25 226:25<br/>227:2,4,6,12,14,17<br/>227:19 230:14,15<br/>231:8,13,14,15,17<br/>232:20 241:22<br/>250:22,25 262:9<br/>266:10,12 267:4,9<br/>267:17 308:23<br/>309:3,10,14 310:9<br/>414:22 481:11,12<br/>481:13,16,18,25<br/>482:10,13,19,25<br/>483:2,3,7,9 485:1,6<br/>493:18<br/><b>codified</b> 321:16<br/><b>coffee</b> 447:7,9,15,18<br/>518:3<br/><b>coffers</b> 507:7<br/><b>cognizance</b> 80:13<br/><b>cold</b> 231:16<br/><b>collateral</b> 171:13<br/><b>colleague</b> 278:6<br/><b>colleagues</b> 398:20<br/>403:11<br/><b>collect</b> 77:25<br/><b>collected</b> 322:12<br/><b>college</b> 439:5<br/><b>column</b> 385:8<br/><b>columns</b> 77:25<br/>100:24 443:25<br/>473:8<br/><b>combustible</b> 173:1<br/>177:9 178:11<br/>409:23,25 410:5,6</p> | <p>412:16,22 414:16<br/>416:17 421:7,24<br/>422:2<br/><b>combustion</b> 412:24<br/>414:18<br/><b>come</b> 130:15 148:4<br/>148:10,11 160:13<br/>215:20,22 230:19<br/>231:6 239:6 250:8<br/>254:4 259:2,3 270:5<br/>270:15 272:12<br/>274:2,5 293:6<br/>302:15,17 313:3<br/>317:16,18 319:19<br/>322:3 331:23<br/>332:10 362:24<br/>366:19 404:23<br/>409:24 419:13<br/>446:2 448:23 453:3<br/>456:13 470:13<br/>480:23 485:23<br/>495:18 503:17<br/>509:3,7 510:7,9<br/>511:3 515:4 516:10<br/>522:23<br/><b>comes</b> 66:1 161:25<br/>167:17 227:4 231:7<br/>267:18 291:8<br/>301:14 400:13<br/>432:3 434:23<br/>523:13<br/><b>comfortable</b> 54:14<br/>63:17 65:16 149:12<br/>187:10 329:14<br/>343:2,10,15 345:23<br/>422:11 510:25<br/><b>coming</b> 141:18<br/>144:16 161:24<br/>170:5 204:1 217:15<br/>231:20 241:17<br/>269:25 291:5<br/>311:22 317:2 371:9<br/>378:6 399:2 401:4<br/>431:21 447:25<br/>448:1,19 449:3<br/>451:18 480:15</p> |
|---|---|---|--|

|  |  |  |   |
|--|--|--|---|
| <p>483:14 490:25<br/>503:20 505:19<br/>518:9 522:20 523:2<br/>523:5</p> <p><b>command</b> 83:14<br/>131:7,9,11,13<br/>133:11 136:19,20<br/>136:21 158:21<br/>204:21 217:2<br/>218:11 220:23<br/>221:7 222:6 223:19<br/>254:22 255:5,10,11<br/>255:12,16,19,20,24<br/>256:21 257:21,22<br/>273:14,17,19 274:1<br/>274:7,10,16,19<br/>275:6 301:19<br/>305:12 359:7<br/>365:18 398:1<br/>428:14 458:7<br/>459:19 460:14<br/>462:10,16 472:2,4<br/>472:11 473:3 479:6<br/>512:22 515:21<br/>519:17</p> <p><b>Commandant</b> 6:16<br/>8:9,17</p> <p><b>Commander</b> 320:10</p> <p><b>commands</b> 146:10<br/>484:8,10,15</p> <p><b>commenced</b> 442:19</p> <p><b>commendable</b> 9:17</p> <p><b>commended</b> 112:14<br/>324:4</p> <p><b>commending</b> 113:8</p> <p><b>comment</b> 62:1 63:7<br/>75:5 83:18 87:21<br/>88:16 92:8 104:2<br/>195:8 236:9,9<br/>265:22 308:6 462:8</p> <p><b>commented</b> 76:1</p> <p><b>comments</b> 246:19<br/>277:16 297:2<br/>419:18 436:7<br/>496:15</p> <p><b>commercial</b> 64:4</p> | <p>106:1</p> <p><b>Commission</b> 529:22</p> <p><b>commissioned</b> 237:8<br/>491:10</p> <p><b>commissioning</b> 136:9</p> <p><b>commitment</b> 323:16</p> <p><b>committed</b> 9:15</p> <p><b>committee</b> 487:14</p> <p><b>common</b> 10:11 21:16<br/>88:18,19 94:20<br/>170:20 208:11<br/>224:3 305:19</p> <p><b>communicate</b> 47:17<br/>76:25 110:9 148:16<br/>258:7 259:16,22<br/>276:1 301:13 377:1<br/>403:1 465:2 467:5<br/>473:19</p> <p><b>communicated</b> 20:19<br/>38:24 47:8 72:10,21<br/>74:19,23 76:6 82:3<br/>107:3,11 110:21<br/>117:7 147:23<br/>169:19 194:17<br/>238:14 244:7<br/>285:17 323:12<br/>330:7 429:7 470:17<br/>473:20 479:17<br/>522:24</p> <p><b>communicates</b> 76:16</p> <p><b>communicating</b><br/>20:11 66:14 148:23<br/>473:25</p> <p><b>communication</b><br/>38:12,15 39:1,14<br/>70:12 76:19 81:6<br/>150:4,11 217:14<br/>219:1 251:19<br/>271:12 274:13,24<br/>275:2,3 292:1 434:7<br/>461:7 462:17<br/>468:10,12 472:8<br/>473:23 514:7<br/>516:25 523:8</p> <p><b>communications</b><br/>218:24</p> | <p><b>communities</b> 163:4</p> <p><b>community</b> 148:24</p> <p><b>companies</b> 81:2<br/>495:22</p> <p><b>company</b> 27:20 28:3<br/>47:9 77:1 89:5<br/>104:19,19 105:2,4,8<br/>105:14,19 111:14<br/>116:9,19 117:1,9<br/>140:11 141:3<br/>154:17 163:20<br/>164:1 211:14,23<br/>224:13 227:13,14<br/>227:16 231:24<br/>232:11 234:15<br/>237:14 239:6,18<br/>250:25 262:8 283:1<br/>315:12 316:12<br/>318:9 327:12<br/>347:10 355:20<br/>363:6,20 371:23<br/>379:25 400:13<br/>401:13 402:14<br/>403:12 434:12,13<br/>438:11 444:25<br/>445:1 458:23 465:5<br/>476:6 481:5 486:6<br/>492:10 493:7,20<br/>507:7 511:7</p> <p><b>company's</b> 486:6</p> <p><b>comparative</b> 142:18</p> <p><b>compared</b> 344:15</p> <p><b>compelled</b> 292:15</p> <p><b>competence</b> 32:4<br/>69:23,25 259:17,22<br/>306:21 308:17</p> <p><b>competencies</b> 69:16<br/>69:20</p> <p><b>competency</b> 105:8,13<br/>244:3,5,8,15</p> <p><b>competent</b> 214:7<br/>216:18 259:12<br/>261:4 390:10<br/>425:19 428:6 496:8</p> <p><b>compile</b> 292:12</p> <p><b>complaints</b> 238:24</p> | <p><b>complete</b> 25:9 54:5<br/>78:19 99:15,16<br/>124:1 152:22<br/>158:25 159:2 202:2<br/>239:23 289:20,22<br/>357:8 376:8 398:1<br/>529:8</p> <p><b>completed</b> 36:1 41:21<br/>69:8 76:5 94:15,17<br/>94:25 95:7 96:8<br/>99:14,23 100:22<br/>102:21 104:14<br/>112:12 113:16<br/>115:6 124:5 170:19<br/>171:6 184:8,25<br/>186:15 202:19<br/>204:18 247:3 313:1<br/>375:16,21 493:2,10<br/>526:17</p> <p><b>completely</b> 74:12<br/>77:2 90:2 115:7<br/>143:3 177:5 202:25</p> <p><b>completing</b> 108:8<br/>386:12</p> <p><b>completion</b> 99:19<br/>113:8 168:5 202:17<br/>327:13 376:13<br/>383:8 384:23 386:5<br/>386:11,11,19<br/>433:17</p> <p><b>completions</b> 161:18</p> <p><b>complex</b> 51:20 52:1,6<br/>81:18,19,19 103:1<br/>217:5 265:16,18,21<br/>408:1 499:1</p> <p><b>complexity</b> 149:9</p> <p><b>compliance</b> 26:7,14<br/>27:2,19,20 28:4<br/>29:20 30:15 34:24<br/>103:7 165:4 191:14<br/>207:16 209:10<br/>224:22,23 225:7,24<br/>226:16 227:14,17<br/>244:12 250:22<br/>262:9 289:15,16<br/>290:6 303:23</p> |
|--|--|--|---|

|  |   |   |  |
|--|---|---|--|
| <p>481:12<br/> <b>complicated</b> 302:1<br/> 306:2<br/> <b>complication</b> 66:7<br/> <b>complied</b> 26:12<br/> <b>complies</b> 431:8<br/> <b>comply</b> 22:25 24:5<br/> 27:5 30:1 61:6<br/> 102:5 189:8 431:5<br/> 481:16<br/> <b>component</b> 95:8,9<br/> 97:7 100:19 280:21<br/> 309:13<br/> <b>components</b> 94:10,12<br/> 283:11 289:21<br/> 290:7 295:25<br/> 303:16 335:10<br/> <b>compound</b> 88:13<br/> 194:22 413:6<br/> <b>comprehensive</b> 32:9<br/> 51:19 52:5 498:25<br/> <b>comprise</b> 529:7<br/> <b>computers</b> 354:9<br/> 420:23<br/> <b>concentrate</b> 146:5<br/> 262:16 512:16<br/> <b>concentrating</b> 283:24<br/> <b>concern</b> 23:7 24:4,16<br/> 24:21 34:15,20,21<br/> 43:21 81:1 89:1<br/> 117:3,12 186:4<br/> 193:10 239:15<br/> 258:7,13,20 259:10<br/> 259:14,16,22 275:8<br/> 314:25 330:4 359:6<br/> 360:2,15,18 379:17<br/> 432:22 454:11<br/> 465:21 468:5<br/> 470:13,23 473:18<br/> 473:18 491:4 492:8<br/> 496:2<br/> <b>concerned</b> 36:4 77:13<br/> 80:25 109:5 118:2<br/> 205:8 209:16<br/> 257:24,25 258:16<br/> 258:24 259:8 290:4</p> | <p>324:13 354:6<br/> 355:23 469:25<br/> 523:25 524:1,11<br/> <b>concerning</b> 310:20<br/> 318:10 395:12<br/> <b>concerns</b> 23:14<br/> 116:25 117:22<br/> 205:13,17,17 249:1<br/> 258:21,22 275:1,11<br/> 306:15,19 307:6<br/> 322:14 353:24<br/> 359:25 361:4<br/> 398:23 399:2<br/> 469:18<br/> <b>conclude</b> 329:19<br/> 484:13<br/> <b>conclusion</b> 11:12<br/> 43:11 109:12 152:1<br/> 229:8<br/> <b>conclusions</b> 8:7 43:4<br/> 222:25 366:25<br/> 483:21 484:20<br/> <b>concurrent</b> 172:13<br/> <b>condition</b> 18:16,22<br/> 20:19 24:24 35:25<br/> 39:12 40:22 42:16<br/> 60:20 62:24 71:20<br/> 71:23 94:25 97:9,14<br/> 97:22 98:11 103:18<br/> 103:19,23,25 105:5<br/> 105:9 107:20 110:6<br/> 111:25 118:9 164:4<br/> 173:14 177:14<br/> 179:3,25 192:7<br/> 193:5 194:6 207:20<br/> 249:22 288:20<br/> 290:24 298:9<br/> 313:16,24 314:7,10<br/> 314:11,13 315:4<br/> 316:5,9 349:8<br/> 357:18 480:17<br/> <b>conditions</b> 35:19 36:3<br/> 36:15,22 38:11<br/> 40:14 41:9 55:12,14<br/> 56:13 63:5,8,19<br/> 68:5,9,16,17 71:17</p> | <p>72:5,14,19 74:19,22<br/> 75:2,13,24 96:13,17<br/> 106:23,24 107:6<br/> 108:25 110:18,23<br/> 110:24 112:21<br/> 113:12 115:7,18,19<br/> 117:5 118:11 125:3<br/> 154:21,23 170:3,22<br/> 185:8 193:14<br/> 194:16 198:7<br/> 201:21 202:21<br/> 204:14 209:11<br/> <b>condolences</b> 398:19<br/> <b>conduct</b> 12:8 29:18<br/> 29:21,24 41:14<br/> 45:21 53:24 114:15<br/> 154:14 213:13<br/> 233:17 234:3,18<br/> 235:2 236:22 237:9<br/> 238:23 239:7 253:6<br/> 254:16 289:23<br/> 290:1 308:17<br/> 313:15 327:25<br/> 348:19 349:1,16<br/> 365:13,24 366:14<br/> 373:1 375:11 376:1<br/> 431:14 432:16<br/> 487:6 488:1 491:11<br/> <b>conducted</b> 10:10 11:9<br/> 29:22 30:4,25 35:19<br/> 36:21 38:4 41:12<br/> 43:3 47:6,7 75:10<br/> 95:24 97:13 103:22<br/> 106:17 108:3 120:4<br/> 136:23 137:23<br/> 175:16 237:18<br/> 238:4 240:13,25<br/> 244:16 252:20,23<br/> 261:8 262:1,7<br/> 263:17 290:21<br/> 313:9 317:24<br/> 323:10 339:5 348:7<br/> 348:21,24 349:7,9<br/> 349:13 351:8<br/> 356:18 361:17<br/> 364:14,17,23</p> | <p>490:11 493:6,15<br/> <b>conducting</b> 107:6<br/> 141:17 144:17<br/> 158:1 214:17<br/> 237:20 312:11<br/> 356:24 434:5<br/> <b>conducts</b> 41:22<br/> <b>conduit</b> 246:11<br/> <b>confer</b> 401:9<br/> <b>conference</b> 272:7<br/> 317:20 320:14<br/> 332:16 366:1<br/> <b>conferences</b> 363:1<br/> <b>conferring</b> 388:18<br/> <b>confers</b> 86:5 503:15<br/> <b>confidence</b> 213:17<br/> 214:4 216:14<br/> 260:25 261:7,15<br/> 307:7 476:8,12,16<br/> 476:17,22<br/> <b>confident</b> 390:15<br/> 401:20<br/> <b>confidential</b> 121:23<br/> <b>configuration</b> 273:5<br/> 416:24<br/> <b>configurations</b> 271:6<br/> <b>confirm</b> 103:7 107:15<br/> 107:22 128:18<br/> 182:9 278:4<br/> <b>confirmed</b> 97:13<br/> 186:17 278:2 412:9<br/> <b>confirming</b> 127:25<br/> <b>conflict</b> 67:16<br/> <b>conflicts</b> 87:11,11<br/> <b>confront</b> 483:3<br/> <b>confuse</b> 170:12<br/> <b>confused</b> 168:24<br/> 197:12<br/> <b>confusing</b> 408:12,13<br/> 408:22 409:8<br/> 485:14<br/> <b>confusion</b> 155:7,10<br/> 223:16<br/> <b>Congress</b> 282:2<br/> <b>conjunction</b> 21:13<br/> 166:12</p> |
|--|---|---|--|

|  |  |   |   |
|--|--|---|---|
| <p><b>connected</b> 409:21<br/>423:3 469:12</p> <p><b>connection</b> 124:21<br/>344:20</p> <p><b>conscientious</b> 214:7<br/>261:4 425:18</p> <p><b>consecutive</b> 507:15</p> <p><b>consequence</b> 55:2,3,6<br/>227:15</p> <p><b>consider</b> 22:25 31:5<br/>33:12 34:2 133:24<br/>384:18 416:7<br/>470:17 520:14</p> <p><b>considerable</b> 59:24</p> <p><b>consideration</b> 469:14<br/>470:8</p> <p><b>considered</b> 22:7<br/>28:24 29:1 32:7<br/>34:5 134:3 396:5</p> <p><b>consistent</b> 21:21<br/>309:15 394:22<br/>505:11</p> <p><b>constantly</b> 252:3</p> <p><b>constituted</b> 188:18</p> <p><b>construction</b> 53:7<br/>87:24 141:10<br/>205:14 438:2</p> <p><b>contact</b> 254:22,24<br/>276:5 373:12<br/>392:20 472:3<br/>523:13</p> <p><b>contacted</b> 471:15</p> <p><b>contacting</b> 467:24</p> <p><b>contained</b> 7:6 40:13<br/>77:14,16 309:9</p> <p><b>containing</b> 99:1</p> <p><b>contemporaneous</b><br/>184:8</p> <p><b>contention</b> 175:24<br/>393:14</p> <p><b>context</b> 114:23<br/>167:25</p> <p><b>continental</b> 396:10</p> <p><b>contingency</b> 138:15<br/>138:19 253:11<br/>257:7</p> | <p><b>continue</b> 10:2 56:4<br/>184:4 200:12 226:5<br/>226:7,9,11,18<br/>248:10 323:6<br/>425:24 524:3 527:8</p> <p><b>continued</b> 23:23<br/>200:7 249:9 348:9<br/>448:11</p> <p><b>continues</b> 157:25</p> <p><b>continuing</b> 345:25</p> <p><b>continuous</b> 510:6</p> <p><b>contract</b> 45:18,23,25<br/>46:1,5,9 48:12<br/>104:5,18 119:18,22<br/>120:9 141:12<br/>148:21 299:10<br/>352:10,21 433:8<br/>505:1</p> <p><b>contracted</b> 23:4<br/>189:18,24</p> <p><b>contracting</b> 141:10</p> <p><b>contractor</b> 29:19<br/>94:22 208:12<br/>217:10</p> <p><b>contractors</b> 21:18<br/>157:10 224:4 241:3<br/>432:21 479:12</p> <p><b>contractor's</b> 283:4</p> <p><b>contribute</b> 221:8<br/>222:8</p> <p><b>contributed</b> 9:10<br/>92:1 158:23 368:21</p> <p><b>contributing</b> 49:21<br/>221:9 222:9 264:1<br/>496:10</p> <p><b>control</b> 33:18 42:6<br/>52:13,16,19 60:13<br/>90:18 96:23 119:14<br/>151:18 166:5,25<br/>167:2,12 169:10,22<br/>201:11 215:5 235:9<br/>252:10 266:15<br/>285:7 286:1,7,8,12<br/>286:19 288:7 311:5<br/>330:22 334:14,15<br/>334:22 337:11</p> | <p>338:13 340:12,15<br/>340:17 347:17<br/>368:25 389:1,6,11<br/>389:16 416:4<br/>426:15,23 443:8,15<br/>449:6 466:16 481:3<br/>482:17 512:20,22<br/>519:12</p> <p><b>controlling</b> 342:7</p> <p><b>controls</b> 172:5</p> <p><b>convene</b> 528:12</p> <p><b>convened</b> 6:23</p> <p><b>convention</b> 309:12<br/>310:12</p> <p><b>conventionally</b><br/>397:24</p> <p><b>conversation</b> 21:25<br/>22:5,9 44:20 73:8<br/>75:3 108:24 115:16<br/>116:8 154:22 164:5<br/>182:8 205:9 220:2,5<br/>220:8,9,11 231:23<br/>241:12 275:14<br/>279:17 280:10,13<br/>292:7 301:14<br/>307:17,20,22<br/>308:16 328:8<br/>373:23,25 374:2,8<br/>374:18,20 391:10<br/>391:15,22 392:19<br/>433:15 464:25<br/>466:1,9,21,25<br/>467:13,23 468:4<br/>475:3,4 506:13,17</p> <p><b>conversations</b> 23:6<br/>83:9 154:18 220:12<br/>230:16 276:9,24<br/>353:18 363:16<br/>435:7 466:3</p> <p><b>conversion</b> 283:2</p> <p><b>convey</b> 359:14<br/>374:25 398:19</p> <p><b>convinced</b> 39:16</p> <p><b>cool</b> 422:24 454:20</p> <p><b>cooling</b> 469:7,7,8,9<br/>472:15 473:8 475:1</p> | <p><b>cooperation</b> 9:24<br/>435:25</p> <p><b>coordinate</b> 468:22</p> <p><b>coordinating</b> 65:17<br/>65:17 67:1 136:23<br/>190:11 191:3,11<br/>194:9 468:24<br/>474:12 504:5</p> <p><b>coordination</b> 81:21<br/>137:23</p> <p><b>coordinator</b> 338:10<br/>480:9</p> <p><b>copied</b> 434:16</p> <p><b>copies</b> 47:15 121:18<br/>122:19,25 150:21<br/>150:22 295:13<br/>347:24</p> <p><b>copy</b> 12:10 47:3<br/>184:21 238:6 331:9<br/>341:12 343:23<br/>351:23 352:4<br/>382:22 431:3<br/>435:10 478:25<br/>479:1</p> <p><b>core</b> 279:6 438:10<br/>476:5</p> <p><b>corner</b> 127:2 282:16<br/>453:4</p> <p><b>corporate</b> 377:7</p> <p><b>correct</b> 25:2 26:21<br/>27:13 28:1,6 38:2,3<br/>46:21 54:22 61:1,2<br/>67:15 74:3,4 75:12<br/>78:4 82:24 83:1<br/>86:15,16,20 88:11<br/>91:23,24 99:12<br/>102:24 109:6,7<br/>110:24 111:19<br/>112:5,10,17 113:19<br/>113:20,24 114:10<br/>120:17 123:24<br/>127:15,16 129:3,9<br/>129:10,25 130:7,8<br/>130:11,13 134:19<br/>137:15 140:3 141:1<br/>144:6,7,9,10 152:25</p> |
|--|--|---|---|

|   |   |   |  |
|---|---|---|--|
| 153:1,5,6 157:12<br>159:10 160:9,10,24<br>161:1,2 163:21,23<br>163:25 165:11<br>167:4,5 168:7,11,12<br>168:15,16,19 169:8<br>169:9,11,12,14,15<br>169:16 172:14,17<br>172:19,23 173:2,6,7<br>173:22,23 174:7,8<br>174:25 175:1,4<br>177:10,24 178:23<br>178:24 179:12<br>180:6 182:2 184:2<br>188:13 189:23<br>193:7,13 197:17<br>198:20 199:1<br>203:11 207:18<br>219:8,9 225:14,15<br>246:25 254:14<br>256:6 257:5 260:8<br>268:17 269:11<br>272:20 279:12<br>280:15 285:4<br>292:12 305:1,6,7,14<br>305:15,20 306:16<br>306:17,21 307:8,9<br>308:11 311:8<br>313:10 314:7<br>320:25 321:25<br>326:15,25 331:16<br>332:22,24 333:4<br>342:1 348:5,6,9<br>350:20,21 352:23<br>352:24 353:5<br>356:16,20 359:23<br>362:1 364:13 366:4<br>368:18 371:11<br>372:5 376:13<br>377:19 378:25<br>379:1 380:7 381:7<br>383:1 388:11 389:2<br>389:19,20 391:6<br>396:11,18,25 397:1<br>399:12,13,15 400:1<br>400:4,5,8,11,16,18 | 401:18,22 402:1,2<br>402:12 403:24,25<br>404:3 405:15 406:1<br>407:3,4 408:5 410:4<br>410:5,7 412:17,18<br>412:25 417:6<br>420:10 421:9 425:6<br>425:7 426:17 430:1<br>430:2 431:19<br>432:25 433:19,20<br>434:22 439:25<br>458:13 465:12<br>466:7 468:1 471:11<br>473:18 474:13<br>477:5,6 481:1 482:4<br>490:5 492:25 501:9<br>506:1 513:5,6<br>517:23 519:16<br>529:8<br><b>corrected</b> 40:10,17<br>74:15 77:9 78:5,8,9<br>193:13 201:19<br>246:24 322:21<br>355:16<br><b>correcting</b> 36:15<br><b>correction</b> 78:19<br><b>corrections</b> 74:9<br><b>corrective</b> 30:22 45:7<br>45:8,9 154:9 159:4<br>242:4 377:2<br><b>correctly</b> 67:14<br>190:13 291:5<br>294:11 297:6<br>300:21 304:22<br>375:10<br><b>corresponded</b> 33:7<br>42:13<br><b>correspondence</b><br>323:1 328:8<br><b>corresponding</b> 283:4<br><b>corrupt</b> 354:11,12<br><b>cost</b> 43:5,21 44:3<br>234:17 283:4<br>298:25 299:1<br>487:24 490:8<br>508:16 509:24 | 510:4<br><b>costs</b> 106:1 508:22<br><b>counsel</b> 12:1 86:5<br>93:21 100:1 101:23<br>112:1 120:23 121:1<br>121:4,7,11,17,21<br>122:10 123:12<br>135:10 149:23<br>159:16 163:19<br>175:22 176:10<br>345:24 350:11,16<br>367:10,13,16,19<br>372:10 382:6<br>383:19 384:6 398:9<br>409:14 484:7<br>503:15 529:16<br><b>count</b> 149:20 225:18<br>448:25 466:14<br><b>counted</b> 61:15 62:7<br><b>counterpart</b> 19:4,12<br>19:13,15 241:7,8<br>270:8 301:17 401:8<br>492:12,19<br><b>countersign</b> 271:11<br><b>country</b> 268:24<br><b>County</b> 529:2,5,21<br><b>couple</b> 64:14 79:5<br>94:4 95:20 164:21<br>179:16 247:5 249:4<br>300:17 304:16<br>307:16 314:18<br>341:16 344:17<br>351:13 363:18<br>364:22 421:4<br>423:25 424:10<br>513:21<br><b>course</b> 19:1 154:2<br>182:5 213:20 240:6<br>351:4 382:13 446:9<br><b>courses</b> 288:11<br><b>court</b> 2:15 6:5 11:19<br>210:24 221:14<br>362:13 418:19<br>460:25 521:15<br>527:22 528:2<br><b>cover</b> 29:14 95:9 | 189:12 217:23<br>295:1 510:19,22<br><b>coverage</b> 10:3<br><b>covered</b> 48:6 382:4<br>454:13<br><b>covering</b> 260:20<br>370:15<br><b>covers</b> 88:1<br><b>Cox</b> 202:8<br><b>coxswain</b> 453:14,24<br>459:17 462:16<br>463:1<br><b>co-chair</b> 2:3,5 6:21<br>436:8<br><b>crack</b> 204:9<br><b>craft</b> 50:18 51:4<br>265:2 453:9 455:15<br>496:25 498:3<br><b>Cramond</b> 3:6 13:16<br>13:16,18 14:5 54:17<br>64:18 67:10 73:18<br>91:21 94:3 100:15<br>102:3 118:22 123:9<br>142:24 155:18<br>187:17 194:4,5<br>200:22 209:24<br>299:5<br><b>crane</b> 351:14,18,21<br>447:13 456:16<br><b>cranes</b> 203:10,12,16<br><b>create</b> 241:12 406:25<br>460:5<br><b>credentials</b> 229:5<br><b>credit</b> 446:6<br><b>crew</b> 76:11 77:21<br>79:11 84:7 96:18<br>112:20 160:19<br>161:25 162:1<br>232:25 255:6,21<br>284:24 327:2 337:8<br>353:15,19,23 354:1<br>356:5 394:21 395:3<br>395:5 399:11,21<br>400:22 401:10,20<br>402:4,7,11,19 403:1<br>403:9,14 407:9 |
|---|---|---|--|

|  |  |  |   |
|--|--|--|---|
| 459:20 467:8<br>481:20 482:5,21<br>488:9 495:25 506:4<br><b>crews</b> 161:10 162:18<br>195:19 403:19<br>404:7<br><b>crew's</b> 317:5<br><b>criteria</b> 22:16,20<br>231:18,22 248:5<br>324:19<br><b>critical</b> 32:25 50:21<br>113:22 114:6,7<br>186:1 245:2 247:8<br>259:5 264:23 307:1<br>307:3 322:8,19<br>331:20 497:1,6,9,15<br>498:1 507:25<br><b>cross-examine</b> 125:6<br><b>crying</b> 279:22 280:9<br>392:5,6<br><b>CSR</b> 1:25 529:20<br><b>culture</b> 237:10<br>491:11<br><b>cup</b> 447:7<br><b>cured</b> 112:9<br><b>curious</b> 259:4 315:20<br><b>current</b> 99:3 101:8<br>311:19 335:19<br><b>currently</b> 16:11 17:6<br>17:18 51:10 141:21<br>248:18 263:6<br><b>Curt</b> 155:16 216:17<br>219:1 255:22 262:3<br>277:5 393:4 449:4<br>450:16 453:3,10<br>456:12 469:2<br>501:20<br><b>curtain</b> 474:23<br><b>Curt's</b> 261:25<br><b>custody</b> 184:19<br><b>customer</b> 270:13<br>506:24<br><b>customers</b> 432:14<br><b>cut</b> 280:23 497:11<br>516:24 517:9,14,15<br>517:17,24 519:11 | <b>cutting</b> 43:5,21 517:3<br>523:15<br><hr/> <b>D</b><br><b>daily</b> 60:8 70:7 105:5<br>106:4 107:9 241:14<br>317:8 330:13<br>352:23 371:14,15<br>371:18,19<br><b>damage</b> 233:24<br>234:17 236:15<br>458:17,18 466:19<br>475:7 486:20<br>487:25 490:8<br><b>damaged</b> 449:15<br><b>damages</b> 507:6<br><b>DAMON</b> 50:20 256:1<br>256:22 264:22<br>275:8,12,24 277:2<br>279:7 390:22 391:5<br>496:25 515:20<br><b>dampener</b> 407:25<br><b>dampeners</b> 294:12<br>415:15<br><b>dampers</b> 77:16<br><b>Dan</b> 141:24<br><b>danger</b> 215:17<br><b>dangers</b> 79:17<br><b>Daniel</b> 320:18<br><b>Daniels</b> 406:11,15<br><b>dark</b> 445:24<br><b>data</b> 281:14 332:15<br>371:9,13 521:1<br><b>date</b> 42:19 46:3 124:1<br>195:18 324:21<br>338:15 349:14<br>379:11 394:4<br>474:14 493:11<br>516:4 529:23<br><b>dated</b> 342:2 350:4<br><b>dates</b> 441:14<br><b>Daun</b> 5:3 219:7<br>220:13 255:22<br>271:18 277:4 279:1<br>279:9 301:7,21<br>302:3,23 353:10 | 374:24,25 375:11<br>407:7 437:2,3 521:8<br>522:3<br><b>Dave</b> 444:1 467:3<br><b>David</b> 2:5 6:21 7:10<br>275:15 276:25<br>302:23,24 442:23<br>446:22 467:6<br>474:20 492:14<br>504:6,7,8 506:2<br>520:2 524:19,24<br><b>Davies</b> 202:7<br><b>davits</b> 453:4<br><b>day</b> 25:16 63:3 64:2<br>71:4 101:13 107:11<br>151:23 158:1<br>178:15 230:10<br>231:17 251:13<br>252:3 271:23 272:5<br>293:14,14 299:6,7<br>318:17 319:1 326:9<br>326:9,10,10 331:22<br>351:1 352:22 353:3<br>353:3 360:6 361:8<br>362:18 363:7,11,15<br>365:11 371:21<br>372:1 373:1,2,3<br>374:4 376:9 383:1<br>391:23 424:18<br>425:9 436:11<br>507:14 509:6,9,12<br>513:24 523:17<br>527:11 529:18<br><b>daylight</b> 470:14<br><b>days</b> 12:6,16 33:6<br>74:6 108:6,22 113:7<br>114:18 115:1,14<br>160:5 291:17<br>299:15 307:24<br>315:8,20 318:21<br>326:14 335:10,11<br>351:9 353:1 359:25<br>370:6,8,8,9,10<br>371:12 376:4,9<br>380:22 402:15<br>403:13 441:22 | 504:1,3 506:6<br>507:15 509:9,11,18<br>509:19,25 515:25<br>515:25 523:17<br>525:21,22<br><b>day-to-day</b> 48:16<br>271:22<br><b>DB</b> 369:5,9,19<br><b>DD3</b> 440:15 441:5<br>504:9 515:3,6<br><b>dead</b> 278:9 517:4,6,8<br><b>deal</b> 19:18 254:6<br>265:20 441:1<br><b>dealing</b> 20:11 32:20<br>44:17 52:3 71:21<br>82:6,14 189:14<br><b>dealt</b> 77:11<br><b>death</b> 353:20<br><b>Deb</b> 358:20 402:21<br><b>debate</b> 146:9 305:11<br>361:18 445:23<br>504:4<br><b>debating</b> 146:8<br><b>December</b> 123:18<br>146:21 149:2<br>340:21 343:25<br>344:3 348:20<br>376:16 378:23<br>383:7 440:14<br>488:17<br><b>decide</b> 334:19 345:22<br>441:21<br><b>decided</b> 441:5 467:4<br><b>decides</b> 347:10<br><b>decision</b> 38:19 56:6<br>65:14 81:12 84:9<br>108:16 192:1<br>215:16,21,23 252:2<br>258:15,23 301:25<br>302:2,4 315:7,13<br>325:11 327:19,19<br>327:20,22,23,24<br>328:1,1,2 359:20<br>360:3,5,21,23,24<br>361:10 390:6,8<br>394:20 428:3 |
|--|--|--|---|

|  |   |   |  |
|--|---|---|--|
| 453:11 464:9<br>475:20,25<br><b>decisions</b> 85:12<br>318:10 389:8,9,13<br>389:17 459:15<br><b>decision-maker</b> 84:8<br>251:23<br><b>decision-making</b><br>9:22 52:11 259:17<br>259:23<br><b>deck</b> 203:10,15<br>447:13 451:17<br>453:9 459:17<br>467:10 474:4<br>489:11 503:6,16,19<br>519:23<br><b>decks</b> 443:24 448:20<br><b>decorum</b> 10:6<br><b>deem</b> 39:10<br><b>deemed</b> 38:22 39:4<br>113:22 114:6,11<br>247:8 256:24 298:9<br>322:8 347:12<br><b>deep</b> 141:14,19<br>143:17 494:25<br><b>deepwater</b> 1:3 6:14<br>15:24 16:5,19,19,24<br>18:18 21:5,23 22:6<br>22:11 23:19 24:17<br>24:23 25:7,8 34:17<br>36:7,9 37:2,13,18<br>38:13 39:17 43:12<br>45:18 46:20 47:11<br>48:22,25 52:2,2<br>56:14 58:8 66:22<br>69:8 84:22 102:14<br>102:25 103:14,19<br>104:4,17 111:15<br>112:6 115:3,13,22<br>116:2 117:6 119:15<br>119:19,25 124:6<br>128:21,22 130:17<br>132:20 133:6<br>136:18 137:1<br>141:22,23 142:3,16<br>143:18 151:4 160:5 | 160:25 161:5,10,25<br>164:25 165:23<br>172:20 173:9<br>175:11 178:7<br>180:24 181:17<br>182:16 183:5<br>193:11 194:15<br>205:20 206:22<br>207:4,9 212:6,8<br>213:11 219:10,17<br>224:22 226:5,11<br>232:6 233:24<br>234:13,15 237:8,16<br>237:22 240:2 243:1<br>250:20 251:22<br>252:6 253:5 254:13<br>257:18 259:4 260:1<br>261:2,17,23 262:12<br>262:18 265:16<br>272:23 286:23<br>287:5 288:19<br>293:15,18 296:3<br>299:6 300:6 303:15<br>304:20,25 308:5,10<br>308:13 310:15<br>312:11 323:5 327:2<br>335:13 337:7,13,15<br>337:20,24 338:7,9<br>338:14 339:9<br>344:20 348:1,22<br>349:3 350:3 352:10<br>353:1 356:16 357:5<br>359:11,17 368:5<br>370:7,24 376:11<br>378:24 382:25<br>384:8 385:1 394:23<br>399:8,12 400:21<br>428:15 437:21,25<br>439:24 440:18<br>442:3 455:24 458:8<br>462:18 464:5<br>475:16 476:4,9,13<br>476:18,23 477:7,8<br>478:5,6 486:19<br>487:23 491:9<br>492:24 493:15 | 494:2 495:1,5,14,20<br>495:24 499:3<br>500:10 504:13<br>505:4 512:4 513:5<br>515:7 518:17<br><b>defeats</b> 33:18 60:13<br>90:18 96:23 166:25<br>167:13 169:22<br>186:19<br><b>defect</b> 32:19<br><b>defective</b> 199:5<br><b>defects</b> 166:5 177:15<br><b>deficiencies</b> 74:15<br>77:23 194:2 195:3,5<br>209:10,17 526:19<br><b>deficiency</b> 59:20<br>62:21 410:16<br><b>define</b> 30:10 31:16<br>32:2 102:17 108:19<br>215:25 218:9 251:1<br>296:24<br><b>defined</b> 21:15 200:15<br>429:13<br><b>defines</b> 201:20<br>395:19 479:23<br><b>definitely</b> 292:4,6<br>306:10 315:15<br>366:11 425:22<br>527:11<br><b>definition</b> 28:11,13<br>28:18,21,22 30:23<br>61:4 114:23 189:21<br>242:6 243:3 287:14<br>372:8 397:20<br><b>degree</b> 98:7 200:11<br>400:19<br><b>degrees</b> 44:9 380:13<br><b>delay</b> 107:24 507:8<br><b>delays</b> 276:6,8<br><b>deliberate</b> 394:20<br><b>deliberations</b> 11:11<br><b>delivery</b> 70:1<br><b>delve</b> 124:23<br><b>demand</b> 504:19<br><b>demise</b> 370:12<br><b>demonstrate</b> 246:7 | 287:18<br><b>demonstrated</b> 32:25<br>243:5 245:2<br><b>demonstration</b> 321:1<br><b>deny</b> 107:22<br><b>Denyce</b> 1:19,25 529:3<br>529:20<br><b>depart</b> 452:25 459:18<br><b>departed</b> 495:22<br><b>department</b> 6:9,10<br>81:22,23,24,25<br>90:10 111:6,8<br>115:11 116:11,21<br>148:11,12 191:13<br>260:23 272:13<br>287:16,20,20 297:3<br>322:25 357:21<br><b>departments</b> 81:17<br>81:21 82:3 137:24<br>188:18 190:12<br>191:11<br><b>departure</b> 524:25<br><b>depend</b> 244:23<br>281:13 377:6<br><b>depended</b> 243:13<br><b>dependent</b> 22:22<br>70:14 71:7 509:12<br><b>depending</b> 71:8<br>193:4 233:19<br>270:24 317:15<br>376:23<br><b>depends</b> 243:14<br>290:7 342:20<br>407:23 418:14<br>478:5<br><b>deployment</b> 21:5<br>44:7<br><b>derived</b> 309:12<br>310:11<br><b>derrick</b> 203:22 204:6<br>204:7 448:17<br>449:11 450:13<br>452:12,13,20<br>466:18 503:20<br><b>describe</b> 21:4 70:11<br>338:18 |
|--|---|---|--|

|   |   |  |  |
|---|---|--|--|
| <p><b>described</b> 82:25<br/>105:2 156:5,16<br/>180:1 182:12<br/>297:22 315:4<br/>370:20 446:10<br/>501:13</p> <p><b>describing</b> 114:20</p> <p><b>description</b> 356:3<br/>397:20 429:4</p> <p><b>design</b> 258:16 266:13<br/>318:7,10 326:24<br/>327:4,10 389:7<br/>431:16,18,22 438:2<br/>513:14</p> <p><b>designated</b> 6:20 26:7<br/>33:14 83:10 217:6<br/>292:25 397:25<br/>437:22 438:16</p> <p><b>designation</b> 33:9</p> <p><b>designed</b> 87:23<br/>297:11 334:9<br/>498:13</p> <p><b>designee</b> 490:2</p> <p><b>designing</b> 430:1</p> <p><b>designs</b> 318:14</p> <p><b>Despite</b> 32:24 245:1</p> <p><b>destined</b> 141:12</p> <p><b>detail</b> 18:23 19:9<br/>51:2,6 70:10 77:14<br/>89:14 134:24 135:5<br/>145:5 182:13<br/>470:10</p> <p><b>detailed</b> 432:5</p> <p><b>details</b> 78:21 99:20<br/>134:10,22 155:12<br/>158:5 165:24<br/>181:19 182:8<br/>205:23</p> <p><b>detect</b> 409:22,23,23</p> <p><b>detectors</b> 310:25</p> <p><b>detection</b> 97:17 180:1<br/>310:24 334:11,12<br/>412:20 417:4,8,10<br/>419:10 426:14</p> <p><b>detects</b> 421:6</p> <p><b>deterioration</b> 427:20</p> | <p><b>determination</b><br/>180:11 250:4 395:4</p> <p><b>determine</b> 8:14,24<br/>15:9 16:3 38:5<br/>132:16 170:15<br/>185:22 510:14</p> <p><b>determined</b> 6:10<br/>180:19</p> <p><b>detrimental</b> 31:25<br/>243:23</p> <p><b>develop</b> 51:19 498:24</p> <p><b>developed</b> 10:20,21<br/>21:17 52:5 72:9<br/>152:13 384:25<br/>385:2 431:16</p> <p><b>developing</b> 327:13</p> <p><b>deviation</b> 30:19<br/>242:1</p> <p><b>Dewey</b> 443:12,14</p> <p><b>DGPS</b> 236:13 490:7</p> <p><b>dialogue</b> 70:12<br/>105:25</p> <p><b>diary</b> 113:16</p> <p><b>dichotomy</b> 156:4,14</p> <p><b>diesel-powered</b> 15:18</p> <p><b>difference</b> 70:4<br/>129:18 130:2<br/>161:16 312:13<br/>425:5</p> <p><b>different</b> 27:6 35:24<br/>36:11 39:9 66:6<br/>70:3 74:11 80:15<br/>81:16 95:9 102:16<br/>105:1 134:11<br/>137:23 142:3 143:4<br/>146:14 156:21<br/>161:9 162:18 163:3<br/>163:4,7,7,16 168:25<br/>170:5 176:15<br/>177:25 178:1<br/>183:12,13,17,18<br/>190:22 191:11<br/>197:2 203:3,3<br/>205:13 216:23<br/>217:17 229:1 242:6<br/>244:8 280:19 288:6</p> | <p>293:2 305:25 312:2<br/>322:14 380:13<br/>408:2 432:20 443:6<br/>443:6 478:17,21,22<br/>478:23 483:24<br/>488:18 513:14</p> <p><b>differentiate</b> 64:23<br/>86:18</p> <p><b>differently</b> 407:13</p> <p><b>differing</b> 64:2</p> <p><b>difficult</b> 150:3 236:9<br/>336:4 400:4,7<br/>476:25</p> <p><b>difficulty</b> 451:12<br/>464:20</p> <p><b>digit</b> 201:1 203:4</p> <p><b>digital</b> 32:25 42:17<br/>245:2</p> <p><b>dignity</b> 10:7</p> <p><b>diligence</b> 431:11</p> <p><b>diligent</b> 303:20</p> <p><b>dilution</b> 31:24 243:22<br/>244:1,2</p> <p><b>dinner</b> 436:16</p> <p><b>direct</b> 13:7 38:15<br/>87:15 166:11<br/>312:20 343:11<br/>395:18 397:11<br/>406:21</p> <p><b>directed</b> 471:18<br/>511:11</p> <p><b>directing</b> 465:3</p> <p><b>direction</b> 69:19</p> <p><b>directions</b> 159:8</p> <p><b>directives</b> 158:17</p> <p><b>directly</b> 16:21 17:22<br/>41:5 47:17 68:19<br/>76:25 213:8 214:10<br/>402:9 434:9 441:3<br/>519:15,19,21</p> <p><b>director</b> 6:17 8:11,18<br/>388:8</p> <p><b>disagree</b> 107:15</p> <p><b>disagreed</b> 71:12<br/>245:23 302:14</p> <p><b>disagreement</b> 71:15</p> | <p>300:20,24,25 301:3<br/>418:2</p> <p><b>disagreements</b><br/>520:20</p> <p><b>disassembled</b> 295:25</p> <p><b>disaster</b> 154:4</p> <p><b>discipline</b> 281:13</p> <p><b>disconnect</b> 138:23<br/>180:13,15 181:10<br/>181:17 182:4 215:6<br/>272:22 408:9 451:5<br/>511:17,24</p> <p><b>disconnected</b> 450:20<br/>450:22</p> <p><b>discontinue</b> 23:20</p> <p><b>discontinued</b> 23:23<br/>23:24,25</p> <p><b>discovered</b> 72:6</p> <p><b>DISCOVERER</b><br/>236:13 438:1 477:5<br/>477:16 490:7</p> <p><b>discovery</b> 11:13<br/>185:17 186:9</p> <p><b>discrepancies</b> 88:22<br/>193:18 245:14,17<br/>249:8 284:16,18<br/>433:14 488:21</p> <p><b>discrepancy</b> 32:12<br/>35:2,5,8 40:7,7<br/>193:12 245:18<br/>247:2</p> <p><b>discuss</b> 307:10<br/>318:19 340:8,16<br/>353:7 361:19<br/>374:17 436:20<br/>444:8 466:15<br/>472:11</p> <p><b>discussed</b> 12:9 35:11<br/>94:5 219:12,14<br/>220:14,16 230:13<br/>248:14 285:7 292:4<br/>308:20 321:16,22<br/>328:4 333:1 363:2<br/>372:4 373:3,9 374:5<br/>374:14 425:25<br/>456:20</p> |
|---|---|--|--|

|   |   |  |   |
|---|---|--|---|
| <p><b>discussion</b> 35:16 40:4<br/>216:5 324:24 328:5<br/>329:23 363:10<br/>374:14 443:17,20<br/>455:25 457:7 458:7<br/>472:14,15,25 473:2<br/>473:5</p> <p><b>discussions</b> 308:15<br/>363:4</p> <p><b>disembarked</b> 442:3</p> <p><b>dislocated</b> 443:4</p> <p><b>dismissed</b> 210:12<br/>435:25</p> <p><b>displace</b> 361:7<br/>384:16,23</p> <p><b>displaced</b> 385:6</p> <p><b>displacement</b> 374:15<br/>376:1 381:17 384:3<br/>384:24 385:2,18<br/>387:15</p> <p><b>displacing</b> 382:25<br/>383:9 387:12<br/>505:16</p> <p><b>display</b> 489:8</p> <p><b>displayed</b> 273:8<br/>489:10</p> <p><b>dispute</b> 195:19</p> <p><b>disputing</b> 278:13</p> <p><b>Disrupting</b> 427:24</p> <p><b>disruption</b> 406:25</p> <p><b>disruptive</b> 9:25</p> <p><b>disseminate</b> 376:21</p> <p><b>disseminates</b> 377:16</p> <p><b>distinction</b> 29:7 90:6</p> <p><b>distract</b> 10:6 457:10</p> <p><b>distribute</b> 490:25</p> <p><b>distributed</b> 377:8<br/>491:2</p> <p><b>district</b> 6:8 7:15,16</p> <p><b>diverter</b> 295:25</p> <p><b>divided</b> 71:7</p> <p><b>division</b> 8:4 157:1<br/>304:19 305:17,23<br/>377:16,16,19,21,23<br/>377:25 437:10,18</p> <p><b>divisions</b> 227:3</p> | <p>251:20 477:3</p> <p><b>divvied</b> 204:9</p> <p><b>divvies</b> 201:18 204:1<br/>204:12</p> <p><b>divvy</b> 202:12</p> <p><b>DNV</b> 46:18 47:5,10<br/>53:23 230:17<br/>231:19 267:18<br/>493:10,14,17,21,22<br/>509:16 511:2</p> <p><b>dock</b> 298:20</p> <p><b>document</b> 20:25<br/>21:16 27:20 49:7,15<br/>56:12 57:18 59:1<br/>60:24 73:19 75:18<br/>78:11 98:14,20<br/>99:12 122:2,23<br/>123:20 124:20<br/>125:5,9,11,15,20<br/>126:17 128:1,10,19<br/>129:4 133:9,10<br/>134:6,15 135:2,3,11<br/>135:17,20,24 136:1<br/>136:16 164:21<br/>165:8 169:18<br/>170:13,15,21 171:1<br/>171:8,19 175:25<br/>178:25 184:7 186:1<br/>186:4,14,21 208:11<br/>218:1,2,6,7 226:15<br/>251:1 287:4 295:9<br/>328:22,22 329:14<br/>330:9,15 331:4,11<br/>331:15 342:13,17<br/>345:22 346:7 369:1<br/>378:4 382:22 383:4<br/>383:12 388:11<br/>432:20 433:1,4,9<br/>434:2,17 478:16,25<br/>479:2</p> <p><b>documentation</b> 47:16<br/>97:10 115:17<br/>124:10 167:16<br/>171:12,16 176:14<br/>181:2 185:6</p> <p><b>documented</b> 39:13</p> | <p>56:6 59:15 171:8<br/>283:7</p> <p><b>documents</b> 94:21<br/>100:13 121:19<br/>122:8,18 123:3<br/>126:3,8 129:11<br/>144:3,4 146:18<br/>147:1 150:18 168:9<br/>168:23 170:6<br/>171:13,14 184:24<br/>185:12,13,22 186:6<br/>278:20 294:17<br/>303:21 330:17<br/>331:18 368:24<br/>521:25 529:9</p> <p><b>doing</b> 50:9 90:17<br/>94:11 116:14,24<br/>156:25 184:8<br/>207:14 208:7 284:5<br/>309:19 315:23<br/>413:20 431:7 435:1<br/>451:9 457:14 468:9<br/>468:10,16 473:22<br/>480:18 483:11<br/>507:13</p> <p><b>dollar</b> 507:6</p> <p><b>dollars</b> 353:3</p> <p><b>domestic</b> 187:22</p> <p><b>door</b> 220:13 449:6<br/>450:15 453:25<br/>454:9 455:13</p> <p><b>doors</b> 77:20,21</p> <p><b>dotted</b> 68:25</p> <p><b>dotted-line</b> 205:2</p> <p><b>doubt</b> 214:6 316:15<br/>390:16 426:1</p> <p><b>Doug</b> 121:14 368:6<br/>368:14,15 369:4</p> <p><b>Douglas</b> 121:9<br/>367:21,25 368:1</p> <p><b>Dowel</b> 406:6</p> <p><b>downplaying</b> 474:6</p> <p><b>downstairs</b> 502:20</p> <p><b>downtime</b> 64:2 67:23<br/>289:15 299:7,11,20<br/>301:11,16 506:14</p> | <p>506:18,23 507:9,16<br/>509:25 510:3</p> <p><b>DP</b> 129:19</p> <p><b>DPO</b> 333:24,24<br/>334:16 420:18<br/>424:20 446:9,25<br/>501:13</p> <p><b>DPOs</b> 424:21</p> <p><b>DPV</b> 129:12,17,21<br/>130:15 134:17<br/>144:6,9</p> <p><b>draft</b> 36:2 352:5<br/>469:25 474:4</p> <p><b>draw</b> 293:3,9 380:14<br/>394:16</p> <p><b>drawing</b> 514:14</p> <p><b>drawings</b> 275:19<br/>514:19</p> <p><b>drawn</b> 222:25 229:8<br/>380:17</p> <p><b>drill</b> 183:18 212:5<br/>232:22,25 312:4,7<br/>333:6,10 334:15,23<br/>364:6 365:5 426:16<br/>426:23 478:4<br/>495:18</p> <p><b>drilled</b> 67:18,24 68:1<br/>507:5</p> <p><b>driller</b> 266:7 312:7<br/>325:19 403:23<br/>437:17 443:8,12,23<br/>457:1 499:13,13</p> <p><b>drillers</b> 334:24</p> <p><b>driller's</b> 443:8</p> <p><b>drilling</b> 1:3 6:13<br/>15:24 16:5,19,25<br/>18:18 21:5,10,10,11<br/>23:9,11,17,21 29:8<br/>29:15,19 31:12<br/>32:20 33:1 40:24<br/>42:18,21 43:12,13<br/>43:16 44:8 52:3,4<br/>54:9 62:1 63:6<br/>64:23 65:4,10 66:8<br/>75:9 79:22 81:2,7<br/>81:22 83:22,23,24</p> |
|---|---|--|---|

|  |  |   |   |
|--|--|---|---|
| 85:7 86:18 87:25<br>88:4,9,11 89:17<br>94:14,14 102:19,20<br>108:8 119:9,20,23<br>120:6 129:24 130:3<br>141:10,11 143:17<br>148:23 157:7<br>160:22,23 161:13<br>161:18 162:13,23<br>163:8,15 167:1<br>169:10 170:9 172:3<br>181:6 201:11 202:7<br>202:13,16 203:17<br>203:21 205:21<br>214:17 233:11,20<br>243:8 245:3 251:11<br>252:16 258:1,6,8,12<br>261:2,23 262:12<br>263:12 265:16,17<br>265:25 266:3,14<br>267:3 284:10<br>297:24 298:24<br>300:22 308:23<br>309:5,11 310:10<br>311:17 318:4 338:1<br>340:12,14,17 354:2<br>354:3,5 357:25<br>358:6 361:7 371:3<br>381:17 383:8<br>394:14 401:6 431:2<br>431:3 432:3,7<br>437:25 438:2,9<br>444:21 446:4<br>452:19 457:13<br>476:13,23 477:8<br>495:1,5,14,20,24<br>499:3,5,12 508:17<br>508:23 509:4 510:2<br>510:12,20 526:24<br><b>drills</b> 252:20 253:7<br>333:2 480:13,14,21<br><b>Dril-Quip</b> 121:6,7<br>367:18,19<br><b>drive</b> 312:24<br><b>driver</b> 507:23<br><b>drop</b> 511:8,12 | <b>dropped</b> 375:5<br>444:18<br><b>dropping</b> 299:12<br><b>drops</b> 375:12<br><b>drove</b> 490:23<br><b>dry</b> 298:20<br><b>drydock</b> 236:14,21<br>490:8<br><b>dry-docked</b> 56:15<br><b>dual</b> 83:14 86:3<br><b>ductwork</b> 77:17<br><b>due</b> 67:23 185:16,25<br>219:21 234:14<br>236:12 326:9<br>330:24 354:10<br>361:1 370:15<br>430:10 431:11<br>439:23 487:22<br>490:6 505:4 510:3<br><b>duly</b> 13:19 211:1<br>437:4<br><b>duplicate</b> 122:25<br><b>duplicates</b> 326:12<br><b>duplication</b> 325:15<br>326:5<br><b>duplications</b> 325:21<br><b>Dupree</b> 16:12,13,20<br>16:23 35:3 38:12,16<br><b>duration</b> 78:18<br>508:10<br><b>duties</b> 15:7,8 123:23<br>211:25 287:19<br>438:7 479:22<br>482:14 502:24<br><b>duty</b> 109:8,24 110:5<br>110:8 138:13<br>193:25 194:6 196:9<br>198:2 476:9<br><b>DWH</b> 522:22<br><b>Dykes</b> 2:5 3:12,16 4:4<br>4:24 6:21 7:10<br>54:13 73:15,17 77:8<br>80:25 89:16 90:13<br>200:21 206:8<br>416:21 417:7,25<br>419:8,20 423:10 | 426:7,8,9,12 427:6<br>436:7,20<br><b>dynamic</b> 94:25 98:9<br>108:14 180:15<br>183:7 205:22,25<br>490:22<br><b>dynamically</b> 28:23<br><b>dynamically-positi...</b><br>129:8 130:3,4 133:7<br><b>D&amp;C</b> 39:2 148:11<br>161:17 163:5,12<br>205:10   | 432:18 456:13<br>493:24 501:7<br>503:24 505:24<br>513:3 526:4<br><b>early</b> 57:2 240:20<br>276:22 313:17<br>354:25 442:5<br>474:16<br><b>earnest</b> 441:16<br><b>easier</b> 336:23<br><b>easily</b> 196:6<br><b>East</b> 378:1<br><b>economic</b> 105:22,24<br>106:1<br><b>EDS</b> 138:23 139:1,5<br>140:2 141:1 180:12<br>180:23 273:1,2,10<br>280:22 389:22<br>390:1,4 401:25<br>408:13 459:7,11<br>460:11 512:21<br><b>EDSed</b> 390:15<br><b>EDSing</b> 463:23<br><b>educate</b> 228:4<br><b>education</b> 212:14<br>321:13 480:14<br><b>educational</b> 15:14<br>212:13 439:3<br><b>effect</b> 58:2 222:18<br>364:25 365:4 394:9<br>408:6 501:12<br><b>effective</b> 20:8,23 52:8<br>65:14 209:7 217:1<br>253:9 274:13 479:9<br><b>effectively</b> 268:23<br><b>effectiveness</b> 18:16<br>50:5 54:7 264:10<br>499:16<br><b>effects</b> 8:21<br><b>effectuate</b> 140:25<br><b>efficiency</b> 12:4<br>286:10<br><b>efficient</b> 209:7<br>213:13 217:2 286:7<br>438:8 479:9<br><b>efficiently</b> 217:9 |
| <b>E</b>   |  |   |   |
|  |  | <b>E</b> 2:1,1 14:3 54:15<br>64:16,16 67:8 73:16<br>77:6 79:7 80:22,22<br>89:15,15 90:14<br>91:19 94:1 102:1<br>118:20 123:7<br>151:12 156:2<br>159:22 164:15<br>187:15,15 199:15<br>199:15 200:20,20<br>206:11 211:2<br>268:10 300:15<br>303:6,6 304:12<br>311:14 320:20<br>336:17 359:1<br>367:22 388:22<br>393:7 398:12 405:5<br>424:3 426:11 427:9<br>427:9 428:11,11<br>437:5 501:5 529:21<br><b>earlier</b> 12:10 54:17<br>63:21 64:18 76:8<br>91:21 119:1 122:22<br>161:4 179:11,15<br>228:3,4 271:25<br>272:16 273:15<br>282:7 288:25 299:5<br>314:14 321:16<br>326:17 332:2 333:1<br>346:18 359:3<br>365:17 370:20<br>381:21,25 426:13 |   |

|   |   |  |  |
|---|---|--|--|
| <p><b>effort</b> 100:18 122:21<br/>154:5 158:5,8 239:9<br/>323:19 324:5<br/>399:15 468:23,25<br/>471:9 472:12<br/>474:12,19</p> <p><b>efforts</b> 254:12 255:2<br/>256:5 471:2 473:13</p> <p><b>egregious</b> 149:17</p> <p><b>eight</b> 34:4 301:2</p> <p><b>eight-word</b> 414:13</p> <p><b>either</b> 58:15 70:3<br/>96:3 109:2 110:23<br/>116:9,18 122:24<br/>125:16 147:24<br/>163:4 208:8 214:12<br/>230:14 238:11<br/>240:20 246:23<br/>256:13,23 280:20<br/>303:21 322:20<br/>329:4 347:11 377:1<br/>407:25 409:15<br/>417:22 431:23<br/>433:8 490:19 504:7<br/>504:10</p> <p><b>elected</b> 239:5 249:3<br/>286:5 315:6 355:18</p> <p><b>electrical</b> 394:13<br/>439:5 516:24</p> <p><b>electrician</b> 353:16<br/>406:12</p> <p><b>electricians</b> 293:5</p> <p><b>electronic</b> 182:19,20</p> <p><b>electronically</b> 421:8</p> <p><b>element</b> 68:7 102:18<br/>299:22 300:1,4,8<br/>317:2 434:4 523:15</p> <p><b>elements</b> 229:1<br/>299:25</p> <p><b>elevate</b> 301:6</p> <p><b>elevated</b> 71:19 72:14</p> <p><b>eliminate</b> 122:7</p> <p><b>embedded</b> 225:2<br/>231:14,15</p> <p><b>emergencies</b> 218:9<br/>368:25 479:24</p> | <p>481:8 489:8</p> <p><b>emergency</b> 58:2<br/>138:23,23 179:19<br/>179:20 180:13<br/>181:9 214:19,21,23<br/>214:25 215:5<br/>217:15,18 218:4,25<br/>272:22 274:14<br/>284:8 306:6,9 395:4<br/>428:21,25 429:9<br/>450:18 458:24<br/>478:14,20 479:7<br/>480:1 482:3 489:18</p> <p><b>emotional</b> 261:19,25<br/>392:1,3</p> <p><b>emotionally</b> 279:23</p> <p><b>emphasizing</b> 81:2</p> <p><b>employ</b> 21:20 24:17<br/>24:22 34:17 64:6<br/>70:2 83:9 205:15<br/>529:14</p> <p><b>employed</b> 21:7 23:1<br/>25:4 27:1 30:5<br/>34:17,19 36:17<br/>48:25 68:24 69:22<br/>71:6 106:15 145:2<br/>165:3 187:3 337:16</p> <p><b>employee</b> 9:3,8<br/>500:13 529:13</p> <p><b>employees</b> 241:3<br/>461:19 496:1 500:8</p> <p><b>employing</b> 38:25<br/>39:3</p> <p><b>employment</b> 22:15<br/>22:19 35:22,23<br/>46:14,14 47:24 48:3<br/>49:2 207:19 425:24<br/>425:25</p> <p><b>employs</b> 21:16</p> <p><b>empowered</b> 9:16</p> <p><b>en</b> 517:12</p> <p><b>encompassing</b> 66:12</p> <p><b>encountered</b> 156:25</p> <p><b>endangered</b> 215:14</p> <p><b>ENDEAVOR</b> 514:3<br/>522:19,20</p> | <p><b>ended</b> 280:12</p> <p><b>Endicott</b> 72:4,15<br/>73:6,7,9 112:24</p> <p><b>endorsement</b> 192:3</p> <p><b>Energy</b> 1:17 2:5,8,10<br/>6:2,18 7:12,17 8:11<br/>8:19 9:6 12:24<br/>51:18</p> <p><b>Enforcement</b> 1:18<br/>2:6,9,11 6:3,19 7:13<br/>7:18 8:12,20 9:7<br/>12:25 51:18</p> <p><b>engage</b> 251:9 255:20<br/>489:13</p> <p><b>engaged</b> 419:23<br/>476:23 477:8 495:5<br/>495:14,23 499:3,5</p> <p><b>engagements</b> 148:20</p> <p><b>engaging</b> 16:24 18:11<br/>38:8</p> <p><b>engine</b> 59:7,8 60:3,7<br/>98:2,4 99:7,15,16<br/>99:22 151:15,17<br/>334:14,22 421:20<br/>422:18 423:1,4<br/>426:15,23</p> <p><b>engineer</b> 7:12 14:22<br/>15:15 182:20<br/>197:24 209:3<br/>251:18 266:7 272:9<br/>287:1,13 318:4<br/>325:19 368:7,13,17<br/>371:18 416:23<br/>424:9 425:16,19<br/>431:24 450:25<br/>478:1 499:13</p> <p><b>engineering</b> 15:16,17<br/>15:19 16:16 17:20<br/>31:13 40:25 204:25<br/>243:9 288:19 292:3<br/>327:6 430:1</p> <p><b>engineers</b> 286:25<br/>288:6 327:4 511:21<br/>524:20,21</p> <p><b>engineer's</b> 193:8</p> <p><b>engines</b> 59:23 98:1</p> | <p>233:14 415:16<br/>422:22,23</p> <p><b>enhance</b> 50:4 53:1<br/>54:7 264:9 267:25</p> <p><b>enhanced</b> 50:13<br/>264:18 496:22</p> <p><b>enhancement</b> 45:14<br/>266:22</p> <p><b>enlighten</b> 223:4</p> <p><b>ensure</b> 15:10 20:8,23<br/>26:11 34:24 43:10<br/>44:12 45:4 51:19<br/>65:12,18 80:1 95:6<br/>96:6 123:25 154:22<br/>161:10 165:3<br/>202:24 203:6 225:1<br/>225:7,23 227:3,5,17<br/>235:13,16 237:5<br/>250:21 251:19<br/>253:15 271:12<br/>297:18 309:14<br/>314:21 431:11<br/>438:12 498:25<br/>500:5</p> <p><b>ensuring</b> 20:17 43:11<br/>70:11 224:22 313:3<br/>355:9 481:12</p> <p><b>entails</b> 212:3</p> <p><b>ENTERPRISE</b> 438:1<br/>477:5,17 478:3</p> <p><b>entire</b> 106:4 132:16<br/>246:18 293:1 370:1<br/>379:13</p> <p><b>entirely</b> 149:4</p> <p><b>entitled</b> 59:2 123:16<br/>294:23 295:10<br/>384:6 394:17</p> <p><b>entity</b> 256:16 309:4</p> <p><b>enunciating</b> 180:2</p> <p><b>enunciation</b> 417:5,12<br/>417:16 426:21</p> <p><b>environment</b> 17:5,10<br/>17:17 30:21 81:11<br/>84:7 86:14 103:2<br/>189:4 242:3 446:21<br/>446:22</p> |
|---|---|--|--|

|  |   |   |   |
|--|---|---|---|
| <p><b>environmental</b> 18:9<br/>61:10 154:4 201:13<br/>507:6</p> <p><b>equation</b> 76:13<br/>199:19,20 200:15<br/>204:2,3</p> <p><b>equipment</b> 21:10,11<br/>25:19 32:17,21,22<br/>42:21 51:8 53:7<br/>66:9 95:2,4,10,14<br/>102:19 103:1 115:8<br/>115:19 138:25<br/>139:17,23 144:19<br/>170:9 171:25 172:1<br/>172:3,4,17 182:22<br/>199:4 203:18,20<br/>206:1 243:11,17<br/>249:4 265:5 270:6,7<br/>270:19 271:2,6,7,10<br/>275:20 281:15<br/>283:22 288:3,19<br/>291:1,3 297:1,4,10<br/>297:18,24 298:7,9<br/>303:17 312:19,21<br/>313:8 316:4 317:18<br/>324:2 325:17 326:1<br/>326:3 357:19<br/>360:14 390:14<br/>438:13 452:19<br/>498:10 508:1<br/>510:22,23 511:2</p> <p><b>equipments</b> 94:14</p> <p><b>equivalent</b> 70:7<br/>397:23 504:8</p> <p><b>Eric</b> 522:17</p> <p><b>eruption</b> 305:13</p> <p><b>escalate</b> 301:18</p> <p><b>escalated</b> 215:5</p> <p><b>ESD</b> 168:22 179:17<br/>179:19,21,24 180:8<br/>334:5</p> <p><b>essence</b> 310:7 370:18</p> <p><b>essentially</b> 188:1<br/>396:9</p> <p><b>establish</b> 195:1 220:4</p> <p><b>established</b> 78:7</p> | <p>175:25 195:12<br/>222:12 228:13<br/>309:16 324:18<br/>354:10 381:21<br/>412:14</p> <p><b>establishment</b> 45:13</p> <p><b>estimate</b> 319:4,6</p> <p><b>estimated</b> 99:18<br/>236:14 490:8</p> <p><b>et</b> 60:15 96:25 166:7<br/>284:11 287:22<br/>331:1</p> <p><b>evacuate</b> 459:20<br/>462:17</p> <p><b>evacuated</b> 147:4<br/>466:12</p> <p><b>evacuating</b> 463:8</p> <p><b>evacuation</b> 219:19<br/>487:12</p> <p><b>evaluate</b> 69:12,14</p> <p><b>evaluated</b> 67:25</p> <p><b>evaluation</b> 50:10<br/>53:17 112:2 114:17</p> <p><b>evening</b> 219:15 393:9<br/>407:3 412:21<br/>416:16 418:17<br/>444:7</p> <p><b>event</b> 55:5 109:9<br/>145:20 152:13<br/>258:4 279:5 306:1<br/>339:6,9,11,12,14<br/>365:20 368:21<br/>376:17 378:24<br/>381:23 383:1,7<br/>419:23 489:18<br/>514:25 524:22</p> <p><b>events</b> 219:14 277:12<br/>278:13 342:5<br/>441:25 442:1</p> <p><b>everybody</b> 65:19<br/>186:5 187:10<br/>213:15 218:3<br/>268:25 282:18<br/>309:24 365:22<br/>369:21 409:2<br/>412:11 450:10</p> | <p>460:15 461:1<br/>464:11,17,25<br/>481:23 485:9,19<br/>526:17 527:25</p> <p><b>everyday</b> 501:2</p> <p><b>evidence</b> 8:24 9:11<br/>11:12 13:2,4 110:10<br/>110:20 402:3<br/>411:13</p> <p><b>evident</b> 215:3</p> <p><b>evidentiary</b> 145:16</p> <p><b>exact</b> 239:2 240:18<br/>257:15 287:14<br/>299:16 338:15<br/>349:14 379:11<br/>450:11 453:3</p> <p><b>exactly</b> 50:10 67:20<br/>72:12 113:1 148:6<br/>237:3 273:16<br/>298:17 309:7<br/>373:18 374:12<br/>408:3 451:25</p> <p><b>examination</b> 122:9<br/>146:4 410:23</p> <p><b>examine</b> 12:6 233:9</p> <p><b>examined</b> 122:21</p> <p><b>example</b> 52:2 81:3<br/>138:12 146:10<br/>203:9 342:10 356:8<br/>433:8 460:10<br/>499:12,23</p> <p><b>examples</b> 380:18</p> <p><b>exceed</b> 297:19</p> <p><b>exceeding</b> 299:19</p> <p><b>excellence</b> 444:25</p> <p><b>exception</b> 285:13</p> <p><b>excess</b> 33:6</p> <p><b>exchange</b> 306:15</p> <p><b>exchanges</b> 65:2</p> <p><b>excited</b> 453:14</p> <p><b>excluding</b> 46:8</p> <p><b>excuse</b> 84:11 98:22<br/>100:7 124:17<br/>280:18 304:4<br/>339:24 430:9 436:5<br/>440:19 521:14</p> | <p><b>excused</b> 13:11</p> <p><b>execute</b> 65:25 200:9<br/>430:8,19 432:4<br/>476:9,17</p> <p><b>executed</b> 21:15,18<br/>35:10 262:23</p> <p><b>executing</b> 44:2 65:24<br/>83:8</p> <p><b>execution</b> 30:14<br/>34:11 430:4 434:10</p> <p><b>executive</b> 43:6,22<br/>378:10</p> <p><b>exercise</b> 86:4 138:22</p> <p><b>exhibit</b> 98:23 340:25<br/>341:5,19,20 344:6,7<br/>344:12 349:19,22<br/>378:21</p> <p><b>exhibits</b> 336:22</p> <p><b>exist</b> 87:11 185:23<br/>186:7 223:20 433:4</p> <p><b>existed</b> 120:10</p> <p><b>existence</b> 432:19</p> <p><b>existing</b> 67:16 386:13</p> <p><b>exists</b> 395:5</p> <p><b>expand</b> 265:24 266:2<br/>499:11</p> <p><b>expect</b> 12:7 24:5 48:5<br/>48:18 70:15 71:23<br/>104:9 105:4,10,14<br/>105:17 139:2,23<br/>140:12 141:2<br/>147:19,23 154:24<br/>165:6 173:11<br/>180:18 181:4,12<br/>198:8 205:25<br/>208:19 209:9 231:2<br/>231:9 284:4 330:3,6<br/>412:11 520:4</p> <p><b>expectation</b> 104:11<br/>139:12 140:24<br/>164:3 198:5,23<br/>199:1,8 207:23<br/>213:10 476:3</p> <p><b>expectations</b> 208:19<br/>213:12</p> <p><b>expected</b> 125:12</p> |
|--|---|---|---|

|  |  |  |  |
|--|--|--|--|
| <p>127:10 351:5<br/> <b>expecting</b> 12:17<br/> <b>expensive</b> 106:5<br/> <b>experience</b> 30:6<br/> 43:16 62:1 69:15<br/> 105:8,12 130:1<br/> 132:7 133:23<br/> 135:14,20 136:1<br/> 139:9 145:10,18<br/> 162:22 183:2<br/> 188:10,11 189:10<br/> 202:24 209:4<br/> 214:20,21 217:7<br/> 229:13 259:4,13<br/> 287:18 305:19<br/> 306:8,8,20 308:3,10<br/> 312:9 327:7 359:11<br/> 359:21 368:9 400:7<br/> 400:21 402:11<br/> 404:5 411:13,18<br/> 427:18 475:22<br/> 494:24,25 495:4,13<br/> 496:2,5<br/> <b>experienced</b> 31:24<br/> 34:9 226:3 243:22<br/> 259:8,12 308:5<br/> 356:6,9,11 357:2<br/> 399:8 400:1 428:20<br/> <b>experiences</b> 67:22<br/> 69:20<br/> <b>experiencing</b> 299:7<br/> 507:15<br/> <b>expert</b> 131:18 132:24<br/> 145:25 326:24<br/> 387:4 410:19 411:4<br/> <b>expertise</b> 71:7 152:18<br/> 152:21 162:13<br/> 183:7,10,22 202:23<br/> 203:23 313:18<br/> 318:6,13 431:13<br/> 432:10 499:10<br/> 516:16<br/> <b>experts</b> 293:4<br/> <b>Expiration</b> 529:23<br/> <b>expired</b> 438:20<br/> <b>Expires</b> 529:22</p> | <p><b>explain</b> 142:21<br/> 218:20 227:25<br/> 228:11 229:20<br/> 230:9 252:7 365:4<br/> 407:19 409:18<br/> 428:23 432:11<br/> 481:10 489:3<br/> <b>explained</b> 175:5<br/> 246:24 285:18<br/> 315:24 330:24<br/> <b>explaining</b> 207:11<br/> <b>explode</b> 412:17<br/> <b>exploded</b> 181:25<br/> 373:15 408:7<br/> <b>exploration</b> 50:6<br/> 163:10 264:11<br/> 268:1 308:10,12<br/> 499:17,18<br/> <b>explore</b> 419:15,17<br/> <b>EXPLORER</b> 143:25<br/> <b>explosion</b> 1:2 6:12<br/> 42:22 151:23 152:1<br/> 153:2 154:2 254:2<br/> 266:21 305:13<br/> 316:8 376:12<br/> 378:25,25 390:13<br/> 409:25 410:3,7<br/> 412:14,15,25 414:5<br/> 414:18 419:12<br/> 470:12 478:11,18<br/> <b>explosions</b> 503:8<br/> <b>explosive</b> 447:25<br/> <b>express</b> 146:3 340:11<br/> 360:15,18<br/> <b>expressed</b> 275:7,10<br/> 359:6 361:3<br/> <b>extended</b> 309:25<br/> <b>extending</b> 197:20<br/> <b>extensive</b> 188:11<br/> 308:10 354:15<br/> 359:11<br/> <b>extent</b> 8:15 86:22<br/> 103:9 114:25 150:2<br/> 157:16 310:18<br/> 382:4<br/> <b>external</b> 253:17,21</p> | <p>254:7 257:16 263:5<br/> 298:12 349:5,6,7,12<br/> 494:6<br/> <b>extra</b> 423:25<br/> <b>extremely</b> 411:1<br/> 425:18<br/> <b>ex-captain</b> 250:7<br/> <b>eyes</b> 280:1<br/> <b>Ezell</b> 356:8,23 371:24<br/> 443:19 444:24<br/> 456:25 457:12<br/> <b>e-mail</b> 98:24 100:9<br/> 112:13,17 113:1,11<br/> 114:3 320:10<br/> 330:19 338:6<br/> 365:25 366:20,21<br/> 377:7,8 520:24,25</p> <hr/> <p style="text-align: center;"><b>F</b></p> <p><b>F</b> 64:16 80:22 89:15<br/> 187:15 199:15<br/> 200:20 303:6 427:9<br/> 428:11<br/> <b>facilitate</b> 101:19<br/> 122:1<br/> <b>facilities</b> 52:10 83:20<br/> 89:17 90:6 160:16<br/> 161:21 431:15<br/> <b>facility</b> 191:22,23<br/> 302:18 429:10<br/> <b>facing</b> 457:2<br/> <b>fact</b> 11:10 32:6 33:19<br/> 60:14 96:24 97:13<br/> 111:2 112:11 120:2<br/> 125:2 145:15 166:6<br/> 169:20 170:15<br/> 173:8 180:8 229:11<br/> 306:5,6 308:7<br/> 323:19 338:24<br/> 340:11 352:20<br/> 355:25 391:25<br/> 393:19 395:7 396:8<br/> 420:22 466:17<br/> 483:13,19 484:8<br/> <b>factors</b> 152:15<br/> <b>facts</b> 91:25 146:5,16</p> | <p>228:12 235:10<br/> 236:21 264:2 329:2<br/> 361:14 464:8<br/> 496:11 529:6<br/> <b>factual</b> 418:2<br/> <b>fact-finding</b> 419:14<br/> <b>fact-gathering</b> 146:7<br/> <b>failed</b> 77:17 286:16<br/> 386:16,18<br/> <b>failure</b> 43:5,21<br/> <b>fair</b> 10:5 27:9 30:7<br/> 103:11 113:21<br/> 125:6,23 126:5,6<br/> 139:10 222:19<br/> 263:8 265:11 306:5<br/> 306:25 343:14<br/> 352:8 370:19<br/> 386:10 422:16<br/> 461:16<br/> <b>fairly</b> 32:14 126:21<br/> 213:12 226:3<br/> 256:13 280:9<br/> 302:21 392:6<br/> 427:16 432:4 481:4<br/> 485:13 490:21<br/> 492:16<br/> <b>faith</b> 126:15 409:4<br/> <b>Falcon</b> 286:22<br/> <b>fall</b> 41:5 62:22,22<br/> 79:9 95:17 97:5,5<br/> 98:5 181:6 201:21<br/> 201:24 202:3<br/> 203:10,18 204:8<br/> 287:10<br/> <b>falling</b> 80:12 447:13<br/> <b>falls</b> 80:19<br/> <b>false</b> 11:3 406:22<br/> 427:22 460:7<br/> <b>familiar</b> 26:4 52:15<br/> 62:13 64:4 83:3<br/> 103:17,18 104:25<br/> 105:5 111:12<br/> 124:11 125:5,8,15<br/> 135:18 141:3,14,16<br/> 143:24 148:6 206:2<br/> 236:20 247:18</p> |
|--|--|--|--|

|   |   |  |  |
|---|---|--|--|
| 248:1 266:9 281:22<br>282:17 288:18<br>294:18,21 296:11<br>297:12 298:23,25<br>316:20 338:2 381:2<br>424:13 460:4<br>508:11 511:13<br>512:15 523:12<br><b>family</b> 468:7<br><b>Fanning</b> 3:23 4:19,25<br>84:11 85:1 147:12<br>151:1,2,3,8,11,13<br>152:23 153:21,24<br>155:13 162:3<br>213:19,25 228:1,19<br>228:20 229:21<br>388:17,20,20,23<br>392:24 408:4<br>413:15,16 427:7,10<br>428:8 430:9,17<br>436:5 477:20<br>521:14,18,22<br><b>far</b> 34:16 104:7<br>115:25 206:17<br>233:9 261:5 262:3<br>318:14 324:12<br>332:19 352:17<br>354:6 355:22 356:5<br>426:19 441:8 452:3<br>482:2 491:20<br>492:10 520:11<br><b>fashion</b> 63:14<br><b>fast</b> 25:17,18 50:18<br>265:1 450:17<br>496:25 498:2<br><b>fatally</b> 461:3<br><b>fax</b> 435:10<br><b>FA-N-N-I-N-G</b><br>388:21<br><b>fear</b> 484:7<br><b>fears</b> 524:9<br><b>February</b> 285:8<br><b>federal</b> 7:7 11:2 50:7<br>192:16 198:4<br>264:12 265:24<br>266:2 297:12 298:3 | 303:24 321:15<br>404:14 412:9 484:2<br>496:18 499:11<br><b>fee</b> 509:14<br><b>feedback</b> 238:18<br>239:18 323:13,23<br><b>feel</b> 65:15 70:9<br>103:15 130:21<br>134:14 140:1<br>142:20 149:11<br>218:10 315:12<br>316:3,9,12 343:1<br>422:10 457:8 496:7<br>500:25<br><b>feels</b> 83:10<br><b>feet</b> 233:25 486:21<br>506:7<br><b>fell</b> 61:13 62:4 269:18<br>452:20<br><b>fellow</b> 15:18<br><b>felt</b> 63:8 72:19 109:9<br>109:16 111:7<br>114:13 115:12<br>140:17 292:15<br>316:12 387:18<br>522:13<br><b>field</b> 44:4 75:20<br>281:16 353:11<br>490:25 513:13<br><b>fifth</b> 314:6<br><b>fighting</b> 253:12,13,25<br>257:7<br><b>figure</b> 132:21 338:25<br>411:12 485:3<br><b>figured</b> 448:17<br><b>filed</b> 56:7<br><b>files</b> 354:11,12,12<br><b>filing</b> 181:2<br><b>fill</b> 496:8 527:11<br><b>filled</b> 17:6,18<br><b>filling</b> 113:2 292:2<br>368:6,11<br><b>final</b> 8:16 20:9,14,16<br>84:10 209:3,6 238:1<br>264:20 301:25<br>352:5 359:19 360:4 | 360:21<br><b>finalized</b> 239:23<br><b>finally</b> 274:5 386:10<br><b>find</b> 18:15,15 154:5<br>233:10 280:11<br>284:16,20 334:18<br>365:5 383:16,25<br>418:9 479:25<br><b>finding</b> 96:20 112:2<br>112:12 315:2<br>360:16 483:19<br><b>findings</b> 8:7 11:10<br>57:24,25 95:21<br>106:19 112:8<br>147:22 148:8<br>208:19 245:19<br>246:23 289:10<br>310:19 312:17<br>314:16 324:4<br>351:12,13,20 355:7<br>375:8 488:19<br><b>fine</b> 11:5 145:20<br>153:23 309:23<br>315:25 350:15<br>462:2,9<br><b>finish</b> 84:12,14 142:7<br><b>finished</b> 364:20<br>375:25 442:17<br><b>finishes</b> 520:8<br><b>fire</b> 1:2 42:22 53:8<br>97:17 168:22<br>172:23 173:3 177:9<br>177:16,21,23 178:6<br>178:10,21 180:1<br>215:6 233:2,4,6<br>252:20 253:12,13<br>253:25 254:2 257:7<br>266:19,21,23 278:3<br>305:13 310:24<br>409:22,22 412:20<br>412:24 414:18,24<br>415:15 416:13<br>449:11 450:12<br>451:21 466:17<br>470:12 478:14<br>503:21 | <b>firefighting</b> 50:13<br>53:9 253:14,18,24<br>254:5,8,12,16,23<br>255:2,17 256:2,5,22<br>257:9,13 264:17<br>266:20 468:23,25<br>469:15 470:6,9<br>471:2,9,13 472:12<br>473:3 474:12,18<br>496:22<br><b>firewall</b> 330:25<br><b>firing</b> 407:18<br><b>first</b> 13:12,14,15,19<br>44:6 59:5 73:20<br>94:6 95:25 104:4<br>123:10 134:16<br>151:14 175:19<br>176:6,24 184:11,18<br>194:21,25 203:25<br>211:1 228:2,18<br>236:8 245:21<br>276:21 277:15<br>278:8 287:6 288:24<br>291:16 292:11,11<br>295:17,22 297:15<br>309:2 315:2,17<br>319:22,23 325:19<br>335:18 353:3<br>361:18 368:1,6,13<br>368:16 373:22,25<br>374:2 392:20<br>398:18 400:21<br>405:7 406:4 408:20<br>409:17,25 413:15<br>423:11 437:4<br>456:10 458:14<br>466:11 470:21,24<br>478:11 483:16<br>486:18 496:17<br>502:8 503:2 516:12<br>520:22 528:6<br><b>fit</b> 116:2,13,23<br>325:25 360:14<br>384:5 444:21<br>464:18<br><b>fitness</b> 425:11 |
|---|---|--|--|

|  |  |   |   |
|--|--|---|---|
| <p><b>fittings</b> 516:13<br/> <b>five</b> 11:6 12:6,16 34:3<br/> 74:5 108:6,22<br/> 156:24 295:23<br/> 314:9 315:19<br/> 318:21 438:9<br/> 441:22 457:6 485:8<br/> 495:17 504:1,3<br/> 509:9,18,19,24<br/> 520:5 528:1<br/> <b>five-day</b> 9:20 78:6<br/> <b>five-minutes</b> 404:23<br/> <b>five-month</b> 112:13<br/> <b>fix</b> 249:5 292:24<br/> 325:16 353:2 354:7<br/> 508:1 526:21<br/> <b>fixed</b> 28:19 74:22<br/> 249:2 253:13,24<br/> 315:6 354:22<br/> 355:16,25 356:1<br/> <b>flag</b> 23:8,10,15 47:2,6<br/> 47:13,18 48:5,17<br/> 49:16 50:10 82:6<br/> 91:17 164:20,25<br/> 165:4,20 193:4<br/> 198:10,17 199:9<br/> 206:4 226:17<br/> 240:22 249:7,11<br/> 267:2,5 414:22<br/> 428:13 433:15<br/> 494:5,15 499:25<br/> <b>flagged</b> 24:8 128:23<br/> 129:2 263:13,21<br/> 494:11<br/> <b>flags</b> 23:19<br/> <b>flag-state</b> 44:25<br/> 241:1<br/> <b>flammable</b> 414:25<br/> <b>flaw</b> 63:2<br/> <b>flawed</b> 461:3<br/> <b>fleet</b> 15:2,4 26:9,9,11<br/> 26:11,23 133:1<br/> 293:1 325:12<br/> <b>flew</b> 452:9 504:17<br/> <b>Fleytas</b> 501:22<br/> <b>flight</b> 442:8 504:23</p> | <p><b>flights</b> 504:22 505:3<br/> <b>flip</b> 282:14 295:4<br/> 297:15<br/> <b>floating</b> 14:25 44:8<br/> 51:20,24 84:2<br/> 265:14 308:13<br/> 311:23 399:8 499:1<br/> 499:4<br/> <b>flood</b> 234:16 444:3<br/> 465:18<br/> <b>flooding</b> 25:22<br/> 117:20 473:7<br/> <b>floor</b> 58:1 101:23<br/> 312:4,7 334:15,23<br/> 426:16,24 442:22<br/> 445:7 446:4 448:6<br/> 457:4,24 496:13<br/> 529:24<br/> <b>flow</b> 328:20 329:24<br/> 330:5 386:15,23<br/> 473:6 519:5 522:14<br/> 523:14<br/> <b>flowing</b> 513:16<br/> 518:22<br/> <b>flown</b> 514:4<br/> <b>fluid</b> 361:7 384:23<br/> 385:8,21 386:5<br/> <b>fluids</b> 505:18<br/> <b>Flynn</b> 17:6,9<br/> <b>focus</b> 9:20 16:6 66:3<br/> 66:13 75:12 78:2<br/> 96:12 106:11<br/> 111:24 115:17<br/> 145:21 146:15<br/> 170:3 184:15 188:6<br/> 203:5,15 323:11<br/> 382:14 428:16<br/> 469:5<br/> <b>focused</b> 75:4 115:6,7<br/> 115:18 168:21<br/> 170:4<br/> <b>focuses</b> 21:9 23:15<br/> 94:13<br/> <b>focusing</b> 75:25 94:6<br/> <b>focussed</b> 95:12<br/> <b>fog</b> 427:19</p> | <p><b>folded</b> 127:2<br/> <b>folks</b> 266:7 479:18<br/> <b>follow</b> 7:4 67:13 94:3<br/> 100:18 101:8<br/> 132:13 188:23<br/> 227:3,6 321:3 375:7<br/> 519:5<br/> <b>followed</b> 35:20 63:9<br/> 91:3 312:25 330:19<br/> 384:25 399:3<br/> <b>following</b> 95:23<br/> 112:18 184:4<br/> 203:23 206:25<br/> 207:13 279:12<br/> 303:20 305:12<br/> 381:12 399:4<br/> <b>follows</b> 13:19 211:1<br/> 437:4<br/> <b>follow-up</b> 67:7 94:16<br/> 94:18 95:23 96:9<br/> 97:12 102:11,13,21<br/> 106:18 113:19<br/> 114:8,15 120:3<br/> 167:17 170:24<br/> 171:14 187:4,17<br/> 209:5 242:17<br/> 300:17 303:8<br/> 330:16 423:13,14<br/> 428:9 458:8<br/> <b>follow-ups</b> 64:14<br/> <b>food</b> 468:7<br/> <b>foot</b> 452:21 453:8,9<br/> <b>force</b> 447:25<br/> <b>forego</b> 510:2,14<br/> <b>foregoing</b> 529:7<br/> <b>foreign-flagged</b><br/> 22:15,19 52:22<br/> <b>foreman</b> 337:20,23<br/> 337:25 338:3,7<br/> <b>forestalled</b> 146:13<br/> <b>forget</b> 387:4<br/> <b>forgot</b> 136:12<br/> <b>forgotten</b> 222:3<br/> <b>form</b> 142:9 145:11<br/> 148:22 154:11<br/> 216:8 233:15 260:2</p> | <p>264:4,20 268:3<br/> 292:6<br/> <b>formal</b> 25:12 45:6<br/> 107:9 154:14<br/> 166:24 167:11<br/> 169:21 173:19<br/> <b>formally</b> 38:23<br/> <b>format</b> 246:2 434:6<br/> <b>formation</b> 386:6<br/> <b>formed</b> 174:12<br/> <b>former</b> 88:25 247:17<br/> <b>formerly</b> 6:19<br/> <b>formulate</b> 143:12<br/> <b>formulated</b> 106:19<br/> <b>formulates</b> 204:10<br/> <b>forth</b> 129:16 294:1<br/> 403:18 419:12<br/> <b>fortunate</b> 455:18<br/> <b>forward</b> 13:6 26:12<br/> 93:2 101:21 236:11<br/> 262:19 336:8 343:5<br/> 402:6,14 403:11,15<br/> 448:15 503:5 522:8<br/> <b>forward-looking</b><br/> 150:12<br/> <b>found</b> 238:21 289:14<br/> 289:16 290:5<br/> 314:19 376:25<br/> 450:4<br/> <b>foundation</b> 39:20<br/> 195:25 222:12<br/> 402:20<br/> <b>four</b> 14:15 34:3 45:20<br/> 102:10 118:8 160:5<br/> 168:14 225:19,20<br/> 237:13,15 307:24<br/> 371:21 376:9 407:9<br/> 439:15,16 441:22<br/> 490:23 491:7<br/> 503:10 504:1,3<br/> <b>fourth</b> 57:20 314:5<br/> <b>four-man</b> 73:22<br/> <b>Fox</b> 391:12<br/> <b>frame</b> 107:17 114:14<br/> 135:4 268:22<br/> 279:14 296:10</p> |
|--|--|---|---|

|  |   |  |   |
|--|---|--|---|
| <p>348:24 349:13<br/>391:9 450:11 453:3<br/>472:4<br/><b>framed</b> 310:16<br/><b>frames</b> 36:12 41:20<br/>46:3 96:14 102:17<br/>106:24<br/><b>framework</b> 376:20<br/>379:14<br/><b>Francisco</b> 8:5<br/><b>frankly</b> 361:21<br/><b>FRC</b> 454:6 497:3,6<br/>497:15,23<br/><b>free</b> 178:19<br/><b>freezing</b> 354:10<br/><b>frequency</b> 213:2<br/><b>Friday</b> 272:5 516:4<br/><b>friends</b> 398:20<br/><b>front</b> 59:3 97:2 206:6<br/>259:6 277:6 294:22<br/>445:12 446:11<br/>455:7 521:5 523:22<br/><b>frustration</b> 275:5,7<br/><b>fulfills</b> 208:14<br/><b>full</b> 10:3 27:1 34:24<br/>42:2 47:4 54:5<br/>66:25 67:21 68:3,5<br/>88:8 91:22 100:2<br/>123:25 131:5<br/>137:21 149:23<br/>152:22 159:2<br/>167:16 168:23<br/>175:12 200:12<br/>202:2 205:23<br/>213:16 214:4<br/>216:14 251:10,19<br/>260:25 261:6,15<br/>264:3 268:3 294:9<br/>360:12 361:16<br/>476:8,12,16,21<br/><b>fully</b> 42:19 52:8<br/>62:25 92:14 105:9<br/>105:11,23 134:5,15<br/>205:24 262:16<br/>286:2 294:5 316:1<br/>332:20 354:17</p> | <p>415:10 480:20<br/>496:12<br/><b>full-functioning</b><br/>419:11<br/><b>full-time</b> 260:17<br/><b>fun</b> 155:20<br/><b>function</b> 148:19<br/>161:17,18 163:5<br/>172:24 173:3,9<br/>174:22 179:24<br/>181:11,13 205:11<br/>255:16 271:3<br/>273:11 285:14<br/>290:13 335:8,9<br/>409:24 415:11<br/>417:8 511:24<br/>515:11,16 518:24<br/><b>functional</b> 176:1<br/>201:2,10,17 354:18<br/><b>functionality</b> 335:5<br/><b>functioned</b> 180:8<br/>333:6,9 414:15<br/>511:18 517:17<br/><b>functioning</b> 175:21<br/>177:2 178:6,12<br/>180:15,21 186:18<br/>253:16 294:5 297:5<br/>352:14,18<br/><b>functions</b> 202:19<br/>205:8 294:11<br/>297:18 378:11<br/>415:14 417:11<br/>421:6 512:19<br/>514:20<br/><b>fundamental</b> 63:2<br/><b>further</b> 31:24 50:10<br/>54:12 64:12 73:12<br/>79:4 92:23 101:3<br/>120:14 124:23<br/>150:11 182:11<br/>195:8 198:6 205:10<br/>206:6 215:4 238:9<br/>243:22 244:1,2<br/>268:6 300:12<br/>311:10 319:16<br/>358:14 359:13</p> | <p>406:25 419:15<br/>527:4 529:12<br/><b>furthermore</b> 286:6<br/><b>future</b> 8:22 92:12<br/>121:16 188:8<br/>295:13 329:7<br/>444:22<br/><b>F-A-N-N-I-N-G</b><br/>151:9<br/><b>F-ing</b> 391:18</p> <hr/> <p style="text-align: center;"><b>G</b></p> <hr/> <p><b>gain</b> 316:25<br/><b>gaining</b> 317:5<br/><b>galley</b> 444:7<br/><b>gallons</b> 518:18,20,23<br/>522:12<br/><b>gas</b> 14:9 26:12 27:3<br/>83:6,19 84:3 97:18<br/>160:16 168:22<br/>173:1,4 177:10,10<br/>177:16,21,23 178:6<br/>178:11,11,21 180:1<br/>183:20 278:21<br/>328:20 329:24<br/>330:5 334:11<br/>407:18 409:22,23<br/>409:24,25 410:2,5,6<br/>412:16,20 414:4,16<br/>414:25 416:13,17<br/>421:7,16,24 422:3<br/>422:14 426:14<br/>496:12 502:22<br/>503:21<br/><b>gases</b> 173:5 412:22<br/><b>gather</b> 101:12 326:13<br/><b>gathering</b> 459:14<br/>460:12 464:7<br/><b>gear</b> 203:13<br/><b>general</b> 10:1 29:9<br/>96:5 172:15,21<br/>173:8,11,15 175:20<br/>177:1,6,7,20,22<br/>178:5,10 203:18<br/>253:2,4,6 293:19,22<br/>294:8,10 302:5</p> | <p>310:16,22 311:2,7<br/>332:20 333:5,13<br/>334:4,13,19 393:15<br/>394:17,19,25 405:8<br/>405:21,24,25 406:9<br/>406:15,23 407:2,6,8<br/>407:10 410:12<br/>414:23 415:14,18<br/>417:17 419:23<br/>420:9 422:18 425:5<br/>427:12 428:1,4<br/>441:4 480:22<br/>502:25 503:5,7<br/>506:13,17<br/><b>generally</b> 95:25<br/>144:4 171:3 177:8<br/>179:18 318:17<br/>374:22<br/><b>generated</b> 35:16<br/>201:24 252:15<br/><b>generation</b> 90:25<br/>95:3 98:8 172:6<br/><b>generator</b> 450:19<br/><b>generators</b> 172:8<br/><b>Geneva</b> 378:10<br/><b>gentleman</b> 7:10,14<br/>7:19,23 133:15<br/>196:8 258:25<br/>292:22<br/><b>gentlemen</b> 223:14<br/>365:17 501:19<br/>504:11<br/><b>genuine</b> 330:4<br/><b>geographic</b> 346:24<br/><b>getting</b> 67:18 277:17<br/>280:8 320:12<br/>326:17 332:3<br/>359:15 376:18<br/>409:2 412:9 414:7<br/>451:21 472:17<br/>485:10<br/><b>give</b> 51:5 54:18 61:3<br/>70:8 125:18 126:5<br/>127:5 138:16<br/>139:22 149:23<br/>152:22 186:10</p> |
|--|---|--|---|

|   |   |  |  |
|---|---|--|--|
| 197:8 228:7 230:1<br>247:5 250:14<br>264:15 269:8<br>282:18 289:9 310:4<br>339:3 348:14<br>350:13 362:19<br>392:13 394:4 403:2<br>416:24 422:9 429:4<br>443:21 445:8 446:5<br>446:17,25 460:21<br>461:1 468:18<br>473:10,12 474:4<br>506:2 522:12<br><b>given</b> 71:9 110:20<br>119:24 148:14<br>152:12 154:25<br>158:18 159:8<br>187:13 238:2<br>246:10 297:8<br>331:17,19 362:5<br>400:20 442:12<br>444:24 479:20<br>484:3,5,21 504:16<br>505:20 529:18<br><b>gives</b> 99:18 480:9<br><b>giving</b> 122:11 135:5<br>209:23 217:18<br>459:1 461:18<br>501:19 502:1<br><b>glanced</b> 127:1<br><b>glaring</b> 158:21<br><b>gleaned</b> 347:9<br><b>globally</b> 46:6,10<br>158:5<br><b>GLOMAR</b> 143:25<br><b>glycol</b> 518:6<br><b>GMS</b> 252:13<br><b>go</b> 6:5 39:1,4 57:1<br>58:17,25 64:14<br>75:20 77:1 99:10<br>111:3 115:9 123:2<br>126:19 147:1<br>151:18 152:3<br>153:21 154:10<br>169:5 198:6 202:17<br>202:20 203:8 204:3 | 205:9,16 206:6<br>212:24 215:4<br>217:24 228:3<br>241:14 245:9,10<br>249:2 261:9 263:11<br>270:11,19 271:3<br>273:13 276:19<br>277:11,13 281:11<br>281:15 282:9<br>284:12 286:14<br>288:2 293:1 301:7,7<br>301:10,21 302:16<br>302:23,25 304:17<br>314:14,17 316:23<br>318:18,24 322:23<br>323:4 324:19<br>325:11 334:12<br>336:3 341:19 350:7<br>353:11 359:7<br>360:23 370:6,14<br>371:12 377:9,10<br>384:17 387:6,21<br>397:19 400:23<br>402:5 403:15<br>406:23 413:15,16<br>427:15 430:25<br>432:15 434:8,8,9<br>436:2 440:21,22<br>441:1,4,5,5,11,17<br>441:21 445:4,25<br>446:3 447:16 449:8<br>450:9 452:3,14,15<br>452:15 453:11<br>455:21 458:19<br>465:21,23 466:5<br>469:15 470:10<br>474:21 475:13<br>481:8 483:4 489:11<br>497:11 502:20<br>503:14,25 504:4<br>509:24 511:22<br>515:4,11 522:2,8,21<br>524:22 526:18<br>527:19 528:3<br><b>goal</b> 101:17 102:5<br>444:10 | <b>goals</b> 444:15,20<br><b>Godfrey</b> 4:16 328:21<br>328:24 335:20<br>336:9,10,14,16,18<br>336:19,25 337:3,6<br>339:24 340:4<br>341:10,13 342:18<br>342:24 343:11,17<br>343:22 344:2,13<br>346:16,18 350:21<br>351:2 358:14<br>388:25<br><b>GODWIN</b> 120:20<br>367:7<br><b>goes</b> 60:25 169:5<br>190:19 204:5,16<br>283:8 294:8 302:5<br>311:5 347:1,2 371:7<br>385:13 394:25<br>396:13 407:24<br>446:19 479:19<br><b>going</b> 36:5 49:25 50:9<br>53:1 57:16 58:24,25<br>60:23 62:8 65:6,13<br>66:22,25 67:24 72:7<br>81:4,13 82:18,18,23<br>85:15,19 86:21 88:9<br>88:21 89:8 98:20<br>101:19 102:4,9<br>110:22 113:25<br>118:8 122:2,18,20<br>122:23 124:18<br>125:18,22 126:12<br>128:16 131:14<br>138:7 140:21 144:2<br>145:13 146:2,8,11<br>146:12,25 149:6,24<br>150:9 154:12 162:1<br>162:5 184:3 185:18<br>186:5 188:7,12<br>194:22 198:18<br>199:18 208:6 218:4<br>218:14,20 219:20<br>221:10 222:10<br>228:3 230:22 231:1<br>235:22 237:19 | 238:8 240:17 242:5<br>246:8 248:16 249:4<br>249:24 251:10<br>254:4 261:20 264:5<br>268:12 273:13<br>276:11,13,21<br>280:14 282:13<br>289:9 292:18<br>294:13,16 298:19<br>298:21 303:9<br>306:12,14 307:23<br>314:19 315:8,20<br>317:16 319:17<br>320:7 322:9 324:21<br>328:25 329:3,17<br>331:1 332:18 336:2<br>336:4,21,22 341:17<br>343:3 350:5,7 360:5<br>360:6,13 362:6<br>363:19,22 365:21<br>369:8 371:14,15<br>374:3,15 375:3<br>378:20 379:20<br>380:11 381:20,24<br>382:21 384:14,20<br>394:11,16 396:2<br>397:10 402:23<br>403:11 410:21<br>411:11 413:11<br>417:18 419:25<br>421:4,16 422:4<br>427:21 430:7<br>434:20 436:11<br>440:24,25 441:4,17<br>443:14,18 444:23<br>447:3,7,16,18 448:5<br>448:11,18,24<br>449:24 452:1 453:5<br>453:24 454:12,17<br>454:19,23 456:15<br>456:17 457:21<br>459:22 460:1<br>462:23 464:6,18<br>466:3 467:12<br>469:24 470:23<br>471:10 474:3,21 |
|---|---|--|--|

|  |  |  |  |
|--|--|--|--|
| 480:4 482:24<br>484:18 486:12<br>491:16 495:10<br>503:1 504:13 505:4<br>505:18 506:16<br>512:16 515:3<br>519:13 523:6<br><b>golden</b> 62:13<br><b>good</b> 14:5,6 53:2 86:9<br>93:20 102:3 118:5<br>118:22 126:15<br>145:9 150:25<br>155:17,19 159:24<br>159:25 164:17,18<br>176:10 187:12<br>223:5 238:17,17<br>262:3 266:15<br>271:12 298:9 321:1<br>323:17 346:17<br>398:14,15 409:4<br>419:3 425:21<br>430:21,25 446:12<br>448:25 449:25<br>457:9 497:10<br>506:15<br><b>GOODRICH</b> 438:3<br>477:10,12,18,19,25<br><b>good-faith</b> 329:4,9<br><b>Gordon</b> 3:22 4:18<br>121:10,13,14<br>122:12 123:8,14,19<br>126:18,20,23<br>127:13,22 128:2,20<br>128:24 131:2<br>132:15 133:3<br>134:16 135:19,22<br>136:6,14 138:20<br>139:11,25 140:7,24<br>142:7,23 143:12,16<br>143:23,24 146:17<br>146:20 148:3<br>149:15 150:15,18<br>150:22 152:8<br>153:10 157:15<br>202:7 309:17<br>343:25 344:5,10,11 | 367:23,24 369:6,8<br>369:11,15,23 372:9<br>372:21 380:4<br>381:24 382:9,16,17<br>383:15,22 384:10<br>384:13,14,20,22<br>387:23 388:14<br>420:16 433:17<br>436:19<br><b>gotcha</b> 126:4<br><b>govern</b> 23:17<br><b>governed</b> 264:14<br><b>governing</b> 50:7<br>188:25 264:11<br><b>government</b> 49:6,9<br>50:6 53:21 54:2<br>89:4,7 192:6 265:24<br>266:2 267:17,21<br>390:25 496:18<br>499:11,24<br><b>Grade</b> 439:4<br><b>great</b> 470:10<br><b>greater</b> 89:8 484:5<br>500:9,15,17<br><b>greatly</b> 89:10<br><b>Greenway</b> 378:12,13<br>388:3,9<br><b>Gregory</b> 91:16<br>304:14<br><b>grinder</b> 517:14<br><b>ground</b> 130:11 382:7<br>382:9<br><b>grounds</b> 228:13<br>261:19<br><b>group</b> 41:11,14 43:6<br>43:9,22 44:15 45:14<br>56:7 57:13 60:18<br>92:18,19 148:20<br>174:13 175:15<br>251:14 262:18<br>270:20 271:8 274:6<br>281:15 292:16<br>293:8 399:17<br>402:12 457:9<br>515:24 516:6<br><b>GRS</b> 347:3 | <b>GSF</b> 325:9<br><b>Guard</b> 2:4,12,14,15<br>6:2,8,16 7:5,8,22<br>8:2,5,10,18 9:6<br>12:23 50:16,23 51:7<br>51:12,17 52:12,15<br>53:3 89:24 192:12<br>192:21,23 193:19<br>193:23,25 194:3,7<br>194:20 196:15<br>198:1,3,11,18,25<br>199:7 204:4 239:25<br>240:2 247:18 248:1<br>249:7,10,15,24,25<br>250:3,5,18 253:17<br>253:19,22 254:4,10<br>254:18 256:14,18<br>264:24 265:4<br>277:24,24 313:25<br>314:3,5 334:1 387:5<br>393:20 394:1<br>397:12,16 410:10<br>410:24 467:21<br>479:13 498:9,17,24<br>499:24 524:10<br><b>Guard/The</b> 1:17<br><b>guess</b> 36:20 39:25<br>87:8 100:14 109:21<br>132:9 134:2 136:4<br>140:22 152:11<br>169:17 208:12<br>218:17 229:4<br>266:18 292:24<br>342:23 379:24<br>380:4 449:5 460:6<br>461:14,25 463:17<br>501:8<br><b>guessing</b> 382:13<br><b>guesswork</b> 197:5<br><b>guidance</b> 217:13<br>353:12 480:5<br><b>Guide</b> 42:1 66:20<br>67:10,25 68:22 70:7<br>70:17 71:12 72:2,10<br>72:21 112:22<br>202:22 204:16,20 | 241:8,13 245:16,21<br>271:25 277:9 278:8<br>278:10,15,18,20<br>301:9,13 302:13<br>307:13 323:1<br>354:19 355:11,14<br>360:20,24 394:13<br>488:17<br><b>guideline</b> 207:20<br><b>guidelines</b> 10:12<br>296:2<br><b>Guide's</b> 67:17,20<br>68:3<br><b>Gulf</b> 1:4 14:10,11<br>15:9 16:10,14,25<br>17:16 18:9,11 21:20<br>25:5 27:4 30:5<br>44:10,17,23 46:7,8<br>52:14,20 56:19 71:6<br>84:2 92:18,21 103:7<br>104:13 110:13<br>116:1 141:13 147:9<br>147:17 152:24<br>153:3 154:1 156:19<br>158:6 160:8 161:19<br>163:12,16 164:23<br>174:3,24 184:19<br>190:2,5 192:11,11<br>200:10 205:15<br>211:20 234:24<br>237:15 263:4<br>268:15 269:3<br>291:20 300:5 302:5<br>311:22 315:18<br>317:3 345:11<br>370:12 396:5<br>438:10 476:25<br>494:19 498:22<br>505:13<br><b>gut</b> 436:12<br><b>guy</b> 82:17 161:23<br>228:21 287:22<br>317:2 359:16,17<br><b>guys</b> 221:5 230:11<br>260:3 316:23 327:6<br>401:3 403:9 455:10 |
|--|--|--|--|

| <b>H</b>   |  |   |   |
|--|--|---|---|
| <b>H</b> 64:16 80:22 89:15<br>187:15 199:15<br>200:20 303:6 427:9<br>428:11  | <b>happened</b> 138:3<br>145:21 146:24<br>222:14 236:4 256:9<br>280:5,7 330:13<br>338:19 392:11,15<br>416:15 481:2<br>488:25 516:23<br>517:5,16 518:4  | <b>hauling</b> 507:23<br><b>Hay</b> 450:5 515:24<br>516:7,18 519:20<br><b>Hays</b> 515:1<br><b>Hayward</b> 202:9<br><b>Hay's</b> 516:16<br><b>hazard</b> 266:18 410:7<br>493:11<br><b>hazards</b> 456:17<br><b>head</b> 174:21 175:14<br>204:11 248:4 273:5<br>288:12 388:1<br>395:17 448:25<br>454:17 466:13<br>521:16<br><b>headed</b> 191:13<br><b>heading</b> 134:9<br><b>headquarters</b> 378:3<br>378:4,7,8,9 431:15<br>431:22<br><b>heads-up</b> 122:11<br><b>headway</b> 238:21<br><b>health</b> 17:4,10,16,21<br>31:7 40:18 201:4,12<br>242:10,25<br><b>hear</b> 13:3 67:14<br>131:20 150:10<br>406:2 411:8 425:1,2<br>451:12,23,25<br>472:19 497:14<br>503:4,5,7,19,21<br>521:18,24<br><b>heard</b> 102:8,10<br>106:17 120:2<br>175:20 176:6,11<br>181:21 197:22<br>199:22 224:9 259:3<br>280:18 304:22<br>334:21 347:20<br>353:21 364:24<br>365:3 368:20,21<br>388:25 389:22<br>391:21 397:13<br>399:1 402:8 403:3<br>418:16 420:25<br>421:1,4 447:10,11 | 449:18 450:23<br>451:4,25 460:23<br>503:2 513:22 515:3<br><b>hearing</b> 7:3 10:5,10<br>13:11 185:21<br>201:16 280:2<br>309:18 416:23<br>451:13 461:9<br>464:20 528:11<br>529:14<br><b>hearings</b> 195:17<br>365:3<br><b>hearsay</b> 372:8<br><b>heavily</b> 432:13<br><b>held</b> 14:13,14,21,24<br>188:13 211:7 234:7<br>291:10 311:21<br>318:21 362:25<br>437:11 438:17<br><b>helicopter</b> 440:7<br>448:13 456:11<br>504:18,22,22,25<br>505:2<br><b>helicopters</b> 504:19<br><b>Hello</b> 424:5<br><b>helmsman</b> 461:4<br><b>help</b> 123:9 136:2<br>148:23 223:4,5<br>239:7 254:4 255:14<br>277:11 291:4 293:6<br>323:9 362:13,19<br>370:5 409:18<br>419:19 453:10<br>455:20 497:11<br>515:4 521:22<br><b>helped</b> 390:22 448:21<br>452:7 460:5<br><b>helpful</b> 13:23 91:14<br>98:18 132:14 196:7<br>229:9 295:12 306:7<br>362:21<br><b>helping</b> 312:22<br><b>HENRY</b> 438:3<br>477:10,11,12,17,18<br>477:25<br><b>hereto</b> 529:6 |
| <b>half</b> 264:2 357:11<br>447:7<br><b>halfway</b> 200:25<br>448:12 502:20<br><b>Hall</b> 522:17<br><b>Halliburton</b> 66:23<br>120:19 217:11,16<br>328:10,18 367:6<br>436:12,17 479:12<br><b>hallway</b> 447:16<br>448:13<br><b>hand</b> 11:20 13:17<br>57:13 69:8 98:14<br>216:11 223:13,15<br>245:16 248:8 305:2<br>305:9,24 306:2<br>336:21 369:9<br>382:21 388:7,8,13<br>437:1 442:21 480:3<br>529:18<br><b>handbook</b> 379:3,4,4<br>379:19 380:7,21<br>381:1,13 382:19<br>383:14,20 384:3,5<br>387:20 505:18<br><b>handle</b> 505:20<br><b>handled</b> 58:19,21<br>252:8 281:10<br><b>handling</b> 201:5,14<br>202:7,8,8,9 203:9<br>302:19 525:11,12<br><b>handoff</b> 217:22<br>222:17 223:2<br><b>handrail</b> 448:5<br>449:22,23 450:9<br>454:4 465:15<br><b>hanging</b> 449:23<br>465:14<br><b>happen</b> 44:12 235:13<br>236:3 237:5 463:6<br>486:16 517:23 | <b>happening</b> 50:2<br>138:5 236:20<br>265:13 334:18<br>339:1 377:4<br><b>happens</b> 27:14 55:2<br>137:25 372:1<br>407:20,22<br><b>happily</b> 443:21<br><b>happy</b> 391:18 411:8<br>418:23 526:19<br>528:5<br><b>hard</b> 125:9,11 153:14<br>153:16 317:5<br>385:11<br><b>hardware</b> 357:19<br><b>hardworking</b> 425:19<br><b>Hariklia</b> 93:20<br><b>Harker</b> 504:8<br><b>Harrell</b> 150:24 151:3<br>194:14,19,19 195:1<br>195:23 218:12<br>227:21 255:22<br>259:16,19 260:25<br>275:13 277:5<br>279:11 327:1<br>356:13,23 363:3<br>364:11 371:24<br>373:24 374:1<br>388:15,21 408:8<br>425:25 429:18,19<br>456:22,25 457:11<br>464:10,19 467:1,9<br>476:8,12 478:9<br><b>Harrell's</b> 213:17<br>214:5<br><b>Harris</b> 529:2,5,21<br><b>Harry</b> 323:3<br><b>hate</b> 436:19 |   |   |

|  |   |   |   |
|--|---|---|---|
| <p><b>hesitated</b> 401:25<br/> <b>hesitating</b> 117:4<br/> <b>Hey</b> 248:11 433:2<br/> 443:14 449:24<br/> <b>he'll</b> 127:7 343:12<br/> 408:5<br/> <b>hierarchy</b> 198:22<br/> <b>Higgins</b> 2:13 3:14<br/> 7:25 12:13 79:5,8<br/> 145:23 161:3<br/> 413:17<br/> <b>high</b> 33:14 54:24<br/> 61:9 212:14 316:16<br/> 316:22 319:2<br/> <b>highlighted</b> 55:22<br/> 57:21 59:6,16 60:12<br/> 282:22 524:6<br/> <b>high-level</b> 61:3 269:9<br/> <b>high-pressure</b> 448:8<br/> <b>high-priority</b> 33:9,14<br/> 33:15<br/> <b>Hilton</b> 1:22<br/> <b>hire</b> 144:12<br/> <b>hired</b> 144:15 437:15<br/> <b>history</b> 359:16<br/> <b>hit</b> 334:19<br/> <b>hitches</b> 195:11<br/> <b>Hobby</b> 1:22<br/> <b>hoc</b> 504:18,21,22<br/> 505:2<br/> <b>hold</b> 14:7,8,16 15:16<br/> 82:18,19,23 84:10<br/> 84:13 98:8 144:24<br/> 144:24 211:5,11<br/> 212:15 388:16<br/> 437:8,13 438:19<br/> 439:21 472:16<br/> <b>holding</b> 130:5 149:12<br/> 197:25 438:23<br/> 453:21<br/> <b>holds</b> 95:2,4 144:20<br/> <b>holiday</b> 260:20<br/> <b>home</b> 123:14<br/> <b>Homeland</b> 6:9<br/> <b>HON</b> 2:7 3:17 13:15<br/> 13:20 14:1 39:23</p> | <p>54:13 64:13 67:4<br/> 73:13 77:3 80:21<br/> 84:14,24 85:14 86:9<br/> 87:2 90:15 91:5<br/> 92:25 93:4,17,24<br/> 98:16 100:11 101:5<br/> 109:13 118:3,15,18<br/> 120:15,19,22,25<br/> 121:3,6,9,11,16<br/> 122:16,20 124:25<br/> 126:19,22 127:3<br/> 128:6,16 130:23<br/> 131:19 132:11,23<br/> 133:15 135:21<br/> 138:7 139:8,14<br/> 140:10,20 142:14<br/> 143:9,14 145:13<br/> 146:19 147:15<br/> 148:2 149:6,22<br/> 150:16,20,23 151:6<br/> 151:10 152:10<br/> 153:11,18,23<br/> 155:15,23 156:6,9<br/> 156:13 157:16<br/> 159:12,15,18,21<br/> 162:10 164:7,11,14<br/> 166:18 167:22<br/> 176:5,17,21 185:18<br/> 186:3,23 187:2,7,13<br/> 188:5 195:9 196:2<br/> 197:1 199:13 206:9<br/> 209:19 210:17<br/> 213:22 218:16<br/> 220:7 221:13,17<br/> 222:2,23 225:19<br/> 228:18,22 230:3<br/> 231:1,6 238:8 268:7<br/> 300:13 304:2,7,10<br/> 309:21 311:12<br/> 319:21 328:25<br/> 329:17 335:18,23<br/> 336:12,15 337:2<br/> 342:20 343:20<br/> 344:8 346:9,14<br/> 348:13 350:9,23<br/> 358:16,23 361:24</p> | <p>362:5,12,17 366:2<br/> 367:5,9,12,15,18,21<br/> 369:7,17,21 372:11<br/> 379:23 380:11<br/> 382:1,11 383:18,24<br/> 384:11,17 387:21<br/> 388:15,18 393:1,4<br/> 396:15 398:7,11<br/> 402:23 404:17<br/> 405:3,16 408:15,20<br/> 409:14 410:21<br/> 411:17 412:6,8<br/> 413:3,11,14,22<br/> 414:2,12 416:1<br/> 417:22 418:7,11,25<br/> 419:7 420:4 422:10<br/> 423:8,11,15,18,21<br/> 424:1 426:4,8<br/> 430:15,18 435:13<br/> 436:1,24 460:1<br/> 461:14 462:9,20<br/> 463:4 464:2 483:16<br/> 487:1 520:7,13<br/> 527:5<br/> <b>honest</b> 127:6 230:13<br/> 264:15 313:6<br/> 375:17<br/> <b>honestly</b> 279:3<br/> <b>honor</b> 12:5 110:4<br/> 120:21 122:13<br/> 131:17 135:7 142:6<br/> 159:20 185:15<br/> 188:1 206:10<br/> 320:19 329:13<br/> 335:20 337:1<br/> 342:19 343:17<br/> 345:19 350:22<br/> 361:20 362:10<br/> 367:8,11,14 382:8<br/> 382:16 383:12<br/> 402:20 408:12<br/> 409:13 413:2<br/> 414:11 415:25<br/> 426:3 459:23<br/> 483:10<br/> <b>hooks</b> 453:22</p> | <p><b>hope</b> 412:1<br/> <b>hopefully</b> 122:6<br/> 469:11<br/> <b>Horizon</b> 1:4 6:14<br/> 21:23 22:6,12 23:19<br/> 24:18,24 25:7,8<br/> 34:17 36:7,9 37:2<br/> 37:13,18 38:14<br/> 39:17 40:4 42:3<br/> 45:19 46:9,20 47:12<br/> 48:22,25 52:2,3<br/> 56:15 58:8 66:22<br/> 69:9 72:1 76:18<br/> 84:23 102:14,25<br/> 103:14,19 104:4,15<br/> 104:18 111:15<br/> 112:6 115:3,14,22<br/> 116:2 117:6 119:15<br/> 119:20,25 124:7<br/> 128:21,22 130:17<br/> 132:20 133:6<br/> 136:18 137:1 142:3<br/> 151:4 160:5,25<br/> 161:6,10,25 165:1<br/> 165:23 172:20<br/> 173:9 175:11 178:7<br/> 180:24 181:17<br/> 182:16 183:5<br/> 193:11 194:15<br/> 196:12 203:10<br/> 205:19,20 206:22<br/> 207:4,9 212:8<br/> 213:11 217:2<br/> 219:10,18 224:22<br/> 226:5,11 232:6<br/> 234:13,16,24<br/> 236:20 237:8,16,22<br/> 240:3 243:1 250:21<br/> 251:22 252:6 253:5<br/> 254:13 255:6 256:3<br/> 256:6 257:18 260:1<br/> 265:16 272:23<br/> 277:18 278:1,3<br/> 286:23 287:5<br/> 288:19 291:19<br/> 293:15,18 299:6</p> |
|--|---|---|---|

|  |   |   |   |
|--|---|---|---|
| <p>300:6 303:16<br/> 304:20,25 308:8<br/> 310:15 312:11<br/> 313:9 316:4,9,13<br/> 319:10,12 323:5<br/> 327:2 335:13 337:7<br/> 337:13,16,24 338:7<br/> 338:9,14 339:9<br/> 344:20 348:1,22<br/> 349:3 350:3 352:10<br/> 353:2 356:16 357:5<br/> 368:5 370:7,25<br/> 376:11 378:25<br/> 382:25 384:9 385:2<br/> 394:23 395:8<br/> 399:12 400:21<br/> 428:15 437:21<br/> 439:24 440:10,14<br/> 440:18 441:6 442:3<br/> 442:24 455:25<br/> 456:3 458:8 462:18<br/> 466:13 474:25<br/> 475:10,16 476:4,9<br/> 476:19 487:23<br/> 488:23 491:10<br/> 492:2,4,25 493:15<br/> 494:3 499:3 500:10<br/> 504:13 505:4 512:4<br/> 513:5 515:7 516:19<br/> 518:17 522:22<br/> <b>HORIZON's</b> 337:20<br/> 443:2<br/> <b>horrific</b> 154:2<br/> <b>HORSE</b> 44:7 45:3,11<br/> 51:21,25 52:3 89:18<br/> 93:12 160:4,8,18<br/> 161:9,24 265:15<br/> 499:2<br/> <b>hot</b> 422:24 466:20<br/> 513:12 514:16<br/> 515:8,16 518:24<br/> <b>Hotel</b> 1:23<br/> <b>hot-stab</b> 513:10<br/> 514:8,20 516:13<br/> <b>hot-stabbing</b> 514:24<br/> 520:22</p> | <p><b>Houma</b> 442:6 504:17<br/> <b>hour</b> 33:10 467:11<br/> 474:5<br/> <b>hours</b> 155:23 299:10<br/> 299:14,19 364:23<br/> 424:18 444:13<br/> 505:25 515:23<br/> 518:2,2<br/> <b>Houston</b> 1:23 378:13<br/> 378:14,18,19<br/> 429:12 440:8 442:5<br/> 514:9 515:22<br/> 529:24,24<br/> <b>how's</b> 443:14<br/> <b>HQS</b> 378:4,6<br/> <b>HQS-OPS</b> 378:4,22<br/> <b>HR</b> 260:22<br/> <b>HS</b> 481:13,15,17<br/> <b>HSE</b> 16:16 17:19<br/> 18:9 81:23 202:8<br/> 205:1 217:25 218:8<br/> 218:8 487:18,19<br/> 507:6<br/> <b>huge</b> 223:19 447:11<br/> <b>humor</b> 527:15<br/> <b>hung</b> 2:3 6:7 278:7<br/> 448:4<br/> <b>hunting</b> 123:2<br/> <b>Hurricane</b> 389:23<br/> <b>Hurricane</b> 234:2<br/> 272:17,18 486:22<br/> <b>hydraulic</b> 517:4<br/> <b>hydraulics</b> 288:8<br/> <b>hydrocarbon</b> 523:14<br/> <b>hypothetical</b> 117:8<br/> 117:11 140:6,8<br/> 301:4 302:14<br/> <b>H-A-R-I-K-L-I-A</b><br/> 93:21</p> <hr/> <p style="text-align: center;"><b>I</b></p> <hr/> <p><b>Ian</b> 323:2<br/> <b>Ida</b> 272:18 389:23<br/> 486:22<br/> <b>idea</b> 86:9 145:9<br/> 263:24 265:22</p> | <p>266:15 274:4 287:2<br/> 398:25 454:7<br/> 474:22 478:7 502:7<br/> <b>identical</b> 153:13<br/> <b>identifiable</b> 30:19<br/> <b>identification</b> 341:4<br/> 349:22<br/> <b>identified</b> 15:11,11<br/> 34:12 35:25 36:4,12<br/> 40:7,8 44:15 45:7<br/> 46:3 55:13 58:15<br/> 63:1,8 65:23 68:6<br/> 74:19,23 89:24 96:3<br/> 99:8,23 100:16,25<br/> 106:24 107:2 111:1<br/> 112:2,7 113:9 200:3<br/> 239:15 245:13<br/> 247:1 323:7 328:17<br/> 478:17 492:8<br/> <b>identifies</b> 35:19 202:6<br/> 283:8<br/> <b>identify</b> 33:24 34:14<br/> 44:18 54:20 59:22<br/> 98:17 154:8,9 159:3<br/> 171:2 257:12<br/> 385:14<br/> <b>identifying</b> 200:11<br/> <b>ignited</b> 496:12<br/> <b>ignore</b> 188:22<br/> <b>Illinois</b> 13:25<br/> <b>imagine</b> 215:19 357:1<br/> 380:12 410:25<br/> <b>imbedded</b> 329:2<br/> <b>IMCA</b> 21:18 44:3,22<br/> 94:22 165:3 170:21<br/> 207:25,25<br/> <b>immediate</b> 30:21<br/> 96:12 134:7 242:4<br/> 252:11<br/> <b>immediately</b> 274:10<br/> 274:19 275:3 279:5<br/> 386:16,21 387:1<br/> 448:3 514:24 519:4<br/> 523:8<br/> <b>IMO</b> 48:22 49:8<br/> 53:20 266:16</p> | <p>308:22 309:3,9,13<br/> 310:9<br/> <b>impact</b> 61:10 79:20<br/> 325:10 334:5<br/> 469:16 470:9<br/> <b>impacted</b> 335:5<br/> <b>impacting</b> 324:14<br/> <b>impair</b> 43:22 192:19<br/> 248:6<br/> <b>impaired</b> 43:6<br/> <b>imperfection</b> 197:5<br/> <b>implement</b> 52:12,18<br/> 158:24 176:3<br/> <b>implementation</b><br/> 34:10<br/> <b>implemented</b> 96:4,7<br/> 158:11 167:12<br/> 169:21 202:18<br/> 235:16 236:3 429:5<br/> <b>implication</b> 213:24<br/> <b>implies</b> 213:20<br/> <b>importance</b> 316:17<br/> <b>important</b> 27:24 28:3<br/> 114:7 126:11,16<br/> 127:8 188:14<br/> 197:10,11,18<br/> 275:20 316:13<br/> 331:20 336:1 343:8<br/> 390:8 413:25 418:9<br/> 460:18 484:16<br/> 500:13,14 501:3<br/> <b>importantly</b> 386:4<br/> <b>impossible</b> 230:1<br/> <b>impression</b> 354:17<br/> 425:15 502:13<br/> <b>imprisonment</b> 11:6<br/> <b>improper</b> 124:23<br/> <b>improve</b> 45:9 53:6<br/> 239:10 486:15<br/> 499:16,19<br/> <b>improvement</b> 45:4<br/> 50:1 233:11 238:19<br/> 238:21 243:11<br/> 442:12<br/> <b>improvements</b> 377:1<br/> <b>inaccurate</b> 85:13</p> |
|--|---|---|---|

|  |   |   |  |
|--|---|---|--|
| <p><b>inactive</b> 511:25<br/> <b>inadequacy</b> 158:21<br/> 243:14 489:5,9<br/> <b>inadequate</b> 31:19,20<br/> 83:11 234:14<br/> 235:20 243:12,18<br/> 385:7 387:13<br/> 487:22 488:23<br/> 489:3<br/> <b>incentive</b> 506:21<br/> <b>incentives</b> 64:8<br/> 494:15<br/> <b>inches</b> 443:3<br/> <b>incident</b> 25:10,11,14<br/> 25:16,20,21,22 43:1<br/> 43:2 44:13,18 45:24<br/> 46:15 51:3 61:4<br/> 92:7,14 93:12<br/> 117:18,20 147:18<br/> 148:7 150:3 154:8<br/> 181:20 182:7<br/> 218:23 222:21<br/> 223:16 233:16,17<br/> 233:19 234:9,10,14<br/> 235:5 236:17<br/> 254:21 255:5,9,10<br/> 255:11,12,13,16,19<br/> 255:20,24 256:21<br/> 261:11 273:13,17<br/> 274:1,7,9,16,19,20<br/> 275:3,6 283:16<br/> 305:4 316:2 319:10<br/> 328:4 332:21,23<br/> 335:5,14 338:13,16<br/> 338:19,21 339:17<br/> 340:5,20 341:23<br/> 344:20 346:19,20<br/> 347:6,13,15 351:9<br/> 357:16 360:1 361:3<br/> 361:8,13 364:1,4<br/> 365:12,16,18<br/> 377:13,14 382:5,14<br/> 390:13 442:22<br/> 443:1,2 444:3 472:4<br/> 472:11 473:2 481:2<br/> 481:4 486:15 487:4</p> | <p>487:6,9 488:5<br/> 490:12,15,17<br/> 512:25 515:14,21<br/> 516:1 519:16 523:8<br/> 525:22<br/> <b>incidents</b> 25:25 150:1<br/> 213:14 337:11<br/> 340:7,8,13,17 347:9<br/> 486:13<br/> <b>include</b> 11:5 124:2<br/> 266:13 329:2<br/> <b>included</b> 56:2 97:9<br/> 170:3,20 173:12<br/> 179:24 328:7<br/> 383:20<br/> <b>includes</b> 111:10<br/> 371:3<br/> <b>including</b> 11:10<br/> 29:15 51:21 66:21<br/> 66:22 167:25 174:6<br/> 177:20 251:11<br/> 270:4 406:14<br/> <b>incompetence</b> 8:25<br/> <b>inconsistent</b> 411:11<br/> 483:2<br/> <b>incorporated</b> 103:10<br/> 187:21 297:24<br/> 487:17 525:12<br/> <b>incorporating</b> 135:25<br/> <b>incorrect</b> 85:12<br/> <b>increase</b> 386:15<br/> 498:20 505:3<br/> <b>increased</b> 283:9<br/> <b>increasing</b> 283:3<br/> <b>increment</b> 507:10<br/> <b>incremental</b> 510:3<br/> <b>independent</b> 37:13<br/> 396:17<br/> <b>INDEX</b> 3:1<br/> <b>India</b> 378:1<br/> <b>indicate</b> 30:16 306:18<br/> 386:15 514:13,20<br/> <b>indicated</b> 33:5 40:15<br/> 41:20 77:10 93:12<br/> 101:9 148:19<br/> 163:20 194:16</p> | <p>216:19 235:11<br/> 244:17 282:3<br/> 296:12 336:1<br/> 398:22 399:14<br/> 401:24 402:4<br/> 429:25 458:10<br/> 459:6 465:10 502:4<br/> 503:12 504:11<br/> 514:15,19 525:5<br/> <b>indicates</b> 201:2 277:8<br/> <b>indicating</b> 328:19<br/> <b>indication</b> 386:22,24<br/> 406:24 504:16<br/> <b>indications</b> 217:19<br/> <b>indicator</b> 414:25<br/> <b>indicators</b> 426:14<br/> <b>individual</b> 24:9 27:19<br/> 39:14 53:14 69:4<br/> 84:20 89:21 165:18<br/> 165:19 174:15,16<br/> 175:13 195:23<br/> 199:18 202:14<br/> 205:3 265:6 267:10<br/> 425:20 443:3<br/> 449:23 450:2 452:5<br/> 452:9 453:13 454:3<br/> 465:14 479:19<br/> 488:7 509:6<br/> <b>individualized</b><br/> 172:11<br/> <b>individuals</b> 38:24<br/> 68:20,21 69:12<br/> 72:17 89:19 90:3<br/> 98:25 139:21<br/> 154:19 183:17<br/> 266:5 274:11<br/> 292:25 312:10<br/> 356:17 425:12<br/> 428:20 429:12<br/> 440:8 444:9 446:6,9<br/> 446:16 448:22<br/> 449:2 451:19<br/> 452:14 453:16<br/> 455:18,20 457:5,6<br/> 457:16 465:8,15,19<br/> 466:4 467:6,11</p> | <p>468:6,15 482:13<br/> 489:21 491:16,18<br/> 497:7,9 500:3,24<br/> 524:23<br/> <b>industry</b> 44:2 50:4,12<br/> 51:15 83:6,18 88:7<br/> 88:17,20 94:23<br/> 137:18,20 143:1<br/> 148:1,20 156:16<br/> 183:13 187:19,20<br/> 188:4,23 190:8,17<br/> 190:20,25 207:20<br/> 209:4 223:24 264:9<br/> 264:16 270:23<br/> 305:20 495:20<br/> 496:21 505:8<br/> 507:21<br/> <b>inference</b> 305:8<br/> <b>infiltrated</b> 421:24<br/> <b>inflatable</b> 498:3<br/> <b>inflow</b> 374:10 402:9<br/> <b>influence</b> 9:25<br/> <b>influx</b> 409:25<br/> <b>inform</b> 192:17 199:4<br/> 232:4 250:15,17<br/> 458:17<br/> <b>information</b> 8:20<br/> 12:20 13:5,8 38:21<br/> 49:23 51:2 85:16<br/> 99:24 105:15<br/> 111:22 115:4<br/> 119:16 120:11<br/> 121:23,24 134:5,14<br/> 135:5 137:3 139:18<br/> 143:21 148:14<br/> 151:20,25 152:21<br/> 154:25 155:2,7,9<br/> 163:17 180:10,25<br/> 206:5 210:2 255:23<br/> 279:3 283:19<br/> 319:12 320:12<br/> 326:20 330:2,9<br/> 331:20,25 332:3,8<br/> 332:12 360:8,16<br/> 376:22 377:17<br/> 402:7 409:2 435:17</p> |
|--|---|---|--|

|   |  |  |  |
|---|--|--|--|
| 459:4,5,14 460:13<br>464:8 467:8,21<br>468:3,17 470:3<br>475:14 482:1<br>483:20 516:15<br><b>informational</b> 10:22<br><b>informed</b> 56:7<br>105:20 193:1<br>259:11 278:21<br>297:3 308:4 351:16<br>359:10 363:8 374:9<br>406:8 407:9 415:9<br>485:24<br><b>informs</b> 481:7<br><b>inhibit</b> 293:19 406:8<br>406:9,16 415:10,12<br><b>inhibited</b> 293:22<br>294:2 310:25<br>353:24 393:15<br>405:9 417:16<br><b>inhibiting</b> 406:5<br><b>inhibits</b> 33:24 42:10<br>90:24 91:2 166:25<br>167:12 169:7,15,22<br>177:17 186:19<br><b>inhibit-related</b><br>168:14<br><b>initial</b> 209:5 215:2<br>277:19 330:18<br>503:17 508:17,19<br>513:4<br><b>initially</b> 304:23<br>442:20 443:11<br>470:2,5 519:7,18<br>524:18<br><b>initiate</b> 238:25 257:4<br><b>initiated</b> 11:15 41:17<br>41:18 260:6 262:5,7<br>263:17 395:1<br>492:24 494:6<br><b>initiates</b> 164:4<br><b>initiating</b> 471:8<br><b>initiation</b> 181:12<br><b>initiative</b> 44:4 440:20<br><b>injection</b> 518:7<br><b>injured</b> 455:20 | <b>injuries</b> 157:6<br><b>injuring</b> 42:24<br><b>input</b> 355:8 361:6,9<br>430:6,6,6,11 431:18<br><b>inquiries</b> 182:12<br><b>inquiry</b> 145:14 231:3<br>403:22<br><b>inserted</b> 309:14<br><b>inside</b> 10:10 204:5<br>421:16 447:6 448:5<br>450:15 469:15<br><b>insinuated</b> 525:1<br><b>insist</b> 355:6<br><b>insisted</b> 302:13<br><b>insofar</b> 157:1<br><b>inspect</b> 231:8 500:3<br>515:7<br><b>inspected</b> 22:2 179:8<br>203:12 290:6 296:1<br>296:17,18 297:1,5<br>298:7<br><b>inspecting</b> 289:21<br>314:1 500:5 511:1<br><b>inspection</b> 21:9,16,19<br>48:4,24 53:25 94:21<br>97:21 170:21<br>178:20 180:23<br>182:15 186:2,14,16<br>186:21 208:1,3,11<br>231:11 240:1,4,6,8<br>240:11,12,22,25<br>241:1 291:1,4<br>296:14,16 298:6,12<br>393:25 499:24<br><b>inspections</b> 48:6<br>108:13 240:13<br>294:23 295:11<br>296:7,25 297:20<br>298:15 357:25<br>358:6<br><b>inspector</b> 9:5 479:13<br><b>inspectors</b> 479:13<br><b>inspects</b> 510:22<br><b>install</b> 354:14<br><b>installation</b> 15:24<br>24:10 51:21 53:15 | 81:6 130:19 194:18<br>197:24 213:5,6<br>227:22 258:16<br>261:1 267:11<br>397:21,23 438:17<br>499:1,4 500:25<br><b>installations</b> 51:25<br>263:13 265:14<br>394:13 442:23<br>446:3 479:20<br>491:17 505:20<br><b>installed</b> 292:19<br><b>instance</b> 138:1<br>148:25 169:6<br>401:25<br><b>instances</b> 68:14,15<br><b>instant</b> 221:1<br><b>instantaneous</b> 425:4<br><b>instantaneously</b><br>427:15<br><b>Institute</b> 15:19 404:6<br><b>instruct</b> 334:17<br><b>instructed</b> 285:17<br>452:23 455:12,13<br>459:17<br><b>instructions</b> 217:18<br>250:21 297:8 447:1<br>501:20 502:1<br>520:24 521:2<br><b>instructor</b> 7:20<br><b>instrumentation</b> 33:1<br>42:18 245:3<br><b>insulation</b> 77:17<br>280:1<br><b>insurance</b> 244:9<br><b>integrity</b> 58:3 66:2<br>66:15 75:4,15 77:11<br>78:16,25 95:13<br>109:1 110:19 185:8<br>193:15 209:15<br>215:13,17 386:13<br>469:11 473:9<br><b>intend</b> 91:7 126:2<br>295:14 296:19<br>320:5<br><b>intended</b> 8:13,23 | 172:21 381:8 394:1<br>394:19 395:1 396:8<br>416:15,16 417:11<br><b>intending</b> 418:5<br><b>intent</b> 295:18 416:19<br>464:17 522:24<br><b>intention</b> 121:19<br><b>inter</b> 38:18<br><b>interact</b> 63:23 70:6<br>105:2 188:9 241:2<br>241:10<br><b>interacting</b> 38:18<br><b>interaction</b> 70:8,9,13<br>80:24<br><b>interactions</b> 152:20<br><b>interest</b> 12:2,3,5,7,9<br>12:15 91:11 101:6<br>101:10 105:19,22<br>105:24 154:15<br>167:24 319:22<br>320:16 409:1<br>483:25 484:17<br>520:15<br><b>interested</b> 106:6<br>123:10 139:13<br>152:17 185:12,13<br>220:19,21 364:2<br>430:19 529:15<br><b>interests</b> 153:13<br>477:1<br><b>interfaces</b> 385:21<br><b>interfere</b> 10:4<br><b>Interior</b> 6:10<br><b>internal</b> 34:25 72:18<br>75:23 92:19 208:13<br>262:7 272:3 290:25<br>493:7 494:1,1<br><b>internally</b> 239:8<br>298:7<br><b>international</b> 15:3<br>21:17 23:8 26:3,9<br>26:10,23 27:10 28:5<br>28:12,15 29:20 34:6<br>53:5,12,20 94:22<br>160:18 187:21<br>188:25 224:16 |
|---|--|--|--|

|  |   |  |   |
|--|---|--|---|
| <p>241:21 266:9<br/>267:16 309:16<br/>481:11<br/><b>interpret</b> 136:1<br/><b>interpretation</b> 87:1<br/>188:2<br/><b>interpretations</b> 394:3<br/><b>interpreted</b> 364:11<br/>364:18 460:12<br/><b>interpreting</b> 145:19<br/>521:21<br/><b>interrelation</b> 251:2<br/><b>interrogated</b> 208:25<br/><b>interrupt</b> 183:14<br/>414:20 416:21<br/>445:11<br/><b>interruption</b> 197:20<br/><b>intersection</b> 447:19<br/><b>intervene</b> 89:9 192:8<br/><b>intervention</b> 475:9<br/>513:4,8 520:20<br/>523:2,9,12 524:17<br/>524:22<br/><b>interview</b> 237:19<br/><b>interviewed</b> 260:11<br/><b>interviews</b> 10:9 155:1<br/>491:18<br/><b>intimate</b> 224:19<br/><b>intimately</b> 83:3<br/><b>introduced</b> 344:5<br/><b>introduction</b> 480:10<br/><b>invest</b> 43:5,21<br/><b>investigated</b> 489:1<br/><b>investigating</b> 137:6<br/>174:10<br/><b>investigation</b> 1:1,18<br/>6:4,11,22 7:1,4,6,21<br/>8:4,13,23 11:8,18<br/>12:21 25:10,11,14<br/>25:16,21 43:4 45:6<br/>101:21 131:16<br/>154:7,11,14 159:3<br/>173:17,20 174:4,17<br/>222:13 233:17,21<br/>234:4,6,7,19,22<br/>235:2 236:23 237:1</p> | <p>260:6,9,10,12 262:6<br/>283:13,19 284:3,7,9<br/>334:18 484:2 487:6<br/>488:2 490:12,18<br/>492:24 493:4<br/><b>investigations</b> 283:24<br/><b>investigative</b> 174:9<br/>175:3<br/><b>investigators</b> 12:22<br/><b>investors</b> 119:6<br/><b>involve</b> 272:6 389:7<br/><b>involved</b> 9:4,18 22:5<br/>23:6 56:18 84:9<br/>92:19 104:13<br/>149:10 162:21<br/>232:11 233:21<br/>255:19 256:17<br/>259:25 260:12<br/>263:8 269:10<br/>290:14 292:18<br/>312:22 356:15,24<br/>357:2,6 413:17<br/>422:8 457:10<br/>474:18 486:5 513:4<br/><b>involvement</b> 21:22<br/>82:21 88:10 224:24<br/>237:11 269:13,20<br/>270:22 271:5<br/>283:12 284:5<br/>481:12 491:12,14<br/>499:25 500:8,16,22<br/><b>involving</b> 16:18<br/>142:19 328:5<br/>395:23 396:22<br/><b>in-depth</b> 225:4<br/>227:20 291:2<br/><b>irrespective</b> 29:11<br/>87:22 106:14<br/><b>Island</b> 23:20 24:7,8<br/>46:18 47:10 49:16<br/>91:8,18<br/><b>Islands</b> 24:15 123:10<br/>123:17 124:12,16<br/>126:25 127:15<br/>128:23 129:2,6,16<br/>132:18 136:9 137:8</p> | <p>165:16 198:1<br/>230:19 231:7,20<br/>240:23 263:14,17<br/>263:21 304:2,5,15<br/>314:4,6 320:17<br/>494:5,11,16 520:9<br/><b>Island-recognized</b><br/>48:21<br/><b>ISM</b> 26:4,8,12,14,22<br/>27:2,5,9,25 28:8<br/>29:7,10,13 30:7<br/>31:6,18 34:9,25<br/>46:19 47:1 49:8<br/>64:19,22 82:10<br/>86:11,17 87:21 88:1<br/>88:24 103:9 114:23<br/>115:1,10 189:11<br/>207:2,10,13,17,24<br/>208:18 209:7,10<br/>224:19,23 225:2,7<br/>225:10,24 226:12<br/>226:24 227:2,3,5,12<br/>227:14,23 229:20<br/>230:13,15,19,20<br/>231:13,13,17,21,21<br/>232:9,11,20 250:22<br/>250:25 262:7<br/>263:17 267:20<br/>481:13,16,18,25<br/>482:12 483:7,9<br/>486:6 493:7,18,18<br/>494:1,6<br/><b>ISM-defined</b> 208:15<br/><b>ISM-designated</b><br/>231:25 485:21<br/><b>ISO</b> 27:11 103:9<br/><b>isolation</b> 243:11<br/>488:9<br/><b>issue</b> 12:14 20:13<br/>49:7 53:25 59:14<br/>62:11 77:19 89:2<br/>142:16 143:10<br/>149:14 152:6 153:8<br/>154:6 173:10<br/>180:14 201:2 204:4<br/>204:5 251:20</p> | <p>267:20 272:12<br/>278:15 292:9<br/>324:14,17 328:3<br/>351:22 354:9<br/>363:21,24 364:12<br/>364:14 380:5 407:1<br/>418:13 456:2,9<br/>504:12<br/><b>issued</b> 9:14 46:19<br/>48:21 49:15 129:5<br/>328:15 393:20,25<br/>512:22<br/><b>issues</b> 19:4 20:9,24<br/>34:10,22 38:11 57:7<br/>58:3 63:1,12 77:13<br/>78:19,24 99:22<br/>146:1 148:23<br/>172:11 197:19<br/>232:9 235:8 236:7<br/>241:9 252:1,3 258:1<br/>258:6 275:18 293:6<br/>307:11 313:8<br/>317:17,18 318:19<br/>321:21 322:19<br/>323:7 324:9,20,25<br/>325:15 330:6<br/>332:18 335:4<br/>353:12 354:20<br/>355:1 359:8 363:9<br/>381:3 386:25 389:7<br/>397:18 399:9<br/>400:23 401:8 441:1<br/>513:10 515:16<br/>518:6 523:8 526:20<br/><b>issues/incidents</b><br/>252:12<br/><b>item</b> 61:4,5,5,8 97:5<br/>168:20 179:25<br/>192:20 246:4,8<br/>326:7 433:7<br/><b>items</b> 31:4 32:21<br/>33:15 34:1,4,12,14<br/>34:15,20,22 40:9,9<br/>40:10,12,13 41:7<br/>42:12,14 58:15<br/>61:11,13 62:4,9,21</p> |
|--|---|--|---|

|  |   |   |   |
|--|---|---|---|
| 65:4 77:9 78:5,9,10<br>89:1 90:17 95:21<br>99:2,3,8 100:15,17<br>100:18,25 106:20<br>106:21 107:1,12,16<br>107:21 108:1,2,3<br>113:9,15,21,22<br>168:25 170:22,24<br>184:1,1,2,3 192:17<br>200:3 201:18,23<br>202:3,13 204:8,18<br>242:6,22 246:13,14<br>247:6,11 248:12,14<br>248:15,21 250:18<br>266:16 289:13,14<br>289:16,16 290:5<br>292:17,20 313:3,5<br>314:18 320:9 322:7<br>322:11,15,21,22<br>323:11,15 324:6<br>355:24 384:2<br>493:25<br><b>i.e</b> 57:25<br><b>I13</b> 517:12 | 255:22 260:25<br>261:3 277:4 279:11<br>279:15,20 280:3,11<br>327:1 363:3,7,11,14<br>364:11 373:24<br>374:9,25 389:25<br>390:2,4,6,15,21<br>391:6,23 392:1,3,8<br>392:9,14,19,21<br>401:3,24 429:19<br>434:25 443:19<br>444:16 445:6,19<br>451:4,8 456:14<br>457:11,22 466:25<br>467:9 476:8,12<br>485:22<br><b>Jimmy's</b> 390:10<br><b>JIT</b> 344:6<br><b>job</b> 54:19 67:17<br>123:23 163:21,23<br>163:24 262:3<br>287:10 292:11<br>323:17 353:1 376:2<br>401:21 497:10<br>508:7 527:11<br>529:25<br><b>jobs</b> 33:8 376:7<br><b>Joe</b> 307:15<br><b>John</b> 2:10 7:15 19:19<br>19:20,23,24 42:1<br>58:19 59:19 66:20<br>67:10 204:16,20<br>241:8,13,15 245:16<br>245:21 277:9 278:7<br>278:10,15,17,20<br>279:1 301:13,17<br>302:22 307:13<br>323:1,2 355:1,11<br>360:20 365:23<br>488:17<br><b>Johnson</b> 4:7,15 58:22<br>58:23 59:18 63:22<br>63:24 72:11,22 76:5<br>210:17,18,25 211:4<br>219:25 220:4<br>222:10 230:24 | 268:12 277:9<br>304:16 311:16<br>320:18,18,21,22<br>321:2 324:10<br>326:24 328:9<br>329:12,22 330:8<br>332:6,24 333:20<br>335:16,16 336:19<br>342:15 344:13<br>345:19 346:4 359:3<br>362:22 367:24<br>381:22 382:3 393:9<br>398:14 404:19<br>414:19 417:14<br>419:16 420:1 422:9<br>423:14 424:5<br>435:15 466:12,15<br>475:17,23,24<br>488:16 500:22<br><b>Johnson's</b> 380:10<br><b>join</b> 234:24 354:15<br><b>joined</b> 357:9 370:12<br>487:13<br><b>joint</b> 1:16 6:11,22 7:1<br>7:3 11:18 269:16<br>291:14 487:13<br><b>Jon</b> 289:6 365:8,9,16<br><b>Jonathan</b> 289:7<br><b>Jones</b> 22:24<br><b>judge</b> 7:23 8:1 10:25<br>12:12 13:13 86:6<br>91:15 140:5 147:12<br>162:3 164:9 185:24<br>194:21 195:7<br>222:16 228:2,15,20<br>229:21 304:4,8<br>311:11 335:22<br>346:3 348:10 350:5<br>379:21 380:8 410:8<br>410:17 413:13,18<br>413:20 414:6<br>416:10 418:4 419:5<br>420:1 422:5 436:22<br>460:23 462:3 464:1<br>482:24 520:3<br><b>judgeship</b> 412:9 | <b>judgment</b> 133:18<br>306:8<br><b>July</b> 44:6 93:13,14<br><b>jump</b> 107:12 432:15<br><b>jumped</b> 107:21 448:3<br><b>jumping</b> 449:19<br><b>June</b> 59:9 345:7<br>437:12 512:13<br><b>justified</b> 428:14  |
| <b>J</b>   |   |   | <b>K</b>  |
| <b>J</b> 365:24 366:9,10<br><b>Jackson</b> 7:16<br><b>jack-up</b> 216:21,24<br><b>jack-ups</b> 312:1<br><b>James</b> 16:11 214:14<br>251:17 271:10,19<br>272:6 283:18 301:7<br>317:16 351:16<br>357:21 370:22<br><b>January</b> 120:6<br>232:12 240:17<br>349:2,11<br><b>Jason</b> 2:8 7:11<br><b>jeopardized</b> 403:10<br><b>Jim</b> 213:17<br><b>Jimmy</b> 150:24 151:3<br>194:14,18,19 195:1<br>195:23 214:4,6<br>218:11 219:1<br>227:21 232:1,2                                       |   |   | <b>K</b> 365:23<br><b>Kaluza</b> 159:18 160:3<br>161:23 162:5<br>258:19 259:2,11,15<br>259:19 306:14<br>307:24 308:4<br>359:10,20 398:11<br>398:17,25<br><b>Kaluza's</b> 162:8<br>259:17,22 306:20<br>307:7 308:2,17<br>359:5<br><b>Karis</b> 3:19 93:19,20<br>93:25 94:2 98:15,19<br>99:5 100:3,14,15<br>101:3 109:11 187:6<br><b>Katrina</b> 234:2 272:17<br>487:2,3<br><b>Keaton</b> 289:6,7 365:8<br>365:9,16<br><b>Keelan</b> 440:25<br><b>keep</b> 55:9 65:2 70:24<br>93:1 101:16 132:11<br>276:16 316:13<br>426:9 469:13 507:9<br>507:19<br><b>keeping</b> 66:15 82:5<br>102:6 300:22<br>302:13<br><b>Keith</b> 522:17<br><b>Kent</b> 214:14 251:17<br>271:10,14,19,21<br>272:6 283:14,18<br>300:20,25 317:16<br>351:17 357:21 |

|   |   |   |   |
|---|---|---|---|
| <p>370:22<br/> <b>Keplinger</b> 420:16<br/> 501:15 502:18<br/> <b>kept</b> 453:14 520:10<br/> <b>Kevan</b> 202:6<br/> <b>Kevin</b> 459:6<br/> <b>key</b> 83:7 180:17<br/> 306:23 487:10<br/> <b>kick</b> 258:3 338:22,24<br/> 339:1,4,12<br/> <b>kill</b> 364:7 365:6<br/> <b>killing</b> 42:24<br/> <b>kin</b> 529:16<br/> <b>kind</b> 169:4,13 183:10<br/> 231:4 238:3,22<br/> 241:9 266:17,25<br/> 276:18 280:12<br/> 284:4 321:13 355:4<br/> 357:9,11 368:8<br/> 375:1 417:18<br/> 428:18 444:10,21<br/> 445:1,23 447:19,24<br/> 448:6,7,8,10,17<br/> 455:9,10<br/> <b>King</b> 277:14<br/> <b>Kirby</b> 3:21 39:19<br/> 118:17,21,24<br/> 120:13,18<br/> <b>knew</b> 24:16 116:1<br/> 352:25 387:11,16<br/> 399:11,25 400:6,10<br/> 401:20 403:9<br/> <b>knock</b> 107:13<br/> <b>knocked</b> 111:1<br/> 218:24 390:14<br/> <b>know</b> 17:2 18:10,13<br/> 19:5,7,9 21:2 22:11<br/> 24:7,10 31:9 34:7<br/> 37:4,8,10,12,15,20<br/> 37:22,24 40:3,19,21<br/> 41:2 42:15,20 49:20<br/> 53:4 56:16 57:3,5<br/> 60:1 61:11,14,20<br/> 62:4,6 64:1 65:14<br/> 67:20 68:4 70:6<br/> 81:10 82:21,22</p> | <p>97:11 101:15 105:7<br/> 106:3,10 109:17,24<br/> 110:1 113:1 119:18<br/> 122:3,3,23,25<br/> 125:18 126:4 127:6<br/> 135:4 139:9,15<br/> 141:24 142:19<br/> 148:13 149:9<br/> 151:22 152:7,16<br/> 153:15,18 154:2<br/> 157:15,24 160:6<br/> 161:23 162:1,4,5,6<br/> 162:17,20 163:1,13<br/> 164:22 165:21<br/> 168:7 171:19<br/> 173:24 174:16<br/> 175:13,23 178:5,9<br/> 178:14 179:17<br/> 181:25 195:15<br/> 197:2 198:15,17<br/> 200:10 202:5<br/> 209:20 214:12<br/> 217:11 218:3,25<br/> 219:4 220:16<br/> 222:22 223:24<br/> 224:8 225:21 226:3<br/> 227:19 228:9,20,22<br/> 229:7,19,23,25,25<br/> 230:5,14,20 231:3<br/> 231:10 234:11<br/> 235:14 236:7,25<br/> 237:3 239:22<br/> 241:20 244:6,7<br/> 249:15,16,17 253:1<br/> 256:10,15 257:3,4,5<br/> 257:10 258:24,25<br/> 259:2 260:24 261:5<br/> 261:10,13 262:6,10<br/> 263:11,15,16,19,22<br/> 263:25 264:15<br/> 266:25 269:16<br/> 270:5,6 271:24<br/> 274:22,25 275:8<br/> 276:9,20 277:16<br/> 278:6 279:10,14<br/> 280:6,7 281:4,17</p> | <p>282:19,21 284:5,6<br/> 284:20,23 285:23<br/> 287:4,8,16,24 288:2<br/> 288:7,22 289:10<br/> 290:2,10 291:16,24<br/> 292:10 293:4,17,21<br/> 296:6,11 298:12,13<br/> 298:16,19 299:22<br/> 300:6 301:4 306:22<br/> 307:13,23 310:8,11<br/> 310:18 312:18<br/> 316:24 317:17<br/> 318:14 319:2,7,8<br/> 321:18,21 324:12<br/> 331:24 332:14,20<br/> 335:7 343:15<br/> 348:16,17 350:16<br/> 352:4,6,17 356:6<br/> 358:5,11 359:16<br/> 361:12,17 362:2,15<br/> 363:25 364:9<br/> 365:16 366:6,13,17<br/> 366:23 368:1<br/> 371:14,15 372:19<br/> 373:17 375:24,25<br/> 376:4,21 377:15<br/> 379:23,25 380:1,3<br/> 380:15,16,19,20<br/> 381:5,5,14 382:20<br/> 383:19,22,25 385:1<br/> 385:4,9,10,16,17,19<br/> 385:20,23,24 386:2<br/> 386:3,7,9 387:14<br/> 388:12 390:2,5,25<br/> 391:17,18,19 392:4<br/> 395:16,17 399:15<br/> 403:3 407:5,23<br/> 408:3,7 411:2,25<br/> 413:9 414:7,21<br/> 420:4,5,6,11,11,15<br/> 420:18,21 421:2,10<br/> 421:12,18 422:6,8<br/> 422:13,14,17 423:2<br/> 424:7 427:16,18,20<br/> 427:23 428:14,24<br/> 429:15,23 430:4,5</p> | <p>431:6,21 432:15,19<br/> 433:2 434:5 444:2<br/> 444:15 445:24<br/> 446:14 447:1,4,24<br/> 448:20 449:8 450:1<br/> 450:4,7,11,17,19<br/> 451:10,21,22<br/> 452:11,12,21 453:1<br/> 453:2,18,21 454:4<br/> 454:10,10,24 455:4<br/> 456:15 457:9,12<br/> 461:15,17 462:1,21<br/> 462:22 463:5,12,12<br/> 463:13,19 465:4,24<br/> 467:12 468:6,15<br/> 469:23 474:15,19<br/> 476:11,21 478:25<br/> 480:17,19,23,24<br/> 483:19,22 484:18<br/> 485:17 486:11,13<br/> 491:4 493:6 494:12<br/> 494:13,14,17 495:2<br/> 495:11 496:9 499:4<br/> 501:21 502:3<br/> 503:21 505:7 506:5<br/> 506:12 507:14<br/> 508:22 511:24,25<br/> 512:15 515:19<br/> 516:6,9,23 518:16<br/> 518:22,25 521:18<br/> 522:22 523:1,16,17<br/> 523:18 524:13<br/> 525:24 526:2,10<br/> <b>knowing</b> 63:3 92:6<br/> 152:17 154:16<br/> 165:14<br/> <b>knowingly</b> 403:14<br/> <b>knowledge</b> 16:23<br/> 18:8 26:3,13 39:24<br/> 40:1 43:9,16 49:20<br/> 50:3 56:14,21 97:23<br/> 97:23 98:12 99:21<br/> 111:21 116:12,22<br/> 119:12 125:7<br/> 140:12,23 147:18<br/> 151:19,24 157:17</p> |
|---|---|---|---|

|  |  |  |  |
|--|--|--|--|
| 180:7 187:20 195:4<br>195:13 200:14<br>224:6,15,16,19<br>227:7,12,19,20<br>229:6 230:15<br>231:13 232:15,17<br>234:4,5 235:1<br>239:13,25 259:9<br>263:25 264:8 276:6<br>280:17 296:21,22<br>305:22 306:9 311:3<br>311:4 322:17<br>335:12 354:8<br>357:25 359:5<br>361:16 362:4,6<br>364:5 372:13<br>379:22 380:10<br>384:8 392:18,23<br>396:17 398:24<br>400:20 402:11<br>415:8,20 432:16<br>481:10 482:19<br>483:7,9 486:9 496:9<br>500:7,16,21 523:7<br><b>knowledgeable</b> 27:25<br>30:7 31:12 40:24<br>68:2 165:19 226:24<br>227:2,17 230:8,12<br>243:7 327:3 401:2<br>516:20<br><b>known</b> 6:19 21:8<br>194:23 385:8<br><b>knows</b> 101:18 121:24<br>122:2 146:6 150:2<br>156:12 390:4<br>402:19 418:10<br>420:2 463:4<br><b>KODIAK</b> 357:9<br><b>KOHNKE</b> 122:13,17<br>195:7,10 196:22<br>221:25 222:3<br>460:23 479:3<br>483:10 520:3,12<br>527:22<br><b>Kongsberg</b> 183:4<br><b>Kongsberg-related</b> | 183:7<br><b>Kuchler</b> 4:17 358:20<br>358:21 359:2<br>362:22 366:4,7<br>367:3 402:17,21,21<br><b>Kuchta</b> 82:19 112:24<br>140:25 155:16<br>218:12 227:8<br>255:22 259:21<br>261:22 277:5 393:2<br>395:12 429:15<br>456:22 458:12<br>459:6 463:23 464:4<br>467:14 469:19<br>470:5 471:9 476:15<br>478:9<br><b>Kuchta's</b> 216:15<br><b>Ky</b> 118:24<br><b>Kyle</b> 156:8 221:15<br>393:2,3<br><b>K-A-R-I-S</b> 93:21<br><hr/> <b>L</b> <hr/> <b>labeled</b> 62:21<br><b>labor</b> 293:8,13<br><b>lack</b> 33:23 39:19<br>59:12 229:6 275:2<br>355:7 362:5<br><b>ladder</b> 302:16 455:17<br><b>lady</b> 330:21 501:21<br><b>laid</b> 196:1<br><b>Lake</b> 7:16<br><b>Landry</b> 468:13,20<br><b>language</b> 166:5<br>280:19 329:15<br>383:21<br><b>laptops</b> 10:15<br><b>large</b> 133:1 225:3<br><b>largely</b> 246:12<br><b>largest</b> 44:7<br><b>latched</b> 137:12,13<br><b>late</b> 56:20 57:2<br>240:20 276:21<br>285:7 320:7 360:5<br>374:23 474:16<br>485:10 520:4 526:5 | <b>laterally</b> 68:22<br><b>latest</b> 276:20<br><b>latitude</b> 461:1 484:5<br>484:21<br><b>launch</b> 453:12,13,18<br>453:20 474:21<br>475:11<br><b>launched</b> 454:2<br><b>launching</b> 475:2<br><b>laundry</b> 106:20<br><b>law</b> 9:1 133:20 189:9<br>309:13 310:12<br>484:2<br><b>laws</b> 11:2<br><b>lawsuits</b> 186:8<br><b>lawyer</b> 125:17 126:14<br>142:10 382:2<br>411:22 413:4<br><b>lawyers</b> 329:1 362:14<br>409:4 491:10<br><b>lay</b> 131:18 221:11,18<br><b>layer</b> 475:14<br><b>layers</b> 225:12,16,22<br>475:14,15<br><b>lead</b> 7:20 14:25 20:12<br>20:20 31:20 35:14<br>38:10 39:2,15 66:12<br>66:17 68:5 69:1<br>71:10 90:9 112:4<br>151:25 175:17<br>201:22 525:5<br><b>leader</b> 16:13 41:8,19<br>41:24 65:23 66:20<br>76:12,16,17,24 81:4<br>83:21 105:11,11<br>160:3 194:17<br>202:22 203:2<br>204:10,16 236:13<br>236:21 258:19<br>259:12 308:6 399:8<br>401:6,7 430:5<br>431:24 434:12<br>490:7 522:19<br><b>leaders</b> 83:7 259:7<br><b>leadership</b> 20:20<br>35:11,13 59:16 | 174:12 205:16<br>206:22 317:21<br><b>leading</b> 335:13 525:7<br><b>leads</b> 155:2 163:5<br><b>leak</b> 285:12,13,16,18<br>285:20,22<br><b>leaking</b> 285:7 518:9<br><b>lean</b> 238:12<br><b>learn</b> 235:4 347:6<br>487:8 488:4<br><b>learned</b> 45:3 92:15<br>148:22 233:22<br>234:8 235:8,15<br>236:2,25 293:25<br>306:11 339:3<br>347:10,16 354:21<br>377:14 442:25<br>443:5 486:14 488:6<br>490:14,16,24 491:1<br><b>leave</b> 260:16 266:25<br>390:6 453:12 463:2<br>464:12,14,18<br><b>leaving</b> 6:14<br><b>led</b> 333:11 518:18<br><b>left</b> 7:11,14,19 69:7<br>247:11 274:16<br>278:11 286:3 308:8<br>310:10 363:22<br>442:5 443:23 445:3<br>448:3,12 450:16<br>451:16 453:7 454:2<br>462:22 465:17<br>469:21 471:4<br>502:20 520:6<br>521:10 522:6<br>524:18<br><b>left-hand</b> 282:15<br><b>legal</b> 86:22,25 109:12<br>109:19 133:14<br>188:2,13 321:10,13<br>529:24<br><b>legally</b> 197:17<br><b>legislation</b> 22:24 61:9<br>250:15<br><b>legislative</b> 62:10,23<br>200:4 |
|--|--|--|--|

|                               |                               |                               |                               |
|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| <b>legitimate</b> 188:5       | <b>licensed</b> 9:2 128:7     | 497:11 517:4                  | <b>local</b> 334:15,21        |
| <b>lends</b> 176:5            | 143:5 193:6,24                | 519:12                        | <b>locate</b> 303:21 519:5    |
| <b>length</b> 100:12 126:1    | 194:5,14 196:14               | <b>lineup</b> 363:4 404:11    | <b>located</b> 15:1 438:3     |
| 315:3 321:22                  | 197:23 247:17,23              | 404:13                        | <b>location</b> 95:3,5 130:6  |
| <b>lesson</b> 45:3 92:15      | 333:25 368:16                 | <b>linked</b> 414:24          | 130:18 131:8                  |
| 234:8 236:2,25                | 397:21,24                     | <b>linking</b> 80:14 161:6,8  | 133:12 134:18                 |
| 443:5 486:14                  | <b>licensing</b> 265:25       | <b>Linsin</b> 3:18 4:13       | 136:18 217:3                  |
| <b>lessons</b> 148:16,22      | 266:3,6 397:18                | 91:15,16,20 92:23             | 269:24,24 446:17              |
| 233:22 234:11                 | 499:12                        | 135:7 304:8,13,14             | 446:25 509:2                  |
| 235:7,15 339:3                | <b>life</b> 1:4 448:15,16     | 311:10 528:5                  | 522:21                        |
| 347:10,16 377:13              | 449:16,21 459:17              | <b>list</b> 12:18 25:17 31:4  | <b>locations</b> 130:14       |
| 442:24 490:14,16              | 462:16 463:8                  | 35:16,17 36:1 40:12           | 429:11                        |
| 490:24 491:1                  | <b>lifeboat</b> 465:10        | 57:6,12 106:20                | <b>locked</b> 512:20          |
| <b>letter</b> 282:1,9,14,17   | 498:13                        | 112:25 113:5                  | <b>lockout</b> 280:20         |
| 283:8 303:9                   | <b>lifeboats</b> 480:7        | 148:15 170:22                 | <b>log</b> 277:6 327:25       |
| <b>let's</b> 6:5 109:13 111:5 | <b>lifesaving</b> 51:8 265:5  | 174:16 179:4 186:6            | 365:20 523:20                 |
| 118:6 131:19                  | 498:10                        | 201:18 202:12,13              | <b>loggerheads</b> 301:5      |
| 136:12,15 142:15              | <b>lifting</b> 203:18,20      | 202:16 204:1,3,18             | <b>logic</b> 411:3            |
| 152:2 162:10                  | <b>lifts</b> 456:17           | 246:15,16,17,18               | <b>logical</b> 411:14         |
| 172:15 179:14                 | <b>light</b> 285:2 332:10     | 292:12 335:19                 | <b>logistics</b> 360:9 433:12 |
| 189:23 214:24                 | 348:18 354:21                 | 355:13 512:9                  | <b>logo</b> 282:15            |
| 286:15 321:4                  | 366:7,24 454:16               | <b>listed</b> 12:18 34:4 40:9 | <b>logs</b> 515:18 521:5      |
| 327:15 341:19                 | 465:18                        | 44:9 93:13 100:17             | 525:25                        |
| 347:23 350:13                 | <b>light-hearted</b> 444:14   | 106:23 394:8                  | <b>London</b> 4:23 159:14     |
| 372:21 373:22                 | <b>likelihood</b> 55:5        | <b>listen</b> 241:16 460:19   | 423:16,20,25 424:4            |
| 380:22 387:21                 | <b>limit</b> 190:5 504:12     | <b>listened</b> 83:12 165:7   | 424:6 426:2                   |
| 389:21 390:20                 | <b>limited</b> 43:16 173:17   | <b>listing</b> 25:22 117:20   | <b>long</b> 10:3 14:13 28:14  |
| 413:4 418:7 445:25            | 257:17 344:14                 | <b>lists</b> 224:11           | 40:12 56:18 104:10            |
| <b>level</b> 23:15 54:24      | 345:16 346:24                 | <b>little</b> 65:15 81:11,12  | 104:17 107:24                 |
| 71:9 227:7 302:20             | 518:12                        | 153:25 168:24                 | 113:5 125:23                  |
| 302:25 303:2                  | <b>line</b> 39:2,5 41:19 46:3 | 172:13 199:8                  | 156:19 211:7                  |
| 306:20 307:7                  | 68:17,25 124:5                | 258:24 317:1 323:2            | 234:25 235:6 300:3            |
| 316:17 379:17                 | 152:3 161:17                  | 432:12 443:24                 | 309:22 315:10                 |
| 429:5 432:10 481:4            | 193:20 198:12,16              | 444:3,19 445:2,4              | 317:4 318:16                  |
| 489:10                        | 205:1 207:9,24                | 446:22 447:9                  | 319:18 327:21                 |
| <b>levels</b> 66:6 331:1      | 208:18 246:4,8                | 448:21 451:21                 | 357:3 360:3,7,17              |
| 481:3                         | 248:14 277:15                 | 454:21 455:23                 | 364:14 389:8                  |
| <b>LEXI</b> 325:9             | 278:9,9 363:22                | 457:22 467:15                 | 399:19 402:13                 |
| <b>liaison</b> 145:8 274:13   | 364:7 365:6 380:14            | 468:9 489:6                   | 406:15 435:7                  |
| 275:23,24,24                  | 380:16 403:21                 | <b>lives</b> 154:3            | 437:11 441:20                 |
| <b>license</b> 15:17 89:23    | 432:5,5 433:7                 | <b>living</b> 144:14 197:6    | 452:11 470:11,12              |
| 89:23 144:21,25               | 454:25 455:11                 | <b>Lloyds</b> 237:9 238:4     | 511:23,25 523:14              |
| 197:25,25 198:2               | 525:14                        | 239:6 267:18                  | 527:24                        |
| 212:15 247:24,24              | <b>liner</b> 327:22           | 349:14                        | <b>longer</b> 79:1 107:23     |
| 266:4 438:18,20,24            | <b>lines</b> 131:25 197:14    | <b>LMRP</b> 511:14,16,23      | 213:20 318:19                 |
| 439:1                         | 200:18 383:4                  | <b>loaded</b> 446:13,21       | 352:22 411:21                 |

|  |  |  |  |
|--|--|--|--|
| <p><b>longest</b> 78:20<br/> <b>long-standing</b> 308:5<br/> <b>long-term</b> 57:7<br/> 444:20<br/> <b>look</b> 13:1 27:2 47:24<br/> 48:14,15 72:18<br/> 89:13 121:21<br/> 129:15,22 135:19<br/> 153:7 164:24<br/> 166:15 204:3<br/> 217:13 233:8,17<br/> 244:9 245:22 270:7<br/> 284:12 342:9 345:2<br/> 345:22 349:20<br/> 350:14 365:19<br/> 369:12,24 397:19<br/> 435:4,5,11 442:25<br/> 458:4 480:4 519:11<br/> <b>looked</b> 36:3,14 65:18<br/> 161:4 249:21 263:5<br/> 315:3 444:2,5 448:1<br/> 448:16<br/> <b>looking</b> 38:8 128:4<br/> 135:3 137:6 165:7<br/> 203:9 261:11<br/> 298:18 301:4<br/> 343:13 383:4 421:5<br/> 436:9 452:12<br/> 460:13 515:24<br/> 516:7,11 525:20<br/> <b>looks</b> 129:4 279:11<br/> 294:25 435:9<br/> 443:19 451:6 504:8<br/> <b>loop</b> 105:15 330:6<br/> <b>lose</b> 286:16 323:11<br/> <b>loss</b> 1:4 236:12<br/> 347:17 380:23,23<br/> 392:1 398:20 490:6<br/> 516:25<br/> <b>losses</b> 258:2 284:10<br/> <b>lost</b> 154:3 231:4<br/> 233:25 380:22<br/> 486:20 523:15<br/> <b>lot</b> 63:5 67:22 74:11<br/> 77:14 88:10 135:4<br/> 185:21 217:5</p> | <p>238:17 255:18<br/> 290:8 376:7 393:11<br/> 425:17 431:10<br/> 446:2 449:2 458:6<br/> 481:14 495:17<br/> 506:16 518:1<br/> 527:16<br/> <b>lots</b> 100:12 133:22<br/> 145:25 185:19<br/> <b>loud</b> 303:13<br/> <b>louder</b> 451:21<br/> <b>loudest</b> 447:11<br/> <b>loudly</b> 423:23<br/> <b>Louisiana</b> 442:7<br/> <b>low</b> 246:22 289:15<br/> 511:13<br/> <b>lower</b> 236:15 282:5<br/> 459:18 462:16<br/> 463:2 489:10 490:9<br/> 498:4 518:7,10<br/> <b>lowered</b> 465:11<br/> <b>low-class</b> 253:25<br/> <b>low-flow</b> 521:9 522:4<br/> <b>Lt</b> 2:15 4:5 7:20<br/> 206:10,12 209:18<br/> <b>lunch</b> 442:7<br/> <b>lunchtime</b> 363:13<br/> <b>lunchtime-ish</b> 373:18<br/> <b>luxury</b> 286:17</p> <hr/> <p style="text-align: center;"><b>M</b></p> <hr/> <p><b>M</b> 1:19,25 2:3 14:3<br/> 54:15 64:16 67:8<br/> 73:16 77:6 79:7<br/> 80:22 89:15 90:14<br/> 91:19 94:1 102:1<br/> 118:20 123:7<br/> 151:12 156:2<br/> 159:22 164:15<br/> 187:15 199:15<br/> 200:20 206:11<br/> 211:2 268:10<br/> 300:15 303:6<br/> 304:12 311:14<br/> 320:20 336:17<br/> 359:1 367:22</p> | <p>388:22 393:7<br/> 398:12 405:5 424:3<br/> 426:11 427:9<br/> 428:11 437:5 501:5<br/> 529:3,20<br/> <b>MacDonald</b> 19:19,20<br/> 19:23,24 20:3 58:20<br/> 59:19<br/> <b>machine</b> 217:5 443:6<br/> 444:4 446:4,10<br/> 501:13<br/> <b>machinery</b> 510:6<br/> <b>machines</b> 507:22<br/> <b>Macondo</b> 19:3 20:4<br/> 21:23 22:5,12 23:5<br/> 25:1,3 34:18 36:8<br/> 37:2,14,18 39:18<br/> 40:5 41:25 119:3,23<br/> 241:2,5 250:22<br/> 328:6 338:16<br/> 339:10,18,19 340:2<br/> 357:6 492:13<br/> <b>Madam</b> 411:15<br/> <b>mail</b> 278:10<br/> <b>main</b> 74:13 203:5<br/> 322:25 326:4<br/> 375:13 379:7<br/> 427:25 467:10<br/> 468:5 519:23<br/> <b>maintain</b> 64:8 227:6<br/> 297:17 325:17<br/> 333:17 397:16<br/> 446:17,24 469:11<br/> 473:9<br/> <b>maintained</b> 30:3<br/> 253:15<br/> <b>maintenance</b> 14:8<br/> 33:4,6 42:15 57:6<br/> 59:11 60:2 79:23<br/> 81:24 103:2 108:7<br/> 160:15 248:20<br/> 263:2 269:14,15,18<br/> 270:4 272:11<br/> 293:10 297:19,21<br/> 299:11 300:23<br/> 301:11,15 313:8</p> | <p>317:17 321:21<br/> 324:17,25 325:7,12<br/> 325:25 326:2,7<br/> 353:15 371:17<br/> 438:13 444:20<br/> 447:21 507:9<br/> 510:19,21<br/> <b>major</b> 30:11,12,17,18<br/> 31:6,9,15,17,21<br/> 32:3 33:22 34:2,5<br/> 34:15 45:1 88:24<br/> 114:17 115:2,13,21<br/> 220:23 234:16<br/> 241:20,23,25 242:7<br/> 243:2,19,25 244:22<br/> 294:23 295:10<br/> 296:7,13,16,24<br/> 298:6 368:25<br/> 428:24 429:9<br/> 487:24<br/> <b>majority</b> 312:17<br/> 317:12 357:17<br/> 378:11<br/> <b>makeup</b> 175:13<br/> <b>making</b> 11:3 53:17<br/> 76:15 82:1 92:20<br/> 130:8,9 188:16<br/> 204:17 210:23<br/> 256:8 258:25 260:3<br/> 312:23 329:9 374:4<br/> 374:7 390:11<br/> <b>man</b> 77:1 163:20<br/> 164:1 292:2 363:6<br/> 363:21 400:13<br/> 401:13 402:15<br/> 403:12 411:4<br/> 434:12,13 452:1<br/> 458:23,23 465:6<br/> 498:4 517:4,6,9<br/> <b>manage</b> 50:16,24<br/> 166:24 241:18<br/> 251:2<br/> <b>managed</b> 33:19 42:7<br/> 60:14 96:24 166:6<br/> 232:5 262:22<br/> 485:25</p> |
|--|--|--|--|

|   |   |  |  |
|---|---|--|--|
| <p><b>management</b> 1:17<br/>2:5,8,10 6:3,18,20<br/>7:13,17 8:12,19 9:7<br/>12:24 18:17,20,24<br/>24:25 25:25 26:3,14<br/>26:16,19,21,23 27:6<br/>27:10,11,15 28:5<br/>29:14 33:4 34:6,23<br/>45:4,10 46:19 51:18<br/>53:21,22 54:3 79:25<br/>103:8,14 161:21<br/>163:6 167:1,11<br/>169:8,21 171:20<br/>172:7 176:2 182:25<br/>183:3 189:12,13,15<br/>201:4,13 208:13,16<br/>208:21 209:1,8,11<br/>215:25 224:17,23<br/>225:1,3,4,12,16,24<br/>226:6,7,12 227:23<br/>228:10 229:19<br/>230:8,12 231:14,16<br/>232:5,20,23 235:12<br/>237:4 238:2 240:9<br/>241:22 252:7,17<br/>255:9 258:18 262:8<br/>267:16,22 271:1<br/>281:10 282:7<br/>297:22 325:7 347:2<br/>347:2 370:18 375:5<br/>378:10 428:25<br/>429:9 433:9 440:5<br/>440:11,13,25<br/>458:22 475:15<br/>476:6 481:11<br/>485:25 486:16<br/>487:18,19 489:2<br/>491:19 494:2,9<br/>510:2</p> <p><b>management-perfo...</b><br/>463:1</p> <p><b>manager</b> 7:16 15:3,4<br/>15:24 17:21 19:18<br/>24:10 26:10 38:13<br/>39:5,5,15 53:15<br/>58:21 65:24 66:11</p> | <p>68:18 69:2 71:10<br/>81:7 105:2 130:19<br/>174:18 194:18<br/>197:24 211:17,19<br/>212:1,3,9 213:5,6<br/>214:3,14 216:13<br/>220:18 225:22<br/>226:22 227:22<br/>232:16 242:16<br/>245:12 251:17<br/>261:1 267:11<br/>268:19,21,23,24<br/>269:1,3,17,17 270:5<br/>271:4 272:19 278:1<br/>289:19 294:14<br/>299:18 301:10<br/>302:5 311:23,25<br/>314:1 316:3 335:2<br/>347:25 366:12<br/>370:6,17 372:22<br/>397:21,23 437:17<br/>437:18,20,23<br/>438:12,17 439:20<br/>441:4 464:5 468:22<br/>475:18 486:10<br/>491:3 515:3,6</p> <p><b>managers</b> 27:25 43:6<br/>43:22 66:17 213:2<br/>219:8 260:21 440:7<br/>490:20</p> <p><b>manager-asset</b><br/>271:20</p> <p><b>manager-perform...</b><br/>211:6 271:19<br/>365:10 437:9 438:6<br/>440:3</p> <p><b>mandated</b> 372:25</p> <p><b>mandatory</b> 335:7<br/>345:3,9</p> <p><b>maneuvered</b> 514:3</p> <p><b>manifold</b> 295:24</p> <p><b>manned</b> 137:2 311:5<br/>428:6 489:20</p> <p><b>manner</b> 21:21 313:1<br/>316:14 403:18<br/>404:7 410:12</p> | <p><b>manning</b> 124:3,12,16<br/>127:18 129:17<br/>134:10 146:25<br/>164:24 165:4,22<br/>189:1</p> <p><b>manpower</b> 59:12,14<br/>59:19</p> <p><b>manual</b> 7:8 218:8<br/>294:6 333:14 334:4<br/>334:11 405:20<br/>406:10,20 408:9<br/>415:12 446:16<br/>478:20 480:2<br/>481:14,15,17<br/>487:20,21</p> <p><b>manually</b> 311:7<br/>393:16 395:1<br/>405:22,25 419:23</p> <p><b>manuals</b> 379:16</p> <p><b>manufacturer</b><br/>303:17</p> <p><b>manufacturer's</b><br/>296:1</p> <p><b>man-hours</b> 33:8<br/>42:13</p> <p><b>March</b> 25:18 36:13<br/>36:20 42:22 55:17<br/>96:15 99:19 112:3<br/>178:19,22 179:9<br/>180:5 182:16 184:5<br/>184:9 186:18,24<br/>338:14,19 339:4,9<br/>340:5 349:2,11</p> <p><b>MARIANAS</b> 22:7<br/>506:8</p> <p><b>marine</b> 1:1,2 7:8,21<br/>11:8 14:10,14,21,25<br/>15:8,9,16,19 16:6<br/>16:17 17:22 18:4<br/>19:7,17 20:18 21:14<br/>21:14,16 25:6 26:2<br/>27:11 29:8 32:14<br/>36:22 38:10 41:6,9<br/>41:20 44:4,12,14,14<br/>44:18 45:1,1,13,14<br/>45:15,16 46:2 47:23</p> | <p>50:13 54:20 55:12<br/>55:21 56:1,7,11<br/>57:7,12 61:19 62:2<br/>63:7,12,16 64:23<br/>65:8 66:1,9,14 68:7<br/>68:8,13,18,25 69:6<br/>70:1,2,4 72:18<br/>75:23 79:9,10,13,17<br/>79:20,24 80:8,12<br/>81:25 83:7 84:4<br/>85:8 86:18 89:20,25<br/>90:9,10 92:18 94:19<br/>94:20,23 95:8,13,18<br/>95:19,22 96:10,15<br/>97:6,9 100:19 103:1<br/>105:10,16 107:18<br/>110:7,12 111:8<br/>112:4,5 113:12<br/>116:1 123:10,16,17<br/>126:24 129:5 133:4<br/>144:4,11 147:6,7,8<br/>147:9,16 148:11,12<br/>152:6,15,23 153:5,8<br/>153:24 154:1,6,15<br/>155:4 158:9,12,15<br/>158:17,22 160:13<br/>164:23 167:18<br/>169:20 170:3,16,20<br/>170:23 171:4,7,21<br/>172:1,10,16 173:10<br/>173:12 174:3,24<br/>179:22 180:14<br/>181:3,11,13 183:12<br/>183:18,22 184:19<br/>185:4,13 186:17<br/>191:12,15 192:10<br/>194:10,12 197:11<br/>201:8,12 202:3,9,10<br/>202:14,19 203:11<br/>203:14,19 204:4,24<br/>205:3,8 207:12<br/>208:11 225:6 227:2<br/>233:20,25 236:15<br/>236:15 242:17<br/>247:10,11 249:20<br/>250:2,6 257:9,12</p> |
|---|---|--|--|

|  |  |   |  |
|--|--|---|--|
| <p>264:17 296:4<br/>314:15 322:25<br/>323:21,24 324:1<br/>371:3,4,5 439:1<br/>446:7 482:3,17<br/>484:2 486:21<br/>487:20 490:9,9<br/>496:22 511:14<br/>518:7,10 526:9<br/><b>mariner</b> 49:5 131:10<br/>132:25 192:10<br/>193:7 196:14<br/><b>mariners</b> 397:17<br/><b>marine-related</b> 58:3<br/>108:1 147:22 148:8<br/>217:8 252:1<br/><b>marine-specific</b><br/>55:14<br/><b>maritime</b> 21:18<br/>30:25 41:15 45:22<br/>46:12 47:1,9 49:4<br/>53:5,12 94:22 189:9<br/>235:19 395:19,22<br/>397:12 438:15,16<br/>438:23 488:11<br/><b>Mark</b> 2:13 7:25<br/>174:12 450:5 515:1<br/>515:24 516:7,11,18<br/>519:20<br/><b>marked</b> 337:4 341:4<br/>349:21 369:4<br/>378:21<br/><b>markings</b> 474:4<br/><b>Marshall</b> 23:20 24:7<br/>24:8,14 46:18 47:10<br/>48:20 49:16 69:6<br/>91:8,17 123:10,16<br/>124:11,16 126:25<br/>127:15 128:23<br/>129:2,6,16 132:18<br/>136:9 137:8 165:16<br/>198:1 230:19 231:7<br/>231:20 240:23<br/>263:13,17,21 304:2<br/>304:5,15 314:4,6<br/>320:17 494:5,11,16</p> | <p>520:9<br/><b>master</b> 15:23 24:9<br/>26:6 28:10 53:14<br/>64:20 85:10 86:12<br/>131:10 133:10<br/>134:18 143:5 189:2<br/>189:19,25 190:9,18<br/>191:1,4,16,25 192:2<br/>194:1 196:12<br/>197:24 214:9,23,25<br/>215:14,18 216:6,16<br/>216:23,25 217:2,7<br/>218:11 219:5<br/>223:15,23 225:17<br/>226:23 231:12<br/>251:6,9,23 252:1,2<br/>261:22 267:10<br/>304:20 305:18<br/>306:3 397:24 429:5<br/>443:13 463:20<br/>467:20 473:20<br/>476:18,22 477:23<br/>477:25 478:3,6,12<br/>479:6 480:15 482:1<br/>482:4,10,16,20<br/>485:2 494:24,25<br/>495:4,14,23 496:4,7<br/><b>mastered</b> 123:4<br/><b>mastering</b> 123:6<br/><b>masters</b> 214:10,15<br/>494:23,23,25<br/>495:13,19<br/><b>master's</b> 144:20<br/>479:24<br/><b>mate</b> 353:16 406:7<br/><b>material</b> 18:16 24:24<br/>192:7 343:8<br/><b>materials</b> 18:22<br/>171:2<br/><b>Mathews</b> 2:8 3:9 4:3<br/>4:10,12 5:6 7:11,14<br/>54:16 64:11 65:3<br/>199:16 200:19<br/>268:9,11 294:24<br/>295:2,4,8,16,21<br/>300:11 303:7 304:1</p> | <p>390:22 391:2 394:4<br/>501:6 503:14,24<br/>520:5,19 521:15,17<br/>522:7 527:3<br/><b>matrix</b> 288:11,13<br/>429:13<br/><b>matter</b> 12:14 89:14<br/>100:13 306:5<br/>394:11 489:16<br/>500:4<br/><b>matters</b> 86:2 230:5<br/>336:23<br/><b>MAX</b> 472:7 473:22<br/>517:13 519:25<br/><b>maximum</b> 299:15<br/><b>Mayday</b> 277:17<br/><b>ma'am</b> 360:22<br/>361:11 364:8,19<br/>367:2<br/><b>MBI</b> 343:23<br/><b>MC</b> 357:9<br/><b>McCARROLL</b> 2:10<br/>3:11 4:11 7:15 67:6<br/>67:9 73:11 300:16<br/>303:5<br/><b>McConey</b> 473:15<br/><b>McCormick</b> 516:12<br/><b>McKechnie</b> 473:4,16<br/>473:17<br/><b>mean</b> 23:10 30:17<br/>79:13 82:9,16,17<br/>83:13 105:24<br/>130:11 142:15<br/>147:13 183:14<br/>186:23 190:2,18,20<br/>191:1 214:22<br/>215:11 223:9<br/>227:11 231:2<br/>251:15 263:22<br/>266:20 275:13,24<br/>276:18 279:21<br/>283:16,18 287:20<br/>320:7 325:16 326:1<br/>329:11,19 331:22<br/>337:25 377:15<br/>395:22 396:16</p> | <p>408:16 432:21<br/>477:21 489:12<br/>510:10<br/><b>meaning</b> 115:1 157:4<br/>370:24 371:1<br/>487:11<br/><b>means</b> 23:12 28:15<br/>30:2,10 44:22 86:20<br/>130:4 136:2,10<br/>137:13 196:25<br/>371:4 378:6<br/><b>meant</b> 162:23 191:7<br/>350:12 405:21<br/><b>measure</b> 78:15 300:8<br/><b>mechanic</b> 368:12<br/><b>mechanical</b> 14:25<br/>15:15 201:5,14<br/>203:9 312:18<br/>386:13,18 439:5<br/><b>mechanism</b> 21:20<br/>65:17 146:3 150:10<br/>181:5 216:11<br/><b>mechanisms</b> 39:10<br/>376:25<br/><b>media</b> 10:3,8,14<br/>391:11<br/><b>medic</b> 480:9<br/><b>medics</b> 442:11<br/><b>meet</b> 17:24,25 18:6<br/>20:3,6 47:13 48:19<br/>213:17 214:5<br/>216:15 231:18<br/>241:14 249:23<br/>293:13 297:19<br/>316:23 456:12<br/>492:15<br/><b>meeting</b> 72:3,12,13<br/>72:16,18,24 238:4<br/>238:14 315:17,17<br/>317:11 320:2,4,13<br/>323:10 330:19<br/>371:23,23,25 372:4<br/>372:14,23,23,25<br/>373:1,2,5,6,8,10<br/>374:5,6 375:24<br/>444:8,11,14,19</p> |
|--|--|---|--|

|  |   |   |  |
|--|---|---|--|
| <p>445:3,4,19,22<br/>456:24 457:17,22<br/>505:24<br/><b>meetings</b> 271:21<br/>272:14 285:4 317:8<br/>317:24 318:2,12,16<br/>318:21,25 319:5<br/>331:24 332:17<br/>355:1 362:25<br/><b>megaphone</b> 451:20<br/>451:23,24<br/><b>MEM</b> 429:9,14,15<br/><b>member</b> 11:18 36:21<br/>85:20 175:2 207:25<br/>394:21 395:3 402:4<br/>425:21 459:20<br/><b>members</b> 2:2 64:15<br/>67:5 142:17 145:22<br/>173:25 174:1,15<br/>175:16 199:14<br/>238:9 268:8 327:2<br/>353:14 399:21<br/>400:25 401:14,16<br/>423:9 426:6 435:14<br/>467:8 483:19 484:4<br/>484:19<br/><b>memories</b> 231:22<br/><b>memorize</b> 127:10<br/><b>memory</b> 99:7 118:8<br/>278:14 284:19<br/><b>men</b> 104:19,19 105:4<br/>105:8,14,19 111:14<br/>116:9,19 117:1,9<br/>154:3 316:20<br/>355:20 371:24<br/><b>mention</b> 328:14<br/>351:11 353:19,23<br/>354:1<br/><b>mentioned</b> 206:14<br/>264:22 291:9<br/>342:22 352:9 363:3<br/>363:20 365:17<br/>400:3 408:7 456:24<br/><b>merchant</b> 394:14<br/><b>merged</b> 325:11<br/><b>merger</b> 325:8</p> | <p><b>merit</b> 53:16<br/><b>mess</b> 518:14<br/><b>message</b> 278:11<br/>468:8<br/><b>met</b> 18:3 125:3<br/>168:10,13 271:25<br/>300:8 320:14 324:3<br/>442:6 492:17<br/><b>method</b> 373:14<br/><b>Mexico</b> 1:4 14:10,11<br/>15:9 16:10,14,25<br/>17:16 18:9,12 21:20<br/>25:5 27:4 30:5<br/>44:10,17,23 46:7,8<br/>52:14,20 56:19 71:6<br/>84:3 92:18 103:7<br/>104:13 110:13<br/>116:1 141:13<br/>147:10,17 152:24<br/>153:4 154:1 158:7<br/>160:9 161:19<br/>163:12 164:23<br/>174:3,25 184:20<br/>190:3,5 192:11,12<br/>200:10 205:15<br/>211:21 234:24<br/>237:16 263:4<br/>268:16 269:4<br/>291:20 300:5 302:5<br/>311:22 315:18<br/>317:3 345:11 396:5<br/>438:10 476:25<br/>494:19 498:23<br/>505:13<br/><b>Michael</b> 13:24<br/><b>microphone</b> 472:19<br/><b>microphones</b> 238:9<br/><b>midafternoon</b> 470:22<br/><b>middle</b> 172:9 236:19<br/>378:1<br/><b>midnight</b> 375:16<br/>471:25<br/><b>mid-August</b> 211:21<br/>234:25 268:16<br/>321:24<br/><b>mid-March</b> 285:8</p> | <p><b>mid-morning</b> 274:15<br/>524:4,10<br/><b>mid-September</b><br/>108:6<br/><b>mid-2005</b> 156:23<br/><b>Mike</b> 164:8,10<br/>292:23 365:13,15<br/>365:24 366:5,11,11<br/>405:2 406:6<br/><b>miles</b> 102:4 397:6,8<br/><b>million</b> 123:3 380:23<br/><b>mind</b> 38:7 65:20<br/>81:14 168:10 180:4<br/>182:10 196:3 207:1<br/>366:5 411:24 502:8<br/>525:3<br/><b>minds</b> 484:19<br/><b>mine</b> 166:15<br/><b>Mineral</b> 6:19<br/><b>Minerals</b> 240:8<br/><b>mini</b> 474:24<br/><b>minimize</b> 9:25 122:7<br/><b>minimum</b> 124:2,12<br/>124:15 127:17<br/>165:22 371:19<br/>439:12<br/><b>minute</b> 327:15<br/>350:13 453:10<br/>518:19,20,23<br/>522:12<br/><b>minutes</b> 102:6 121:20<br/>277:15 318:18,20<br/>335:22,23 336:13<br/>338:25 372:24<br/>408:4 444:12 485:8<br/>503:10 505:25<br/>528:2<br/><b>misalignment</b> 71:23<br/><b>Mischaracterizes</b><br/>405:12<br/><b>mischaracterizing</b><br/>405:14<br/><b>misconduct</b> 8:25<br/><b>misquote</b> 408:5<br/><b>misses</b> 291:11,13<br/><b>missing</b> 6:15 239:8</p> | <p>354:12 375:9<br/>468:15<br/><b>mission</b> 22:22 29:12<br/>66:5,10 81:19 83:24<br/>84:1 87:23 171:10<br/>180:17 207:21<br/><b>missions</b> 161:11<br/>162:19,23,24<br/><b>mission-specific</b><br/>136:22<br/><b>Mississippi</b> 276:7<br/><b>misstates</b> 328:21<br/>383:12<br/><b>mistake</b> 196:10<br/><b>misunderstood</b><br/>233:13 326:18<br/><b>mitigate</b> 54:21 92:4<br/><b>mitigated</b> 63:9 109:2<br/>203:6<br/><b>mitigation</b> 110:23<br/><b>mitigations</b> 15:11<br/>54:21 55:10,11<br/>58:16 62:3 75:13<br/>78:17 96:3 185:7<br/>200:12<br/><b>MMS</b> 240:11 432:6<br/>505:8<br/><b>mobile</b> 1:3 6:13<br/>129:24 130:2<br/>141:11 205:20<br/>359:11 394:14<br/><b>MOC</b> 69:8 78:11<br/>288:9<br/><b>MOCs</b> 185:9 271:5,8<br/><b>mode</b> 186:10 214:12<br/>294:6,9 333:14<br/>334:4,5 405:20<br/>406:9,10,16,21<br/>407:21,22,23 408:9<br/>415:10,12 417:16<br/>419:11 446:16<br/><b>models</b> 146:9,15<br/>328:19<br/><b>modes</b> 134:11<br/><b>modification</b> 247:14<br/>281:9 282:8 513:1</p> |
|--|---|---|--|

|   |  |   |   |
|---|--|---|---|
| <p><b>modifications</b> 271:7<br/>280:25 281:2,20<br/>282:4 512:3,10<br/><b>modified</b> 33:25<br/><b>MODU</b> 16:5,24<br/>18:10,17,24 23:8<br/>24:8,13 48:22 49:8<br/>50:17 53:13 56:19<br/>65:22 66:18 84:5<br/>144:5,9 145:4,10<br/>171:9 189:2,23,24<br/>190:15 191:6,12<br/>217:3 261:17<br/>264:25 266:10,12<br/>266:13,20 267:4,9<br/>308:23 309:3,10,14<br/>310:9 349:17,20<br/>350:2 414:22<br/>437:20 494:18,18<br/>497:17,24<br/><b>MODUs</b> 18:25 41:22<br/>56:3 68:23 144:3<br/>148:21 212:6<br/>223:19 263:12<br/>397:22 494:10<br/><b>MODUSpec</b> 290:12<br/>290:20,23,24 296:4<br/>313:15,17 349:9<br/>350:3 351:6,20<br/>357:14<br/><b>MOEX</b> 19:11 20:22<br/>21:1 37:17,23 38:1<br/>38:18 39:17,22<br/>53:23 118:25 119:2<br/>119:13 120:8,16<br/>358:21 402:22<br/>492:21<br/><b>moment</b> 92:16,22<br/>120:2 134:13<br/>136:16<br/><b>Monday</b> 1:12 272:5<br/><b>monetary</b> 506:22<br/><b>Monico</b> 13:24,24<br/>93:6,9 122:5 127:19<br/>127:24 128:5,13,18<br/><b>monitor</b> 505:18</p> | <p><b>monitored</b> 385:8<br/>386:14 424:18<br/><b>monitoring</b> 332:12<br/>332:15 333:14<br/>385:6 391:1 502:21<br/>502:23 505:21<br/><b>monitors</b> 502:24<br/><b>month</b> 60:4 70:18<br/>168:5 237:7 299:11<br/>370:6,8,14,15<br/>371:13 375:4 440:6<br/>441:8 491:9<br/><b>monthly</b> 355:5 375:2<br/>375:7<br/><b>Monthly-type</b> 70:8<br/><b>months</b> 78:23 79:1<br/>113:19 114:8,12,13<br/>211:20 291:6 301:2<br/>379:7 439:9,17,19<br/>490:24 491:7<br/><b>moon</b> 443:25<br/><b>Moore</b> 232:1,2,3<br/>485:22,23<br/><b>moored</b> 477:12 478:1<br/><b>mooring</b> 233:24<br/>486:20 487:14<br/><b>morning</b> 12:10 14:5<br/>14:6 54:17 79:4<br/>93:20 94:5 102:3,6<br/>118:22,23 122:22<br/>150:25 155:17,19<br/>159:24,25 164:17<br/>164:18 241:15<br/>251:15 252:14<br/>271:25 272:2,2,4<br/>279:12 285:3 317:8<br/>317:20 318:12<br/>319:4 320:14,15<br/>330:12 332:17<br/>336:1 363:1,2<br/>371:16 390:23<br/>391:4 392:20<br/>427:22 432:23<br/>433:2,7 442:6<br/>470:15 471:7,25<br/>474:17 504:25</p> | <p>513:24 516:4 527:8<br/>527:21 528:6,10,12<br/><b>Morrison</b> 18:6<br/><b>mothers</b> 123:5<br/><b>motor</b> 292:2<br/><b>move</b> 101:21 126:7<br/>130:14 176:8 230:3<br/>280:14 294:13<br/>336:8 343:5 346:15<br/>346:16 419:19<br/>522:14<br/><b>moved</b> 162:6 316:1<br/>355:5 382:6 489:7<br/>495:20 517:25<br/><b>moving</b> 93:1 130:10<br/>134:19 214:12<br/>350:16<br/><b>mud</b> 374:15 381:17<br/>381:17 382:25<br/>383:9 384:4 454:13<br/>505:15,20<br/><b>muddy</b> 448:21<br/><b>multiple</b> 55:10<br/>201:15 280:19<br/>325:20<br/><b>multiplied</b> 55:6<br/><b>Murphy</b> 320:11<br/><b>mustered</b> 274:10<br/><b>mustering</b> 395:5<br/><b>M-I</b> 66:23 120:25<br/>121:1 217:11<br/>367:12,13 479:12<br/><b>M-O-N-I-C-O</b> 13:25</p> <hr/> <p style="text-align: center;"><b>N</b></p> <hr/> <p><b>N</b> 2:1 14:3,3 54:15,15<br/>64:16,16 67:8,8<br/>73:16,16 77:6,6<br/>79:7,7 80:22,22<br/>89:15,15 90:14,14<br/>91:19,19 94:1,1<br/>102:1,1 118:20,20<br/>123:7,7 151:12,12<br/>156:2,2 159:22,22<br/>164:15,15 187:15<br/>187:15 199:15,15</p> | <p>200:20,20 206:11<br/>206:11 211:2,2<br/>268:10,10 300:15<br/>300:15 303:6,6<br/>304:12,12 311:14<br/>311:14 320:20,20<br/>336:17,17 359:1,1<br/>367:22,22 388:22<br/>388:22 393:7,7<br/>398:12,12 405:5,5<br/>424:3,3 426:11,11<br/>427:9,9 428:11,11<br/>437:5,5 501:5,5<br/>529:24<br/><b>name</b> 13:21 17:8,11<br/>19:13,22 69:3 91:13<br/>91:16 102:3 118:24<br/>121:12 151:2,7,8<br/>156:7,10 160:2<br/>162:9,11 164:12<br/>206:14 210:21,22<br/>210:24 221:14<br/>277:25 292:22<br/>302:8 304:14<br/>320:22 328:24<br/>336:19 358:18<br/>362:8 387:4 398:16<br/>423:21 424:5 429:3<br/>436:25 501:21<br/>516:12<br/><b>names</b> 148:13 529:10<br/><b>narrative</b> 461:18<br/><b>narrow</b> 256:14<br/><b>National</b> 397:12<br/><b>Nations</b> 309:12<br/>310:12<br/><b>natives</b> 472:17<br/><b>naturally</b> 256:9<br/><b>nature</b> 57:25 96:5<br/>138:5 150:2 194:22<br/>196:17 233:19<br/>283:10 376:23<br/>377:7<br/><b>NAUTILUS</b> 233:24<br/>486:19 513:16<br/>514:4</p> |
|---|--|---|---|

|  |  |  |   |
|--|--|--|---|
| <p><b>naval</b> 473:4</p> <p><b>navigable</b> 395:25<br/>396:6,11</p> <p><b>navigation</b> 28:13,17<br/>32:19 66:2,15 82:5<br/>82:14 95:13 191:14<br/>393:25</p> <p><b>NCRA</b> 529:20</p> <p><b>near</b> 45:2 291:11,13<br/>322:1 442:21<br/>444:18</p> <p><b>necessarily</b> 146:8<br/>192:4 204:6 208:5<br/>389:6 401:1 440:24<br/>463:7 478:5 509:22</p> <p><b>necessary</b> 29:21<br/>110:21 114:11<br/>125:19 140:14<br/>332:4,8 387:19<br/>390:14 508:5</p> <p><b>necessitate</b> 249:6</p> <p><b>need</b> 35:20 39:25<br/>128:12 132:9 136:4<br/>152:11 153:21<br/>159:5 170:12<br/>181:14 198:17,19<br/>206:6 210:5,6 215:4<br/>216:4 229:3 238:11<br/>248:11 250:3 270:6<br/>317:16 325:18<br/>333:17 338:5<br/>342:25 343:3,12<br/>359:12 360:10,11<br/>362:15 369:11<br/>380:17 404:19<br/>408:18 409:7 417:2<br/>419:15,16 422:23<br/>422:23 433:14<br/>435:20 445:18<br/>446:6 448:24<br/>458:12 459:2 460:5<br/>461:25 469:24<br/>473:6 483:20<br/>522:22 524:23</p> <p><b>needed</b> 60:1,20 159:1<br/>253:21 256:24</p> | <p>260:23 319:12<br/>325:16 326:20<br/>331:25 360:7<br/>487:15 522:15<br/>523:1</p> <p><b>needlessly</b> 427:25</p> <p><b>needs</b> 34:23 51:14<br/>131:20 134:12<br/>181:15</p> <p><b>negative</b> 308:17,18<br/>359:22 361:12<br/>362:24 364:6,10<br/>375:25 402:5,9<br/>403:20 404:2,8,11<br/>404:13 443:18<br/>457:14 505:10,12</p> <p><b>Neil</b> 3:6 13:16,18<br/>194:4</p> <p><b>Neither</b> 141:11</p> <p><b>net</b> 23:12 50:5 54:8<br/>264:10 434:14<br/>499:16,18,19,20,23</p> <p><b>network</b> 148:16</p> <p><b>Neumeyer</b> 307:15</p> <p><b>neutral</b> 280:21</p> <p><b>never</b> 18:23 25:12<br/>139:4 153:7 181:21<br/>182:3,3 199:22<br/>200:17 220:25<br/>221:1 230:13<br/>247:20,21 283:21<br/>289:10 301:3<br/>308:20 324:20,22<br/>324:22 330:13<br/>333:18 346:12<br/>350:2 351:10,15,25<br/>352:6 353:21<br/>373:19 403:14<br/>419:12 420:25<br/>434:17,24 445:13<br/>511:4</p> <p><b>nevertheless</b> 399:5</p> <p><b>new</b> 18:2 141:11<br/>262:19 274:17<br/>281:6 326:6 330:23<br/>330:24 359:15</p> | <p>382:9 401:4 428:14<br/>479:5 492:16<br/>495:18 508:24<br/>509:2</p> <p><b>Newman</b> 225:13<br/>226:24 227:11,18<br/>429:6 500:23</p> <p><b>news</b> 391:11,12</p> <p><b>Newsweek</b> 391:12</p> <p><b>Nguyen</b> 2:3 3:8,10,15<br/>4:2,9 5:1,5 6:1,7<br/>11:23 14:4 19:23,25<br/>20:2 40:6 54:11<br/>64:17 67:3 80:23<br/>84:18 85:9 86:11,24<br/>87:17 88:14,19<br/>93:15 96:19 114:21<br/>142:21 150:25<br/>156:12 161:3<br/>187:16 188:21<br/>190:4,7 196:10,19<br/>197:21,22 199:12<br/>209:24 210:6,11,14<br/>211:3 214:2 219:3<br/>220:1,18 223:18<br/>225:21 229:16<br/>230:17 231:24<br/>236:1 238:13 268:5<br/>268:14 319:17<br/>395:11 404:19,22<br/>414:19 420:6 428:9<br/>428:12 430:23<br/>435:15,20,24 436:2<br/>436:7,22 437:6<br/>445:10,15 462:14<br/>462:15,24 463:22<br/>464:10 473:1<br/>477:22 479:4,5<br/>483:6 485:20<br/>486:23,24 487:3,5<br/>495:12 501:4 527:7<br/>527:13,16,24 528:7</p> <p><b>Nguyen's</b> 76:9</p> <p><b>night</b> 138:3 182:8<br/>218:12 276:23<br/>305:10 375:16</p> | <p>474:16</p> <p><b>nights</b> 370:9,10<br/>371:13</p> <p><b>nine</b> 34:4 40:9,15<br/>242:5</p> <p><b>noise</b> 447:17 451:20<br/>452:22 503:20,22</p> <p><b>nominate</b> 159:4</p> <p><b>nominated</b> 69:6<br/>75:23 205:16 445:1</p> <p><b>noncollision</b> 32:22</p> <p><b>nonconformance</b><br/>31:10 33:17,25</p> <p><b>nonconformities</b><br/>114:18,19,22 115:3<br/>115:9,13,21</p> <p><b>nonconformity</b> 30:11<br/>30:12,17,18 31:6,15<br/>31:17,21,23 32:3,7<br/>32:20,23 33:3,22<br/>34:3,5,15 88:24<br/>114:25 241:21,23<br/>242:1,8 243:2,20,25<br/>244:22</p> <p><b>nondowntime</b> 507:20</p> <p><b>nondrilling</b> 527:1</p> <p><b>nonemergency</b> 479:8</p> <p><b>nonmarine</b> 323:24</p> <p><b>nonoperational</b> 58:1<br/>59:24 60:4,7 151:16<br/>199:5</p> <p><b>nonproductive</b><br/>506:11,15</p> <p><b>non-Transocean</b><br/>479:18</p> <p><b>noon</b> 373:16</p> <p><b>normal</b> 29:25 93:5<br/>103:3 109:14<br/>434:22</p> <p><b>normally</b> 71:2 162:2<br/>281:9</p> <p><b>Norman</b> 174:19<br/>175:15</p> <p><b>North</b> 146:21 147:19<br/>312:2 340:21<br/>341:22 342:14</p> |
|--|--|--|---|

|  |   |   |   |
|--|---|---|---|
| <p>344:15,17 345:12<br/>345:17 347:7,16<br/>376:17 377:18,23<br/>437:10 438:4<br/><b>northwest</b> 15:1<br/><b>Norway</b> 378:1<br/><b>Notary</b> 1:21 529:4,21<br/><b>notation</b> 130:4 511:8<br/><b>note</b> 196:17 277:6<br/>278:19 468:9<br/><b>noted</b> 100:19 127:1<br/>195:3 201:21 246:9<br/>256:1 401:5<br/><b>notes</b> 93:11 306:18<br/>471:24<br/><b>notice</b> 100:6 123:11<br/>123:16,17 126:24<br/>129:5 132:18,19<br/>133:4 144:4 290:18<br/><b>noticed</b> 454:4,5<br/><b>notification</b> 250:8,12<br/>250:16 510:16<br/><b>notifications</b> 250:14<br/><b>notify</b> 172:22 177:9<br/>250:10<br/><b>notifying</b> 468:7<br/><b>NRS</b> 344:16<br/><b>NTL-05</b> 262:20 263:7<br/><b>number</b> 14:21,24<br/>16:14 20:15 21:6<br/>26:8 35:19,24 36:4<br/>36:11 42:9,14 49:25<br/>57:24 58:15 61:14<br/>61:20 62:6 63:17<br/>74:18,21 75:7,16<br/>77:17 80:10 81:16<br/>95:1,5 96:2 98:25<br/>100:2,6,12 102:16<br/>104:14,21,22<br/>107:16,19 108:9,25<br/>110:18 123:13,15<br/>136:5 141:17<br/>147:24 163:3<br/>167:20,22 169:5,24<br/>171:8 177:15,17<br/>198:6 200:23</p> | <p>246:22 248:14,21<br/>277:7 282:19 295:7<br/>295:9 299:16,25<br/>325:1,5 328:5,11<br/>341:9,12 343:19,21<br/>343:24 356:24<br/>369:14 394:7<br/>406:22 408:2<br/>427:17 486:12<br/>505:3<br/><b>numbering</b> 201:1<br/>203:2 204:13<br/><b>numbers</b> 247:5<br/><b>numerous</b> 212:20,23<br/>220:12 235:7 258:1<br/>258:2 259:13 288:6<br/>376:25 422:25<br/>435:7<br/><b>NVIC</b> 393:20,24</p> <hr/> <p style="text-align: center;"><b>O</b></p> <hr/> <p><b>O</b> 14:3 54:15 64:16<br/>67:8 73:16 77:6<br/>79:7 80:22 89:15<br/>90:14 91:19 94:1<br/>102:1 118:20 123:7<br/>151:12 156:2<br/>159:22 164:15<br/>187:15 199:15<br/>200:20 206:11<br/>211:2 268:10<br/>300:15 303:6<br/>304:12 311:14<br/>320:20 336:17<br/>359:1 367:22<br/>388:22 393:7<br/>398:12 405:5 424:3<br/>426:11 427:9<br/>428:11 437:5 501:5<br/><b>oath</b> 10:25 11:1 93:5<br/>93:5 149:12 405:4<br/><b>oaths</b> 11:19<br/><b>object</b> 86:21 124:18<br/>127:19 131:17<br/>138:4 140:4,9<br/>145:11 147:12</p> | <p>149:24 152:8 162:3<br/>175:22 187:25<br/>194:22 196:16<br/>213:19 218:14<br/>219:20 221:10<br/>222:10 228:13,16<br/>230:22 235:22<br/>309:17 342:12<br/>350:6 361:21<br/>379:20 380:8<br/>381:20,24 410:9<br/>413:18 414:11<br/>419:25 422:4<br/>459:22 482:25<br/>495:10<br/><b>objected</b> 309:20<br/><b>objection</b> 39:19<br/>84:13,16,24 85:2<br/>88:12 109:11<br/>125:24 133:13<br/>139:6 142:5 145:14<br/>149:7 176:10<br/>185:19 196:17<br/>210:19,23 228:1<br/>229:22 328:21<br/>329:18 346:3<br/>348:10 362:7 372:6<br/>383:11 402:17,24<br/>405:11 408:11<br/>410:22 413:1,5,15<br/>415:24 461:10<br/>462:19 463:3<br/><b>objectionable</b> 142:8<br/><b>objections</b> 410:18<br/>412:2 419:1<br/><b>objects</b> 375:5 444:18<br/><b>obligation</b> 28:7,9<br/>47:13 103:15<br/>109:17 193:21<br/>194:2,10,25 207:22<br/>352:13<br/><b>obligations</b> 26:5<br/>34:25 41:6 48:19<br/>109:19 207:8<br/><b>oblige</b> 412:7<br/><b>observation</b> 30:13</p> | <p>87:20 168:4<br/><b>observations</b> 168:14<br/>168:18 238:20<br/><b>observed</b> 107:10<br/>305:24<br/><b>obtain</b> 8:20 186:8<br/><b>obtainable</b> 123:1<br/><b>obvious</b> 34:10 67:23<br/>256:24<br/><b>obviously</b> 34:19 75:6<br/>85:18 87:9 119:22<br/>126:10 131:24<br/>136:5 149:13 196:3<br/>200:8 229:9 268:15<br/>285:16 335:25<br/>336:3 346:5 411:10<br/>460:17 485:12<br/>510:10<br/><b>occasion</b> 434:24<br/><b>occasionally</b> 48:1<br/>317:15 350:10<br/><b>occasioned</b> 157:6<br/><b>occasions</b> 25:9<br/>377:12<br/><b>occur</b> 138:9 233:8<br/>307:22 376:19<br/>389:22 397:2<br/>412:15 512:7<br/><b>occurred</b> 25:17 42:23<br/>138:10 149:17<br/>152:4 153:2 218:24<br/>221:2 304:25<br/>332:23 390:13<br/>391:9 396:21<br/>458:11<br/><b>occurrences</b> 149:21<br/><b>occurring</b> 55:4,5<br/>92:4,12 307:1<br/><b>occurs</b> 395:25 421:7<br/><b>Ocean</b> 1:17 2:5,8,10<br/>6:2,18 7:12,17 8:11<br/>8:18 9:6 12:24<br/>51:18 141:14,20<br/>143:18 522:19,20<br/><b>October</b> 75:22 76:2,3<br/>96:11 97:21 184:11</p> |
|--|---|---|---|

|   |  |  |  |
|---|--|--|--|
| <p>184:15 339:15,18<br/>339:20,23,24 340:3<br/>438:18<br/><b>offer</b> 38:10 49:23<br/>54:21 89:12 92:13<br/>92:17<br/><b>office</b> 59:13 206:15<br/>220:13 274:12,12<br/>274:23 317:14<br/>378:16 388:2<br/>447:22,22 468:4<br/>491:17 502:11<br/>529:18<br/><b>officer</b> 9:2,5,8 193:24<br/>194:5,14 247:18,21<br/>251:18 272:10<br/>317:23 397:22<br/>467:25<br/><b>officers</b> 197:23,23<br/><b>offices</b> 273:20,22,24<br/>274:11 365:18<br/>440:9<br/><b>official</b> 10:19 212:2<br/>238:1 239:17 284:3<br/>388:1<br/><b>offloading</b> 25:19<br/>499:6<br/><b>offshore</b> 1:3 6:13<br/>15:24 19:11 20:23<br/>21:1 24:10 27:4<br/>37:17 38:18 39:17<br/>43:12 50:5,13,20<br/>51:10,20,24 53:14<br/>54:8 70:18 81:6<br/>83:21 87:25 104:15<br/>105:3 107:5 118:25<br/>119:2,13 120:17<br/>129:24 130:2,18<br/>141:5,9,11 143:17<br/>156:22,23 183:20<br/>194:18 195:11<br/>197:23 205:21<br/>211:15 213:4,6<br/>227:22 235:19<br/>237:20 238:5,6<br/>249:13 261:1,9</p> | <p>263:13 264:10,17<br/>265:7,14 267:10,25<br/>312:5 317:21 327:6<br/>358:22 394:14<br/>397:20,23 401:2<br/>402:22 438:17<br/>447:12 479:20<br/>492:21 496:21<br/>498:12 499:1,4,17<br/>499:18 525:24<br/><b>off-load</b> 265:18<br/>505:15<br/><b>off-scene</b> 257:21<br/><b>Oh</b> 14:18 73:7 140:20<br/>197:21 241:8<br/>257:19 270:3<br/>349:12 364:15<br/>388:6 430:17 511:9<br/>526:14,16<br/><b>oil</b> 14:9 26:11 27:3<br/>50:5 54:8 83:6,19<br/>84:3 160:16 183:20<br/>264:10 325:17<br/>499:17<br/><b>OIM</b> 76:20,20,25<br/>80:19 81:20 82:1<br/>83:20 84:21 85:3,6<br/>89:21,23 90:4,11<br/>130:25 131:4<br/>136:18,23 137:14<br/>137:21 143:5,19<br/>151:4 155:8 156:4<br/>156:15 157:1,7<br/>189:5 190:10,19<br/>191:3,7,9,15,16,22<br/>191:24 192:2 195:2<br/>211:16,22 213:18<br/>214:5,7,11,16,24<br/>215:1,4,18 216:12<br/>216:19,23 217:6<br/>218:11 219:5<br/>223:15,22 229:18<br/>229:18,22 230:5,7<br/>231:3,12 238:5<br/>247:17,21,22<br/>251:17,25 252:2</p> | <p>258:7 261:16 266:4<br/>272:8 304:20 305:3<br/>305:18 306:3 315:4<br/>317:22 337:25<br/>359:14 363:3<br/>371:16,17 389:25<br/>390:2 397:21 398:3<br/>429:5,25 431:25<br/>433:3 434:2,8,9,13<br/>434:24,25 437:19<br/>437:22,25 438:19<br/>438:20 451:4<br/>455:25 456:7,11<br/>475:15,25 476:9,13<br/>477:4,9,10,24 478:2<br/>478:3,6,19 479:7,15<br/>481:5,22,24 482:8<br/>482:10 484:25<br/>489:25 490:1<br/>500:21<br/><b>OIMs</b> 213:10 230:7<br/>476:3<br/><b>OIM's</b> 230:14 438:18<br/>447:22<br/><b>okay</b> 23:18 27:8<br/>30:16,24 31:4 35:15<br/>43:18 45:8 46:10<br/>55:8 59:13 61:7<br/>67:3 76:23 83:2<br/>87:19 88:6 90:3,8<br/>91:5 92:25 93:17<br/>101:5 105:18 111:9<br/>111:20 113:6,15<br/>120:7,19 121:11<br/>123:22 126:22<br/>127:11,12 128:6<br/>129:7 130:16<br/>131:14 132:10<br/>136:14 137:17<br/>139:4,14,25 140:20<br/>141:24 143:23<br/>145:7 146:20 148:2<br/>148:25 150:16,23<br/>152:2 153:20<br/>155:24 162:10<br/>167:3,14,21 176:23</p> | <p>177:7,11,19 180:7<br/>183:16 186:3,12<br/>187:7 192:15 193:3<br/>194:13 196:2,11<br/>197:4 202:4,16<br/>203:8,25 204:15,20<br/>208:9,17 209:2,14<br/>223:12 226:15,21<br/>230:3 234:13 235:1<br/>237:3,7 241:20,25<br/>242:8,9 245:20<br/>247:23 252:4<br/>254:11 256:7 257:6<br/>266:12,24 269:2,20<br/>269:23 270:14,21<br/>278:19 280:3<br/>282:18 287:7 296:3<br/>297:4,12 303:3,5,18<br/>313:23 320:12<br/>329:17,20 333:13<br/>346:14 349:19<br/>352:20 353:18,23<br/>357:17 358:16<br/>363:8,10,23 366:17<br/>369:4 370:5,10<br/>372:2,11,20 373:25<br/>374:23 375:19<br/>377:3 378:3 379:12<br/>380:22 381:6,11,16<br/>381:19 382:11,23<br/>383:3,18,24 384:13<br/>385:5,13 387:22<br/>388:6 389:6,21,25<br/>390:4,12 391:11<br/>392:8,13 396:12<br/>404:22 407:5,15<br/>410:21 412:6,13<br/>413:11 414:8 415:7<br/>415:8 420:20<br/>421:19 423:15<br/>425:8 430:17 435:3<br/>435:5 436:24 442:5<br/>445:9,17 449:17<br/>455:2 457:23 458:1<br/>458:20 463:18,22<br/>466:15 469:3 470:7</p> |
|---|--|--|--|

|   |   |  |   |
|---|---|--|---|
| <p>477:19 487:5<br/>501:11 502:21,25<br/>511:13 521:4 528:7<br/><b>old</b> 326:14<br/><b>once</b> 18:3 92:13<br/>152:10 175:23<br/>229:3 240:10 246:6<br/>253:16 259:20<br/>274:1 292:10<br/>322:20 324:18<br/>357:15 373:17<br/>382:12 421:6 448:9<br/>510:8 523:13<br/>526:17<br/><b>ones</b> 203:4 208:24<br/>263:24 356:2<br/>448:23 491:25<br/>493:17 500:25<br/>513:21<br/><b>one's</b> 172:12,12<br/><b>ongoing</b> 48:3 69:25<br/>74:24 102:15 103:3<br/>110:11 154:7<br/>180:20 490:18,19<br/><b>online</b> 161:21<br/><b>onshore</b> 35:12 211:16<br/>237:19 287:21<br/>467:5<br/><b>onsite</b> 508:23<br/><b>on-scene</b> 473:11<br/><b>open</b> 101:17 184:1<br/>187:8 285:14<br/>453:24 454:8,12<br/>519:11<br/><b>opened</b> 274:1 455:13<br/><b>opening</b> 77:21<br/><b>operate</b> 27:16,22<br/>83:4 139:5,22<br/>140:14 200:13<br/>225:1 226:6,7,9,12<br/>226:18,18 227:16<br/>248:11,12 249:9<br/>286:16 319:12<br/>326:20 332:4,8<br/>348:9 393:16<br/><b>operated</b> 19:1 20:17</p> | <p>71:5 109:10 111:7<br/>141:15 160:18<br/>161:1 316:5,10,17<br/>395:8<br/><b>operates</b> 111:16<br/>137:11 142:2<br/>143:20<br/><b>operating</b> 18:11<br/>50:17 78:12,13,14<br/>80:11 103:1 104:10<br/>106:3 119:8 213:11<br/>264:25 296:19<br/>300:23 316:13<br/>332:5 345:17 347:5<br/>389:18 412:21<br/>476:4 497:17,23<br/>507:20 518:5<br/><b>operation</b> 14:10<br/>20:12 22:4 23:9,11<br/>24:13 27:12,18<br/>28:16 31:13 32:9<br/>36:6,8,10 40:25<br/>43:12,18 55:3 60:8<br/>64:21,22 65:10,22<br/>66:18 75:10 77:20<br/>81:2 82:11 85:7,8<br/>86:12,19,19,20 87:4<br/>87:16,22 88:2,4,5,9<br/>88:11 89:2,19,22<br/>92:21 96:2 103:13<br/>109:14 113:23<br/>130:13 132:2<br/>134:11 139:17,22<br/>180:20 183:2 189:3<br/>189:12 190:10<br/>191:2,5 207:3 219:8<br/>225:11 243:8<br/>244:18 251:6,24<br/>252:16 258:9<br/>262:12,23 263:1<br/>267:6 309:6 322:12<br/>360:9,14 383:8<br/>411:5 431:12,14<br/>432:20 433:18<br/>438:5 457:10<br/>462:25 481:19,19</p> | <p>482:21 491:3<br/>494:19 495:5<br/>508:25 514:24<br/>526:22<br/><b>operational</b> 9:22<br/>39:12 77:18 87:7<br/>95:14 103:25<br/>108:10 109:22<br/>133:16 141:13<br/>143:2 151:15<br/>178:18 180:19<br/>181:15 212:4 217:7<br/>258:15 263:10<br/>284:9 286:2 294:5<br/>301:16 332:20<br/>334:9 354:13<br/>415:11,15 456:16<br/>468:18<br/><b>operations</b> 14:23<br/>16:14,19 18:6,11<br/>20:25 21:12 23:16<br/>25:5 27:3 28:14<br/>29:8,9,15 43:13,17<br/>52:21 53:1 56:19<br/>58:5,7 61:17 64:8<br/>64:24 65:9 66:8<br/>73:24,25 74:5 75:11<br/>76:22 79:10,17,19<br/>79:20,22 80:8,12<br/>83:8 94:15 96:7<br/>102:20 106:12<br/>108:9,17,19,21<br/>109:3 110:7,13<br/>112:4 119:14,20<br/>120:6 131:5 136:22<br/>137:22 158:1,9,15<br/>158:22 162:14,22<br/>163:8 170:9,25<br/>172:6 174:13,14<br/>181:7 191:10,14<br/>197:12 200:7,9<br/>203:17,21 204:7<br/>206:17 213:13<br/>214:18 217:24<br/>218:3 239:10<br/>241:17 247:9</p> | <p>248:17 251:14,14<br/>251:25 260:22<br/>267:4 271:19,20<br/>302:6 308:14,24<br/>309:11 310:10<br/>315:16,17 341:21<br/>342:10,14 366:12<br/>371:2 386:19 388:1<br/>388:9 437:9 438:9<br/>438:12 440:3 457:8<br/>487:20,21 490:20<br/>495:1 500:12<br/>504:13 514:8<br/>526:24 527:1<br/><b>operations-related</b><br/>14:21<br/><b>operator</b> 26:6 30:15<br/>47:3,12 48:18 81:5<br/>103:16 189:7<br/>193:22 194:11<br/>205:12 208:2<br/>223:25 397:25<br/>501:25<br/><b>operators</b> 207:23<br/><b>operator's</b> 204:2<br/><b>opinion</b> 63:11 85:25<br/>86:23 87:5 109:18<br/>132:6 133:1,14<br/>138:11,16,17<br/>145:19 152:14<br/>196:17 197:16<br/>218:17,18 219:2<br/>220:17 221:11,19<br/>221:20,23 223:11<br/>229:2,5,12 244:8<br/>264:4,21 266:24<br/>267:23 268:3 286:1<br/>289:12 348:14,14<br/>348:15 402:25<br/>403:3 409:8 411:6<br/>422:12 460:21<br/>461:12 464:6<br/>495:17 511:8<br/>517:25<br/><b>opinions</b> 11:10<br/>135:13 145:17</p> |
|---|---|--|---|

|                             |                              |                             |                             |
|-----------------------------|------------------------------|-----------------------------|-----------------------------|
| 146:3                       | 479:21 480:10                | <b>overlaps</b> 172:13      | 470:15,22 471:1,4           |
| <b>opportunities</b> 442:13 | <b>original</b> 303:17 401:6 | <b>overly</b> 350:19 464:3  | 471:25 513:25               |
| <b>opportunity</b> 168:1    | <b>originally</b> 442:20     | <b>overnight</b> 441:16     | 514:6 520:12                |
| 289:25 345:21               | 513:12                       | <b>overridden</b> 33:21     |                             |
| 365:22 377:1 507:2          | <b>Orleans</b> 274:17        | 60:16 97:1 166:8            | <b>P</b>                    |
| <b>opposed</b> 171:22       | <b>ought</b> 85:17 146:15    | <b>override</b> 97:14,17,21 | <b>P</b> 2:1,1              |
| 179:22 219:25               | 194:25 195:15                | <b>overrides</b> 177:17     | <b>PA</b> 217:17 427:4      |
| 334:4 506:7 511:1           | 411:7 416:4 484:5            | 178:20                      | <b>package</b> 236:15       |
| <b>opposite</b> 302:12      | <b>outcome</b> 49:3 522:8    | <b>overriding</b> 191:25    | 298:24 358:1,6              |
| 391:25                      | <b>outline</b> 15:13 212:12  | <b>overrule</b> 329:18      | 434:4 490:9 507:11          |
| <b>opted</b> 441:5          | 438:14 439:2                 | 402:24 410:22               | 508:17,23 509:4             |
| <b>order</b> 89:2 101:8,16  | <b>outlined</b> 43:25 81:15  | <b>Overruled</b> 462:20     | 510:3,12 511:14             |
| 139:22 140:2 141:1          | 193:21                       | <b>overs</b> 305:24         | 518:7,10                    |
| 167:20 171:7                | <b>outlines</b> 478:21       | <b>overseas</b> 302:6       | <b>packer</b> 273:7         |
| 238:10 246:18               | <b>output</b> 294:7 405:19   | <b>oversee</b> 87:3 438:8   | <b>packers</b> 521:10 522:5 |
| 247:6 256:5 270:18          | 415:13,18                    | <b>overseeing</b> 221:22    | <b>pad</b> 285:23           |
| 277:12 278:13               | <b>outs</b> 111:11           | <b>oversight</b> 49:6,10    | <b>page</b> 3:3 55:20 57:17 |
| 297:2 335:19                | <b>outside</b> 57:9,11 61:8  | 51:20 52:9 54:2             | 58:24,25 60:23              |
| 342:25 348:5                | 61:22 62:9,22 79:19          | 160:14 267:3,21             | 73:19 96:21 97:2            |
| 355:12 362:20               | 79:23 80:7,13                | 308:23 309:5,11             | 98:1 99:11 123:11           |
| 431:23 432:1                | 105:12 142:12                | 310:9 498:25                | 127:14 129:1,12,13          |
| 440:17 459:3,20             | 200:4 239:6 253:16           | <b>overview</b> 269:9       | 129:15,22 131:24            |
| 461:5 462:5,6               | 284:25 309:18                | <b>owned</b> 45:17 76:4     | 133:4,5 134:9 166:4         |
| 464:22 473:10               | 449:5,22,23 454:24           | 99:13 141:15                | 166:12,13,16,23             |
| 483:18,20                   | 455:6,16                     | 160:25 184:16               | 167:19 169:1                |
| <b>ordered</b> 107:19       | <b>outstanding</b> 59:25     | <b>owner</b> 9:3,4 26:6     | 200:23,25 202:6             |
| 113:18 254:15               | 108:25 247:7                 | 61:9 397:25                 | 295:1,5 297:15              |
| 440:21,23                   | 322:21 324:25                | <b>owners</b> 394:2 397:17  | 342:9,10 344:23             |
| <b>orders</b> 459:1 463:19  | 326:11                       | <b>ownership</b> 63:19      | 378:21 383:5                |
| 473:12 480:11,15            | <b>out-of-service</b> 247:16 | 323:19                      | 394:17                      |
| <b>ordinary</b> 351:4       | 248:19 276:10,12             | <b>owner/operator</b>       | <b>pages</b> 100:6 123:11   |
| <b>organization</b> 16:9    | 276:13 291:11                | 27:18 28:9 30:1             | 127:1 135:4 529:7           |
| 17:4,12,13,20 44:16         | 296:18,21 526:16             | <b>owns</b> 160:17          | <b>paid</b> 123:5 368:13    |
| 46:19 47:5 48:21            | <b>out-service</b> 322:4     | <b>O'Bryan</b> 159:15,17    | 507:12,24                   |
| 53:6,13,22 54:3             | <b>overall</b> 38:9 59:8,10  | 205:6,7,10 302:17           | <b>pain</b> 501:1           |
| 76:15 213:4 230:18          | 65:11 76:12 80:16            | 303:1,4 398:8,10            | <b>Panama</b> 23:19         |
| 262:12 269:19               | 81:4 84:6 161:5              | 440:24 442:14               | <b>Panamanian</b> 438:18    |
| 302:20                      | 191:1 224:25 496:3           | 446:20 467:3,24             | <b>panel</b> 132:19 158:11  |
| <b>organizational</b> 16:9  | <b>overarching</b> 80:19     | 468:3 525:1                 | 294:7 311:5 321:3           |
| 17:3,15 24:12 213:3         | <b>overboard</b> 449:19      | <b>O'Bryan's</b> 206:14     | 325:4 405:20 406:8          |
| 214:8 224:1,12              | 498:4                        | <b>o'clock</b> 279:13       | 415:13,18 424:16            |
| 262:22,25                   | <b>overdue</b> 33:5 59:7,9   | 364:20,21 373:20            | 424:23,24 427:13            |
| <b>organizations</b> 49:6   | 98:2,4 326:8,10              | 374:21 375:24               | <b>panels</b> 334:14 426:14 |
| 53:24 267:18,22             | <b>overhaul</b> 59:25 98:3   | 391:4 427:22 436:3          | 426:22 448:1                |
| <b>orientation</b> 442:12   | <b>overhauled</b> 296:9      | 436:15 442:18               | 512:20,22                   |
| 442:14,17 479:21            | <b>overlap</b> 181:9         | 444:10 469:22               | <b>panoply</b> 138:8        |

|  |  |   |  |
|--|--|---|--|
| <p><b>paragraph</b> 57:20<br/>59:5 60:12 73:20,23<br/>200:25 282:24<br/>295:22 386:12<br/>394:18</p> <p><b>parallel</b> 154:11,14</p> <p><b>parameters</b> 215:9,11</p> <p><b>parcel</b> 177:23</p> <p><b>Pardon</b> 491:15,15</p> <p><b>Park</b> 273:19,22<br/>275:10 378:17<br/>388:5</p> <p><b>Parkway</b> 529:24</p> <p><b>part</b> 7:7 9:2 11:7 22:9<br/>22:14,18 23:12<br/>36:16 42:11 44:20<br/>48:6 55:2 59:17<br/>60:1 68:6 72:6<br/>79:24 90:23 91:2<br/>97:11 99:23 104:1<br/>124:4,9 130:22<br/>135:24 158:7 163:6<br/>165:2 170:8 171:16<br/>174:17 175:14<br/>176:21 177:23<br/>179:20,21 180:3,19<br/>181:13 198:7,8<br/>199:1,3 202:17<br/>203:14,19 209:12<br/>233:2,5 239:9<br/>244:23 252:16<br/>260:10 275:22,22<br/>286:6,8,11,15,19<br/>292:15 299:21<br/>307:4 308:16<br/>347:18 356:19<br/>365:18 366:15<br/>375:12 400:14<br/>405:7 417:7,16<br/>418:8 474:23<br/>479:21 480:6<br/>481:13 482:15<br/>508:7 519:10</p> <p><b>participant</b> 234:21</p> <p><b>participate</b> 37:1,17<br/>232:16,22 233:12</p> | <p>239:24 291:18<br/>298:14 486:10<br/>508:14</p> <p><b>participated</b> 240:5<br/>240:24 285:3 317:7</p> <p><b>participating</b> 232:19<br/>307:17 502:17<br/>514:23</p> <p><b>participation</b> 484:1<br/>502:19</p> <p><b>particular</b> 10:2 21:25<br/>22:1,5,22 26:18<br/>29:11 42:20 49:13<br/>52:23 65:22 66:5,10<br/>75:8 82:4 83:24<br/>84:1 87:23 97:16<br/>102:19 138:14,25<br/>139:18 146:16<br/>150:3 154:21<br/>160:20 161:13<br/>165:15 168:20<br/>169:2 171:1 183:6<br/>205:11,12 207:21<br/>222:21 243:16<br/>254:1 359:21<br/>403:21 441:19<br/>488:19 512:13</p> <p><b>particularly</b> 64:20<br/>112:19 124:9<br/>125:10 188:6<br/>284:24 393:14<br/>461:2</p> <p><b>particulars</b> 353:7</p> <p><b>parties</b> 10:4 12:1,5,7<br/>12:9,15 20:15 65:12<br/>66:23 72:10 91:10<br/>101:10 110:9 120:9<br/>163:7 167:24<br/>218:23 256:17<br/>319:22 320:16<br/>484:17 520:15<br/>529:17</p> <p><b>partners</b> 38:1,8<br/>119:2,5</p> <p><b>partnership</b> 312:22</p> <p><b>parts</b> 107:19 113:18</p> | <p>114:14 183:13<br/>247:13 417:3</p> <p><b>party</b> 10:22 20:10<br/>27:11 38:8 40:3<br/>51:1 54:3 65:21<br/>101:6 175:12 179:6<br/>452:2 483:25<br/>529:13,15</p> <p><b>pass</b> 315:3</p> <p><b>passed</b> 206:19 335:13</p> <p><b>passengers</b> 395:6</p> <p><b>Pat</b> 151:2 205:5,7,10<br/>303:4 388:20<br/>440:24 442:14<br/>444:1 446:20 467:3<br/>525:1</p> <p><b>PATHFINDER</b><br/>464:5</p> <p><b>patience</b> 101:24<br/>485:18</p> <p><b>Patrick</b> 159:15,16<br/>398:8,9</p> <p><b>Paul</b> 4:7 58:22,23<br/>59:18 63:21 76:4<br/>210:25 277:9,14<br/>280:6 365:24 366:9<br/>366:10 466:11<br/>475:17,23,24<br/>488:15 500:22</p> <p><b>pause</b> 127:9</p> <p><b>pay</b> 63:3 352:22<br/>509:6</p> <p><b>paying</b> 106:4</p> <p><b>pays</b> 102:18</p> <p><b>PDAs</b> 10:15</p> <p><b>peak</b> 273:1</p> <p><b>peculiarly</b> 180:14</p> <p><b>peer</b> 238:22 271:14<br/>401:8 434:13</p> <p><b>peg</b> 390:23</p> <p><b>penalties</b> 11:2,5</p> <p><b>penciled</b> 276:19</p> <p><b>Penton</b> 4:1,22 164:9<br/>164:10,13,16<br/>166:17,20 168:3<br/>176:4,20,23,24</p> | <p>185:24 186:13,24<br/>187:1 405:1,1,6,13<br/>405:23 408:17<br/>409:17 410:13,17<br/>411:15 412:1,13<br/>413:20,24 414:6,9<br/>414:14 415:21<br/>416:10 417:6 418:8<br/>418:23 419:5,18,21<br/>420:3,13,20 422:6<br/>422:16 423:6</p> <p><b>people</b> 65:7,9 66:24<br/>70:7 79:21 81:10<br/>82:15 85:15 86:4<br/>112:25 113:5<br/>142:11 148:13,15<br/>155:2 175:8 177:25<br/>188:20 195:10<br/>197:2,3 205:13<br/>218:5,5 221:22<br/>231:9 255:14,18<br/>281:20 284:2<br/>293:10,14 306:7<br/>307:16 317:10<br/>325:22 354:20<br/>394:12 406:24<br/>417:2 425:12<br/>427:21 434:1<br/>439:13 443:10<br/>446:2 448:19,21<br/>449:16 451:18<br/>453:1,5 454:5<br/>458:15 463:10<br/>465:22 480:24<br/>500:10 507:19<br/>509:13 518:1<br/>520:21</p> <p><b>people's</b> 427:24</p> <p><b>percent</b> 99:15 226:19<br/>239:2 244:11 247:3<br/>247:4 256:15 273:4<br/>278:25 289:21<br/>290:4 300:9 319:7<br/>358:8 363:14<br/>366:21 381:2 423:5<br/>429:17 506:14,19</p> |
|--|--|---|--|

|  |   |   |  |
|--|---|---|--|
| <p>507:2,9<br/> <b>percentage</b> 506:11<br/> <b>Perez</b> 69:7,7,13 70:16<br/> 70:21 71:11,20 72:2<br/> 72:3,14 73:3,9<br/> <b>Perez's</b> 72:4<br/> <b>perfectly</b> 449:25<br/> 461:22<br/> <b>perform</b> 87:24<br/> 162:18 207:23<br/> 227:5 251:3 269:25<br/> 298:5,20,24<br/> <b>performance</b> 31:25<br/> 43:7,23 60:17 70:1<br/> 212:3,4 221:4 239:4<br/> 243:23 246:11<br/> 269:11,17 284:13<br/> 287:9 300:8,21,22<br/> 312:14 335:3<br/> 338:10 347:25<br/> 370:21,22,24 371:1<br/> 403:20 404:2,8<br/> 456:1,9<br/> <b>performed</b> 29:18<br/> 94:7 102:11 165:6<br/> 179:5 182:11 185:7<br/> 208:6 333:2 502:4<br/> 514:8<br/> <b>performing</b> 70:15<br/> 116:3 131:6 161:11<br/> 179:6 180:2 505:10<br/> <b>performs</b> 162:1<br/> 417:11<br/> <b>period</b> 33:11 69:11<br/> 70:19 74:1 78:6<br/> 108:5 110:17<br/> 112:13 115:14<br/> 119:24 213:23<br/> 230:11 247:16<br/> 248:19 268:22<br/> 276:10,12,13 291:5<br/> 291:11 296:18,21<br/> 322:5 452:4<br/> <b>periodically</b> 32:11,15<br/> 244:20<br/> <b>periods</b> 312:2</p> | <p><b>perjury</b> 11:3<br/> <b>Permanently</b> 333:23<br/> <b>permanently-man...</b><br/> 333:19<br/> <b>permission</b> 459:11<br/> <b>permit</b> 236:8 489:22<br/> 489:23<br/> <b>permits</b> 208:2 489:17<br/> 489:19<br/> <b>permitted</b> 119:19<br/> <b>permitting</b> 31:19<br/> 41:3 235:9,20 236:5<br/> 487:23<br/> <b>person</b> 9:9 12:18<br/> 13:4,7 17:17 18:9<br/> 26:7 32:14 33:19<br/> 51:9 60:15 67:11<br/> 71:2,15 83:7,10<br/> 90:1 96:25 118:4<br/> 139:9 143:6,19<br/> 145:10 147:13<br/> 163:1 166:7 186:16<br/> 196:14 197:11<br/> 220:15 221:20<br/> 231:25 279:6<br/> 280:16 313:2<br/> 317:13 356:11<br/> 368:25 395:2<br/> 397:24 419:16<br/> 427:1 439:13<br/> 441:10 459:24<br/> 460:3 485:21<br/> 498:11 516:21<br/> 525:2<br/> <b>personal</b> 12:17 23:15<br/> 79:12 135:13 312:9<br/> 379:21<br/> <b>personally</b> 64:10<br/> 154:10 234:11<br/> 240:24 274:24<br/> 316:16 331:12<br/> 355:22 385:10<br/> 435:11 511:22<br/> <b>personnel</b> 30:20<br/> 31:11,25 40:23<br/> 45:15 75:20 79:14</p> | <p>80:11 86:13 105:3<br/> 107:5,8 134:23<br/> 172:22 177:9 179:5<br/> 183:19 192:7<br/> 194:12,12 197:25<br/> 212:3 221:3 227:1<br/> 232:22 233:8,12,21<br/> 242:2 243:7,23<br/> 251:2 257:8,18<br/> 265:25 266:3<br/> 269:10,25 270:25<br/> 273:25 284:13,23<br/> 284:24 286:25<br/> 287:9 292:19 293:5<br/> 293:8 312:24<br/> 313:18 333:17<br/> 371:1,5 392:2<br/> 420:12,22 428:7<br/> 429:1 499:12<br/> 502:10,11 514:9<br/> 520:1 522:18 523:1<br/> <b>persons</b> 6:14 9:18,24<br/> 265:6 380:5 426:23<br/> <b>person's</b> 188:9<br/> <b>person-on-board</b><br/> 504:12<br/> <b>perspective</b> 386:11<br/> 418:15<br/> <b>persuasive</b> 484:22<br/> <b>petroleum</b> 7:11 404:6<br/> <b>phase</b> 259:5 376:5,13<br/> 376:15 383:9<br/> 433:19 479:7,8<br/> <b>phone</b> 251:16 277:10<br/> 277:21,23,23<br/> 279:16 374:22<br/> 390:21,25 391:4<br/> 392:10,21 466:11<br/> 516:10<br/> <b>phoned</b> 278:7,8,10<br/> 374:22<br/> <b>phones</b> 10:16<br/> <b>photography</b> 10:17<br/> <b>phrase</b> 171:20,21<br/> <b>phrases</b> 190:23<br/> <b>physical</b> 431:6</p> | <p><b>physics</b> 411:3<br/> <b>PIC</b> 215:15 220:15<br/> 525:1<br/> <b>pick</b> 225:4<br/> <b>picked</b> 237:13 238:10<br/> 442:24 515:2<br/> <b>picture</b> 65:13,19<br/> 66:21 76:12 81:4,14<br/> 81:16 161:5<br/> <b>piece</b> 13:1 22:24<br/> 103:1 138:25<br/> 139:17,23 172:16<br/> 243:16 325:17<br/> 510:23<br/> <b>pieces</b> 171:11,25<br/> 172:1,2,4 205:3<br/> 249:4 510:22<br/> <b>PII</b> 344:6,11 369:4,9<br/> 369:19 383:5<br/> <b>pilot</b> 9:2<br/> <b>pin</b> 229:24<br/> <b>pipe</b> 203:19 364:7<br/> 365:5 519:13 522:3<br/> 526:20<br/> <b>pipng</b> 403:19 404:8<br/> <b>pit</b> 505:22,22<br/> <b>PI</b> 378:13<br/> <b>placard</b> 480:3<br/> <b>place</b> 19:17 20:8,23<br/> 22:23 31:8,22 32:5<br/> 32:7 33:13 36:24<br/> 40:18 41:4 52:9<br/> 62:3 65:18 71:16<br/> 76:24 78:11 81:17<br/> 83:14,19 86:4 88:18<br/> 110:24 160:24<br/> 167:1 215:10 216:2<br/> 216:2 217:4,12,22<br/> 220:15,23 242:11<br/> 242:25 243:5 244:4<br/> 244:6,15,20 246:5<br/> 246:24 247:12<br/> 248:22 254:6<br/> 265:20 266:23<br/> 271:13 275:14<br/> 296:13 316:16</p> |
|--|---|---|--|

|  |   |   |   |
|--|---|---|---|
| <p>334:7,20 340:21<br/>347:7 350:24<br/>357:16 366:23<br/>372:15 373:4,9<br/>374:3,6 375:1<br/>376:21 478:9<br/>489:20 499:8 500:6<br/>524:9<br/><b>placed</b> 10:25 193:12<br/>278:17<br/><b>plain</b> 114:7<br/><b>plan</b> 31:8 33:10,13<br/>40:18 72:7,9 101:8<br/>106:19,21 237:14<br/>242:11,25 243:4<br/>246:5,7,24 247:12<br/>257:7,9,11,16 270:7<br/>296:13 315:11<br/>322:23 324:25<br/>360:8 389:18 430:3<br/>430:7,20,22,23<br/>431:5,21,22 432:4<br/>432:14 433:12,23<br/>433:25 435:9<br/>519:10 522:8<br/><b>planned</b> 33:6 59:8,9<br/>98:3 273:11 301:15<br/>385:18 483:23<br/>503:25 510:19,21<br/>526:16<br/><b>planning</b> 259:9<br/>441:17<br/><b>plans</b> 241:16 245:24<br/><b>plant</b> 59:2 98:2<br/><b>plants</b> 15:18 169:2<br/><b>platform</b> 44:8 163:9<br/>259:3 399:2<br/><b>play</b> 404:1 470:13<br/><b>played</b> 20:17<br/><b>Plaza</b> 388:3,9<br/><b>PLCs</b> 167:2 169:11<br/><b>Pleasant</b> 287:2<br/>450:24 515:1 517:3<br/><b>please</b> 11:20 13:13<br/>21:4 31:5 54:24<br/>55:8 56:4 57:23</p> | <p>59:5 61:3 84:15<br/>88:15 93:23 95:11<br/>116:15,17 117:24<br/>129:14 147:2<br/>166:21 169:25<br/>170:14 178:8<br/>226:10 241:4 252:7<br/>266:1 303:19<br/>337:22 340:25<br/>341:3,9 344:23<br/>349:20 369:12<br/>370:5 384:10<br/>386:20 404:24<br/>407:16,19 408:25<br/>436:22,25 441:23<br/>441:24 450:22<br/>460:22,24 462:12<br/>472:17,19,21<br/>485:11<br/><b>pleased</b> 323:18<br/><b>plenty</b> 452:16<br/><b>plug</b> 320:5 331:3,13<br/><b>plug-and-abandon...</b><br/>433:19,23,25<br/><b>plume</b> 422:14<br/><b>PMs</b> 99:16 326:11<br/><b>pod</b> 285:12,21 286:1<br/><b>pods</b> 285:7<br/><b>poignancy</b> 460:16<br/><b>point</b> 74:9 80:9,14<br/>87:10 91:22 93:10<br/>102:12 128:5 135:8<br/>140:18 161:6,8<br/>177:4 209:3 256:1<br/>274:16 278:12<br/>280:9,13 321:23<br/>330:11 342:25<br/>346:5 348:12 374:9<br/>384:17,17 386:5<br/>419:9,13 449:10<br/>453:25<br/><b>pointed</b> 145:15 223:1<br/>236:5<br/><b>points</b> 206:20 244:5<br/>245:24 375:9<br/>384:15 410:23</p> | <p><b>policies</b> 7:4 30:13,14<br/>34:25 41:19 61:9,23<br/>218:8 263:3 379:5<br/>481:14,24<br/><b>policy</b> 61:6 62:11<br/>137:11 216:9<br/>252:19 280:17,24<br/>293:17,20 379:25<br/>386:21 458:23<br/>478:15 505:12<br/><b>politely</b> 290:17<br/><b>pollution</b> 1:2 81:10<br/>189:4 251:4,7<br/>481:21 482:6,17,22<br/>495:25<br/><b>pool</b> 10:13 293:8,13<br/>443:25<br/><b>popular</b> 309:20<br/><b>port</b> 52:13,16,19,20<br/>123:14 191:24<br/>452:24 465:17<br/>518:7<br/><b>portion</b> 7:3 234:1<br/>289:24,25 299:24<br/>419:14 486:21<br/><b>portions</b> 196:5<br/><b>pose</b> 337:18<br/><b>poses</b> 30:19 242:1<br/><b>position</b> 14:7,13,14<br/>14:17,24 16:10<br/>17:16 19:8 34:13<br/>44:15 49:18 50:8,14<br/>51:5 52:7 53:10,17<br/>54:4 69:13 92:7<br/>98:8,9 104:15<br/>110:12 130:6<br/>144:16,24,25 145:1<br/>150:7 152:12 211:5<br/>211:7,12 229:8<br/>264:6 269:16<br/>285:19 299:17<br/>306:23 311:20<br/>343:7 368:4,6<br/>385:21 420:7 437:8<br/>437:11,13,14<br/>439:14 462:25</p> | <p>492:16 496:7,8<br/>500:7,15,21<br/><b>positioned</b> 28:23<br/><b>positioning</b> 28:24<br/>66:3 95:1 180:16<br/>183:7 205:22,25<br/>490:22<br/><b>positions</b> 14:18,22<br/>104:22,23 113:4<br/>183:17,18 205:16<br/>211:11 214:9<br/>216:23 269:3 292:2<br/>311:21 312:10<br/>399:22 420:11<br/>437:16<br/><b>positive</b> 238:18<br/>323:23<br/><b>possessions</b> 396:20<br/><b>possibility</b> 273:6<br/><b>possible</b> 8:15 186:6<br/>331:2 509:25<br/><b>possibly</b> 206:21<br/>272:14 514:21<br/><b>post</b> 45:24 46:15 76:1<br/>77:20 78:14 444:11<br/><b>posted</b> 12:19 343:22<br/>490:3<br/><b>poster</b> 128:3,10<br/><b>posting</b> 489:16<br/><b>Postmortem</b> 514:18<br/><b>Post-incident</b> 293:23<br/>332:9<br/><b>potential</b> 55:3 58:1<br/>61:10 79:17 222:18<br/>315:5 329:24 330:5<br/>376:18<br/><b>potentially</b> 33:3<br/>185:25 193:4 283:3<br/><b>pots</b> 518:2<br/><b>pound</b> 51:10<br/><b>pounds</b> 265:8 365:5<br/>452:22 498:14<br/><b>power</b> 59:2 90:24<br/>95:3 98:2,7 169:2<br/>172:6 450:18<br/><b>PowerPoint</b> 341:4,14</p> |
|--|---|---|---|

|  |  |   |  |
|--|--|---|--|
| <p>341:24 492:1<br/> <b>powers</b> 7:2<br/> <b>practical</b> 217:19<br/> <b>practice</b> 31:13 40:25<br/> 83:16,17 85:3 243:8<br/> 253:2,4,6,8 305:19<br/> 321:18 333:2 404:7<br/> 485:6 502:12<br/> <b>practices</b> 31:14 41:1<br/> 243:9 297:23 321:7<br/> 321:9<br/> <b>praise</b> 323:21<br/> <b>preapproved</b> 10:8<br/> <b>preceded</b> 119:23<br/> <b>predecessor</b> 16:21<br/> 232:3 289:4<br/> <b>predominantly</b> 467:7<br/> <b>predominately</b><br/> 473:24<br/> <b>preeminent</b> 209:22<br/> <b>prefacing</b> 85:4<br/> <b>preference</b> 85:20<br/> <b>preferred</b> 276:20<br/> <b>prematurely</b> 427:17<br/> <b>premise</b> 132:12,16<br/> 460:8<br/> <b>premises</b> 132:5<br/> 372:12 427:25<br/> <b>prepare</b> 291:4<br/> <b>prepared</b> 57:6,12<br/> 241:18 291:7 374:4<br/> 374:7 481:7<br/> <b>preparedness</b> 58:2<br/> <b>preparing</b> 260:2<br/> 384:16,22 491:21<br/> <b>prerequisites</b> 287:8<br/> 287:12,15<br/> <b>prerogative</b> 109:4<br/> <b>prescribed</b> 94:21<br/> 164:24,25<br/> <b>prescriptive</b> 264:12<br/> 264:13 496:19<br/> <b>present</b> 9:24 15:6,8<br/> 56:23,25 72:23 73:1<br/> 73:6,7 85:15 102:9<br/> 220:10 318:13</p> | <p>410:6 488:17<br/> 494:20 501:11<br/> <b>presentation</b> 341:25<br/> 412:3 418:19 492:1<br/> 506:2,3<br/> <b>presented</b> 245:11,20<br/> 310:1 422:2<br/> <b>president</b> 16:16<br/> 163:11 301:25<br/> <b>presidents</b> 16:15<br/> <b>pressure</b> 43:6,22<br/> 286:10,11 335:8,11<br/> 364:6,7 365:5 386:6<br/> 427:19 507:18<br/> <b>pressures</b> 364:5<br/> 385:25 443:18<br/> 457:15<br/> <b>presumably</b> 104:3<br/> 108:17<br/> <b>pretour</b> 371:23,25<br/> 372:23,24 373:1,6<br/> <b>pretty</b> 231:15 238:17<br/> 256:4 266:21<br/> 274:10 282:3<br/> 292:11 319:18<br/> 390:8 444:14<br/> 450:23 451:3<br/> 500:18<br/> <b>prevent</b> 8:8 50:1<br/> 233:18 235:16<br/> 482:22<br/> <b>prevented</b> 77:24<br/> 247:9<br/> <b>preventer</b> 139:1<br/> 303:16<br/> <b>preventing</b> 8:21<br/> 81:10 84:7<br/> <b>prevention</b> 6:8 86:14<br/> 189:4 251:4,7<br/> 297:23 481:20<br/> 482:6 495:25<br/> 525:13<br/> <b>previous</b> 18:4 32:24<br/> 102:22 144:16<br/> 228:5 245:1,5,7,9<br/> 409:6 416:22</p> | <p>441:10<br/> <b>previously</b> 10:12<br/> 94:17 140:15<br/> 148:19 159:2 180:1<br/> 414:3 442:11 444:3<br/> 484:7 512:19<br/> <b>pre-incident</b> 293:24<br/> <b>pre-meeting</b> 237:17<br/> <b>Pride</b> 141:3,4,5,9,15<br/> 143:3,17,20 160:18<br/> 161:24<br/> <b>primarily</b> 56:24 75:4<br/> 75:14 76:19 78:2<br/> 94:13 95:12 105:12<br/> 113:12 115:6<br/> 163:11 181:6,8<br/> 202:2 307:12,17<br/> 313:7 374:2<br/> <b>primary</b> 51:8 66:3,13<br/> 67:11 265:5 267:6<br/> 286:19 291:3 313:2<br/> 498:10<br/> <b>prior</b> 11:23 18:3<br/> 24:25 36:5 58:17<br/> 78:13 96:1,7 109:2<br/> 116:10,20 117:14<br/> 117:16,17 131:21<br/> 133:7 135:5 141:18<br/> 144:16 184:10<br/> 213:16,21 237:19<br/> 257:23 258:14<br/> 290:1 296:21,22,22<br/> 311:22,25 319:10<br/> 325:6 342:22<br/> 347:14 358:6<br/> 401:25 439:10,10<br/> 440:10 445:3<br/> 455:24 456:20,20<br/> 465:13 476:7<br/> 491:16 515:14<br/> <b>priorities</b> 316:23<br/> <b>prioritized</b> 71:18<br/> <b>priority</b> 71:19 319:2<br/> 401:17<br/> <b>privy</b> 237:17 238:3<br/> 240:12</p> | <p><b>proactive</b> 239:5,9,11<br/> 444:17<br/> <b>probably</b> 14:15 87:12<br/> 148:14 182:24<br/> 212:22 219:23<br/> 249:1 294:14<br/> 320:23 322:3<br/> 350:11 371:21<br/> 373:20 395:16<br/> 441:16,17,22 444:7<br/> 447:11 452:20<br/> 458:19 464:6<br/> 470:14,22 471:25<br/> 492:17 501:1<br/> <b>probative</b> 483:5<br/> <b>problem</b> 82:9,16<br/> 121:25 128:13,14<br/> 136:14 152:5 155:4<br/> 197:21 295:16<br/> 301:10 304:7<br/> 388:17 415:22<br/> 514:15<br/> <b>problems</b> 63:4<br/> 121:22 122:7<br/> 156:25 157:3,13,18<br/> 354:2,4 376:19<br/> 513:7 514:14,19<br/> <b>procedural</b> 12:12<br/> <b>procedure</b> 7:5 78:11<br/> 78:13,14 215:24<br/> 216:9,10 217:21,23<br/> 250:21 327:17<br/> 331:5,14 377:3<br/> 379:19 403:18<br/> 430:3,7,24 431:21<br/> 432:3,7 434:9,23<br/> 453:21 478:16<br/> 505:12,15<br/> <b>procedures</b> 30:13,14<br/> 35:1 41:19 78:12<br/> 149:18 162:1<br/> 163:14,15 214:22<br/> 218:8 252:16 263:3<br/> 266:14 327:13,16<br/> 342:4,6 379:5<br/> 398:24 400:24</p> |
|--|--|---|--|

|   |  |   |   |
|---|--|---|---|
| <p>460:4 481:14,25<br/>488:8 520:22<br/><b>proceed</b> 93:23 128:17<br/>196:4 252:5 304:9<br/>336:14 462:12<br/>485:11<br/><b>proceeding</b> 10:1,17<br/>10:20 11:15,25 93:6<br/>126:5<br/><b>proceedings</b> 10:7<br/>11:14 186:9 407:12<br/>529:9<br/><b>process</b> 20:7,23 21:4<br/>21:7,14,15 22:3,14<br/>22:19 31:19,22 32:6<br/>33:23 41:3 43:7,23<br/>43:24 44:21 45:3<br/>55:18 76:14,24<br/>92:16 94:13,19<br/>102:13,15 103:2,3<br/>107:4 146:7 147:25<br/>148:1 154:23 165:2<br/>170:19 172:8<br/>182:10 204:19<br/>225:6 243:11,15,17<br/>243:18 244:6<br/>265:12 275:23<br/>306:2 312:25<br/>327:13 354:24<br/>356:19 361:1 375:2<br/>375:5 386:13<br/>430:12 489:7<br/>493:18 507:4 510:9<br/><b>processes</b> 21:6 53:3<br/>104:2 148:4 438:11<br/>476:6 488:9 507:3<br/>523:13<br/><b>procrastinated</b><br/>453:10<br/><b>product</b> 169:19<br/>334:12<br/><b>production</b> 14:9 15:1<br/>15:25 27:3 43:5,21<br/>44:8 50:6 52:4 54:8<br/>54:9 83:20,21 84:3<br/>161:20 163:10</p> | <p>183:20 191:22,23<br/>204:2 264:11<br/>265:17 268:1 499:5<br/>499:17<br/><b>productive</b> 506:11<br/><b>professional</b> 1:21<br/>49:5 69:15 128:8<br/>165:13 212:15<br/><b>professionalism</b><br/>431:13<br/><b>professionals</b> 68:13<br/>70:2 183:12<br/><b>profile</b> 283:4<br/><b>program</b> 7:21 52:16<br/>52:19,19 209:8<br/>281:18 291:7<br/>428:25 429:4,5<br/>431:3,3 444:22<br/><b>programs</b> 321:6<br/><b>progress</b> 25:11,16<br/>36:14,19 55:15<br/>59:12 75:1 92:16<br/>100:22 108:12,18<br/>247:8 263:7 323:10<br/>323:14,24 324:4,9<br/>359:12<br/><b>progressed</b> 21:9<br/>36:23 53:19 55:16<br/>70:19 75:13 97:19<br/>101:2 107:10 159:3<br/>184:4,13 211:15<br/>236:11<br/><b>progressing</b> 63:20<br/>68:9,15<br/><b>prohibit</b> 229:10<br/><b>prohibited</b> 10:18<br/><b>project</b> 18:19 19:3<br/>20:3,4 21:24 22:8<br/>22:12 25:1,3 34:18<br/>36:8,18 37:3,14,19<br/>38:2,14 39:4,15,18<br/>41:25 65:24 66:11<br/>66:16 69:1 70:13<br/>71:10 241:2,5<br/>250:23 492:13<br/><b>promise</b> 336:22</p> | <p>382:10 426:9<br/><b>promoted</b> 211:18<br/>268:20 287:16<br/><b>promulgated</b> 410:11<br/><b>prone</b> 427:21<br/><b>proper</b> 32:9 51:19<br/>63:9 244:18 342:3,6<br/>438:12 459:15<br/>464:9 498:25<br/><b>properly</b> 42:19<br/>132:17,22 133:9<br/>137:1,7 221:7 222:7<br/>292:21 297:18<br/>412:20 413:2<br/>414:15 415:4,5<br/>416:3 418:14<br/>517:17<br/><b>property</b> 380:6<br/><b>proposals</b> 185:9<br/><b>proposed</b> 441:14<br/><b>proposition</b> 106:5<br/><b>proprietary</b> 121:24<br/><b>propulsion</b> 66:2,15<br/>447:2<br/><b>protect</b> 380:5 412:24<br/><b>protected</b> 414:17<br/><b>protection</b> 53:8 86:14<br/>266:19,23<br/><b>protocol</b> 21:8,17,19<br/>44:22 94:20 124:5<br/>170:21 171:7 208:1<br/>208:2 251:5<br/><b>protocols</b> 41:23<br/><b>prove</b> 258:11<br/><b>proven</b> 180:18<br/>181:15<br/><b>provide</b> 54:5 111:22<br/>163:18 181:1<br/>206:16 208:3 210:3<br/>210:5 264:7 288:15<br/>331:18 351:23<br/>352:14 430:6<br/>431:18 432:14<br/>433:2 435:17<br/>441:23,24 445:16<br/>468:3 478:24 479:1</p> | <p><b>provided</b> 51:10 78:10<br/>95:3 99:24 115:17<br/>134:7 171:16 197:5<br/>277:7 282:1 330:10<br/>330:15 331:15<br/>348:8,21 515:18<br/><b>provides</b> 119:13<br/>433:10<br/><b>providing</b> 175:17<br/>202:23 256:2<br/>326:19 474:23<br/>513:17<br/><b>proving</b> 180:20 258:3<br/><b>provision</b> 9:12<br/><b>provisions</b> 297:19<br/>299:9<br/><b>proximity</b> 475:10<br/><b>PRS</b> 315:5,25 526:20<br/><b>prudent</b> 253:9<br/><b>public</b> 1:21 7:3<br/>395:24 396:23<br/>484:18 529:4,21<br/><b>publicity</b> 477:1<br/><b>pull</b> 238:12 293:12<br/>508:2<br/><b>pulled</b> 262:17 306:13<br/>455:19<br/><b>pump</b> 77:25 521:8<br/>522:3<br/><b>pumped</b> 385:15<br/><b>pumping</b> 384:24<br/>385:3,14 505:22<br/>518:13,16<br/><b>punch</b> 201:18 202:13<br/>204:18<br/><b>punching</b> 153:15<br/><b>pure</b> 95:13 185:16<br/><b>purely</b> 16:6 21:9<br/>39:11 62:2 115:18<br/>172:1,3 184:15<br/>199:9 275:23 286:7<br/>286:9<br/><b>purpose</b> 8:21 99:6<br/>116:13,23 198:14<br/>255:12 422:17,19<br/>469:10 475:1</p> |
|---|--|---|---|

|   |  |  |   |
|---|--|--|---|
| <p>485:12<br/> <b>purposely</b> 495:21<br/> <b>purposes</b> 10:23 291:2<br/> 302:14 395:20<br/> 461:9<br/> <b>purview</b> 154:17<br/> <b>push</b> 510:1 517:9<br/> <b>pusher</b> 211:16<br/> 251:18 272:9 312:8<br/> 317:22 338:1 345:6<br/> 356:9 371:17<br/> 403:24 437:17<br/> 456:1,8 481:6<br/> <b>put</b> 74:3 77:10 78:11<br/> 110:24 113:16<br/> 136:16 167:25<br/> 198:21 205:5 206:5<br/> 230:10 246:5,18,24<br/> 262:14 280:20<br/> 285:15 286:5 324:5<br/> 329:6 343:6 373:4<br/> 375:1 378:20 384:5<br/> 384:23 387:19<br/> 440:4 449:16 452:7<br/> 454:19,20 455:14<br/> 469:3 470:18<br/> 471:19 496:6 507:7<br/> 507:19 519:12<br/> 521:1<br/> <b>putting</b> 452:6 469:5<br/> 470:4,6,21 473:8<br/> <b>PVF</b> 517:3<br/> <b>P&amp;A</b> 331:13<br/> <b>P-E-N-T-O-N</b> 164:13</p> <hr/> <p style="text-align: center;"><b>Q</b></p> <hr/> <p><b>QHSE</b> 437:18 439:20<br/> <b>qualifications</b> 70:5<br/> 193:8 226:2,4<br/> <b>qualified</b> 63:6 182:21<br/> 182:25 267:1<br/> <b>qualify</b> 109:13<br/> 224:10 226:1 297:7<br/> <b>quality</b> 267:22<br/> 297:22<br/> <b>qualms</b> 390:11</p> | <p><b>quarter</b> 276:22,22<br/> 442:9<br/> <b>query</b> 219:4<br/> <b>question</b> 17:1,7 18:14<br/> 19:6,10 21:3 22:10<br/> 22:17 23:3 34:8<br/> 37:11,16,21,25<br/> 43:15 46:11 49:12<br/> 49:17,19,24 50:9,15<br/> 51:23 52:8 53:11<br/> 54:18 56:17 57:4<br/> 60:22 67:7,20 70:25<br/> 74:6,13 77:2 84:12<br/> 84:15,18 85:2,23,24<br/> 86:7 87:14 92:17<br/> 96:20 115:5,25<br/> 116:15,25 117:11<br/> 118:2 119:17<br/> 120:12 127:4<br/> 128:14 129:14<br/> 131:20 132:5 133:3<br/> 133:25 134:3,5,8,15<br/> 136:12 139:10<br/> 140:5,16 143:11,13<br/> 143:15,22 145:6,12<br/> 146:9 147:1,5<br/> 150:14 151:21<br/> 152:9 153:20,22<br/> 154:13 158:6,13<br/> 162:9,11,15 166:22<br/> 169:17 176:5,19<br/> 177:1,5 178:8<br/> 181:23 182:4<br/> 186:22 194:23<br/> 195:22 198:11<br/> 203:25 205:24<br/> 213:23 214:1<br/> 219:23 221:2,24<br/> 222:1,17,19 223:8<br/> 223:14 226:10<br/> 228:14,25 229:1,11<br/> 229:15 230:2,23<br/> 231:4 233:14<br/> 253:23 261:13,18<br/> 288:25 294:17<br/> 303:8 305:11</p> | <p>308:13 309:22<br/> 310:4,6,7 319:23<br/> 326:16 329:21<br/> 336:11 343:1,4,16<br/> 345:15,24,25<br/> 349:11 350:6,19<br/> 366:2 382:12<br/> 387:11,21 403:6<br/> 408:22 409:8,16,18<br/> 409:20 411:16,20<br/> 412:12 413:7 415:4<br/> 415:23 416:6,11,12<br/> 417:23 421:5 427:8<br/> 429:24 430:10<br/> 432:1 458:2 460:11<br/> 461:3,24 462:5,13<br/> 463:15 465:24<br/> 472:23 480:20<br/> 483:22 484:12<br/> 485:13,16 497:20<br/> 498:5 499:22 519:1<br/> 523:21 524:16<br/> 526:3,23<br/> <b>questioned</b> 182:7<br/> <b>questioning</b> 14:2<br/> 64:19 90:23 93:8<br/> 112:1 164:19<br/> 335:19 425:11<br/> <b>questions</b> 12:12 50:1<br/> 54:12 64:12 73:12<br/> 73:14 74:11 76:9<br/> 77:4,8 79:4,6 91:6,8<br/> 91:14 93:18 94:4<br/> 95:21 97:25 101:4,7<br/> 101:20 102:6<br/> 114:22,24 118:16<br/> 120:20,24 121:2,5,8<br/> 121:10 122:24<br/> 125:10,13,16,21<br/> 126:14,16 136:15<br/> 142:18 143:7 152:3<br/> 155:1,14 159:14,17<br/> 161:4 176:4 179:16<br/> 180:12 187:8,17<br/> 196:4 205:18 206:9<br/> 209:19 210:1 230:9</p> | <p>235:23 268:6<br/> 273:14 276:3<br/> 294:13,15 299:4<br/> 300:12,14,17 304:3<br/> 304:6,18,23 308:21<br/> 310:2,14,16 311:11<br/> 320:8 321:3 329:1<br/> 335:1 336:8 343:9<br/> 350:8 358:15 367:4<br/> 367:7,11,14,17,20<br/> 372:19 388:24<br/> 395:11 398:10<br/> 412:4 413:23,25<br/> 414:1 423:13<br/> 424:11 428:10<br/> 435:14,16 458:8<br/> 460:7,18,19 484:15<br/> 520:6,8,16 527:4,6<br/> <b>quick</b> 126:21 155:22<br/> 156:1 164:20<br/> 294:16 393:10<br/> 404:20 414:20<br/> 424:11 427:7<br/> <b>quickly</b> 107:1,13<br/> 111:2 300:18<br/> 350:16,18 368:19<br/> 376:22 377:4<br/> <b>quite</b> 32:17 79:13<br/> 117:23 225:18<br/> 258:5 299:9 354:25<br/> 391:25 432:11<br/> 443:10 478:12<br/> 500:2<br/> <b>quiz</b> 128:12<br/> <b>quizzed</b> 131:21<br/> <b>quote</b> 197:17 228:8<br/> 241:24 263:4<br/> 288:12 294:19<br/> 418:13<br/> <b>quoted</b> 166:5 249:13</p> <hr/> <p style="text-align: center;"><b>R</b></p> <hr/> <p><b>R</b> 2:1,7,13 64:16,16<br/> 80:22,22 89:15,15<br/> 187:15,15 199:15<br/> 199:15 200:20,20</p> |
|---|--|--|---|

|   |  |  |   |
|---|--|--|---|
| <p>303:6,6 427:9,9<br/>428:11,11<br/><b>racking</b> 203:20<br/>315:25 526:20<br/><b>radio</b> 469:2 513:22<br/><b>rafts</b> 453:5<br/><b>raise</b> 11:20 13:17<br/>34:22 205:13,17<br/>258:22 259:10<br/>437:1<br/><b>raised</b> 34:22 71:24<br/>72:1 117:22 205:18<br/>242:14 258:21<br/>353:12 359:24<br/>399:2 470:22<br/><b>Ralph</b> 7:20<br/><b>ram</b> 282:5,5 285:14<br/>285:15,15,24 286:8<br/><b>rams</b> 273:3,9 286:6,9<br/>286:17 517:19<br/>519:13 521:8 522:3<br/><b>Ramsey</b> 515:2 517:2<br/><b>ran</b> 238:5 297:1<br/>449:12,19 450:13<br/>458:17<br/><b>random</b> 48:1 237:22<br/><b>randomly</b> 48:12<br/><b>Randy</b> 443:19 444:24<br/>457:12 522:19<br/><b>ranging</b> 408:2<br/><b>rank</b> 461:7<br/><b>ranking/scoring</b><br/>71:18<br/><b>ranks</b> 211:15<br/><b>rarely</b> 63:25 64:1<br/><b>rate</b> 64:2 106:4 299:6<br/>299:7,12 352:23<br/>507:15 509:7,12<br/><b>rates</b> 385:18<br/><b>rationale</b> 459:25<br/><b>reach</b> 470:25 484:19<br/><b>reached</b> 366:25<br/><b>reacted</b> 340:12,18<br/><b>reactive</b> 239:11<br/><b>read</b> 55:24 57:23<br/>59:5 60:11 86:7</p> | <p>116:16 126:12<br/>134:14 135:11<br/>168:6 202:12 222:1<br/>224:18 282:21,24<br/>294:19 295:21<br/>297:16 303:11,13<br/>303:18 342:25<br/>343:4 361:15 364:3<br/>365:2,21 366:22<br/>369:15,18 372:7<br/>381:11 384:14,21<br/>394:11 407:11<br/>409:12 411:16<br/>480:2 502:8 522:16<br/>522:25 525:8,16<br/><b>readily</b> 123:1<br/><b>readiness</b> 34:16<br/><b>reading</b> 73:19 135:1<br/>135:17 168:3<br/>303:25 385:5 387:8<br/><b>ready</b> 241:18 260:3<br/>264:3,20 287:22<br/>522:1<br/><b>real</b> 164:20 300:18<br/>368:19 414:20<br/>424:11 450:17<br/>453:11<br/><b>realistic</b> 114:13<br/><b>Reality</b> 371:20<br/><b>realized</b> 71:17<br/><b>really</b> 118:9 126:11<br/>126:15 163:17<br/>180:12 266:24<br/>278:25 279:1<br/>323:17,18 350:12<br/>359:12 361:15<br/>364:1 382:6 440:23<br/>448:11 450:7<br/>496:11<br/><b>realtime</b> 332:11,15<br/>371:9,13 529:20<br/><b>reason</b> 33:21 56:6<br/>59:12 60:16 97:1<br/>106:13 107:24<br/>115:20 120:7 126:1<br/>158:22 166:8</p> | <p>196:21 291:3 293:9<br/>315:15 347:4,8<br/>351:10 362:2<br/>363:17 375:13<br/>376:10 410:10<br/>427:11,14 525:20<br/><b>reasonable</b> 150:4<br/>401:12 483:21<br/><b>reasonably</b> 135:24<br/><b>reasons</b> 106:7 163:21<br/>163:24 326:4<br/>406:23 416:9<br/>422:25<br/><b>recall</b> 16:22 64:25<br/>71:25 77:12 78:18<br/>90:19,21 98:10<br/>112:16 119:3 124:8<br/>137:6 156:16 166:9<br/>173:13 227:22<br/>232:19 240:3,18<br/>250:19 256:8,21<br/>257:2 274:21<br/>277:10,25 279:2,15<br/>285:21 289:1<br/>299:16 308:25<br/>315:16 328:4<br/>330:11 346:22<br/>348:25 351:15,19<br/>351:22 361:5 362:1<br/>363:15 373:18<br/>374:11 375:17,18<br/>379:10,10 381:9<br/>393:12,17 395:14<br/>405:10 433:6<br/>440:16 457:4<br/>488:24 502:19,25<br/>506:9 512:23,25<br/>528:9<br/><b>receive</b> 11:25 47:3<br/>60:8 64:7 287:25<br/>299:18 300:4<br/>323:13,23 330:3,12<br/>331:9 332:11 351:5<br/>373:12 381:22<br/>382:5 431:3 432:24<br/>434:2 444:24 456:7</p> | <p>490:14 506:22<br/><b>received</b> 238:6 246:6<br/>297:2 303:9 315:21<br/>331:7 332:7 347:24<br/>351:10,25 357:15<br/>429:15 433:21,23<br/>433:24 434:3,4,17<br/>434:24,25<br/><b>receives</b> 332:14<br/><b>receiving</b> 11:23<br/>319:11 468:17<br/><b>recently-appointed</b><br/>11:17<br/><b>recertification</b><br/>313:22<br/><b>recessing</b> 520:14<br/><b>recognize</b> 9:17 17:8<br/>17:11 46:18<br/><b>recognized</b> 47:5 49:6<br/>53:22 230:18<br/>267:17 450:25<br/>452:8 506:5,10<br/><b>recollect</b> 71:1 90:25<br/>97:8 98:13 116:7<br/>117:5 157:9,20<br/><b>recollection</b> 72:25<br/>74:4 86:8 98:21<br/>113:25 220:3 274:9<br/>309:8 366:3 391:8<br/>396:7 441:25<br/><b>recommendation</b><br/>32:24 54:6 56:5,10<br/>58:4,8 72:20 73:24<br/>89:6,10 150:8 168:4<br/>169:20 179:3 192:5<br/>245:1 264:6 297:9,9<br/>321:17 416:6<br/>496:15 499:15,19<br/><b>recommendations</b><br/>8:8 9:19 11:11<br/>55:25 56:1,8 89:13<br/>92:2 167:8,9 188:7<br/>188:17 202:18<br/>223:6 245:9 267:24<br/>286:23 287:22<br/>357:15 496:16</p> |
|---|--|--|---|

|                             |                             |                              |                             |
|-----------------------------|-----------------------------|------------------------------|-----------------------------|
| 505:9                       | 469:24 473:6,7              | <b>refreshing</b> 98:21      | 196:20,24 198:4,19          |
| <b>recommended</b>          | 474:3                       | 381:5                        | 199:2,3,7 264:25            |
| 193:11 297:23               | <b>reductions</b> 134:10,17 | <b>reg</b> 28:12 321:15      | 265:7,10 270:23             |
| 298:3 303:15                | <b>redundancy</b> 283:2     | 404:10                       | 295:2 410:11                |
| 306:13 321:6,8              | 506:16                      | <b>regard</b> 9:19 42:3      | 496:18 497:16               |
| 404:6                       | <b>refer</b> 29:9 55:19     | 105:15 106:21                | 498:18,19,25 499:8          |
| <b>recommending</b>         | 57:16,17 58:24              | 115:24 213:11                | <b>regulations</b> 6:25 7:7 |
| 261:16 416:7                | 60:23 125:12 126:4          | 251:24 308:23                | 22:23 23:17 188:3,9         |
| <b>reconnect</b> 515:4      | 200:22 213:23               | 312:16 476:4                 | 188:19 189:1                |
| <b>reconvene</b> 209:21     | 294:22 336:23               | <b>regarded</b> 462:10       | 191:15 197:3,14             |
| 210:14                      | 521:4,7 522:16              | <b>regarding</b> 58:3 95:21  | 199:11 249:24               |
| <b>record</b> 6:6 12:11     | 523:19,23                   | 96:20 98:1 126:16            | 263:7 264:12                |
| 13:21,22 48:12              | <b>reference</b> 90:24      | 144:11 146:25                | 265:20,23 270:25            |
| 91:13 98:24 118:5           | 121:17 131:9 134:8          | 147:1 217:14 229:6           | 271:2 294:17                |
| 121:12 156:7                | 134:12 166:14,21            | 251:15 284:8,9               | 295:14 297:13               |
| 184:12 196:18               | 167:24 169:5,24             | 304:19 308:2 360:3           | 298:4 303:24                |
| 210:21 299:23               | 170:16 187:21               | 398:23 456:8                 | 404:12,15 410:24            |
| 320:24 328:24               | 231:10 296:8                | 467:24 473:3                 | 416:4,8 505:9               |
| 329:5,6 358:19              | 297:25 376:16               | 486:14                       | <b>regulatory</b> 12:25     |
| 362:9 365:22                | 479:2                       | <b>regardless</b> 233:16     | 51:18 52:9 82:15            |
| 369:16 417:20               | <b>referenced</b> 183:25    | 403:15                       | 108:13 133:19               |
| 506:15 527:20               | <b>references</b> 129:21    | <b>regards</b> 217:16 371:4  | 189:8 198:16                |
| <b>recorded</b> 36:16,23    | 131:22 176:2                | <b>regime</b> 52:9 108:14    | 231:20 270:23               |
| 48:9 75:24,25 91:2          | <b>referencing</b> 55:9     | 309:16                       | 272:12 309:15               |
| 173:14 176:14               | 134:20 272:18               | <b>region</b> 15:10 30:5     | 357:24 358:6                |
| 177:14 179:25               | 346:5                       | 212:23 237:13                | <b>rehashing</b> 417:21     |
| 198:7 208:20                | <b>referred</b> 161:6       | 268:24 364:22                | <b>relate</b> 170:16 171:21 |
| <b>RECORDER</b> 2:15        | 170:24 493:14               | 376:8                        | 180:4 384:3                 |
| <b>records</b> 48:14 100:21 | <b>referring</b> 32:18      | <b>regional</b> 15:4 145:1   | <b>related</b> 38:10 167:2  |
| 179:3 208:4 279:10          | 108:20 113:12               | <b>registered</b> 1:20       | 169:10 193:14               |
| 284:13 390:24               | 118:6 160:20                | 349:15                       | 198:14 320:24               |
| <b>recovery</b> 265:1       | 195:14 290:23               | <b>registry</b> 203:13       | 322:7 400:24                |
| <b>recruited</b> 69:18      | 305:2 338:21 339:7          | <b>regs</b> 262:20           | <b>relates</b> 169:7 171:9  |
| <b>rectification</b> 18:25  | 387:13                      | <b>regular</b> 18:7 70:12    | 178:6,10 185:6              |
| <b>rectified</b> 36:5 97:14 | <b>refers</b> 315:1         | 110:11 263:23                | <b>relating</b> 29:13 32:12 |
| 98:11 106:25 109:2          | <b>refinery</b> 42:23       | 301:14 529:13                | 42:4 50:1 89:4              |
| 110:23 205:17               | <b>reflect</b> 51:8 93:11   | <b>regularly</b> 297:5       | 181:4 232:23 251:3          |
| 248:16,22 315:14            | 100:18 142:18               | 324:3                        | 258:15 261:6 458:3          |
| <b>rectify</b> 314:20,21    | 265:5 460:20                | <b>regulation</b> 1:18 2:5,8 | 467:16 475:20               |
| 315:8                       | 498:10                      | 2:10 6:3,18 7:13,18          | <b>relation</b> 43:13       |
| <b>recurrence</b> 8:8       | <b>reflected</b> 223:3      | 8:12,19 9:7,14               | <b>relationship</b> 16:9    |
| <b>recurring</b> 208:24     | <b>reflection</b> 223:4     | 28:12 29:10,21,25            | 17:3,15 47:2,13             |
| <b>redistributed</b> 379:16 | <b>refresh</b> 231:22       | 50:7,16,24 51:19             | 55:1 213:3 214:9            |
| <b>redline</b> 514:14,19    | 284:18 309:8                | 52:5 165:5 187:22            | 222:14 223:13               |
| <b>redoing</b> 290:1        | 393:23                      | 187:23 188:22                | <b>relatively</b> 18:2      |
| <b>reduce</b> 92:11 283:2   | <b>refreshes</b> 99:7       | 192:12,16,22                 | <b>relay</b> 331:20 470:3   |

|  |   |  |   |
|--|---|--|---|
| 516:15<br><b>relayed</b> 272:14<br>324:10 468:8<br>469:23<br><b>relaying</b> 255:23<br>459:4,5 467:8,20<br><b>release</b> 463:2<br><b>releasing</b> 453:21<br><b>relevance</b> 235:25<br>410:9<br><b>relevant</b> 31:11 40:23<br>142:20 145:19<br>243:6 336:8 409:3<br><b>reliability</b> 14:8<br>160:15<br><b>reliable</b> 106:11<br><b>relief</b> 260:20 262:15<br><b>rely</b> 80:3 253:16,18<br>329:15 387:14<br>400:17,25 401:13<br>401:15 431:10,12<br>432:13 511:2<br><b>relying</b> 336:6<br><b>remained</b> 69:10<br><b>remaining</b> 36:25<br>45:22<br><b>remarks</b> 85:5<br><b>remedial</b> 376:24<br><b>remedied</b> 168:19<br><b>remedies</b> 233:18<br><b>remember</b> 78:21<br>278:13 279:2,16<br>310:3 330:18<br>351:19 381:9,15<br>389:23,25 391:9<br>405:17 408:10<br>428:17 488:21,23<br>493:23 516:12<br><b>remind</b> 99:13 132:8<br>405:17<br><b>reminded</b> 409:5<br><b>reminder</b> 11:7<br><b>reminding</b> 424:2<br><b>removal</b> 10:13<br><b>remove</b> 246:17<br><b>removes</b> 207:22 | <b>reoccurrence</b> 233:18<br>235:17<br><b>reopen</b> 418:21<br><b>repair</b> 70:19 113:17<br>247:15<br><b>repaired</b> 97:15 112:9<br><b>repairs</b> 18:25 67:23<br>74:16 108:7 111:1<br>112:12 189:14<br>281:20 508:4<br><b>repeat</b> 11:21 17:7<br>22:17 40:16 51:23<br>116:15 129:14<br>158:13 169:24<br>176:19 214:1 310:5<br>310:7 337:22<br>344:10 403:6<br>409:15 460:2<br>462:12<br><b>repeatedly</b> 409:5<br><b>repetitive</b> 464:3<br><b>rephrase</b> 86:10<br>158:15 188:21<br><b>replace</b> 22:7 306:14<br>310:25<br><b>replaced</b> 281:6<br>354:13<br><b>replacement</b> 59:11<br>354:14<br><b>report</b> 8:6 11:8 16:15<br>16:15 17:22 35:10<br>35:17 36:2 39:7,8,8<br>39:13 40:14 41:10<br>47:4 49:3 56:3,8<br>59:15 61:1 68:16,21<br>75:20 77:15 88:25<br>94:7 99:8 107:9<br>113:25 116:11,21<br>117:2,2,12 161:21<br>166:23 168:25<br>169:4 171:6 175:17<br>191:15,16 193:22<br>193:25 194:2,6,20<br>195:6 198:2 204:11<br>204:20,23,25 235:7<br>238:2,7,14,17 | 239:15,17,19,22<br>242:14,15,15<br>244:25 245:8,16,20<br>245:22 246:2,6,8,10<br>246:21 248:13,14<br>248:15 249:6,14,21<br>249:25 250:3,18<br>252:12,13,14,15<br>264:20 268:3<br>271:16,18 310:19<br>328:10,15,18<br>329:23 330:13,22<br>330:25 331:2,23<br>339:5 347:8 350:25<br>351:1,16 353:10<br>355:7 357:17,18<br>371:16,18 375:12<br>392:10 432:23<br>433:7 441:4 492:9<br><b>reportable</b> 192:13,21<br>192:23 247:19<br>248:2,2<br><b>reported</b> 1:22,25<br>18:5 32:8 117:2<br>118:11 193:18<br>194:24 196:14<br>213:14 214:10,13<br>242:22 249:10<br>252:8,10,14 268:25<br>346:21 395:13<br><b>reporter</b> 1:20,21 6:5<br>11:19 116:18<br>117:24 210:24<br>221:14 222:5<br>362:15 411:16,21<br>472:16,24 521:15<br>521:20,24 522:2<br>527:23 528:2 529:4<br><b>reporters</b> 362:13<br><b>REPORTER'S</b> 5:11<br>529:1<br><b>reporting</b> 163:11<br>205:5 248:5 249:23<br>325:9 364:19<br>395:20<br><b>reports</b> 41:7 60:9 | 68:19 90:11 99:1<br>203:3 213:7 262:2<br>271:19 278:3 323:7<br>364:15 371:16<br>377:14 392:14<br>432:24 433:3,7,13<br>433:14<br><b>represent</b> 102:4<br>118:24 121:14<br>124:14 128:9 151:3<br>160:3 336:20<br>388:21 398:16<br>424:6<br><b>representation</b><br>128:11<br><b>representative</b> 84:4<br>191:10 206:21<br>431:17 475:5 481:6<br><b>representatives</b><br>10:14 91:9 96:8<br>108:4 274:18,23<br>318:13<br><b>represented</b> 411:1<br><b>representing</b> 91:16<br>120:23 121:1,4,7<br>159:16 355:25<br>367:10,13,16,19,24<br>398:9<br><b>Republic</b> 91:17<br>127:15 129:5<br><b>reputable</b> 239:6<br><b>reputation</b> 380:23<br><b>request</b> 9:23 12:4<br>18:25 47:15 58:13<br>72:8 74:2,7,13,16<br>135:8 250:13<br>254:22 255:25<br>256:9,13 257:22<br>303:10,12,12,14,14<br>330:12,14,18 331:4<br>331:12,13 366:13<br>374:24 436:14<br><b>requested</b> 36:5 75:14<br>109:1 248:21<br>250:14 256:11,25<br>269:8 322:23 330:9 |
|--|---|--|---|

|   |   |   |  |
|---|---|---|--|
| <p>331:6,11,18 433:11<br/>522:11<br/><b>requesting</b> 254:10<br/>308:22 431:7<br/>522:23<br/><b>requests</b> 245:6<br/>303:22 330:16<br/><b>require</b> 12:21 24:9<br/>50:17,24 53:13,21<br/>54:2 199:11 242:3<br/>258:8 264:25 266:6<br/>267:5,9,17 414:22<br/><b>required</b> 26:11 32:16<br/>51:4 78:7 98:8<br/>108:13 130:14<br/>134:24 162:17<br/>189:8,11 244:21<br/>250:11 321:6,17<br/>334:19 347:12<br/>376:24 381:4 415:6<br/>429:13 439:20<br/>497:16<br/><b>requirement</b> 24:14<br/>27:4,17 28:7 48:4<br/>144:24 145:7<br/>198:24 212:24<br/>247:19 248:2<br/>249:23 266:13<br/>298:4 309:9 310:9<br/>311:1 385:8 415:2<br/>434:18 439:12<br/>497:22<br/><b>requirements</b> 24:6<br/>26:5 44:2,25 47:14<br/>48:18 56:3 82:2,7<br/>124:3,12,16 125:4<br/>127:18 164:24<br/>165:4,5,15,20,22<br/>189:9 198:3,12<br/>206:3 208:15 285:1<br/>287:10,24 293:14<br/>309:3 325:25<br/>393:21 394:2<br/><b>requires</b> 30:21 197:7<br/>412:10 413:7 509:3<br/><b>requiring</b> 383:7</p> | <p><b>rescue</b> 50:18,21 51:4<br/>264:23 265:2 466:4<br/>467:18,22 496:25<br/>497:1 498:2<br/><b>rescuing</b> 497:7<br/><b>researched</b> 529:10<br/><b>reservations</b> 419:2<br/><b>reserve</b> 419:6<br/><b>resolution</b> 20:8,24<br/>233:10 322:19<br/><b>resolve</b> 12:14 87:10<br/>248:12 301:5,16,18<br/>364:13<br/><b>resolved</b> 97:22 99:9<br/>232:8 324:19<br/>363:21,24 364:12<br/>374:9 457:19,20,24<br/>486:1<br/><b>resolving</b> 324:9<br/><b>resource</b> 12:22<br/>202:24<br/><b>resources</b> 254:5,8<br/>257:12 262:17<br/>293:3,12 312:23<br/>323:9<br/><b>respect</b> 90:17 95:16<br/>96:20 109:18 125:1<br/>125:7 133:19,20<br/>138:11,14 140:22<br/>152:14 158:9<br/>170:17 185:16,25<br/>213:15 219:21<br/>229:5 301:9 310:16<br/>319:21 338:12<br/>341:22 384:8 386:6<br/>397:18 418:21<br/>425:17 430:11<br/>504:12<br/><b>respectfully</b> 12:4<br/>131:11 134:13<br/>436:14<br/><b>respond</b> 138:14<br/>218:5 306:9<br/><b>responded</b> 246:7<br/><b>response</b> 77:8 150:5<br/>158:4,8 198:16</p> | <p>217:18 218:25<br/>231:3 274:15 284:8<br/>303:10 305:8<br/>388:24 428:21<br/>461:21 478:20<br/>480:1 512:10 525:6<br/>525:7,10 526:8<br/><b>responses</b> 482:3<br/><b>responsibilities</b> 54:19<br/>67:21 68:3 95:17<br/>102:9 105:1 124:22<br/>131:10 190:15<br/>194:9 204:25 207:2<br/>207:9,16,22,24<br/>215:15 216:11<br/>246:3 269:9 287:11<br/>357:5 370:22<br/>482:15 484:4 485:5<br/>508:7<br/><b>responsibility</b> 8:15<br/>62:17 64:20 67:21<br/>79:11 80:2,5 85:5<br/>87:16 92:3,10 97:6<br/>98:6 105:25 128:8<br/>132:1 134:23<br/>170:17 175:10<br/>189:1 193:1 194:20<br/>201:8 213:18 214:5<br/>215:8 216:7,15<br/>224:21,24,25 251:1<br/>255:8,20 267:6<br/>292:15 304:19,25<br/>305:3,17,23 309:4,5<br/>309:10 312:20<br/>313:3 327:8,9<br/>476:18 483:18,25<br/>484:25 485:1 496:3<br/>500:9,12,15,17<br/><b>responsible</b> 23:9,11<br/>43:19 65:4,7,8,10<br/>67:11,17 76:10<br/>80:16 81:7,9 82:11<br/>82:14,23 84:6 85:6<br/>85:11 86:12 88:4<br/>110:9 161:8 165:13<br/>174:2,25 179:6</p> | <p>189:3 190:9,11<br/>191:3,4 202:15<br/>204:17 212:7<br/>225:10 246:13<br/>251:6 267:3 269:15<br/>318:9 325:20<br/>327:12 337:7,10<br/>357:13,14 389:1,16<br/>395:3 420:8 426:22<br/>481:19,22 482:5,7<br/>482:20 495:24<br/><b>responsive</b> 303:21<br/>415:23 416:5<br/><b>rest</b> 240:13 246:23<br/>295:19 396:2<br/>415:19 435:2<br/>518:14<br/><b>restless</b> 472:17<br/><b>restricted</b> 397:22<br/><b>restrictive</b> 50:7<br/><b>rests</b> 47:14 194:11<br/><b>result</b> 10:13 30:24<br/>35:15 37:9 46:23<br/>47:7,24 57:5,8<br/>157:6 180:24 193:9<br/>197:13 201:17<br/>238:13 239:21,25<br/>242:19,23 248:9<br/>325:8 354:21 356:1<br/>378:23 493:12,13<br/>494:2 505:2<br/><b>resultant</b> 385:25<br/><b>resulted</b> 209:11<br/>214:25 306:1 513:1<br/><b>resulting</b> 45:10 88:22<br/><b>results</b> 31:2 37:5,22<br/>47:6,21 48:23 51:11<br/>63:15 208:10 209:4<br/>209:7 237:24<br/>242:24 245:12<br/>308:18 372:23<br/>373:5 488:14,15<br/>491:23,25 492:3<br/><b>resume</b> 108:16<br/><b>resuming</b> 109:2<br/><b>retained</b> 481:5</p> |
|---|---|---|--|

|  |  |   |   |
|--|--|---|---|
| <p><b>retired</b> 7:24<br/> <b>retreading</b> 382:7<br/> <b>retrieve</b> 411:21<br/> <b>return</b> 58:14 72:8,20<br/> 74:3 386:15,23<br/> <b>returning</b> 96:1,7<br/> <b>returns</b> 27:19<br/> <b>reversed</b> 514:21<br/> <b>Revette</b> 443:12<br/> <b>review</b> 8:16 33:4 36:1<br/> 48:12 92:15 126:8<br/> 126:24 127:14<br/> 133:4 206:7 208:13<br/> 208:16 232:20<br/> 239:3 245:22<br/> 283:22 314:6 324:3<br/> 366:22 431:4,4<br/> 432:9 434:20<br/> <b>reviewed</b> 124:21<br/> 159:5 296:3 353:6<br/> 355:12 372:3 435:2<br/> 488:8,15<br/> <b>reviewing</b> 122:6<br/> 134:6<br/> <b>reviews</b> 158:25<br/> 313:24 314:9<br/> <b>revised</b> 123:17 379:6<br/> 379:9,13,13<br/> <b>revision</b> 171:8 379:15<br/> 381:13 383:14<br/> <b>revisions</b> 379:7<br/> <b>reward</b> 199:19,25<br/> 200:2<br/> <b>re-answering</b> 350:8<br/> <b>Richard</b> 18:6 202:8,8<br/> <b>Richards</b> 515:2<br/> <b>Rick</b> 336:19<br/> <b>rig</b> 20:12,16 21:8<br/> 22:1,2 25:12,19<br/> 30:25 31:12 32:1<br/> 35:12 38:25 40:24<br/> 41:15 45:21 46:12<br/> 55:17 56:7 57:25<br/> 58:2,14,21 59:16<br/> 60:18 61:9,17 63:4<br/> 64:3,5,8 67:22 68:6</p> | <p>70:15,21,23,25 71:2<br/> 71:3 74:1,20 75:23<br/> 76:22 80:17,18<br/> 81:18,22 85:12 94:6<br/> 94:8,13,16 95:9,18<br/> 96:8,10,16,18,21<br/> 99:23 100:20<br/> 102:11,18,22<br/> 104:10,22,24 105:5<br/> 105:16 106:2,4,5,18<br/> 107:8 108:6,8,21<br/> 109:5,10 110:22<br/> 111:2,5,25 112:18<br/> 112:20 113:4,23<br/> 116:10,19 117:13<br/> 118:9 137:21,24<br/> 141:18 148:19<br/> 151:23 162:6,7<br/> 164:2 167:17 170:8<br/> 170:25 171:22,25<br/> 172:12 174:21<br/> 175:14 179:23<br/> 201:9 204:11<br/> 205:11 211:6,17<br/> 212:1,2,9 213:2<br/> 214:3 216:13<br/> 218:15 220:18<br/> 227:5 233:16<br/> 236:10 239:19<br/> 241:1,11 242:16,17<br/> 243:7,24 245:12<br/> 247:6 248:9,19<br/> 250:8 251:24<br/> 257:20 259:8<br/> 260:21 261:2<br/> 263:23 268:19,20<br/> 268:25 269:3,17,17<br/> 269:21 272:2,8,19<br/> 272:25 275:19<br/> 276:4,7,9 277:25<br/> 278:8 284:24<br/> 286:25 290:24<br/> 291:16,17 292:10<br/> 292:20 293:1<br/> 299:17,19,23 300:1<br/> 300:22 302:13</p> | <p>305:13 306:13<br/> 307:25 310:17<br/> 311:2,25 313:12,16<br/> 314:1,4,10,24<br/> 315:13,19 316:3,17<br/> 316:21,23 317:20<br/> 319:9 321:24 322:2<br/> 322:3,9 323:9 324:2<br/> 324:14 331:6<br/> 332:12,15 334:8<br/> 335:2 344:14<br/> 347:23,24,25 348:4<br/> 348:9,22 349:8,15<br/> 350:3 352:10,14,17<br/> 352:21,23 355:12<br/> 355:15 357:11,18<br/> 358:2,7 359:5,21<br/> 362:25 363:19<br/> 364:20,21 365:9<br/> 370:5,17 372:22<br/> 373:16,19,20<br/> 374:22 375:6,23<br/> 389:1 390:1,4,15,17<br/> 392:2,11,16 398:23<br/> 398:24 399:6 400:1<br/> 400:24 401:9,10<br/> 408:6,9 409:21<br/> 410:1 412:24 413:8<br/> 414:16,17 421:6<br/> 430:4 431:6 434:6<br/> 434:12 437:17,20<br/> 437:23 438:13<br/> 440:9 442:8,10,21<br/> 444:21 445:6 446:4<br/> 446:17 448:14<br/> 457:4,23 461:20<br/> 463:10 464:5 469:3<br/> 469:6 470:7,25<br/> 471:19 473:5 474:6<br/> 475:17 478:12<br/> 480:8 482:18 488:7<br/> 496:13 497:12<br/> 501:2 504:1,20<br/> 505:13,13 506:16<br/> 506:23 507:20<br/> 509:20 510:23</p> | <p>511:2,21 512:14,21<br/> 515:2,6 519:6,9<br/> 525:3 526:8<br/> <b>right</b> 7:23,25 8:3<br/> 11:20 13:17 53:23<br/> 57:22 70:3 71:9<br/> 82:13 83:25 86:17<br/> 88:3,6,7 103:17<br/> 110:25 112:7,11<br/> 113:6 114:12<br/> 115:20 119:11,15<br/> 119:25 127:13<br/> 129:22 131:7<br/> 135:21 137:5 138:1<br/> 157:11,14,17 159:9<br/> 165:10 166:11,20<br/> 169:7 177:12<br/> 185:12 189:20,24<br/> 191:8 192:3 193:6<br/> 193:17,24 197:23<br/> 198:13 206:25<br/> 212:10 216:20<br/> 228:19 233:21<br/> 236:19 242:10<br/> 256:12,19 260:19<br/> 262:24 263:5 265:7<br/> 266:4 267:2 273:1<br/> 277:13,21 284:22<br/> 285:6 300:23<br/> 301:20,22 305:7,22<br/> 312:23 313:20<br/> 320:24 322:10,15<br/> 322:16 326:17<br/> 336:9 338:12 339:1<br/> 340:5 347:7 348:1<br/> 349:16,17 350:23<br/> 352:11,15 353:4<br/> 355:16 356:1,15<br/> 371:8 373:7,22<br/> 377:18 381:7,18<br/> 382:17,21 383:4<br/> 395:16 396:8 397:4<br/> 397:7,8,10,18<br/> 399:17,20,23<br/> 414:13 416:21<br/> 419:3,6 420:9</p> |
|--|--|---|---|

|   |   |  |   |
|---|---|--|---|
| 425:23 428:17<br>432:11 433:5,22<br>437:1 440:16 445:6<br>445:14,20 448:12<br>451:5,14 452:18,24<br>453:25 454:12<br>457:15 467:25<br>471:11 486:23<br>489:19 494:19<br>498:13 503:9<br>507:24 512:16<br><b>rights</b> 10:4 119:13<br><b>rigid</b> 336:2<br><b>rigs</b> 46:9 83:4 92:20<br>117:6 141:12 158:3<br>158:7 161:19,20<br>162:18 163:9,16<br>183:18 206:17<br>237:15 262:13<br>263:9 291:22,23<br>311:24 344:15<br>345:17 347:5<br>377:11,14,15 500:3<br>508:12<br><b>rig's</b> 277:20 313:24<br>314:7,10 447:3<br>506:14<br><b>ringing</b> 503:23<br><b>rinse</b> 454:19<br><b>rise</b> 11:20 379:18<br><b>riser</b> 137:13 234:1<br>236:15,16 273:8<br>278:22 442:21,25<br>486:21 490:9,10<br>505:16,21 511:14<br>518:7,10 519:5<br><b>risk</b> 9:21 15:9 16:7<br>30:21 54:25 55:1<br>59:22,24 60:5,18<br>62:11,12 66:6,9,14<br>68:17 78:15,16,16<br>78:17 79:16 81:13<br>84:7 199:19 200:11<br>202:1 205:3,8 242:3<br>280:22 282:6 283:4<br>283:9 289:15 | 328:19 329:24<br>337:18 365:13,24<br>366:14,15,17<br>474:24 524:9<br><b>risks</b> 15:12 20:18<br>38:11 44:18 45:16<br>54:20,22 66:1,13<br>78:13 80:1,3,6,7<br>82:2 92:4,11 199:24<br>200:1,8,12 203:24<br><b>risk-based</b> 52:11<br><b>rivers</b> 396:9<br><b>RMS</b> 325:8,10,13,15<br>326:5,6<br><b>road</b> 350:7<br><b>Robert</b> 2:15 159:18<br>307:24 308:4<br>398:11<br><b>robust</b> 487:10<br><b>rod</b> 517:9,14<br><b>Rodriguez</b> 69:9,13<br>72:2 73:3 97:12,18<br>98:25 101:1 112:3<br>112:18 113:11<br>115:12,18 144:12<br>145:2 154:22<br>168:11,17,21<br>173:18 174:6<br>178:18 179:1,8<br>180:5 182:9,19<br>183:9 184:8 185:2<br>186:14 324:2 355:3<br><b>Rodriguez's</b> 97:20<br>114:17 182:14,15<br><b>roger</b> 130:11<br><b>role</b> 18:4 20:17 26:9<br>103:6 173:16,19<br>174:4 194:10 212:2<br>212:2,3 260:9<br>312:15 368:12<br>404:1 493:4<br><b>roles</b> 156:21 207:16<br><b>roll</b> 448:24<br><b>Ronnie</b> 164:9 405:1<br><b>roof</b> 448:1<br><b>room</b> 10:10 272:7 | 307:16 311:6<br>320:14 332:17<br>334:14,15,23<br>412:11 421:20<br>422:18 423:1,4<br>426:15,23 443:9<br>449:6 451:10<br>457:22,23<br><b>rooms</b> 292:3<br><b>root</b> 154:8 159:4<br>233:17<br><b>rooted</b> 229:12<br><b>rope</b> 455:12<br><b>Ross</b> 2:12 8:3<br><b>rotate</b> 101:9<br><b>rotation</b> 319:24<br><b>roughly</b> 74:1 211:8,8<br>318:17 509:8<br><b>roustabout</b> 211:15<br>312:5,7<br><b>roustabouts</b> 233:5<br><b>route</b> 192:20 248:7<br>517:12<br><b>routed</b> 434:20<br><b>routine</b> 42:12 440:2<br><b>routines</b> 33:6,7<br><b>ROV</b> 472:8 474:21<br>475:2,6,9,11 515:4<br>516:23 517:1 518:5<br>518:12,13,17 519:1<br>519:3,20,22 521:9<br>522:4,13 524:22<br><b>RP</b> 294:18 295:9<br>296:25 297:22<br>298:2<br><b>RPMs</b> 99:15<br><b>RPR</b> 1:25 529:20<br><b>RSTC</b> 317:23 480:8<br><b>rule</b> 93:6 207:13<br>373:4<br><b>rules</b> 12:9 62:13<br>145:15 505:10<br><b>ruling</b> 460:2<br><b>run</b> 286:18 348:9<br>360:5,6 362:24<br>440:13 454:25 | 507:24<br><b>rundown</b> 450:17<br><b>running</b> 90:10<br>244:11 300:22<br>302:13 360:12<br>524:1,12,14,17<br><b>runs</b> 285:13<br><b>R&amp;B</b> 286:22<br><hr/> <b>S</b> <hr/> <b>S</b> 2:1 529:21<br><b>safe</b> 82:5 88:4,5<br>100:14 106:11<br>110:7 124:2,12,15<br>127:18 129:17<br>165:22 189:3<br>191:14 213:13<br>225:10 316:14<br>430:8 431:11,14<br>432:14 438:8<br>449:10 481:19<br>482:21 500:12<br><b>safely</b> 109:10 111:7<br>316:6,10,18 319:13<br>326:21 332:4,8<br>432:17 455:21<br><b>safer</b> 150:12 428:3<br><b>safety</b> 7:8 8:7 17:5,10<br>17:17,21 18:17,20<br>18:23 23:12 24:24<br>25:24 26:3,13,16,18<br>26:20,23 27:5,10,15<br>28:5 29:14 30:20<br>31:7 34:6,23 40:18<br>43:3,7,11,23 45:4<br>45:10 46:19 50:5<br>53:21 54:8 61:10<br>62:14,18,20 63:13<br>76:10 79:9,10,12,13<br>79:14,21,24 80:10<br>80:17 81:9 82:11<br>84:6 85:6,11 86:13<br>103:8,10,14 105:19<br>106:7,16 109:6<br>111:10,11,18 152:6<br>153:8 154:6 155:4 |
|---|---|--|---|

|  |  |   |   |
|--|--|---|---|
| <p>163:21,24 172:16<br/> 173:10 174:13<br/> 180:14,17 181:11<br/> 189:12,15,16<br/> 190:10 191:2<br/> 197:19,23 201:4,4<br/> 201:12,12 206:17<br/> 208:20 209:1,7,10<br/> 215:25 218:2<br/> 224:16,22 225:23<br/> 226:6,12 227:23<br/> 228:10 229:19<br/> 230:8,12 231:14<br/> 232:4,23 235:12<br/> 237:4,9 239:4,10<br/> 241:21 242:2,11,25<br/> 247:8 251:4,18<br/> 252:7,17 259:6<br/> 262:8 264:10<br/> 267:16,25 272:9<br/> 291:10,14,19<br/> 299:23 317:23<br/> 324:14 337:7 348:4<br/> 376:19 378:11<br/> 380:5,13 389:1,16<br/> 401:17 403:10<br/> 406:25 427:23<br/> 434:14 442:12,13<br/> 456:1,8 458:22<br/> 475:21,21 479:20<br/> 480:8 481:11,20,23<br/> 482:5,21 485:24<br/> 486:16 487:18<br/> 489:2 491:11,19<br/> 494:1,9 495:24<br/> 499:16,18,19,20,23<br/> 500:9 506:15<br/> 526:10,12<br/> <b>sail</b> 70:3 90:7<br/> <b>sailed</b> 145:4<br/> <b>sailing</b> 191:23<br/> <b>sake</b> 192:16<br/> <b>salt</b> 374:15<br/> <b>saltwater</b> 374:16<br/> 381:17 382:25<br/> <b>salvage</b> 469:22</p> | <p>471:13<br/> <b>Sam</b> 529:24<br/> <b>San</b> 8:5<br/> <b>Sanders</b> 1:19,25<br/> 529:3,20<br/> <b>sands</b> 523:14<br/> <b>sank</b> 44:9 182:1<br/> <b>Sannan</b> 302:6,9,10<br/> 302:18 441:3<br/> <b>sat</b> 248:13 353:9<br/> 355:11 442:13<br/> <b>satellite</b> 373:13<br/> <b>satisfaction</b> 78:5<br/> 107:25 108:4 430:8<br/> <b>satisfactorily</b> 56:9<br/> 58:5 354:23 457:19<br/> <b>satisfied</b> 36:9,18,18<br/> 63:14 108:17<br/> 314:16 322:18<br/> 430:7<br/> <b>satisfy</b> 385:7<br/> <b>sat-phone</b> 390:24<br/> 391:14<br/> <b>saw</b> 80:7 235:6<br/> 239:18 341:24<br/> 344:17 348:18<br/> 351:16 353:21<br/> 378:24 384:4<br/> 465:11<br/> <b>saying</b> 80:12 82:22<br/> 127:22 195:17<br/> 202:16 245:8<br/> 256:20 276:16<br/> 416:15 423:24<br/> 431:24 432:22<br/> 433:1 438:21 449:7<br/> 451:1,25 453:14<br/> 475:2 480:22<br/> 482:12<br/> <b>says</b> 127:14,17,23,23<br/> 147:13 166:21<br/> 252:23,25 253:1<br/> 277:14 295:22<br/> 297:9 328:23<br/> 365:23 378:22<br/> 383:13,13 386:4</p> | <p>388:13 394:25<br/> 396:19 482:16<br/> 483:5 512:18<br/> 523:24<br/> <b>scanning</b> 129:1<br/> <b>scenario</b> 152:19<br/> 427:5<br/> <b>scenarios</b> 478:21,23<br/> 481:9<br/> <b>scene</b> 468:22 474:10<br/> 476:1<br/> <b>schedule</b> 106:22<br/> 129:20,20,21,23<br/> 130:15 134:17<br/> 270:8 276:7,9 300:7<br/> 375:2 384:24 385:3<br/> 385:14 436:9 440:4<br/> 441:9<br/> <b>scheduled</b> 57:1<br/> 263:23 270:10,12<br/> 290:19 298:6 440:7<br/> 504:22 507:8<br/> <b>schedules</b> 133:5<br/> <b>scheduling</b> 269:21,23<br/> 276:4 289:1,1,19<br/> 290:3,11,14,19<br/> 312:15 504:6<br/> <b>Schonekas</b> 3:24 4:20<br/> 86:6,21 88:12 100:1<br/> 123:12 124:17<br/> 131:17 133:13<br/> 138:4 139:6 140:9<br/> 142:5,8 153:17<br/> 155:17,20,22,25<br/> 156:3,8,8,11,14<br/> 157:21 159:11<br/> 187:25 196:16<br/> 221:10,15,16<br/> 294:24 295:6,12,20<br/> 341:8 343:18<br/> 369:13 383:11<br/> 393:3,3,5,8 394:6<br/> 394:10 396:19<br/> 398:5 405:11<br/> 408:11,19 409:12<br/> 410:8 412:2,7 413:1</p> | <p>413:13 414:11<br/> 415:24 459:22<br/> 462:19 463:3,25<br/> 482:24<br/> <b>school</b> 212:14 439:9<br/> <b>schools</b> 212:21 288:5<br/> <b>Science</b> 15:19<br/> <b>scope</b> 12:5 15:6 54:18<br/> 65:25 142:12<br/> 211:25 438:6<br/> <b>screen</b> 353:20<br/> <b>screens</b> 354:3<br/> <b>scribble</b> 468:9<br/> <b>scrutinized</b> 110:25<br/> <b>sea</b> 146:21 147:19<br/> 309:13 310:12<br/> 311:24 312:2<br/> 340:21 341:22<br/> 342:14 344:15,17<br/> 345:12,17 347:7,17<br/> 376:17 377:18<br/> 438:4<br/> <b>SeaDrill</b> 224:7<br/> <b>seagoing</b> 14:22<br/> <b>SEAL</b> 529:18<br/> <b>seaman</b> 9:3 368:8<br/> <b>search</b> 303:20 452:2<br/> 467:18,21 468:16<br/> <b>seas</b> 446:15<br/> <b>seawater</b> 361:7 376:1<br/> 383:10 384:4<br/> <b>seaworthiness</b><br/> 192:19 248:7,24,25<br/> 249:8<br/> <b>seaworthy</b> 352:14,18<br/> <b>second</b> 36:20 55:25<br/> 142:14 170:23<br/> 184:14 201:1 203:4<br/> 228:7 276:22<br/> 289:25 295:5<br/> 303:11,14 330:20<br/> 339:11 372:9<br/> 374:18,20 396:3<br/> 402:4,9 416:22<br/> 432:8<br/> <b>Secondly</b> 320:1</p> |
|--|--|---|---|

|   |   |   |  |
|---|---|---|--|
| <p><b>seconds</b> 411:20 512:2<br/> <b>second-to-last</b> 60:11<br/> <b>section</b> 59:2 99:10<br/> 167:15 169:1,4<br/> 246:19 294:21<br/> 295:10 297:20,20<br/> 345:2 394:17<br/> 395:18,21 435:1<br/> 481:16 525:8<br/> <b>sections</b> 80:15 168:25<br/> 202:14 297:21<br/> <b>sector</b> 8:5 211:19<br/> 268:23 311:23<br/> <b>sectors</b> 346:24<br/> <b>security</b> 6:9 17:5,10<br/> <b>SEDCO</b> 146:22<br/> <b>see</b> 49:2 50:10 65:19<br/> 66:11 83:4 110:5<br/> 129:11,16,19,23<br/> 131:12 135:16<br/> 136:15 153:7 170:7<br/> 186:7 193:21<br/> 201:11,11,12,15<br/> 202:13 203:8<br/> 207:18 228:25<br/> 235:24 242:15,16<br/> 245:22 263:10<br/> 266:17 268:3<br/> 279:25 280:2<br/> 289:11 328:10<br/> 341:6 342:2,9<br/> 344:19 345:6<br/> 347:22 357:4<br/> 359:12 364:15<br/> 374:23 378:3 392:4<br/> 401:11 406:3<br/> 417:20 431:5 432:9<br/> 442:15,25 443:5<br/> 444:1,21 446:16<br/> 447:20 449:2,15<br/> 451:12 452:12<br/> 454:12,14,18<br/> 463:11 491:19<br/> 518:9 525:9,14<br/> <b>seeing</b> 97:8 99:6<br/> 168:23 451:13</p> | <p>464:20 518:12<br/> <b>seek</b> 107:13<br/> <b>seen</b> 69:20 84:22<br/> 107:7 119:8 123:19<br/> 124:20 216:10<br/> 238:1,18,19 239:17<br/> 262:1 287:6 288:24<br/> 289:11 311:5<br/> 334:21 341:13,21<br/> 342:6,7,13 344:21<br/> 345:13 346:7,12<br/> 347:18 349:25<br/> 350:2,15,25 352:6<br/> 368:24 369:2 370:1<br/> 370:2 387:3 391:11<br/> 391:21 448:16<br/> 449:4,11 454:1<br/> 465:15,16,18<br/> 484:23 491:2,25<br/> 502:6 518:11<br/> <b>sees</b> 164:4<br/> <b>select</b> 25:3 39:17<br/> <b>selected</b> 22:12 48:24<br/> 237:15<br/> <b>selecting</b> 21:4 24:4<br/> 24:25<br/> <b>selection</b> 21:23 22:15<br/> 22:20,21 37:2,18<br/> 237:21<br/> <b>self-propelled</b> 129:23<br/> 130:2 144:5,9<br/> <b>semester</b> 439:4<br/> <b>semi</b> 477:12<br/> <b>semis</b> 223:22 308:6<br/> 312:1<br/> <b>send</b> 281:19 315:9<br/> 347:11 398:23<br/> 399:5,11 441:12<br/> 452:2<br/> <b>senior</b> 16:10 20:20<br/> 27:24 35:11,12 83:7<br/> 83:21 84:4 191:10<br/> 194:11 211:16<br/> 226:22 232:16<br/> 238:6 258:18 272:9<br/> 312:8 333:23 345:6</p> | <p>356:9 399:22<br/> 428:25 446:9,25<br/> 450:5 456:1,8<br/> 458:23 460:3 465:5<br/> 468:21 481:6<br/> 486:10 501:13<br/> 516:18<br/> <b>sense</b> 81:1 131:23<br/> 217:19 282:12<br/> 350:13 380:12<br/> 386:12 410:5<br/> 416:16<br/> <b>sensed</b> 412:22 414:16<br/> <b>sensor</b> 407:24 412:19<br/> 416:13<br/> <b>sensors</b> 407:18 410:5<br/> 411:7 427:16,20<br/> <b>sent</b> 99:17 274:11<br/> 282:3 377:14<br/> <b>sentence</b> 55:25 73:21<br/> 303:19 384:21<br/> 502:9<br/> <b>separate</b> 33:20 85:4,7<br/> 223:22 252:15<br/> 262:14 417:3<br/> 507:14<br/> <b>separately</b> 216:23<br/> <b>separating</b> 202:15<br/> <b>September</b> 29:22<br/> 31:1 36:13,23 40:8<br/> 48:7 55:13 57:8<br/> 58:14 61:12 69:5<br/> 70:18 73:22 74:2,7<br/> 74:14 75:18,22<br/> 88:23 94:7,16 95:24<br/> 96:11 99:2 102:12<br/> 102:21 106:17<br/> 107:2 110:15 112:9<br/> 113:10 119:25<br/> 166:2 167:16<br/> 170:20 174:19<br/> 175:16 177:18<br/> 178:4 179:4 193:10<br/> 235:18 242:16<br/> 245:8 296:20<br/> 310:19 354:22</p> | <p>378:23 488:10<br/> 489:3 526:6<br/> <b>Sepulvado</b> 258:19<br/> 306:12<br/> <b>serious</b> 30:19,20<br/> 32:14 48:8 71:22<br/> 77:19 208:24 242:1<br/> 242:3 330:5 490:21<br/> <b>seriously</b> 411:18<br/> <b>seriousness</b> 221:1<br/> <b>serve</b> 24:9 53:14<br/> 260:25 261:16<br/> 267:10 437:19<br/> 439:14 461:8<br/> 476:12,22<br/> <b>served</b> 14:22 15:23<br/> 26:7 183:17,19<br/> 437:25<br/> <b>serves</b> 291:1<br/> <b>service</b> 6:20 33:11<br/> 75:6,8 77:10 141:13<br/> 192:19 193:12<br/> 199:5 240:9 248:7<br/> 295:24 322:2,9<br/> 397:22<br/> <b>services</b> 201:13<br/> 256:22 471:13<br/> <b>serving</b> 84:20<br/> <b>session</b> 6:4 9:20<br/> 11:24 320:5<br/> <b>set</b> 66:1,16 113:18<br/> 129:16 130:6 143:1<br/> 170:24 183:12,21<br/> 273:7 318:1 321:6,6<br/> 321:8 345:7 406:7<br/> 413:9 416:2,5 425:5<br/> 427:12,17,19<br/> <b>sets</b> 449:13<br/> <b>setting</b> 403:18<br/> <b>settled</b> 300:25 301:1<br/> 301:12<br/> <b>setup</b> 404:2<br/> <b>seven</b> 34:4 113:22<br/> 247:11 301:2 315:8<br/> 335:10 457:6<br/> <b>severe</b> 328:19 329:24</p> |
|---|---|---|--|

|   |  |  |  |
|---|--|--|--|
| <p>330:5 380:25<br/> <b>severely</b> 449:15<br/> <b>severity</b> 233:16<br/> 305:10<br/> <b>shack</b> 334:24 354:3,5<br/> 443:8,23<br/> <b>shaking</b> 521:16<br/> <b>share</b> 37:5 279:19<br/> 320:22<br/> <b>shared</b> 37:8 80:2,5<br/> 233:22 353:13<br/> <b>Shaun</b> 160:2 362:10<br/> 398:16<br/> <b>shear</b> 273:3 281:5,6<br/> 517:9,18,20,21,22<br/> 523:13<br/> <b>shed</b> 366:7,24<br/> <b>Sheehan</b> 141:25<br/> <b>sheet</b> 61:1 166:24<br/> 171:11<br/> <b>sheets</b> 203:3<br/> <b>shelf</b> 15:2<br/> <b>Shetland</b> 312:3<br/> <b>shield</b> 408:24<br/> <b>shift</b> 371:25 420:19<br/> <b>ship</b> 30:20 86:13<br/> 226:6,12 233:8<br/> 242:2 397:17,18<br/> 480:24<br/> <b>shipping</b> 15:3,5 26:9<br/> 26:10,23 44:16<br/> 232:12 486:7<br/> 493:20<br/> <b>ships</b> 223:22 478:4<br/> 495:18<br/> <b>shipyard</b> 57:1,14<br/> 291:5,7<br/> <b>shocked</b> 448:10<br/> <b>shoe</b> 351:18<br/> <b>shoes</b> 351:15,21<br/> <b>shop</b> 206:15 274:1<br/> 315:9 447:9,15,18<br/> <b>shoreside</b> 468:6<br/> <b>shore-side</b> 257:21<br/> 370:18<br/> <b>short</b> 107:17 135:24</p> | <p>290:18 342:21<br/> 359:20 360:3,7<br/> 426:10 436:11<br/> 449:15 520:11<br/> <b>shorted</b> 114:8<br/> <b>shorter</b> 96:13 114:9<br/> <b>Shorthand</b> 1:20<br/> 529:4<br/> <b>shortly</b> 361:13 514:2<br/> <b>short-term</b> 78:15,17<br/> 444:19<br/> <b>shot</b> 101:22<br/> <b>shoulder</b> 443:4,12<br/> <b>show</b> 51:11 110:10<br/> 271:11 282:13<br/> 294:25 303:9<br/> 347:10 430:3 524:2<br/> 524:12,14<br/> <b>showed</b> 287:3 353:9<br/> 454:16 458:3 469:1<br/> 470:24<br/> <b>shows</b> 460:14<br/> <b>shucked</b> 423:23<br/> <b>shut</b> 89:2 106:6 108:7<br/> 109:5 111:6 248:19<br/> 280:10 314:10,12<br/> 352:21 386:17<br/> 412:23 414:17<br/> 416:17 418:4 421:9<br/> 421:13,23 422:1<br/> 519:13 521:11<br/> 522:6<br/> <b>shutdown</b> 179:19,21<br/> 180:2 258:8 415:15<br/> 417:11 526:13,14<br/> 526:24,25 527:1<br/> <b>shutdowns</b> 294:12<br/> <b>shuts</b> 421:11<br/> <b>shutting</b> 315:19<br/> 365:13,25 386:21<br/> <b>shuttle</b> 522:14<br/> <b>sic</b> 368:11 420:15<br/> 473:15 515:1<br/> <b>sickness</b> 293:11<br/> <b>side</b> 41:20 42:15 63:8<br/> 63:16 76:12 81:5,5</p> | <p>95:18,18,19,23<br/> 107:18 158:12,17<br/> 170:9 171:21,22<br/> 172:2 179:22,23<br/> 180:18 181:7<br/> 203:19 204:2,3<br/> 217:25 269:16,19<br/> 270:23,24 271:3<br/> 284:9 300:23<br/> 301:21 302:12,12<br/> 312:14,14,21<br/> 322:25 323:24,25<br/> 324:1,2 360:8<br/> 370:21 371:7<br/> 465:17 519:11<br/> <b>sides</b> 302:7<br/> <b>sidetrack</b> 338:23<br/> <b>sign</b> 323:3<br/> <b>signal</b> 236:13 490:7<br/> <b>signature</b> 430:24<br/> <b>signed</b> 208:1 271:11<br/> 355:9,13,14,21<br/> <b>significance</b> 13:7<br/> 136:8 152:12<br/> 354:20<br/> <b>significant</b> 33:5 89:1<br/> 106:11 132:2 306:7<br/> 465:9<br/> <b>sign-off</b> 179:7<br/> <b>similar</b> 8:22 19:8<br/> 27:10 52:18 111:16<br/> 247:10 282:9<br/> 322:14 443:1<br/> <b>similarities</b> 142:22<br/> <b>simple</b> 132:12 170:2<br/> 171:24 414:3<br/> <b>simply</b> 87:25 102:13<br/> 117:12 135:10<br/> 176:2 483:3<br/> <b>Sims</b> 275:15 276:25<br/> 302:23,24 442:23<br/> 446:22 467:4,6,24<br/> 468:10 474:21<br/> 475:3 492:14<br/> 502:17 504:6,7,8<br/> 506:2 520:2 524:19</p> | <p>524:24<br/> <b>simulate</b> 516:24<br/> 517:4,8<br/> <b>simulated</b> 517:6<br/> <b>simulation</b> 501:8<br/> 502:5,17<br/> <b>simulator</b> 446:14<br/> 501:10 502:2,12<br/> <b>simultaneously</b><br/> 450:24<br/> <b>sincere</b> 398:19<br/> <b>single</b> 24:9 33:19<br/> 53:13 60:14 84:19<br/> 96:24 166:7 175:2<br/> 184:16 189:11<br/> 267:9<br/> <b>sinking</b> 1:3 6:12 45:2<br/> 133:7<br/> <b>sir</b> 14:19 15:22 16:1<br/> 19:25 20:5 22:13,18<br/> 22:21 24:1 26:1,17<br/> 26:25 27:7 28:2<br/> 29:3 30:9,23 35:4,7<br/> 39:13 41:13,16 42:5<br/> 43:14 46:16,24<br/> 47:20,22 51:24<br/> 52:17,24 54:22,23<br/> 55:21,23 57:15,19<br/> 57:23 58:9,25 59:4<br/> 60:10,12 61:1,7<br/> 62:6,15,19 64:11<br/> 65:1 69:17 74:11<br/> 77:5,8 79:3,6,15<br/> 87:17 88:21 89:10<br/> 90:12 95:11 99:5<br/> 102:8 103:6 105:18<br/> 109:6 111:9,13,24<br/> 112:16 115:23<br/> 118:13 123:20,21<br/> 124:13 128:25,25<br/> 129:15 136:15<br/> 137:9 141:6,7 142:1<br/> 142:7 144:1,13<br/> 146:23 147:2<br/> 154:12 155:5,12<br/> 156:14,18,20</p> |
|---|--|--|--|

|   |  |  |  |
|---|--|--|--|
| 157:11,14,21,23<br>158:2,20,24 159:24<br>160:7 164:6 165:21<br>165:25 166:3,10,19<br>167:10 168:8 174:5<br>175:7 178:24<br>179:13 181:19,22<br>181:24 182:14,23<br>187:1 188:24 190:4<br>190:16,24 192:14<br>193:9 199:12,22<br>206:13,18,24 207:5<br>210:6,11 211:10<br>213:9 214:2 233:1<br>234:23 235:3<br>236:19 241:6<br>247:25 255:18<br>258:10 260:18<br>268:5 269:12<br>272:15 273:23<br>275:17 277:1 279:8<br>281:1 282:13,25<br>283:17 285:5<br>286:13 287:5<br>288:14,17 293:16<br>295:5,23 296:5<br>297:14 299:2<br>300:11 301:23<br>302:11 303:13,25<br>304:21 305:5,16,25<br>306:5 307:11<br>308:21 309:1 310:8<br>311:9 313:11 314:8<br>316:7 321:11 325:5<br>326:22 333:21<br>342:11 344:19,21<br>345:4,12,14,15<br>347:7 352:12<br>358:20 368:22<br>369:24,25 377:20<br>378:15 385:1 387:7<br>387:10 389:2<br>393:11,19,23<br>394:12,22,25 395:7<br>395:10,14 396:4<br>397:4,10,13,15,19 | 398:2 404:16,20,21<br>405:7 407:15<br>408:17 412:14<br>414:9 415:21<br>416:11 417:25<br>420:13,20 423:6<br>424:8 435:19,23,24<br>437:8 438:5,14,21<br>438:22,25 439:19<br>439:22,25 440:17<br>441:7,13 443:16<br>445:10,12 453:19<br>456:4 458:5,13<br>459:5 462:14<br>464:21 469:9<br>473:15 474:14<br>475:12 477:5 479:4<br>491:8 492:5 493:1<br>495:7 497:2,4<br>499:21 500:7<br>501:16,17 503:1,3<br>504:6 505:14<br>508:20 509:21<br>510:17 511:19<br>512:4,5,11,24 513:2<br>513:15,23 514:11<br>514:17,22,25<br>515:17 519:8<br>523:22 524:7<br>526:15 527:4,9,25<br><b>sit</b> 125:9 136:25<br>137:5 159:6 165:21<br>223:10 332:7<br>366:25 444:8<br><b>site</b> 158:8 399:8<br>401:7 431:24<br>434:12<br><b>sitting</b> 153:14 457:22<br><b>situation</b> 16:18 71:12<br>187:14 214:24<br>215:3,11 216:1,22<br>217:12 221:1 232:7<br>232:8 243:14 252:9<br>253:20 257:24<br>301:5 306:6 315:14<br>395:5 402:14 | 403:11,15 441:10<br>450:13 456:19<br>457:1 465:5 479:14<br>480:1,4 486:1<br>490:21 508:25<br><b>situations</b> 215:11<br>216:4,5,8 252:8,14<br>386:17 457:18<br>463:6,9 478:17<br><b>six</b> 34:3 113:19 114:8<br>114:11,13 156:24<br>201:3 211:8,8<br>268:19,21 291:6<br>379:7 439:10,17<br>457:6<br><b>six-month</b> 113:16<br>184:2<br><b>size</b> 51:9 265:6<br>498:11<br><b>skate</b> 442:21,25<br><b>Skelton</b> 17:18,19,24<br>18:2,4,8 35:6<br><b>skills</b> 45:15<br><b>skimming</b> 343:7<br><b>skip</b> 127:7 136:12<br>142:15 152:2<br><b>sleep</b> 427:24<br><b>slid</b> 455:6<br><b>slight</b> 285:15 286:4<br>399:1<br><b>slightly</b> 126:24<br><b>slipped</b> 443:3<br><b>slippery</b> 448:21<br><b>slow</b> 521:1<br><b>slowed</b> 448:10<br><b>slowly</b> 340:12,15,18<br><b>small</b> 104:21 456:14<br>498:3<br><b>Smit</b> 471:12,15,23<br>473:11 474:7,10<br><b>smoke</b> 447:8,10<br><b>smoking</b> 447:10<br><b>Smolen</b> 17:21,22<br><b>smoothly</b> 126:7<br>217:24<br><b>SMS</b> 34:11 | <b>SNS</b> 185:10<br><b>societies</b> 500:3<br><b>society</b> 24:6 47:18<br>48:13 82:7,15 193:1<br>198:9,13,24 199:4,9<br>499:25<br><b>software</b> 512:18<br><b>sole</b> 86:1 255:19<br><b>solely</b> 233:20 283:23<br>298:15<br><b>solemnity</b> 10:6<br><b>somebody</b> 138:1<br>140:23 256:25<br>274:2,14 277:24<br>292:6 307:15<br>366:20 430:25<br>440:21 449:18<br>452:1 465:2 467:4<br>469:2 470:16<br>489:13 527:10<br><b>somebody's</b> 392:5<br>455:4<br><b>someday</b> 387:19<br><b>somewhat</b> 305:19<br>307:1<br><b>soon</b> 69:7 215:13<br>520:7<br><b>sorry</b> 96:11 144:8<br>147:6 156:6 168:6<br>183:14 221:15<br>233:13 257:21<br>276:16 286:20<br>294:24 295:2 310:5<br>342:18 349:12<br>366:6 368:15<br>378:23 379:11<br>384:21 387:8,24<br>388:6,16 420:17<br>423:22 445:10<br>472:16,22 503:14<br>505:8 506:18<br>509:17 511:5 515:5<br>521:17<br><b>sort</b> 34:8 39:9 48:15<br>52:25 67:16 69:25<br>79:23,23 96:5 105:7 |
|---|--|--|--|

|  |   |  |   |
|--|---|--|---|
| <p>107:9 148:16<br/> 152:19,19 154:11<br/> 161:4 163:3 203:17<br/> 208:23 300:19<br/> 302:18,22,24<br/> 309:19 391:19<br/> <b>sorted</b> 445:7<br/> <b>sound</b> 61:15 256:4<br/> 334:13 391:6<br/> 407:10 432:11<br/> <b>sounded</b> 279:23<br/> 394:20 395:2 407:2<br/> <b>sounding</b> 294:10<br/> 407:6 415:19<br/> <b>source</b> 422:2<br/> <b>sources</b> 12:20<br/> <b>spare</b> 107:19 113:17<br/> <b>spark</b> 366:3<br/> <b>speak</b> 69:23 140:11<br/> 147:15 252:2 270:8<br/> 275:9,10 353:14<br/> 363:5 371:18<br/> 373:19 401:9<br/> 472:18<br/> <b>speaking</b> 255:21,23<br/> 279:6 302:23<br/> 307:12,14 362:16<br/> 514:11<br/> <b>speaks</b> 482:25<br/> <b>Spears</b> 522:19<br/> <b>spec</b> 290:8 297:4<br/> 298:10<br/> <b>special</b> 262:14<br/> <b>specialized</b> 15:15<br/> 203:16<br/> <b>specific</b> 40:14 42:10<br/> 61:12,14 66:14<br/> 92:13 138:6,18<br/> 157:4 171:9 202:25<br/> 203:20 225:4<br/> 252:22 292:25<br/> 293:6 327:16<br/> 374:24 380:17<br/> 416:11 433:6<br/> <b>specifically</b> 18:20<br/> 20:4 40:4 56:16,19</p> | <p>59:14 61:18 68:2<br/> 70:22,25 77:12 80:8<br/> 137:16 139:16<br/> 141:19 148:3<br/> 162:12 163:13<br/> 181:5 182:7 185:14<br/> 257:10 288:3 372:2<br/> 383:5 406:17<br/> 482:20,22 516:7<br/> <b>specifics</b> 92:6 240:3<br/> 257:15 373:3<br/> <b>specified</b> 297:25<br/> <b>specifies</b> 482:1<br/> <b>speculate</b> 39:25<br/> 109:21 132:9 134:2<br/> 136:5 140:22<br/> 152:11 218:18<br/> 227:10 228:17<br/> 229:4 342:24<br/> 361:22 379:24<br/> 413:8 429:8 460:6<br/> 461:15 462:1<br/> <b>speculating</b> 363:25<br/> 382:13<br/> <b>speculation</b> 71:11<br/> 348:11 361:15<br/> 402:8,18 421:1<br/> 422:5 459:23 461:8<br/> <b>speculative</b> 149:5<br/> 463:15<br/> <b>speech</b> 414:13<br/> <b>spell</b> 151:6 156:9<br/> 164:11<br/> <b>spelled</b> 151:9 482:15<br/> 489:6<br/> <b>spelling</b> 362:19<br/> <b>sphere</b> 92:3,10<br/> <b>spill</b> 525:6,7,9,11<br/> <b>splashed</b> 515:12<br/> <b>split</b> 84:21<br/> <b>spoke</b> 277:4 279:15<br/> 279:20 292:5<br/> 295:16 307:6 315:3<br/> 359:9 363:7,14<br/> 364:21 373:16,17<br/> 373:20 375:23</p> | <p>392:8 406:6 407:7<br/> <b>spoken</b> 284:6,7,7,8<br/> 363:20 392:9 402:8<br/> 407:8<br/> <b>spot</b> 409:10<br/> <b>spread</b> 106:4 436:16<br/> <b>spreadsheet</b> 75:24<br/> 76:4 99:1 100:8,9<br/> 100:17,21,24 167:7<br/> 179:2 183:25<br/> 184:10,14,16,18<br/> 246:2<br/> <b>stab</b> 513:13 515:16<br/> 518:24 519:12<br/> <b>stabbing</b> 514:16<br/> 515:8<br/> <b>stability</b> 469:16<br/> 470:13,18<br/> <b>stack</b> 273:3,10<br/> 275:20 280:20<br/> 281:23 282:6,9<br/> 289:17 290:22<br/> 295:24 296:15<br/> 512:4 513:5,11<br/> 514:14 516:21<br/> 525:2<br/> <b>staff</b> 8:1<br/> <b>stage</b> 145:17 285:24<br/> <b>stages</b> 215:2 354:25<br/> 357:10<br/> <b>stairs</b> 449:12,13,20<br/> <b>stand</b> 13:17 436:25<br/> <b>standard</b> 44:3 51:8<br/> 51:13 53:7 61:6<br/> 66:1 83:5,13,17<br/> 85:3 88:7 94:23<br/> 137:18,20 142:25<br/> 156:16 187:19,20<br/> 188:4 190:8,17,20<br/> 190:25 223:25<br/> 224:2 265:5 326:3<br/> 434:9 498:9<br/> <b>standards</b> 27:11 30:2<br/> 61:23 62:10,10,11<br/> 62:23 83:16 103:8<br/> 188:23 200:5</p> | <p>266:16,18 271:1<br/> 487:15 505:8<br/> <b>standby</b> 50:17,24<br/> 265:1 497:23 498:7<br/> <b>standing</b> 273:6 449:5<br/> 450:16 453:8 502:2<br/> <b>stands</b> 179:19 432:10<br/> <b>stand-down</b> 291:10<br/> 291:15,19,21 348:4<br/> 348:4 526:5,11,12<br/> 526:13<br/> <b>starboard</b> 449:6<br/> <b>start</b> 126:13 177:12<br/> 268:12 272:4 349:6<br/> 413:4 472:21 510:8<br/> 512:11 523:24<br/> 528:6<br/> <b>started</b> 211:14<br/> 238:21 255:3<br/> 277:23 280:8 312:5<br/> 425:9,10 441:17<br/> 444:10,11 454:17<br/> 454:22 470:21<br/> 471:2 513:8<br/> <b>starting</b> 459:1<br/> <b>starts</b> 55:24 201:1<br/> <b>state</b> 1:22 13:21 23:8<br/> 23:10,15 47:2,6,14<br/> 47:18 48:17 49:14<br/> 49:16 50:4 52:13,16<br/> 52:19 87:5 91:12,17<br/> 121:12 156:7<br/> 164:20,25 165:5,20<br/> 193:4 198:10,17<br/> 206:4 210:23<br/> 221:13 226:17<br/> 235:10 240:22<br/> 249:7,11 261:19<br/> 264:9 267:2 309:10<br/> 310:10 358:18<br/> 362:8 414:22<br/> 428:13 436:25<br/> 494:5 499:24,25<br/> 529:2<br/> <b>stated</b> 74:2 75:16<br/> 76:8 140:16 222:24</p> |
|--|---|--|---|

|   |   |   |  |
|---|---|---|--|
| <p>228:2 232:20<br/>314:14 345:20<br/>513:20 529:6<br/><b>statement</b> 87:19 93:7<br/>103:5,12 105:21<br/>106:10 107:16<br/>113:14 131:12<br/>163:25 166:13<br/>178:2 210:20 228:8<br/>329:10,20 403:4<br/>445:5,12,16 458:3,4<br/>461:16 462:10<br/>502:3,6<br/><b>statements</b> 11:4<br/>342:21 391:13<br/>484:14<br/><b>states</b> 1:16 2:4,12,14<br/>2:15 6:1 8:10 9:5,9<br/>9:13 11:16 12:23<br/>48:5 49:14 50:11<br/>73:21 82:6 199:9<br/>267:5 395:21 396:1<br/>396:6,10,22,24<br/>397:3,21 482:13<br/><b>stating</b> 86:24 210:22<br/><b>station</b> 66:15 189:6<br/>189:20,23,25<br/>190:19 191:6,6<br/>251:23 333:19<br/>427:2,3 443:9<br/>477:24 479:23,23<br/><b>stationary</b> 130:25<br/><b>stations</b> 253:24<br/>334:16<br/><b>statistical</b> 289:9<br/><b>status</b> 40:6,19,21<br/>41:2 42:3,16 47:19<br/>48:2,6,17 76:6 99:3<br/>192:7 247:1 260:16<br/><b>statute</b> 47:14<br/><b>statutory</b> 29:25 44:2<br/>44:24 47:25 49:7,15<br/>53:25 165:5 189:9<br/>483:17<br/><b>staunch</b> 116:2<br/><b>stay</b> 456:25 457:16</p> | <p><b>stayed</b> 274:14<br/><b>steam</b> 15:17<br/><b>steamed</b> 453:23<br/><b>steaming</b> 454:18<br/><b>steered</b> 454:15<br/><b>steering</b> 454:22<br/><b>stem</b> 517:24<br/><b>step</b> 160:4 239:5<br/>251:21 268:25<br/>455:23<br/><b>stepped</b> 443:3<br/><b>steps</b> 110:21 384:7<br/><b>step's</b> 434:4<br/><b>Steve</b> 121:13 159:13<br/>225:13 292:5<br/>367:24 387:24<br/>388:7,8,13 416:23<br/>417:13 423:20,22<br/>424:5,6,7 425:14,17<br/>429:6<br/><b>Steven</b> 17:6,9 226:24<br/>227:18 291:24<br/>368:11<br/><b>stood</b> 448:15 451:11<br/><b>stop</b> 20:16,16 111:17<br/>163:21,24 164:2<br/>227:8,8,8,9,11<br/>285:16 315:6,13<br/>324:13,22 330:15<br/>337:17 377:4<br/>401:21 508:1<br/><b>stoppage</b> 324:16<br/><b>stopped</b> 314:23,24<br/>381:25<br/><b>stop-the-job</b> 164:5<br/><b>stop-work</b> 111:11<br/><b>storage</b> 15:1 265:17<br/>499:5<br/><b>storm</b> 273:1 487:11<br/><b>story</b> 264:3 406:13<br/><b>stovepipes</b> 65:6<br/><b>straight</b> 152:3<br/><b>straighten</b> 372:10<br/><b>stream</b> 470:25<br/><b>stress</b> 460:16<br/><b>stretcher</b> 452:6</p> | <p><b>stricken</b> 361:23<br/><b>strictly</b> 77:1 98:20<br/>99:6 204:6 211:22<br/><b>strike</b> 351:3<br/><b>strikingly</b> 140:6<br/><b>string</b> 327:21 360:4,4<br/>360:7,7,12,13,17<br/>389:9 435:8<br/><b>Stringfellow</b> 514:12<br/>514:13,18 519:16<br/>521:3<br/><b>string/short</b> 435:7<br/><b>striving</b> 323:20<br/><b>stroke</b> 299:11<br/><b>strong</b> 116:2<br/><b>stronger</b> 199:8<br/>264:14<br/><b>struck</b> 206:13 207:12<br/><b>structural</b> 53:8,8<br/>266:19,23 469:7,8,9<br/><b>structure</b> 24:13<br/>28:20 29:25 45:13<br/>71:16 83:5,14,19<br/>88:17,18,19 160:24<br/>163:6 190:15 224:1<br/>224:12 262:22<br/>283:5 299:22<br/>309:15<br/><b>structures</b> 84:2<br/><b>struggling</b> 225:5<br/>279:25 280:1<br/><b>stuck</b> 338:22<br/><b>study</b> 127:5 149:11<br/>286:20,21 296:12<br/><b>stuff</b> 67:1 82:15,21<br/>239:7 270:19<br/>280:14 287:19<br/>391:19<br/><b>subject</b> 8:16 11:2,13<br/>112:13 127:17<br/>362:23 389:17<br/>394:10<br/><b>subjective</b> 140:23<br/>343:5<br/><b>submersible</b> 477:13<br/><b>submit</b> 8:6 309:25</p> | <p><b>submitted</b> 510:11,13<br/>512:9<br/><b>subpoena</b> 303:10<br/>512:10<br/><b>subsea</b> 234:1 266:7<br/>266:14 286:24<br/>287:1,10,13,16,19<br/>287:21 288:6,19<br/>297:3 450:5,25<br/>486:22 499:13<br/>511:20 513:20<br/>515:24 516:3,6,8,11<br/>516:18 517:1<br/>524:19,21<br/><b>subsequent</b> 219:18<br/>355:4 376:6<br/><b>subsequently</b> 186:9<br/>211:18 315:10<br/><b>substantial</b> 188:11<br/><b>substitute</b> 133:17<br/>189:15<br/><b>substitution</b> 187:23<br/><b>successful</b> 333:10<br/><b>successfully</b> 95:7<br/><b>sucking</b> 447:25<br/><b>suffered</b> 234:16<br/>487:24<br/><b>sufficient</b> 49:22<br/>134:4,4,14 152:21<br/>412:16<br/><b>suggest</b> 124:22<br/>128:15 175:20<br/>176:12 347:15<br/>397:15 410:14<br/>418:17<br/><b>suggested</b> 157:22<br/>176:25 464:23<br/><b>suggesting</b> 127:24<br/>146:13 178:2 465:2<br/><b>suggestion</b> 89:11<br/>176:7 192:9 395:12<br/>462:7,11<br/><b>suggestions</b> 484:8,10<br/><b>suggests</b> 114:3 324:8<br/><b>suitability</b> 16:4 34:16<br/>38:5 249:9</p> |
|---|---|---|--|

|  |  |   |   |
|--|--|---|---|
| <p><b>suitable</b> 36:10 38:14<br/>38:20 58:16 69:21<br/>425:24</p> <p><b>suite</b> 131:5 137:22<br/>168:23</p> <p><b>suitied</b> 477:2</p> <p><b>sum</b> 209:2</p> <p><b>summarize</b> 132:15</p> <p><b>summary</b> 369:10,20<br/>369:24</p> <p><b>sump</b> 443:2</p> <p><b>Sunday</b> 252:21,24,25<br/>253:7 333:3,6,10</p> <p><b>super</b> 119:22 336:2<br/>401:6</p> <p><b>superintendent</b><br/>14:23 250:2,7</p> <p><b>superiors</b> 226:3</p> <p><b>supertankers</b> 14:24</p> <p><b>supervisor</b> 59:11<br/>68:18 69:10 71:22<br/>72:4 73:1,2,5,9<br/>287:17 450:5 466:9<br/>516:18</p> <p><b>supervisors</b> 73:4<br/>301:6 353:15<br/>466:22</p> <p><b>supervisor's</b> 447:21</p> <p><b>supplanted</b> 188:4</p> <p><b>supplied</b> 281:6</p> <p><b>suppliers</b> 144:18</p> <p><b>supply</b> 50:20 255:13<br/>256:22 504:19</p> <p><b>support</b> 25:10 28:22<br/>30:23 38:10 41:8<br/>44:16 66:7,8 68:8<br/>68:20 69:1 71:9,22<br/>87:25 172:5,9<br/>203:16,21 205:1<br/>227:3 253:21<br/>255:13 281:16<br/>287:21 315:21<br/>353:11 378:11<br/>475:25 529:24</p> <p><b>supported</b> 25:20 51:2<br/>107:5 315:12 316:1</p> | <p><b>supporting</b> 70:17<br/>110:22 156:22<br/>201:25</p> <p><b>supports</b> 66:16 95:14<br/>171:11</p> <p><b>suppose</b> 133:17 384:1</p> <p><b>supposed</b> 375:21<br/>441:11</p> <p><b>supposition</b> 196:8,20</p> <p><b>sure</b> 32:17 71:8 76:15<br/>79:13 82:2,20 83:10<br/>100:3 101:17<br/>103:24 104:3,23<br/>106:3 107:23<br/>108:11 113:3,13<br/>114:1 117:21,23<br/>121:16 122:16<br/>127:14 128:3<br/>131:23 138:20<br/>143:13 146:19<br/>150:9 151:11<br/>166:18 169:3,3<br/>190:13 192:10<br/>195:9 201:19<br/>202:18,20 204:7,17<br/>208:22 212:21<br/>213:1 215:22<br/>217:19 218:22<br/>222:2 223:12 224:8<br/>226:19 227:11,18<br/>234:12 239:2<br/>240:17 241:17<br/>243:21 244:14<br/>245:5 248:25<br/>249:12 251:12,21<br/>252:4,22,25 253:21<br/>254:17 255:3,7,25<br/>256:10,15 257:3,4,5<br/>259:7 260:3 261:19<br/>261:24 264:13<br/>273:4,9 274:8 276:1<br/>278:10,25 279:3,14<br/>280:9,16 287:14<br/>291:15 292:5,16<br/>298:17 300:10<br/>304:7,10 307:3,14</p> | <p>309:25 312:23,25<br/>313:20 322:24<br/>323:11 329:22<br/>330:21 331:8 337:2<br/>338:15 339:6 340:6<br/>341:10 343:14<br/>348:23 349:14<br/>350:20 356:22<br/>358:8,12 359:15,18<br/>360:25 363:14<br/>366:21 368:24<br/>369:7 372:22 374:4<br/>374:7 376:3 380:16<br/>382:7,18 385:20,24<br/>387:25 392:6 394:6<br/>408:5 409:14<br/>417:20 419:7,15<br/>420:1,24 421:14,17<br/>421:25 422:13<br/>425:10 429:7,17<br/>433:13 434:3<br/>442:24 448:25<br/>450:8 459:2 487:14<br/>493:21 496:13,24<br/>507:22 519:1<br/>527:16,25</p> <p><b>surface</b> 298:8 511:18<br/>515:13</p> <p><b>surname</b> 330:21</p> <p><b>surprise</b> 140:3<br/>235:18,21 236:6<br/>238:15 492:3 495:3<br/>495:6,15</p> <p><b>surprised</b> 139:5,7<br/>235:23,25 238:16<br/>238:20 290:20<br/>495:11,12</p> <p><b>survey</b> 51:11 237:9<br/>237:12,20,25 239:1<br/>239:7,21 265:8<br/>298:23,24 491:11<br/>491:13,24 498:15<br/>508:23 509:2,4<br/>510:3,12,15,20<br/>511:3,12</p> <p><b>surveyed</b> 508:17</p> | <p><b>surveying</b> 509:13</p> <p><b>surveyor</b> 230:18</p> <p><b>surveyors</b> 183:16</p> <p><b>surveys</b> 47:25 508:12<br/>510:6,11</p> <p><b>survival</b> 452:25<br/>453:9 455:15</p> <p><b>survivor</b> 50:21 497:1</p> <p><b>survivors</b> 264:23<br/>465:12 467:19</p> <p><b>suspect</b> 436:10 520:7</p> <p><b>suspend</b> 58:4,7 73:24</p> <p><b>suspended</b> 73:25<br/>74:5 75:11 108:22<br/>184:15</p> <p><b>sustain</b> 138:7 145:13<br/>149:6 185:18<br/>361:24 362:6<br/>380:11 413:12</p> <p><b>sustained</b> 125:25<br/>233:24 483:11<br/>486:19</p> <p><b>SVC</b> 294:7 405:20<br/>406:8 415:13,18</p> <p><b>SWACO</b> 66:23<br/>120:25 121:1<br/>217:11 367:12,13<br/>479:12</p> <p><b>swap</b> 258:18</p> <p><b>swapped</b> 330:23</p> <p><b>SWAT</b> 293:3</p> <p><b>swear</b> 210:18</p> <p><b>swiftly</b> 292:16</p> <p><b>swimming</b> 454:5</p> <p><b>switch</b> 446:15</p> <p><b>switched</b> 23:19</p> <p><b>sworn</b> 11:22 13:19<br/>211:1 437:4</p> <p><b>system</b> 18:17,21,24<br/>23:9,11,21 24:25<br/>25:25 26:14,16,19<br/>26:21,24 27:6 29:14<br/>32:4,10,13 33:5<br/>34:11,23 45:5,10<br/>52:6,13 53:23 71:18<br/>79:25 83:11 90:25</p> |
|--|--|---|---|

|  |  |   |   |
|--|--|---|---|
| 95:1 103:9,10<br>111:10,16 138:24<br>143:2 157:14,22<br>161:22 166:24<br>167:11 169:21<br>171:20 172:6,7,16<br>172:17,21,25 173:4<br>175:20 176:2 177:2<br>177:6,7,16,20,21,22<br>177:23 178:6,10,17<br>178:19 179:8,17,21<br>179:21 180:3,13,13<br>180:14,15,17 181:3<br>181:10,13 185:10<br>189:12,14,15 201:1<br>203:2,11,14,20<br>204:13 208:21<br>209:1,11 215:25<br>217:4 225:2,3,4,8<br>225:24 227:23<br>228:10 229:19<br>230:8,12 231:14,16<br>232:5,24 233:25<br>234:2,15 235:13,20<br>236:5,8,16 237:4<br>238:11 244:9,15,19<br>244:24 252:7,13,17<br>262:9 267:3,22<br>296:19 297:17<br>310:15,20,21,22<br>325:7,9,12,13,15,24<br>326:5,6,6 330:24<br>334:6,8 346:20<br>347:9 354:11<br>364:19 376:20<br>377:10 402:1 406:7<br>407:17 408:1,13,14<br>412:23 415:9,10<br>416:25 417:1,10<br>418:9 421:14,15<br>422:18 423:3<br>424:12 431:9 476:6<br>486:16,20,22<br>487:18,19,23 488:6<br>488:22 489:2<br>490:10 491:20 | 494:2,9 510:21<br>518:15 520:25<br>526:21<br><b>systems</b> 54:3 66:3,7<br>75:7 77:24 95:13<br>97:18 103:15<br>105:10,16 108:9,15<br>144:18 167:1,2<br>168:22 169:6,8,10<br>172:4 178:5,11<br>179:14 180:8,21,23<br>182:4 183:1,3,5,8<br>184:9 185:1 186:18<br>224:23 244:4<br>253:14 271:1 288:8<br>288:9 297:24<br>310:24 311:4 325:7<br>330:23,25 347:2<br>353:24 355:19,20<br>407:19 409:19,21<br>409:22 412:19,20<br>412:23 414:15,17<br>416:13,14,20 419:9<br>419:10,24 421:8,13<br>421:19,23 422:1<br>423:2 433:9 446:7<br>446:18 510:19<br>529:20<br><b>S-C-H-O-N-E-K-A...</b><br>156:11 | 336:17 359:1<br>367:22 388:22<br>393:7 398:12 405:5<br>424:3 426:11 427:9<br>427:9 428:11,11<br>437:5 501:5 529:21<br><b>TA</b> 376:16<br><b>Tab</b> 341:3,19 349:21<br><b>table</b> 134:7,20,22<br>246:2<br><b>tables</b> 135:6<br><b>take</b> 11:19 68:16 75:8<br>91:10 92:25 100:11<br>121:21 125:22<br>126:12 128:11<br>133:25 134:1<br>135:20 162:8 191:7<br>199:24 202:12<br>204:15 207:1<br>213:22 215:10<br>216:2,2 217:12,22<br>230:6 231:1 239:5<br>245:16 247:5<br>255:14 258:3<br>280:12 295:18<br>315:8,10 319:18<br>345:3,10 349:20<br>350:14,18 353:1<br>362:22 364:9<br>366:15 369:11<br>374:3,6 380:20,22<br>396:15 404:17,23<br>405:16 432:1 436:3<br>444:12 458:24<br>459:20 461:24<br>463:1,19 465:3<br>471:20 474:11<br>478:18 479:14<br>480:1 511:23 512:1<br>519:4 523:15 524:3<br>524:10,20 527:19<br>527:25 528:4<br><b>taken</b> 44:4 63:18<br>71:13 76:1 110:21<br>200:8 202:20<br>239:21 260:13 | 313:4 339:4 357:4<br>357:16 384:7<br>399:14 442:16<br>459:19 480:24<br>492:7 515:19,20,20<br>529:14<br><b>takes</b> 200:1 411:21<br>448:13<br><b>talk</b> 59:18 111:5<br>118:4 166:1 172:15<br>179:14 187:19<br>190:7 195:5 199:18<br>277:1 279:11<br>302:17 327:15<br>347:23 373:22<br>389:21 390:20<br>411:19 512:17<br><b>talked</b> 29:17 38:6<br>63:21 136:11<br>151:14 173:16,25<br>176:18 201:7<br>259:18 276:23<br>287:8 426:13<br>444:16,19 451:8<br>501:8 505:24<br><b>talking</b> 57:17 61:18<br>69:14 113:6 118:9<br>134:17 173:17<br>181:8 190:8 206:20<br>214:20 230:20<br>233:14 240:16<br>243:15,16,17 271:9<br>281:14 282:6,19<br>339:14 349:5<br>363:18 371:6<br>391:17,20 471:5<br>490:23 498:2<br>502:16 503:10<br>508:24 509:1 511:9<br>519:15,21<br><b>talks</b> 99:14 134:23<br>169:6 410:11<br><b>tapped</b> 443:11<br><b>targeting</b> 52:12,13,19<br><b>task</b> 325:16,20<br><b>tasking</b> 468:19 |
|--|--|---|---|

|  |  |   |  |
|--|--|---|--|
| <p><b>tasks</b> 113:9 260:22</p> <p><b>team</b> 11:18 14:25<br/>20:12,20 35:14 36:2<br/>36:22 38:10,11 39:2<br/>39:14 41:8,18,22,24<br/>58:4 59:17 65:23<br/>66:4,12,17,20 68:5<br/>68:8,11,12,13,19<br/>69:1 70:17 71:10<br/>73:22 74:20,20<br/>76:11,15,17,24<br/>77:18 81:4 90:9<br/>95:23 96:11,16<br/>97:12 101:2 107:4,7<br/>141:17 154:19<br/>163:5 165:13,19<br/>167:10 168:5 170:4<br/>171:17 173:25<br/>174:2,11,15,18<br/>175:3,9,13,14,15,17<br/>183:9,11 194:17<br/>201:20,22 202:6,22<br/>203:2,5,22 204:10<br/>204:16 227:4 233:3<br/>233:4,6 238:4,6<br/>251:13 255:5,24<br/>257:21,22 260:11<br/>262:15 284:4,8,9<br/>293:4 317:3,13,21<br/>323:18 338:25<br/>340:17 355:12,15<br/>359:10 364:16<br/>399:25 400:6,10,14<br/>400:25 401:3,6,14<br/>401:16 425:21<br/>434:11 435:1,2<br/>442:5 467:5,22<br/>469:23 512:13<br/>526:1</p> <p><b>teammates</b> 400:17</p> <p><b>teams</b> 70:13 217:18</p> <p><b>team's</b> 100:18</p> <p><b>technical</b> 9:21 15:3<br/>16:3 26:10 31:14<br/>41:1 201:13 202:7,9<br/>225:23 226:2 243:9</p> | <p>281:16 343:8<br/>353:11 378:12<br/>431:17 439:5<br/>475:20,25</p> <p><b>technically</b> 326:8<br/>504:24</p> <p><b>technician</b> 182:20</p> <p><b>Technology</b> 15:20</p> <p><b>telephone</b> 252:11<br/>279:23 317:19<br/>373:13 392:5 427:4<br/>519:19 523:4</p> <p><b>tell</b> 28:18 31:5,5<br/>40:15 54:25 55:8<br/>65:5 69:3 81:13<br/>94:9 95:22 109:20<br/>116:5 123:4 124:14<br/>128:20 130:16<br/>132:4 137:13<br/>138:21 144:14,20<br/>144:23 145:3<br/>158:10 166:21<br/>169:18 170:14<br/>180:22 220:8,10<br/>241:25 242:7<br/>248:10 266:12<br/>279:22 285:21<br/>298:17 311:20<br/>315:19 325:4<br/>354:19 361:12<br/>363:10 364:2 368:4<br/>374:1,13 376:17,18<br/>378:5 379:2,12<br/>384:10 386:20<br/>387:23 392:4,9<br/>406:14,19 407:5,16<br/>503:23</p> <p><b>telling</b> 65:2 359:17<br/>391:2 463:10</p> <p><b>tells</b> 436:13</p> <p><b>temperamental</b><br/>427:16</p> <p><b>temporary</b> 78:12,13<br/>78:14 247:22<br/>292:24 331:3<br/>376:14 433:18</p> | <p>435:8</p> <p><b>ten</b> 68:19 102:6<br/>291:17 299:15<br/>315:8,20 335:21<br/>509:11</p> <p><b>tenure</b> 313:12 370:2</p> <p><b>ten-minute</b> 93:1</p> <p><b>ten-minutes</b> 319:19<br/>436:3</p> <p><b>ten-page</b> 100:7</p> <p><b>term</b> 31:20 55:7<br/>114:20 141:16<br/>199:19,22 338:2,4<br/>364:24 395:21<br/>413:2</p> <p><b>terminology</b> 176:16<br/>178:1 280:18<br/>415:12</p> <p><b>terms</b> 20:25 22:1<br/>24:4 43:11 45:8<br/>52:11 53:16 63:18<br/>64:5 68:9 69:14<br/>70:16 79:10,12,16<br/>81:13 83:8 88:9<br/>95:10 129:18<br/>139:20 169:14<br/>183:25 185:19<br/>188:3 197:11,18<br/>198:16,24 202:1<br/>203:23 207:3,7<br/>214:22 219:4<br/>224:21 233:10<br/>262:23 263:1 335:3<br/>411:3 459:23 471:8<br/>474:12 529:10</p> <p><b>terrible</b> 154:3</p> <p><b>territorial</b> 397:3</p> <p><b>territories</b> 396:20</p> <p><b>test</b> 77:18 118:8<br/>282:5 285:13,14,15<br/>285:24 286:6,8,9,15<br/>286:15,17,18<br/>308:18,18 335:9,11<br/>359:22 361:13,16<br/>361:18 363:5 364:6<br/>364:14,23 374:10</p> | <p>375:25 402:5,9<br/>404:2,11,13 443:18<br/>457:14 505:12<br/>511:16,24 515:8</p> <p><b>tested</b> 297:5 386:18</p> <p><b>testified</b> 13:19 91:21<br/>119:1 124:19 131:2<br/>142:25 149:8 159:2<br/>168:10 179:10<br/>211:1 230:25<br/>305:16 306:11<br/>307:5 313:25<br/>326:23 332:2<br/>346:18 407:13<br/>410:19 418:12<br/>437:4 484:9 503:25<br/>513:3</p> <p><b>testify</b> 39:21,23<br/>133:21 135:12<br/>176:12 292:23<br/>418:3 484:25</p> <p><b>testifying</b> 11:1<br/>142:10 361:25<br/>410:19</p> <p><b>testimonies</b> 293:25<br/>362:4</p> <p><b>testimony</b> 11:24<br/>12:16 122:1 123:22<br/>126:9 130:17,22<br/>131:16,21,23 140:8<br/>173:10 201:6<br/>227:21 228:4,5<br/>262:2 268:14 322:6<br/>335:25 350:10<br/>353:22 361:22<br/>365:1,2 371:9 372:3<br/>372:4,7 373:8 387:4<br/>389:4 393:11,12<br/>403:5 405:8,10,12<br/>406:4 408:10<br/>410:18 411:10<br/>416:2 417:1,9,13,19<br/>418:16,21 425:9<br/>428:2 432:18 483:1<br/>501:7 527:9</p> <p><b>testing</b> 46:13 286:11</p> |
|--|--|---|--|

|   |   |  |   |
|---|---|--|---|
| <p>335:8 354:16 483:8<br/> <b>tests</b> 286:10 335:13<br/> 356:18,24 361:17<br/> 362:1,3,24 364:10<br/> 364:16 403:20<br/> 404:9 505:10<br/> <b>Texas</b> 1:22,23 42:23<br/> 42:23 43:7 378:14<br/> 529:2,5,24<br/> <b>text</b> 166:9<br/> <b>thank</b> 20:1 54:11<br/> 58:23 64:11 73:11<br/> 79:3 80:20 90:13<br/> 91:15 92:24 93:2,9<br/> 93:15,19,25 101:4<br/> 101:23 110:3,14<br/> 118:13,15,18<br/> 120:13,15,21<br/> 122:10,12 150:16<br/> 150:23 151:10<br/> 155:6,13,15 159:11<br/> 159:12,19,21 160:1<br/> 164:6,7 165:25<br/> 174:23 178:3<br/> 179:13 182:14<br/> 183:23 184:6 187:1<br/> 187:2,7,12 199:12<br/> 200:19 206:8 209:2<br/> 209:18,22,24<br/> 210:11,13,15 211:4<br/> 211:10 213:25<br/> 268:5 295:20<br/> 300:11 303:5 304:1<br/> 304:8 311:11,13<br/> 319:15 335:16,20<br/> 336:9,16 337:5<br/> 340:1 343:17<br/> 358:15,17,23 367:4<br/> 367:5 369:22<br/> 382:16 388:14,15<br/> 389:21 390:20<br/> 392:24 393:1<br/> 396:13 397:9 398:5<br/> 398:7,21 404:16,24<br/> 407:15 413:13<br/> 419:20 420:20</p> | <p>423:6,8,15 424:1<br/> 426:3,4 427:6 428:8<br/> 435:24 436:1,4<br/> 437:7 479:4 485:18<br/> 501:4 520:17<br/> 521:20 527:4,15<br/> <b>Thanks</b> 67:3 156:13<br/> 164:14 270:21<br/> <b>thereabouts</b> 442:18<br/> <b>thereof</b> 8:16 275:2<br/> <b>thereunder</b> 6:25 9:14<br/> <b>Thierens</b> 323:3<br/> <b>thing</b> 53:2 88:16<br/> 153:19 294:9<br/> 334:10 343:6<br/> 415:17 417:15<br/> 425:13 451:10<br/> 453:11 463:22<br/> 510:7 519:10<br/> 520:23 525:25<br/> 528:6<br/> <b>things</b> 65:8 80:10<br/> 85:17,18 101:19<br/> 103:6 126:7 131:15<br/> 138:8 145:25<br/> 217:24 230:4 249:2<br/> 262:22 263:2<br/> 271:13 332:9<br/> 348:17 353:2<br/> 355:15 363:18,19<br/> 366:15 374:23<br/> 383:6,8,17 391:14<br/> 401:15 408:3,12<br/> 411:4 413:9 421:7<br/> 422:14 427:17<br/> 431:5 444:9 446:12<br/> 461:19 500:5<br/> 507:23 510:19<br/> <b>think</b> 32:14 34:22<br/> 49:5,9,13 51:12<br/> 53:16 54:1,5,7,10<br/> 54:19 59:23 62:9<br/> 63:2 67:25 73:8<br/> 74:1 78:2,25 82:8<br/> 82:15 85:17,17<br/> 87:19 90:5,23 93:14</p> | <p>97:16 102:9 103:12<br/> 106:9 114:22<br/> 117:14,17 118:5<br/> 125:6,23 126:20<br/> 127:4 138:21<br/> 139:10,12 140:15<br/> 145:9 146:12<br/> 147:16 148:4,18<br/> 149:15,22,24<br/> 158:25 162:14<br/> 165:2,8 166:4 168:9<br/> 168:10,17 170:4<br/> 171:7 178:1 184:1<br/> 185:16 186:4<br/> 189:21 194:13,25<br/> 197:22 199:7,10<br/> 200:9 202:5 208:14<br/> 217:1,16 219:22<br/> 221:6 222:5,11,19<br/> 222:20 223:15<br/> 226:19,22 228:2<br/> 230:4 236:2 247:11<br/> 249:14 253:8 256:9<br/> 262:1,3 264:19,24<br/> 265:11,19 266:15<br/> 267:4,12,12,20,25<br/> 268:16,18 269:7<br/> 272:16,17 276:24<br/> 281:18 289:20,22<br/> 291:15 292:17<br/> 302:21 305:8<br/> 307:15 313:14,24<br/> 318:20 319:11<br/> 320:23 326:16,19<br/> 326:23 329:13<br/> 333:1 335:21<br/> 341:11 345:19<br/> 350:11,15 351:9<br/> 358:12 359:4<br/> 365:11 368:12<br/> 372:3 373:16<br/> 375:20 379:21<br/> 380:25 382:3 384:5<br/> 390:22 408:6 409:3<br/> 409:3,17 411:2<br/> 413:6 418:11,22</p> | <p>419:3 422:12<br/> 425:18,20 430:9,12<br/> 430:13,15 433:16<br/> 433:16 436:11<br/> 440:14 445:17<br/> 446:5 459:12,13<br/> 460:8,14,21 461:4<br/> 461:10,22 463:14<br/> 464:7,17,20 465:8<br/> 469:21 475:19<br/> 476:24 478:6,11<br/> 479:5,8 484:16<br/> 485:2,8 487:13<br/> 495:16 496:17<br/> 497:6,15 500:2<br/> 501:12 503:4,12,24<br/> 505:23,24 507:21<br/> 510:18 512:11<br/> 513:3 516:11<br/> 520:13 521:4,15<br/> 523:19 526:4 528:1<br/> <b>thinking</b> 119:6<br/> 191:20 279:1 300:9<br/> 385:11 387:9<br/> 461:16<br/> <b>thinks</b> 125:19 196:24<br/> 337:18 343:12,14<br/> 408:18,22 411:13<br/> <b>third</b> 55:20 66:23<br/> 73:23 282:24 320:6<br/> 411:25 440:6 441:8<br/> <b>third-party</b> 30:4 71:5<br/> 209:12 217:10<br/> 432:21 479:11,12<br/> <b>thoroughly</b> 103:17<br/> 103:18 107:14<br/> <b>thought</b> 177:8 220:25<br/> 223:2 233:14<br/> 265:12 279:22<br/> 304:24 308:7<br/> 373:19 381:21<br/> 447:12 449:9<br/> 457:11 498:5 511:5<br/> 511:7,9 526:18<br/> 527:22<br/> <b>thoughts</b> 134:7</p> |
|---|---|--|---|

|   |  |  |  |
|---|--|--|--|
| <p>150:10<br/> <b>thousand</b> 353:3<br/> <b>threat</b> 30:19 242:2<br/> <b>threaten</b> 324:16<br/> <b>three</b> 34:3 46:9,13<br/> 158:7 168:13<br/> 169:13 256:17<br/> 260:11 295:23<br/> 296:8 299:4 307:24<br/> 313:23 334:16<br/> 335:23 353:22<br/> 356:17 363:14,16<br/> 370:8,9,10 371:12<br/> 371:21 376:8<br/> 402:15 403:12<br/> 407:8 436:17 454:4<br/> 465:11,15,18,22<br/> 481:3 503:10<br/> 509:17,19,24<br/> 515:25<br/> <b>threshold</b> 169:17<br/> <b>throttle</b> 455:1,8,14<br/> <b>throwing</b> 455:11<br/> <b>thrust</b> 290:17 447:1<br/> <b>thrusters</b> 98:9 446:15<br/> <b>thumbs</b> 445:8,21<br/> <b>THUNDER</b> 44:7<br/> 45:2,11 51:21,25<br/> 52:3 89:18 93:12<br/> 160:4,8,17 161:9,24<br/> 265:15 499:2<br/> <b>Thursday</b> 441:15<br/> 474:16<br/> <b>tie</b> 455:4<br/> <b>tied</b> 28:19 185:21<br/> 409:22 455:13<br/> <b>tight</b> 116:2<br/> <b>time</b> 11:17 12:3,11<br/> 13:10 25:19 36:12<br/> 36:17 40:8,17 41:20<br/> 42:7 44:9,13 45:18<br/> 46:3 49:2 54:12<br/> 67:24 68:1 69:5<br/> 70:22 74:10,18,22<br/> 87:10 89:13 96:13<br/> 102:16 106:24</p> | <p>107:17 109:5<br/> 110:11 111:11<br/> 113:4 114:8,9,14<br/> 115:24 116:3,10,14<br/> 116:19,24 118:4<br/> 119:24 125:15,19<br/> 126:2,12 133:11<br/> 134:1,4 135:3 145:3<br/> 175:19,21 176:6,24<br/> 177:18 178:12<br/> 180:22 195:2,24<br/> 196:9,13 209:23<br/> 213:23 221:21<br/> 223:14 230:11<br/> 234:25 235:6 236:8<br/> 240:15,16,18,18<br/> 243:5 244:8,10<br/> 247:2,14 252:21<br/> 261:9 268:2,6,22<br/> 272:20,23,25 273:6<br/> 275:21 276:5,14<br/> 278:16 279:14<br/> 285:6 286:22 287:6<br/> 288:23,24 291:8<br/> 296:10 298:8<br/> 299:11,17,20,24<br/> 300:1,7 305:23<br/> 307:1 314:1,9,13,23<br/> 315:7 316:3,8<br/> 317:12 322:1 324:5<br/> 330:8,20 332:5,21<br/> 335:4,17 336:4,13<br/> 341:24 343:2 346:5<br/> 347:24 348:24<br/> 349:13 357:4 358:7<br/> 359:4,22 362:16<br/> 364:21 365:16<br/> 374:11 376:12<br/> 379:9 380:23 391:8<br/> 392:19 399:10,15<br/> 399:19 402:13<br/> 405:16 411:25<br/> 413:10 419:3,22<br/> 433:22 434:25<br/> 435:18 442:2,3<br/> 449:4 450:3,8,11</p> | <p>451:4,16,20 452:4<br/> 452:17,18,23 453:3<br/> 453:12 454:2,7<br/> 455:10 457:9<br/> 461:25 465:1 467:9<br/> 470:8,20 472:4,6<br/> 473:21 474:7 481:8<br/> 487:11 502:1,22<br/> 503:1 506:11,15<br/> 507:5,8 508:10<br/> 509:5,20 513:24<br/> 515:14 516:22<br/> 517:12 518:4<br/> 520:19 522:13,15<br/> 526:11,17 527:20<br/> <b>timeframes</b> 35:25<br/> <b>timeline</b> 78:20<br/> <b>timelines</b> 55:10<br/> <b>timely</b> 63:13 67:18<br/> 313:1<br/> <b>timeout</b> 111:18<br/> <b>times</b> 55:6 119:16<br/> 132:1 213:14<br/> 252:22 260:11<br/> 276:2 333:18 342:7<br/> 352:18 363:15<br/> 371:21 373:24<br/> 385:22 386:1,14<br/> 428:7 446:2 463:7<br/> 487:11 492:17<br/> 510:8<br/> <b>timetable</b> 21:15<br/> 74:16 78:6 106:22<br/> <b>timing</b> 360:10 376:3<br/> <b>Tires</b> 477:20<br/> <b>title</b> 6:23,24 7:6 11:9<br/> 102:8,10 167:6<br/> 388:1<br/> <b>titled</b> 94:8<br/> <b>today</b> 92:21 155:18<br/> 159:6 165:21<br/> 175:19 176:12<br/> 177:13 205:19<br/> 206:6 294:4 295:19<br/> 320:5 321:22 332:7<br/> 350:4 367:1 409:5</p> | <p>426:13 456:13<br/> 458:6<br/> <b>TOI</b> 522:24 524:8<br/> 525:11<br/> <b>told</b> 60:3 73:25<br/> 115:12 147:11,20<br/> 149:1,2,16,19<br/> 177:13 186:15<br/> 251:8 278:5 279:24<br/> 279:25 308:1,14<br/> 355:15,17 359:3,7<br/> 373:5 392:15<br/> 402:15 403:13,16<br/> 406:12,20 407:7<br/> 416:25 417:9<br/> 430:25 449:14<br/> 450:9 453:24<br/> 454:11,23 455:19<br/> 458:12 464:10<br/> 466:12 471:18<br/> 473:17 474:2 506:6<br/> 523:4<br/> <b>Tommie</b> 406:11<br/> <b>tomorrow</b> 320:13<br/> 418:18 436:10,18<br/> 527:8,20 528:10,12<br/> <b>tone</b> 153:25<br/> <b>toned</b> 446:22<br/> <b>tonight</b> 520:4<br/> <b>tool</b> 208:10 211:16<br/> 251:18 272:9 312:8<br/> 317:22 338:1 345:6<br/> 356:9 371:17<br/> 403:24 437:17<br/> 456:1,8 481:6<br/> <b>top</b> 104:23 248:3<br/> 273:4 282:15<br/> 288:12 395:17<br/> <b>topic</b> 124:23 220:6<br/> 393:24 395:11<br/> <b>topics</b> 94:4 201:3<br/> 220:16 348:5<br/> 397:11<br/> <b>total</b> 34:1,2,14 257:9<br/> 311:16<br/> <b>totaled</b> 33:7</p> |
|---|--|--|--|

|  |   |   |   |
|--|---|---|---|
| <p><b>totally</b> 375:21<br/> <b>tough</b> 409:10<br/> <b>tour</b> 420:15 441:6<br/> 442:19 446:3 457:4<br/> 457:9,12 480:6<br/> <b>tours</b> 440:5<br/> <b>tower</b> 390:3 427:2<br/> <b>toxic</b> 173:5 177:10<br/> 178:11 409:23<br/> <b>toxics</b> 414:24<br/> <b>track</b> 246:3 323:10<br/> 326:9 508:8 516:14<br/> <b>tracked</b> 56:8 203:7<br/> <b>tracking</b> 171:11<br/> <b>traditional</b> 312:6<br/> <b>Traditionally</b> 205:1<br/> <b>traffic's</b> 504:24<br/> <b>Trahan</b> 271:20 301:8<br/> 301:21 302:4 452:8<br/> <b>train</b> 288:2<br/> <b>trained</b> 139:4,16,19<br/> 139:21 183:4 356:6<br/> 428:6<br/> <b>training</b> 7:22 15:21<br/> 144:18 212:4,18,19<br/> 227:24 229:20<br/> 269:11 271:1<br/> 284:13 285:1 287:9<br/> 287:25 288:5,7,10<br/> 321:10 345:10<br/> 371:2 378:12<br/> 428:25 429:8,9,10<br/> 429:11,13,14,16<br/> 439:7,8,13 480:8,14<br/> 480:21<br/> <b>transaction</b> 220:14<br/> <b>transcript</b> 1:16 10:20<br/> 10:21 364:3 529:8<br/> <b>transcripts</b> 407:12<br/> <b>transfer</b> 220:23<br/> 221:6 222:6<br/> <b>transferred</b> 246:17<br/> 472:7 517:11<br/> 519:19<br/> <b>transition</b> 215:10<br/> 216:2 217:12</p> | <p>218:22 219:4<br/> 220:22 221:2,4<br/> 304:24 478:8<br/> <b>translation</b> 325:23<br/> <b>Transocean</b> 18:17,24<br/> 19:1,15,17 20:11,21<br/> 23:20 25:10,20,24<br/> 29:19 31:11 33:10<br/> 35:12 36:15 40:23<br/> 45:17,23 46:4,13<br/> 47:12,15,16 57:13<br/> 62:10 63:18 74:20<br/> 74:24 76:4,7 78:10<br/> 80:6 83:4,15 96:4<br/> 96:17 99:13,24<br/> 100:23 101:7 102:4<br/> 105:3 107:3,5,8,12<br/> 109:16 110:20<br/> 112:14,20 113:8<br/> 119:19 120:9 142:3<br/> 143:1,25 146:22<br/> 147:11,17,25<br/> 148:10 157:11,25<br/> 158:7,10,18 159:8<br/> 161:1 163:19 179:2<br/> 179:5 183:24<br/> 184:17 185:7,10,11<br/> 207:14,25 208:12<br/> 208:20,25 211:12<br/> 211:23,24 216:20<br/> 218:1 219:7 222:11<br/> 223:18 224:11,13<br/> 225:1,3 226:15,22<br/> 232:15 233:23<br/> 234:3,15,18 235:4<br/> 236:13,22 237:8<br/> 238:2,23,25 239:4<br/> 239:13,14,18,21<br/> 240:1 243:7 244:10<br/> 246:12 249:3 250:2<br/> 252:19 253:11<br/> 254:5,8,20,21 256:5<br/> 256:12,18,25 257:4<br/> 257:6,18 260:6,13<br/> 261:2,23 262:5,11<br/> 263:12,18 270:1,16</p> | <p>272:3 274:19 275:1<br/> 276:6,17 277:7<br/> 280:17 281:17,23<br/> 282:2,15 283:7,13<br/> 283:23 284:2,3<br/> 287:13 290:25<br/> 291:14,21,23<br/> 292:24 298:5,15<br/> 299:21 303:13<br/> 313:14 314:20<br/> 316:12 317:11,13<br/> 320:2,13,19 322:14<br/> 322:19 323:6 324:8<br/> 325:8,10 327:9,19<br/> 327:22 328:1<br/> 332:11 337:6,10,16<br/> 338:7 340:17<br/> 341:22 342:3<br/> 344:15 345:18<br/> 346:20 347:6 348:8<br/> 348:8,19,22 349:1<br/> 352:2,21,22,25<br/> 353:8,13 354:23<br/> 355:15,23 356:5<br/> 357:24 369:1 370:2<br/> 376:20 377:19<br/> 379:14 380:24<br/> 382:1 383:6 384:4<br/> 386:20 387:18<br/> 388:25 389:15<br/> 392:10,14,22 401:3<br/> 401:18 403:17<br/> 423:11 425:21<br/> 426:5 428:24 430:5<br/> 430:11,24 431:1,17<br/> 432:21 434:19<br/> 437:14,15 440:8<br/> 458:22 465:5 467:7<br/> 468:21 469:22<br/> 471:17 472:3,8,10<br/> 473:2 476:13,23<br/> 477:14 478:16,24<br/> 485:21 486:9,13,14<br/> 486:19 487:5,8,23<br/> 488:1,4 490:7,11<br/> 491:10 492:7,23</p> | <p>493:6,25 494:7,10<br/> 494:18 500:8<br/> 502:11 505:11<br/> 506:25 507:1<br/> 508:11 509:3<br/> 510:14 511:10,12<br/> 511:16 512:9 514:9<br/> 514:25 515:15,19<br/> 520:10,21 523:1,9<br/> 525:12,23 526:1<br/> <b>Transocean's</b> 34:25<br/> 60:2 62:23 111:10<br/> 137:11 239:9<br/> 245:13 263:20<br/> 273:17,21,22<br/> 323:14,23 352:13<br/> 365:20 525:2,2<br/> <b>Transocean-owned</b><br/> 100:23 253:3<br/> <b>transpired</b> 220:11<br/> <b>traveling</b> 452:19<br/> <b>treated</b> 213:15<br/> <b>trend</b> 238:24<br/> <b>trends</b> 206:16 208:23<br/> <b>trick</b> 85:19<br/> <b>tried</b> 517:8<br/> <b>trigger</b> 239:3<br/> <b>triggered</b> 407:24<br/> <b>triggers</b> 426:21<br/> <b>trip</b> 44:7 439:23<br/> 440:21 441:9,19,21<br/> 449:16 452:9<br/> 488:16 504:20<br/> 505:5<br/> <b>TRN-HCEC-0063...</b><br/> 288:22<br/> <b>TRN-HCEC-0064...</b><br/> 282:20<br/> <b>TRN-USCG_MM...</b><br/> 277:8<br/> <b>TRN-USCG_MM...</b><br/> 523:21<br/> <b>TRN-USCG_MM...</b><br/> 521:6<br/> <b>troublesome</b> 258:12<br/> <b>Troy</b> 73:5</p> |
|--|---|---|---|

|  |  |   |  |
|--|--|---|--|
| <p><b>truck</b> 507:23 508:1<br/> <b>true</b> 62:16 103:5,12<br/> 105:21 113:14<br/> 119:4,20 125:4<br/> 127:21 131:15<br/> 137:19 147:3<br/> 172:20 176:10<br/> 178:2 192:18 198:5<br/> 207:17 326:24<br/> 329:11 361:14<br/> 414:10,14 529:7,7<br/> <b>trust</b> 316:25 317:6<br/> 332:1 449:25 450:6<br/> <b>trustworthiness</b><br/> 461:13<br/> <b>truth</b> 130:24 309:21<br/> 463:17<br/> <b>truthful</b> 110:2<br/> <b>try</b> 70:24 74:12 102:5<br/> 138:20 176:20<br/> 233:10 292:8<br/> 372:21 393:9<br/> 411:12 412:7 414:6<br/> 436:16 465:21<br/> 517:9<br/> <b>trying</b> 80:9 117:5<br/> 145:20 149:16<br/> 170:12 176:15<br/> 204:7 268:13 366:5<br/> 383:16 419:8<br/> 446:24,25 461:1<br/> 469:21 485:3<br/> 510:14 521:22<br/> <b>tube</b> 385:25<br/> <b>Tuesday</b> 332:23<br/> <b>turbocharger</b> 59:10<br/> <b>turbos</b> 99:15,16<br/> <b>turn</b> 101:18 146:17<br/> 246:2 340:25 341:3<br/> 344:23 349:19<br/> 395:10<br/> <b>turned</b> 448:12 453:7<br/> 505:25<br/> <b>twice</b> 373:17,21<br/> <b>two</b> 25:8,25 34:3<br/> 72:16 89:18 90:3</p> | <p>98:4 135:5 141:11<br/> 141:21 155:23<br/> 168:9 171:11<br/> 179:14 201:16<br/> 212:22,22,25 213:1<br/> 216:22 218:23<br/> 221:3,5 223:13<br/> 244:5 254:19<br/> 256:16 268:24<br/> 274:11 291:1,3,17<br/> 293:2 296:8 306:7<br/> 311:23 322:4 326:4<br/> 326:13 333:17<br/> 336:13 340:7<br/> 344:22 345:13<br/> 346:7 347:14,18<br/> 353:22 361:2,8,17<br/> 362:1,3 364:16<br/> 370:8,8,9,10,21<br/> 371:12,21 376:4<br/> 408:12 417:3<br/> 420:12 424:21<br/> 428:16 433:9,14<br/> 439:6,9,17 444:12<br/> 446:15 448:15<br/> 449:13,21 474:22<br/> 501:19 505:25<br/> 515:25 523:17<br/> 524:19,20 525:21<br/> 525:22<br/> <b>type</b> 8:9 51:3 52:13<br/> 63:7 64:7 182:21<br/> 228:14 269:23<br/> 271:6 272:12<br/> 275:18,20 283:14<br/> 283:15,21,22 330:2<br/> 506:22 513:1<br/> <b>types</b> 149:21 185:1<br/> 288:7 499:8<br/> <b>typically</b> 440:5<br/> 441:15</p> <hr/> <p style="text-align: center;"><b>U</b></p> <hr/> <p><b>U</b> 64:16 80:22 89:15<br/> 187:15 199:15<br/> 200:20 303:6</p> | <p>385:25 427:9<br/> 428:11<br/> <b>Uh-huh</b> 23:14 50:22<br/> <b>UK</b> 247:22 269:5<br/> 312:1 438:17<br/> <b>ultimate</b> 398:1<br/> <b>ultimately</b> 39:16<br/> 85:14 143:9 303:4<br/> 322:18,18 362:12<br/> 364:10 481:22<br/> 484:21 500:25<br/> <b>umbrella</b> 169:14<br/> <b>unable</b> 77:25<br/> <b>unacceptable</b> 18:18<br/> 39:4,11<br/> <b>unanimous</b> 412:10<br/> <b>unaware</b> 406:5<br/> 458:16<br/> <b>uncertainty</b> 306:19<br/> <b>unclear</b> 33:9 135:9,9<br/> 167:15 186:2<br/> <b>UNCLOS</b> 309:16<br/> <b>uncommon</b> 224:9<br/> 258:11<br/> <b>underbalanced</b> 386:6<br/> <b>underlying</b> 109:19<br/> <b>underneath</b> 169:1<br/> 475:7<br/> <b>understand</b> 16:11<br/> 17:5,9,18 27:7<br/> 29:15,16 62:3 66:19<br/> 76:11 91:25 104:7<br/> 105:9,11,23 114:25<br/> 128:22 136:2<br/> 137:10 143:17<br/> 152:19 160:17<br/> 170:12 171:18<br/> 176:9 188:15,20<br/> 190:13 191:9,18<br/> 196:21 197:1 204:8<br/> 207:15 218:1<br/> 241:23 245:15<br/> 265:8 289:23<br/> 300:21 312:13<br/> 321:23 322:6,10<br/> 325:3 335:1 344:14</p> | <p>345:9,16 348:23<br/> 360:10,11 363:23<br/> 370:17 371:8<br/> 384:19 417:2<br/> 428:15 439:22,23<br/> 441:7,9 444:4<br/> 445:25 459:8<br/> 460:25 479:22<br/> 485:15,16 492:23<br/> 493:19 496:12<br/> 498:14 499:22<br/> 500:18 523:4,5<br/> <b>understandable</b><br/> 461:23<br/> <b>understanding</b> 28:10<br/> 67:2 68:4,8 78:4<br/> 85:21 87:7 91:22<br/> 109:23 110:1<br/> 128:25 130:20,24<br/> 131:25 133:6,22<br/> 142:24 143:3 144:3<br/> 173:21 188:8 197:9<br/> 197:18 202:1<br/> 203:24 215:12<br/> 219:17,25 230:14<br/> 237:21 248:3 251:7<br/> 254:3,9 260:5 294:4<br/> 301:20 305:17<br/> 308:9 310:23 321:5<br/> 325:1,2 333:8 334:7<br/> 340:23 346:10<br/> 382:24 398:2<br/> 407:20 446:18<br/> 485:4 491:19 500:4<br/> 501:2<br/> <b>understandings</b><br/> 133:16 188:15<br/> <b>understands</b> 346:4<br/> <b>understood</b> 20:19<br/> 82:3 92:14 139:21<br/> 198:20 203:6 346:6<br/> 396:4 400:22<br/> 459:24 487:14<br/> 510:10<br/> <b>undertaken</b> 32:11,15<br/> 73:21 158:10</p> |
|--|--|---|--|

|                              |                            |                               |                             |
|------------------------------|----------------------------|-------------------------------|-----------------------------|
| <b>undertaking</b> 102:14    | 498:17,20                  | <b>values</b> 438:10          | <b>versus</b> 325:10 327:22 |
| <b>underway</b> 28:11,13     | <b>updated</b> 379:16      | <b>valve</b> 281:5,6 517:24   | <b>vessel</b> 9:4 21:5,21   |
| 28:25,25 29:1,2,4            | <b>upgrade</b> 108:14      | <b>valves</b> 403:19 404:8    | 22:7,15,18,20,21            |
| 84:5 130:8,9 157:8           | 487:15                     | 522:14                        | 23:2,16,21 24:4,8           |
| 190:19 191:5,19              | <b>upgrades</b> 95:2,6     | <b>vantage</b> 449:10         | 24:22 25:3,4,17             |
| 214:13 477:23                | <b>upper</b> 328:20 329:24 | <b>variable</b> 282:5         | 26:6 27:14,18,19,22         |
| <b>undoing</b> 455:11        | <b>upset</b> 279:21,21,24  | <b>variables</b> 149:25       | 28:4,11,14,16,19,24         |
| <b>unduly</b> 10:5           | 392:7                      | 290:9 380:2 422:8             | 29:4,5,11,19 30:3,4         |
| <b>unfair</b> 342:16         | <b>up-to-date</b> 275:19   | <b>varied</b> 12:22           | 36:5 38:5,20,22             |
| <b>unfamiliar</b> 125:22     | <b>urged</b> 13:8          | <b>variety</b> 356:18         | 39:3,5,10 44:1              |
| 165:8                        | <b>usage</b> 141:1         | <b>various</b> 29:18 47:25    | 45:23 46:4,13 47:7          |
| <b>unhappy</b> 324:8         | <b>USCG-JIT</b> 344:11     | 48:4 90:17 94:10,12           | 47:12,19,24 48:11           |
| <b>uniform</b> 101:16        | <b>USCG/BOEM</b> 1:1       | 100:16 117:22                 | 49:1,9 50:18,19,20          |
| 163:15,15                    | <b>use</b> 10:15 18:18     | 169:5,6 190:11                | 50:24 51:3 52:13            |
| <b>uniformity</b> 162:17     | 44:21 98:20 99:6           | 217:23,24 325:21              | 53:1 58:17 65:22,25         |
| <b>unit</b> 1:3 6:13 14:12   | 119:19 121:19              | 410:24 411:7 418:2            | 66:5 71:17 72:8,19          |
| 16:13 38:13 89:20            | 122:2,7,18,23 126:3        | 429:10 437:16                 | 75:5,6,9 76:10,16           |
| 129:24 130:3                 | 177:25 183:3               | <b>vast</b> 427:18            | 76:18,20 77:10 81:9         |
| 205:21 253:25                | 184:14 223:25              | <b>vehicles</b> 147:24        | 81:19 82:5,12 83:8          |
| 261:23 359:11                | 295:15 299:14              | <b>vent</b> 280:20            | 83:15,22,23,24 84:5         |
| 398:1 519:20,22              | 327:21 336:22              | <b>ventilation</b> 421:8,13   | 84:7,19 85:10 86:13         |
| 522:11                       | 338:4 364:20 389:8         | 421:15,19,23 422:1            | 87:16,22,23 88:1,5          |
| <b>United</b> 1:16 2:4,12,14 | 389:10 415:13              | 422:18,22,25 423:3            | 95:2,4 96:1 98:8            |
| 2:15 6:1 8:10 9:5,8          | 419:3 429:12 505:1         | <b>verbal</b> 323:16 431:23   | 103:15 106:15               |
| 9:13 11:16 12:23             | <b>usually</b> 39:1 203:15 | 521:2                         | 110:7 115:24                |
| 49:14 309:12                 | <b>utility</b> 21:11       | <b>verbatim</b> 154:11        | 116:12,22 123:24            |
| 310:11 395:25                | <b>utilized</b> 170:15     | 298:1 381:10                  | 125:3 129:8,9 130:3         |
| 396:6,10,22,24               | 281:18                     | <b>verification</b> 9:21 30:2 | 130:5,14,17 131:6,7         |
| 397:3                        | <b>U.S</b> 6:7,23,24 8:1   | 36:21 63:10,17 74:8           | 131:11,13 132:17            |
| <b>units</b> 15:1 141:11     | 11:4,9 194:4 198:25        | 75:17,19,21 76:2,5            | 133:6,8,11 136:19           |
| 203:16 394:15                | 247:21,24 250:18           | 95:5 96:6,9 101:1             | 136:20,21 137:14            |
| 438:9                        | 397:12 524:9               | 108:3 114:15 115:5            | 142:2 145:8 146:22          |
| <b>unknown</b> 317:2         | 529:24                     | 154:20 178:17                 | 147:4 153:3 155:8           |
| <b>unlatch</b> 273:10        |                            | 182:9,11 244:18               | 167:1 169:7 171:9           |
| <b>unlatching</b> 181:5      | <b>V</b>                   | 375:12                        | 171:10,20 172:7,12          |
| <b>unlocked</b> 512:21       | <b>vacation</b> 260:21     | <b>verified</b> 35:20 55:16   | 172:18 173:2,6              |
| <b>unmanned</b> 333:18       | 272:24 319:9               | 74:14 100:25 179:8            | 179:9,22 180:16,18          |
| <b>unsafe</b> 164:4 314:11   | 370:15                     | 184:13 406:11                 | 180:20 181:10               |
| 314:13 337:18                | <b>vague</b> 138:4 230:23  | 511:20                        | 182:25 183:3 189:2          |
| 401:22 402:5,14              | 248:3 396:7                | <b>verify</b> 32:9 62:8       | 189:3,5,8,13,13,16          |
| 403:11,15                    | <b>vaguely</b> 236:18      | 94:25 96:16 97:18             | 189:19,21 190:10            |
| <b>unskillfulness</b> 8:25   | <b>valid</b> 27:15 329:20  | 154:23 251:3                  | 190:18 191:2,4,19           |
| <b>unsuitable</b> 38:23      | 466:13                     | 355:19,20 360:13              | 192:8 193:16,22,22          |
| <b>unsure</b> 202:11         | <b>value</b> 53:3 299:24   | 375:8 406:7 511:19            | 194:11,12 205:22            |
| <b>update</b> 51:7,13        | 507:6                      | 511:22                        | 207:21,21 208:2,7           |
| 264:24 265:4 498:9           | <b>valued</b> 464:6        | <b>verifying</b> 103:13       | 208:16 209:13               |

|   |   |  |   |
|---|---|--|---|
| 212:9 214:9,10<br>215:13,17 216:16<br>216:20 219:19<br>224:11 225:9,10,11<br>225:17 226:17,23<br>227:13,15,23<br>229:19 232:5,23<br>237:9 240:1 248:7<br>248:24 249:9,22<br>251:6,9,11,15<br>252:17 253:3,14,16<br>253:24 254:2,12,15<br>254:22,25,25 255:6<br>255:17 257:8 262:8<br>265:1,18 267:19<br>326:1 333:16<br>352:14 370:19<br>371:7,10 373:13,14<br>393:25 395:23<br>396:22,23,24 407:3<br>412:15 416:14<br>421:24 424:14<br>425:6 433:17 434:1<br>437:20,24 440:12<br>441:24 442:15,19<br>453:23 456:10,13<br>459:21 462:23<br>463:20 464:13,15<br>464:18 465:6,17<br>468:13,13 469:12<br>469:13,15,25 470:4<br>470:9,18,19 473:7,9<br>474:25 475:7,21<br>476:13,23 477:8,14<br>477:14,16 478:1,13<br>480:12,16 481:20<br>482:5,21 485:25<br>488:20 489:24<br>490:22 491:11<br>495:5,14,23,25<br>496:3,5 497:23<br>498:7 499:9 500:20<br>508:19 517:2,10<br>524:21<br><b>vessels</b> 21:19 24:5<br>26:8,12 27:1 44:22 | 45:17 48:2 52:6,12<br>52:22 64:5 68:18,24<br>70:4 71:5,5 87:4<br>94:24 127:18<br>137:12 141:21<br>161:9,12 183:19<br>205:14 223:22<br>232:10 237:13,17<br>263:6,20 265:21,23<br>267:7 268:24<br>394:14 395:24<br>411:5 477:23,24<br>487:16 495:18,21<br>496:6 513:13<br>522:21<br><b>vessel's</b> 192:19<br>469:16<br><b>vessel-related</b> 19:4<br>20:9,13,24<br><b>vessel-shape</b> 191:23<br><b>vetted</b> 47:23<br><b>vetting</b> 22:14,19<br>29:18<br><b>vice</b> 16:15,16 163:11<br>301:24<br><b>vicinity</b> 254:13<br><b>video</b> 10:16 518:1<br><b>view</b> 47:11 78:15<br>81:20 103:22<br>184:25 190:14<br>204:19 245:13,13<br>245:18 484:3<br><b>views</b> 135:12 309:25<br><b>violation</b> 9:1,12<br>10:11<br><b>violations</b> 109:6<br><b>VIP</b> 259:25 374:3<br><b>VIPs</b> 374:6<br><b>visibility</b> 42:2 88:8<br>89:4,8 440:5,11,13<br><b>visible</b> 107:8<br><b>visit</b> 16:24 24:23 25:7<br>36:21 55:16 76:2<br>96:10,14 178:22<br>179:1 180:5 184:5<br>184:12,15 206:23 | 228:4 259:25 260:3<br>260:4 291:16 374:3<br>440:2,9,18 441:16<br>504:1<br><b>visited</b> 25:8,12,15<br>179:9 439:24<br><b>visiting</b> 206:22<br>440:10<br><b>visits</b> 63:17 75:17,19<br>75:21 112:18<br>178:18<br><b>visual</b> 424:23<br><b>vis-à-vis</b> 159:7<br><b>VMS</b> 169:7<br><b>voice</b> 217:17 278:10<br>450:25<br><b>volume</b> 385:6 387:12<br>387:15 410:6<br>505:21<br><b>volumes</b> 385:14<br>412:16<br><b>vote</b> 412:10<br><b>VP</b> 16:10 17:4,10,19<br>18:5<br><b>VPs</b> 205:2 | 157:24 164:19,22<br>166:1,11 167:24<br>173:24 176:22<br>186:5,8 187:5<br>190:12,21 200:22<br>207:14 209:21<br>210:20 221:13<br>229:10,14 249:1,12<br>256:14 277:16<br>280:22 282:14<br>294:22 321:22<br>323:22 334:25<br>339:13 342:23<br>343:6 372:13 382:2<br>382:14 387:7<br>395:10 400:14<br>408:15 413:16,17<br>413:18 415:7,13<br>416:18 417:23<br>421:16 424:10,11<br>427:11 431:25<br>443:9 454:7 458:2,4<br>461:10 462:12<br>465:4 480:13 491:4<br>495:11 496:14<br>507:22 521:9 522:4<br>522:20 523:19,20<br>527:19,25 528:2,4<br><b>wanted</b> 101:12<br>135:23 245:23<br>248:15 261:9<br>289:11 304:17<br>314:16,21 321:2<br>322:11,21 354:15<br>374:25 375:1<br>395:18 398:22<br>442:15,23 443:4<br>444:1,4 449:2<br>453:25 521:8,12<br>522:3,9,9 524:20<br>526:21<br><b>wanting</b> 62:2 301:10<br><b>wants</b> 209:21 210:19<br>410:13<br><b>warm</b> 448:7<br><b>warning</b> 406:24 |
|---|---|--|---|

|   |  |   |   |
|---|--|---|---|
| <p><b>warranted</b> 6:15<br/> <b>warrants</b> 395:5<br/> <b>warranty</b> 281:23<br/> <b>washing</b> 427:19<br/> <b>washroom</b> 447:6<br/> <b>wasn't</b> 73:1 75:10<br/> 114:11 117:23<br/> 149:8 152:4 221:12<br/> 222:21 234:10<br/> 240:14 243:5 244:2<br/> 244:7,24 258:17,25<br/> 278:15 285:12<br/> 290:13,16,19,24<br/> 291:13 294:9 325:3<br/> 325:25 328:7,16,17<br/> 330:1 331:1,23<br/> 339:11 370:15<br/> 381:22 391:24,25<br/> 397:8 413:8 440:23<br/> 497:20 505:2<br/> 522:23 526:19<br/> <b>watch</b> 395:2 446:10<br/> 501:13,25 502:2<br/> <b>watched</b> 262:2 518:1<br/> <b>watching</b> 518:11<br/> <b>water</b> 77:24 130:10<br/> 273:8 396:6 450:18<br/> 454:5,19 465:12,16<br/> 465:19,22 469:1,3,5<br/> 469:15,24 470:4,6,9<br/> 470:18,21,23,25<br/> 471:19 473:6,8<br/> 474:3,22 475:5<br/> 497:10<br/> <b>waters</b> 28:15,15<br/> 247:22 395:25<br/> 396:10 397:3<br/> <b>watertight</b> 58:2 66:2<br/> 66:14 75:4,15 77:11<br/> 77:16,20,21 78:16<br/> 78:25 95:12 109:1<br/> 110:19 185:8<br/> 193:15 209:15<br/> <b>waving</b> 449:7 458:15<br/> <b>way</b> 55:7 83:4 89:6<br/> 109:14 128:17</p> | <p>130:8,9 139:19<br/> 143:1,20 161:11<br/> 162:2,18 164:20<br/> 190:14 191:9,17,18<br/> 195:14 198:21<br/> 204:19 206:4<br/> 207:22 208:7,8<br/> 226:23 228:24<br/> 262:1,22 309:24<br/> 312:6 321:18<br/> 333:22 363:4 365:4<br/> 372:21 379:18<br/> 380:6 381:1 382:18<br/> 394:23 395:8<br/> 409:19 429:6,8<br/> 447:2 454:23<br/> <b>Wayne</b> 2:7 7:24<br/> <b>ways</b> 136:6 185:20<br/> <b>Weatherford</b> 121:3,4<br/> 367:15,16<br/> <b>website</b> 12:19 337:4<br/> 341:11 343:23<br/> 394:8 397:17,19<br/> <b>Wednesday</b> 441:15<br/> 471:7 472:1 474:16<br/> 514:2<br/> <b>week</b> 149:19 199:17<br/> 199:18 272:25<br/> 295:19 318:22<br/> 353:17 440:6 441:8<br/> 441:18 512:17<br/> <b>weekend</b> 253:7<br/> <b>weekly</b> 70:8 252:23<br/> 253:1 323:10 355:1<br/> 480:15<br/> <b>weeks</b> 78:23 79:1<br/> 291:17 318:24<br/> 322:4 341:16<br/> 344:18,22 345:13<br/> 346:8 347:14,18<br/> 353:22 359:25<br/> 361:3<br/> <b>week-by-week</b> 48:16<br/> <b>weep</b> 286:4<br/> <b>weigh</b> 452:21<br/> <b>weight</b> 51:9 265:6</p> | <p>360:12 498:11,15<br/> <b>welcome</b> 85:21 136:3<br/> 221:23<br/> <b>welfare</b> 481:23<br/> <b>wellhead</b> 469:13<br/> 475:11,21<br/> <b>wells</b> 20:12,20 35:14<br/> 38:10,11 39:1,14<br/> 41:8,18 58:4 65:23<br/> 66:12,17 68:4 69:1<br/> 71:10 76:15,17,24<br/> 163:5 175:17<br/> 201:22 202:22<br/> 203:1 204:16 212:5<br/> 258:11 262:15<br/> 266:14 276:19<br/> 297:24 308:10<br/> 323:18 354:15<br/> 359:10 434:11<br/> 527:2<br/> <b>well-control</b> 15:21<br/> 152:5 212:18,20<br/> 214:24 215:3 234:1<br/> 252:8,9,12,13,15<br/> 257:24 258:1,6<br/> 284:25 330:5<br/> 337:11 338:13,16<br/> 338:19,25 339:5,6,8<br/> 339:12,17 340:7<br/> 342:3 345:10,16<br/> 346:19 347:6 379:2<br/> 379:4,5,18 380:7,21<br/> 381:1,13 382:19<br/> 386:25 387:19<br/> 431:8 439:7,9,13<br/> 456:19 481:4<br/> 486:22 505:17<br/> <b>well-designing</b><br/> 430:12<br/> <b>well-mirrored</b><br/> 302:21<br/> <b>well-represented</b><br/> 410:25<br/> <b>well-site</b> 105:10,11<br/> 160:3 258:19 259:7<br/> 259:12 308:5 430:5</p> | <p>431:23 522:18<br/> <b>well-trained</b> 428:20<br/> <b>went</b> 104:3,4 154:23<br/> 182:10 218:22<br/> 221:2,4 246:16<br/> 248:20 249:5 271:8<br/> 274:17 291:18<br/> 302:3 305:9 307:24<br/> 312:21 314:21<br/> 315:16 319:1 322:4<br/> 322:12,25 323:2,5<br/> 360:25 365:17<br/> 406:21 427:13<br/> 434:11 439:24<br/> 440:15 442:20<br/> 443:7,11,25 444:15<br/> 444:16 446:8 447:5<br/> 447:6,15 448:8<br/> 450:15 451:8,17<br/> 453:20 456:14<br/> 458:11,14 466:6<br/> 467:11 477:1<br/> 488:18 495:22<br/> 503:18 504:17<br/> 517:2 524:24<br/> 526:21<br/> <b>weren't</b> 228:3 247:4<br/> 292:25 296:11<br/> 307:16 314:12<br/> 327:5 330:15<br/> 339:19 340:2 375:9<br/> 462:24 463:24<br/> 464:12<br/> <b>west</b> 288:18 296:12<br/> 312:2<br/> <b>Westlake</b> 273:24<br/> 274:23,25 275:9<br/> <b>we'll</b> 64:14 91:9<br/> 128:7,11 153:12<br/> 176:8 186:10,10<br/> 210:14 213:22<br/> 280:11 329:10<br/> 346:16 396:15<br/> 436:10 520:10<br/> 522:5<br/> <b>we're</b> 39:3 82:17,18</p> |
|---|--|---|---|

|   |  |  |  |
|---|--|--|--|
| 113:6 118:8 122:20<br>122:23 125:18<br>126:11 131:24<br>134:16,20 140:21<br>141:21 145:20<br>168:24 199:18<br>214:17 243:15,16<br>243:17 251:19<br>271:9 277:17 278:3<br>281:14 282:6,19<br>291:7 293:10 301:3<br>324:21 336:2<br>339:13 350:7 371:6<br>378:17 382:7<br>417:18 421:4 432:6<br>436:11 452:1 468:8<br>490:23 507:12<br><b>we've</b> 57:17 82:19<br>84:22 102:8,10<br>106:17 127:19<br>136:11 176:17<br>219:14 220:16<br>298:16 319:17<br>336:12 341:4<br>377:13 382:3<br>419:13 449:16<br>450:17,18,19<br>452:14,15,15,16<br><b>whatnot</b> 446:7<br>447:22 449:11<br>451:18,22 452:20<br>466:18 469:1 470:1<br>480:8 503:18<br>516:14<br><b>whatsoever</b> 119:14<br>149:3 175:10<br><b>Wheatley</b> 2:12 3:13<br>8:4 77:5,7 79:3<br>80:20 140:4,18<br>145:11 190:2<br>210:13 348:10<br><b>whichever</b> 415:12<br><b>whoosh</b> 448:8<br><b>wide</b> 183:12 408:2<br><b>wildly</b> 463:14<br><b>willful</b> 9:1 | <b>Williams</b> 164:8,10<br>292:23 365:13<br>405:2<br><b>window</b> 290:18<br><b>windows</b> 454:13<br><b>winds</b> 446:14<br><b>Winslow</b> 5:3 219:7<br>219:16,22,24<br>220:13 255:22<br>271:17,18 277:4<br>279:1,9 301:7,21<br>302:4,24 353:10<br>374:24 375:11<br>407:7 429:22<br>436:18 437:2,2,3,7<br>462:4,8 483:6 501:7<br>527:7 528:9<br><b>wire</b> 434:15,21<br><b>wires</b> 516:24<br><b>wisdom</b> 308:22<br><b>wish</b> 125:1 519:1<br><b>withdrawn</b> 27:21<br>226:16<br><b>withhold</b> 322:8<br><b>witness</b> 11:1 12:18<br>13:12,14,15 54:14<br>85:19,22 86:5,23<br>87:3 88:15 93:4,18<br>121:15 122:3,4,22<br>124:19,24 125:8,14<br>125:17,17,18<br>126:11 127:12<br>128:12 131:18,20<br>131:22,25 132:6,8<br>132:10,24 133:17<br>135:11,17,23<br>138:11 139:7<br>140:10,21 145:18<br>146:5 147:21 149:7<br>150:2 155:19,21,24<br>157:19 187:3,12<br>188:2,10 195:4<br>196:6,9,23,24 197:7<br>197:8 209:22 210:4<br>210:9 219:22 220:7<br>221:12,18 222:4 | 229:2,24 230:1<br>295:18 320:6 343:7<br>345:21 346:12<br>350:17 361:21<br>362:2 365:19 369:9<br>384:6 396:18<br>404:21 405:12<br>408:17,23 409:6,6<br>410:20 413:4 414:3<br>416:1,19 418:10<br>420:10,17 423:19<br>435:19,23 436:4,23<br>436:25 445:14<br>460:14 461:2 463:9<br>463:16 472:23<br>484:9,12,24 485:3<br>485:14 503:15<br>522:1 527:10,14<br><b>witnesses</b> 10:1,24<br>11:22 12:2 13:10<br>126:3,6 228:5,6<br>280:19 342:23<br>418:3 436:12,17<br><b>women</b> 316:21<br><b>wondered</b> 448:10<br>450:12<br><b>wondering</b> 350:11<br>461:20 528:1,3<br><b>Wong</b> 174:19,20<br>175:9,15<br><b>word</b> 313:20 359:4<br>463:2<br><b>words</b> 199:6 244:19<br>361:25<br><b>work</b> 23:5 25:17<br>31:19 33:13 35:16<br>35:17 41:3 57:12<br>58:14,18 65:25 66:1<br>69:21 72:8,20 74:3<br>94:24 97:12 99:20<br>110:22 111:3,18<br>116:3,13,24 141:8<br>141:18 144:17<br>157:25 169:19<br>188:9,11 195:11,11<br>214:16,23 215:1 | 234:15 235:9,9,20<br>236:5,8 246:15,16<br>246:17,18 248:21<br>249:2,5 251:3<br>261:20 262:18<br>263:8,11 270:6<br>274:6 292:18<br>293:14 296:19<br>314:14,17,22,24<br>317:4 322:23 323:4<br>323:6,9 324:13,17<br>324:19 376:7<br>400:14 409:19<br>411:7,8 418:13<br>438:9,10,11 446:6<br>446:18 454:1<br>455:15,19 467:6<br>468:25 470:17<br>471:19 472:2<br>473:14,23 474:2,22<br>476:5 482:14<br>487:15,22 489:17<br>489:18,22,23<br>495:22 498:11<br>500:10 501:2<br>526:18<br><b>worked</b> 14:20 141:9<br>156:19 157:10<br>195:20 211:24<br>217:4,8 224:12,14<br>230:10 283:14<br>301:2 302:16 308:6<br>311:17 312:4 375:6<br>394:23 403:23<br>416:25 425:12<br>437:17 446:11<br>450:24 464:4 467:7<br>478:4 501:14<br><b>worker</b> 42:24<br><b>workers</b> 60:2<br><b>working</b> 41:4 51:10<br>56:21 66:24 70:21<br>141:22 161:24<br>244:24 260:17<br>263:6 265:7 287:15<br>288:4 294:11 |
|---|--|--|--|

|  |   |   |   |
|--|---|---|---|
| <p>297:11 312:1<br/>314:24 315:13<br/>316:21 317:3<br/>342:15 400:7,11<br/>436:15 447:2<br/>489:13 496:6<br/>501:18 511:21<br/>525:23<br/><b>workload</b> 71:7,8<br/><b>works</b> 62:16 99:19<br/>162:2 407:17<br/>418:10,12 446:1<br/>481:5<br/><b>work-permit</b> 488:6,8<br/>489:7<br/><b>work-permitting</b><br/>488:22<br/><b>world</b> 150:12 347:5<br/>376:19 377:5<br/>495:19<br/><b>worldwide</b> 237:15<br/>239:4 346:25 347:1<br/>347:3,4<br/><b>worried</b> 248:23<br/><b>worry</b> 280:10<br/><b>wouldn't</b> 22:11 34:20<br/>104:12 154:15<br/>195:15 227:10<br/>243:21 259:13<br/>266:18 365:15<br/>400:25 411:24<br/>463:7 468:24 496:6<br/>517:15<br/><b>Wright</b> 366:12<br/><b>written</b> 75:20 197:3<br/>215:24 216:9,10<br/>217:21,23 252:19<br/>323:20 403:17<br/>431:20 432:3<br/>478:15 502:3<br/><b>wrong</b> 81:14<br/><b>wrongly</b> 391:13<br/><b>wrote</b> 481:15,15,25<br/>505:17 525:18</p> <hr/> <p style="text-align: center;"><b>X</b></p> | <p><b>X</b> 14:3 54:15 64:16<br/>67:8 73:16 77:6<br/>79:7 80:22 89:15<br/>90:14 91:19 94:1<br/>102:1 118:20 123:7<br/>151:12 156:2<br/>159:22 164:15<br/>187:15 199:15<br/>200:20 206:11<br/>211:2 268:10<br/>287:18 299:19,23<br/>300:15 303:6<br/>304:12 311:14<br/>320:20 324:21<br/>325:16 336:17<br/>359:1 367:22<br/>388:22 393:7<br/>398:12 405:5 424:3<br/>426:11 427:9<br/>428:11 437:5 501:5<br/>509:2 529:21</p> <hr/> <p style="text-align: center;"><b>Y</b></p> <p><b>Yancey</b> 420:14<br/>501:15,19 502:1,18<br/><b>yeah</b> 73:5 102:24<br/>117:16 118:7 129:4<br/>134:21 143:12<br/>149:15 153:11,18<br/>184:23 219:14<br/>224:13 265:12<br/>277:4 282:17,23<br/>285:25 293:2<br/>306:22 313:16<br/>314:2 315:15 322:3<br/>322:11 338:4 341:7<br/>353:9,13 366:10<br/>370:14 378:19<br/>391:21,22 398:25<br/>399:7,24 424:24<br/>425:2 437:22<br/>445:21 451:5 471:3<br/>504:3 506:12<br/>509:14 516:3<br/>521:20<br/><b>year</b> 64:9 71:1</p> | <p>102:23 211:21<br/>291:6 305:1 438:18<br/>439:20 493:24<br/>495:1,4,13 496:1,2<br/>496:5<br/><b>years</b> 11:6 14:15,20<br/>14:23 19:2 43:24<br/>44:5,21 102:10<br/>118:8 156:24<br/>191:20 209:3 211:8<br/>211:9 212:22,25<br/>213:1 259:13<br/>268:19,21 295:24<br/>311:16,18,21<br/>356:16,20,25 439:6<br/>439:10,15,16,18<br/>447:12 495:17<br/>509:3<br/><b>yelling</b> 449:18 452:14<br/><b>yells</b> 228:21<br/><b>yesterday</b> 425:8<br/><b>Yorktown</b> 7:22<br/><b>you-all</b> 123:3 143:7<br/><b>Yup</b> 341:2<br/><b>y'all</b> 274:1 302:14<br/>526:5</p> <hr/> <p style="text-align: center;"><b>Z</b></p> <p><b>zero</b> 299:12</p> <hr/> <p style="text-align: center;"><b>\$</b></p> <p><b>\$2,500</b> 509:9<br/><b>\$200</b> 508:20<br/><b>\$250,000</b> 11:5 508:20<br/><b>\$500,000</b> 63:3<br/><b>\$7</b> 380:23<br/><b>\$760,000</b> 236:14<br/>490:8<br/><b>\$900,200</b> 234:17<br/><b>\$920,000</b> 487:24</p> <hr/> <p style="text-align: center;"><b>0</b></p> <p><b>0008902</b> 167:20<br/><b>0443</b> 523:23<br/><b>05</b> 93:14<br/><b>0531</b> 365:23<br/><b>07</b> 93:13</p> | <p><b>0800</b> 528:10,12<br/><b>0844</b> 521:7<br/><b>09</b> 102:21 119:25<br/>123:18 170:20<br/>193:10 242:16<br/>310:20 344:1,3<br/>370:12 378:24<br/><b>0904</b> 522:16</p> <hr/> <p style="text-align: center;"><b>1</b></p> <p><b>1</b> 15:16 59:7 61:4,5<br/>61:13 62:21 71:19<br/>99:16 123:11<br/>127:14 129:1 133:4<br/>290:21 326:10<br/>378:21 383:5<br/>385:14 471:25<br/>481:4 513:25 514:6<br/><b>1st</b> 349:2,11 350:4<br/><b>1-96845</b> 529:25<br/><b>1:15</b> 210:15<br/><b>1:30</b> 442:8<br/><b>10</b> 273:19,22 275:10<br/>290:4 349:21 353:1<br/>378:17 388:5<br/>492:17 494:14<br/><b>10th</b> 346:13<br/><b>10,000</b> 506:7,7<br/><b>10:00</b> 277:15 363:1<br/><b>100</b> 99:15 226:19<br/>239:2 247:3,4<br/>256:15 273:4<br/>278:25 300:9 358:8<br/>363:14 366:21<br/>381:2 423:5 429:17<br/><b>100,000</b> 509:8<br/><b>1001</b> 11:4<br/><b>102</b> 3:20<br/><b>105</b> 341:5<br/><b>106</b> 341:20<br/><b>108</b> 349:22<br/><b>11</b> 6:14 44:6 61:15,22<br/>154:3 279:13<br/>298:20 391:4<br/>436:15 469:22<br/><b>11-page</b> 100:8,9</p> |
|--|---|---|---|

|  |   |   |  |
|--|---|---|--|
| <p><b>11.2</b> 380:22<br/> <b>11:15</b> 471:4<br/> <b>11:30</b> 516:4<br/> <b>115</b> 3:22 50:21<br/>             264:23 497:1,7<br/> <b>118</b> 3:21<br/> <b>12</b> 207:13 373:14<br/>             397:6,8 439:4<br/>             470:22 471:1,4<br/>             514:6<br/> <b>12,000-hour</b> 59:10<br/> <b>12-mile</b> 249:14<br/> <b>12-31-11</b> 529:23<br/> <b>12:30</b> 442:7<br/> <b>13</b> 3:6 73:22<br/> <b>13th</b> 74:25<br/> <b>132</b> 369:5<br/> <b>1348</b> 6:24<br/> <b>14</b> 3:8 6:8 14:22<br/>             58:25 96:21 98:1<br/>             166:4 169:1 290:22<br/>             335:11 350:4<br/>             494:21,22,23 495:3<br/>             495:13<br/> <b>14th</b> 342:2 351:8<br/>             394:6<br/> <b>1400</b> 365:5<br/> <b>143</b> 289:16<br/> <b>15</b> 291:11,13 318:18<br/>             353:1 492:17<br/> <b>150,000</b> 452:21<br/> <b>151</b> 3:23<br/> <b>155</b> 369:9,19<br/> <b>156</b> 3:24<br/> <b>159</b> 3:25<br/> <b>16</b> 42:24<br/> <b>164</b> 4:1<br/> <b>165</b> 51:10 265:8<br/>             498:14,20<br/> <b>17</b> 60:24 73:22<br/>             200:23<br/> <b>17D</b> 513:12,15,23<br/> <b>17H</b> 513:13,17<br/> <b>17th</b> 74:25<br/> <b>17.10</b> 297:20<br/> <b>17.11</b> 297:21</p> | <p><b>17.12</b> 297:21<br/> <b>170</b> 42:24<br/> <b>18</b> 11:4 439:19<br/> <b>18th</b> 345:7<br/> <b>18-month</b> 268:22<br/> <b>18.10</b> 297:20<br/> <b>18.10.3</b> 294:21<br/>             295:10,22<br/> <b>18.11</b> 297:21<br/> <b>18.12</b> 297:22<br/> <b>187</b> 4:2<br/> <b>19th</b> 337:21,24<br/> <b>1900</b> 456:24 457:17<br/> <b>1980</b> 437:16<br/> <b>1989</b> 393:20 394:7<br/> <b>199</b> 4:3<br/> <b>1991</b> 437:22</p> <hr/> <p style="text-align: center;"><b>2</b></p> <hr/> <p><b>2</b> 3:4 57:17 61:7,8<br/>             62:5,22 71:19 73:19<br/>             344:7,12 378:21,21<br/>             383:5,5 394:18,19<br/>             481:16<br/> <b>2-7579-BPOS108-0...</b><br/>             100:4<br/> <b>2-89</b> 394:7<br/> <b>2.3.1</b> 166:14 169:6<br/>             170:1<br/> <b>2.4.18</b> 99:10<br/> <b>2:00</b> 427:21<br/> <b>2:15</b> 228:23<br/> <b>2:30</b> 442:9<br/> <b>20</b> 6:11 99:22 151:5<br/>             151:18 152:5 180:9<br/>             211:20 298:20<br/>             311:18,21 337:21<br/>             337:24 339:20<br/>             342:5 353:1 354:7<br/>             390:12 494:14<br/>             504:14<br/> <b>20th</b> 55:11 63:15<br/>             98:10 110:15<br/>             132:20 137:2 138:3<br/>             149:1 155:9 165:23<br/>             175:11 177:2 178:7</p> | <p>178:12 218:13<br/>         260:1 273:17<br/>         276:23 305:1<br/>         370:13 371:22<br/>         373:9 375:15<br/>         383:17,20 385:2,9<br/>         386:21 412:21<br/>         439:25 440:18<br/>         504:1<br/> <b>200</b> 4:4 118:2<br/> <b>2000</b> 56:22<br/> <b>2001</b> 104:4,8 437:23<br/> <b>2004</b> 156:21<br/> <b>2005</b> 23:18 42:22<br/>             56:22,22,24 156:23<br/>             233:23 296:12<br/>             358:12 486:19<br/>             510:13<br/> <b>2005-2006</b> 56:20<br/> <b>2006</b> 48:22 232:13,17<br/>             437:12 486:7<br/>             512:13<br/> <b>2007</b> 44:6 46:23<br/> <b>2008</b> 25:18,23 32:8<br/>             59:9 117:18 120:6<br/>             120:10 186:18<br/>             234:14 244:16,25<br/>             487:22 489:1<br/> <b>2009</b> 29:23 31:1 48:7<br/>             55:13 57:10 59:8<br/>             61:12 69:6 73:22<br/>             75:18 88:23 94:7,16<br/>             95:24 96:12,15<br/>             97:21 98:3 99:2<br/>             102:12 106:18<br/>             107:2 110:15 111:2<br/>             112:21 115:8,19<br/>             146:21 166:2<br/>             167:16 174:19<br/>             175:16 177:18<br/>             178:4 184:11<br/>             234:25 235:19<br/>             240:20 245:8<br/>             268:16 272:18<br/>             281:4 296:20<br/>             321:24 339:24</p> | <p>340:3,22 348:20,20<br/>         353:6 354:22 356:1<br/>         376:17 488:10<br/>         489:3 526:6<br/> <b>2010</b> 1:5,12 3:2 6:12<br/>             55:17 57:2 98:11<br/>             99:22 110:16 111:5<br/>             111:6,20,25 115:22<br/>             118:6,10 132:20<br/>             151:5,18 152:5<br/>             165:23 175:11<br/>             177:3 178:7,12,19<br/>             178:22 180:5,9<br/>             182:16 184:9<br/>             186:23,24 236:12<br/>             240:19,20,21<br/>             337:21,24 338:14<br/>             338:20 339:4,18,23<br/>             342:2 345:7 346:10<br/>             349:2,2 350:4 354:7<br/>             365:21 390:12<br/>             439:25 444:15<br/>             490:6 529:18<br/> <b>2011</b> 57:2 247:15<br/>             276:14<br/> <b>204</b> 289:15<br/> <b>2045</b> 502:10<br/> <b>206</b> 4:5<br/> <b>21</b> 113:7 114:18<br/>             115:1,14 195:11,12<br/>             195:20,20<br/> <b>21st</b> 273:18 365:11<br/>             365:21 375:20,22<br/>             471:5 514:1<br/> <b>21-22</b> 1:5<br/> <b>210</b> 4:7<br/> <b>2100</b> 515:23<br/> <b>211</b> 4:9<br/> <b>22</b> 44:9 110:15<br/>             289:14<br/> <b>22nd</b> 6:12 58:13 74:2<br/>             74:7,14 75:3,14<br/>             516:24 525:21<br/> <b>220</b> 51:11 265:9<br/>             498:16,21<br/> <b>23</b> 1:12 3:2 42:22</p> |
|--|---|---|--|

|  |   |   |   |
|--|---|---|---|
| 344:1<br><b>23rd</b> 146:21 149:2<br>340:21 344:3<br>376:16 378:23,24<br>383:7 515:23,25<br><b>24</b> 299:10,14 424:18<br>443:3<br><b>24,000-hour</b> 59:8,10<br>98:3<br><b>24-hour</b> 489:20<br><b>24/7</b> 333:20<br><b>25</b> 491:18<br><b>250.198</b> 297:25<br><b>250.446A</b> 297:16<br><b>252</b> 276:7 357:7,9<br><b>26</b> 234:14 236:12<br>247:6,7 487:22<br>490:6<br><b>26th</b> 529:18<br><b>268</b> 4:10   | <b>329</b> 99:11<br><b>336</b> 4:16<br><b>359</b> 4:17<br><b>363</b> 529:24<br><b>367</b> 4:18<br><b>369</b> 289:13,13<br><b>388</b> 4:19<br><b>39</b> 394:17<br><b>390</b> 33:7 42:12<br>324:24 326:11<br><b>393</b> 4:20<br><b>398</b> 4:21   | <b>50</b> 452:21<br><b>500-and-some</b> 353:2<br><b>501</b> 5:6<br><b>52</b> 518:2<br><b>529</b> 5:11<br><b>53</b> 294:18 295:9<br>296:25 297:23<br>298:2 321:4,17<br><b>54</b> 3:9 62:7,9  | <b>8th</b> 338:14,20<br><b>8:00</b> 1:13<br><b>80</b> 3:15 244:11<br><b>8181</b> 1:23<br><b>89</b> 3:16   |
| <hr/> <b>3</b> <hr/> <b>3</b> 342:9,10 344:23,24<br>364:20 427:21<br>506:14,19 507:9<br>518:18,20,23<br><b>3,200</b> 233:25 486:21<br><b>3,545</b> 33:8 42:13<br><b>3:00</b> 373:20 374:21<br>442:9<br><b>3:30</b> 442:18<br><b>3:35</b> 319:19<br><b>30</b> 14:20 33:6 209:3<br>318:18,20 338:25<br>491:18<br><b>30-foot</b> 446:14<br><b>30-second</b> 445:23<br><b>300</b> 4:11<br><b>303</b> 4:12<br><b>304</b> 4:13<br><b>31st</b> 233:23 348:20<br>349:2,11 486:18<br><b>311</b> 4:14<br><b>32</b> 166:13,16,23<br>167:19<br><b>320</b> 4:15 | <hr/> <b>4</b> <hr/> <b>4</b> 7:7,8 59:9 60:3<br>99:14 151:15,17<br>202:3,6 203:4<br>274:23,25 342:10<br>344:23,24 364:21<br>373:20 374:21<br>375:23 442:18<br><b>4-13-13</b> 529:22<br><b>4.0-31</b> 395:18<br><b>4.03-1</b> 192:16<br><b>40</b> 121:20 289:21<br>452:20 518:2<br><b>4038</b> 529:23<br><b>405</b> 4:22<br><b>424</b> 4:23<br><b>426</b> 4:24<br><b>427</b> 4:25<br><b>428</b> 5:1<br><b>43</b> 6:24 411:20<br><b>437</b> 5:3,5<br><b>45</b> 444:12 505:25<br>512:2<br><b>46</b> 6:23 7:6 11:9<br>192:15 395:18<br><b>49</b> 518:2 | <hr/> <b>6</b> <hr/> <b>6</b> 123:11 129:12,22<br>133:5 134:9 351:9<br>436:3<br><b>6:30</b> 272:4 362:25<br>444:7<br><b>60</b> 71:5<br><b>63</b> 36:22 55:15 112:8<br>112:12<br><b>6301</b> 6:24 11:9<br><b>64</b> 3:10<br><b>65</b> 62:21 200:3<br><b>67</b> 3:11  | <hr/> <b>9</b> <hr/> <b>9</b> 470:15 520:12<br><b>9th</b> 529:24<br><b>9:30</b> 447:4<br><b>9:45</b> 447:5<br><b>90</b> 3:17<br><b>9001</b> 27:11 103:9<br><b>91</b> 3:18<br><b>94</b> 3:19<br><b>95</b> 319:7 507:2<br><b>97</b> 507:2 |
|  | <hr/> <b>5</b> <hr/> <b>5</b> 7:9<br><b>5th</b> 99:19<br><b>5-year</b> 303:15<br><b>5.2</b> 394:17<br><b>5:15</b> 404:24  | <hr/> <b>7</b> <hr/> <b>7</b> 36:25 55:15 123:11<br>123:16 129:12,13<br>129:15 133:5 171:8<br>277:15 341:3 351:9<br>444:10 495:3,12<br><b>7-038-2</b> 123:17<br><b>7:00</b> 101:12<br><b>7:30</b> 320:13<br><b>70</b> 36:22 55:14 112:8<br>112:12<br><b>70-knot</b> 446:14<br><b>711</b> 146:22<br><b>713.653.7100</b> 529:25<br><b>73</b> 3:12<br><b>77</b> 3:13<br><b>77060</b> 529:24<br><b>77061</b> 1:23<br><b>79</b> 3:14 |   |
|  |   | <hr/> <b>8</b> <hr/> <b>8</b> 339:4 341:19,19<br>470:14   |   |