UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

- - -

IN RE AIR CRASH OFF POINT MUGU, CALIFORNIA, ON JANUARY 31, 2000.

Case No. 00-1343 CRB

VOLUME I - DEPOSITION OF

QUINTON SCOTT PATTERSON

JULY 17, 2002

SEATTLE, WASHINGTON

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IN RE AIR CRASH OFF POINT MUGU, CALIFORNIA, ON JANUARY 31, 2000.
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Volume I - deposition of QUINTON SCOTT PATTERSON, taken on behalf of the Defendants, at 1201 Third Street, 48th Floor, Seattle, Washington 98104, commencing at 9:15 a.m., Wednesday, July 17, 2002, before Jan W. Serra, CSR 8207.



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INDEX

WITNESS: QUINTON SCOTT PATTERSON


| EXAMINATION | PAGE |
|---|---|
| BY MR. FRANKEL | 8 |
| BY MR. MASSEY | 170 |
| BY MR. READ | 179 |
| BY MR. LEBOVITZ | 206 |


EXHIBITS:

PLAINTIFFS'

| NUMBER | DESCRIPTION | PAGE |
|---|---|---|
| (None) | | |

DEFENDANTS'


| NUMBER | DESCRIPTION | PAGE |
|---|---|---|
| 184 | Faxed documents | 91 |
| 185 | Memorandum "to whom it may concern" | 103 |
| 186-A | Photograph | 109 |
| 186-B | Photograph | 109 |
| 186-C | Photograph | 109 |
| 187 | Service bulletin issued by Boeing and McDonnell Douglas on or about February 11, 2000 | 118 |
| 188 | BOECOM message | 122 |
| 189 | AOL Boeing McDonnell Douglas service bulletin | 123 |
| 190 | BOECOM message | 124 |
| 191 | Revision two, dated March 30th, to the service bulletin that had been issued on February 11, 2000 | 125 |
| 192 | BOECOM message | 126 |

DEFENDANTS' (continued)


| NUMBER | DESCRIPTION | PAGE |
|---|---|---|
| 193 | BOECOM message | 127 |
| 194 | Email from Mr. Leiper to Mr. Clark on which Mr. Hueto is copied | 144 |
| 195 | Boeing drawing and specification for the restraining fixture to do end-play checks | 155 |
| 196 | Bates A00000002 | 169 |
| 197 | Letter dated December 7, 2000 from Louie Key to Richard Rodriguez | 179 |
| 198 | Boeing Message Request dated May 20, 2000, requested by Scott Patterson | 213 |
| 199 | Boeing response to the Alaska request in Exhibit 198 | 220 |


WITNESS INSTRUCTED NOT TO ANSWER:
(None)
INFORMATION TO BE SUPPLIED:
(None)



THE VIDEOGRAPHER: This is the videotape deposition of Scott Patterson, taken on behalf of the defendant the Boeing Company and McDonnell Douglas Corporation in the matter of the Air Crash Off Point Mugu, California on January 31st, 2000.

This case is venued in the United States District Court, Northern District of California. MDL docket number 00-1343-CRB.

This deposition is being held at 1201 Third Avenue, 48th Floor, Seattle, Washington, on July 17th, 2002.

The video operator is Patty Gouthro, PES Video Service, main office Fresno, California. The court reporter is Jan Serra of Atkinson Baker, located in Glendale, California. Going on the record at approximately 9:15 a.m.

Counsel, please state their appearances.

MR. FRANKEL: Steve Frankel, on behalf of defendants the Boeing Company and McDonnell Douglas Corporation.

MR. MASSEY: Shalem Massey, for Equilon.

MR. READ: Greg Read, for Shell Oil company.

MR. LEBOVITZ: Jamie Lebovitz for Plaintiffs Administrative and Steering Committees and



certain plaintiffs.

MR. GREAVES: John Greaves for certain plaintiffs and Plaintiffs Steering Committee.

MR. JAQUES: Dane Jaques, on behalf of Alaska.

MS. KENNEDY: Kris Kennedy on behalf of Trig and Derilen.

THE VIDEOGRAPHER: Will the court reporter please swear in the witness.

QUINTON SCOTT PATTERSON,
having first been duly sworn, was
examined and testified as follows:

EXAMINATION

BY MR. FRANKEL:

**Q Would you please state your name for the record.**

A My name is Quinton Scott Patterson. I go by my middle name. But my first name is Quinton.

**Q Mr. Patterson, have you ever had your deposition taken before?**

A No.

**Q Let me try to just go over some basic**



**ground rules with you so we can communicate effectively here today.**

**I'll be asking questions. Other counsel around the table may ask questions. It's important in responding to our questions that you answer verbally, with a yes or no or whatever the question calls for, rather than shaking your head or nodding your head so that the court reporter can actually take it down.**

**Do you understand that?**

A Yes.

**Q In connection with my questions, if at any time you don't understand the question, you'd like to have it repeated or rephrased, please let me know and I'll do that.**

**Will you do that?**

A Yes. Okay.

**Q I'm going to assume that if you answer my question that you understand it.**

**Is that fair?**

A That's fair.

**Q Now, at the conclusion of these proceedings the court reporter will prepare a transcript which will be provided to your counsel and ultimately to you for review.**

**Do you understand that?**

A I understand that.
**Q You'll be able to make changes to the answers that you give here today. Do you understand that?**
A Yes.
**Q If you do make a substantive change to your answers, for example, changing a yes to a no or otherwise changing the substance of an answer that you give, do you understand that at the time of trial I, together with the other counsel seated around this table, may be able to comment upon that at trial?**
A I understand.
**Q Now, if at any time you want to take a break during these proceedings, just let me know and we will go off the record. So long as a question is not pending. If a question is pending, I'll ask that you answer the question that's pending before we take a recess.**
**Do you understand that?**
A Yes.
**Q Is there any reason, Mr. Patterson, either because of medication that you may be taking or for any other reason that would preclude you here today from giving truthful and accurate testimony under oath?**



A No.
**Q By whom are you employed, sir?**
A Alaska Airlines.
**Q In what capacity?**
A I'm the director of service engineering.
**Q Would you describe what as director of service engineering you do.**
A I manage the service engineering group. And what service engineering does is handle the day-to-day issues with aircraft that come up in either the line maintenance environment or the base maintenance environment.
**Q You're based at Alaska Airlines corporate headquarters here in Seattle?**
A Yes.
**Q How long have you held the position of director of service engineering?**
A Probably eight months.
**Q How long have you been employed by Alaska?**
A This August it will be ten years.
**Q Going back to August of 1992, is that when you started with Alaska?**
A Yes.
**Q In what capacity were you first hired?**
A I was hired into manager of airframe



engineering.
**Q As manager of airframe engineering, could you briefly describe what you did.**
A I was responsible for the structures and interior aspects of engineering. And I managed a group of nine engineers focusing primarily on aircraft structures and interiors.
**Q Based in Seattle?**
A Yes.
**Q How long did you handle --**
**How long did you hold the position of manager of airframe engineering?**
A I held that up until July of 2000.
**Q What position did you assume in July of 2000?**
A Director of engineering.
**Q As director of engineering, briefly describe what your duties and responsibilities were.**
A That was a oversight position of the entire engineering group dealing with both the project work in engineering and the service-related work. So it handled avionics, systems, interior structures.
**Q As director of engineering, to whom did you report?**
A Jim Davey.



**Q Prior to becoming director of service engineering approximately eight months ago, did you hold any positions prior to that other than director of engineering?**
A No.
**Q In your current position as director of service engineering, to whom do you report?**
A Jim Davey.
**Q As manager of airframe engineering for the ten-year period between, or for approximately I guess the eight-year period between August of '92 and July of 2000, to whom did you report?**
A Larry Sukut was the first one I reported to. And for an interim it was Jim Davey. And then they re-instigated the director of engineering position under Jay Maloney. So Jay Maloney was the third.
**Q When you reported to Mr. Sukut --**
A Yes.
S-u-k-u-t.
**Q -- and Mr. Davey what positions did they hold at that time?**
A Larry Sukut held the director of engineering position. At that time Jim Davey was the managing director of engineering. I'm sorry. The

assistant vice president of engineering.
**Q And Mr. Maloney, what position did he hold?**
A He was the director of engineering.
**Q Mr. Davey's current position?**
A Managing director of engineering.
**Q In the various engineering positions that you have held, did you work on matters concerning Alaska's entire fleet or was it focused on particular type of aircraft?**
A Entire fleet.
**Q Briefly describe what you did before coming to Alaska in August of 1992.**
A I'm sorry?
**Q What did you do before you arrived at Alaska in 1992?**
A I started off working for McDonnell Douglas in 1984. The first job I held was an engineer in manufacturing research and development, dealing with robotics and rivetting machines.
Then '96 I joined the DC-9, MD-80 stress group in customer service. And that job we dispositioned questions from the MD-80 operators regarding structural repairs to the aircraft.
1990 I left McDonnell Douglas and went to work for Continental Airlines in Houston, Texas.



**Q Which year?**
A 1990.
**Q 1990. Maybe I have this wrong.**
**You worked --**
A I worked from 1984 to 1990 at McDonnell Douglas. In '86 that job was split between two groups at McDonnell Douglas.
In 1990 I want to Continental Airlines in Houston, Texas.
**Q What did you do for Continental?**
A I was a senior structures engineer, and we supported base maintenance aircraft and base maintenance in Hobby, which was their maintenance base for the DC-9s and MD-80s.
**Q How long did you hold the senior structures engineering position with Continental?**
A I was in the same position from 1990 to 1992.
**Q Am I correct that you then voluntarily elected to leave Continental and join Alaska?**
A Yes.
**Q Briefly describe your educational background.**
A I have a BS in mechanical engineering from Villanova University.



**Q What year did you obtain that degree?**
A 1984.
**Q Any other degrees?**
A No.
**Q Do you hold any licenses other than a driver's license, for example?**
A Not currently.
**Q Have you --**
A I had a professional engineering license in the state of Texas in 1991 to 1992.
**Q While you were at Continental?**
A Yes.
**Q Did you stop maintaining that license because you joined Alaska?**
A Yes. The license was only good in the state of Texas. Didn't apply in Washington.
**Q Have you ever served in the armed forces?**
A No.
**Q Other than the proceedings that bring you here today, have you ever provided any testimony in connection with any matter concerning Alaska's maintenance practices or the crash of Flight 261?**
A No.
**Q Did you review any documents in connection with your deposition today?**



A Yes.
**Q Do you recall when you first reviewed, began review of any documents?**
A Probably a week ago.
**Q What did you review about a week ago?**
A Several AOLs.
**Q Those are All Operator Letters?**
A Yes.
**Q From McDonnell Douglas or Boeing?**
A McDonnell Douglas.
**Q Anything other than AOLs?**
A Not that I'm aware of.
**Q Did you meet with anyone in connection with your deposition here today?**
A I met with Dane Jaques to discuss the deposition procedures.
**Q When did you meet with him?**
A This morning and a week ago.
**Q Let's talk about the meeting a week ago.**
**How long did that last?**
A Probably about two hours.
**Q Anyone else present other than you and Mr. Jaques?**
A Yes.
**Q Who else was present?**

A Mike Kerns, Gerardo Hueto, Carla. And there were several Alaska employees; Wright McCartney, Donna Nelson, Chris Column, and Kevin Pape.
**Q P-a-p-e.**
A I believe that was it.
**Q Who was Carla?**
A Carla is in the legal department at Alaska Airlines.
**Q Were all the Alaska employees that you have just identified present for this approximate two-hour meeting?**
**Were they there throughout the meeting approximately a week ago?**
A They came and went. I think they briefed individuals and then they left and --
**Q Did you then separately meet with anyone after this group meeting?**
A No.
**Q So you were just there for the group meeting?**
A Right.
**Q In connection with that meeting a week ago, did you review any other documents other than AOLs?**
A AOL's and service bulletins that were related to the AD; Airworthiness Directive.



**Q Any other documents that you reviewed at that meeting?**
A I provided a summary of individuals at Alaska Airlines that had attended past team conferences for the MD-80.
**Q Is this something you prepared in writing?**
A Yes.
**Q How long was that memo that you prepared?**
A About a half a page.
**Q Was this a memorandum that you had or you prepared for purposes of this meeting?**
A I prepared for purposes of this meeting.
**Q Anything else?**
A That's it.
**Q Then did you have a subsequent meeting after the meeting about a week ago?**
A I had breakfast with Dane this morning.
**Q Did you review any documents at that meeting?**
A One AOL. And that was it.
**Q Apart from not having provided any testimony in connection with Alaska's maintenance practices, the crash of Flight 261, and apart from the meetings that you have had with counsel, have you ever been interviewed by any representative of any federal,**



**state, regulatory or enforcement authority?**
A No. There may be -- going back to the original question, I'm not sure if it fits or not -- but there was a document that I prepared on the condition of the jackscrew on the ocean floor. And that was submitted at the time of the Sunshine Hearing with the NTSB.
**Q What was the document entitled?**
A I think -- I don't think it had a title on it. It was just an eyewitness account of a description of the horizontal stabilizer and jackscrew during the recovery.
**Q When did you prepare those, that document?**
A It was during the NTSB hearings.
**Q This would have been the hearings in December of 2000?**
A Yes.
**Q Am I correct that the jackscrew from Aircraft 963 was recovered on or about the 14th of February of 2000?**
A On or about that date.
**Q The hearings that you're referring to at the NTSB took place in December of 2000?**
A That's correct.
**Q And you prepared the account in December of**



**2000 as opposed to February of 2000 when the jackscrew was recovered?**
A Yes.
**Q Before I go through that, I just want to go back to at least prior to your work at Alaska in connection with first your position with Continental Airlines as the senior structures engineer.**
**Had you had any involvement or done any work in that position concerning a jackscrew assembly on a horizontal stabilizer on an MD-80 aircraft or any derivative?**
A No.
**Q In your position with McDonnell Douglas from 1984 to 1990 did any of your work involve matters concerning the horizontal stabilizer or the jackscrew assembly?**
A Horizontal stabilizer or the jackscrew?
**Q Yes.**
A The jackscrew, no. The horizontal, we dealt with structural repairs to the horizontal.
**Q When you say "structural repairs," can you just give me an example of what you're talking about.**
A The horizontal stabilizer skins, doubler repairs.
**Q But I take it that in your capacity at**

**McDonnell Douglas, based on what I thought I heard from your answer, that insofar as the jackscrew assembly is concerned that operates the horizontal stabilizer, you had no work and did nothing in connection with that while you were at McDonnell Douglas?**

A That's correct.

**Q Let's turn to your work.**

**I'm correct that upon your graduation from Villanova in 1984 you immediately joined McDonnell Douglas; is that right?**

A Yes. I graduated June and started with McDonnell Douglas in September.

**Q How old are you, sir?**

A I am 40.

**Q I want to focus on the period while you have been at Alaska from 1992 to the date of the crash on January 31st, 2000.**

**And during that period in your various capacities as manager of airframe engineering and director of engineering, did you have any occasion to deal with any matters concerning the jackscrew assembly on an MD-80 aircraft?**

A I would like to clarify that I was only the manager of airframe engineering prior to the crash.



**Q Okay?**

A And no --

Could you restate the second part of that question?

**Q Am I correct that your current position is director of service engineering --**

A That's correct.

**Q -- is that right?**

A That's correct.

**Q And you were manager of airframe engineering during what period?**

A From 1992 to July 2000.

**Q So in your capacity as manager of airframe engineering, at least for the period 1992 to January 31st, 2000, the date of the crash, had you had any involvement in connection with any matter that you engaged in on behalf of Alaska to deal with any matters concerning the jackscrew assembly on MD-80 aircraft?**

A No.

**Q Had you ever heard any discussions about it prior to the crash?**

A Could you --

**Q Had you ever heard anyone at Alaska talk about the jackscrew assembly on an MD-80 aircraft prior to the crash?**

A Working in the structures area, I didn't get involved with the jackscrew that much. There may have been discussions, but it wasn't my primary focus.

**Q So nothing stands out in your mind of hearing anything about the jackscrew assembly during that roughly a year period?**

A That's correct.

**Q I'm correct that in your position as manager of airframe engineering during the period from the time you joined Alaska in 1992 until the date of the crash that you did not have any involvement in, for example, establishing or providing input to maintenance intervals for MD-80 aircraft?**

A That's correct.

**Q And in your work either at Continental Airlines or at McDonnell Douglas Corporation prior to that, although you have testified that you never did any work in matters concerning the jackscrew assembly on an MD-80 aircraft or any derivative, did you ever participate in any discussions or hear any matters discussed concerning the jackscrew assembly that stand out in your mind --**

A Nothing.

**Q -- in any of those positions?**



A Nothing that stands out in my mind.

**Q Other than this summary document that you prepared about individuals who may have attended what you described as team conferences, have you prepared any other documents in connection with matters concerning the crash of Flight 261 or the document that you have described that you prepared back at the time of the public hearing that in any way relate to MD-80 matters concerning the crash or to Alaska's maintenance practices or to the jackscrew assembly?**

A No.

**Q Am I correct that the first involvement that you had in matters concerning a jackscrew assembly on an MD-80 aircraft occurred after the crash?**

A That's correct.

**Q And with the crash taking place on January 31st, 2000, when was the first time thereafter that you had any involvement?**

A The first time is I flew down with the first team for the accident investigation. Which I was involved with the structures team on the on-site work that was done.

**Q When did you fly down?**

A That same day.

**Q So you flew down to where on January 31st?**
A We flew to Los Angeles on January 31st.
**Q Who accompanied you?**
A A whole team of Alaska employees; care team members, accident investigation team members. It was the whole MD-80 load full of people.
**Q Do you recall how many people we are talking about on that date?**
A Our MD-80s hold 140. So it was probably between 100 and 120 people.
**Q What were you asked to do?**
A I was a member of our accident response group under the aircraft recovery team. And so I went down to assist with the investigation.
**Q Can you briefly describe, at least during the period between January 31st and the date, which I believe to be February 14th, 2000, what if anything you did during that roughly two-week period?**
A I participated in the initial NTSB briefings. We reviewed or I reviewed, as part of the structures team, videotapes that were sent back from the ships of the aircraft wreckage on the ocean floor.
And when it was time to go out to start recovering aircraft wreckage I was on board the Independence when the horizontal stabilizer was



recovered from the ocean floor.
What I did on the ship is the guys on board the Independence that controlled the robot, the submersible, were going off of guidance on what parts needed to be recovered. And we were there to assist them on what parts of the aircraft to bring up and what was important.
**Q When was the first time that you saw any videotapes of the aircraft wreckage on the ocean floor in relation to the crash on January 31st, 2000?**
A The day prior to the recovery.
**Q So on or about February 13th?**
A Right. They had videotapes on board the ship that showed the horizontal stabilizer with the jackscrew assembly still attached to the horizontal.
**Q So you watched those videotapes on the ship?**
A Yes.
**Q How many times did you watch 'em?**
A Several times. We were trying to determine the location of the jackscrew assembly, and that was the first videotape that clearly showed where the jackscrew was on the ocean floor. That tape hadn't been sent to shore yet.
**Q This was a videotape that was taken by whom**



**to your knowledge?**
A By the members of the USS Independence. The guys that ran the submersible.
**Q What responsibility did you have other than watching the videotapes?**
**I take it you just went on the ship on the Independence on February 13th, 2000?**
A That's correct.
**Q And you got on the ship, is that when you first watched the videotapes?**
A Yes.
They didn't have the submersible underwater. It was on board the ship. So we reviewed tapes in preparation for the first dive for recovery.
And then when they did the first dive, while we were on board the ship we did a survey to determine what was the best method to lift the horizontal stabilizer from the ocean floor. And I gave recommendations to the crew members on how to, where the rigging should be placed to bring the horizontal stabilizer to the surface.
**Q Was there just one videotape that you viewed of the horizontal stabilizer and the jackscrew assembly on the ocean floor?**
A On board the ship when we first went on.



**Q About how long was it?**
A I think it probably was a two-hour tape.
**Q That just focused on the horizontal stabilizer and jackscrew assembly or other parts of the wreckage?**
A It was other parts of the wreckage, but we basically reviewed the, heavily reviewed the portion that dealt with the horizontal to determine what to go after first.
**Q Who other than yourself from Alaska was the viewing the tape?**
A Louie Key, I believe.
**Q What position did Mr. Key have with Alaska at the time?**
A He's in our maintenance organization. I'm not sure what his position is.
**Q Anyone else from Alaska you reviewed that videotape?**
A No.
**Q Was anyone else from Alaska on the Independence with you?**
A No.
**Q When in terms of the time of the day was it that you first viewed the tape on February 13th, 2000?**
**The morning? The afternoon?**

A The afternoon.
**Q Were there other people not from Alaska watching the tape with you?**
A Yes. There was a member from the NTSB from Washington.
**Q Who was that?**
A I don't remember his name.
**Q Anyone else?**
A Just people from the USS Independence; the recovery ship.
**Q Do you remember anyone from the USS Independence who viewed the tape with you?**
A No.
**Q I take it that after you viewed the tape -- I take it you watched it several times; is that right?**
A That's right.
**Q -- you then had discussions with the Independence recovery team?**
A Yes.
**Q And tried to give them guidance as to how they might set up rigging to bring the jackscrew and horizontal stabilizer assembly up to the surface?**
A That's correct.
**Q Then did they send a submersible down first**



**to begin that effort?**
A Yes.
**Q Was the submersible equipped with video equipment?**
A Yes. That's how the videotapes were all recorded is through the submersible.
**Q Just to make sure I understand, before this submersible at least went out after you saw the videotapes on the 13th, was it just one videotape that you viewed --**
A Yes.
**Q -- that had material relating to the horizontal stabilizer and the jackscrew assembly on it, or was it a number of different tapes?**
A On board the ship, it was just one tape.
**Q Had you seen any tapes of the horizontal stabilizer or the jackscrew assembly on the ocean floor prior to the time you spent on board the ship on February 13th?**
A There were several tapes that were sent to shore for review. But that one aboard the ship was the clearest video of the horizontal of the ones that were taken.
**Q In terms of -- Had you viewed other tapes prior to the**



**time that you went on board the ship?**
A Yes.
**Q From those tapes, could you see the horizontal stabilizer and jackscrew assembly or not?**
A I didn't see the horizontal stabilizer or jackscrew assembly on any of the previous tapes.
**Q How many other tapes did you view before coming on board the ship?**
A Probably four or five.
**Q When you -- After seeing the tape on the ship on the 13th of February 2000, did the submersible disembark from the ship and go down to the ocean floor that day?**
A Yes.
**Q Did it have a live video feed so you could see --**
A Yes.
**Q -- video while the submersible made its way down to the ocean floor?**
A Yes. The submersible had the cameras, and all the video recording was done on board the ship. But it was live.
**Q As the submersible made its way to the ocean floor, did you, were you then in an area where you could view the live video?**



A Yes.
**Q Was anyone else with you while you viewed the live video?**
A Louie Key and the NTSB members were in and out of the control room.
**Q Can you tell us what you next remember happening once the submersible left the ship and got to the ocean floor. Did you immediately then see live video of the horizontal stabilizer and jackscrew assembly or did it take some time before that occurred?**
A No. We discussed with the crew members on board before they sent the submersible down what we were interested in looking at. And for the most part they knew where it was on the ocean floor. So when they went down, when we were in the room they were able to go directly to the horizontal stabilizer.
**Q Can you describe for us what you first saw when the video, live video feed came back from the submersible?**
A On the ocean floor the horizontal stabilizer was sitting nose down in the mud. Or the ocean floor. And the horizontal stabilizer was completely buried in the silt. All you could see is, was the upper portion of the motor mounts where the

motor is mounted to. So you couldn't see the screw at all. The screw was totally submerged in the silt of the ocean floor.

**Q When you saw the video from the ship, is that what you saw as well?**

A Yes.

**Q So I take it you couldn't see the jackscrew itself or the gimbal nut or any part of the assembly of the jackscrew assembly?**

A You could not see the screw at all. And the gimbal nut was in a different location than the horzontal stabilizer, being that the gimbal nut was still attached to the vertical at a different location. The gimbal nut, you couldn't see at that location at all.

**Q You couldn't see it on the video that you saw before the submersible left --**

A Right, that's true.

**Q -- that you saw on the ship?**

A That's correct.

**Q And when the submersible got to the ocean floor, what could you see from the live video feed from the submersible concerning the gimbal nut that was still attached to the vertical stabilizer?**

A When I was on board the ship we didn't see



the gimbal nut at all. That was recovered two days later and I was not aboard the ship when that was recovered. So I didn't see anything with the gimbal nut.

**Q After the submersible sent back the live video, what is the next thing you recall occurring?**

A We assessed the size of the horizontal stabilizer, what condition it was in, what was surrounding the horizontal stabilizer that may have interfered with the lift and recovery.

The horizontal stabilizer right section was entirely missing. The center box section was intact, and a major portion of the left horizontal stabilizer was attached to the center box.

And what the Independence guys needed to know what was the approximate weight of that component to determine how to rig it.

And all we had on board the ship was the MD-80 aircraft recovery manual, which gave weights of the elevators, but did not give weights of the horizontal stabilizer. So we made a phone call back to shore to talk to the Boeing individual on site to get an estimate of how much the entire horizontal stabilizer weighed to make an estimate to the Independence recovery team what they should do rigging



for.

We got the information from Boeing. It sounded way under weight from what it should have been. We beefed the estimate up to allow the Independence team not to damage their submersible in raising this component and provided that information to the crew.

In addition, I gave them recommendations on where they should put the slings on the horizontal stabilizer to be able to lift it and not damage the jackscrew during the lift.

**Q Who did you speak with at shore from Boeing?**

A The individual's name that was, the only guy out there from Boeing at that time, was an MD-11 structures engineer. And I don't remember his name right now. But he was the only structures guy on site at that time from Boeing.

**Q After you provided, after you gathered the information, provided information concerning weight, how to set up the slings, what if anything else happened?**

A At that point the Independence crew went through the tedious task of -- they brought the sub back up to the surface to prepare the rigging straps



that they used for the lift and then took all that stuff back down to the ocean floor with the submersible. Then went through the tedious task with the robotic arms, trying to maneuver the slings into location for the lift.

That went on way into the night. It probably -- I left the control room probably at two o'clock in the morning the following day because it was, looked like it was going to be a long process to get the thing rigged up. So I went and took about five hours of sleep.

And by the next morning they had, they were proceeding with the second lift of the horizontal stabilizer. The first lift they had the rig lines trying to break it loose from the ocean floor. They broke a rig line on it. I don't think the horizontal stabilizer was lifted at all. It just -- they stood it up on its tail end.

When the lines broke they sent the submersible back down to do a survey of the horizontal and verify that the rig lines were still intact.

They brought the submersible back up and rigged it with a heavier tension line, sent it back down. And on the second attempt they were able to bring it to the surface.

**Q When it was rigged the first time and the line broke, were you, is that when you were getting some shuteye?**
A Yes.
**Q So you didn't see any video of that thereafter?**
A I saw video of that. There was -- they had the videotape up in the rec area of the ship, and it was kind of like a rec room where they had a video monitor. And we watched the video that was taken during that first lift, after the fact.
**Q What, if anything, did you see?**
A What we saw was the basically they had it rigged, they went to lift the submersible and the submersible sits quite a distance above the horizontal stabilizer, so with the murky water, as the submersible went up, the horizontal stabilizer basically disappeared in the murk.
And then what you saw shortly after that was a rig line that was under tension got slack. And so they brought the sub back down to the ocean floor to look what the situation was.
And basically the horizontal stabilizer was stood up on its tail with the jackscrew completely visible at that point. And they basically surveyed



and videod the whole horizontal stabilizer in that condition. And that's when they brought the sub back up to put a stronger rigging on it.
**Q From the video, you could now see the jackscrew?**
A Yes. And they had a good clear shot of the jackscrew once it was stood on end and it was pulled out of the mud at the bottom of the ocean.
**Q What did you see on the jackscrew from the video?**
A There was basically, on the jackscrew itself there was a lot of silt and buildup around the screw. So you couldn't see a whole lot.
Basically the other thing was when they were videotaping they were more, the crew was more focused on the rig lines, so any shot they had of the jackscrew was basically a fly-by, and focused primarily on what the rigging looked like so they could determine what they needed to do on the second attempt. But the jackscrew itself had basically silt and debris on the screw.
**Q What did you observe about its condition otherwise on the video?**
A We observed that it was connected, still connected to the center box of the horizontal



stabilizer and that the screw was intact. It was a complete screw, and it wasn't broken.
**Q Could you observe on this video, for example, whether there were any thread remnants of any sort on the screw itself?**
A At the time you could see remnants of the thread. Personally, I wasn't sure what it was. It looked like wire that was wrapped around the screw.
**Q And you could see that from the video?**
A Yes.
**Q From the video, apart from the silt and debris that was covering the screw, could you discern from the video, for example, whether there was any grease of any sort on the video on the screw?**
A I don't remember if you could or not. We weren't looking at it at that aspect. We were just looking for the general condition of the unit to make sure that it was still in a condition to lift to the surface.
**Q Anything else that you recall about the physical, if you will, characteristics of what you observed of the horizontal or jackscrew assembly as it was, from the video, after it had been rigged the first time and failed?**
A Nothing else. The only other issue that is



there is that video does not exist anymore.
After the horizontal stabilizer was recovered, we went back to try to find the video, and it never made it ashore.
That video is not accounted for with all the other videos. So there is a lapse in the video documentation of the recovery of the horizontal stabilizer.
**Q Am I correct that the first time you saw this video was sometime in the early morning hours of the 14th of February of 2000?**
A That's correct.
**Q Did you just watch it on one occasion that day?**
A We watched it on several occasions. And basically it was all waiting for them to get the submersible rigged for the second dive to recover it. So we were watching it the entire time they were rigging the submersible.
**Q And this was one videotape?**
A It was one videotape. And I think it was the duration of about four hours.
**Q This would have been video that was generated while you were getting your shuteye on the morning, early morning hours of the 14th?**

A Yes.
**Q So you woke up, you watched the video. You, did you give direction to the recovery team on the Independence as to what changes should be made to the rigging?**
A I didn't make any recommendations. What they basically did is they rigged the submersible to pretty much the maximum capacity that the submersible could lift without damaging it and they went down with rig lines at that capacity and were able to lift it at that point. But the rigging was still intact, so they didn't need to re-rig any of the slings on the horizontal. They were all still attached.
**Q I take it then the process began to hoist the horizontal stabilizer assembly to the surface?**
A That's correct.
**Q And were you able to watch a live feed of that taking place from the ship as it was coming up through the ocean?**
A You were. It's not that clear. Like I said, the video on the submersible is looking at a part that's attached probably ten feet below the submersible. So you got little glimpses of the horizontal as it came



up, but they weren't clear pictures.
**Q From the time the hoisting operation began, when it started, to the time it reached the surface, about how long of period of time elapsed?**
A 15 or 20 minutes.
**Q Do you know what the depth was of where the horizontal tab was when it was on the --**
A I believe it was between 600 and 700 feet.
**Q What was used to, was it -- Was it hoisted from the ship once the submersible hadn't -- Just tell me how the process worked.**
A The process on how they rig it for parts under a certain weight that they can, that they have cables that lift the submersible off the ocean floor and control the submersible. With those cables that they lift the submersible, they can sling below the submersible additional devices to bring parts up with the submersible, provided that it's under a certain weight. So they basically lift the submersible and then they have cables going from the submersible to aircraft parts that are lifted all as one unit coming up.



**Q So both the submersible and the horizontal stabilizer and the jackscrew are being hoisted up?**
A They are lifted at the same time.
**Q So were you on the deck of the ship as the horizontal stabilizer and jackscrew came off the ocean?**
A Yes.
**Q About how far away were you when you first saw it come up from beneath the ocean?**
A Once they brought it on to the deck of the ship, we were able to walk right up to it.
**Q But I take it that you saw it from a distance as it came from the ocean, came out of the ocean.**
A I saw it from a distance because the recovery crane operators were bringing the submersible aboard ship and an aircraft part aboard the ship. And they wanted people to stay out of that area until they could get the thing secure on the deck of the ship before they let individuals walk in and look at it.
**Q So when did you first -- Did you first see it when it made its way onto the deck, or had you soon it before?**
A I watched from a distance as it broke the surface of the ocean. Then watched from a distance



until they got it above the ship and they were about ready to lower it down on the ship. At that point I walked up and made some recommendations on how they should position it on the ship so they didn't damage the horizontal stabilizer since at that point the horizontal screw was sticking below the horizontal and we didn't want them to rest it on the horizontal. So we made recommendations to the crew on how to support it on the ship without doing any damage to the horizontal.
**Q From the time that you first saw it come up from the ocean until it got hoisted down onto the deck of the ship, about how much time elapsed?**
A That process was about a half an hour.
**Q When you first -- so it was -- let me strike that. It was approximately half an hour from the time it first breached the surface of the ocean until it got to the deck of the ship; is that right?**
A Approximately.
**Q And at least until it got to the deck of the ship, you were a fair distance away such that you couldn't really observe, for example, what the jackscrew looked like?**
A From that distance, no.

**Q When was the first time you were able to observe firsthand what the jackscrew looked like from a physical perspective?**

A Once they put it on the deck of the ship, the first thing that happened was the, they had two FBI agents on board the ship that were responsible for any human remains that may be on the part that needed to be removed before people got next to it. They went in and basically surveyed that part of it.

Then the Independence guys, basically they had a garden hose on the ship, a hose that they rinsed the parts with to wash ocean debris and that nature off the parts. Then we were able to get in close to look at the part.

**Q How long did the FBI examination take?**

A Not more than ten minutes.

**Q Do you know who the FBI agents were that were on board?**

A They were two female agents. I didn't get the names.

**Q Was anyone else, other than crew members of the Independence, with you on the deck of the ship as it was, as the horizontal and jackscrew were being hoisted down?**

A Loule Key and the NTSB representative. I'm



thinking the NTSB representative's first name was Mike. But I'm not hundred percent sure on that.

MR. JAQUES: Can we take a short break?

THE VIDEOGRAPHER: Going off record, 10:22 a.m.

(Recess taken)

MR. HICKEY: We are going back on the record at 10:36 a.m.

**Q MR. FRANKEL: I want to just go back for a moment try to just get some perspectives. And I'm going to try to get at least a picture from the NTSB docket I think that depicts or shows the jackscrew being hoisted down and get you to identify it. But I have to get that printed out.**

**So before I do that, when you were on the deck of the ship and the horizontal stabilizer was being hoisted from -- when you first see it come off the ocean, in terms of feet, how far away are you?**

A Probably 50 feet from it. We were standing up on the bridge area, looking from above.

**Q So were you looking down or --**

A Looking down on the whole back end of the ship, watching the recovery.

**Q And you're only 50 feet away when you first see it come up from the ocean when it breaks water?**



A Probably a little more than that because the ship was sitting higher off the ocean floor than the deck. So between 50 and 75.

**Q So you were on the bridge at the top of the ship, the highest point of the ship?**

A Not the highest point, but up on the platform above the deck.

**Q Above the deck.**

**How far above the deck are you?**

A Approximately 50 feet.

**Q Do you watch the entire hoist operation from the bridge?**

A Yes.

**Q Is it hoisted straight out of the water?**

A It was hoisted straight out of the water along the side of the ship.

And then they had to bring the crane over the back, across the deck of the ship to put it in an area where they were able to secure it on the deck of the ship.

**Q And you remained on the bridge during this whole operation?**

A Yes.

**Q And were you able to observe the horizontal stabilizer throughout the period, from the time it**



**broke water until it got hoisted by the crane around to the other side of the ship?**

A Right.

I came down to the deck of the ship when they started to lower it to the deck, and it looked like they were going to just set it on the deck of the ship without any supports.

I didn't think that was a good idea, so at that point I went down and talked to the crew members and recommended they get something underneath the horizontal to not allow the jackscrew to be unsupported on the deck of the ship.

**Q Do you know whether this operation from, was videotaped as it was being hoisted from the ocean and then the crane taking it?**

A It wasn't videotaped because the video's on the submersible. There were digital photos taken of it during that process.

**Q Did you take any such pictures yourself?**

A I didn't take any pictures. The cook on the ship took digital pictures.

**Q Anyone else other than the cook taking pictures; as far as you know?**

A I don't know who else on the Independence may have been taking pictures. But I knew he was

taking pictures of it.
**Q So you gave some --**
**So you come down off the bridge and you go down to the deck?**
A Yes.
**Q And you give recommendations to the crew in terms of putting some support before they lower the horizontal stabilizer and jackscrew to the deck of the ship?**
A Correct.
**Q And when they are lowering it to the deck of the ship, is that at the front of the ship, the middle of the ship?**
A The back of the ship.
**Q Is it the same area where they had been hoisting it originally?**
A Hoisting the submersible?
**Q You said that when they had begun hoisting the horizontal and it first broke from the ocean surface that it was at the back of the ship?**
A Right.
**Q And then they needed a crane to move it around to --**
A Basically they kept -- the crane is what lifts the winch, is what lifts the submersible. And



the, any part that's attached to the submersible out of the ocean. And it can pivot.
Once you get the parts clear up above the deck you can pivot it back and rotate the back to place parts on the deck of the ship.
**Q So the, you're on the bridge, you come down to the deck. The crane has moved the horizontal into the appropriate position. And they are going to lower it down to the deck in the back of the ship?**
A Right.
**Q And at that time, after the FBI agents had cleared the way and you had given instructions, did they put some support in accordance with your instructions before they lowered it?**
A They put whatever was available in close proximity to support it. I think they found a couple of old rusty oil barrels that they put under it.
But yeah, they did support it so the jackscrew did not come in contact with the deck of the ship when they removed the winch from it.
**Q So then it was placed on these oil drums.**
**Then did the FBI agents --**
A Yeah, the --
**Q -- the two FBI agents approached it.**
**And how far away were you when the**



**jackscrew assembly and the horizontal stabilizer first touched the oil drums?**
A Probably within five feet.
**Q And Mr. Key was with you at that time?**
A Yes.
**Q And the representative from the NTSB?**
A Yes.
**Q Anyone else other than crew members?**
A Crew members and the FBI.
**Q Agents?**
A Yes.
**Q The two FBI agents?**
A (Shakes head yes)
**Q You don't recall the names of the two FBI agents?**
A No.
**Q The FBI examines it. Then does a crew member on the Independence use a garden hose on the assembly or --**
A Yes.
**Q Was that a high-pressure hose?**
A It didn't appear to be a high pressure hose.
**Q Just a typical garden hose?**
A Yes.



**Q And how long did they use the hose on the assembly?**
A They spent about 10 or 15 minutes rinsing the whole assembly.
**Q Did you observe that rinsing throughout the entire period?**
A No.
**Q Where were you while they were doing the rinsing?**
A I was within five feet of it, but I was talking with other people. I didn't watch the whole rinsing of it.
**Q Did you express any concern at the assembly being rinsed?**
A No.
**Q Did anyone else to your knowledge?**
A No.
**Q After this rinsing operation was completed, what do you next remember doing?**
A We were able to go in and look at the assembly. We looked at the jackscrew. We looked at the damage to the entire assembly.
**Q It was you, Mr. Key and the representative of the NTSB?**
A Right.

**Q Plus the members of the Independence were pretty interested in just for the fact that they brought it up so --**

**Do you remember the names of anyone from the Independence that was with you on the deck examining the jackscrew?**

A No.

**Q How long did you spend observing the jackscrew and the horizontal stabilizer?**

A The jackscrew stayed aboard the ship for approximately about another hour. Once they got word that the jackscrew was recovered it was pretty interested in getting it on shore. So in the time it took to send a barge out.

They didn't bring the Independence back in with the horizontal. They wanted to leave the recovery ship on site to do further recovery of the tail. So they sent a barge out to transport the horizontal stabilizer back to shore. So it sat on board the ship for about an hour until it was transferred.

**Q Were you observing it during that hour?**

A Yes, we were.

Not for the entire hour. But we were observing it for the better half of the first hour.



The first half hour we were looking at it.

**Q Were you making notes?**

**Did you make any notes concerning your observations on this period, I think it's between the 13th and 14th of February.**

A Actually, I think that the period, now that I think about it, it was probably more like the 8th and 9th. I think the 9th was the day, more closer to the day of the recovery. So I think I was on board ship the 8th and 9th.

I think the 14th sounds a little later.

**Q The 8th and 9th.**

**So when we have been talking about the 13th and 14th previously in your deposition, you think it actually was the 8th and 9th?**

A I believe it was closer to the 8th and 9th than the 13th and 14th.

**Q With respect to your observations either from watching videos on the 8th and the 9th or your observations on the 9th when the jackscrew assembly, the jackscrew and the horizontal stabilizer gets hoisted from the ocean floor and ultimately makes its way to the deck of the Independence, did you make any notes of your observations?**

A No.



**Q Do you know whether Mr. Key did?**

A I don't know if he did or not.

**Q Do you know whether the representative of the NTSB was making any written observations; taking notes?**

A I don't recall.

**Q Have you ever seen any writings recording observations that were made by anyone during the 8th and 9th of February during this recovery of the horizontal stabilizer and jackscrew?**

A Have I ever seen any?

**Q Yes.**

A No.

**Q I take it --**

**Have you ever seen any pictures that would have been taken on the 8th or 9th of February that relate to the horizontal stabilizer or jackscrew as it was making its way to the deck of the Independence?**

A Yes. Actually the cook provided a disk with pictures. I got a copy of the pictures.

**Q And have you maintained that to this day?**

A I believe I still have it, yes.

**Q Do you know whether that disk of pictures was provided to anyone else other than yourself?**

A I'm not aware.



Louie Key may have got it. I don't know for sure if he did or not.

**Q Do you know whether the representative of the NTSB was provided with a copy?**

A I don't know if he was or not.

**Q Have you provided a copy of your disk or any of the pictures on your disk to anybody else?**

A I don't remember if we provided those or not. They may have been.

**Q Have you ever shown the pictures on your disk to anybody?**

A Several of the engineers at work have seen the pictures.

**Q Other than engineers at work, anybody else?**

A No.

(Off-the-record discussion)

MR. READ: Maybe we could find out if those could be brought here or emailed here, because it seems pretty critical.

MR. FRANKEL: Can we go off the record for a minute and talk about this?

THE VIDEOGRAPHER: Going off the record at 10:50 a.m.

(Recess taken)

THE VIDEOGRAPHER: We're going back on the

record, 10:54 a.m.
MR. FRANKEL: While we were off the record we were trying to see if efforts can be undertaken to receive the digital pictures which the cook on the Independence provided to Mr. Patterson might still be at Alaska. And efforts are being undertaken to see if they can be provided to us so that we can ask the witness some questions concerning them.
**Q MR. FRANKEL: The cook who took the pictures, do you know his name?**
A No.
**Q Do you recall how many pictures you received on the disk that the cook provided to you?**
A Between 15 and 20.
**Q Do you recall of the 15 or 20 pictures that you were provided, were they all pictures relating to the horizontal stabilizer and jackscrew arriving on the deck of the Independence, or did they relate to other matters as well?**
A He had pictures of the horizontal stabilizer recovery. He had pictures of his fellow crew members on there. There is also pictures of the recovery of the vertical stabilizer. They are on the disk as well.
**Q Were you present for the recovery of the**



**vertical stabilizer too?**
A Yes.
**Q Did that come after the recovery of the jackscrew and horizontal?**
A Yes. But the piece that we recovered did not contain the gimbal nut.
**Q Let's go back to your observations during the hour or so that you were able to observe the jackscrew and horizontal after it had been placed on support, the FBI agents had examined it and a garden hose had been used on it.**
**What did you see first with respect to the jackscrew? What did it look like?**
A The jackscrew looked pretty greasy and grimy. It had debris embedded in the threads.
It had what I thought was a piece of wire wrapped around the screw, which turned out to be the threads of the gimbal nut.
But it was pretty grimy and gritty, and it looked like it had grease on it. I don't know how much grease it had on it. But what they did with the garden hose wasn't enough to wash the debris off on board the ship, so it was pretty grimy looking, on the screw.
**Q When you say it was gritty, grimy, had**



**debris, can you describe what it looked like?**
MR. JAQUES: I'm going to object. You mischaracterized his prior testimony right there.
**Q MR. FRANKEL: Did you understand my question?**
A Could you ask it again?
(The record was read as follows:
**Q When you say it was gritty, grimy, had debris, can you describe what it looked like?)**
MR. JACQUES: Same objection. You didn't include the, conveniently omitted his testimony that was greasy as well.
MR. FRANKEL: I want to describe the · · I want to deal with the grit and grime first.
THE WITNESS: Okay.
**Q MR. FRANKEL: In your words, what was, what does grit and grime mean?**
A The grit and grime that was there was embedded in the greasy substance that was on the screw, it was embedded on the jackscrew itself
**Q So this was in the what I'll call the valleys of the screw as opposed to on the threads?**
A No, it was on the threads.
**Q On the threads as well as into the valleys**



**between the threads?**
A Right.
**Q What color was it?**
A I don't recall the color of it. It all looked black.
**Q It all looked black.**
**Other than it looking black, did you observe any other physical characteristics?**
A The jackscrew, it appeared to be bent up at the joint where it ties into the motor mounts.
It appeared to be bent aft of the -- and I'm not sure if it was aft to the left or aft to the right -- but the screw was bent where it joined into the motor mounts at the top of the gearbox at the top of the assembly.
**Q You said you saw what appeared to be like a wire going around?**
A Wrapped around the screw.
**Q Was that going at the bottom or at the top?**
A I don't remember if it was at the bottom or the top.
**Q I mean, if the -- let me just draw you a picture and tell me whether --**
**You have the horizontal stabilizer here and the jackscrew coming out like this. This is a pretty**

**elementary diagram, but I'm just trying to ask you where, if this is the jackscrew on my elementary diagram, do you recall where the threads were that you saw or the wire on the horizontal?**

A The threads of the screw go all the way up through.

**Q The wire that you referenced.**

A I don't remember where the wire was in relation to the screw.

**Q Was the screw black from top to bottom; from where it connected to the horizontal stabilizer all the way to the bottom? Was it black and grimy from top to bottom?**

A It appeared to be grimy with silt and a greasy substance from top to bottom.

**Q Throughout the whole circumference of the screw you were able to look around the 360 degrees. Was there any difference?**

A I didn't look at it that closely in that much detail to determine that.

**Q When you say that there was a greasy or slimy substance, did you have any understanding of what that was?**

A At that particular time I wasn't focused on looking for any reason for that. We were just



assessing what we had recovered and getting it prepped to be transported to shore.

**Q Did you touch it?**

A No.

**Q Did anyone touch it?**

A I don't remember if anyone did or not.

**Q When I say "touch it," I mean the jackscrew or the horizontal stabilizer other than perhaps any crew members that --**

**Did any crew members touch it when they were hoisting it down or did it just get hoisted down without anyone touching it?**

A They may have touched the exterior portions, the extremities of it to guide it as it was coming down.

Since it's on a sling, it's rotating around as its coming down. So to guide it down to the ship and keep it stabilized I'm sure they touched the outer sections of it to prevent it from hitting.

There were some components that fell out of the stabilizer box that were touched by the crew members. And what happened is they, the lower stop was contained somewhere inside the stabilizer and it fell out onto the deck floor when they touched the stabilizer to the deck floor. And in conjunction with



a bunch of bearings, ball bearings from inside the gearbox assembly. And so those pieces were picked up off the deck of the ship and put in a plastic bag and sent back to shore with the horizontal.

**Q And you remained -- I take it you remained on the ship after the barge came and took the horizontal --**

A Yes.

**Q -- and jackscrew back to shore?**

A Yes.

**Q In your observations during the approximate hour that the jackscrew and the horizontal remained unsupported on the deck, did you observe anything on the jackscrew that was green in color?**

A I don't recall.

**Q Did you observe anything on the jackscrew that was red in color?**

A I don't recall.

**Q Did you, in connection with looking at -- I take it you were able to look at the motor and the horizontal stabilizer as well not just the jackscrew?**

A The motor wasn't there. So we weren't able to look at the motor.

**Q You saw the jackscrew and you saw the**



**horizontal?**

A The horizontal and upper gear box with the motors attached to.

**Q In your observation of any of those components; the horizontal, the gear box, did you observe anything that was red or green in color?**

A I don't remember if I did or not. I was looking more at the structural aspect of the horizontal rather than looking for colors of greases.

**Q So you don't know what was on the screw. You just had a physical observation that it was black and slimy, gritty and appeared greasy, but you don't know what it consisted of?**

A I don't know what the greasy substance consisted of, no.

**Q And you don't know what any of the other substances that you observed being black in color consisted of; do you?**

A No, I didn't do a detailed analysis of the material.

**Q Approximately what time was it that the jackscrew and horizontal made its way to the deck? What time of the day was it?**

A I would have to guess it was close to lunchtime. Between 11 and 1.

**Q And the operation to begin the hoisting operation that commenced while you were getting shuteye and continued thereafter, how long did that whole operation take from the time it first started until the jackscrew was onto the deck of the ship?**
A I'm not sure what time frame.
**Q I'm looking on the 9th of February, they apparently, while you were getting some shuteye, attempted to start putting cables on and slings around.**
A They had already started that prior to.
**Q Prior to you going to sleep?**
A Right.
**Q And that probably --**
**Did that start sometime on the 8th of February?**
A Yes.
**Q In the late hours of the 8th?**
A It started in the evening of the 8th.
I don't know what time they started. The videotapes probably have all that. The videotapes have all the dates and times of all that on the videotapes.
**Q Except the one that somehow disappeared?**
A There is a four-hour lapse. But we know



the time frame of that four-hour lapse because you have the end of the previous tape and the start of the next tape.
**Q So if it started sometime in the evening on the 8th, it was close to noon on the 9th by the time the jackscrew was on the deck; is that right?**
A I think that the jackscrew was on the deck -- the noontime I believe was the time it was transported to a barge and shipped to shore.
**Q So it was about 11?**
A But it was on the deck before that.
**Q About 10:30 or 11 o'clock in the morning it made it to the deck?**
A It may have been -- I'm note sure of the exact time.
**Q Did you observe the transfer of the jackscrew and horizontal from the deck of the ship to the barge?**
A Yes.
**Q How was that accomplished?**
A They used the hoist on the ship, crane hoist, and set up rigging on the barge to support the stabilizer, and then used the crane to swing it from the deck of the Independence over to the barge.
**Q When the horizontal was first put on the**



**deck of the Independence did they keep rigging attached to it or was it completely disengaged and just sitting unattached, unsupported?**
A The rigging was still attached.
**Q Was still attached.**
**How long -- did it take about an hour for it to get transferred to the barge?**
A It didn't take an hour. It was probably less than a half an hour.
**Q As far as you could tell, was anything done physically to the jackscrew or the horizontal between the time it was rigged and moved to the barge?**
**Was it --**
**did they use a garden hose on it again?**
**Anything else happen other than it get transferred from the ship to the barge?**
A No, it was just the transfer.
**Q Did both you and Mr. Key and the NTSB representative remain on the Independence or --**
A Yes.
**Q -- did anyone go to the barge?**
A We remained on the Independence.
**Q Do you know who was on the barge to receive the transfer of the jackscrew and horizontal?**
A No.



**Q Did you ever see the jackscrew and horizontal again?**
A Yes.
**Q What else did you do while you were still on board the Independence after the jackscrew made its way back to shore on the barge?**
A At that point we worked with the crew of the Independence to recover additional sections of the tail of the ship, and we located a large section of the vertical stabilizer which we thought would contain the gimbal nut and spent the remaining portion of the time on the ship, that I was on the ship, rigging and lifting the large section of the vertical stabilizer.
**Q How long did you remain on the ship?**
A I think we, at that evening I went to shore. Or shortly, I think it was that evening on the 9th.
**Q That would have been the 9th of February, that evening you went back to shore?**
A (Shakes head yes)
It may have been that evening or it may have been early the next morning. They brought the whole Independence back to shore because the vertical stabilizer section that was recovered was too large of a piece to move to a barge. So they just brought the

whole ship back in. I think it was the next morning that they brought the Independence back in.

**Q So you remained on the ship through the 9th and perhaps the early morning hours of the 10th; correct?**

A Correct.

**Q Of February?**

A Yes.

**Q Now, with respect to the recovery operations of the tail portions of the tail and the vertical stabilizer, did you go through a similar process; i.e. was the submersible sent down to relay video back and you provide guidance to the crew of the Independence as to how they should rig to bring up those other parts of the wreckage?**

A That's correct.

The only difference was is during the lift of the vertical stabilizer, since it contained a portion of the aft fuselage, we weren't sure what the weight of it was, so they did not lift it with the submersible. They lifted it with the crane off the back end of the ship. Which was able to lift a lot heavier weights than you could with the submersible.

**Q What was the next part of the wreckage after the jackscrew and horizontal stabilizer, that**



**you've previously described, that was next brought either to the surface or to the deck of the ship?**

A When the submersible was down reviewing the tail of the ship, the next piece that was brought up to the surface was the vertical stabilizer tip faring at the top of the horizontal.

The reason they brought that piece up is that they had to bring the submersible back to the surface to rig it for the, bring down rigging lines for the vertical, and the crew members asked is there anything down here that's light that may be of interest. So we grabbed the tip faring and that was raised to the surface.

And then the next parts they brought up were the vertical stabilizer skins and sections of the aft fuselage frames that were attached to the, that are attached to the vertical stabilizer.

**Q Any other parts of the wreckage that you observed being recovered while you were on the ship?**

A That was it.

**Q Were any of those parts or components that you saw brought to the deck of the ship in the same manner that the horizontal stabilizer and jackscrew?**

A That vertical stabilizer tip faring was a small part. So they basically held it in their



robotic mechanical arms and lifted the submersible with that piece attached to the robotic arms. Which was different than what they did to the horizontal. But it was a lightweight component that they just gripped onto it and brought that up.

The vertical stabilizer was lifted in an entirely different fashion, without the use of the submersible.

**Q Through the use of the cranes?**

A Right.

**Q Let's just talk about the vertical stabilizer tip faring, the first, next part that, or component that you saw.**

**Was that hoisted to the deck in the same fashion or was that what was brought up in the submersible?**

A It was brought up in the arms of the submersible. And when they rested the submersible on the deck they released the grippers on the submersible and the part was laid on the deck in that fashion.

**Q Did you, did that --**

**Did the FBI agents then go and examine that part like they did the with jackscrew and horizontal stabilizer?**

A I believe they did.



**Q Was that part then hosed with the garden hose too?**

A Yes.

**Q Did you observe that part thereafter?**

A Yes.

**Q What observations did you have about the stabilizer tip faring?**

A It was not much to it. It was the skins of the faring and the frames on the inside. It contained the tail number of the airplane. So it had a 963 on the component.

**Q Was it, was there black debris or any substance covering what you saw?**

A That component isn't, there wasn't any black debris or anything on that.

**Q It was clean?**

A It was pretty much in a clean area of the airplane. And it wasn't -- that part, laying on the ocean floor wasn't, it was just laying on the ocean floor.

**Q So it wasn't buried?**

A It wasn't buried.

**Q Like the jackscrew and the horizontal?**

A Right.

**Q What was the next component that you saw**

**hoisted?**
A That would be the vertical stabilizer section with the aft fuselage frames.
**Q And that was, they used the cranes on the ship to hoist that; correct?**
A Right. They brought that on, they lifted it over the back of the ship and set it on the aft section of the ship.
**Q Was this part or component of the aircraft that was buried like the jackscrew and horizontal stabilizer, or had it been sitting on the ocean floor?**
A It was sitting on the ocean floor.
There may have been pieces of it that were embedded in the silt, but it was a pretty big section of the airplane. And to say which sections were embedded and which ones weren't, I wouldn't be able to say.
**Q Was that --**
**When it was hoisted up to the ship through the cranes, was it placed on the deck of the ship?**
A Yes.
**Q In the same area that the other components you have described were placed?**
A That was placed probably further aft on the ship because the crane couldn't set it in the area



where they, so it was pretty much the whole back end of the ship was covered by this piece.
**Q In terms of size, how big of a component or components of the aircraft was this?**
A It was several components of the airplane all kind of jumbled together. And it was pretty large in size.
I would -- I'm not a very good size estimator, but I would probably say the total maybe 20 feet by 15 feet pieces, all jumbled together.
**Q And once this, these components were hoisted by the crane, placed on the deck of the slip, did a similar process take place where the FBI agents first examined this large component, or was there a different process that was followed?**
A I believe that they didn't get into the same process because they were immediately taking the ship back to shore and that was all going to be done on shore. So I don't recall the FBI agents or the garden hose being used on that. They basically got it onto the ship and secured and sent the ship to shore.
**Q Were you able to observe what those components physically looked like once they were on the deck?**
A Yes.



**Q From a physical, from a physical description, what did you observe?**
A What we first looked for was to see if the gimbal nut was contained in that section that was recovered. Which it wasn't.
But basically it was a bunch of twisted sheet metal and wires, cables from aircraft entwined in it.
**Q This was --**
**What components of the aircraft were contained in this next wreckage recovery?**
A That's were the vertical stabilizer outer skins, right and left side.
The rear spar of the vertical stabilizer.
Sections of center spar and front spar of the very stabilizer and the sections of the fuselage frames where the spar is attached to in the aft fuselage.
**Q I take it that you didn't observe any greasy-like substances that appeared on these components?**
A No.
**Q Nothing that was red or green in color?**
A Nothing that stood out.
**Q Approximately what time did this recovery**



**of the these components that you just described conclude?**
**When did it reach the deck? Approximately what time on the 9th of February, the 10th of February, did that happen?**
A It was later in the day. I believe it was still light out. So probably right before dusk.
**Q In February that would probably be somewhere around five o'clock in the afternoon. I'm not asking you to guess but --**
A Maybe the vertical stabilizer came up the following day because it was daytime when it was, when we went back to shore and we went, we took the stabilizer or the ship back as soon as the stabilizer was on deck. So I'm not sure if it was the 9th or the 10th that it was recovered. Maybe it was more like the 10th because we went back during the day.
**Q You returned to shore with the vertical stabilizer component and the other wreckage component that you have just described with the Independence sometime on the morning of the 10th?**
A It may have been, yes.
**Q What did you do when you got to shore?**
A Had some preliminary discussions with the other members of the structures working group. And

think I went to the hotel and got some sleep.
**Q When was the next occasion that you saw the jackscrew and the horizontal stabilizer that was the first recovery operation that you witnessed?**
A When the Independence went to shore I was able to see the horizontal stabilizer as it stood in the hangar with the other components of the aircraft that were recovered.
**Q Did the --**
**When you saw it, did you see it in the hangar?**
**Where were you taken ashore? Where did the Independence --**
A The Independence pulled in on the deck right adjacent to the hangar where the components were being stored.
**Q Where was that?**
A That was at the naval base in Point Hueneme.
**Q When you first saw the jackscrew and horizontal stabilizer again, I take it you saw it on the morning of the 10th of February when you got to shore?**
A Yes.
**Q Did you get to observe it so that you were**



**close enough to see whether or not it was in, it appeared to be in the same condition that it was when you had seen it while you were on the deck of the Independence?**
A It looked a lot cleaner than it did on the deck of the Independence.
**Q When you said "looked cleaner," what do you mean?**
A The substance that was on the screw was no longer on the screw and you could actually see the screw itself.
The wire or the threads of the gimbal nut were still wrapped around the screw. But the oily, grimy, greasy substance wasn't on the screw anymore, and you could actually see the screw.
**Q What could you see about the screw?**
**Was it -- what color was the screw at this point?**
A What color was the screw at that --
**Q Before you said it was sort of black and slimy and appeared to be covered with a greasy substance.**
**What did it look like now?**
A You could see that, the gunmetal color of the screw and what still looked like a wire wrapped



around it, being it was the threads.
**Q Did you ask anybody what happened to the black substance that you had seen on the screw while it was on the deck?**
A No.
**Q Do you know how, what happened in the interim between when you last saw it and the time that you saw it again in the hangar?**
A I wasn't on shore, so I didn't know what they did with it once it got to shore.
**Q Any other different observations other than you could now see the --**
**Was all the black substance, slimy, greasy, oily substance that you had seen on the screw all on the deck, was that all gone and all you saw is the gunmetal of the screw?**
A I think for the most part the substance that was on the screw was gone when we witnessed it on the shore.
THE VIDEOGRAPHER: I need to change tapes. This is the end of tape one in the videotape deposition of Scott Patterson. We are going off record at 11:27 a.m.
(Recess taken)
THE VIDEOGRAPHER: This is the beginning of



tape two in the videotape deposition of Scott Patterson. We are going back on the record at 11:34 a.m.
**Q MR. FRANKEL: How long did you observe the jackscrew and the horizontal when it got back to shore?**
A At the time I got back to shore they had the horizontal stabilizer supported in the hangar with the jackscrew still attached. And about a half an hour later they started to process of removing the jackscrew from the horizontal stabilizer to send it back to Washington. So I think I got to look at it for about an hour before it was removed and shipped back to Washington.
**Q On the jackscrew, after you had, when you were observing it back at the hangar at the naval station at Point Hueneme and it was being removed, did you observe any substances on the jackscrew itself other than just simply seeing the gunmetal color of the jackscrew?**
A Other than it looked a lot cleaner and you could see the gunmetal on it, I don't recall any other details.
**Q So nothing red or green on it?**
A I don't recall.

**Q Have you ever seen the jackscrew or the horizontal stabilizer since?**
A The jackscrew I haven't seen since. The horizontal stabilizer, we spent a considerable amount of time with over the next two weeks examining that.
**Q You were examining it in your capacity as -- for what purpose?**
A I was a member of the structures group, and I went back to Washington for about a week and then went back on site.
And at that time they had started the sequencing group or had already started the sequencing group. So I picked up on where Gerardo left off with the sequencing group in looking at the whole tail assembly to determine sequencing of events.
**Q Did the horizontal stabilizer itself remain at Point Hueneme during this period?**
A Yes.
**Q And it was only the jackscrew as far as you know, that was transported to Washington?**
A That, and I'm, I think the gimbal nut was also removed and sent back to Washington.
**Q Did you --**
**I take it based on your earlier testimony that you did not observe the recovery of the gimbal**



**nut.**
A That's true.
**Q Have you ever seen the gimbal nut from the accident aircraft since it was recovered?**
A Yes.
**Q Where were you when you first saw it?**
A I was in the hangar when they brought the component into the hangar.
**Q You were at the, this is the naval station at Point Hueneme?**
A That's correct.
**Q When in relation to the 8th, 9th and 10th of February, in connection with your participation in the recovery operation of the jackscrew and horizontal stabilizer and the other components you have described, did the gimbal nut get recovered?**
A During the 8th, 9th and 10th.
**Q No, when in relation to that? I assume it was after.**
A I think it was recovered within the next two days after the 10th.
**Q You were in the hangar when the gimbal nut was brought --**
**Was it brought by ship back to Point Hueneme, or how did it arrive? Or if you don't**



**know, you don't know.**
A I don't know. It came back with several other components that they recovered. I don't remember how it came back.
**Q Did you get to observe the gimbal nut?**
A Yes.
**Q From what distance were you when you first saw it?**
A I was within inches of the gimbal nut, looking at it.
**Q What did you observe?**
**Where was it situated when you first saw it at the hangar?**
A It was sitting on the hangar floor. So we were basically looking at it from standing level all the way down to viewing it closer than that.
**Q What did you observe from a physical perspective in connection with the gimbal nut?**
A For the gimbal nut, that the threads were no longer on the inside of the gimbal nut and there was red grease at the top of the gimbal and in the area around the upper portion of the gimbal nut where it ties into the structure of the vertical stabilizer. And I think there is some pretty good pictures that were taken that show what the gimbal nut looked like



sitting on the hangar floor.
**Q Who took those pictures?**
A I don't know who on the structures team took pictures of that, but there were pictures available. I'm not sure who took the pictures.
**Q But this was in contrast to the pictures taken by the cook on the --**
A The cook didn't take any pictures in the hangar. He stayed on the ship.
**Q This was the,this was someone on the structures group, as far as you know, that was --**
A Yes.
**Q -- actually taking the pictures?**
A Yes. Involved with the NTSB.
**Q So the gimbal nut, it was sitting on the hangar floor?**
A Right.
**Q And you were looking?**
A Down.
**Q You could look down on it and you could look around it?**
A Right.
**Q And you saw grease on the top?**
A On the upper surface.
**Q On the upper surface?**

A On the upper surface.
**Q Red grease?**
A Yes, red grease.
**Q Where else did you see red grease?**
A I believe the red grease was where the gimbal nut ties into the structure of the vertical, there was grease in the area, in that area also.
**Q That would have been where?**
**From your observation, was that on the top? Was it on the sides?**
**In terms of how you were looking at it, where did you see the grease, the other grease, other than on the top?**
A You could see some grease down inside the nut. And I'm not sure where around the top of it, what actually the components were. But it looked like there was grease in local areas, looking down from the top.
**Q Red grease?**
A Red grease.
**Q Could you see any grease fittings on the gimbal nut?**
A I didn't observe the grease fittings on the gimbal nut.
**Q Do you know whether there are any grease**



**fittings on a gimbal nut?**
A I believe there are.
**Q Do you know whether there is a Zerk fitting on a gimbal nut?**
A I believe it's a Zerk fitting. I'm not sure.
**Q But apart from a Zerk fitting, are there other grease fittings on a gimbal nut?**
A I'm not sure.
**Q Did you observe any grease or what appeared to be grease to you -- I'm just trying to get your best observation of where you saw red on the gimbal nut.**
**You have told us you saw it on the top. You saw it inside. Where else did you see it?**
A I'm not sure what components attach that in there. But it looked like there was grease on components around the nut. I can't be specific on what those components are.
**Q Did it look --**
**In terms of seeing red, was it just little specs of red or was it blotches of red?**
A It was more of a blotch than a speck.
**Q Okay.**
**I mean in terms of diameter or size, how**



**would you describe the red that you saw on the gimbal nut?**
A I don't know if I can get into that much detail. I didn't study it that close.
**Q Did you see any green, any evidence of any green substances appearing on the gimbal nut?**
A I don't remember green.
**Q Other than seeing this red substance, did you see any other substances on or around the gimbal nut?**
A Not that I can recall.
**Q Other than the red substances, could you just see the metal and was it --**
A The metal of the eye.
**Q You said before, for example, when you saw the jackscrew back in the hangar, you could just see the gunmetal.**
A Right.
**Q I'm asking on the gimbal nut, apart from seeing the red substances, what else did you see on the gimbal nut?**
A You could see the metal on the gimbal nut. And it looked shiny on the inside.
**Q What about outside?**
A I was basically looking down the center of



it. So I don't remember what the outside of it looked like.
MR. READ: Could you establish whether the gimbal nut was opened up while the witness was looking at it.
**Q MR. FRANKEL: Was the gimbal nut opened up?**
A Opened up as in disassembled?
**Q Yes.**
A No.
**Q It was still intact?**
A It was still intact and still attached in the mount in the vertical stabilizer.
**Q The gimbals were around the nut?**
A Yes.
**Q The Acme nut?**
A Yes.
**Q Did you --**
**And how long did you spend observing the gimbal nut approximately two days after you had observed the jack screw and horizontal stabilizer?**
A Probably 15 or 20 minutes.
**Q Did you make any writings recording your observations?**
A No, I didn't document what I saw on that.

There were other components that were coming into the hangar at the time that we were looking at various components as they came in.

**Q Did the gimbal nut remain in the hangar at Point Hueneme, or was it too transported back to Washington?**

A It was removed from its mounts and sent, I believe it was sent back to Washington.

I'm not sure where it was sent, but it was shortly, as with the jackscrew, removed from the structure and shipped out of the hangar.

**Q Other than your observation of the gimbal nut some two days or so after the 10th, roughly, of February of 2000, have you ever seen it again?**

A No.

**Q And other than your observation?**

A Other than pictures of it?

**Q Other than pictures.**

A Other than pictures, no.

**Q And other than pictures, other than pictures of the jackscrew, apart from your observation when it was returned to the hangar at Point Hueneme, and then so far as you know sent to Washington, have you ever seen it since?**

A No.



**Q Now, you had testified earlier this morning that when it came to the NTSB public hearing in December you prepared something in connection with your observations back in February?**

A Yes.

**Q You did so --**

A It was primarily on the jackscrew. It did not contain gimbal nut information.

**Q And you did that at who's request?**

A The company's request.

**Q Who at the company requested that you do so?**

A I don't remember who it was.

It was at the time of the hearing and it seemed that they wanted what information the people on the ship had observed since they went back at the public hearings. So we wrote up what we observed and faxed it back.

MR. FRANKEL: Let's mark as Exhibit 184 a two-page document bearing Bates numbers A00001317 through A0013418.

(Defendants' Exhibit 184 was marked for identification)

**Q MR. FRANKEL: I've had the court reporter marked and it's been handed to you, Mr. Patterson**



**Exhibit 184. The first page appears to be a fax transmission sheet from Terry Clark, party coordinator to Richard D. Rodriguez at the NTSB. And the second page appears to be the letter that was faxed to Mr. Rodriguez by Mr. Clark.**

**Have you ever seen these documents before?**

A I have never seen this letter before. This wasn't the letter I was referring to that I wrote. This looks like a summary, what was on the letter that I wrote.

**Q The letter that you wrote, was it a letter directed to someone or was it just a memorandum?**

A I think it was a just a memorandum.

**Q Have you retained that memorandum?**

A I have it on my computer at work, yes.

MR. FRANKEL: If anyone has a Bates number on that memorandum, I certainly haven't found it.

MR. READ: I haven't found it.

Do you know if it's been produced?

MR. JAQUES: I don't know offhand.

MR. FRANKEL: I know that we have searched and we couldn't find it. And you know, I would make a request that it be produced.

**Q MR. FRANKEL: Focusing on the second paragraph of Mr. Clark's letter --**



**First of all, who is Mr. Clark?**

A Mr. Clark is the party coordinator for Alaska Airlines on the crash investigation.

**Q Was he the person to whom you reported in connection with your work on the investigation following the crash?**

A Yes.

**Q Mr. Rodriguez, do you know who he is?**

A Yes. He is the chief investigator of the accident.

**Q Did you have interactions with Mr. Rodriguez in connection with your work following the crash?**

A Yes.

**Q Now, the second paragraph on page two of the exhibit, you believe that that was taken from the memorandum that you prepared?**

A I believe it was, yes.

**Q Did you -- do you recall having any discussions with Mr. Clark back in November of 2000, before this letter was prepared to Mr. Rodriguez, where you discussed with Mr. Clark the observations that you had back in February of 2000?**

A There may have been. I don't remember if it was.

**Q Now, the first paragraph of Mr. Clark's letter notes that it was his understanding at least, that the NTSB had requested the identity of individuals who possess a sense of knowledge that there was grease on the jackscrew assembly following its recovery; correct? That's what the first paragraph of the letter --**

A That's what the first paragraph reads, correct.

**Q And I'm correct, at least based on your earlier testimony, that you don't know whether there was grease on the jackscrew or not?**

A I don't think I said that.

I said there was greasy, gritty substance on the jackscrew. I don't think --

**Q But you don't know what the physical characteristics of that substance were? You don't know whether it was grease or some other substance?**

A That's true.

**Q Now, it says in the second paragraph of Mr. Clark's letter that "on February 8th the Acme screw upper and lower mechanical stops were recovered from the ocean floor by the M/V Independence."**

**When the jackscrew and horizontal stabilizer were recovered, did you see the lower and**



**upper mechanical stops?**

A The upper mechanical stop was still attached on the screw, up by the upper gearbox. And the lower stop was the part that I said fell out of the horizontal stabilizer as they were lowering it onto the deck of the ship.

**Q Now, the next sentence says that "after sand was hosed off of the Acme screw," is that the reference or is that a reference as far as you understand it, to the use of the garden hose?**

A That may be the reference to the garden hose.

**Q Did you see sand on the jackscrew?**

A Grit, sand.

**Q Then notes that you, together with Mr. Key, who were assisting with the recovery effort on board the ship, observed grease-like substance coating the outside of this Acme screw.**

**And the grease-like substance that you observed, was this black, sort of slimy, gritty substance that you previously described?**

A That's true.

**Q And so the record's clear, you never touched it; right?**

A Right.



**Q And you don't know whether it was grease or silt or what the physical characteristics of the substance you observed were?**

A I don't know what the physical characteristics of the substance was, that's correct.

**Q Now, the next paragraph references the systems and structures working groups examining the screw on February 9th.**

**Does that reference your examination of those components, as far as you know, at the hangar?**

A Yes, that is probably most likely what the people at the hangar were looking at.

**Q Now, the next paragraph makes reference --**

**Which group were you a part of, the systems or the structures working groups?**

A The structures.

**Q Were you present --**

**Was Mr. Leiper and Mr. Hueto present at any time on the 9th of February during your exam while you were at either on the boat on the ship or at the hangar?**

A They were not on the ship. They were at the hangar.

**Q Were you present with them when -**

**Were they present when you were observing**



**at least the jackscrew when it had been returned to the hangar that next day, the 9th of February?**

A When I got to the hangar, after we brought the vertical stabilizer back to shore when the Independence came on shore, I know we were all present when they were removing the jackscrew from the horizontal in preparation for having it shipped back to Washington.

**Q I guess what I'm trying to understand, when you next saw the jackscrew in the hangar you said that it had been cleaned in some fashion because you could see the gunmetal.**

**And what my question is: Was Mr. Hueto and Mr. Leiper present with you at the time you were making those observations?**

A I don't remember if they were or not.

They were in the area. I don't know if they were standing right next to me.

**Q Now, at least when you saw the jackscrew back in the hangar, am I correct that when you saw it you did not observe any grease-like substance on it?**

MR. JACQUES: On what?

**Q MR. FRANKEL: On the jackscrew.**

A I don't remember the details.

I remember that it looked cleaner. I don't

know if it looked spic and span or -- it looked a lot cleaner than it did on the ship. And that's about all I remember.

**Q But in contrast to what you observed on the ship, when you got back to the hangar you didn't see any black silty, greasy substance that you can recollect?**

A I didn't see the grit and grime that was on the screw back at hangar.

**Q And you didn't see any grease-like substance on the screw back at hangar that you can recollect?**

A I don't, I don't recall if there was or wasn't.

**Q Now, when the Acme nut, the gimbal nut were returned to the hangar at the Point Hueneme Naval Station, do you recall whether Mr. Hueto and Mr. Leiper were present at that time?**

A They were present at that time.

**Q Do you recall ever seeing Mr. Hueto make a tactile examination of the Acme nut?**

A I didn't remember if he did or didn't.

**Q Do you see in Mr. Clark's letter in the third paragraph, last, next-to-the-last sentence --**

A Which one are you referring to?



**Q It says, "Mr. Hueto made a further tactile exam of the Acme nut by physically taking his bare finger and rubbing the inside of it where the threads used to be."**

A I think what that paragraph is referring to is when the jackscrew first came ashore and was put in the hangar. And at that time I was still on the Independence when that was taking place.

**Q If you look at sentence, it was referring to the nut.**

A And on the 9th I was still on the Independence.

**Q Let me try to clarify this.**

**I thought that you had testified earlier that you were at the hangar when the gimbal nut first was returned to the Point Hueneme Naval Station from the ship.**

A If I did say that, I was mistaken.

What I thought you were referring to is did I see the jackscrew when I returned to shore. And I did.

**Q Right?**

A Right. But I wasn't there when it was returned to shore. I was still on the ship.

**Q I understand that. I'm now talking about the gimbal nut.**



A Oh, the gimbal nut. I'm sorry.

**Q Am I correct in terms of what I thought I understood your testimony earlier, and that is that when the gimbal nut first made its way to the naval station at Port Hueneme after being recovered from the ship, that you were present when it first arrived?**

A That's correct.

**Q And do you recall whether Mr. Hueto was also present --**

A Yes, he was.

**Q -- when it first arrived?**

**And my question then is: On whatever date that was, I assume it was a couple of days after the 9th of February, probably the 13th or 14th of February --**

A I'm not sure of the date.

**Q The question I have is whether you observed Mr. Hueto when the Acme nut, the gimbal nut had been returned, making a tactile examination of it by physically taking his bare finger and rubbing the inside of the gimbal nut where the threads used to be, and that when he removed his finger from the Acme nut it had grease-like substance on it?**

A I vaguely remember him doing that.



**Q Do you recall what he did?**

**Did you observe him actually doing it?**

A I believe that I did. I, I'm not a hundred percent sure. I do know that he got a lot closer to the nut than I did.

**Q Did you --**

**Do you recall anyone else other than Mr. Hueto physically touching the gimbal nut?**

A I don't remember if anyone else ever touched the gimbal nut. I'm sure people probably did. I don't remember who did or --

**Q Do you recall what.**

**Do you recall what was on Mr. Hueto's finger after he conducted his tactile examination?**

A I seem to remember it was the same red grease that was sitting on the top of the gimbal nut and in the area.

**Q Do you recall anyone telling Mr. Hueto that he shouldn't be doing that?**

A No.

**Q In connection with at least preparing your memorandum describing what you had observed back in February of 2000 -- now in November or December of 2000 -- do you recall speaking to anyone in the November-December time frame about your observations?**

A I may have discussed it with Terry Clark over the phone what my observations was.
**Q Anybody else?**
A No. Maybe Gerardo. I may have discussed it with Gerardo.
**Q Do you recall -- well, strike that.**
**Between February, when you first had your physical observations of both the jackscrew and the gimbal nut, and November-December of 2000, do you recall whether you spoke to anyone in that interim period about your observations concerning the physical characteristics, condition of either the jackscrew or the gimbal nut when you saw them in February?**
A I don't recall --
**Q So --**
A -- specifically.
**Q So the only recollection that you have of next talking about your observations, other than having seen, observed them firsthand in February, was months later, in November and December of 2000?**
A That's correct.
MR. JACQUES: Is now a good time for lunch break?
MR. FRANKEL: You mean lunch?
MR. JACQUES: Yes.



THE VIDEOGRAPHER: Going off record, 12:10 p.m.
(At 12:10 p.m. the deposition was adjourned for noon recess.)
(At 1:40 p.m. the deposition of QUINTON SCOTT PATTERSON was reconvened with the same persons present)

THE VIDEOGRAPHER: We are going back on the record 1:40 p.m.
MR. FRANKEL: I would like to have marked as the next exhibit in order -- would that be 185 -- a one-page document dated December 8, 2000, and it appears to have been signed by Mr. Patterson.
(Defendants' Exhibit 185 was marked for identification)
**Q MR. FRANKEL: I have had placed before you and marked, Mr. Patterson, Exhibit 185, December 8th, 2000 appears, memorandum "To whom it may concern."**
**Is that your signature that appears at the bottom?**
A Yes.
**Q And is this the memorandum that you referred to during your testimony this morning that you prepared in connection with the NTSB public**



**hearings?**
A Yes.
**Q Did you prepare it on the date it bears: December 8th, 2000?**
A Yes.
**Q Did you prepare a number of drafts or was this the only document that you prepared?**
A I did it on the computer. That was the only document.
**Q Who did you give this to when you prepared it on December 8th?**
A I believe it was Terry Clark. I'm not a hundred percent sure on that.
**Q Prior to giving it to Mr. Clark, did anyone other than yourself review it?**
A No.
**Q Did Mr. Clark ask you to make any changes to it after he first saw it?**
A No.
**Q The memorandum reflects that it was on February 7th, 2000 that there was first an indication of locating the horizontal stabilizer on the ocean floor; is that correct?**
A Let me read that for a second.
**Q Take as much time as you need.**



A It looks like, on this, the dates of the 7th and the 8th.
**Q Is this one of the document you reviewed prior to your deposition today?**
A No.
**Q Now, were you on the Independence on the 7th of February when the first indication came that the horizontal stabilizer and jackscrew had been located on the ocean floor?**
A I was on the Independence. I'm not sure what the dates were that they were out there.
**Q Did you keep a calendar? Because you're preparing this memorandum in December of 2000, recollecting events that occurred several months before in February?**
**How did you, how were you able to establish the dates that these events took place in December in preparing this memo?**
A I think I was going back from an Alaska Airlines engineering order that was issued to go inspect the horizontal stabilizers and backing up from that date as a reference point.
**Q When you say there was an engineering order --**
A Yes.

**Q -- can you describe what, when you received the engineering order?**
A When the jackscrew went on shore the, in the, was found that the threads were stripped and were on the jackscrew, the guys that were on shore had a conversation with the guys back at the office about preparing a document to go look at the other MD-80s for general condition and of the jackscrew assemblies. And Alaska Airlines launched a fleet-wide inspection of the MD-80 fleet that evening.
**Q The evening of February 8th or some other evening?**
A I would have to look at the engineering document to know that for sure.
**Q So there was, once the jackscrew and horizontal stabilizer were back on shore, who was it -- you said the guys at the hangar talked to people back at headquarters.**
**Who are they walking about?**
A Gerardo Hueto was the one that was communicating back with engineering in Seattle. I don't know who he was talking to back in Seattle. But based on their discussion, Alaska put together an inspection document to go out to check the fleet that evening.



**Q I'm just trying to understand the timing of it.**
**The jackscrew assembly did not arrive on the ship, at least according to your memorandum, until the morning of the 8th of February?**
A Right.
**Q Correct?**
A Yes. That's what that says.
**Q Was it sometime later that day or the next day, the 9th, that the jackscrew and horizontal stabilizer arrived on shore?**
A The horizontal stabilizer arrived on shore the same day as it was brought aboard the ship.
**Q So that would have been sometime on the 8th?**
A Sometime on the 8th.
**Q Was it sometime after the stabilizer and jackscrew arrived on the ship and made it to the naval station at Point Hueneme that the order, the engineering order to inspect Alaska's fleet of MD-80 aircraft was put into motion by Mr. Hueto?**
A Yes.
**Q So that order went in force sometime on the evening of February 8th?**
A I'm not sure if it was the evening of



February 8th. But the document will have it date of when it was issued.
**Q And based on that order, that engineering order, you went back and reconstructed these events that are reflected in Exhibit 184?**
A Based on the date of the engineering order, I backtracked from that date.
(Off-the-record discussion)
**Q MR. FRANKEL: Directing your attention to the next-to-the-last paragraph of your memorandum where it says, "I observed the jackscrew itself was very dirty and had areas with grease and grime," I think, as you testified earlier, you don't know whether it was grease or grime; do you?**
A It looked like grease.
**Q But you didn't do any physical examination, so you don't know what it was?**
A No.
**Q Was it a barge or a shuttle boat that took the stabilizer to shore?**
A Not being a ship --
It looked like a barge.
**Q Do you know what was done with this memorandum after you prepared it?**
A No.



MR. FRANKEL: I would like to mark the next series as sort of a group exhibit. I have black and white copies for everybody, but the copy that I'm going to give to the court reporter is color. If people want color copies, we can have them made overnight. This will be Exhibit 186-A, 186-B, 186-C.
And I will represent for the record that those were pictures that were downloaded from the NTSB web site during the lunch recess.
(Defendants' Exhibit 186-A through 186-C were marked for identification)
**Q MR. FRANKEL: Before you is a set of four photographs marked as Exhibits 186-A through D.**
**Have you ever seen these photographs before?**
A Yes.
**Q Were these photographs that were taken while on the ship or while on the Independence or after the jackscrew assembly -- at least for the first two pages of the Exhibit, A and B -- made it to shore?**
A These were after it was taken to shore.
**Q Are these pictures, so far as you know, that were taken by representatives of the NTSB?**
A I have no idea who took the pictures.
**Q Do you know where these --**

With respect to Exhibit 186-A, that's a picture of the jackscrew?
A Yes.
Q And do you know where this picture was taken? Is this in the hangar or is it somewhere else?
A It looks like it's outside the hangar. I don't know where it is outside the hangar.
Q Did you ever see the jackscrew outside the hangar?
A No.
Q Turning to 186-B, do you know where that picture was taken?
A It looks like it's outside the hangar also.
Q You never saw the jackscrew outside the hangar?
A No.
Q From the at least the color photograph of both 186-A and B, is that what you recollect the jackscrew looking like when you saw it in the hangar?
A Yes.
Q And the same is true for both 186-A and B?
A Yes.
The only difference in the hangar is it had shoring supports under it.
Q 186-B, am I correct that the horizontal



stabilizer is visible being attached to the top of the jackscrew; is that correct?
A Could you repeat that?
Q Is the horizontal stabilizer attached to the top of the jackscrew?
A Actually, the jackscrew is mounted to the front of the horizontal stabilizer; the center box of the stabilizer.
Q But, and 186-A the stabilizer is not visible on that picture; is that correct?
A The lower surface of the stabilizer is.
Q Is that at the top --
A That's at the top of the picture.
Q And in 186-B you can see the entire stabilizer structure; can't you?
A With the exception of the motors at the top and --
Q Directing your attention now to 186-C, do you know what that's a picture of?
A There's a picture of the vertical stabilizer structure that contains the gimbal nut.
Q Do you know where this picture was taken?
A No, I don't.
Q If you look.
Am I correct that in the center of that



photograph you see a raised part and a circular part, is that where the gimbal nut is?
A Yes.
Q Did you see the gimbal nut in this condition when you observed it at the hangar when it first arrived?
A Yes.
Q Are the red references on Exhibit 186-C, the red markings, is that the red grease-like substance that you had indicated before that you saw?
A I believe it is, yes.
MR. LEBOVITZ: Does he have a color one?
THE WITNESS: Yes.
MR. LEBOVITZ: I want you to point out what --
THE WITNESS: (Indicating). The next picture has.
Q MR. FRANKEL: Where is the grease that you were pointing to?
A You see the grease here, smeared on the side.
Q What's that in there?
A It's that inside.
Q If you turn back to 186-C, all the red indications in the color photograph before you are



what you at least identified previously as being what you thought was a grease-like substance; is that correct?
A I'm not sure about this stuff down on the side here. I know the stuff in and around the nut.
Q Did the grease --
Does this red grease-like substance that you saw, did it appear wet, dry?
Could you speak to that?
A Did it appear wet or dry?
Q Did it appear --
How did the grease appear? Did it appear to be dried grease, wet grease?
A I didn't look at it to make a determination at that part during --
Q Was it shiny?
A Was the grease shiny?
Q Was it shiny?
A I don't remember.
What we were doing in the investigation at that early stages, I wasn't focusing primarily on grease, we were looking more at structures because we were in the structures group. So I didn't do a ot of in-depth study of the grease at the time.
Q You don't know whether it was grease or

not?
A It appeared to be grease.
**Q But you --**
**It looked like grease, but you didn't do any physical examination?**
A I didn't do any physical examination.
**Q If we turn to 186-D, that's a close up, more close up photograph of the gimbal nut; is that correct?**
A That's correct.
**Q There are various red, what appear to be blotches around the perimeter.**
**You see those?**
A Yes.
**Q Was that the red grease-like substance that you had previously identified that you had seen?**
A I was referring -- when I said the top, I was referring to the substance that was up here and down in this area where the gimbal nut attaches into the mount structure or the horizontal stabilizer has a fitting that ties in the gimbal ring that holds the nut.
**Q Were you present when these photographs were taken; to your knowledge?**
A I don't know when they were taken, so I



don't know if I was there or not.
**Q Do you know where these photographs were taken?**
A I don't know where the photographs were taken. I would assume they were in the hangar. I don't know that for a fact.
**Q Is 186-D, does that represent a -- at least as far as you can recollect -- an accurate reproduction of how you saw the gimbal nut appear when you first saw it in the hangar at Point Hueneme on February 10th-11th of 2000.**
A Yes.
**Q Have you had any occasion to read the systems group chairman's factual report concerning the NTSB investigation, at least the final draft dated as of February 9th, 2000?**
A No, I haven't.
**Q Did anyone ever tell you that in connection with the NTSB, at least the systems group chairman's factual report, final draft dated as of November 9th, 2000, that there was no visible evidence of grease on the Acme screw along the length where it normally travels within the Acme nut upon its recovery?**
A I remember hearing that that came out of the NTSB. I didn't remember what format that came out



of.
**Q Did you ever have any discussions with anyone about that conclusion or finding?**
A Did I have any discussions?
**Q Or discussions or --**
**Did you ever have any discussions with anyone about the system group's chairman's factual report of the investigation concerning the fact that there was no visible evidence of grease on the Acme screw along the length where it normally travels within the Acme nut upon its recovery?**
A Since I didn't know what the contents of what the report was, I didn't have any discussions with anybody.
**Q Did anyone tell you that since the factual report was issued, the final draft of the system group's chairman's final report was issued as of November 9th, 2000 that they needed you to provide your recounting in an attempt to rebut that determination?**
A No.
**Q Do you disagree with what the NTSB chairman's final report states with respect to no visible evidence of grease on the Acme screw along the length where it normally travels within the Acme nut**



**upon recovery?**
A Without knowing what the circumstances that are surrounding that, I don't know if I can agree or disagree with that.
**Q Did you have any involvement in assisting Alaska Airlines in any way with this re-inspection of the fleet that was launched on February 8th or thereabouts concerning its jackscrew assemblies on MD-80 aircraft?**
A No.
**Q If you could direct your attention to Exhibit 113 --**
A (Complying)
**Q -- Exhibit 113 is from the NTSB docket Exhibit 9-J and its an FAA Airworthiness Directive.**
**Do you know what an Airworthiness Directive is?**
A Yes.
**Q What is an Airworthiness Directive?**
A An Airworthiness Directive is issued by the FAA and it's a mandated action to be taken on certain model aircraft within a specific time period.
**Q Did you become aware on or about February 11th of 2000, that the FAA had directed operators of DC-9, MD-80 and other aircraft to conduct**

examinations and inspections of their jackscrew assemblies?
A Yes, I was aware of that.
Q Did you receive a copy of the Directive at the time?
A At the time, I did not.
Q How did you become aware of it?
A We heard about it down on site; on the crash site.
Q Did the Federal Airworthiness Directive come before or after Alaska began reinspecting its own fleet?
A After.
Q Did you have any role in connection with taking any action on behalf of Alaska in connection with Exhibit 113, the Airworthiness Directive issued on February 11th?
A No.
MR. FRANKEL: Let's mark as Exhibit 187 a document bearing Bates numbers MB0017523 through MB0017541.
(Defendants' Exhibit 187 was marked for identification)
Q MR. FRANKEL: Exhibit 187 is a service bulletin issued by Boeing and McDonnell Douglas on or



about February 11, 2000.
Did you ever have occasion to see Exhibit 187 before?
A Yes.
Q Did you see it on or about February 11th, 2000?
A I didn't see it on February 11th. I saw it at a later date.
Q Do you recall when the first time was?
A Probably two weeks after I got back to the office. Which was probably around mid-February; February 15th through the 20th.
Q Did you routinely receive McDonnell Douglas service bulletins?
A Did we --
Q Did you routinely, in your capacity in your engineering positions at Alaska Airlines, receive service bulletins issued by Boeing and McDonnell Douglas?
A Yes.
Q From your review of Exhibit 187, did you understand at the time that, like the Federal Airworthiness Directive, it called for operators of MD-80, DC-9 aircraft to do checks and re-inspections of their jackscrew assemblies?



A I would like to clarify that. I didn't receive this one when it came in. The systems group at Alaska Airlines received this one and worked it.
Q But you got a copy sometime in February of 2000, a couple weeks after it was issued; correct?
A I saw a copy of it.
Q Did you read it?
A I didn't read the whole thing.
Q Did you learn that apart from the Federal Airworthiness Directive that you previously examined as Exhibit 113 that Boeing and McDonnell Douglas had issued a service bulletin asking for operators of MD-80 aircraft and other derivative aircraft to reexamine, reinspect their jackscrew assemblies?
A Yes. The AD actually references this service.
Q And that's on, if you turn to Exhibit 113 --
A Page four of six.
Q -- page four of Exhibit 113; correct?
A Exhibit 113, page four of six, paragraph A references to do the inspections in accordance with the bulletin.
Q You became aware of both the FAA Airworthiness Directive and the Boeing/McDonnell



Douglas service bulletin, Exhibit 187, in February of 2000?
A Yes.
Q But you had nothing to do, at least from Alaska's perspective, in terms of implementing either one?
A Engineering in Seattle implemented the paperwork to do the inspections there in accordance with the AD.
I was down on site in Oxnard, still with the on-site work.
Q Do you know what a BOECOM message is?
A Yes.
Q Did you routinely receive BOECOM messages in your capacity as Alaska Airlines?
A I received some of the BOECOM messages.
Many BOECOM messages that come in don't all go to engineering. So I don't receive 'em; all the BOECOM messages.
Q What is your understanding what a BOECOM message is?
A We refer, at Alaska Airlines we refer to them as Boeing telexes. And it's information that we can request information from the Boeing Company, and it's their vehicle to respond to our requests. Or

Boeing wants to provide information to the airline, that's a vehicle that they do that with.

MR. FRANKEL: Let me mark as Exhibit 188 a two-page document bearing Bates numbers AABOEO1 00044 through 00045.

(Defendants' Exhibit 188 was marked for identification)

**Q MR. FRANKEL: Before you, marked as Exhibit 188, is that a BOECOM message as far as you understand it?**

A Yes.

**Q This was directed to Mr. Davey at Alaska Airlines from the Boeing Company?**

A It looks like it.

**Q Was he who you were reporting to in February of 2000?**

A No. I was reporting to Jay Maloney in February of 2000.

**Q This is dated February 9th, 2000; correct?**

A Correct.

**Q This preceded both the Airworthiness Directive and the service bulletin; correct --**

A That's correct.

**Q -- Exhibit 113 and 187?**

**Do you recall ever having seen Exhibit 188**



**before?**

A I recall seeing it after the fact.

**Q And when after the fact would you have seen it first?**

A Probably between the February 15th to February 20th time.

**Q And in this BOECOM message to Mr. Davey, Boeing was requesting information on jackscrew assemblies and also asking operators like Alaska to do a jackscrew test; correct? An end-play check test?**

A That's what it appears to say.

**Q I take it that you had no role in taking any steps in connection with this BOECOM message?**

A No.

MR. FRANKEL: Let me mark as Exhibit 189 a document bearing Bates numbers MB00170542 through MB00170562.

(Defendants' Exhibit 189 was marked for identification)

**Q MR. FRANKEL: Before you is another Boeing/McDonnell Douglas service bulletin that appears to have been issued on February 12th. Has a revision to Exhibit 187 as a revision one.**

**Do you recall having seen Exhibit 189 before?**



A Yes, in that same, after the fact --

**Q Exhibit 189 made a modification to the original service bulletin; Exhibit 187?**

A Seven.

**Q So you would have seen this again in, sometime in February of 2000?**

A Yes.

**Q But you had no role in pursuing any action in connection with this revised revision one to the service bulletin that Boeing and McDonnell Douglas issued?**

A That's correct.

MR. FRANKEL: Let me mark as Exhibit 190 a two-page document that bears Bates numbers MB00202286 through MB002022, I think it's 85 to 86. Its MB00202285 to 286.

(Defendants' Exhibit 190 was marked for identification)

**Q MR. FRANKEL: Before you is Exhibit 190, a two-page document.**

**Is that another BOECOM message?**

A Yes.

**Q It's dated February 10th of 2000; isn't that correct?**

A It's dated February 9th. It looks like the



same identical document as item 188.

**Q At the top there is a date that I see as "10 February 2000."**

**Do you see that?**

A Yes, I do see that.

**Q There is a difference between the two in that Exhibit 188 references Mr. Davey, and I don't see a Mr. Davey referenced on the face of Exhibit 190.**

A What I was referring to is the Boeing telex number, M-7200-00-00456, is the same identical Boeing telex number that is on Exhibit 188, with the same date.

**Q From the telex number, is that a way you can determine whether at least it's the same telex message?**

A Yes.

MR. FRANKEL: Let me mark as the next Exhibit 191. And it bears Bates numbers MB00170587 through MB00170610.

(Defendants' Exhibit 191 was marked for identification)

**Q MR. FRANKEL: Before you as Exhibit 191 is a revision two, dated March 30th, to the service bulletin that had been issued on February 11th, 2000 and previously marked as Exhibit 187 here; is that**

correct?
A Yes.
**Q Did you see Exhibit 191 on or about March 30th of 2000?**
A No.
I was working in the structures group, and the service bulletins associated with the inspections of the jackscrew were done in the systems group. Which was not in my area of responsibilities.
**Q Did you ever see Exhibit 191?**
A At a later date, I probably did.
**Q Do you have any reason to believe that Alaska Airlines did not receive this on or about March 30th of 2000?**
A Could you restate the question?
**Q Do you have any reason to believe that Alaska Airlines did not receive Exhibit 191 on or about March 30th of 2000?**
A No.
MR. FRANKEL: Let me have marked as Exhibit 192 a two-page document bearing Bates numbers MB00213458 to MB00213459.
(Defendants' Exhibit 192 was marked for identification)
**Q MR. FRANKEL: Before you as Exhibit 192,**



**BOECOM message; is that correct?**
A That's correct.
**Q This BOECOM message is the number S7200-00-00974, dated 13 of April 2000; correct?**
A Correct.
**Q Did you see this BOECOM message on or about February -- April 13th, 2000?**
A No, I did not.
**Q Did you see it sometime thereafter?**
A At a later date, probably several months after this date.
**Q Several months after April.**
**Did you have any reason to believe Alaska Airlines did not receive it on or about the 13th of April, 2000?**
A No.
**Q Now, between February of 2000 and April of 2000 I'm correct, am I not, Mr. Patterson, that you had no involvement in doing any work in connection with the rechecks of jackscrew assemblies?**
A That's correct.
**Q And your understanding, I assume -- let me strike that.**
**I assume that it was your understanding, at least from the time that Alaska Airlines issued its**



**that's a BOECOM message?**
A Yes.
**Q That appears to be dated, based on the telex number 7200-00-00973, as of April 13, 2000; correct?**
A Yes.
**Q Did you receive a copy of this BOECOM message on or about April 14th?**
A I did not receive this BOECOM message.
**Q Did you ever see it before?**
A Yes.
**Q When did you first see it?**
A I don't recall the date I first saw it. It was after April 2000.
**Q After April 2000.**
**Do you have any reason to believe that Alaska Airlines did not receive it on or about April 13th, 2000?**
A No.
MR. FRANKEL: Let me mark as the next exhibit, 193, Bates numbers MB00213460 through MB0213461.
(Defendants' Exhibit 193 was marked for identification)
**Q MR. FRANKEL: Exhibit 193 is another**



**engineering order through the issuance of the service bulletins, Airworthiness Directives in the February time period, that Alaska Airlines, as well as all other operators of MD-80 aircraft and other derivative aircraft were supposed to recheck their jackscrew assemblies and do end-play checks on them; is that correct?**
A That was kind of a long question. But it was my understanding that, yeah, that the service bulletins that were issued with the AD were mandated to be complied with in that time period.
**Q Did you understand that in complying with the Airworthiness Directives and the service bulletins that operators like Alaska Airlines, who operated MD-80 aircraft, were to do end-play checks on their jackscrew assemblies?**
A Yes.
**Q And in connection with --**
**First of all, have you ever done an end-play checks yourself on a jackscrew assembly?**
A No.
**Q In connection with doing an end-play check, did you have an understanding in February of 2000 that a particular tool was needed in order to perform an end-play check?**

A Yes.
**Q And that was a restraining fixture?**
A That's correct.
**Q Had you ever seen a restraining fixture prior to February of 2000 at Alaska Airlines?**
A No.
**Q Did you see one in February of 2000?**
A Yes.
**Q Where did you see it?**
A Did I see one in February of 2000?
**Q 2000.**
**You said that you never saw one before February.**
A I wasn't involved with the end-play checks, but I was familiar with 'em after the AD came out.
I've seen pictures of restraining fixtures. I think the first time in February we had an airplane in the hangar in Seattle that was having an end-play check done to it.
**Q Did you see the restraining fixture that was being used to perform the end-play test?**
A Yes.
**Q Did you know at the time, in February of 2000, as to who manufactured that restraining fixture?**
A No. I didn't have enough details to



determine who manufactured it or not.
**Q Did you know in February of 2000 as to how many restraining fixtures Alaska Airlines had within its system?**
A No.
**Q Did you subsequently determine -- strike that.**
**After April of 2000, other than seeing an end-play check done -- this was in February of 2000 that you saw it being done?**
A Yes.
**Q Was this part of the carrying out the Airworthiness Directives and service bulletins --**
A Yes.
**Q -- that, when you saw it being done?**
**And you just saw one end-play check being done in that time frame?**
A Yes.
**Q And this was at the Oakland hangar?**
A No, this was in Seattle.
**Q Seattle hangar.**
**Did you ever see another end-play check being done, other than in February of 2000, in conformity with the Airworthiness Directives between February and April?**



A I've seen end-play checks being done in Oakland after that time frame.
**Q After April or between February and April?**
A After April.
**Q Did you observe the restraining fixture that was being used in connection with the end-play checks you observed in Oakland?**
A I saw the restraining fixtures, yeah.
**Q Could you determine, based on what you had seen being done in Seattle in February, whether the restraining fixture that was being used to perform the end-play check in Oakland after April was the same or similar to the restraining fixture that you had seen being used in February?**
A I didn't study the restraining fixtures that closely to determine which were which, so --
**Q Other than --**
**And how many end-play checks did you observe in Oakland being performed?**
A During what time frame?
**Q Between April of 2000 and August of 2000.**
A One or two.
Actually, it was one in Oakland. I only saw one end-play check being done in Oakland.
**Q And one in Seattle?**



A Yes.
**Q That's between February and August?**
A Right.
**Q In what connection were you observing these end-play checks being performed?**
A In what --
**Q Under what circumstances -- how did it come to be that you were observing end-play checks during that period?**
A I went down to observe the end-play checks to gain familiarity with the procedures being used.
**Q And you, that was why you saw it in Seattle first and Oakland thereafter?**
A No. The Seattle one, we had a circumstance with the aircraft that required structure support. So that's how I got involved with the Seattle one. The Oakland one was an information gathering trip.
**Q Did there come a time when you learned that the restraining fixture that Alaska Airlines had been using to perform its end-play checks, or at least some of its end-play checks, may not have been in conformity with the Boeing specification?**
A Could you repeat that question?
(The record was read as follows:
**Q Did there come a time when you learned**

that the restraining fixture that Alaska Airlines had been using to perform its end-play checks, or at least some of its end-play checks, may not have been in conformity with the Boeing specification?)
THE WITNESS: Yes.
Q MR. FRANKEL: When did you first become aware of that?
A I don't recall the date.
Q Approximately?
A I'm guessing late April time frame.
Q Late April of 2000?
A Yes.
Q And how was it that you became aware of that fact in April of 2000?
A It was brought to our attention that there were some differences in the Alaska tool and the Boeing tool. And the differences in the tool we could not guarantee what kind of readings it would take. We didn't know if it would produce the same results. We didn't know if it wouldn't produce the same results.
So what Alaska did is took a conservative measure to reinspect the airplanes that we could confirm were not done utilizing the Boeing-manufactured tools.



Q You had never heard anything about it before?
A No.
Q Did you learn from Mr. Hueto in the time of that conversation or at any time thereafter where the Alaska restraining fixture had been fabricated or manufactured?
A Where?
Q Yes.
A It wasn't discussed.
Q Did you ever learn where it was manufactured?
A No.
Q At that time did you -- in April of 2000 did you physically examine the Alaska restraining fixture and also examine a Boeing restraining fixture?
A No.
Q Did you ever examine, physically, the Alaska restraining fixture?
A I saw it. I didn't examine it.
Q When did you first see it, at least after Mr. Hueto brought this matter to your attention?
A Probably a couple days after.
Q What did --
Once Mr. Hueto brought it to your



Q With respect to your discovery in April of 2000, how did you, how did it come to your attention that this had occurred?
A It was brought to my attention by Gerardo Hueto, who was involved with the investigation.
Q Where were you when Mr. Hueto first brought it to your attention?
A Probably in my office.
Q Did he call you on the phone or did he come to see you?
A I don't remember if he came to see me or called me. We met during that day so --
Q What do you recall Mr. Hueto saying to you when you first learned about Alaska's tooling issue with respect to the restraining fixture?
A That there were differences in the tool.
Q Anything more than that?
A I can't recall anything more than that.
Q Did you learn at that time --
And I take it that's the first you'd ever heard about a potential problem with Alaska's restraining fixture was when Mr. Hueto brought it to your attention sometime in April of 2000?
A Yes.



attention, what if anything did you do?
A I, we sat down and worked out a planned book, Gerardo and myself, on immediately looking at which aircraft had had inspections done with the Boeing tool which, and which ones hadn't, to set forth with a game plan on how we were going to reinspect the fleet that did not utilize the Boeing tool.
Q Other than having discussions with Mr. Hueto about this subject, did you speak with anyone else at Alaska or anywhere else?
A We had discussions with other individuals at Alaska. We had discussions with the FAA during the course of that day.
Q When Mr. Hueto first brought it to your attention or --
A After that.
Q And a couple of days later, or who did you speak with at the FAA, if anyone?
A I don't think I spoke with anyone particularly at the FAA. I was in a meeting where it was brought to the attention of the FAA.
Q When did that meeting take place?
A That same day.
Q And are we still in April of 2000?
A Yes.

**Q Who from the FAA was present at that meeting?**
A I believe Tim Miller was at the meeting. And there were several other FAA people. I don't remember which ones were there. I know for sure that Tim Miller was there.
**Q And you don't remember the names of any other FAA representatives being present?**
A No.
**Q Mr. Hueto was there with you?**
A At that meeting, I don't think he was at that meeting.
**Q Was anyone else from Alaska Airlines present with you?**
A Yes. Jim Davey was there.
**Q Anyone else?**
A There probably were other people. I don't remember who was exactly there from Alaska.
**Q Did the meeting take place at Alaska's offices in Seattle?**
A Yes.
**Q How long did the meeting last?**
A About an hour.
**Q Did you speak at the meeting or did Mr. Davey, or both of you?**



A Both of us.
**Q So far as you know, was this the first advisement to the FAA that the restraining fixture that Alaska used to conduct end-plays may not have been in conformity with the Boeing tool or specification?**
A As far as I know, yes.
**Q What if anything did you --**
**As best you can recollect, what did you advise the FAA at this meeting in April of 2000?**
A We advised them what the results of our study was on how many aircraft were affected and what our game plan was for doing re-inspections.
**Q How many aircraft had you ascertained had been inspected with the Alaska tool as opposed to the Boeing tool in the period after February 9th, 2000?**
A I don't remember what the number was.
**Q What did you advise the FAA you were going to do in terms of re-inspection?**
A We advised the FAA that we were grounding the aircraft that we could not confirm that its last end-play check was done with the Boeing-manufactured tool. And we were going to accomplish re-inspections on those aircraft utilizing the Boeing tool.
**Q What if anything did the FAA say in**



**response?**
A I think they thought that was a good plan.
**Q Did you prepare any memoranda of any sort to the FAA based on you having learned from Mr. Hueto that the Alaska tool that may have not conformed to the Boeing specification was used in connection with performing end-play checks in the period after February of 2000?**
A I didn't prepare any memorandums. I'm not sure who at the company may have prepared that.
**Q Have you ever seen any documentation prepared by anyone at Alaska that sets forth anything concerning the discovery that a non-conforming tool or fixture, restraining fixture, was being used to perform end-play checks?**
A I do remember seeing documents because I think that whole issue was self-disclosed and it came out of our quality assurance group.
**Q Do you recall anything about the documents that you saw?**
A I don't remember the details of the documents.
**Q And after this meeting in April of 2000 --**
**Did you have just one meeting with the FAA about this subject?**



A That day, yes. There were probably some follow-on meetings with the FAA after that.
**Q How many such follow-on meetings?**
A I didn't participate in all of them, so I can't tell you how many meetings they had after that.
**Q Did you participate in any other meetings with respect to the FAA and the Alaska restraining tool?**
A Maybe one. Pretty much in that aspect it was being run through the self-disclosure process and being handled in that avenue through our quality assurance group.
**Q Who from the quality assurance group would have been working on this matter?**
A I don't know who was spearheading it in QA.
**Q Other than working with Mr. Davey, who attended at least the first meeting with the FAA, and Mr. Hueto, who advised you of this potential problem in the first instance, who else at Alaska did you deal with concerning any matter with regard to the Alaska restraining fixture and its perhaps non-conformity with the Boeing restraining fixture?**
A Our quality assurance group and our inspection group. Which is part of QC.
**Q And anyone in particular in those groups**

**that you dealt with on these issues?**
A I believe Jim Trimberger was involved. We also dealt with maintenance with the inspections that were done on the airplanes.
**Q Who did you personally have any interaction with?**
A I didn't get involved in the re-inspections, so --
**Q So you had no involvement with the re-inspections.**
**Were you were involved at least in making the disclosure to the FAA about this potential problem?**
A I wasn't involved with the disclosure. That was done through our quality assurance group.
**Q Let me -- I thought I heard you testify a little while ago that the meeting that you attended with Mr. Davey in April of 2000 was the first the FAA had been advised of this potential problem?**
A Right.
**Q So you were involved in the disclosure; correct?**
A I wasn't the one that did the disclosing. That was done by representatives at the meeting. I was at the meeting where it was disclosed.



next exhibit in order, 194, which is a two-page document bearing Bates numbers AA00006389 through AA006390.
(Defendants' Exhibit 194 was marked for identification)
**Q MR. FRANKEL: Exhibit 194 is before you, Mr. Patterson. Have you ever seen Exhibit 194 before?**
A Let me take a look at it for a second.
**Q Sure.**
A I don't recall seeing this before.
**Q I want to --**
**This appears to be an email from Mr. Leiper to Mr. Clark on which Mr. Hueto is copied.**
A Yes, that appears to be.
**Q I just want to direct your attention to the second paragraph under "Hi Jeff," on the first page.**
A Okay.
**Q Having reviewed that, does that at all refresh your recollection as to how many aircraft were grounded and rechecked due to the possibility of Alaska's fabricated tool restraining fixture being used to do end-play checks?**
A It probably was in that range.
**Q If you look down further it says, "Using the matrix sheet and checking for end-plays done on**



**Q Did you, do you recall saying anything yourself at the meeting?**
A We, what I talked about is what action plan that Alaska was going to embark on to reinspect the airplanes.
**Q From the time that the FAA was first advised of this in April of 2000, how long did it take before the plan to reinspect was actually implemented?**
A The aircraft were inspected that very night.
**Q And you're certain that this occurred in April of 2000?**
A I'm not a hundred percent certain.
THE VIDEOGRAPHER: Can I change tapes?
MR. FRANKEL: Why don't we take a brief recess.
THE VIDEOGRAPHER: This is the end of tape two in the videotape deposition of Scott Patterson. We are going off the record at 2:53 p.m.
(Recess taken)
THE VIDEOGRAPHER: This is the beginning of tape three in the videotape deposition of Scott Patterson. We are going back on the record 3:06 p.m.
MR. FRANKEL: I want to have marked as the



**August 3rd or the 4th last year, you can determine which aircraft they are."**
**Does that in any way change your recollection as to when the recheck was performed after learning of the use of the, after being advised initially by Mr. Hueto of the potential problems with the Alaska restraining fixture; i.e. that the recheck occurred in August as opposed to April?**
A Yeah, that's probably more accurate.
**Q Let me ask you this and see whether you had any involvement or learned prior to the crash --**
**Do you know how many restraining fixtures Alaska Airlines had within its system?**
A No. I didn't have any involvement with that.
**Q Did you learn, did you ever learn how many restraining fixtures Alaska had prior to the crash to do end-play checks?**
A I don't recall.
**Q After the crash, between January 31st, 2000 and August 3rd or 4th, 2000, did you ever learn how many Alaska restraining fixtures Alaska had in its system and how many Boeing restraining fixtures Alaska had in its system?**
A No, I didn't.

MR. MASSEY: Maybe you could ask him who would know.
MR. FRANKEL: That was going to be my next question.
MR. MASSEY: And where records would be kept.
**Q MR. FRANKEL: Who, as far as you would know, would have information concerning the number and the source of manufacture and design of restraining fixtures used to do end-play checks at Alaska that would have been used prior to January 31st, 2000?**
A I would assume that someone in Quality Control would know that. I don't know a particular name of who would be knowledgeable. That's more of a quality control type function.
**Q Would the person either in quality control have information concerning the number, source of manufacturer of restraining fixtures that were used to do end-play checks both before the crash and after the crash, that person would be in quality control?**
A I believe it would be.
**Q But you don't know who it would be?**
A No.
**Q The Alaska fleet was grounded in August of 2000 to do these rechecks?**



A A portion of the fleet.
**Q A portion of the fleet.**
**At least the portion that you had identified, that Alaska had identified as having had end-play checks performed with the Alaska restraining fixture; is that correct?**
A Restate the question.
**Q Okay.**
**In August of 2000 Alaska grounded that portion of its fleet that it had identified as having had end-play checks performed on those aircraft with the Alaska-fabricated restraining fixture?**
A That's correct.
The last end-play check was done with the Alaska-manufactured restraining fixture.
**Q So whatever aircraft had last had end-play checks performed with the Alaska restraining fixture prior to August of 2000 were grounded at the beginning of August?**
A Yes.
**Q And new end-play checks were done on those planes with the Boeing tool; correct?**
A The Boeing-manufactured tool, yes.
**Q Other than advising the FAA initially -- in terms of -- let me go back and try to clarify the**



**record.**
**If the fleet was in fact grounded or at least that portion of the fleet that last had an end-play check done by use of an Alaska-fabricated tool in August, when was the FAA first advised about that issue if the grounding took place in August?**
A It was probably August in lieu of April.
**Q I think news reports, and I think even Exhibit 194 before you I think reflects that the grounding took place on August 3rd and 4th of 2000.**
A I think the grounding took place on August 3rd. End-play checks were done over a period of time between August 3rd and August 4th.
**Q And when in connection with --**
**If that was when the fleet was grounded and the new end-play checks performed with the Boeing tool, when would the FAA have first been advised of that fact?**
A August 3rd.
**Q So they were advised on the day the grounding was going to take place?**
A Yes.
**Q When in relation to August 3rd and 4th was it that you first learned about this issue?**
A When was --



**Q You previously your testimony -- and I think you may have had your dates confused -- was that you first learned about this in April.**
A Okay.
**Q And now it's, I think, clear from the record that the grounding and rechecks were done in August of 2000.**
**I'm now trying to at least get the record clear as to when it would have been that Mr. Hueto first brought this issue to your attention.**
A During the day of August 3rd.
**Q So you first learned about it on August 3rd that there was a problem with having used an Alaska tool?**
A There may have been a problem.
**Q There may have been a problem of using an Alaska tool to do end-play checks on MD-80 aircraft?**
A Yes.
**Q You participated in meeting with Mr. Davey and perhaps others from Alaska and representatives of the FAA, including Mr. Miller, on August 3rd as well?**
A Yes.
**Q And on the evening of August 3rd and into August 4th those aircraft that had been last checked for end-play with an Alaska tool restraining fixture**

were then rechecked during that period?
A Yes.
Q Now I want to direct your attention back to Exhibit 191. If you turn to Bates numbered page 602 at the bottom there is a Bates number on the lower right-hand corner.
A Okay.
Q The last three digits are 602.
A (Complying)
And if you continue now over to 603 --
(Complying)
Q -- do you recall having seen the reference on page 603 of Exhibit 191 that "Boeing had determined that in order to accomplish the jackscrew assembly end-play wear check operators were required, would require the horizontal stabilizer restraining fixture part No. 4196750, the tool's currently unavailable through Boeing according to Boeing. Accordingly, Boeing is supplying the drawing for the horizontal stabilizer restraining fixture."
A I see that.
Q Had you learned about that in March of 2000 or at any other time prior to August 3rd of 2000?
A As I stated earlier, I didn't read the entire bulletins. I don't recall reading that note on



the bulletin.
Q Did you ever learn at any time why it took from February of 2000 to August of 2000 for Alaska to realize that the restraining fixture that it was using to perform end-play checks, at least on part of its fleet, the Alaska restraining fixture may not have been in conformity with the Boeing specification?
A I don't know the details of why that took place.
Q Well, without --
Apart from the details, what is your understanding of why it took a number of months for Alaska to come to this realization?
A I don't know what the reason is. It was out of my area of responsibility, so --
Q Who at Alaska would know the answer to that question?
A I think probably based on the investigations that were done through the quality assurance group, someone in the QC and QA organization may know that. I'm not sure by name who.
Q You've never asked anyone why it took so long?
A I never personally asked them.
Q And no one's ever told you why?



A No.
Q Apart from participating in the meeting on August 3rd, 2000, both first with Mr. Hueto, then with Mr. Davey and representatives of the NTSB, what if any other involvement did you have in connection with grounding of the fleet?
MR. JACQUES: I object. You mischaracterized his testimony.
Q MR. FRANKEL: Do you understand the question?
A Could you repeat it?
MR. FRANKEL: Could you read it back?
(The record was read as follows:
Q Apart from participating in the meeting on August 3rd, 2000, both first with Mr. Hueto, then with Mr. Davey and representatives of the NTSB, what if any other involvement did you have in connection with grounding of the fleet?)
THE WITNESS: A portion of the fleet.
Q MR. FRANKEL: A portion of the fleet?
A I was involved with a press conference that was released on the evening of August 3rd.
Q When you say you were involved in a press conference, what do you mean by that?



A The company held a press conference to give the details of why Alaska was voluntarily grounding a portion of their MD-80 fleet. And I got called to the podium to describe what a restraining fixture did in conjunction with doing end-play checks.
Q Do you recall what you said?
A I described to the press what a restraining fixture does as far as setting the horizontal stabilizer up in a position that basically with an end-play check trying to get a measurement between, the gap between the gimbal nut threads and the jackscrew threads and how the restraining fixture is involved in that process.
Q Did you speak at all about the restraining fixture that Alaska had fabricated?
A No.
Q Did anyone else?
A Bill Ayer did.
Q Do you recall --
Mr. Ayer was the president at the time?
A Yes.
Q Do you recall what Mr. Ayer said concerning the Alaska-fabricated restraining fixture?
A I don't remember exactly what the words were other than there was differences between the

Alaska tool and the Boeing tool. And as a conservative measure the company was rechecking the airplanes to assure that the end-play checks were in compliance.

**Q When Mr. Hueto first brought this matter to your attention on August 3rd, did he tell you when he first learned of the problem?**

A No.

**Q Did you ever ask him?**

A No.

We were too busy involved with putting the details together and what we needed to go forward with the go forth plan.

**Q Did you ever examine, yourself, a drawing for the Alaska tool?**

**Had you ever seen a blueprint or specification or drawing of what the Alaska fixture was, how the Alaska fixture was set up?**

A I don't remember seeing a drawing for the way the Alaska tool was manufactured.

**Q Do you recall seeing a drawing for Boeing fixture?**

A Yes.

MR. FRANKEL: Mark as Exhibit 195 a document bearing Bates numbers MB-00248560 through



MB-00248566.

(Defendants' Exhibit 195 was marked for identification)

**Q MR. FRANKEL: I have had marked as Exhibit 195 -- have you ever seen Exhibit 195 before?**

A Yes.

**Q Is that the Boeing drawing and specification for the restraining fixture to do end-play checks?**

A Yes.

**Q When did you first see Exhibit 195?**

A I don't recall the date when I first saw this.

**Q Did you see it prior to August 3rd, 2000?**

A No.

**Q You saw it sometime thereafter.**

**Do you recall in what connection you would have seen it?**

A Just curiosity and how the Boeing tool was manufactured.

**Q What caused you to become curious about how the Boeing tool was manufactured?**

A What caused the --

**Q Yes.**

A When I get involved in events I kind of



like to follow up and get educated on the details.

**Q No one asked you to examine it?**

A No.

**Q And you'd never seen any drawing for the Alaska-fabricated version of its restraining fixture; is that right?**

A Right.

**Q Do you know whether such a drawing exists?**

A I don't know if one exists or not.

**Q Do you know how Alaska fabricated or manufactured its restraining fixture?**

A No.

**Q Do you know whether they did it, Alaska did it in-house or somewhere else?**

A I don't know if they did it in-house or had it done somewhere else.

**Q Who would have that information at Alaska?**

A I think that the same quality control group.

**Q Who made the decision on behalf of Alaska to ground the fleet and recheck, or ground part of the fleet and recheck those planes that had last been checked with the Alaska-fabricated version of the restraining fixture?**

A Who made the final decision?



**Q Who on behalf of Alaska made the decision do that?**

A I believe it was Bill Ayer.

**Q Had you participated in any meetings with Mr. Ayer prior to the press conference?**

A No.

**Q Did you have any discussions with him --**

A No.

**Q -- about that?**

**Who made the recommendations to Mr. Ayer for him to take that action; to your knowledge?**

A I would be guessing, but I would think Gerardo did follow on with Mr. Ayer on the circumstances surrounding the event.

**Q I take it that August 3rd was a very busy day for you.**

A Yes, it was.

**Q Do you recall when in the day you first learned from Mr. Hueto about the problems with the Alaska restraining fixture; potential problems with it?**

A I know it was sometime in the afternoon. I don't know the exact time.

**Q Then sometime in the afternoon --**

**And how long did you spend with Mr. Hueto**

**that afternoon when you first learned about this?**
A We spent a considerable part of the rest of the day putting a plan together.
**Q Then you also met with the FAA that same afternoon?**
A Yes.
**Q Did you call, did you participate in calling the FAA to have them come over?**
A No.
**Q How did this meeting get arranged?**
A I think that was arranged through Mr. Davey.
**Q How was it that Mr. Davey learned that he needed to arrange a meeting with the FAA; to your knowledge?**
A I had informed him what we were working on, and he coordinated I believe setting up meetings with the FAA while we were coordinating what we needed to do with the aircraft and putting an action plan together.
**Q So far as you know, were you the first person to advise Mr. Davey about this problem?**
A As far as I know, yes.
**Q What time, if you can recollect, did the meeting with the FAA representatives take place on**



**NTSB with regard to the grounding?**
A I'm not sure.
I'm sure it was communicated to the NTSB. I don't know who called them or what time frame they called them.
**Q Other than Mr. Miller at the FAA, are you aware of any communications with any other specific individuals at the FAA?**
A There were other individuals in the meeting, but I don't remember who was there other than Tim Miller.
**Q What position did Tim Miller hold with the FAA at the time?**
A I don't know what his exact position was. I do know that he's over our CMO office.
**Q In connection with this litigation, Mr. Patterson, Boeing and McDonnell Douglas had requested the production of all documents from Alaska relating to Alaska's decision to ground and/or test certain of Alaska's MD-80 aircraft after the accident when it was revealed that the Alaska restraining tool may have been used to check end-play measurements on jackscrew assemblies. And we received no documents from Alaska in response to that request. At least any that we could ascertain were responsive to that**



**August 3rd?**
A I'm thinking between three and four in the afternoon.
**Q When did the first conference with Mr. Ayer take place?**
A 9:30 that evening.
**Q The planes, at least the ones that were last checked with the Alaska restraining fixture, began being grounded at what time on August 3rd?**
A Approximately between four and five in the afternoon.
**Q Other than yourself, Mr. Davey, Mr. Hueto and Mr. Ayer, anyone else that you interacted with on August 3rd in connection with the decision to advise the FAA, ground that portion of the fleet? Anyone else that you interacted with at Alaska in connection with this decision?**
A Andy Leiper was involved in putting together the action plan and determining which aircraft had last end-play checks done with the Boeing tool versus the Alaska tool.
**Q Anybody else other than Mr. Leiper?**
A Not that I can recall.
**Q Did you or anyone else at Alaska, to your knowledge, have any communications with anyone at the**



**request.**
**Do you know where, if at all, such documents would be located at Alaska?**
A As far as the list of tail numbers?
**Q Or just documentation that relates to the whole plan of action that you put into place, communications that you would have had with Mr. Leiper, Mr. Hueto, Mr. Ayer, anything in writing concerning the action plan, the decision to ground the fleet or the portions of the fleet, anything relating to what we have been spending the last number of hours talking about?**
A There were no documents prepared for that. It was all sitting down and determining what tail number aircraft were checked with the Alaska tool and which were checked with the Boeing tool.
But we didn't actually put down a written plan that this is what we are going to go on. We determined what airplanes need to be checked, notified the FAA that these airplanes were suspect and we are reinspecting the airplanes. There wasn't any paperwork issued to do that..
Maintenance and planning were issued these need to be inspected prior to revenue service. And the paperwork to do the end-play checks has already n

place via the Alaska Airlines work cards that were generated based on the Airworthiness Directive. So they just reissued the work cards out to those aircraft.

**Q So you prepared nothing in writing about this? You're not aware of anyone else at Alaska that prepared any written communications, whether emails, anything concerning the grounding of the fleet and the use of the suspect Alaska tool?**

A I didn't prepare any paperwork. I don't know who else may have prepared paperwork. I do know it went down pretty quick and --

**Q But you've never seen any paper that relates to the August 3rd events?**

A I'm sure there is paperwork that has to deal with the self-disclosure that was involved. I haven't physically seen that paperwork.

**Q Where would that paperwork concerning the self-disclosure be located?**

A In our quality assurance area.

**Q Do you know what happened to the Alaska-fabricated tools that at least had been used prior to August 3rd?**

A I do know that several tools were turned over to the NTSB. I don't know what happened after



that.

**Q Did Alaska retain any?**

A I don't know if they did or not.

**Q How do you know they were turned over to the NTSB?**

A I was told.

**Q Who told you?**

A Um, I think it was either Andy or Gerardo, in discussions. But with those two individuals.

**Q What if any involvement after the events of August 3rd and 4th did you have in connection with end-play checks or any matter concerning jackscrew assemblies and horizontal stabilizers on MD-80 aircraft?**

A Till --

**Q After August 3rd and 4th, 2000, when you were you involved in this action plan to recheck part of the fleet.**

A Okay.

**Q After that was accomplished, what if any involvement did you have concerning any matter relating to jackscrew assemblies, horizontal stabilizers or end-play checks on them thereafter?**

A Up to today's date?

**Q Up to today.**



A I got involved just recently with doing an Alaska Airlines drawing to provide identification markings on restraining fixture tools to further clarify positioning of the tool and direction for the tool to be rotated in for lengthening and shortening.

**Q And is this Boeing tool --**

A This is the Boeing tool that is now being used.

**Q When did this involvement take place?**

A Probably within the last month. After the 2002 team conference where Boeing conveyed to the operators what direction they were going with the restraining fixture and the end-play checks, they had graphics and the team conference material that indicated that Boeing was going to mark the tools with an up indicator arrow to orient the tool to the aircraft and also mark which direction you turn the tool to lengthen and shorten for doing the end-play checks.

**Q This was at a team conference that you attended?**

A Yes.

**Q Did you typically attend team conferences on behalf of Alaska?**

A I typically didn't. I went to maybe one



prior to that, one or two. I think it was one prior to that.

**Q Do you know what a twin-jet conference is?**

A I'm assuming it's the same thing; an MD-80 twin-jet team conference.

**Q Just so the record is clear, what is a twin-jet conference?**

A A twin-jet conference is an opportunity for all the airline operators that fly that particular type of aircraft to get together and discuss issues that they have with the aircraft. And it's Boeing's opportunity to convey to the airline what's being done about those issues. It's basically an information exchange.

**Q Apart from the conference that you recently attended, am I correct that so far as you know, representatives of Alaska Airlines routinely attended twin-jet conferences when they were held at least since Alaska's been operating MD-80 aircraft?**

A They routinely -- I don't know if routinely is an accurate word. They went to some of 'em. They didn't go every year.

And there were different individuals that may have gone. So it wasn't anything formalized that said whenever there is a twin-jet conference coming

around these individuals have to go every year.
**Q Were these, were twin-jet conferences, to your knowledge, held on an annual basis?**
A They were held on an annual basis unless they had a cancellation of -- I think a few of them were cancelled and they didn't have 'em, twin-jet conferences, some years.
**Q Was there a particular person or persons, at least from Alaska, that would typically attend the twin-jet conferences when Alaska attended and a twin-jet conference was being held?**
A Typically they would be attended by either representatives from engineering or from our tech service group.
And basically how we determined if we going to send anybody or if anybody was going to attend, McDonnell Douglas would publish the agenda for the meeting prior to the conference. And if items that were being presented at the meeting were items that Alaska Airlines or tech service or engineering had interest in or involvement in, we may have sent representatives to those meetings.
**Q So I take it that you attended the last team conference or twin-jet conference that has been held by --**



A For 2002, yes.
**Q Did you attend the twin-jet conference on behalf of Alaska in 2001?**
A No.
**Q Do you know who attended on behalf of Alaska last year?**
A I don't know. I don't think anybody attended last year.
**Q Do you know with respect to years prior to the year that you attended, 2002, who would have attended on behalf of Alaska twin-jet conferences in prior years?**
A No.
**Q Who specifically --**
A We don't keep records of that, so I don't know who, specifically who attended which class.
**Q So there are no records at Alaska from which it could be ascertained as to who attended or didn't attend a particular conference?**
A There are no formal records. We don't keep track of attendance for team conferences.
In preparation for a document that was requested from Alaska Airlines I sent out an email to the current engineers and current representatives in tech service on their recollection; could they send me



what team conferences they may have attended since 1994.
**Q You didn't get anything back in response?**
A I had John Hoover, who is now the director of project engineering, attended team conferences. And he, I think he put down dates. He attended one, and it was early nineties, but he wasn't sure which year it was.
There may have been other individuals at Alaska to attended team conferences that aren't working for the company anymore.
MR. FRANKEL: Let take a short break.
THE VIDEOGRAPHER: Going off record, 3:47 p.m.
(Recess taken)
MR. HICKEY:
THE VIDEOGRAPHER: Going back on the record, 3:59 p.m.
**Q MR. FRANKEL: Do you know, Mr. Patterson, what twin-jet focus reports are?**
A Uh, I think I've seen 'em. I'm not familiar with 'em.
**Q Do you know whether Alaska would routinely receive twin-jet focus reports?**
A I don't know how Alaska receives them.



**Q You wouldn't be the person who would typically receive them at Alaska; is that correct?**
A That's correct.
**Q Do you have any reason to believe that Alaska doesn't receive twin-jet focus reports from Boeing or McDonnell Douglas?**
A I wouldn't know how they receive 'em or how regularly they come or if they get 'em all.
MR. FRANKEL: I want to mark as Exhibit 196 a two-page document bearing Bates A, several zeros, and then a 2 and several zeros, and A3.
(Defendants' Exhibit 196 was marked for identification)
**Q MR. FRANKEL: Have you ever seen Exhibit 196 before?**
A Let me take a look at it real quick.
I don't remember seeing this document before.
**Q Do you have any idea who prepared it?**
A No.
**Q Just to go back to a matter with regard to the restraining fixture, I take it that you certainly have no knowledge as to what steps, if any, Alaska took prior to August 3rd of 2000 to ascertain whether its restraining fixture comported with the Boeing**

**specification?**
A I'm not familiar with that.
**Q It would be quality control personnel, as far as you know, that would have information concerning whatever steps were taken prior to August 3rd?**
A As far as I know. That would be my guess.
MR. FRANKEL: At this time, I have no further questions of the witness.
I'm reserving my rights to recall him in light of Alaska's incomplete document production and the pendency of the NTSB investigation.

EXAMINATION

**Q MR. MASSEY: Mr. Patterson, you're director of service engineering?**
A Yes.
**Q And in your capacity as director of service engineering do you have any involvement with making modifications or amendments to the Alaska general maintenance manual?**
A Some involvement.
**Q What --**
A I'm not involved with all changes to it.



engineering order that drives a change, then in engineering we dictate on the engineering order what changes need to be done to the manuals based on the documents we received.
If there is incorrect, if there is stuff in the manual that's not correct, we gain clarification from the manufacturers and receive BOECOM messages that state, yes, the manual is in error and here's the way the manual should be worded.
On most occasions it takes the manufacturers a while to get that inputted into the manual. So we will drive through engineering changes to the manual via Alaska Airlines maintenance manual supplements so that maintenance has the most accurate information.
**Q Do all ADs concerning Alaska Airlines fleet come through your office?**
A Right now they currently go through the project side of the house. Service engineering doesn't handle ADs. That's handled through project engineering at Alaska. So they don't come through my side of the house.
**Q How do you become aware of them; ADs?**
A I am copied on the notification that an AD has been issued and our director of technical



**Q What involvement do you have?**
A If there is a document, like an example of it would be the Airworthiness Directive that came out, there are maintenance manual, if there are maintenance manual supplements that are directed by an Airworthiness Directive that the manufacturer hasn't updated the manual, we put supplements in the manual until -- the Alaska Airlines engineering orders drive supplements in the manual until the manufacturers update the manuals.
**Q Are you responsible for making sure that those supplements get into the manual?**
A No.
**Q What department is that?**
A Maintenance Programs.
**Q What about lubrication task cards? Do you have any involvement with lubrication task cards in your current position?**
A I don't have any involvement.
**Q What about making changes to task cards? Any involvement with that?**
A If there --
Yes, I do have involvement with that.
**Q What's your involvement with that?**
A If there is, like I said, if there is an



compliance is the person that monitors ADs and notifies both directors at Alaska that an AD has been issued to our fleet.
**Q Okay. Remind me, sir, what was your position at Alaska in the 1997 time period?**
A '97 time period was director of engineering.
**Q Did you get involved --**
MR. JACQUES: What date was that? Just so the record is clear.
MR. MASSEY: 1997 time period he was director of engineering.
MR. JACQUES: I don't think that was right. You might want to clarify that.
**Q MR. HICKEY: Were you director of engineering at Alaska Airlines in 1997?**
A No. I'm sorry. I was manager of airframe engineering in 1997.
**Q Did you then become director of engineering after that?**
A Yes.
**Q What date did you become director of engineering?**
A It was in the year 2000. Probably July/August time frame.

**Q Did you ever become involved in making changes to the lubrication interval for the jackscrew for MD-80 aircraft?**
A No.
**Q Did you ever become involved, prior to the accident, in making changes to the interval for end-play checks on MD-80 aircraft?**
A No.
**Q Do you have --**
**In your current position do you have involvement with Alaska's PMI?**
A Yes.
**Q What involvement do you have with Alaska's PMI currently?**
A Basically supplying them documents and clarification on issues they come up with on a day-to-day basis.
**Q Does that have to do with various engineering change orders, that type of thing?**
A Yes.
**Q Prior to the crash, did you have in your capacity as either director of engineering or director of airframe engineering --**
A Manager of airframe engineering.
**Q -- manager of airframe engineering, any**



**involvement with Alaska's PMI?**
A Yes.
**Q In the same for capacity in dealing with engineering change orders?**
A Or questions they had, yes.
**Q None of those changes --**
**Did any of the involvement that you had prior to the crash that we are here about today with Alaska's then PMI have anything to do with either lubrication or end-play checks on MD-80 aircraft?**
A No.
**Q Do you know what AeroShell Grease 33 is?**
A I know what it is. I don't know all details of it. I do know it's a grease that's --
**Q You know it's an aviation grease?**
A Yes.
**Q You know what color it is?**
A Yes.
**Q What color is it?**
A Green.
**Q Have you ever used it in your jobs, various jobs at Alaska Airlines?**
A I have physically never used it myself.
**Q Have you seen it or -- strike it.**
**Have you actually seen AeroShell Grease 33?**



A Yes.
**Q In what was circumstances were you looking at AeroShell Grease 33?**
A I have seen it in wheel wells of aircraft on 737s and saw it, the grease and fittings and --
**Q In various inspections that you have had you have seen these?**
A In the course of looking at structure in the area.
**Q Did you know what AeroShell Grease 33 was, and the color, prior to the crash here?**
A No.
**Q By the way, of those various times that you saw the accident jackscrew and gimbal nut, did you ever see green grease on it?**
A I may have. I don't know where. There was a lot of components that were in the hangar at that time.
**Q I mean, I think you said that you had seen red grease on the accident jackscrew and gimbal nut.**
A Gimbal nut. Not the jackscrew, the gimbal nut.
**Q On the gimbal nut. Okay.**
**Do you recall seeing green grease on it?**
A There was, I don't remember if -- one of



the problems that we had or for me on the investigation when I was looking at parts, I was looking at it from the structures aspect, so I wasn't paying particular attention to what grease colors were -- I was looking more at structural part of it.
**Q But you remember the green grease but not the green grease, is that a fair statement?**
A I'm sorry, restate.
**Q You have a recollection of seeing red grease on the gimbal nut but not green grease. Is that a fair statement?**
A I have a recollection of seeing red grease and other greases. I don't remember if I saw green grease or not. The red grease stood out.
**Q After the accident, have you had any involvement with testing of AeroShell 33 or Mobil 28?**
A No.
**Q Have you been involved in any discussions regarding the use of AeroShell Grease 33 on MD-80 jackscrews post-accident?**
A I wasn't involved with discussions.
I'm aware that after the accident Alaska Airlines switched back to Mobil 28 for the entire MD-80.
**Q Were you involved in any way, shape or form**

in making those decisions?
A No.
Q That decision was not --
Was that decision made by the service engineering department?
A We didn't have a service engineering department at that time.
Q When was the service engineering department put together?
A At the end of 2001.
Q Was that --
Why was the service engineering department initiated?
A The service engineering department was initiated to provide a better service to maintenance as far as a group just dedicated to hangar and line maintenance support.
Prior to that the engineers were working both project side of the house and service side of the house. And we thought it would be more efficient to split engineering between a project side that could focus on projects and service that could focus on the day-to-day needs of the airline.
Q Was the decision to establish a service engineering department made in conjunction with your



Q First, have you ever seen that before?
A No.
Q Did you and Mr. Key have a discussion, one or more discussions, concerning your observations of grease on the jackscrew before you wrote your respective statements to the NTSB in December of 2000?
A No.
Q Have you ever had a discussion -- strike it.
From the day that you and Mr. Key were on the ship and observed the jackscrew assembly after it had been removed from the water, from that day until today, have you ever had any discussions with Mr. Key concerning what the two of you observed on that day on the ship?
A About anything on the ship?
Q No. What you observed about the jackscrew.
A Not that I can recall.
Q Have you ever exchanged any emails about your observations?
A No.
Q Have either of you given any statements to anyone concerning what you observed with respect to the jackscrew on the ship other than what you wrote in the two statements that you sent to the NTSB?



PMI?
A No.
Q Did the FAA have any role at all in the establishment of the service engineering department?
A Not that I'm aware of.
MR. MASSEY: Thank you very much.
MR. JACQUES: Let's take a short break.
THE VIDEOGRAPHER: Going off the record, 4:14 p.m.
(Recess taken)
THE VIDEOGRAPHER: We are going back on the record, 4:27 p.m.
(Defendants' Exhibit 197 was marked for identification)

EXAMINATION

BY MR. READ:
Q My name is Greg Read. I represent Shell Oil Company.
While we were off the record I marked as Exhibit 197 a copy of a two-page letter dated December 7, 2000 from Louie Key to Richard Rodriguez. And I don't see any Bates stamp on it.
A Oh, bates stamp.



A I know I haven't. I don't know if he has.
Q Did you have any discussions with anyone after you got off the ship and before you returned to Seattle about what you had observed on the jackscrew assembly on the ship?
A I had discussions about where the ower stop that was sent to shore came from because there was curiosity from the shore, how was the lower stop recovered. So I did have discussions about that.
Q How about your observations of a greasy-like substance on the jackscrew?
A No.
Q Did you talk about that with anyone before you returned to Seattle?
A No.
Q To the best of your memory, did you talk about that subject, the greasy-like substance you saw on the jackscrew, with anyone until you wrote your statement to the NTSB in December 2000?
A Not that I can recall.
Q All right.
If you look at Mr. Key's statement, Exhibit 197, in the second paragraph you'll see that he identifies the NTSB representative as Mike Stockhill.

Does that refresh your recollection that that was the NTSB representative who was on the ship with the two of you when the jackscrew was recovered?
A Yes.
Q Was Mr. Stockhill a member of one of the NTSB groups?
A I believe he was.
Q Do you know which group?
A I originally thought it was Washington. I heard later today that it may have been out of the Chicago office.
Q My question may not have been clear. Was he a member of the systems group, the structures group or some other group?
A I don't know if he was a member of any of those groups. I don't know.
Q Do you know what Mr. Stockhill's role was with respect to the NTSB investigation of this accident?
A No.
Q Did you and Mr. Stockhill have any discussions concerning your observations of a grease-like substance on the jackscrew while the two of you were on the ship?
A No.



Q Have you at any time after the two of you got off the ship, at any time up until today, ever discussed your respective observations of a grease-like substance on the jackscrew?
A No.
Q Have you ever seen anything in writing prepared by Mr. Stockhill concerning his observations of the jackscrew while it was on the ship?
A No.
Q Do you have any information from any source as to what Mr. Stockhill observed with respect to the jackscrew while it was on the ship?
A No.
Q So whether or not Mr. Stockhill made any observations concerning the grease-like substance, you simply don't know, it was never discussed?
A That's correct.
Q Did Mr. Stockhill have a camera on the ship?
A I don't believe he did.
Q Did you have a camera?
A No.
Q Did Mr. Key have a camera?
A I don't believe he did either. I'm not sure if he had one or not.



Q To your knowledge --
A Wait. I'm sorry. Mr. Key did have a camera.
Q What kind of camera?
I don't mean the make. Was it a digital camera, a single lens reflex, a Brownie?
A I don't think it was a digital camera. I think it was one you had to get pictures developed off of.
Q To your knowledge, did Mr. Key take any photographs of the jackscrew after it was recovered and while it was still on the ship?
A I don't know if he did or not.
Q I don't know quite how to ask this question: But it seems very strange to me that someone was not charged with recording what the wreckage looked like as soon as it was recovered on the ship.
Before you went on the ship was there any discussion with any representatives of the NTSB about who was responsible for recording observations either photographically or by notes?
A I was given no guidance by the NTSB in that aspect.
Q Did you have any discussions with anyone



from the NTSB before you went on the ship about any subject concerning the investigation?
A No. It was a pretty quick call when they decided to send the ship out. There wasn't much advance notice that I was going to be going until the time we went.
Q Do you have a recollection of Mr. Key having his camera in his possession on the deck of the ship while the three of you were looking at the jackscrew assembly?
A I don't --
He must have had it in his possession. I did see a picture that he did take on the ship. But it was not of the wreckage, it was of the video recorder in the, on board the ship.
Q I understand so far.
So he had it somewhere inside the ship at some time?
A Yes.
Q Now I want to know: Do you have a recollection as you were standing on the deck and after the jackscrew was recovered whether he had the camera around his neck or --
A I don't have a recollection of that.
Q -- or in his hands?

Does Mr. Key still work for the company?
A I just found out today that he doesn't.
Q Am I right that at no time after you left the ship on or about February 9th or 10th, until today, have you ever asked Mr. Key if he has any photographs of the jackscrew?
A I've never asked him that.
Q And you've never seen any photographs taken by Mr. Key of the jackscrew assembly on the ship?
A That's a tricky question. The picture that he took was of the jackscrew on the ship via, through the video monitor.
Q That is a tricky question. I understand.
Have you ever seen a picture taken by Mr. Key of the jackscrew assembly while it was on the deck of the ship?
A No.
Q How many photographs did -- strike it.
Did anyone else, to your knowledge, on the ship have a camera other than the cook and Mr. Key?
A Not to my knowledge.
Q And you're pretty sure that Mr. Stockhill did not have a camera?
A I don't know if he did.
Q You didn't see one?



A I didn't see one.
Q All right.
How many photographs did the cook give you?
A I think it was 15 to 20 pictures.
Q And you're relatively certain those are still on the laptop which you were utilizing?
A They may not be on the laptop, but I know I have them on a floppy disk.
Q And you know that you still have the disk?
A Yes.
Q And it's in your office?
A I believe it is.
Q Have you looked at those recently, like in preparation for this deposition?
A No.
Q When is the last time you looked at those photographs, approximately?
A Probably, not since the year 2000.
Q To the best of your memory, did any of those photographs taken by the cook, were any of those sufficiently close to the jackscrew to depict the greasy-like substance that you observed?
A I don't believe there were any that were.
Q Were any of them sufficiently close to depict the color of the jackscrew; if you can



recollect?
A From a distance you can depict color, but --
Q To the best of your memory, none of those photographs depict in any way, shape or form a greasy-like substance because they were too far away?
A That's correct.
Q And to the best of your knowledge there are no photographs in existence taken by anyone that you know about that show the greasy-like substance you observed while the jackscrew was on the deck of the ship, is that true?
A That's true.
Q And am I right that nobody, to your knowledge, took any notes concerning observations made about the jackscrew assembly while it was on the deck of the ship?
A I don't know if Mr. Stockhill or Mr. Key took notes.
Q You did not?
A I did not.
Q And you've never seen any notes taken by either of those other two?
A That's correct.
Q Do I have it right that you, Mr. Key and



Mr. Stockhill were the only members of the investigation team that were on the ship?
A That's correct.
Q The other people were ship employees?
A Or FBI agents.
Q Right.
Do you know the name -- strike it.
How many FBI agents looked at the jackscrew before you did, looking for human remains?
A Two.
Q Do you know their names?
A No.
Q Do you know any place where those names --
In other words, if you wanted to search for those names, is there a way you could find them?
A I'm sure the NTSB has the names of the individuals that were on the ship.
Q Do you know if those FBI agents had cameras?
A I don't believe they did.
Q You didn't see 'em take any pictures of the jackscrew?
A No.
Q Did anybody take a sample of the grease-like substance while the jackscrew was on the

**ship?**
A Not that I'm aware. Although there was in the bag that the parts went into, the lower stop and the bearings, there was grease on that bag, the plastic bag that they were dropped into because the parts were put in the bag. So that greasy-like substance was on the plastic bag that went to shore with the horizontal stabilizer.
**Q And the bag had the end stop and other parts?**
A It had the lower stop and several ball bearings.
**Q Was is that same black, greasy-like substance?**
A Yes.
**Q If you'll look at Exhibit 197, on page two, up near the top of the page, Mr. Key writes, "Visually I could see that the threads were covered in what appeared to be a grease-like substance and a mixture of mud and sand. The heaviest concentration was at the upper end. Continuing down the threads it would be better characterized as a film or sheen, but there was a coating."**
**Do you agree with that description? Take your time and read it again.**



A I agree that there was grease-like substance on the screw. I didn't look at it close enough to give the detail that he did in his letter.
**Q All right.**
**Do you agree that except for the upper portion of the jackscrew, the substance on the threads was better characterized as a film or sheen?**
A Would you repeat that question?
**Q Do you agree that except for the upper portion of the jackscrew, the substance that you observed on the threads of the rest of the jackscrew could be characterized as a film or a sheen as opposed to thick grease?**
A I couldn't comment on that.
**Q You didn't look at it that closely?**
A Right. To get that much detail into it.
**Q All right. Let me ask you this.**
**Do you have any reason to believe that Mr. Key's description is not correct?**
A I don't have any reason to believe it's not correct.
**Q Okay. Now, make sure I have this right.**
**You were not present on the dock when the jackscrew arrived back at the dock?**
A That's correct.



**Q Do you have any knowledge as to whether Mr. Hueto and Mr. Louie observed the jackscrew before it was washed on the dock?**
A Louie Key was on the boat with myself. So he was not on shore.
**Q I misspoke.**
**Who is --**
A Leiper.
**Q Let me ask the question again.**
**Do you have any knowledge as to whether or not Mr. Leiper and Mr. Hueto observed the jackscrew before it was washed on the dock?**
A I believe they observed it --
Before it was washed on the dock?
**Q Yes.**
A I don't believe they got to see it before it was washed on the dock because the investigator -- if they did the jackscrew like they did the rest of parts coming ashore, they went through a, kind of a sterilization process with components before the investigators could look at 'em. It was in a quarantined area. So I don't believe they got to look at it before it was washed.
**Q If that's true -- and I understand you weren't there -- if that's true, what Mr. Hueto and**



**Mr. Leiper would have seen would be the jackscrew in the condition as depicted in the photographs 186-A and 186-B?**
A I don't know what condition they got to see the jackscrew in because I wasn't there.
**Q Okay.**
**Have you ever had a discussion with Mr. Hueto or Mr. Leiper about what they observed either then or at any time up until today?**
A No.
**Q Have you ever seen any notes or memos or emails prepared by Mr. Hueto or Mr. Leiper concerning their observations of the jackscrew at the dock?**
A We saw the one earlier today that Terry Clark summarized.
**Q Other than that?**
A No.
**Q Have you ever been at a meeting with Mr. Leiper or Mr. Hueto, or both, in which their observations of the jackscrew on the dock were discussed?**
A I don't recall being in an meeting discussing that.
**Q When you observed the red grease on the gimbal nut on the dock were you aware that Mobil 28**

was a red grease?
A No.
**Q Did you have any knowledge as to what manufacturers of aviation grease colored their grease red?**
A No.
**Q When you made observations of both the jackscrew on the ship and the gimbal nut on the dock, did you know what kind of grease was supposed to be applied to the jackscrew assembly?**
A No.
**Q So tell me if this is right.**
**The color of the grease came as no surprise to you because you didn't know what color the grease was supposed to be?**
A That's correct.
**Q Now, we have seen some pictures of the gimbal nut here. But my question is this: Did you observe anyone taking photographs of the gimbal nut while you were present?**
A I think several members of the structures group were taking pictures. I don't recall who was taking pictures. When the gimbal nut came ashore it was a pretty popular part and there were a lot of photographs taken.



**Q Do you know if Mr. Leiper or Mr. Hueto took photographs of the gimbal nut?**
A I don't know if they did or they didn't.
**Q Was Mr. Key present with you when you looked at the gimbal nut on shore?**
A I don't remember if he was there or not.
**Q I take it you don't know if he took any photographs.**
A Right.
**Q Referring to Exhibit 186-C, are all of the red areas that we see in that photograph red grease?**
A I don't know if all of the areas are red grease.
**Q Well --**
A From that picture, it's hard to tell.
**Q When you were present looking at the gimbal nut, did you see anything that was red that was not grease?**
A I don't recall if I did or --
**Q Were there --**
**Did you observe some locations where there were literally what I would call globs of grease-like, the lower most red area on Exhibit 186-D. Is that a glob of red grease?**
A I can't tell from that picture.



**Q Do you remember observing --**
**When I say a glob I mean a three-dimensional, you know, glob.**
A I remember seeing globs of grease. I don't remember what exact areas.
**Q The globs of grease you observed were red?**
A From the best of my recollection.
**Q And we are talking about the gimbal nut?**
A Right.
**Q Did you observe any grease inside the gimbal nut in the area where the threads used to be?**
A At the upper portion on the inside, yes.
**Q Was that red?**
A Was that red?
**Q Was it red in color?**
A I don't know what color it was. I know there was grease down inside.
**Q Do you remember now making any mental note that there was anything different about the grease you observed at the top of the bore as distinguished from the grease you observed outside of the gimbal nut?**
A I didn't make a distinguishing between what colors the greases were.
I did remember red grease was in the area, but I wasn't looking at it to distinguish color of



greases. I was looking at it more for the structural aspect of it.
**Q Okay.**
**Do you know if the gimbal nut was washed before photograph 186-D was taken?**
A I know that to my knowledge all the parts were sent through the same process on the shore before they were moved into the hangar.
**Q Tell us what that process is as you understand it.**
A The process, as I understand it from what we saw on other parts, were if there was any human remains on the parts that didn't get picked off on the boat, they removed those on shore, and they did do a rinsing of parts on the shore.
**Q Was that for hygiene purposes as you understood it?**
A I think it was for hygiene purposes for the protection the investigators.
**Q All right.**
**So tell me if this is right. All you can say is if that process was followed, then the gimbal nut would have been washed before you saw it?**
A Yes, should have been. I can't for a fact that they did, but it should have been.

**Q I understand.**
**Have you ever spoken to Mr. Stockhill on any subject after you left Port Hueneme on that, during that investigation?**
A No.
**Q Switching subjects to the grounding of the, the grounding of the 19 aircraft. Is that a correct way to state it?**
A 18 or 19. The number in that range.
**Q Do I have it right that the 18 or 19 aircraft that were grounded had been previously inspected utilizing the Alaska-fabricated restraining tool?**
A Yes. The last inspection was done with the Alaska fabricated tool.
**Q I was mixed up on -- had they been inspected with an Alaska fab --**
A Let me go back and clarify that.
We could not confirm a hundred percent that the inspections were done with a Boeing tool. So we had to assume conservatively that they were not done with a Boeing tool. And so we did inspections on any airplane we couldn't confirm a hundred percent that the Boeing tool was used. So some of those airplanes may have used the Boeing tool, we just couldn't



confirm it.
**Q I understand. And you said, were the last inspection.**
**These aircraft were all inspected sometime April or after, April 2000 or after; correct?**
A They were inspected continuously for the AD after February.
**Q After February.**
**And you don't know as you sit here today how many Alaska-fabricated tools there were as of February 2000?**
A That's correct.
**Q Do you know how many Boeing-fabricated tools Alaska owned in February 2000?**
A No.
**Q Did Alaska purchase several Boeing-fabricated tools after the accident?**
A I know that they purchased additional Boeing tools after the re-inspection of the MD-80 fleet. I don't know what the purchasing was with the Boeing tools prior to that.
**Q It's been my understanding -- tell me if this is wrong -- that as of the time of the accident Alaska only owned one restraining tool, which was located in Oakland.**



**Do you know if that's correct?**
A I don't know if that's correct or not.
**Q Do you have any information that Alaska owned more than one restraining tool as of the date of the accident?**
A I don't have any information on that.
**Q As a result of the retest of the 18 or 19 aircraft using a Boeing restraining tool, were different end-play results obtained?**
A I don't know what the results of the end-play checks were.
I do know that none of the airplanes that were reinspected failed end-play checks. So there were no failures. I don't know what the results were in comparison to what was measured before.
**Q Okay.**
**Exhibit 194 refers to a matrix, as I understand it at least reading between the lines, was some sort of chart which compared readings taken during the original inspections as compared to the readings taken with the Boeing restraining tool.**
**Have you ever seen that matrix?**
A Yes.
**Q Was it attached to this email?**
A I don't know what was attached to in email.



I didn't see this email.
**Q Is the matrix as I described it, is it some sort of chart that compares the readings taken originally with the readings taken with the Boeing restraining tool?**
A What the chart has by aircraft tail number is all of the end-play checks that were done since February. It doesn't speculate if it's a Boeing tool or if it's an Alaska-made tool. But it basically has the dates the readings were taken and what the readings were for all of the aircraft in our fleet.
**Q Is one able to look at that chart and pick out the 18 or 19 aircraft that were rechecked?**
A Yes.
**Q Because there are two readings?**
A You could pick out that because it will have the dates of August 3rd and August 4th that the readings were done and you know those probably were the airplanes that were retested.
**Q Did the chart have some sort of column which contained the differences in reading for those 18 or 19 aircraft that were rechecked?**
A It has a column that has the difference between the present reading and the reading taken before as a measurement of wear rates, yes.

**Q Now I'm speaking of the 18 or 19 aircraft that were rechecked.**
A They are in the matrix.
**Q And there is column --**
**Is there a column from which you could tell the difference between the reading that was done in February or after and the reading that was done August 3rd and 4th?**
A Yes, the readings for all the dates are recorded on the matrix.
**Q All right.**
**But is what you're saying you can't attribute the difference in reading solely to the fact there that there was a Boeing restraining fixture for the second reading?**
A Right.
**Q Because there has been hours put on the airplane and some wear presumably occurred in the jackscrew assembly?**
A That's correct.
**Q What's the highest difference you recall seeing?**
A I don't remember looking at the details of the differences.
**Q Did you participate in any meetings or**



**conference calls or email exchanges after the August 3rd and 4th re-readings concerning any conclusions about whether the Alaska-fabricated tools had in fact caused erroneous readings to be made?**
A I don't recall being in any meetings discussing that.
**Q Do you have any information from any source as to whether anyone concluded that in fact the Boeing-fabricated restraining tools had caused erroneous readings?**
A I don't recall that.
**Q You have no information on that subject at all?**
A It's in the matrix. I don't have any information that conclusions were drawn on that particular subject.
**Q Do you have a copy of that matrix?**
A Not on me right now.
**Q No. At your office?**
A Yes.
**Q Does it have a title "Matrix of Readings?"**
A I'm not sure. It has a title on it. I don't know what the title is. But it's -- I think the title contains the AD number and it's basically end-play check readings that are done in conjunction



with the AD.
**Q Was that matrix given to the NTSB; if you know?**
A I believe it has been.
**Q Have you been present during any discussion after the accident as to whether your observations of red grease indicated that the accident aircraft jackscrew had been lubricated with Mobil 28 during its last lubrication prior to the accident?**
A No.
**Q After the August 3rd and 4th re-readings did Alaska stop using Alaska-fabricated restraining tools?**
A Yes.
**Q And is it correct that Alaska, from that time until today, only uses Boeing-fabricated tools?**
A That's correct.
**Q After August 3rd and 4th, 2000, do you have any knowledge that anyone did any additional testing of the Alaska-fabricated restraining tools in order to determine their accuracy?**
A I'm not aware of any testing that has been done after August 3rd and 4th.
**Q Did you make the decision to not use Alaska-fabricated tools after August?**



A I think it was a company decision.
**Q Did you participate in it?**
A I was involved in it.
**Q Did you agree with the decision?**
A I agreed with the decision in the fact that since we couldn't confirm a hundred percent f it produced accurate readings or not, that to take the conservative measure and use the Boeing tools.
**Q All right.**
**And in the course of those discussions concerning the decision not to use Alaska-fabricated tools, I take it someone looked at matrix in order to try to make an attempt to determine whether the tools may have contributed to erroneous readings?**
A I don't know if that was part of the discussion.
I don't think Alaska ever went back to try to justify or do any testing to see if we should continue use of the tools. They had purchased an ample quantity of the Boeing tools, and the decision was made to just go forward with the Boeing tools.
**Q Do you know how many Boeing tools Alaska purchased?**
A No, I don't.
MR. READ: That's all I have. Thanks.

THE VIDEOGRAPHER: Going off the record, 5:01 p.m.
(Recess taken)
THE VIDEOGRAPHER: Going back on the record, 5:08 p.m.

EXAMINATION

BY MR. LEBOVITZ:
**Q Mr. Patterson, Jamie Lebovitz. I'm a member of Plaintiffs Administrative and Steering Committees. And I have a few questions for you this afternoon. Okay?**
A Okay.
**Q I'll move as quickly as I can.**
**Can you look at Exhibit 75 in the exhibit book up in front of you.**
A All right. Got it.
**Q Do you have it.**
**In looking at the page following that, which is Bates number 9128, do you see that?**
A Yes.
**Q There is a signature there and a name of a person named H. E. Whetro.**
A Yes.



**Q This was issued in '94 of May. I know you were at McDonnell Douglas and dealt primarily with robotics. But I was wondering if you knew who this Mr. Whetro was when you were at McDonnell Douglas?**
A I do not know who he is.
**Q Have you seen this document before today?**
A Yes.
**Q When did you see it for the first time?**
A Probably sometime within the year 2000.
**Q Was there any particular reason why you had the occasion to see this document?**
A It was being discussed with the NTSB.
**Q When you say "it was being discussed," what do you mean by that?**
A I don't know what the details of the discussion were, but the document was brought up so I pulled it up to review as a reference.
**Q Let me ask you this.**
**Having read this, are you aware that the reason, one of the reasons why this AOL or All Operator Letter was issued was because of a concern that was brought to Douglas's attention about premature wear of horizontal stabilizer jackscrew assemblies?**
MR. FRANKEL: Objection. No foundation.



Calls for speculation.
**Q MR. LEBOVITZ: Are you aware of that?**
A Could you repeat the question.
**Q What was your understanding as to why this AOL was issued?**
MR. FRANKEL: Objection. No foundation.
Calls for speculation.
THE WITNESS: My impression of this by reading it is that operators were having wear and Boeing issued a recommendation based on stuff they obtained from the field.
**Q MR. LEBOVITZ: If you look at the last sentence on the first page where it says "Douglas is of the opinion that the most probable cause of the observed Acme nut thread question and subsequent excessive end-play was inadequate lubrication of the actuator assemblies."**
**Do you see that?**
A Yes.
**Q Do you know whether at any time subsequent to 1984, and in particular any time once Alaska Airlines began using MD-80 series of aircraft, whether Douglas provided any instruction or information, other than that which was contained in the maintenance manual, regarding the methodology and**



**the procedure for delivering lubrication to a horizontal jackscrew assembly?**
MR. FRANKEL: Objection. No foundation.
Calls for speculation.
MR. LEBOVITZ: Go ahead.
THE WITNESS: I'm not aware of any.
**Q MR. LEBOVITZ: Look on the next page of this AOL if you would please.**
A Page two?
**Q Yes.**
A Okay.
**Q In the last paragraph it talks about Douglas wishing to emphasize the importance of maintaining a conscious lubrication program to minimize Acme nut thread wear.**
**Do you see that?**
A Yes.
**Q Are you aware of any document, any manual, any bulletin, any writing whatsoever that came from Douglas, after the issuance of this AOL, describing or delineating what a conscious lubrication program consists of?**
MR. FRANKEL: Objection. No foundation.
Calls for speculation.
THE WITNESS: I'm not aware.

MR. FRANKEL: Other than what this document says: Every 600 hours?
MR. LEBOVITZ: Beyond this document. That's exactly what I asked.
THE WITNESS: I'm not aware of any document released after this date.
**Q MR. LEBOVITZ: Are you aware as to whether McDonnell Douglas or Boeing, for that matter, at any time prior to the crash of Alaska Airlines Flight 261 provided a warning or any notification whatsoever to Alaska Airlines describing what the consequences would be to safety of flight in the event of the stripping or excessive wear of the nut threads within an Acme nut on the horizontal stabilizer jackscrew?**
MR. FRANKEL: No foundation. Calls for speculation.
**Q MR. LEBOVITZ: Go ahead.**
A I'm not aware of any document.
**Q Since the crash of Alaska Airlines Flight 261, did you come to learn that McDonnell Douglas and/or Boeing provided warnings to operators of other Douglas aircraft of the consequence of excessive wear or stripping of Acme nut threads?**
A Could you restate that question?
**Q MR. LEBOVITZ: Since the crash of**



**Flight 261, did you come to learn that prior to the crash McDonnell Douglas and/or Boeing provided warnings to operators of MD-11 aircraft of what the consequences would be in the event of excessive wear or stripping of Acme nut threads?**
MR. FRANKEL: Objection. No foundation.
THE WITNESS: I heard that there was MD-11 issues. I was not fully aware of what the details of those issues were.
**Q MR. LEBOVITZ: In your capacity, your particular position at Alaska Airlines, were you familiar with the contents of the maintenance manual insofar as the conduct of end-play exams or inspections of MD-80 horizontal stabilizer jackscrew assemblies?**
A For what time frame are you talking about?
**Q Any time prior to the crash of Flight 261.**
A No.
**Q What about subsequent to the crash?**
A Subsequent, after the crash I was aware of it based on the activity that was going on.
**Q Okay.**
**Did there come a time, Mr. Patterson, when you learned that there was an inconsistency between the DC-9, MD-80 overhaul manual as compared to the**



**DC-9, MD-80 maintenance manual insofar as end-play examination of horizontal stabilizer jackscrew assemblies?**
MR. FRANKEL: Objection. No foundation. The question is vague and ambiguous. Calls for speculation.
THE WITNESS: There were differences in the manual. I don't think there were differences in regards to the procedure. But there were differences in interval between the overhaul manual and the maintenance manual.
Or actually the overhaul manual called out an interval reduction for end-play checks as the jackscrew passed through 34 thousandths end-play. That was not contained in the maintenance manual.
**Q MR. LEBOVITZ: How was that brought to your attention, Mr. Patterson?**
A I don't remember the circumstances that it was brought to my attention. But I do know that when we looked at it, there was a difference.
**Q Did it concern you that there was an inconsistency between the overhaul manual and the maintenance manual?**
MR. FRANKEL: Objection. The question's vague and ambiguous. No foundation. Calls for



speculation.
**Q MR. LEBOVITZ: Go ahead.**
A It concerned me that there would be something buried in an overhaul manual that was not consistent with what was in the maintenance manual. Which is what maintenance uses on a day-to-day basis.
MR. LEBOVITZ: I'm going to hand you an exhibit which is going to be marked in the sequence. The next number, madam court reporter?
THE REPORTER: 198.
(Defendants' Exhibit 198 was marked for identification)
**Q MR. LEBOVITZ: Mr. Patterson, I'm handing you what has been marked as Exhibit 198. Can you take a look at that for a moment.?**
A I'm looking at it.
**Q Do you recognize it?**
A Yup. Yes.
**Q What is it?**
A It is a letter that I sent to Boeing asking for clarification of what the one thousand hour interval reduction was in asking about the differences between the overhaul manual and the maintenance manual.
**Q Did someone at Alaska Airlines direct you**

**to make this inquiry, or was this something within the province of your particular position that you took it upon yourself you needed to find out what was going on here?**

A In the course of discussing it with individuals at Alaska Airlines I felt that it needed to be clarified. So I took it upon myself to issue the request to Boeing.

**Q By the way, prior to the crash of Flight 261, was Alaska Airlines in the business of overhauling jackscrew assemblies for MD-80 aircraft?**

A No.

**Q So in the day-to-day maintenance and continued airworthiness of MD-80 aircraft, would Alaska have any reason to consult the DC-9 or MD-80 overhaul manual?**

MR. FRANKEL: Objection. Calls for speculation. No foundation.

THE WITNESS: In regards to the jackscrew, no.

**Q MR. LEBOVITZ: Now, Exhibit 197 is entitled "A Boeing Message Request."**

**Is this some type of form that is created over there at Alaska Airlines, or is this a Boeing document; if you know?**



A This is a form that is created on the PCs of the engineers. And we in turn give this to the on-site Boeing rep, who will convert this into a BOECOM message, which is sent to Boeing.

**Q Who was the Boeing on-site rep, if you know, back in January 31st, 2000?**

A I believe it was David Inerbitzen.

**Q When you say an on-site rep for Boeing, is this someone that maintains some office space at Alaska Airlines' headquarters?**

A It maintains office space at the hangar at Alaska Airlines. Not at the headquarters. In Seattle.

**Q That is a field representative?**

A Yes.

**Q And does Boeing have more -- strike that.**

**In January of 2000, did Boeing have more than one field representative at the Alaska Airlines hangar?**

A We have two now. I'm not sure. There was a lot of changes with the field reps. I don't recall how many they had.

**Q Let me ask you this another way.**

**At least for the entire period of time that Alaska Airlines was operating MD-80 aircraft, which**



**started sometime, what in the early 1990s --**

A Operating MD-80 aircraft?

**Q Yes.**

A I think it started in 1980's.

**Q '80s. Okay.**

**Whenever it was, was there a field representative for the airframe manufacturer always in place at Alaska Airlines for the MD-80 aircraft?**

MR. FRANKEL: Objection. It calls for speculation.

**Q MR. LEBOVITZ: If you know.**

A Prior to 1992 I don't know, because I wasn't there.

**Q How about when you got there?**

A From when I got there, we had two reps there, and there has been a rep there for the entire duration I have been there.

**Q Is this rep someone who for his or her day-to-day job or position comes to the, this person comes to hangar and that's where they spend the better part of their time?**

A I wouldn't say they spend the better part of their time in the hangar. They are pretty much in their office if they are not -- I would say the majority of the time is spent in the office.



**Q Does this person, this field representative, would it have been either a McDonnell Douglas or a Boeing employee?**

A Yes.

**Q So that person is on the McDonnell Douglas or Boeing payroll as far as you know?**

A That's correct.

**Q Did you ever get to interact at all with the field representatives; get to know them personally and know what kind of information they had access to?**

A Every day.

**Q Now, is it your understanding that either McDonnell Douglas or when McDonnell Douglas became Boeing that a Boeing field representative would have access to any information within the Boeing Company or the McDonnell Douglas Company concerning the airworthiness or any matters pertaining to the safety of the flight for the aircraft that they designed and manufactured?**

MR. FRANKEL: Objection. Calls for speculation. No foundation.

THE WITNESS: No. I know they had access to more information than we had access to.

**Q MR. LEBOVITZ: How did you know that?**

A Because in their office they have

information for the various fleet types that we don't fly at Alaska Airlines. So I know they have that in their office.

And there are certain occasions where we would go the reps to obtain Boeing documents that Alaska didn't have on site and they were able to get access to those documents.

**Q Were there occasions, Mr. Patterson, when the McDonnell Douglas or Boeing field representative would provide information concerning the airworthiness or safety of flight issues on McDonnell Douglas or Boeing aircraft that were not in the fleet that Alaska Airlines used?**

A Not very often.

**Q Was it your understanding that there were some components and systems contained in an MD-80 that were similar or identical to components or systems in other McDonnell Douglas aircraft?**

MR. FRANKEL: Objection. No foundation. Calls for speculation.

THE WITNESS: I was going to ask you to restate that question.

**Q MR. LEBOVITZ: Okay.**

**Do you know whether or not McDonnell Douglas 80 series aircraft have systems or components**



**that are similar to systems or components in other MD series of airplanes like MD-11s or DC-8s?**

A I'm not aware. There may be, but I'm not aware if there are or not.

**Q At any time, once you joined Alaska Airlines, up until the time of the crash of Alaska Airlines Flight 261, did the field representative for McDonnell Douglas or Boeing ever bring to your attention something that -- without your requesting, bring anything to your attention that concerned airworthiness or the safety of flight of airplanes that you folks were operating?**

MR. FRANKEL: Objection. The question's over broad. It's vague and ambiguous. Calls for speculation.

THE WITNESS: On occasion they would alert us of Airworthiness Directives that we already knew about.

But Boeing, through the BOECOM system issues messages out alerting operators that an Airworthiness Directive is coming or has been released. So we do get notifications on some things.

MR. LEBOVITZ: Let's mark this as Exhibit 199.

///



(Defendants' Exhibit 199 was marked for identification)

**Q MR. LEBOVITZ: Mr. Patterson, have you soon this exhibit before?**

A Yes, I have.

**Q What is it?**

A This is the Boeing response to the Alaska request, Exhibit 198.

**Q Do you want to read it to refresh your memory, or do you have a pretty good recollection of what the substance of this thing is?**

A Let me take a couple minutes. I haven't read this recently.

MR. LEBOVITZ: Go ahead.

THE VIDEOGRAPHER: This is the end of tape three videotape in the deposition of Scott Patterson. We are going off record at 5:27 p.m.

(Recess taken)

THE VIDEOGRAPHER: This begins tape four in the in the video deposition of Scott Patterson. We are going back on the record 5:28 p.m.

THE WITNESS: Okay.

**Q MR. LEBOVITZ: Looking at the top of the first page, to the right says, "customer distribution" and the name "Scott Patterson."**



**I assume that's you.**

A That's me.

**Q Was this distributed to anyone else on your part at Alaska Airlines once you received it?**

A By myself?

**Q Yes.**

A Yes.

**Q Who else was it distributed to?**

A A copy was provided to Gerardo. I think Andy Leiper was given a copy since they were involved with the investigations. And the information in the talks was useful for what they were doing.

There were probably other people at Alaska Airlines that saw this. I don't have a recollection of the list of names.

I do know that portions of that telex were used for employee presentations that were done throughout the company to bring awareness to the employees of the company of information just to educate what was end-play checks. And there was a lot of issues regarding the end-play checks in Oakland.

And one of the things that this telex clarified was that 40 thousandths was a good reading to put a jackscrew back in service.

And there were a lot of issues whether

40 thousandths was over the limit or not over the limit. And this was the first document that we got from the manufacturer that said 40 thousandths was an acceptable limit to return a jackscrew to service.

**Q Well, isn't it true, Mr. Patterson, that even before the crash of Flight 261, 40 thousandths of an inch of measurement on an end-play wear of a jackscrew gimbal nut assembly was still a serviceable or was a system that could still be put back in the aircraft for flight?**

A It was. But when you read the maintenance manual, you could read it both ways.

**Q What do you mean?**

A I don't have the exact wording of what the maintenance manual was, but there was a lot of questions arising from the check that was done in Oakland whether 40 thousandths was an acceptable reading.

**Q Are you saying there was some ambiguity there?**

A Yes.

**Q Now, in January -- strike that.**

**In September of 1997, which is when the last end-play check was done on Aircraft 963, the accident aircraft --**



A Okay.

**Q -- to your knowledge, was the overhaul manual for the DC-9 and MD-80, did it contain the requirement for stepped up or 1000-hour interval inspections for jackscrew assemblies that were overhauled and had wear of .034 or above?**

A I would have to look at the date of the manual. But I believe it was.

**Q Are you familiar with the process of revisions or amendments to maintenance manuals and other manuals that accompany an airplane?**

A Revisions to manuals at Alaska?

**Q Yeah, revisions to supplements.**

**Are you familiar with the process that it does happen?**

A Yes.

**Q In the course of your career at Alaska Airlines, have there been times when maintenance manuals have been updated or revised or amended for whatever reason?**

A Yes.

**Q At any time, based on what you know today, at any time prior to the crash of Flight 261 was there ever an amendment or supplement or revision to the DC-9, MD-80 overhaul manual which dispensed with the**



**1000-hour wear check intervals for end-play measures of .034 and above?**

MR. FRANKEL: Objection. No foundation. Calls for speculation.

THE WITNESS: No.

MR. READ: Don't be afraid of his objections.

What is your answer?

A No.

**Q MR. READ: As far as you know today, has there been any revision, amendment or deletion of the thousand hour wear check interval from the overhaul manual for the DC-9 or MD-80 aircraft?**

A I'm not aware that it has been removed as of today.

**Q As of today, according to an Airworthiness Directive, 2000-hour interval inspections of end-play wear are required, is that right, on MD-80s?**

A That's correct.

**Q Regardless of measure; is that right?**

A That's correct.

**Q At any time prior to the crash of Alaska Airlines Flight 261 did McDonnell Douglas or Boeing representatives thereof ever come to Alaska Airlines to provide instruction on the methods**



**or the proper procedure for lubricating the jackscrew gimbal nut assembly on an MD-80 airplane?**

MR. FRANKEL: Objection. No foundation. Calls for speculation.

**Q MR. LEBOVITZ: Did that ever happen?**

A Not that I'm aware of.

**Q Okay.**

**Prior to the crash of Alaska Airlines Flight 261, did anyone from McDonnell Douglas or Boeing come to the Alaska Airlines facilities where they maintain MD-80 aircraft to provide instruction or to make observations of the methods by which Alaska Airlines undertook to measure end-play wear on the MD-80 jackscrew gimbal nut assemblies?**

MR. FRANKEL: Objection. No foundation. Calls for speculation.

THE WITNESS: Not that I'm aware of.

MR. JAQUES: Jamie, it's past 5:30. Why don't you wrap up that line of questioning and we will knock off for the day.

MR. LEBOVITZ: I'm just about done.

MR. FRANKEL: I'm going to have some more questions. Just so you know.

MR. JACQUES: I figured. So we will knock off for the day.

MR. LEBOVITZ: You want to bring him back tomorrow?
How much do you have?
MR. FRANKEL: Probably going to have half an hour maybe.
MR. JACQUES: We will come back tomorrow. It's been a long day. But if you want to finish whatever that line is, that's fine.
MR. LEBOVITZ: Just bear with me a second here. I was counting on finishing and letting the witness go home for good. But if Mr. Frankel's got a few more, then it's not going to be possible.
Just a second. We will finish it there and just pick it up back tomorrow morning.
Do you want to start a little earlier since we've got McCartney?
MR. JACQUES: We are already starting at nine.
MR. LEBOVITZ: May I have just a few minutes? You say 30 minutes?
MR. FRANKEL: At most.
MR. JAQUES: We are going to be here all this week and all next week. I don't see any reason to --
MR. LEBOVITZ: It's your call. It's your



witness tomorrow.
Do you want to start at nine?
MR. JACQUES: Let's start at nine. Nine is fine.
MR. FRANKEL: Nine is fine.
Lets go off the record.
THE VIDEOGRAPHER: This is the end of tape four, day one, in the videotape deposition of Scott Patterson. We are going off record at 5:37 p.m.
MR. FRANKEL: With respect to this transcript, I would be prepared to stipulate that the court reporter be relieved of her obligations under the Federal Rules; that the original be sent to Mr. Rushing and that mr. Rushing make arrangements with the witness to sign it under penalty of perjury, with the requirement of any notary being waived.
MR. RUSHING: That's fine. 45 days from first being received.
MR. FRANKEL: How about 30?
MR. RUSHING: Thirty is probably going to do.
MR. FRANKEL: You'll maintain custody of the original transcript and notify us within 30 days whether there have been any changes to any of the testimony Mr. Patterson has given to us. And if we



are not so notified, we will assume that it's been reviewed and no changes have been made.
MR. RUSHING: That's fine.
MR. FRANKEL: Just, are you prepared to keep custody of the original transcript and make it available to the parties upon reasonable notice?
MR. RUSHING: Right.
MR. FRANKEL: If it's for some reason not available, the original transcript, we can stipulate that a certified copy can be used in its stead?
MR. RUSHING: As if it's a signed original?
MR. FRANKEL: Yes.
MR. RUSHING: Correct.
(Ending time: 5:37 p.m.)



STATE OF {_____)
) ss.
COUNTY OF {_____)

I, the undersigned, declare under penalty of perjury that I have read the foregoing transcript, and I have made any corrections, additions, or deletions that I was desirous of making; that the foregoing is a true and correct transcript of my testimony contained therein.
Executed this _____ day of _____, 2002, at

_____
QUINTON SCOTT PATTERSON

STATE OF CALIFORNIA )

COUNTY OF SAN FRANCISCO )

I, JAN W. SERRA, CSR No. 8207, Certified Shorthand Reporter, certify:

That the foregoing proceedings were taken before me at the time and place therein set forth, at which time the witness was put under oath by me;

That the testimony of the witness and all objections made at the time of the examination were recorded stenographically by me and were thereafter transcribed;

That the foregoing is a true and correct transcript of my shorthand notes so taken.

I further certify that I am not a relative or employee of any attorney or of any of the parties, nor financially interested in the action.

I declare under the penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated this July 25, 2002.

Certified Shorthand Reporter



REPORTER'S CERTIFICATION OF CERTIFIED COPY

I, JAN W. SERRA, CSR No. 8207, Certified Shorthand Reporter in the state of California certify that the foregoing pages 1 through 230 constitute a true and correct copy of the original deposition Volume I of QUINTON SCOTT PATTERSON, taken on July 17, 2002.

I declare under penalty of perjury under the laws of the state of California that the foregoing is true and correct.

Dated this July 25, 2002.

JAN W. SERRA, C.S.R. No. 8207

1201 2:16 7:9
12100 3:9
122 5:20
123 5:21
124 5:22
125 5:23
126 5:25
127 6:3
13 127:4 128:4
13th 27:12 28:7 29:24 31:9,19 32:12 55:5 55:13,17 100:15 127:18 128:7,15
1370 3:13
14th 20:19 26:17 41:11 41:25 55:5,11,14,17 100:15 127:8
140 26:9
144 6:4
15 43:5 53:3 58:14,15 75:10 89:22 187:4
15th 119:12 123:5
155 6:5
16th 4:4
169 6:7
17 1:17 2:18 231:10
17th 7:10
170 5:5
1701 4:13
179 5:6 6:8
18 198:9,10 200:7 201:13,22 202:1
184 5:13 91:19,22 92:1 108:5
185 5:14 103:12,15,18
186-A 5:15 109:6,10,13 110:1,18,21 111:9 193:2
186-B 5:16 109:6 110:11,25 111:14 193:3
186-C 5:17 109:6,10 111:18 112:8,24 195:10
186-D 114:7 115:7 195:23 197:5
187 5:18 118:19,22,24 119:3,21 121:1 122:24 123:23 124:3 125:25
188 5:20 122:3,6,9,25 125:1,7,11
189 5:21 123:15,18,24 124:2
19 198:7,9,10 200:7 201:13,22 202:1
19th 4:9
190 5:22 124:13,17,19 125:8
191 5:23 125:18,20,22 126:3,10,17 150:4,13
192 5:25 126:21,23,25
193 6:3 127:21,23,25
194 6:4 144:1,4,6,7 148:9 200:17
195 6:5 154:24 155:2,5 155:5,11
196 6:7 169:9,12,15
197 6:8 179:13,22 181:23 190:16
214:21
198 6:10,12 213:10,11 213:14 220:8
1980's 216:4
1984 14:17 15:5 16:2 21:14 22:10 208:21
199 6:11 219:24 220:1
1990 14:24 15:2,3,5,8 15:17 21:14
1990s 216:1
1991 16:10
1992 11:21 14:12,15 15:18 16:10 22:17 23:12,14 24:11 216:12
1994 168:2
1997 173:5,11,16,18 222:23

2
2 169:11
2:53 143:19
20 6:10 43:5 58:14,15 75:9 89:22 187:4
20th 119:12 123:6
200 4:13
2000 1:4 2:4 5:19,24 6:8,10 7:5 12:13,15 13:12 20:16,20,23 21:1,1 22:18 23:12 23:15 25:18 26:17 27:10 28:7 29:24 32:12 41:11 90:14 93:20,23 101:23,24 102:9,20 103:13,19 104:4,21 105:13 115:11,16,21 116:18 117:24 119:1,6 120:5 121:2 122:16,18,19 124:6,23 125:3,24 126:4,14,18 127:4,14 127:15,18 128:4,7,15 128:17,18 129:23 130:5,7,10,11,24 131:2,8,9,23 132:21 132:21 134:12,15 135:2,24 136:14 137:24 139:10,16 140:8,23 142:18 143:7,12 145:20,21 146:11,25 147:9,18 148:10 149:7 150:22 150:23 151:3,3 152:3 152:15 155:14 163:16 169:24 173:24 179:23 180:6 181:19 187:18 199:5 199:11,14 204:18 207:9 215:6,17
2000-hour 224:17
20007 3:24
2001 167:3 178:10
2002 1:17 2:18 7:11 164:11 167:1,10 229:13 230:21 231:10,14
202)625-3123 3:24
206 5:7
213 6:10
213)955-7700 4:10
214)752-8600 4:14
216)621-2300 3:14
220 6:11
230 231:7
25 230:21 231:14
261 16:22 19:23 25:6 210:9,20 211:1,17 214:10 219:7 222:6 223:23 224:23 225:9
28 177:16,23 193:25 204:8
284-6930 1:23
286 124:16

3
3rd 145:1,21 148:10,12 148:13,19,23 149:11 149:12,21,23 150:23 152:3,15,23 154:6 155:14 157:15 159:1 159:9,14 162:14,23 163:11,16 169:24 170:6 201:17 202:8 203:2 204:11,18,23
3:06 143:24
3:47 168:14
3:59 168:18
30 226:20 227:19,23
30th 5:23 125:23 126:4 126:14,18
300 3:23
31 1:4 2:4
31st 7:5 22:18 23:15 25:18 26:1,2,16 27:10 145:20 146:11 215:6
310)576-1200 3:6
33 175:12,25 176:3,10 177:16,19
34 212:14
360 62:17

4
4th 145:1,21 148:10,13 148:23 149:24 163:11,16 201:17 202:8 203:2 204:11 204:18,23
4:14 179:9
4:27 179:12
40 22:15 221:23 222:1 222:3,6,17
415 1:23
415)781-7900 4:5
415)882-2410 3:19
4196750 150:17
44113-1792 3:14
45 227:17
48th 2:17 7:10

5
5 1:22
5:01 206:2
5:08 206:5
5:27 220:17
5:28 220:21
5:30 225:18
5:37 227:9 228:14
50 47:19,24 48:3,10

6
6th 3:18
600 43:8 210:2
602 150:4,8
603 150:10,13
625 1:22
685 3:18

7
7 6:8 179:23
7th 104:21 105:2,7
700 43:8
7200-00-00973 127:4
725 4:8
737s 176:5
75 48:3 206:16
75202 4:14

8
8 5:4 103:13
8th 55:7,10,12,15,16 55:19 56:8,16 66:15 66:18,19 67:5 83:12 83:17 94:21 103:18 104:4,11 105:2 106:11 107:5,15,16 107:24 108:1 117:7
80 218:25
80s 216:5
800)827-0097 3:11
8207 1:24 2:19 230:4 231:5,17
85 124:15
86 15:6 124:15

9
9C049B6 1:25
9th 55:8,8,10,12,15,16 55:19,20 56:9,16 66:7 67:5 69:17,18 70:3 77:4,15 83:12 83:17 96:8,19 97:2 99:11 100:15 107:10 115:16,20 116:18 122:19 124:25 139:16 186:4
9-J 117:15
9:15 2:18 7:16
9:30 159:6
90017-5419 4:9
90025-7106 3:10
90401-2131 3:6
91 5:13
9128 206:21
92 13:11
94 207:1
94103 1:22
94105 3:18
94111-3628 4:5
950 3:10
96 14:20
963 20:19 73:10 222:24
97 173:6
98104 2:17

42:23 70:13 185:14 186:12 220:20
videod 39:1
VIDEOGRAPHER 4:15 7:1 8:8 47:4 57:22,25 80:20,25 103:1,9 143:14,17,21 168:13 168:17 179:8,11 206:1,4 220:15,19 227:7
videos 41:6 55:19
videotape 7:1 27:22,25 28:22 29:18 31:9 38:8 41:20,21 80:22 81:1 143:18,22 220:16 227:8
videotaped 49:14,16
videotapes 26:21 27:9 27:13,16 28:5,10 31:5,9 66:21,21,23
videotaping 39:15
video's 49:16
view 32:7,25
viewed 28:23 29:24 30:12,14 31:10,25 33:2
viewing 29:11 84:16
Villanova 15:25 22:10
visible 38:25 111:1,10 115:21 116:9,24
Visually 190:17
volume 1:15 2:15 231:9
voluntarily 15:19 153:2

W

W 1:24 2:19 3:22 230:4 231:5,17
Wait 184:2
waiting 41:16
waived 227:16
walk 44:11,20
walked 45:3
WALKER 4:12
walking 106:19
want 10:13 15:8 21:4 22:16 45:7 47:9 60:14,15 109:5 112:14 143:25 144:11,15 150:3 169:9 173:14 185:20 220:9 226:1,7,15 227:2
wanted 44:18 54:16 91:15 189:14
wants 122:1
warning 210:10
warnings 210:21 211:3
wash 46:12 59:22
washed 192:3,12,14 192:17,23 197:4,23
washington 1:18 2:17 3:24 7:10 16:16 30:5 81:12,14 82:9,20,22 90:6,8,23 97:8 182:9
wasn't 24:4 40:2,7 49:16 59:22 62:24 64:23 73:14,18,19,21 73:22 76:5 79:14 80:9 92:8 98:14 99:23 113:21 130:14 136:10 142:14,23 161:21 165:24 168:7 177:3,21 185:4 193:5 196:25 216:13
watch 27:19 41:13 42:18 48:11 53:11
watched 27:16 28:10 30:15 38:10 41:15 42:2 44:24,25
watching 28:5 30:3 41:18 47:23 55:19
water 38:16 47:25 48:14,15 49:1 180:12
way 25:8 32:18,23 36:3 37:6 44:22 51:12 55:23 56:18 62:5,12 65:22 69:6 84:16 100:5 117:6 125:13 145:3 154:20 172:9 176:13 177:25 188:5 189:15 198:8 214:9 215:23
ways 222:12
wear 150:15 201:25 202:18 207:23 208:9 209:15 210:13,23 211:4 222:7 223:6 224:1,12,18 225:13
web 109:9
Wednesday 2:18
week 17:4,5,18,19 18:13,22 19:16 82:9 226:23,23
weeks 82:5 119:10 120:5
weighed 35:24
weight 35:16 36:3,20 43:14,21 70:20
weights 35:19,20 70:23
well 34:5 58:19,24 60:13,25 64:21 102:6 129:3 149:21 151:10 195:14 222:5
wells 176:4
went 14:24 18:14 26:13 28:6,25 31:8 32:1 33:16 36:23 37:3,6,10 38:14,17 41:3 42:10 46:8 49:9 69:15,19 77:13,13,17 78:1,5 82:9,10 91:16 106:3 107:23 108:4 133:10 162:12 164:25 165:21 184:19 185:1,6 190:3 190:7 192:19 205:17
were 11:24 12:18 16:11 18:2,9,12,19 18:24 22:5 23:10 26:11,21 27:4,5,20 28:16 30:2 31:5,20 31:20,23 32:24 33:4 33:14,16,16 37:12,21 37:24 38:2,2 39:15 39:15 40:4,16 41:18 41:18,24 42:11,14,18 42:21 44:4,8,11,16 45:1,22 46:1,6,13,17 46:18,19,23 47:15,19 47:21 48:4,19,24 49:6,17 51:25 53:8,8 53:20 54:1,22,23,24 55:1,2 56:8 58:2,3,16 58:16,25 59:8 62:3 62:17,25 63:11,20,21 64:2,20 66:2,8 69:4 71:15,16,19,21 74:13 74:15,23 75:11,17,22 75:23 76:10,12 78:8 78:12,15,25 79:3,13 81:16 82:6 83:6,9,22 84:7,15,19,25 85:4 85:18 86:11,16 89:14 90:1,1,2 94:17,22,25 95:5,16 96:3,12,14 96:17,20,22,22,24,25 96:25 97:5,6,14,16 97:17,18 98:15,18,19 99:15,19 100:7 105:6 105:11,11,16 106:4,4 106:5,16 109:8,8,11 109:17,17,21,23 112:19 113:20,22,23 114:23,24,25 115:2,4 115:5 122:15 126:8 129:5,10,10,15 132:16 133:4,8 134:17,24 135:7,17 137:6 138:4,5,17 139:12,18,20,23 141:1 142:4,11,11,21 143:9 144:19 146:18 147:18,21 148:12,20 149:6 150:1,15 151:19 152:24 153:25 154:3,11 158:16,18,21 159:7 160:9,25 161:13,15 161:16,20,23 162:1 162:24 163:4,17 164:12 165:18,23 166:2,2,4,6,19,19 170:5 173:15 176:2 176:17 177:5,25 178:18 179:21 180:10 182:24 185:9 185:21 187:6,20,23 187:23,24 188:6 189:1,2,4,17 190:5,6 190:18 191:23 193:20,25 194:20,22 194:24 195:16,20,22 196:6,23 197:7,8,12 198:11,20,21 199:2,4 199:6,10 200:8,11,13 200:14,14 201:7,10 201:11,13,18,18,19 201:22 202:2 203:15 207:2,4,16 208:9 211:9,11 212:7,8,9 218:6,8,12,15,17 219:12 221:10,12,13 221:16,17,25 223:5 230:6,10,11
weren't 40:16 43:1 64:23 70:19 74:16 192:25
West 3:23
wet 113:8,10,13
We're 57:25
we've 226:16
whatsoever 209:19 210:10
wheel 176:4
WHEELER 3:4
Whetro 206:24 207:4
while 16:11 22:5,16 28:16 32:18 33:2 41:24 53:8 58:2 66:2 66:8 69:4 71:19 79:3 80:3 89:4 96:19 109:18,18 142:17 158:18 172:11 179:21 182:23 183:8 183:12 184:12 185:9 186:15 188:11,16 189:25 194:20
white 109:3
whole 26:4,6 39:1,13 47:22 48:22 53:4,11 62:16 66:4 69:23 70:1 75:1 82:14 120:8 140:17 161:6
Wilshire 3:5,9
winch 50:25 51:20
wire 40:8 59:16 61:17 62:4,7,8 79:12,25
wires 76:7
wishing 209:13
witness 3:20 5:2 6:13 8:9 58:8 60:16 89:4 112:13,16 134:6 152:20 170:9 208:8 209:6,25 210:5 211:7 212:7 214:19 217:22 218:21 219:16 220:22 224:5 225:17 226:11 227:1,15 230:8,9
witnessed 78:4 80:18
woke 42:2
wondering 207:3
word 54:11 165:21
worded 172:9
wording 222:14
words 60:17 153:24 189:14
work 12:20,21 14:7,25 21:5,9,14 22:4,8 24:16,19 25:23 57:12 57:14 92:15 93:5,12 121:11 128:19 162:1 162:3 186:1
worked 15:4,5 43:12 69:7 120:3 137:2
working 14:16 24:2 77:25 96:7,15 126:6 141:14,16 158:16 168:11 178:18
wouldn't 74:16 134:21 169:1,7 216:22
wrap 225:19
wrapped 40:8 59:17 61:18 79:13,25
wreckage 26:22,24 27:9 29:5,6 70:15,24 71:18 76:11 77:19 184:17 185:14
Wright 18:2
writes 190:17
writing 19:6 161:8 162:5 183:6 209:19
writings 56:7 89:23
written 56:4 161:17 162:7
wrong 15:3 199:23
wrote 91:17 92:8,10,11 180:5,24 181:18

X

X 5:1

Y

yeah 51:18,23 129:9 132:8 145:9 223:13
year 15:1 16:1 24:7 145:1 165:22 166:1 167:6,8,10 168:8 173:24 187:18 207:9
years 11:20 166:7 167:9,12
Yup 213:18

Z

Zerk 87:3,5,7
zeros 169:10,11

0

00-1343 1:6 2:6
00-1343-CRB 7:8
00044 122:4
00045 122:5
034 223:6 224:2

1

1 65:25 231:7
1:40 103:5,10
10 53:3 125:3
10th 70:4 77:4,16,17 77:21 78:22 83:12,17 83:21 90:13 124:23 186:4
10th-11th 115:11
10:22 47:4
10:30 67:12
10:36 47:8
10:50 57:23
10:54 58:1
100 3:5,13 26:10
1000-hour 223:4 224:1
1025 3:22
103 5:14
109 5:15,16,17
11 5:19,24 65:25 67:10 67:12 119:1
11th 117:24 118:17 119:5,7 125:24
11:27 80:23
11:34 81:3
113 117:12,14 118:16 120:11,18,20,21 122:24
118 5:18
12th 123:22
12:10 103:2,3
120 26:10

thick 191:13
thing 35:6 37:10 39:14 44:19 46:5 120:8 165:4 174:19 220:11
things 219:22 221:22
think 18:14 20:9,9 29:2 37:16 41:21 47:12 49:8 51:16 55:4,6,7,8 55:9,11,14 67:7 69:15,16 70:1 78:1 80:17 81:12 82:21
Till 163:15
Tim 138:3,6 160:11,12
time 9:12 10:9,13 13:22,24 20:6 24:11 25:8,16,20 26:23 27:8 29:14,23 31:18 32:1 33:11 36:15,18 38:1 40:6,24 41:9,18 43:2,3,4 44:3 45:11 45:13,18 46:1 48:25 51:11 52:4 54:13 159:21,21 160:21 161:15,16 162:9 164:4,5,6,7,16,18 198:13,15,20,22,24 198:25 199:24 200:4 200:8,21 201:5,8,9
tooling 135:15
tools 134:25 162:22,24 164:3,15 199:10,14 199:17,19,21 203:3,9 204:13,16,20,25 165:25 166:2,6,10,11 166:24 167:2,11 168:20,24 169:5
twisted 76:6
two 5:23 15:6 17:21 35:1 37:7 46:5,19 51:24 52:12,14 81:1 82:5 83:21 89:20 90:13 93:15 109:20 119:10 125:6,23 132:22 143:18 163:9 54:20 66:5 107:4 171:8,9 180:12 181:18 183:2 185:5 186:4 193:9 204:16 219:6
update 171:10
updated 171:7 223:19
upper 33:25 65:2 84:22 85:24,25 86:1 94:22 95:1,2,3 190:21 191:5,9 196:12

modification 124:2
modifications 170:21
moment 47:10 213:15
Monica 3:6
monitor 38:10 186:12
monitors 173:1
month 164:10
months 11:18 13:2 102:20 105:14 128:10,12 151:12
MORAN 4:3
more 39:15,15 46:16 48:1 55:7,8 65:8 77:16 87:23 113:22 114:8 135:18,19 145:9 146:14 177:5 178:20 180:4 197:1 200:4 215:16,17 217:23 225:22 226:12
morning 17:18 19:17 29:25 37:8,12 41:10 41:25,25 67:12 69:22 70:1,4 77:21 78:22 91:1 103:24 107:5 226:14
most 33:14 80:17 96:11 172:10,14 195:23 208:14 226:21
motion 107:21
motor 33:25 34:1 61:10,14 64:21,23,24
motors 65:3 111:16
mount 4:7 89:13 114:20
mounted 34:1 111:6
mounts 33:25 61:10,14 90:7
move 50:22 69:25 206:15
moved 51:7 68:12 197:8
much 24:3 35:23 42:8 45:13 59:21 62:20 73:8,17 75:1 88:3 104:25 141:9 179:6 185:4 191:16 216:23 226:3
mud 33:22 39:8 190:20
mugu 1:4 2:4 7:5
murk 38:18
murky 38:16
must 185:12
myself 137:3 175:23 192:4 214:7 221:5
M-7200-00-00456 125:10
M/V 94:23

N

N 3:1 5:1
name 8:18,20,21,21 30:7 36:14,16 47:1 58:10 146:14 151:21 179:19 189:7 206:23 220:25
named 206:24
names 46:20 52:14 54:4 138:7 189:11,13 189:15,16 221:15
NATH 3:17
nature 46:12
naval 78:18 81:16 83:9 98:16 99:16 100:5 107:18
near 190:17
neck 185:23
need 42:13 80:20 104:25 161:19,24 172:3
needed 27:5 35:15 39:19 46:7 50:22 116:18 129:24 154:12 158:14,18 214:3,6
needs 178:23
Nelson 18:3
never 24:18 41:4 92:7 95:23 110:14 130:12 136:1 151:22,24 156:4 162:13 175:23 183:16 186:7,8 188:22
new 147:21 148:16
news 148:8
next 33:6 35:6 37:12 46:8 53:19 67:3 69:22 70:1,24 71:1,4 71:14 72:12 73:25 76:11 78:2 82:5 83:20 95:7 96:6,13 97:2,10,18 102:18 103:12 107:9 109:1 112:16 125:17 127:20 144:1 146:3 209:7 213:9 226:23
next-to-the-last 98:24 108:10
night 37:6 143:10
nine 12:6 226:18 227:2 227:3,3,5
nineties 168:7
nobody 188:14
nodding 9:7
none 5:10 6:14,16 175:6 188:4 200:12
non-conforming 140:13
non-conformity 141:21
noon 67:5 103:4
noontime 67:8
normally 115:22 116:10,25
North 4:13
northern 1:2 2:2 7:7
nose 33:22
notary 227:16
note 67:14 150:25 196:18
notes 55:2,3,24 56:5 94:2 95:15 184:22 188:15,19,22 193:11 230:14
nothing 22:4 24:5,24 25:1 40:25 76:23,24 81:24 121:4 162:5
notice 185:5 228:6
notification 172:24 210:10
notifications 219:22
notified 161:19 228:1
notifies 173:2
notify 227:23
November 93:20 101:23 102:20 115:20 116:18
November-December 101:25 102:9
NTSB 20:7,14,23 26:19 30:4 33:4 46:25 47:1 47:11 52:6 53:24 56:4 57:4 68:18 85:14 91:2 92:3 94:3 103:25 109:8,23 115:15,19,25 116:22 117:14 152:4,17 160:1,3 162:25 163:5 170:12 180:6,25 181:19,24 182:2,6,18 184:20,23 185:1 189:16 204:2 207:12
number 5:9,12 6:2 7:8 31:14 73:10 92:16 104:6 125:10,11,13 127:4 128:3 139:17 146:8,17 150:5 151:12 161:11,15 198:9 201:6 203:24 206:21 213:9
numbered 150:4
numbers 91:20 118:20 122:4 123:16 124:14 125:18 126:21 127:21 144:2 154:25 161:4
NURENBERG 3:12
nut 34:8,11,12,14,23 35:1,4 59:6,18 69:11 76:4 79:12 82:21 83:1,3,16,22 84:5,9 84:18,19,20,22,25 85:15 86:6,15,22,24 87:1,4,8,13,18 88:2,6 88:10,19,21,22 89:4 89:6,14,16,20 90:4 90:13 91:8 98:15,15 98:21 99:2,10,15 100:1,2,5,19,19,22 100:23 101:5,8,10,16 102:9,13 111:21 112:2,4 113:5 114:8 114:19,22 115:9,23 116:11,25 153:11 176:14,20,21,22,23 177:10 193:25 194:8 194:18,19,23 195:2,5 195:17 196:8,11,21 197:4,23 208:15 209:15 210:13,14,23 211:5 222:8 225:2,14
N.W 3:22

O

Oakland 131:19 132:2 132:7,12,19,23,24 133:13,17 199:25 221:21 222:17
oath 10:25 230:8
object 60:2 152:7
objection 60:11 207:25 208:6 209:3,23 211:6 212:4,24 214:17 216:9 217:20 218:19 219:13 224:3 225:3 225:15
objections 224:7 230:10
obligations 227:12
observation 65:4,11 86:9 87:12 90:12,16 90:21
observations 55:4,18 55:20,24 56:4,8 59:7 64:11 73:6 80:11 89:24 91:4 93:22 97:15 101:25 102:2,8 102:11,18 180:4,20 181:10 182:22 183:3 183:7,15 184:21 188:15 193:13,20 194:7 204:6 225:12
observe 39:22 40:3 45:23 46:2 48:24 53:5 59:8 61:8 64:13 64:16 65:6 67:16 73:4 75:22 76:2,19 78:25 81:4,18 82:25 84:5,11,17 86:23 87:10 97:21 101:2 132:5,19 133:10 194:19 195:21 196:10
observed 39:24 40:22 65:17 71:19 89:21 91:16,17 95:17,20 96:3 98:4 100:18 101:22 102:19 108:11 112:5 132:7 180:11,14,17,23 181:4 183:11 187:22 188:11 191:11 192:2 192:11,13 193:8,24 196:6,20,21 208:15
observing 54:8,22,25 81:16 89:19 96:25 133:4,8 196:1
obtain 16:1 218:5
obtained 200:9 208:11
occasion 22:21 41:13 78:2 115:13 119:2 207:11 219:16
occasions 41:15 172:10 218:4,8
occurred 25:14 33:11 105:14 135:3 143:11 145:8 202:18
occurring 35:6
ocean 20:5 26:22 27:1 27:9,23 28:18,24 31:17 32:13,19,24 33:8,15,21,23 34:3 34:21 37:2,15 38:21 39:8 42:20 43:15 44:6,9,13,14,25 45:12,18 46:12 47:18 47:25 48:2 49:14 50:19 51:2 55:22 73:19,19 74:11,12 94:23 104:22 105:9
off 1:4 2:4 7:4 10:15 14:16 27:4 43:15 44:5 46:13 47:4,17 48:2 50:3 57:20,22 58:2 59:22 64:3 70:21 80:23 82:13 95:8 103:1 143:19 168:13 179:8,21 181:3 183:2 184:8 197:13 206:1 220:17 225:20,25 227:6,9
offhand 92:20
office 7:13 106:6 119:11 135:9 160:15 172:17 182:11 187:11 203:18 215:9 215:11 216:24,25 217:25 218:3
offices 138:20
Off-the-record 57:16 108:8
often 218:14
Oh 100:2 179:25
Ohio 3:14
oil 4:2,6 7:22 51:17,21 52:2 179:20
oily 79:13 80:14
Okay 9:16 23:1 60:16 87:24 144:17 147:8 149:4 150:7 163:19 173:4 176:23 191:22 193:6 197:3 200:16 206:13,14 209:11 211:22 216:5 218:23 220:22 223:1 225:7
old 22:14 51:17
omitted 60:12
once 33:7 39:7 43:10 44:10 46:4 51:3 54:11 75:11,23 80:10 106:15 136:25 208:21 219:5 221:4
one 4:4 13:13 19:20 28:22 31:9,15,21 41:13,20,21 43:24 66:24 80:21 98:25 105:3 106:20 112:12 120:2,3 121:6 123:23 124:9 130:7,10,12 131:16 132:22,23,24 132:25 133:14,16,17 140:24 141:9 142:23 156:2,9 164:25 165:1 165:1 168:6 176:25 180:3 182:5 183:25 184:8 186:25 187:1 193:14 199:24 200:4 201:12 207:20 213:21 215:18 221:22 227:8
ones 31:22 74:16 137:5 138:5 159:7
one's 151:25
one-page 103:13
only 16:15 22:24 36:14 36:17 40:25 47:24 70:17 82:19 102:17 104:7,9 110:23 132:23 189:1 199:24 204:16

85:20,21 87:20 99:9 106:7,13 111:24 113:14 144:8,24 169:16 181:22 190:16 191:2,15 192:21,22 201:12 206:16 208:12 209:7 213:15 223:7
looked 37:9 39:18 40:8 45:24 46:2 49:5 53:21,21 59:14,20 60:1,9 61:5,6 75:23 76:3 79:5,7,25 81:21 84:25 86:16 87:17 88:23 89:1 97:25 98:1,1 108:15,22 114:4 184:17 187:13 187:16 189:8 195:5 205:12 212:20
looking 33:14 40:16,17 42:23 47:20,21,22 55:1 59:23 61:7 62:25 64:19 65:8,9 66:7 82:14 84:10,15 85:18 86:11,17 88:25 89:4 90:2 96:12 110:19 113:22 137:3 176:2,8 177:2,3,5 185:9 189:9 195:16 196:25 197:1 202:23 206:20 213:16 220:23
looks 92:9 105:1 110:6 110:13 122:14 124:25
loose 37:15
Los 3:10 4:9 26:2
lot 39:12,13 70:22 79:5 81:21 98:1 101:4 113:23 176:17 194:24 215:21 221:20,25 222:15
Louie 6:9 29:12 33:4 46:25 57:1 179:23 192:2,4
lower 45:2 49:5 50:7 51:8 63:22 94:22,25 95:4 111:11 150:5 181:6,8 190:3,11 195:23
lowered 51:14
lowering 50:11 95:5
lubricated 204:8
lubricating 225:1
lubrication 171:16,17 174:2 175:10 204:9 208:16 209:1,14,21
lunch 102:22,24 109:9
lunchtime 65:25
L.L.P 4:12

M

M 4:12
machines 14:19
madam 213:9
made 32:18,23 35:21 41:4 42:5 44:22 45:3 45:8 56:8 65:22 67:13 69:5 99:1 100:5 107:18 109:5 109:20 124:2 156:20 156:25 157:1,10 178:4,25 183:14 188:15 194:7 203:4 205:21 228:2 229:9 230:10
main 7:13
maintain 225:11 227:22
maintained 56:21
maintaining 16:13 209:14
maintains 215:9,11
maintenance 11:11,12 15:12,13,13 16:22 19:22 24:14 25:10 29:15 142:3 161:23 170:22 171:4,4,15 172:13,14 178:15,17 208:25 211:12 212:1 212:11,15,23 213:5,6 213:23 214:13 222:11,15 223:10,19
major 35:13
majority 216:25
make 10:2,6 31:7 35:24 40:17 42:6 55:3,23 89:23 92:22 98:20 104:17 113:14 184:5 191:22 196:22 204:24 205:13 214:1 225:12 227:14 228:5
makes 55:22 96:13
making 55:2 56:4,18 97:15 100:20 142:11 170:20 171:11,20 174:1,6 178:1 196:18 229:10
Maloney 13:16,16 14:2 122:17
manage 11:8
managed 12:5
manager 11:25 12:2,12 13:9 22:20,25 23:10 23:13 24:10 173:17 174:24,25
managing 13:25 14:5
mandated 117:21 129:10
maneuver 37:4
manner 71:23
manual 35:19 170:22 171:4,5,7,7,9,12 172:6,8,9,12,13,13 208:25 209:18 211:12,25 212:1,8,10 212:11,12,15,22,23 213:4,5,23,24 214:16 222:12,15 223:3,8,25 224:13
manuals 171:10 172:3 223:10,11,12,19
manufacture 146:9
manufactured 130:24 131:1 136:7,12 154:20 155:20,22 156:11 217:19
manufacturer 146:18 171:6 216:7 222:3
manufacturers 171:9 172:7,11 194:4
manufacturing 14:18
many 26:7 27:19 32:7 58:12 121:17 131:3 132:18 139:12,14 141:3,5 144:19 145:12,16,22,23 186:18 187:3 189:8 199:10,13 205:22 215:22
March 5:23 125:23 126:4,14,18 150:22
mark 91:19 109:1 118:19 122:3 123:15 124:13 125:17 127:20 154:24 164:15,17 169:9 219:23
marked 91:23,25 103:11,16,18 109:11 109:13 118:23 122:7 122:8 123:19 124:18 125:21,25 126:20,24 127:24 143:25 144:5 155:3,4 169:13 179:14,21 213:8,12 213:14 220:2
Market 3:18 4:13
markings 112:9 164:3
massey 4:8 5:5 7:21,21 146:1,5 170:16 173:11,17 9:6
material 31:12 65:20 164:14
matrix 144:25 200:17 200:22 201:2 202:3 202:10 203:14,17,21 204:2 205:12
matter 7:4 16:21 23:16 136:22 141:14,20 154:5 163:12,21 169:21 210:8
matters 14:7 21:14 22:22 23:18 24:19,21 25:5,9,13 58:19 217:17
maximum 42:8
may 5:14 6:10 9:4 10:11,22 20:2 24:3 25:3 35:9 46:7 49:25 57:1,9 63:13 67:14 69:21,21 71:11 74:13 77:22 93:24 95:11 102:1,4 103:19 133:21 134:4 139:4 140:5,10 149:2,15,16 151:6,21 160:22 162:11 165:24 166:21 168:1,9 176:16 182:10,12 187:7 198:25 205:14 207:1 219:3 226:19
maybe 15:3 57:17 75:9 77:11,16 102:4 141:9 146:1 164:25 226:5
MB-00248560 154:25
MB-00248566 155:1
MB00170542 123:16
MB00170562 123:17
MB00170587 125:18
MB00170610 125:19
MB0017523 118:20
MB0017541 118:21
MB002022 124:15
MB00202285 124:16
MB00202286 124:14
MB00213458 126:22
MB00213459 126:22
MB00213460 127:21
MB0213461 127:22
MCCARTHY 3:12
McCartney 18:2 226:16
mcdonnell 3:16 5:18 6:21 7:3,19 14:16,24 15:5,7 17:9,10 21:13 22:1,5,10,13 24:17 118:25 119:13,18 120:11 124:10 160:17 166:17 169:6 207:2,4 210:8,20 211:2 217:3,5,13,13 217:16 218:9,11,18 218:24 219:8 224:23 225:9
MD 219:2
MDL 7:6
MD-11 36:15 211:3,7
MD-11s 219:2
MD-80 14:20,22 19:5 21:10 22:23 23:18,25 24:14,20 25:9,14 26:6 35:19 106:10 107:20 117:9,25 119:24 120:13 129:4 129:15 149:17 153:3 160:20 163:13 165:4 165:19 174:3,7 175:10 177:19,24 199:19 208:22 211:14,25 212:1 214:11,14,15 215:25 216:2,8 218:16 223:3 223:25 224:13 225:2 225:11,14
MD-80s 15:14 26:9 106:7 224:18
mean 60:18 61:22 63:7 79:8 87:25 102:24 152:25 176:19 184:5 196:2 207:14 222:13
measure 134:23 154:2 205:8 224:20 225:13
measured 200:15
measurement 153:10 201:25 222:7
measurements 160:22
measures 224:1
mechanical 15:24 72:1 94:22 95:1,2
medication 10:22
meet 17:13,17 18:16
meeting 17:19 18:11 18:12,17,20,22 19:2 19:11,12,15,16,19 137:20,22 138:2,3,11 138:12,19,22,24 139:10 140:23,24 141:17 142:17,24,25 143:2 149:19 152:2 152:14 158:10,14,25 160:10 166:18,19 193:18,22
meetings 19:24 141:2 141:3,5,6 157:4 158:17 166:22 202:25 203:5
member 26:12 30:4 52:18 82:8 182:5,13 182:15 206:11
members 26:5,5 28:2 28:19 33:4,12 46:21 49:9 52:8,9 54:1 58:22 63:9,10,22 71:10 77:25 189:1 194:21
memo 19:8 105:18
memoranda 140:3
memorandum 5:14 19:10 92:12,13,14,17 93:17 101:22 103:19 103:23 104:20 105:13 107:4 108:10 108:24
memorandums 140:9
memory 181:16 187:19 188:4 220:10
memos 193:11
MENDES 4:7
mental 196:18
message 5:20,22,25 6:3,10 121:12,21 122:9 123:7,13 124:21 125:15 127:1 127:8,9 128:1,3,6 214:22 215:4
messages 121:14,16 121:17,19 172:7 219:20
met 17:15 135:13 158:4
metal 76:7 88:13,14,22
method 28:17
methodology 208:25
methods 224:25 225:12
MICHAEL 3:22
middle 8:21 50:13
mid-February 119:11
might 30:22 58:5 173:14
Mike 18:1 47:2 181:24
Miller 138:3,6 149:21 160:6,11,12
mind 24:5,23 25:1
minimize 209:15
minute 57:21
minutes 43:5 46:16 53:3 89:22 220:12 226:20,20
mischaracterized 30:3 152:8
missing 35:12
misspoke 192:6
mistaken 99:18
mixed 198:16
mixture 190:19
Mobil 177:16,23 193:25 204:8
model 117:22

61:9,25 62:2 63:7 64:9,12,14,16,22,25 65:22 66:5 67:6,7,17 68:11,24 69:1,5 70:25 71:23 72:23 73:23 74:10 78:3,20 81:5,9,11,15,18,20 82:1,3,19 83:14 88:16 90:10,21 91:7 94:5,12,15,24 95:13 97:1,6,10,19,23 99:6 99:20 102:8,12 105:8 106:3,5,8,15 107:3 107:10,18 108:11 109:19 110:2,8,14,19 111:2,5,6 117:8 118:1 119:25 120:14 123:8,10 126:8 128:20 129:5,16,20 150:14 153:12 160:23 163:12,22 174:2 176:14,20,21 180:5,11,17,24 181:4 181:11,18 182:3,23 183:4,8,12 184:11 185:10,22 186:6,9,11 186:15 187:21,25 188:11,16 189:8,22 189:25 191:6,10,11 191:24 192:2,11,18 193:1,5,13,20 194:8 194:10 202:19 204:8 207:23 209:2 210:14 211:14 212:2,14 214:11,19 221:24 222:4,8 223:5 225:1 225:14
Jackscrews 177:20
JACQUES 60:11 97:22 102:22,25 152:7 173:9,13 179:7 225:24 226:6,17 227:3
Jamie 3:12 7:24 206:10 225:18
Jan 1:24 2:19 7:14 230:4 231:5,17
January 1:4 2:4 7:5 22:18 23:15 25:18 26:1,2,16 27:10 145:20 146:11 215:6 215:17 222:22
Jaques 3:21 8:4,4 17:15,23 47:3 60:2 92:20 225:18 226:22
Jay 13:16,16 122:17
Jeff 144:16
Jefferson 3:22
Jim 12:25 13:8,14,24 138:15 142:2
Job 14:17,21 15:6 216:19
Jobs 175:21,22
John 3:9 8:2 168:4
Join 15:20
Joined 14:20 16:14 22:10 24:11 61:13 219:5
Joint 61:10
July 1:17 2:18 7:10 12:13,14 13:11 23:12 230:21 231:10,14
July/August 173:25
Jumbled 75:6,10
June 22:12
Just 8:25 10:14 18:10 18:19 20:10 21:4,22 28:6,22 29:3 30:9 31:7,9,15 37:17 40:16 41:13 43:12 47:9,10 49:6 52:24 54:2 61:22 62:1,25 63:11 64:21 65:11 68:3,17 69:25 72:4 72:11 73:19 77:1,20 81:19 87:11,21 88:13 88:16 92:12,13 107:1 131:16 140:24 144:15 155:19 161:5 162:3 164:1 165:6 169:21 173:9 178:16 186:2 198:25 205:21 221:19 225:21,23 226:9,13,14,19 228:4
Justify 205:18

K

kboyle 3:7
keep 63:18 68:1 105:12 167:15,20 228:5
kennedy 4:12 8:6,6
kept 50:24 146:6
kerns 3:22 18:1
kevin 3:4 18:3
Key 6:9 29:12,13 33:4 46:25 52:4 53:23 56:1 57:1 68:18 95:15 179:23 180:3 180:10,13 183:23 184:2,10 185:7 186:1 186:5,9,15,20 188:18 188:25 190:17 192:4 195:4
Key's 181:22 191:19
kind 38:9 75:6 129:8 134:19 155:25 184:4 192:19 194:9 217:10
knew 33:15 49:25 207:3 219:17
knock 225:20,24
know 9:13 10:14 35:16 43:6 46:17 49:13,23 49:24 56:1,2,3,23 57:1,3,5 58:10 59:20 65:10,13,14,16 66:20 66:25 68:23 80:6,9 82:20 84:1,1,2 85:3 85:11 86:25 87:3 88:3 90:23 92:19,20 92:21,22 93:8 94:11 94:16,18 96:1,4,10 97:5,17 98:1 101:4 106:14,22 108:13,17 108:23 109:22,25 110:4,7,11 111:19,22 113:5,25 114:25 115:1,2,4,6 116:12 117:3,16 121:12 130:23 131:2 134:20 134:21 138:5 139:2,7 141:15 145:12 146:2 146:8,13,13,22 151:8 151:14,16,21 156:8,9 156:10,13,15 157:22 157:23 158:21,23 160:4,14,15 161:2 162:11,11,21,24,25 163:3,4 165:3,16,20 167:5,7,9,16 168:19 168:23,25 169:7 170:4,7 175:12,13,13 175:14,15,17 176:10 176:16 181:1,1 182:8 182:15,16,17 183:16 184:13,14 185:20 186:24 187:7,9 188:10,18 189:7,11 189:13,18 193:4 194:9,14 195:1,3,7 195:12 196:3,16,16 197:4,6 199:9,13,18 199:20 200:1,2,10,12 200:14,25 201:18 203:23 204:3 205:15 205:22 207:1,5,15 208:20 212:19 214:25 215:6 216:11 216:12 217:6,9,10,22 217:24 218:2,24 221:16 223:22 224:10 225:23
knowing 117:2
knowledge 28:1 53:16 94:4 114:24 157:11 158:15 159:25 166:3 169:23 184:1,10 186:19,21 188:8,15 192:1,10 194:3 197:6 204:19 223:2
knowledgeable 146:14
Kris 8:6
KRISTINA 4:12

L

laid 72:20
lapse 41:6 66:25 67:1
laptop 187:6,7
large 69:9,13,24 75:6 75:14
Larry 13:13,23
last 17:20 80:7 98:24 138:22 139:21 145:1 147:14,16 148:3 149:24 150:8 156:22 159:8,20 161:11 164:10 166:23 167:6 167:8 187:16 198:14 199:2 204:9 208:12 209:12 222:24
late 66:18 134:11,12
later 35:2 55:11 77:6 81:10 102:20 107:9 119:8 126:11 128:10 137:17 182:10
launched 106:9 117:7
laws 230:19 231:12
laying 73:18,19
learn 120:9 135:20 136:4,11 145:16,16 145:21 151:2 210:20 211:1
learned 133:18,25 135:15 140:4 145:11 148:24 149:3,12 150:22 154:7 157:19 158:1,13 211:24
learning 145:5
least 21:5 23:14 26:15 31:8 45:21 47:11 94:2,10 97:1,19 101:21 107:4 109:19 110:17 113:1 115:8 115:15,19 121:4 125:14 128:25 133:20 134:3 136:21 141:17 142:11 147:3 148:3 149:8 151:5 159:7 160:24 162:22 165:18 166:9 200:18 215:24
leave 15:20 54:16
lebovitz 3:12 5:7 7:24 7:24 112:12,14 206:9 206:10 208:2,12 209:5,7 210:3,7,17 210:25 211:10 212:16 213:2,7,13 214:21 216:11 217:24 218:23 219:23 220:3,14,23 225:5,21 226:1,9,19 226:25
left 14:24 18:15 33:7 34:17 35:13 37:7 61:12 76:13 82:13 186:3 198:3
legal 18:7
Leiper 6:4 96:18 97:14 98:18 144:12 159:18 159:22 161:8 192:8 192:11 193:1,8,12,19 195:1 221:10
length 115:22 116:10 116:25
lengthen 164:18
lengthening 164:5
lens 184:6
less 68:9
let 8:25 9:13 10:14 44:20 45:15 61:22 99:13 104:24 122:3 123:15 124:13 125:17 126:20 127:20 128:22 142:16 144:8 145:10 147:25 168:12 169:16 191:17 192:9 198:18 207:18 215:23 220:12
Lets 227:6
letter 6:8 92:4,7,8,9,11 92:11,25 93:21 94:2 94:7,21 98:23 179:22 191:3 207:21 213:20
Letters 17:7
letting 226:10
Let's 17:19 22:8 59:7 72:11 91:19 118:19 179:7 219:23 227:3
level 84:15
license 16:6,9,13,15
licenses 16:5
lieu 148:7
lift 28:17 35:10 36:10 36:11 37:1,5,13,14 38:11,14 40:18 42:9 42:11 43:15,17,22 70:17,20,22
lifted 37:17 43:24 44:3 70:21 72:1,6 74:6
lifting 69:13
lifts 50:25,25
light 71:11 77:7 170:11
lightweight 72:4
like 9:12 22:24 37:9 38:9 39:18 40:8 42:22 45:24 46:2 49:6 55:7 59:13,20 60:1,10 61:16,25 72:23 73:23 74:10 75:23 77:16 79:23,25 84:25 86:16 87:17 89:2 92:9 103:11 105:1 108:15,22 109:1 110:6,13,19 114:4 119:22 120:1 122:14 123:9 124:25 129:14 156:1 171:2 171:25 184:17 187:13 192:18 219:2
likely 96:11
limit 222:1,2,4
line 11:11 37:16,23 38:2,20 178:16 225:19 226:8
lines 37:14,19,21 39:16 42:10 71:9 200:18
list 161:4 221:15
literally 195:22
litigation 160:16
little 42:25 48:1 55:11 87:21 142:17 226:15
live 32:15,22,25 33:3,9 33:19 34:22 35:5 42:18
LLP 3:4
load 26:6
Lobby 3:23
local 86:17
located 7:15 69:9 105:9 161:3 162:19 199:25
locating 104:22
location 27:21 34:11 34:14,15 37:5
locations 195:21
long 10:15 11:16,19 12:10,11 15:15 17:20 19:8 29:1 37:9 43:4 46:15 53:1 54:8 66:3 68:6 69:14 81:4 89:19 129:8 138:22 143:7 151:23 157:25 226:7
longer 79:10 84:20
look 38:22 44:20 46:14 53:20 59:13 62:17,19 64:20,24 79:23 81:12

172:20
hands 185:25
hangar 78:7,11,15 80:8 81:8,16 83:7,8,22 84:13,14 85:1,9,16 88:16 90:2,4,11,22 96:10,12,21,23 97:2 97:3,10,20 98:5,9,11 98:16 99:7,15 106:17 110:5,6,7,9,13,15,19 110:23 112:5 115:5 115:10 130:18 131:19,21 176:17 178:16 197:8 215:11 215:19 216:20,23
happen 68:15 77:5 223:15 225:5
happened 36:22 46:5 63:22 80:2,6 162:21 162:25
happening 33:7
hard 195:15
having 8:12 19:21 93:19 97:7 102:19 122:25 123:24 130:18 137:8 140:4 144:18 147:4,10 149:13 150:12 185:8 207:19 208:9
head 9:7,7 52:13 69:20
headquarters 11:14 106:18 215:10,12
hear 24:21
heard 22:1 23:21,24 118:8 135:22 136:1 142:16 182:10 211:7
hearing 20:6 24:6 25:8 91:2,14 115:24
hearings 20:14,15,22 91:17 104:1
heavier 37:23 70:23
heaviest 190:20
heavily 29:7
HEDLUND 3:8
held 7:9 11:16 12:13 13:23 14:7,17 71:25 153:1 165:18 166:3,4 166:11,25
HELLER 3:12
her 216:18 227:12
HEUTO 4:16
Hi 144:16
HICKEY 47:7 168:16 173:15
high 52:22
higher 48:2
highest 48:5,6 202:21
high-pressure 52:21
him 17:17 100:25 101:2 146:1 154:9 157:7,11 158:16 170:10 186:7 226:1
hired 11:24,25
hitting 63:19
Hobby 15:13
hoist 42:15 48:11 67:21,22 74:5
hoisted 43:10 44:2 45:12 46:24 47:13,17 48:14,15 49:1,14 55:22 63:11 72:14 74:1,19 75:12
hoisting 43:2 50:16,17 50:18 63:11 66:1
hold 12:11 13:3,22 14:2 15:15 16:5 26:9 160:12
holds 114:21
home 226:11
Hoover 168:4
horizontal 20:11 21:10 21:15,17,19,20,23 22:3 26:25 27:14,15 28:18,21,23 29:3,8 30:23 31:13,16,22 32:4,5 33:10,17,21 33:23 35:7,9,11,13 35:21,23 36:9 37:13 37:16,20 38:15,17,23 39:1,25 40:22 41:2,7 42:14,16,25 43:7 44:1,5 45:5,6,6,7,10 46:23 47:16 48:24 49:11 50:8,19 51:7 52:1 54:9,16,19 55:21 56:10,17 58:17 58:20 59:4,9 61:24 62:4,11 63:8 64:4,7 64:12,21 65:1,2,5,9 65:22 67:17,25 68:11 68:24 69:2 70:25 71:6,23 72:3,23 73:23 74:10 78:3,6 78:21 81:5,8,11 82:2 82:4,16 83:14 89:21 94:24 95:5 97:7 104:22 105:8,21 106:16 107:10,12 110:25 111:4,7 114:20 150:16,19 153:8 163:13,22 190:8 207:23 209:2 210:14 211:14 212:2
horzontal 34:12
hose 46:11,11 52:18 52:21,23,24 53:1 59:11,22 68:14 73:2 75:20 95:10,12
hosed 73:1 95:8
hotel 78:1
hour 45:14,17 54:11,20 54:22,24,25 55:1 59:8 64:12 68:6,8,9 81:10,13 138:23 213:21 224:12 226:5
hours 17:21 37:11 41:10,22,25 66:18 70:4 161:11 202:17 210:2
house 172:19,22 178:19,20
Houston 14:25 15:9
Hueneme 78:19 81:17 82:17 83:10,25 90:5 90:22 98:16 99:16 100:6 107:19 115:10 198:3
Hueto 6:4 18:1 96:18 97:13 98:17,20 99:1 100:9,19 101:8,18 106:20 107:21 135:5 135:7,14,23 136:4,22 136:25 137:9,14 138:10 140:4 141:18 144:13 145:6 149:9 152:3,16 154:5 157:19,25 159:12 161:8 192:2,11,25 193:8,12,19 195:1
Hueto's 101:13
human 46:7 189:9 197:12
hundred 47:2 101:3 104:13 143:13 198:19,23 205:6
hygiene 197:16,18

I

idea 49:8 109:24 169:19
identical 125:1,10 218:17
identification 91:23 103:16 109:11 118:23 122:7 123:19 124:18 125:21 126:24 127:24 144:5 155:3 164:2 169:13 179:14 213:12 220:2
identified 18:10 113:1 114:16 147:4,4,10
identifies 181:24
identify 47:13
identity 94:3
immediately 22:10 33:9 75:17 137:3
implemented 121:7 143:8
implementing 121:5
importance 209:13
important 9:4 27:7
impression 208:8
inadequate 208:16
INC 1:21
inch 222:7
inches 84:9
include 60:12
including 149:21
incomplete 170:11
inconsistency 211:24 212:22
incorrect 172:5
independence 26:25 27:3 28:2,7 29:21 30:9,12,19 35:15,25 36:5,23 42:4 46:10 46:22 49:24 52:18 54:1,5,15 55:23 56:18 58:5,18 67:24 68:1,19,22 69:5,8,23 70:2,14 77:20 78:5 78:13,14 79:4,6 94:23 97:5 99:8,12 105:6,10 109:18
indicated 112:10 164:15 204:7
indicating 112:16
indication 104:21 105:7
indications 112:25
indicator 164:16
individual 35:22
individuals 18:15 19:3 25:3 44:20 94:4 137:11 160:8,9 163:9 165:23 166:1 168:9 189:17 214:6
individual's 36:14
inerbitzen 215:7
information 6:15 36:2 36:6,20,20 91:8,15 121:23,24 122:1 123:8 133:17 146:8 146:17 156:17 165:13 170:4 172:15 183:10 200:3,6 203:7 203:12,15 208:24 217:10,15,23 218:1 218:10 221:11,19
informed 158:16
initial 26:19
initially 145:6 147:24
initiated 178:13,15
input 24:13
inputted 172:11
inquiry 214:1
inside 63:23 64:1 73:9 84:20 86:14 87:15 88:23 99:3 100:22 112:23 185:17 196:10,12,17
insofar 22:2 211:13 212:1
inspect 105:21 107:20
inspected 139:15 143:9 161:24 198:12 198:17 199:4,6
inspection 106:9,24 141:24 198:14 199:3
inspections 118:1 120:22 121:8 126:7 137:4 142:3 176:6 198:20,22 200:20 211:14 223:5 224:17
instance 141:19
INSTRUCTED 6:13
instruction 208:23 224:25 225:11
instructions 51:12,14
intact 35:12 37:21 40:1 42:12 89:11,12
interact 217:8
interacted 159:13,16
interaction 142:5
interactions 93:11
interest 71:12 166:21
interested 33:14 54:2 54:13 230:17
interfered 35:10
interim 13:14 80:7 102:10
interior 12:5,22
interiors 12:7
interval 174:2,6 212:10 212:13 213:22 223:4 224:12,17
intervals 24:14 224:1
interviewed 19:25
investigation 25:21 26:5,14 93:3,5 113:20 115:15 116:8 135:6 170:12 177:2 182:18 185:2 189:2 198:4
investigations 151:19 221:11
investigator 93:9 192:17
investigators 192:21 197:19
involve 21:14
involved 24:3 25:22 85:14 130:14 133:16 135:5 142:2,7,11,14 142:21 152:22,24 153:13 154:11 155:25 159:18 162:16 163:17 164:1 170:25 173:8 174:1,5 177:18,21,25 205:3 221:10
involvement 21:8 23:16 24:12 25:12,19 117:5 128:19 142:9 145:11,14 152:5,18 163:10,21 164:9 166:21 170:20,23 171:1,17,19,21,23,24 174:11,13 175:1,7 177:16
in-depth 113:24
in-house 156:14,15
issuance 129:1 209:20
issue 40:25 135:15 140:17 148:6,24 149:10 214:7
issued 5:18,24 105:20 108:2 116:16,17 117:20 118:16,25 119:18 120:5,12 123:22 124:11 125:24 128:25 129:10 161:22,23 172:25 173:3 207:1 207:21 208:5,10
issues 11:10 142:1 165:10,13 174:16 211:8,9 218:11 219:20 221:21,25
item 125:1
items 166:18,19
i.e 70:12 145:7

J

jack 89:21
jackscrew 20:5,11,18 21:1,9,15,17,19 22:2 22:22 23:18,25 24:3 24:6,19,22 25:10,13 27:15,21,23 28:23 29:4 30:22 31:13,17 32:4,6 33:10 34:7,9 36:11 38:24 39:5,7,9 39:11,17,20 40:22 44:2,5 45:24 46:2,23 47:12 49:11 50:8 51:19 52:1 53:21 54:6,9,10,12 55:20 55:21 56:10,17 58:17 59:4,9,13,14 60:21

222:6,10 223:23 224:23 225:9
floor 2:17 3:5,18 4:4,9 7:10 20:5 26:22 27:1 27:9,23 28:18,24 31:18 32:13,19,24 33:8,15,21,23 34:3 34:22 37:2,15 38:21 43:15 48:2 55:22 63:24,25 73:19,20 74:11,12 84:14 85:1 85:16 94:23 104:23 105:9
floppy 187:8
fly 25:24 165:9 218:2
fly-by 39:17
focus 22:16 24:4 168:20,24 169:5 178:22,22
focused 14:8 29:3 39:16,17 62:24
focusing 12:6 92:24 113:21
folks 219:12
follow 156:1 157:13
followed 75:15 197:22
following 37:8 77:12 93:6,12 94:5 206:20
follows 8:13 60:7 133:24 152:13
follow-on 141:2,3
force 107:23
forces 16:17
foregoing 229:8,11 230:6,13,20 231:7,12
form 177:25 188:5 214:23 215:1
formal 167:20
formalized 165:24
format 115:25
forth 137:5 140:12 154:13 230:7
forward 154:12 205:21
found 51:16 92:17,18 106:4 186:2
foundation 207:25 208:6 209:3,23 210:15 211:6 212:4 212:25 214:18 217:21 218:19 224:3 225:3,15
four 32:9 41:22 109:12 120:19,20,21 159:2 159:10 220:19 227:8
four-hour 66:25 67:1
fpitre@cpsmlaw.com 3:7
frame 66:6 67:1 101:25 131:17 132:2,20 134:11 160:4 173:25 211:16
frames 71:16 73:9 74:3 76:17
francisco 1:22 3:18 4:5 230:3
frankel 3:17 5:4 7:18 7:18 8:17 47:9 57:20 58:2,9 60:4,14,17 81:4 89:6 91:19,24 92:16,21,24 97:23 102:24 103:11,17 108:9 109:1,12 112:18 118:19,24 122:3,8 123:15,20 124:13,19 125:17,22 126:20,25 127:20,25 134:7 143:15,25 144:6 146:3,7 152:9 152:12,21 154:24 155:4 168:12,19 169:9,14 170:8 207:25 208:6 209:3 209:23 210:1,15 211:6 212:4,24 214:17 216:9 217:20 218:19 219:13 224:3 225:3,15,22 226:4,21 227:5,10,19,22 228:4 228:8,12
Frankel's 226:11
Fresno 7:13
from 6:4,8 10:24 14:22 15:5,17,24 17:9 19:21,23 20:18 21:14 22:2,9,17 23:12 24:10 26:21 27:1 28:18 29:10,17,20 30:2,4,4,9,11 32:3,13 33:19 34:4,22,23 36:2,3,12,15,18 37:15 39:4,9 40:9,11 40:11,13,23 42:19 43:2,10,23 44:9,12 44:13,15,24,25 45:11 45:12,17,25 46:2 47:11,17,19,20,25 48:12,25 49:13,14 50:19 51:20 52:6 54:4 55:19,22 62:10 62:11,13,15 63:19 64:1 66:4 67:17,23 68:16 76:1,1,7 81:11 83:3 84:7,15,17 86:9 86:17 87:7 88:19 90:7,10,21 92:2 93:16 94:23 97:6 99:16 100:6,23 105:19,22 108:7 109:8 110:17 117:14 119:21 120:9 121:4 121:24 122:13 125:13 128:25 136:4 138:1,13,18 140:4 141:13 143:6 144:12 149:5,20 151:3,11 152:2,14 157:19 160:18,24 165:15 166:9,13,13 167:17 167:23 169:5 172:7 177:3 179:23 180:10 180:12,12 181:7,8 183:10 185:1 188:2 195:15,25 196:7,20 197:11 202:5 203:7 204:15 208:11 209:19 216:15 222:3 222:16 224:12 225:9 227:17
front 50:12 76:15 111:7 206:17
full 26:6
fully 211:8
function 146:15
further 54:17 74:24 99:1 144:24 164:3 170:9 230:15
fuselage 70:19 71:16 74:3 76:16,18

G

gain 133:11 172:6
game 137:6 139:13
gap 153:11
garden 46:11 52:18,24 59:10,22 68:14 73:1 75:20 95:10,11
gathered 36:19
gathering 133:17
gave 28:19 35:19 36:8 50:2
gbpwlaw.com 3:7
gear 65:2,5
gearbox 61:14 64:2 95:3
general 40:17 106:8 170:21
generated 41:24 162:2
gerardo 4:16 18:1 82:13 102:4,5 106:20 135:5 137:3 157:13 163:8 221:9
gets 55:21
getting 38:2 41:24 54:13 63:1 66:2,8
GILMORE 3:21
gimbal 34:8,11,12,14 34:23 35:1,3 59:6,18 69:11 76:4 79:12 82:21,25 83:3,16,22 84:5,9,18,19,20,21 84:22,25 85:15 86:6 86:22,24 87:1,4,8,12 88:1,6,9,19,21,22 89:4,6,20 90:4,12 91:8 98:15 99:15 100:1,2,5,19,22 101:8,10,16 102:9,13 111:21 112:2,4 114:8 114:19,21 115:9 153:11 176:14,20,21 176:21,23 177:10 193:25 194:8,18,19 194:23 195:2,5,16 196:8,11,21 197:4,22 222:8 225:2,14
gimbals 89:14
give 10:3,9 21:22 30:21 35:20 42:3 50:6 104:10 109:4 153:1 187:3 191:3 215:2
given 51:12 180:22 184:23 204:2 221:10 227:25
giving 10:24 104:14
Glendale 7:15
glimpses 42:25
glob 195:24 196:2,3
globs 195:22 196:4,6
go 8:20,25 10:15 21:4 21:4 26:23 29:8 32:13 33:17 47:9 50:3 53:20 57:20 59:7 62:5 68:21 70:11 72:22 105:21 106:7,24 121:18 147:25 154:12,13 161:18 165:22 166:1 169:21 172:18 198:18 205:21 209:5 210:17 213:2 218:5 220:14 226:11 227:6
going 7:15 9:17 11:21 20:2 27:4 37:9 43:23 47:4,7,11 49:6 51:8 57:22,25 60:2 61:17 61:19 66:12 75:18 80:22 81:2 103:1,9 105:19 109:4 137:6 139:18,23 143:4,19 143:23 146:3 148:21 161:18 164:12,15 166:15,16 168:13,17 179:8,11 185:5,5 206:1,4 211:21 213:7 213:8 214:3 218:21 220:17,21 225:22 226:4,12,22 227:9,20
gone 80:15,18 165:24
good 16:15 39:6 49:8 75:8 84:24 102:22 140:2 220:10 221:23 226:11
gouthro 4:15 7:12
grabbed 71:12
graduated 22:12
graduation 22:9
graphics 164:14
grease 40:14 59:20,21 84:21 85:23 86:2,3,4 86:5,7,12,12,14,17 86:19,20,21,23,25 87:8,10,11,17 94:5 94:12,18 96:1 101:16 108:12,14,15 112:18 112:20 113:6,12,13 113:13,17,22,24,25 114:2,4 115:21 116:9 116:24 175:12,14,15 175:25 176:3,5,10,15 176:20,24 177:4,6,7 177:10,10,12,14,14 177:19 180:5 190:4 191:13 193:24 194:1 194:4,4,9,13,14 195:11,13,18,24 196:4,6,10,17,19,21 196:24 204:7
greases 65:9 177:13 196:23 197:1
grease-like 95:17,19 97:21 98:10 100:24 112:9 113:2,7 114:15 182:23 183:4,15 189:25 190:19 191:1 195:22
greasy 59:14 60:13,20 62:15,21 65:12,14 79:14,21 80:13 94:14 98:6
greasy-like 76:20 181:11,17 187:22 188:6,10 190:6,13
greaves 3:9 8:2,2
green 64:14 65:6 76:23 81:24 88:5,6,7 175:20 176:15,24 177:6,7,10,13
GREENE 3:4
Greg 7:22 179:19
GREGORY 4:3
grime 60:15,18,19 98:8 108:12,14
grimy 59:15,19,23,25 60:8 62:12,14 79:14
gripped 72:5
grippers 72:19
grit 60:15,18,19 95:14 98:8
gritty 59:19,25 60:8 65:12 94:14 95:20
ground 9:1 156:21,21 159:15 160:19 161:9
grounded 144:20 146:24 147:9,18 148:2,15 159:9 198:11
grounding 139:20 148:6,10,11,21 149:6 152:6,19 153:2 160:1 162:8 198:6,7
group 11:8 12:6,20 14:21 18:17,19 26:13 77:25 82:8,12,13,14 85:11 96:14 109:2 113:23 115:14,19 120:2 126:6,8 140:18 141:12,13,23,24 142:15 151:20 156:19 166:14 178:16 182:8,13,14 182:14 194:22
groups 15:6 96:7,15 141:25 182:6,16
group's 116:7,17
guarantee 134:19
guess 13:10 65:24 77:10 97:9 170:7
guessing 134:11 157:12
guidance 27:4 30:21 70:13 184:23
guide 63:14,17
GUILFORD 3:8
gunmetal 79:24 80:16 81:19,22 88:17 97:12
guy 36:15,17
guys 27:2 28:3 35:15 46:10 106:5,6,17

H

H 3:17 206:24
half 19:9 45:14,17 54:25 55:1 68:9 81:9 226:4
hand 213:7
handed 91:25
handing 213:13
handle 11:9 12:10 172:20
handled 12:22 141:11

133:20,21 134:3,4 139:22 140:7,15 144:22 145:18 146:10,19 147:5,11 147:14,16,21 148:4 148:12,16 149:17,25 150:15 151:5 153:5 153:10 154:3 155:9 159:20 160:22 161:25 163:12,23 164:13,18 174:7 175:10 200:9,11,13 201:7 203:25 208:16 211:13 212:1,13,14 221:20,21 222:7,24 224:1,17 225:13
end-plays 139:4 144:25
enforcement 20:1
engaged 23:17
engineer 14:17 15:11 21:7 36:16
engineering 11:5,7,8,9 11:17 12:1,2,5,12,16 12:17,20,21,23 13:2 13:4,7,9,15,24,25 14:1,3,5,6 15:16,24 16:9 22:20,21,25 23:6,11,14 24:10 105:20,23 106:2,13 106:21 107:20 108:3 108:6 119:17 121:7 121:18 129:1 166:13 166:20 168:5 170:17 170:20 171:8 172:1,2 172:2,12,19,21 173:7 173:12,16,18,19,23 174:19,22,23,24,25 175:4 178:5,6,8,12 178:14,21,25 179:4
engineers 12:6 57:12 57:14 167:24 178:18 215:2
enough 59:22 79:1 130:25 191:3
entire 12:19 14:8,10 35:23 41:18 48:11 53:6,22 54:24 111:14 150:25 177:24 215:24 216:16
entirely 35:12 72:7
entitled 20:8 214:22
entwined 76:7
environment 11:11,12
Equilon 7:21
equipment 31:4
equipped 31:3
erroneous 203:4,10 205:14
error 172:8
ESQ 3:4,9,12,17,21,22 4:3,8,12
establish 89:3 105:16 178:24
establishing 24:13
establishment 179:4
estimate 35:23,24 36:4
estimator 75:9
even 148:8 222:6
evening 66:19 67:4 69:15,16,19,21 106:10,11,12,25 107:24,25 149:23 152:23 159:6
event 157:14 210:12 211:4
events 82:15 105:14 105:17 108:4 155:25 162:14 163:10
ever 8:22 16:17,20 19:24 23:21,24 24:20 56:7,11,15 57:10 69:1 82:1 83:3 90:14 90:24 92:6 98:20 101:9 109:14 110:8 115:18 116:2,6 119:2 122:25 126:10 127:10 129:19 130:4 131:22 135:22 136:11,18 140:11 144:7 145:16,21 151:2,25 154:9,14,16 155:5 169:14 174:1,5 175:21 176:15 180:1 180:8,13,19 183:2,6 186:5,14 193:7,11,18 198:2 200:22 205:17 217:8 219:8 223:24 224:24 225:5
every 165:22 166:1 210:2 217:11
everybody 109:3
evidence 88:5 115:21 116:9,24
exact 67:15 157:23 160:14 196:5 222:14
exactly 138:18 153:24 210:4
exam 96:19 99:2
examination 5:3 8:15 46:15 96:9 98:21 100:20 101:14 108:16 114:5,6 170:14 179:16 206:7 212:2 230:10
examinations 118:1
examine 72:22 136:15 136:16,18,20 154:14 156:2
examined 8:13 59:10 75:14 120:10
examines 52:17
examining 54:6 82:5,6 96:7
example 10:7 16:6 21:22 24:13 40:4,13 45:23 88:15 171:2
exams 211:13
except 66:24 191:5,9
exception 111:16
excessive 208:16 210:13,23 211:4
exchange 165:14
exchanged 180:19
exchanges 203:1
Executed 229:13
exhibit 6:12 91:19,22 92:1 93:16 103:12,15 103:18 108:5 109:2,6 109:10,20 110:1 112:8 117:12,14,15 118:16,19,22,24 119:3,21 120:11,18 120:20,21 121:1 122:3,6,9,24,25 123:15,18,23,24 124:2,3,13,17,19 125:7,8,11,18,20,22 125:25 126:3,10,17 126:21,23,25 127:21 127:23,25 144:1,4,6 144:7 148:9 150:4,13 154:24 155:2,5,5,11 169:9,12,15 179:13 179:22 181:23 190:16 195:10,23 200:17 206:16,16 213:8,11,14 214:21 219:24 220:1,4,8
exhibits 5:8 109:13
exist 41:1
existence 188:9
exists 156:8,9
express 53:13
exterior 63:13
extremities 63:14
eye 88:14
eyewitness 20:10

F

FAA 117:15,21,24 120:24 137:12,18,20 137:21 138:1,4,8 139:3,10,18,20,25 140:4,24 141:2,7,17 142:12,18 143:6 147:24 148:5,17 149:21 158:4,8,14,18 158:25 159:15 160:6 160:8,13 161:20 179:3
fab 198:17
fabricated 136:6 144:21 153:15 156:10 198:15
face 125:8
facilities 225:10
fact 38:11 54:2 115:6 116:8 123:2,3 124:1 134:15 148:2,18 197:24 202:13 203:4 203:8 205:5
factual 115:14,20 116:7,15
failed 40:24 200:13
failures 200:14
fair 9:19,20 45:22 177:7,11
familiar 130:15 168:22 170:2 211:12 223:9 223:14
familiarity 133:11
far 44:8 47:18 48:9 49:23 51:25 68:10 82:19 85:11 90:23 95:9 96:10 109:22 115:8 122:9 139:2,7 146:7 153:8 158:21 158:23 161:4 165:16 170:4,7 178:16 185:16 188:6 217:6 224:10
faring 71:5,12,24 72:12 73:7,9
fashion 72:7,15,20 97:11
fax 92:1
faxed 5:13 91:18 92:4
FBI 46:6,15,17 51:11 51:22,24 52:9,12,14 52:17 59:10 72:22 75:13,19 189:5,8,18
February 5:18,24 20:20 21:1 26:17 27:12 28:7 29:24 31:19 32:12 41:11 55:5 56:9,16 66:7,16 69:18 70:7 77:4,5,8 78:22 83:13 90:14 91:4 93:23 94:21 96:8,19 97:2 100:15 100:16 101:23 102:7 102:13,19 104:21 105:7,15 106:11 107:5,24 108:1 115:11,16 117:7,24 118:17 119:1,5,7,12 120:4 121:1 122:16 122:18,19 123:5,6,22 124:6,23,25 125:3,24 128:7,17 129:2,23 130:5,7,10,13,17,23 131:2,9,23,25 132:3 132:10,14 133:2 139:16 140:8 151:3 186:4 199:7,8,11,14 201:8 202:7
federal 19:25 118:10 119:22 120:9 227:13
feed 32:15 33:19 34:22 42:18
feet 42:24 43:8 47:18 47:19,24 48:10 52:3 53:10 75:10,10
fell 63:20,24 95:4
fellow 58:21
felt 214:6
female 46:19
few 166:5 206:12 226:12,19
field 208:11 215:14,18 215:21 216:6 217:1,9 217:14 218:9 219:7
Figueroa 4:8
figured 225:24
FILE 1:25
film 190:22 191:7,12
final 115:15,20 116:16 116:17,23 156:25
financially 230:17
find 41:3 57:17 92:22 189:15 214:3
finding 116:3
fine 226:8 227:4,5,17 228:3
finger 99:3 100:21,23 101:14
finish 226:7,13
finishing 226:10
first 3:5 8:12,21 11:24 13:13 14:17 17:2 21:6 25:12,18,20,21 27:8,22 28:10,14,15 28:25 29:9,24 30:25 33:18 37:14 38:1 11 40:24 41:9 44:8,21 44:22 45:11,15,18 46:1,5 47:1,17,24 50:19 52:1 54:25 55:1 59:12 60:15 66:4 67:25 72:12 75:14 76:3 78:4,20 83:6 84:7,12 92:1 93:1 94:1,6,8 99:6,15 100:5,7,12 102:7 104:18,21 105:7 109:19 112:6 115:10 119:9 123:4 127:12 127:13 129:19 130:17 133:13 134:7 135:7,15,21 136:21 137:14 139:2 141 17 141:19 142:18 143:6 144:16 148:5,17,24 149:3,10,12 152:3,15 154:5,7 155:11,12 157:18 158:1,21 159:4 180:1 207:8 208:13 220:24 222:2 227:18
firsthand 46:2 102:19
fits 20:3
fitting 87:3,5,7 114:21
fittings 86:21,23 87:1,8 176:5
five 32:9 37:11 52:3 53:10 77:9 159:10
fixture 6:6 130:2,4,20 130:24 132:5,11,13 133:19 134:1 135:16 135:23 136:6,16,16 136:19 139:3 140:14 140:14 141:21,22 144:21 145:7 147:6 147:12,15,17 149:25 150:16,20 151:4,6 153:4,8,12,15,23 154:17,18,22 155:8 156:5,11,24 157:20 159:8 164:3,13 169:22,25 202:14
fixtures 130:16 131:3 132:8,15 145:12,17 145:22,23 146:10,18
fleet 14:8,10 106:10,24 107:20 117:7 118:12 137:7 146:24 147:1,2 147:10 148:2,3,15 151:6 152:6,19,20,21 153:3 156:21,22 159:15 161:10,10 162:8 163:18 172:16 173:3 199:20 201:11 218:1,12
fleet-wide 106:9
flew 25:20 26:1,2
flight 16:22 19:23 25:6 210:9,12,20 211:1,17 214:10 217:18 218:11 219:7 11

deck 44:4,10,19,23 45:12,19,21 46:4,22 47:16 48:3,7,8,9,18 48:19 49:4,5,6,12 50:4,8,11 51:4,5,7,9 51:19 54:5 55:23 56:18 58:18 63:24,25 64:3,13 65:22 66:5 67:6,8,11,13,17,24 68:1 71:2,22 72:14 72:19,20 74:20 75:12 75:24 77:3,15 78:14 79:3,6 80:4,15 95:6 185:8,21 186:16 188:11,16
declare 229:7 230:18 231:11
dedicated 178:16
defendant 4:2,6,11 7:3
defendants 2:16 3:15 3:20 5:11 6:1 7:19 91:22 103:15 109:10 118:22 122:6 123:18 124:17 125:20 126:23 127:23 144:4 155:2 169:12 179:13 213:11 220:1
degree 16:1
degrees 16:3 62:17
deletion 224:11
deletions 229:10
delineating 209:21
delivering 209:1
department 18:7 171:14 178:5,7,8,12 178:14,25 179:4
depict 187:21,25 188:2 188:5
depicted 193:2
depicts 47:12
deposition 1:15 2:15 7:2,9 8:23 16:25 17:14,16 55:14 80:22 81:1 103:3,5 105:4 143:18,22 187:14 220:16,20 227:8 231:8
depth 43:6
derivative 21:11 24:20 120:13 129:4
derlien 4:11 8:7
describe 11:6 12:3,18 14:11 15:22 26:15 33:18 60:1,9,14 88:1 106:1 153:4
described 25:4,7 71:1 74:23 77:1,20 83:16 95:21 153:7 201:2
describing 101:22 209:20 210:11
description 5:9,12 6:2 20:11 76:2 190:24 191:19
design 146:9
designed 217:18
desirous 229:10
detail 62:20 88:4 191:3 191:16
detailed 65:19
details 81:23 97:24 130:25 140:21 151:8 151:11 153:2 154:12 156:1 175:14 202:23 207:15 211:8
determination 113:14 116:20
determine 27:20 28:17 29:8 35:17 39:19 62:20 82:15 125:14 131:1,6 132:9,16 145:1 204:21 205:13
determined 150:13 161:19 166:15
determining 159:19 161:14
DETERT 4:3
developed 184:8
development 14:18
devices 43:19
diagram 62:1,3
diameter 87:25
dictate 172:2
difference 62:18 70:17 110:23 125:6 201:23 202:6,13,21 212:20
differences 134:17,18 135:17 153:25 201:21 202:24 212:7 212:8,9 213:22
different 31:14 34:11 34:13 72:3,7 75:15 80:11 165:23 196:19 200:9
digital 49:17,21 58:4 184:5,7
digits 150:8
direct 117:11 144:15 150:3 213:25
directed 92:12 117:24 122:12 171:5
Directing 108:9 111:18
direction 42:3 164:4,12 164:17
Directive 18:25 117:15 117:16,19,20 118:4 118:10,16 119:23 120:10,25 122:22 162:2 171:3,6 219:21 224:17
Directives 129:2,13 131:13,24 219:17
directly 33:17
director 11:5,6,17 12:16,17,23 13:1,3,6 13:15,23,25 14:3,5 22:21 23:6 168:4 170:17,19 172:25 173:6,12,15,19,22 174:22,22
directors 173:2
dirty 108:12
disagree 116:22 117:4
disappeared 38:18 66:24
disassembled 89:8
discern 40:12
disclosed 142:25
disclosing 142:23
disclosure 142:12,14 142:21
discovery 135:1 140:13
discuss 17:15 165:10
discussed 24:22 33:12 93:22 102:1,4 136:10 183:3,16 193:21 207:12,13
discussing 193:23 203:6 214:5
discussion 57:16 106:23 108:8 180:3,8 184:20 193:7 204:5 205:16 207:16
discussions 23:21 24:4,21 30:18 77:24 93:20 116:2,4,5,6,13 137:8,11,12 157:7 163:9 177:18,21 180:4,13 181:2,6,9 182:22 184:25 205:10
disembark 32:12
disengaged 68:2
disk 56:19,23 57:6,7 57:11 58:13,24 187:8 187:9
dispensed 223:25
dispositioned 14:22
distance 38:15 44:13 44:15,24,25 45:22,25 84:7 188:2
distinguish 196:25
distinguished 196:20
distinguishing 196:22
distributed 221:3,8
distribution 220:24
district 1:1,2 2:1,2 7:7 7:7
dive 28:14,15 41:17
dock 191:23,24 192:3 192:12,14,17 193:13 193:20,25 194:8
docket 7:8 47:12 117:14
document 20:4,8,13 25:2,6 89:25 91:20 103:13 104:7,9 105:3 106:7,14,24 108:1 118:20 122:4 123:16 124:14,20 125:1 126:21 144:2 154:25 167:22 169:10,17 170:11 171:2 207:6 207:11,16 209:18 210:1,3,5,18 214:25 222:2
documentation 41:7 140:11 161:5
documents 5:13 16:24 17:3 18:23 19:1,18 25:5 92:6 140:16,19 140:22 160:18,23 161:3,13 172:4 174:15 218:5,7
doing 45:9 53:8,19 100:25 101:2,19 113:20 128:19 129:22 139:13 153:5 164:1,18 221:12
DOMBROFF 3:21
done 21:8 25:23 32:21 68:10 75:18 108:23 126:8 129:19 130:19 131:9,10,15,17,23 132:1,10,24 134:24 137:4 139:22 142:4 142:15,24 144:25 147:14,21 148:4,12 149:6 151:19 156:16 159:20 165:12 172:3 198:14,20,21 201:7 201:18 202:6,7 203:25 204:23 221:17 222:16,24 225:21
Donna 18:3
doubler 21:23
douglas 3:16 5:18,21 7:3,19 14:16,24 15:6 15:7 17:9,10 21:13 22:1,6,11,13 24:17 118:25 119:13,19 120:11 121:1 123:21 124:10 160:17 166:17 169:6 207:2,4 208:13,23 209:13,20 210:8,21,22 211:2 217:3,5,13,13,16 218:9,11,18,25 219:8 224:23 225:9
Douglas's 207:22
down 9:8 25:20,24 26:1,14 30:25 32:13 32:19 33:13,16,22 37:2,20,24 38:21 42:10 45:2,12 46:24 47:13,21,22 49:4,9 50:3,4 51:6,9 63:11 63:11,15,17,17 70:12 71:3,9,11 84:16 85:19,20 86:14,17 88:25 113:4 114:19 118:8 121:10 133:10 137:2 144:24 161:14 161:17 162:12 168:6 190:21 196:17
downloaded 109:8
draft 115:15,20 116:16
drafts 104:6
draw 61:22
drawing 6:5 150:19 154:14,17,19,21 155:7 156:4,8 164:2
drawn 203:15
dried 113:13
drive 171:8 172:12
driver's 16:6
drives 172:1
dropped 190:5
drums 51:21 52:2
dry 113:8,10
due 144:20
duly 8:12
duration 41:22 216:17
during 10:14 20:12,14 22:19 23:11 24:6,10 26:15,18 36:11 38:11 48:21 49:18 54:22 56:8,9 59:7 64:11 70:17 77:17 82:17 83:17 96:19 103:24 109:9 113:15 132:20 133:8 135:13 137:12 149:11 150:1 198:4 200:20 204:5,8
dusk 77:7
duties 12:18
D.C 3:24

E

E 3:1,1 5:1 206:24
earlier 82:24 91:1 94:11 99:14 100:4 108:13 150:24 193:14 226:15
early 41:10,25 69:22 70:4 113:21 168:7 216:1
educate 221:20
educated 156:1
educational 15:22
effectively 9:2
efficient 178:20
effort 31:1 95:16
efforts 58:3,6
eight 11:18 13:2
eight-year 13:11
either 10:21 11:10 24:16 55:18 71:2 96:20 102:12 121:5 146:16 163:8 166:12 174:22 175:9 180:22 183:24 184:21 188:23 193:9 217:2 217:12
elapsed 43:4 45:13
elected 15:20
elementary 62:1,2
elevators 35:20
em 27:19 121:18 130:15 165:21 166:6 168:21,22 169:7,8 189:21 192:21
email 5:4 144:12 167:23 200:24,25 201:1 203:1
emailed 57:18
emails 162:7 180:19 193:12
Embarcadero 4:4
embark 143:4
embedded 59:15 60:20 60:21 74:14,16
emphasize 209:13
employed 11:2,19
employee 217:3 221:17 230:16
employees 18:2,9 26:4 189:4 221:19
end 37:18 39:7 47:22 57:2 70:22 75:1 80:21 143:17 178:10 190:9,21 220:15 227:7
Ending 228:14
end-play 6:6 123:10 129:6,15,20,22,25 130:14,18,21 131:9 131:16,22 132:1,6,12 132:18,24 133:5,8,10

158:8 169:8 172:17 172:21 174:16 210:20 211:1,23 224:24 225:10 226:6
comes 216:19,20
coming 14:11 32:8 42:19 43:24 61:25 63:15,17 90:1 165:25 192:19 219:21
commenced 66:2
commencing 2:18
comment 10:11 191:14
Committee 8:3
Committees 7:25 206:12
communicate 9:1
communicated 160:3
communicating 106:21
communications 159:25 160:7 161:7 162:7
company 3:15 4:2,6 7:3,19,23 91:11 121:24 122:13 140:10 153:1 154:2 168:11 179:20 186:1 205:1 217:15,16 221:18,19
company's 91:10
compared 200:19,20 211:25
compares 201:3
comparison 200:15
complete 40:2
completed 53:18
completely 33:24 38:24 68:2
compliance 154:4 173:1
complied 129:11
complying 117:13 129:12 150:9,11
component 35:16 36:6 72:4,13 73:11,14,25 74:9 75:3,14 77:19 77:19 83:8
components 63:20 65:5 71:21 74:22 75:4,5,11,23 76:10 76:21 77:1 78:7,15 83:15 84:3 86:16 87:16,18,19 90:1,3 96:10 176:17 192:20 218:16,17,25 219:1
comported 169:25
computer 92:15 104:8
concentration 190:20
concern 5:14 53:13 103:19 207:22 212:21
concerned 22:3 213:3 219:11
concerning 14:7 16:21 21:9,15 22:22 23:18 24:19,22 25:6,9,13 34:23 36:20 55:3 58:8 102:11 115:14 116:8 117:8 140:13 141:20 146:8,17
153:22 161:9 162:8 162:18 163:12,21 170:5 172:16 180:4 180:14,23 182:22 183:7,15 185:2 188:15 193:12 203:2 205:11 217:16 218:10
conclude 77:2
concluded 203:8
conclusion 9:21 116:3
conclusions 203:3,15
condition 20:5 35:8 39:2,22 40:17,18 79:2 102:12 106:8 112:5 193:2,4
conduct 117:25 139:4 211:13
conducted 101:14
conference 152:22,25 153:1 157:5 159:4 164:11,14,20 165:3,5 165:7,8,15,25 166:11 166:18,24,24 167:2 167:19 203:1
conferences 19:5 25:4 164:23 165:18 166:2 166:7,10 167:11,21 168:1,5,10
confirm 134:24 139:21 198:19,23 199:1 205:6
conformed 140:5
conformity 131:24 133:22 134:5 139:5 151:7
confused 149:2
conjunction 63:25 153:5 178:25 203:25
connected 39:24,25 62:11
connection 9:11 16:21 16:24 17:13 18:22 19:22 21:6 22:5 23:16 25:5 64:19 83:13 84:18 91:3 93:5,12 101:21 103:25 115:18 118:14,15 123:13 124:9 128:19 129:18 129:22 132:6 133:4 140:6 148:14 152:5 152:19 155:17 159:14,16 160:16 163:11
conscious 209:14,21
consequence 210:22
consequences 210:11 211:4
conservative 134:22 154:2 205:8
conservatively 198:21
considerable 82:4 158:2
consisted 65:13,15,18
consistent 213:5
consists 209:22
constitute 231:7
consult 214:15
contact 51:19
contain 59:6 69:10 91:8 223:3
contained 63:23 70:18 73:9 76:4,11 201:21 208:24 212:15 218:16 229:12
contains 111:21 203:24
contents 116:12 211:12
Continental 14:25 15:8 15:10,16,20 16:11 21:6 24:16
continue 150:10 205:19
continued 4:1 6:1 66:3 214:14
Continuing 190:21
continuously 199:6
contrast 85:6 98:4
contributed 205:14
control 33:5 37:7 43:16 146:13,15,16,20 156:18 170:3
controlled 27:3
conveniently 60:12
conversation 106:6 136:5
convert 215:3
convey 165:12
conveyed 164:11
cook 49:20,22 56:19 58:4,9,13 85:7,8 186:20 187:3,20
coordinated 158:17
coordinating 158:18
coordinator 92:2 93:2
copied 6:4 144:13 172:24
copies 109:3,5
copy 56:20 57:4,6 109:3 118:4 120:4,6 127:7 179:22 203:17 221:9,10 228:10 231:1,8
corner 150:6
corporate 11:13
Corporation 7:4,20 24:17
correct 15:19 20:18,24 22:7,9 23:5,7,9 24:8 24:9,15 25:12,16 28:8 30:24 34:20 41:9,12 42:17 50:10 70:5,6,16 74:5 83:11 94:6,9,10 96:5 97:20 100:3,8 102:21 104:23 107:7 110:25 111:2,10,25 113:3 114:9,10 120:5,20 122:19,20,22,23 123:10 124:12,24 126:1 127:5 128:1,2 128:4,5,18,21 129:7 130:3 142:22 147:6 147:13,22 165:16 169:2,3 172:6 183:17 188:7,24 189:3 191:19,21,25 194:16 198:7 199:5,12 200:1 200:2 202:20 204:15 204:17 217:7 224:19 224:21 228:13 229:11 230:13,20 231:8,13
corrections 229:9
counsel 3:2 4:1 7:17 9:3,23 10:10 19:24
counting 226:10
COUNTY 229:3 230:3
couple 51:16 100:14 120:5 136:23 137:17 220:12
course 137:13 176:8 205:10 214:5 223:17
court 1:1,21 2:1 7:7,14 8:8 9:8,22 91:24 109:4 213:9 227:12
covered 75:2 79:21 190:18
covering 40:12 73:13
crane 44:16 48:17 49:1 49:15 50:22,24 51:7 67:21,23 70:21 74:25 75:12
cranes 72:9 74:4,20
crash 1:4 2:4 7:4 16:22 19:23 22:17,25 23:15 23:22 24:1,12 25:6,9 25:15,17 27:10 93:3 93:6,13 118:9 145:11 145:17,20 146:19,20 174:21 175:8 176:11 210:9,19,25 211:2,17 211:19,20 214:9 219:6 222:6 223:23 224:22 225:8
CRB 1:6 2:6
created 214:23 215:1
crew 28:19 33:12 36:7 36:23 39:15 45:8 46:21 49:9 50:6 52:8 52:9,17 58:22 63:9 63:10,21 69:7 70:13 71:10
critical 57:19
CSR 1:24 2:19 230:4 231:5
curiosity 155:19 181:8
curious 155:21
current 13:6 14:4 23:5 167:24,24 171:18 174:10
currently 16:7 150:17 172:18 174:14
custody 227:22 228:5
customer 14:21 220:24
C.S.R 231:17

D

D 5:1 92:3 109:13
Dallas 4:14
damage 36:5,10 45:4,9 53:22
damaging 42:9
dane 3:21 8:4 17:15 19:17
date 20:21 22:17 23:15 24:11 26:8,16 100:13 100:17 104:3 105:22 108:1,6,7 119:8 125:2,12 126:11 127:13 128:10,11 134:9 155:12 163:24 173:9,22 200:4 210:6 223:7
dated 5:23 6:8,10 103:13 115:15,20 122:19 124:23,25 125:23 127:3 128:4 179:22 230:21 231:14
dates 66:22 105:1 11 105:17 149:2 168:6 201:10,17 202:9
Davey 12:25 13:8, 4 13:21,24 122:12 123:7 125:7,8 138:15 138:25 141:16 142:18 149:19 152:4 152:16 158:12,13,22 159:12
Davey's 14:4
David 215:7
day 25:25 27:11 29:23 32:13 37:8 41:14 55:8,9 56:21 65:23 77:6,12,17 97:2 107:9,10,18 135:13 137:13,23 141:1 148:20 149:11 157:16,18 158:3 180:10,12,14 21 :11 225:20,25 226:7 227:8 229:13
days 35:1 83:21 89:20 90:13 100:14 136:23 137:17 227:17,23
daytime 77:12
day-to-day 11:10 174:17 178:23 2 3:6 214:13 216:19
DC-8s 219:2
DC-9 14:20 117:25 119:24 211:25 2 2:1 214:15 223:3,25 224:13
DC-9s 15:14
deal 22:22 23:17 60:15 141:19 162:16
dealing 12:20 14:18 175:3
dealt 21:20 29:8 142:1 142:3 207:2
debris 39:21 40:12 46:12 59:15,22 60:1 60:9 73:12,15
December 6:8 20:16 20:23,25 91:3 101:23 102:20 103:13,18 104:4,11 105:13,17 179:23 180:6 181:19
decided 185:4
decision 156:20,25 157:1 159:14,17 160:19 161:9 179:3,4 178:24 204:24 205:1 205:4,5,11,20
decisions 178:1

8:6 23:17 118:15 156:20 157:1 164:24 167:3,5,11
being 7:9 34:12 44:2 46:23 47:13,17 49:14 53:14 58:6 65:17 71:19 75:20 78:16 80:1 81:17 100:6 108:21 111:1 113:1 130:21 131:10,15,16 131:23 132:1,6,10,11 132:14,19,24 133:5 133:11 138:8 140:14 141:10,11 144:21 145:5 159:9 164:7 165:12 166:11,19 193:22 203:5 207:12 207:13 227:16,18
believe 18:5 26:17 29:12 43:8 55:16 56:22 67:8 72:25 75:16 77:6 86:5 87:2 87:5 90:8 93:16,18 101:3 104:12 112:11 126:12,16 127:16 128:13 138:3 142:2 146:21 157:3 158:17 169:4 182:7 183:20 183:24 187:12,23 189:20 191:18,20 192:13,16,22 204:4 215:7 223:8
below 42:24 43:18 45:6
beneath 44:9
bent 61:9,11,13
best 28:17 87:12 139:9 181:16 187:19 188:4 188:8 196:7
better 54:25 178:15 190:22 191:7 216:20 216:22
between 13:10,11 15:6 26:10,16 43:8 48:3 55:4 58:14 61:1 65:25 68:11 80:7 102:7 123:5 125:6 128:17 131:24 132:3 132:21 133:2 145:20 148:13 153:10,11,25 159:2,10 178:21 196:22 200:16 201:24 202:6 211:24 212:10,22 213:23
Beyond 210:3
big 74:14 75:3
Bill 153:18 157:3
black 61:5,6,7 62:10 62:12 65:11,17 73:12 73:15 79:20 80:3,13 95:20 98:6 109:2 190:13
blotch 87:23
blotches 87:22 114:12
blueprint 154:16
board 26:24 27:2,13 28:13,16,25 31:15,18 32:1,8,21 33:13 34:25 35:18 46:6,18 54:20 55:9 59:23 69:5 95:16 185:15
boat 96:20 108:19 192:4 197:14
BOECOM 5:20,22,25 6:3 121:12,14,16,17 121:19,20 122:9 123:7,13 124:21 127:1,7,9 128:1,3,6 172:7 215:4 219:19
boeing 3:15 5:18,21 6:5,10,11 7:3,19 17:9 35:22 36:2,13,15,18 118:25 119:18 120:11 121:23,24 122:1,13 123:8 124:10 125:9,10 133:22 134:5,18 136:16 137:5,7 139:5 139:16,24 140:6 141:22 145:23 147:22 148:16 150:13,18,18,19 151:7 154:1,21 155:7 155:19,22 159:20 160:17 161:16 164:6 164:7,11,15 169:6,25 198:20,22,24,25 199:19,21 200:8,21 201:4,8 202:14 205:8 205:20,21,22 208:10 210:8,21 211:2 213:20 214:8,22,24 215:3,4,5,8,16,17 217:3,6,14,14,15 218:5,9,12 219:8,19 220:7 224:24 225:10
Boeing's 165:11
Boeing-fabricated 199:13,17 203:9 204:16
Boeing-manufactured 134:25 139:22 147:23
Boeing/McDonnell 120:25 123:21
book 137:3 206:17
bore 196:20
both 12:20 44:1 68:18 102:8 110:18,21 120:24 122:21 138:25 139:1 146:19 152:3,15 173:2 178:19 193:19 194:7 222:12
bottom 39:8 61:19,20 62:10,12,13,15 103:21 150:5
Boulevard 3:5,9
box 35:12,14 39:25 63:21 65:2,5 111:7
BOYLE 3:4
breached 45:18
break 10:14 37:15 47:3 102:23 168:12 179:7
breakfast 19:17
breaks 47:25
bridge 47:20 48:4,12 48:21 50:3 51:6
brief 143:15
briefed 18:14
briefings 26:20
briefly 12:3,17 14:11 15:22 26:15
bring 16:19 27:6 28:20 30:22 37:25 43:19 48:17 54:15 70:14 71:8,9 219:9,10 221:18 226:1
bringing 44:16
broad 219:14
BROILLET 3:4
broke 37:16,19 38:2 44:24 49:1 50:19
broken 40:2
brought 36:24 37:22 38:21 39:2 44:10 54:3 57:18 69:22,25 70:2 71:1,4,7,14,22 72:5,15,17 74:6 83:7 83:23,24 97:3 107:13 134:16 135:4,7,23 136:22,25 137:14,21 149:10 154:5 207:16 207:22 212:16,19
Brownie 184:6
BS 15:24
buildup 39:12
bulletin 5:18,21,24 118:25 120:12,23 121:1 122:22 123:21 124:3,10 125:24 151:1 209:19
bulletins 18:24 119:14 119:18 126:7 129:2 129:10,13 131:13 150:25
bunch 64:1 76:6
buried 33:24 73:21,22 74:10 213:4
business 214:10
busy 154:11 157:15

C

C 3:1
cables 43:15,17,23 66:9 76:7
calendar 105:12
california 1:2,4,22 2:2 2:4 3:6,10,18 4:5,9 7:5,7,13,15 230:1,19 231:6,12
call 35:21 60:22 135:10 158:7 185:3 195:22 226:25
called 119:23 135:13 153:3 160:4,5 212:12
calling 158:8
calls 9:6 203:1 208:1,7 209:4,24 210:15 212:5,25 214:17 216:9 217:20 218:20 219:14 224:4 225:4 225:16
came 18:14 33:19 42:25 44:5,13,13 49:4 64:6 77:11 84:2 84:4 90:3 91:2 97:5 99:6 105:7 115:24,25 120:2 130:15 135:12 140:17 171:3 181:7 194:13,23 209:19
camera 183:18,21,23 184:3,4,6,7 185:8,23 186:20,23
cameras 32:20 189:19
cancellation 166:5
cancelled 166:6
capacities 22:20
capacity 11:4,24 21:25 23:13 42:8,10 82:6 119:16 121:15 170:19 174:22 175:3 211:10
cards 162:1,3 171:16 171:17,20
care 26:4
career 223:17
Carla 18:1,6,7
carrying 131:12
case 1:5 2:5 7:6
cause 208:14
caused 155:21,23 203:4,9
center 4:4 35:12,14 39:25 76:15 88:25 111:7,25
certain 8:1,2 43:14,20 117:21 143:11,13 160:20 187:5 218:4
certainly 92:17 169:22
CERTIFICATION 231:1
certified 228:10 230:4 230:24 231:1,5
certify 230:5,15 231:6
chairman's 115:14,19 116:7,17,23
change 10:6 80:20 143:14 145:3 172:1 174:19 175:4
changes 10:2 42:4 104:17 170:25 171:20 172:3,12 174:2,6 175:6 215:21 227:24 228:2
changing 10:7,8
characteristics 40:21 61:8 94:17 96:2,5 102:12
characterized 190:22 191:7,12
charged 184:16
chart 200:19 201:3,6 201:12,20
check 106:24 123:10 129:22,25 130:19 131:9,16,22 132:12 132:24 139:22 147:14 148:4 150:15 153:10 160:22 203:25 222:16,24 224:1,12
checked 149:24 156:23 159:8 161:15 161:16,19
checking 144:25
checks 6:6 119:24 129:6,15,20 130:14 132:1,7,18 133:5,8 133:10,20,21 134:3,4 140:7,15 144:22 145:18 146:10,19 147:5,11,17,21 148:12,16 149:17 151:5 153:5 154:3 155:9 159:20 161:25 163:12,23 164:13,19 174:7 175:10 200:11 200:13 201:7 212:13 221:20,21
Chicago 182:11
chief 93:9
chris 4:16 18:3
circular 112:1
circumference 62:16
circumstance 133:14
circumstances 117:2 133:7 157:14 176:2 212:18
clarification 172:6 174:16 213:21
clarified 214:7 221:23
clarify 22:24 99:13 120:1 147:25 164:4 173:14 198:18
Clark 6:4 92:2,5 93:1,2 93:20,22 102:1 104:12,14,17 144:13 193:15
Clark's 92:25 94:1,21 98:23
class 167:16
clean 73:16,17
cleaned 97:11
cleaner 79:5,7 81:21 97:25 98:2
clear 39:6 42:22 43:1 51:3 95:23 149:5,9 165:6 173:10 182:12
cleared 51:12
clearest 31:22
clearly 27:22
Cleveland 3:14
close 46:13 51:15 65:24 67:5 79:1 88:4 114:7,8 187:21,24 191:2
closely 62:19 132:16 191:15
closer 55:8,16 84:16 101:4
CMO 160:15
coating 95:17 190:23
color 61:3,4 64:14,17 65:6,17 76:23 79:17 79:19,24 81:19 109:4 109:5 110:17 112:12 112:25 175:17,19 176:11 187:25 188:2 194:13,14 196:15,16 196:25
colored 194:4
colors 65:9 177:4 196:23
column 18:3 201:20,23 202:4,5
come 11:10 44:9 45:11 47:17,25 50:3 51:6 51:19 59:3 118:11 121:17 133:7,18,25 135:2,10 151:13

49:22 52:8 53:16 54:4 56:8,24 63:5,6 63:12 68:21 92:16 101:7,9,18,24 102:10 104:14 115:18 116:3 116:7,15 137:10,18 137:19 138:13,16 140:12 141:25 151:22 153:17 159:13,15,24,25 162:6 180:23 181:2 181:13,18 184:25 186:19 188:9 194:19 203:8 204:19 221:3 225:9
anything 17:11 19:13 24:6 26:17 35:3 36:21 38:12 40:20 64:13,16 65:6 68:10 68:15 71:11 73:15 135:18,19 136:1 137:1 139:8,25 140:12,19 143:1 161:8,10 162:8 165:24 168:3 175:9 180:16 183:6 195:17 196:19 219:10
anywhere 137:10
AOL 5:21 19:20 207:20 208:5 209:8,20
AOLs 17:6,11 18:23
AOL's 18:24
apart 19:21,23 40:11 87:7 88:19 90:21 120:9 151:11 152:2 152:14 165:15
apparently 66:8
appear 52:22 113:8,10 113:11,12,12 114:11 115:9
appearances 3:2 4:1 7:17
appeared 61:9,11,16 62:14 65:12 76:20 79:2,21 87:10 114:2 190:19
appearing 88:6
appears 92:1,4 103:14 103:19,20 123:11,21 127:3 144:12,14
applied 194:10
apply 16:16
approached 51:24
appropriate 51:8
approximate 18:10 35:16 64:11
approximately 7:16 13:2,10 18:13 45:17 45:20 48:10 54:11 65:21 76:25 77:3 89:20 134:10 159:10 187:17
April 127:4,8,14,15,18 128:4,7,12,15,17 131:8,25 132:3,3,4 132:12,21 134:11,12 134:15 135:1,24 136:14 137:24 139:10 140:23 142:18 143:7,12 145:8 148:7 149:3 199:5,5
area 24:2 32:24 38:8 44:16 47:20 48:19 50:15 73:17 74:22,25 84:22 86:7,7 97:17 101:17 114:19 126:9 151:15 162:20 176:9 192:22 195:23 196:11,24
areas 86:17 108:12 195:11,12 196:5
arising 222:16
ARISTEI 3:8
armed 16:17
arms 37:4 72:1,2,17
ARNOLD 4:3
around 9:4 10:10 39:12 40:8 49:1 50:23 59:17 61:17,18 62:17 63:16 66:10 77:9 79:13 80:1 84:22 85:21 86:15 87:18 88:9 89:14 113:5 114:12 119:11 166:1 185:23
arrange 158:14
arranged 158:10,11
arrangements 227:14
arrive 83:25 107:3
arrived 14:14 100:7,12 107:11,12,18 112:6 191:24
arriving 58:17
arrow 164:16
ascertain 160:25 169:24
ascertained 139:14 167:18
ashore 41:4 78:12 99:6 192:19 194:23
asked 26:11 71:10 151:22,24 156:2 186:5,7 210:4
asking 9:3 77:10 88:19 120:12 123:9 213:20 213:22
aspect 40:16 65:8 141:9 177:3 184:24 197:2
aspects 12:5
assemblies 106:8 117:8 118:2 119:25 120:14 123:9 128:20 129:6,16 160:23 163:13,22 207:24 208:17 211:15 212:3 214:11 223:5 225:14
assembly 21:9,16 22:3 22:23 23:18,25 24:6 24:19,22 25:10,14 27:15,21 28:24 29:4 30:23 31:13,17 32:4 32:6 33:10 34:8,9 40:22 42:16 52:1,19 53:2,4,13,21,22 55:20 61:15 64:2 82:15 94:5 107:3 109:19 129:20 150:14 180:11 181:5 185:10 186:9,15 188:16 194:10 202:19 209:2 222:8 225:2
assessed 35:7
assessing 63:1
assist 26:14 27:5
assistant 14:1
assisting 95:16 117:5
associated 126:7
assume 9:17 12:14 83:18 100:14 115:5 128:22,24 146:12 198:21 221:1 228:1
assuming 165:4
assurance 140:18 141:12,13,23 142:15 151:20 162:20
assure 154:3
Atkinson 7:14
ATKINSON-BAKER 1:21
attach 87:16
attached 27:15 34:13 34:24 35:14 42:14,24 51:1 65:3 68:2,4,5 71:16,17 72:2 76:17 81:9 89:12 95:3 111:1,4 200:24,25
attaches 114:19
attempt 37:24 39:20 116:19 205:13
attempted 66:9
attend 164:23 166:9,16 167:2,19
attendance 167:21
attended 19:4 25:3 141:17 142:17 164:21 165:16,17 166:10,12,23 167:5,8 167:10,11,16,18 168:1,5,6,10
attention 108:9 111:18 117:11 134:16 135:2 135:4,8,24 136:22 137:1,15,21 144:15 149:10 150:3 154:6 177:4 207:22 212:17 212:19 219:9,10
attorney 230:16
attribute 202:13
August 11:20,21 13:11 14:12 132:21 133:2 145:1,8,21 146:24 147:9,18,19 148:5,6 148:7,10,12,13,13,19 148:23 149:7,11,12 149:21,23,24 150:23 151:3 152:3,15,23 154:6 155:14 157:15 159:1,9,14 162:14,23 163:11,16 169:24 170:6 201:17,17 202:8 203:2 204:11 204:18,23,25
authority 20:1
available 51:15 85:5 228:6,9
avenue 7:10 141:11
aviation 175:15 194:4
avionics 12:22
aware 17:12 56:25 117:23 118:3,7 120:24 134:8,14 160:7 162:6 172:23 177:22 179:5 190:2 193:25 204:22 207:19 208:2 209:6 209:18,25 210:5,7,18 211:8,20 219:3,4 224:14 225:6,17
awareness 221:18
away 44:8 45:22 47:18 47:24 51:25 188:6
Ayer 153:18,20,22 157:3,5,10,13 159:4 159:13 161:8
a.m 2:18 7:16 47:5,8 57:23 58:1 80:23 81:3
A00000002 6:7
A00001317 91:20
A0013418 91:21
A3 169:11

B

B 3:21 109:20 110:18 110:21
back 11:21 20:2 21:5 25:7 26:21 33:19 35:5,21 36:25 37:2 37:20,22,23 38:21 39:2 41:3 47:7,9,22 48:18 50:14,20 51:4 51:4,9 54:15,19 57:25 59:7 64:4,9 69:6,19,23 70:1,2,13 70:22 71:8 74:7 75:1 75:18 77:13,14,17 81:2,5,7,12,14,16 82:9,10,22 83:24 84:2,4 88:16 90:5,8 91:4,16,18 93:20,23 97:4,7,20 98:5,9,11 101:22 103:9 105:19 106:6,16,18,21,22 108:4 119:10 143:23 147:25 150:3 152:12 168:3,17 169:21 177:23 179:11 191:24 198:18 205:17 206:4 215:6 220:21 221:24 222:9 226:1,6,14
background 15:23
backing 105:21
backtracked 108:7
bag 64:3 190:3,4,5,6,7 190:9
Baker 7:14
ball 64:1 190:11
bare 99:2 100:21
barge 54:14,18 64:6 67:9,18,22,24 68:7 68:12,16,21,23 69:6 69:25 108:19,22
bark 112:24
barrels 51:17
base 11:11 15:12,12 15:13 78:18
based 11:13 12:8 22:1 82:24 94:10 106:23 108:3,6 127:3 132:9 140:4 151:18 162:2 172:3 208:10 211:21 223:22
basic 8:25
basically 29:7 38:13,18 38:23,25 39:11,14,17 39:20 41:16 42:7 43:22 46:9,10 50:24 71:25 75:20 76:6 84:15 88:25 153:9 165:13 166:15 174:15 201:9 203:24
basis 166:3,4 174:17 213:6
bates 6:7 91:20 92:16 118:20 122:4 123:16 124:14 125:18 126:21 127:21 144:2 150:4,5 154:25 169:10 179:24,25 206:21
BAUM 3:8
bear 226:9
bearing 91:20 118:20 122:4 123:16 126:21 144:2 154:25 169:10
bearings 64:1,1 190:4 190:12
bears 104:3 124:14 125:18
became 120:24 134:14 217:13
become 117:23 118:7 134:7 155:21 172:23 173:19,22 174:1,5
becoming 13:1
beefed 36:4
before 2:19 8:23 10:17 14:11,14 21:4 31:7 32:7 33:11,13 34:17 44:20,23 46:8 47:15 50:7 51:14 67:11 77:7 79:20 81:13 88:15 92:6,7 93:21 103:17 105:15 109:12,15 112:10,25 118:11 119:3 122:8 123:1,20,25 124:19 125:22 126:25 127:10 130:12 136:2 143:8 144:6,7,10 146:19 148:9 155:5 169:15,18 180:1,5 181:3,13 184:19 185:1 189:9 192:2,12 192:14,16,20,23 197:5,7,23 200:15 201:25 207:6 220:4 222:6 230:7
began 17:3 42:15 43:2 118:11 159:9 208:22
begin 31:1 66:1
beginning 80:25 143:21 147:18
begins 220:19
begun 50:18
behalf 2:16 7:2,18 8:4

A
AABOEO1 122:4
AA00006389 144:2
AA006390 144:3
able 10:2,11 33:17 36:10 37:24 42:11,18 44:11 46:1,13 48:19 48:24 53:20 59:8 62:17 64:20,23 70:22 74:16 75:22 78:6 105:16 201:12 218:6
aboard 31:21 35:2 44:17,17 54:10 107:13
about 5:18 17:5,19,21 19:9,16 20:19,21 21:22 23:21,25 24:6 25:3 26:8 27:12 29:1 37:10 39:22 40:20 41:22 43:4 44:8 45:1 45:13,14 53:3 54:11 54:20 55:7,13 57:21 67:10,12 68:6 72:11 73:6 79:16 81:9,13 82:9 88:24 98:2 99:25 101:25 102:11 102:18 106:6,19 113:4 116:3,7 117:23 118:8 119:1,5 126:3 126:13,18 127:8,17 128:6,14 135:15,22 136:1 137:9 138:23 140:19,25 142:12 143:3 148:5,24 149:3 149:12 150:22 153:14 155:21 157:9 157:19 158:1,22 161:12 162:5 165:13 171:16,20 175:8 180:16,17,19 181:4,6 181:9,10,13,17 184:20 185:1 186:4 188:10,16 193:8 196:8,19 203:3 207:22 209:12 211:16,19 213:22 216:14 219:18 225:21 227:19
above 38:15 45:1 47:20 48:7,8,9 51:3 223:6 224:2
acceptable 222:4,17
access 217:10,15,22 217:23 218:7
accident 25:21 26:5,12 83:4 93:10 160:20 174:6 176:14,20 177:15,22 182:19 199:17,23 200:5 204:6,7,9 222:25
accompanied 26:3
accompany 223:11
accomplish 139:23 150:14
accomplished 67:20 163:20
accordance 51:13 120:22 121:8
according 107:4 150:18 224:16
Accordingly 150:18
account 20:10,25
accounted 41:5
accuracy 204:21
accurate 10:24 115:8 145:9 165:21 172:14 205:7
Acme 89:16 94:21 95:8 95:18 98:15,21 99:2 100:19,23 115:22,23 116:9,11,24,25 208:15 209:15 210:13,23 211:5
across 48:18
action 117:21 118:15 124:8 143:3 157:11 158:19 159:19 161:6 161:9 163:17 230:17
activity 211:21
actually 9:8 55:6,15 56:19 79:10,15 85:13 86:16 101:2 111:6 120:15 132:23 143:8 161:17 175:25 212:12
actuator 208:17
AD 18:25 120:15 121:9 129:10 130:15 172:24 173:2 199:6 203:24 204:1
addition 36:8
additional 43:19 69:8 199:18 204:19
additions 229:9
adjacent 78:15
adjourned 103:3
Administrative 7:25 206:11
ADs 172:16,20,23 173:1
advance 185:5
advise 139:10,18 158:22 159:14
advised 139:11,20 141:18 142:19 143:7 145:5 148:5,17,20
advisement 139:3
advising 147:24
AeroShell 175:12,25 176:3,10 177:16,19
affected 139:12
afraid 224:6
aft 61:11,12,12 70:19 71:16 74:3,7,24 76:17
after 16:17 19:16 25:14 29:9 30:14 31:8 32:11 35:5 36:19,19 38:11,19 40:23 41:2 51:11 53:18 59:3,9 64:6 69:5 70:25 81:15 83:19,21 89:20 90:13 95:7 97:3 100:6,14 101:14 104:18 107:17 108:24 109:19,21 118:11,13 119:10 120:5 123:2,3 124:1 127:14,15 128:11,12 130:15 131:8 132:2,3 132:4,12 136:21,23 137:16 139:16 140:7 140:23 141:2,5 145:5 145:5,20 146:19 160:20 162:25 163:10,16,20 164:10 173:20 177:15,22 180:11 181:3 183:1 184:11 185:22 186:3 198:3 199:5,5,7,8,17 199:19 202:7 203:1 204:6,11,18,23,25 209:20 210:6 211:20
afternoon 29:25 30:1 77:9 157:22,24 158:1 158:5 159:3,11 206:13
again 60:6 68:14 69:2 78:21 80:8 90:14 124:5 190:25 192:9
agenda 166:17
agents 46:6,17,19 51:11,22,24 52:10,12 52:15 59:10 72:22 75:13,19 189:5,8,18
ago 13:2 17:4,5,18,19 18:13,22 19:16 142:17
agree 117:3 190:24 191:1,5,9 205:4
agreed 205:5
ahead 209:5 210:17 213:2 220:14
air 1:4 2:4 7:4
aircraft 11:10 12:6 14:9,23 15:12 20:19 21:10 22:23 23:19,25 24:14,20 25:14 26:13 26:22,24 27:6,9 35:19 43:24 44:17 74:9 75:4 76:7,10 78:7 83:4 107:21 117:9,22,25 119:24 120:13,13 129:4,5,15 133:15 137:4 139:12 139:14,21,24 143:9 144:19 145:2 147:11 147:16 149:17,24 158:19 159:20 160:20 161:15 162:4 163:14 164:17 165:10,11,19 174:3,7 175:10 176:4 198:7 198:11 199:4 200:8 201:6,11,13,22 202:1 204:7 208:22 210:22 211:3 214:11,14 215:25 216:2,8 217:18 218:12,18,25 222:10,24,25 224:13 225:11
airframe 11:25 12:2,12 13:9 22:20,25 23:10 23:13 24:10 173:17 174:23,24,25 216:7
airline 122:1 165:9,12 178:23
airlines 3:20 11:3,13 14:25 15:8 18:8 19:4 21:7 24:17 93:3 105:20 106:9 117:6 119:17 120:3 121:15 121:22 122:13 126:13,17 127:17 128:14,25 129:3,14 130:5 131:3 133:19 134:2 138:13 145:13 162:1 164:2 165:17 166:20 167:23 171:8 172:13,16 173:16 175:22 177:23 208:22 210:9,11,19 211:11 213:25 214:6 214:10,24 215:10,12 215:18,25 216:8 218:2,13 219:6,7 221:4,14 223:18 224:23,25 225:8,10 225:13
airplane 73:10,18 74:15 75:5 130:17 198:23 202:18 223:11 225:2
airplanes 134:23 142:4 143:5 154:3 161:19 161:20,21 198:24 200:12 201:19 219:2 219:12
airworthiness 18:25 117:15,16,19,20 118:10,16 119:23 120:10,25 122:21 129:2,13 131:13,24 162:2 171:3,6 214:14 217:17 218:10 219:11,17,21 224:16
alaska 3:20 6:11 8:5 11:3,13,19,22 14:12 14:15 15:20 16:14 18:2,8,9 19:4 21:5 22:17 23:17,24 24:11 26:4 29:10,13,17,20 30:2 58:6 93:3 105:20 106:9,23 117:6 118:11,15 119:17 120:3 121:15 121:22 122:13 123:9 126:13,17 127:17 128:14,25 129:3,14 130:5 131:3 133:19 134:2,17,22 136:6,15 136:19 137:10,12 138:13,18 139:4,15 140:5,12 141:7,19,20 143:4 145:7,13,17,22 145:22,23 146:10,24 147:4,5,9,17 149:13 149:17,20,25 151:3,6 151:13,16 153:2,15 154:1,15,17,18,20 156:10,13,17,20 157:1,20 159:8,16,21 159:24 160:18,21,24 161:3,15 162:1,6,9 163:2 164:2,24 165:17 166:9,10,20 167:3,6,11,17,23 168:10,23,25 169:2,5 169:23 170:21 171:8 172:13,16,21 173:2,5 173:16 175:22 177:23 198:15,17 199:14,16,24 200:3 204:12,15 205:17,22 208:22 210:9,11,19 211:11 213:25 214:6 214:10,15,24 215:10 215:12,18,25 216:8 218:2,6,13 219:6,7 220:7 221:4,14 223:12,18 224:23,25 225:8,10,13
Alaska's 14:8 16:21 19:22 25:9 107:20 121:5 135:15,22 138:19 144:21 160:19,20 165:19 170:11 174:11,13 175:1,9
Alaska-fabricated 147:12 148:4 153:23 156:5,23 162:22 198:12 199:10 203:3 204:12,20,25 205:11
Alaska-made 201:9
Alaska-manufactured 147:15
alert 219:16
alerting 219:20
allow 36:4 49:11
along 48:16 115:22 116:10,24
already 66:11 82:12 161:25 219:17 226:17
although 24:18 190:2
always 216:7
ambiguity 222:19
ambiguous 212:5,25 219:14
amended 223:20
amendment 223:24 224:11
amendments 170:21 223:10
amount 82:4
ample 205:20
analysis 65:19
Andy 159:18 163:8 221:10
and/or 160:19 210:21 211:2
Angeles 3:10 4:9 26:2
annual 166:3,4
another 54:11 123:20 124:21 127:25 131:22 215:23
answer 6:13 9:5,17 10:8,17 22:2 151:16 224:8
answers 10:3,7
anybody 57:7,11,14 80:2 102:3 116:14 159:22 166:16,16 167:7 189:24
anymore 41:1 79:14 168:11
anyone 17:13,22 18:16 23:24 29:17,20 30:8 30:11 33:2 46:21

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

- - -

IN RE AIR CRASH OFF POINT MUGU, CALIFORNIA, ON JANUARY 31, 2000.

Case No. 00-1343 CRB

VOLUME II - DEPOSITION OF

QUINTON SCOTT PATTERSON

JULY 18, 2002

SEATTLE, WASHINGTON

ATKINSON-BAKER, INC.
COURT REPORTERS
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REPORTED BY: JAN W. SERRA, CSR NO. 8207

FILE NO.: 9C049B7

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
- - -
IN RE AIR CRASH OFF POINT MUGU, CALIFORNIA, ON JANUARY 31, 2000.
) Case No. 00-1343 CRB

Volume II - deposition of QUINTON SCOTT PATTERSON, taken on behalf of the Defendants, at 1201 Third Street, 48th Floor, Seattle, Washington 98104, commencing at 9:12 a.m., Thursday, July 18, 2002, before Jan W. Serra, CSR 8207.



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INDEX

WITNESS: QUINTON SCOTT PATTERSON


| EXAMINATION | PAGE |
|---|---|
| BY MR. LEBOVITZ | 237 |
| BY MR. FRANKEL | 253 |
| BY MR. MASSEY | 314 |
| BY MR. READ | 326 |


EXHIBITS:

PLAINTIFFS'

| NUMBER | DESCRIPTION | PAGE |
|---|---|---|
| (None) | | |

DEFENDANTS'


| NUMBER | DESCRIPTION | PAGE |
|---|---|---|
| 200 | Twin Jet Technical Focus Record | 277 |
| 201 | Written self-disclosure to Mr. Whittaker, principal maintenance inspector at Alaska, of the circumstances surrounding the grounding of the fleet on August 3rd and 4th | 280 |
| 202 | May 5th, 2000 letter from Mr. Trimberger to Mr. Whittaker at the FAA | 284 |
| 203 | Mr. Stockhill's statement pertaining to the recovery of the Flight 261's horizontal stabilizer establish and jackscrew | 295 |
| 204 | Picture of the jackscrew from the accident aircraft | 304 |
| 205 | Alert notice regarded the horizontal stabilizer trim motor | 321 |

THE VIDEOGRAPHER: This is day two of the video tape deposition of Scott Patterson, taken on behalf defendant the Boeing Company and McDonnell Douglas in the matter of the Air Crash Near Pt. Mugu California on January 31st, 2000.

This case is venued in the United States District Court, Northern District of California, MDL docket 00-1343-CRB. This deposition is being held at 1201 Third Avenue, 49th floor, Seattle, Washington, on July 18th, 2002.

The video operator is Patty Gouthro, PES Video Service, main office Fresno, California. The court reporter is Jan Serra of Atkinson-Baker Court Reporters, located in Glendale, California. We are going on the record at approximately 9:12 a.m.

Counsel, please state their appearances for the record.

MR. FRANKEL: Steve Frankel, on behalf of defendants the Boeing Company and McDonnell Douglas Corporation.

MR. HULTQUIST: Michael Hultquist, on behalf of the Boeing Company and McDonnell Douglas Corporation.

MR. HILL: Greg Hill, on behalf of Equilon.

MR. READ: Greg Read, Shell Oil Company.



MS. KENNEDY: Kristina Kennedy, on behalf of Trig and Derlien.

MR. LEBOVITZ: Jamie Lebovitz, on behalf of Plaintiff's Administrative Committee and Steering Committee.

MR. BOYLE: Kevin Boyle, on behalf of the various plaintiffs as PFC.

MR. MASSEY: Shalem Massey, for Equilon.

MR. JACQUES: Dane Jaques, on behalf of Alaska.

THE VIDEOGRAPHER: Will the court reporter please swear in the witness.

QUINTON SCOTT PATTERSON,
having first been duly affirmed, was examined and testified as follows:

EXAMINATION

BY MR. LEBOVITZ:

**Q Good morning again. Thanks for coming back. We will try to move through this as expeditious as possible.**

**There has been much said regarding the existence and extent of any lubricant or grease on the**



**jackscrew gimbal nut assembly in connection with the accident aircraft.**

**I would like to know if you have heard that there are those out there who believe that one of the contributing causes of the crash was the lack of lubrication on the jackscrew gimbal nut?**

**Have you heard that before?**

MR. FRANKEL: Objection to the form of the question. It's vague. It's ambiguous.

**Q MR. LEBOVITZ: Have you heard that before?**

A I have heard that before.

**Q Have you seen a draft of an outline of Boeing submission which was prepared by Mr. Peter Kovasak in connection with the investigation and the crash of Flight 261?**

A I don't believe I have.

**Q Do you know who Mr. Peter Kovasak is?**

A Yes.

**Q Who is he?**

A I know he's a Boeing employee and he was involved with the NTSB investigation. I remember seeing him on-site.

**Q Was he at the, was he on the ship anywhere when the jackscrew was pulled out of the water?**

A No.



**Q Was he at the base when the jackscrew was brought ashore?**

MR. FRANKEL: Objection. Calls for speculation. No foundation.

**Q MR. LEBOVITZ: Did you see him there?**

A I didn't see him there that day.

**Q When the jackscrew was observed once it was brought ashore and before it was transported to the NTSB, you indicated that it had been washed, power-washed, I believe it was, by the authorities at the port.**

A I wasn't on shore when they did the washing. But it looked like with the rest of the parts; there was a washing done to the parts before they were moved into the hangar.

**Q Let me ask you this.**

**Did someone advise you or inform you that in fact the jackscrew gimbal nut assembly underwent a washing with bleach prior to its placement in the hangar?**

A I have heard that, yes.

**Q Who told you that?**

A Gerardo Hueto.

**Q Anyone else?**

A I think that's the only one I recall saying

that.
**Q Just so that we are absolutely clear, was there any representative of Boeing or McDonnell Douglas company or Shell Oil or Equilon present on the ship when the jackscrew gimbal nut assembly was pulled out of the ocean waters?**
MR. FRANKEL: Objection. Misstates the witness's testimony. Calls for speculation. No foundation.
THE WITNESS: There was no one there from the Boeing Aircraft Company or Shell Oil on the ship when the jackscrew, with the horizontal were recovered.
**Q MR. LEBOVITZ: Was there anyone on the ship when you observed the jackscrew being brought on board from out of the waters that indicated the significance of any of the presence or the lack of grease or lubrication on the jackscrew gimbal nut assembly?**
A Could you restate that.
**Q Did anyone at all on the ship indicate to you that there was significance to be attached to any grease or lubrication that would exist on the jackscrew gimbal nut assembly pulled out of the ocean?**
MR. FRANKEL: Objection. I object to the



form of the question. The witness has clearly testified he was not on the ship when the gimbal nut was recovered. And your question is improper.
MR. LEBOVITZ: Go ahead.
THE WITNESS: For the purpose of the jackscrew, no.
**Q MR. LEBOVITZ: The gimbal nut or the Acme nut, as it's properly called, that sits in a gimbal came aboard the ship when you were not on the ship; is that right?**
A That's correct.
**Q Now, I want you to once more describe for everyone here what the jackscrew looked like insofar as the presence or the existence of what you believed was grease or lubrication on it when it was brought on board the ship?**
A When the jackscrew was brought on board the ship the entire screw was covered with a grease-like substance, with grit and sand embedded in the grease. When it was brought on shore.
And it looked a lot different when the Independence came back into shore with the vertical stabilizer component. And it was in the hangar with the parts that were recovered from the previous days.
It looked a lot cleaner in the hangar than



it did when it was brought aboard the Independence.
MR. READ: Move to strike everything after the first sentence as non-responsive.
MR. FRANKEL: Join.
**Q MR. LEBOVITZ: Mr. Patterson, we have seen, in fact there were exhibits marked of what the jackscrew looked like once it was brought on shore and put in the hangar.**
**Do you remember those exhibits yesterday?**
A Pictures, yes.
**Q Now, do the pictures depict the jackscrew as it looked when it was brought on board the ship and before it was cleaned?**
A No.
**Q What's the -- what is the distinguishing difference between what you saw in the hangar and what you saw on the ship?**
A What I saw in the hangar was a material that was on the jackscrew and was brought aboard the ship was cleaned off, it wasn't there.
**Q Now, did you say you observed the hosing of the jackscrew on board the ship, some kind of garden hose?**
A It was a garden hose there. They rinsed the entire part and the jackscrew was rinsed with it.



**Q Once the rinsing took place with the garden hose, was there any material difference in how the jackscrew looked compared to what it looked like before it was rinsed?**
A I didn't get a good look at the jackscrew before it was rinsed. That was part of the ship guys preparing the parts before we would go in. So I didn't walk in and look at it before they rinsed it.
**Q Okay.**
**But after they rinsed it with the garden hose is when they made these observations insofar as the presence of grease and grit and grime I think you described; is that right?**
A That's correct.
**Q I believe Mr. Read asked you this question yesterday, but I want to make sure that we are all clear.**
**Was there anyone from the NTSB or on behalf of anyone in the Navy or FBI or anyone who you saw take any samples of grease or lubrication or grit or grime from any portion of the jackscrew prior to its leaving the ship?**
A Not to my knowledge.
**Q Clarify something for me.**
**Did you describe the, a -- strike that.**

**Did you observe a concentration of this grease, lubricant substance greater towards the, to either extremes of the jackscrew, or was it greater on one extreme of the jackscrew?**
**Clarify that for me.**
A I didn't -- it was on the jackscrew. I didn't clarify where it was. It was on the screw, and I didn't pay particular attention if it was more to the top or more to the bottom.
**Q Okay.**
**If you were to pull the exhibit that shows the jackscrew as it appeared once it was washed and brought on shore, can you point, can you hold up please for the camera and just point along what area of the jackscrew you saw this greasy lubrication substance?**
MR. READ: Object. There is no foundation. The witness said he didn't pay any attention to that.
THE WITNESS: The grease was on the screw. And in the picture, the screw was in this area (indicating).
MR. READ: Move to strike as non-responsive.
MR. FRANKEL: Join.
**Q MR. LEBOVITZ: Mr. Patterson, hold that**



see the power washing; right?
MR. LEBOVITZ: I understand that. But I want to just make sure we have a good set of eyes here. Okay.
**Q MR. LEBOVITZ: What is your vision, by the way?**
A Um, I don't recall what my vision is.
**Q Do you need to wear corrective lenses?**
A No.
**Q Okay.**
**Now, I want you to take your finger, starting from the top of that jackscrew, and I want you to point to the areas -- okay -- and if it was the entire length of the screw, so be it. But I want you to point exactly where the saw the lubrication grease substance.**
MR. FRANKEL: Objection. Misstates the witness's prior testimony. No foundation.
MR. LEBOVITZ: Go ahead.
THE WITNESS: The specific areas of the screw I didn't pay particular attention to where the grease was. But the entire length of the screw was covered with a gritty substance, with grease in areas of the screw.
I can't say if the grease was particularly



**picture back up again.**
A Okay.
**Q You saw that same jackscrew on board the ship; is that right?**
A That's correct.
**Q Before it was brought on shore and power-washed with bleach; is that right?**
A That's correct.
MR. FRANKEL: Objection. No foundation. Calls for speculation.
**Q MR. LEBOVITZ: Is there anyone else by the name of Scott Patterson who was on board that ship?**
A Not to my knowledge.
**Q Okay. And you're sure you were on that ship?**
A Yes, I was.
**Q Okay.**
**Did you have any problems with your vision when you were on the ship?**
A No.
**Q Were you suffering from any type of astigmatism or blurred vision?**
A No.
**Q Are you color blind?**
MR. READ: The no foundation was he didn't



on the bottom or the top. But on the screw was a grease-like substance with grit embedded in sand embedded from the ocean floor.
The entire screw -- and I think it's important to keep in mind -- the entire screw up to this point, right to this point, (indicating) was embedded in the ocean floor. The only thing you could see when it was sitting on the ocean floor -- you couldn't see any part of the screw -- all you saw was the upper motor mounts. So this entire length of screw was beneath the silt in the ocean floor as the horizontal stabilizer sat before it was recovered.
MR. LEBOVITZ: Okay.
MR. READ: Move to strike the second half of the answer as non-responsive.
MR. FRANKEL: Join.
MR. LEBOVITZ: Lawyer talk, Mr. Patterson. Don't worry about it.
**Q MR. LEBOVITZ: You described seeing the end-stop, I believe, at some point in time in a plastic bag; am I correct?**
A The lower stop was found when they lowered the horizontal stabilizer on to the deck of the ship. It actually fell out of some portion of the horizontal stabilizer and fell onto the deck of the ship.

So the pieces were picked up and placed into a plastic bag with several of the ball bearings from the, I would assume the upper gearbox. And placed in a plastic bag and shipped back to shore with the jackscrew.
MR. READ: Move to strike the answer, the entire answer, as non-responsive.
MR. FRANKEL: Same objection.
MR. READ: It was a yes or no question.
MR. JACQUES: There is no judge here to rule on a motion to strike, and now is not an appropriate time to make such a motion. Why don't you reserve yourself to objections only so we can move the deposition along.
MR. READ: I would appreciate it if you would instruct your witness to answer the questions. And that will really move it along.
I'm going to continue to object when the witness is giving information that is not called for by the question which makes him an obvious advocate. And I think you would be wise to instruct your witness just to answer the question.
MR. LEBOVITZ: Well, listen. I think I'm satisfied. I'm asking questions, I'm getting direct answers to the questions. And, you know, it's



unfortunate that there are some people here who are not happy with the answers to the questions. But, you know, that's a discussion for a different day.
**Q MR. LEBOVITZ: Now, the end-stop that you saw, or the lower stop I think you described, did it have this, some greasy lubricant-type of substance on it as well?**
A It had a substance on it because it was transferred to the bag when they placed it in the bag.
**Q MR. LEBOVITZ: Okay.**
**The substance that you saw on the bag or in the bag from the lower stop, did it look identical to the substance that you saw on the jackscrew itself?**
A It looked like a grease-like substance similar to what was on the jackscrew.
**Q Similar in color?**
**A Yes.**
**Q Similar in consistency?**
**A I can't state for consistency.**
**Q Okay.**
**But the appearance looked similar to that --**
**A It looked similar.**
**Q -- to that substance you saw on the jackscrew; is that right?**



**A That's right.**
**Q Do you know where that bag is that contained the lower stop?**
A Now?
**Q Yes.**
A No.
**Q Do you know whether or not it was retained by the NTSB or any party?**
A No.
**Q At any time -- well, strike that.**
**When was the last time you saw the jackscrew prior to its leaving the naval base for the NTSB headquarters in D.C.?**
A The day that we, the Independence got back on shore was the last time I saw it because that was the day that they, a day when the Independence got to the shore and I got back to the hangar, they were in the process of removing the jackscrew. And once it was removed, I didn't see the jackscrew from that point on.
**Q Did you observe the jackscrew being removed from its mount and put in some type of shipping container?**
**Did you watch that process?**
A I didn't watch the packing of the



jackscrew. I watched them remove the bolts that attached it to the center box.
**Q Who did the removal?**
A I believe it was an Alaska mechanic.
**Q Was there someone from the NTSB present when that was happening?**
A Yes.
**Q Was there someone, to your knowledge, from Boeing present when the jackscrew was being removed and being prepared for shipment to Washington, D.C.?**
A There was a Boeing engineer on-site in the hangar. I don't know if he was watching.
**Q Do you know if it was Mr. Kovasak?**
A I don't know.
It wasn't Mr. Kovasak.
**Q Did you ever have any conversation with the Boeing engineering once the jackscrew came back to the port and before it was shipped out to D.C.?**
A Could you --
**Q Did you have any conversation with the Boeing representative at the naval base at any time between the point when the jackscrew arrived from the ship and before it left for D.C.?**
A Not regarding the removal of the jackscrew.
I may have talked to him about other stuff,

but it wasn't in regards to the jackscrew.
**Q Did the Boeing representative at any time in your presence ever say words to the effect, hey, you know, they are taking lubrication off that jackscrew or they're removing grease and they shouldn't be doing that?**
MR. FRANKEL: Objection. No foundation.
**Q MR. LEBOVITZ: Did you ever hear anything like that?**
A No.
**Q Okay.**
**You had described earlier having watched the live video feed from the submersible of the unit scouring around the ocean floor looking for parts; is that right?**
A That's correct.
**Q Did you make a good observation of what the ocean floor looked like? What kind of -- whether it was sandy or rocky, that sort of thing?**
A It was not rocky at all. It was a layer of silt that was pretty flat. A muddy, silty composition.
MR. LEBOVITZ: Okay.
Mr. Patterson, I have nothing further for you at this time. Thanks again for coming this



morning. I don't know if Mr. Frankel has any follow up.
MR. FRANKEL: Do you have any questions?
MR. BOYLE: I don't.

EXAMINATION

BY MR. FRANKEL:
**Q Mr. Patterson, during the period prior to the crash you were in a position, were you not, to at least have available to you All Operator Letters and service bulletins that Boeing and McDonnell Douglas had issued insofar as lubrication of the jackscrew assembly?**
A They were available. In my area of responsibility of Alaska Airlines, I didn't utilize those because I was in structures and interiors.
**Q But you have no doubt as you sit here today that as a routine and ordinary course of Alaska's business that it received service bulletins and All Operator Letters, particularly insofar as they related to the jackscrew assembly, lubrication intervals and the importance of doing end-play checks?**
MR. JACQUES: I'm going to object. It's ambiguous as to time frame.



**Q MR. FRANKEL: Any time prior to the crash.**
MR. JAQUES: Same thing, it's ambiguous.
You mean even before they had MD-80s n the fleet? Are you talking about forever from the accident backward?
**Q MR. FRANKEL: So long as --**
**It is your understanding, is it not, Mr. Patterson, that Alaska had in its fleet MD-80s starting in 1985; is that right?**
A That's right.
**Q And from the period that Alaska had MD-80s in its fleet in 1985 to the date of the crash you have no doubt in your mind that Alaska received, on a routine basis, service bulletins, All Operator Letters that related to the MD-80 fleet that Alaska was operating; do you?**
MR. JAQUES: I'm going to object. Lack of foundation.
MR. LEBOVITZ: I'm going to join.
MR. JAQUES: Calls for speculation.
**Q MR. FRANKEL: Do you have any doubt?**
A I would say we received service bulletins and AOLs. I can't say whether we question received every single one from the Boeing Company.
**Q Do you have any reason to believe that**



**Alaska didn't receive service bulletins concerning AOL letters or service bulletins since they have been operating MD-80s that McDonnell Douglas and Boeing issued?**
MR. JAQUES: Same objection; lack of foundation. Calls for speculation --
THE WITNESS: We have received documents. I can't say we received every single one.
**Q MR. FRANKEL: Okay. And who at Alaska Airlines would be in the best position, if it's not you, to speak to receipt of service bulletins and the receipt of AOL, Operator Letters?**
A Who would be able to say if we got 'em all or --
**Q Who would be able to say what the practice was at Alaska Airlines in terms of how they were received, where they were maintained and for how long they were maintained, et cetera?**
A That would be a representative of our technical publications group within engineering.
**Q Would that be a person like Mr. Mariatt?**
A Mr. Mariatt currently, right now, holds the position of manager of that group.
**Q Now, Mr. Lebovitz directed your attention to Exhibit 75. Could you turn Exhibit 75.**

A Okay.
**Q That's an AOL letter?**
A That is.
**Q So far as you know, on May 29th, 1984 -- the date it bears -- Alaska Airlines was not yet operating MD-80 aircraft; was it?**
A That's correct.
**Q I want to direct your attention to Exhibit 77.**
A (Complying)
**Q That's also an All Operator Letter issued by McDonnell Douglas on or about the 5th of September, 1991?**
A That's correct.
**Q Have you ever seen Exhibit 77 before?**
A After the crash I have.
**Q And you saw it at Alaska Airlines?**
A Yes.
**Q So you don't have any reason to believe that Alaska Airlines didn't receive Exhibit 77 on or about the 5th of September 1991; do you?**
MR. JAQUES: I'm going to object. Lack of foundation. Calls for speculation.
THE WITNESS: The way I was able to obtain it was on myboeingfleet.com, which has currently all



**Q Are you familiar with the On Aircraft Maintenance Planning Document issued by Boeing?**
A Vaguely.
**Q Have you ever read it?**
A Not the whole thing.
**Q Do you know that Boeing recommends that for --**
**First of all, do you know whether or not -- strike that.**
**It's your understanding, is it not, that Alaska Airlines is an MSG2 operator of MD-80 aircraft?**
MR. JAQUES: I object. Lack of foundation.
THE WITNESS: I'm aware of that.
**Q MR. FRANKEL: And for MSG-2 operators of MD-80 aircraft you're aware, are you not, that Boeing recommends that jackscrew assemblies be lubricated every 6 to 900 hours?**
MR. JAQUES: I'm going to object. Lack of foundation and mischaracterizes the facts.
THE WITNESS: I'm not aware of what the MSG-2 document is because I'm not in the maintenance programs area.
**Q MR. FRANKEL: Do you have any idea what the lubrication interval that Alaska operated between -- well, strike that.**



the previous documents that Boeing has issued. So I can't attest to how Alaska received it in '91. But the way I got it was on 5yboeingfleet off the Internet.
**Q MR. FRANKEL: At least currently, any AOL letter that Boeing has issued with respect to the MD-80 fleet is available on the Internet?**
A If Boeing has loaded it into myboeingfleet it is.
**Q Now I want to direct your attention to the second page which bears Bates number 9126.**
A Okay.
**Q And to the third-to-the-last paragraph.**
**See where it says, "In conclusion, Douglas would recommend for increased service life that operators lubricate the jackscrew assembly repetitively at the 600 hours called out in the On Aircraft Maintenance Planning document or sooner?"**
A I see that.
**Q Do you know in 1991 what the frequency or interval for Alaska's lubrication of the jackscrew assembly was?**
A No, I don't.
**Q Did you ever learn what it was?**
A No, I haven't.



**From 1996 to the date of the crash, do you have any knowledge of what the lubrication interval that Alaska utilized for lubrication of the jackscrew assembly?**
A I know it's higher than what the, it was higher than what the AD mandated now, which we are currently under. I don't know what it was.
**Q Would it surprise you to learn that Alaska was simply lubricating the jackscrew assembly approximately every seven to eight months?**
A I wouldn't --
The way the maintenance program was put together was done in accordance with the FAA-approved maintenance practice that Alaska had. So I don't know what the intervals were. But we were doing it under an FAA-approved maintenance practice.
**Q You don't know what Boeing's recommendations were?**
MR. JAQUES: Objection. Asked and answered.
THE WITNESS: I didn't go back and look at what the Boeing recommendation was.
**Q MR. FRANKEL: Did you have any knowledge prior to the crash as to what the interval was for inspection of the jackscrew assembly?**

A No.
Q Did anyone ever tell you that Alaska's maintenance intervals for inspection of the jackscrew assembly were tied solely to calendar time?
A Could you repeat the question.
Q Well, let me ask it a different way.
Did you have any understanding --
Did you know that prior to the crash it was Boeing/McDonnell Douglas' recommendations that, for MSG-2 operators, that the jackscrew assembly be lubricated every 30 months or 7000 flight hours, whichever comes first?
MR. JAQUES: I'm going to object. That mischaracterizes the facts. There is no foundation for this witness to answer this.
You have a 30(b)(6) witness you have already asked about this who will be back here when this witness is finished. I don't think this is an appropriate line of questioning for this witness, and I think it's wasting our time.
MR. FRANKEL: Well, I'm dealing with Mr. Lebovitz' questions. You weren't objecting to his questions when he got into all this.
MR. JAQUES: He wasn't asking this.
MR. FRANKEL: He certainly was.



Q MR. FRANKEL: With respect to end-play checks, Mr. Patterson, do you have any understanding, prior to the crash, as to what the Boeing recommendation was for conducting end-play checks?
MR. JAQUES: Same objections. Lack of foundation.
THE WITNESS: It is my understanding that the end-play checks per the Boeing documents were to be done every 2-C check interval.
Q MR. FRANKEL: Do you know what the Boeing recommendation was for a 2-C check interval --
A No.
Q -- prior to the crash?
Would it surprise you to learn that Boeing recommended that end-play checks be performed every 30 months or 7000 flight hours, whichever comes first?
MR. JAQUES: I object to the form of the question. Whether he's surprised by something or not is not relevant to this litigation. He already said he doesn't know.
Q MR. FRANKEL: You can answer.
A I don't have one way or the other on that one. I'm not involved with the maintenance programs to that much detail.
Q Did you know that prior to the crash that



Alaska was simply checking end-play measurements every 30 months, regardless of the number of flight hours?
MR. JAQUES: I object. Lack of foundation and it mischaracterizes prior testimony.
THE WITNESS: I do know that Alaska was checking end-play checks at the 2-C interval that Boeing called out on their document.
Q MR. FRANKEL: What was the 2-C check that Alaska utilized in terms of time?
A Alaska C checks were 15 months.
Q Without regard to flight hours?
A I don't know what the details are other than I do know that our C check interval for the MD-80 was 15 months.
Q Just so I understand your testimony, Mr. Patterson, prior to the crash you had nothing whatsoever to do with keeping apprised of lubrication intervals, lubrication practices or end-play checks concerning the jackscrew assembly on MD-80 aircraft.
Is that fair?
A That's correct.
Q And any communications on that score that would have come to Alaska from Boeing or McDonnell Douglas didn't come to you; right?
A No, they didn't.



Q And you had no interaction whatever with Boeing or McDonnell Douglas concerning any matters regarding lubrication of jackscrew assemblies or end-play checks at any time prior to the crash?
A That's correct.
Q To the extent there were communications on those subjects from McDonnell Douglas or Boeing in the time preceding the crash, they would have come to other people at Alaska Airlines, not yourself?
A Yes.
Q Now, am I correct, sir, that at some point during the period that you have been at Alaska Airlines you have sat on what is known as the Reliability Control Board?
A I have sat on a few of the meetings. And my current position as director, that is a director level position to sit in on those.
So prior to the crash, ones I did sit on where when I was acting director when the director was absent.
Q Can you tell us in what time period you would have been sitting in on Reliability Control Board meetings?
A It was on and off for my career at Alaska Airlines prior to being a director. I don't

know the exact dates that I sat in there.
**Q In terms of time frame at least, did you occasionally sit in on the board in the year 2001, 2000, prior to the crash? I'm just trying to get a time frame.**
A From 2001 to present I have sat in probably 95 percent of 'em. Prior to being a director I probably sat in five percent of the ones they had. Of that five percent, it ranged from 1992 to 2001.
**Q At any time during any of those Reliability Control Board meetings did you ever recall participating in any discussion or deliberation concerning maintenance intervals for MD-80 aircraft?**
A I may have. I don't re -- nothing stands out off the top of my head.
**Q You never recall having any discussions or deliberations with regard to when an C check should be performed, when an A check should be performed at Alaska Airlines on its MD-80 fleet?**
A Like I said, there may have been meetings where that was discussed. Nothing sticks out in the top of my head.
**Q That was not something that you were paying particular attention to at the time?**
A No.



**Q Now I want to go back to the use of the Alaska restraining tool and the grounding of the fleet.**
**Did you ever learn, either prior to August 3rd or thereafter, that an Alaska restraining fixture that had been used to perform end-play checks had been broken?**
A I wasn't aware of that.
**Q Never became aware of it?**
A No.
**Q Am I correct, so far as you know, that all the Alaska-fabricated restraining tools that had been used prior to August 3rd of 2000 have been sent to the NTSB?**
A I don't know where the tools were sent. I do know that after August 4th the only tools that were able to be utilized during end-play checks were the McDonnell Douglas tools because we changed the task card to specifically have a sign off that the Douglas tool was being used, with the serial number of the tool.
**Q And since August 3rd or 4th have you seen, at Alaska or anywhere else, an Alaska-fabricated restraining tool?**
A I don't recall seeing one.



**Q So the last time you would have seen one was on or before August 3rd or 4th?**
A There may have been when they were collecting them to ship the ones they shipped to the NTSB, I may have seen one during that process. But they were out of the inventory.
**Q Now, you mentioned that Boeing had a field service representative at the Seattle facility.**
A That's correct.
**Q At least during the time that you have been in Seattle; right?**
A Yes. At least one.
**Q Are you aware of whether a field service representative for Boeing has been on-site at Alaska's Oakland facility at any time?**
A I don't -- I'm not aware of what the Oakland facility situation was.
I do know that there was a rep there at one time because our current engineer is sitting in that office. That was the office. But the rep there, I believe, from my recollection, was bouncing between Oakland and San Francisco and covering the Bay Area.
**Q Who was that representative?**
A I don't remember the name.
**Q You have been to the Oakland heavy**



**maintenance facility Hangar 6 on a number of occasions?**
A I have been to the Oakland facility several times.
**Q About how many occasions over the years?**
A At least 15 times.
**Q Have you ever seen the Boeing field service representative present at the Oakland facility while you were there?**
A No.
**Q Now, you testified yesterday, in response to questions that Mr. Lebovitz had put before you, Exhibits, I believe, 198 and 199.**
A Okay.
**Q Am I correct that at least with respect to your preparation of Exhibit 198, that that was prompted, I think you said because there was confusion at the Oakland hangar as to what the measurement on an end-play had to be before the jackscrew had to be removed?**
MR. JAQUES: I object. That mischaracterizes his testimony.
THE WITNESS: I didn't say it was Oakland.
I said there was confusion. And the confusion lied between the NTSB and our local FAA as

far as the NTSB with the 40 thousandths being an acceptable limit and our local FAA with the interpretation of the overhaul manual 1000-hour reduction in end-play check limit. That's where the confusion lied. And we needed to get that clarified.

**Q And just so I understand, the overhaul manual for the MD-80, DC-9 aircraft is a manual, so far as you knew, that Alaska had maintained in its technical library?**

MR. JAQUES: Object to the form of the question. It makes a reference to a manual that doesn't exist.

THE WITNESS: We maintained the DC-9 overhaul manual in the technical library.

**Q MR. FRANKEL: So far as you know, the overhaul manual has been maintained in the technical library, the DC-9 overhaul manual, for as long as you've been at Alaska?**

MR. JAQUES: Same objection. It's not clear what overhaul manual you're referring to.

THE WITNESS: The DC-9 overhaul manual, as far as I know, is being maintained at the technical library --

**Q And the overhaul manual --**

MR. JACQUES: Let him finish his answer.



THE WITNESS: We used to have it on hard copy. Right now that manual is also available on myboeingfleet. So we utilize myboeingfleet for the current version of that manual on-line.

**Q MR. FRANKEL: The overhaul manual that you were referencing in Exhibit 198 is the overhaul manual for the DC-9; correct?**

A It's entitled DC-9 Overhaul Manual, yes.

**Q And that's --**

**Was there, to your knowledge, an overhaul manual for the MD-80?**

A There is no manual that Douglas put out that is called an MD-80 overhaul manual. The MD-80 components are also in that volume of the DC-9 overhaul manual.

**Q And that overhaul manual, so far as you knew at least since 1992, when you joined Alaska, has been available either in hard copy or over the Internet to Alaska employees?**

A To Alaska engineers --

**Q What about to Alaska maint --**

THE REPORTER: I didn't get that last --

A To Alaska engineers in the technical publications department.

**Q MR. FRANKEL: What about Alaska**



**maintenance personnel?**

A Maintenance personnel did not have access to that because we do not overhaul jackscrews at Alaska Airlines. So that's not a document that they would need to have access to.

**Q You don't know one way or another whether the overhaul manual was located at the Oakland Hangar 6 facility; do you?**

A I don't know what the status is at Oakland.

MR. READ: Could you ask if it takes a password to get into myboeing.com.

**Q MR. FRANKEL: Does it take a password to get into myboeingfleet.com today?**

A Yes.

**Q How do you obtain such a password?**

A Through the Boeing Company. Through our technical publications department.

**Q And if a particular Alaska employee wanted to have, get access to boeing.com -- myboeing.com, how would they go about doing that?**

A They would go through our technical publications department for access authority, and based on their title or job description at the company, they would be given access to certain documents, where other people have access to other



documents.

**Q And in terms of who makes the decision as of at Alaska as to who gets access to what, is that Alaska's decision or a Boeing decision?**

A That's an Alaska decision.

**Q Prior to the date of the crash, did you have an understanding as to what the end-play measurement on a jackscrew assembly had to be in order for there to be, in order for it to have to be removed and replaced?**

A I did not get involved with end-play checks, so I didn't even know what an end-play check was prior to the crash.

**Q Did you -- I want to focus on language in your --**

**When you turn to Exhibit 199.**

**Am I correct --**

A 199?

**Q 199.**

A Okay.

**Q I thought I heard you state yesterday that when you received Exhibit 199 from Boeing that it was your testimony that this was the first time that Boeing had ever told Alaska that a .040 reading on an end-play check was still a serviceable jackscrew**

assembly.
A The .040 limit per Alaska Airlines, it was our understanding that that was an acceptable reading.
Now, when debate began in the NTSB on whether .040 was acceptable or not, we wanted to get clarification from Boeing in writing that .040 was acceptable. Because with the wording that was in the maintenance manual that read "end-play limits between 3 thousandths and 40 thousandths," there were people at NTSB that were saying well, 40 thousandths isn't between. It has to be less than 40 to be between.
So this was the first time we got clarification from Boeing that 40 thousandths is an acceptable limit that clarified that statement of limits between 3 and 40 thousandths.
**Q Have you ever looked at Alaska Airlines' task card?**
A I have looked at many Alaska Airlines task cards.
**Q Would you turn to Exhibit 126.**
A (Complying) Okay.
**Q Have you ever seen Exhibit 126 before?**
A Let me look at it for a second.
Yes, I believe I have.
**Q You've seen this precise document?**



A Yes.
**Q Under what circumstances?**
A It was in the documents that were put together -- this is for the investigation. This is -- looks like the task card that was used on Aircraft 963.
**Q Back in September of -- during the last C check in September of 1997?**
A Yes.
**Q And you saw, first saw this after the crash?**
A Yes.
**Q Did you ever talk with anyone about it?**
A Not in any great detail.
**Q I want to direct your attention to step 11 on the second page of the exhibit.**
A Okay.
**Q This is Alaska Airlines' task card for performing the end-play check at least as of September of 1997; right?**
A That's correct.
**Q Do you have any understanding as to how the Alaska Airlines task cards are prepared?**
A I have my understanding of how they are prepared.



**Q Okay. What's your understanding?**
A They are prepared by our maintenance programs group. Originally prepared based on the Boeing recommendations. And they are updated as required.
The Airworthiness Directives effect task cards. They can be changed, and through the life of the airplane, they are maintained in that fashion.
**Q When you were preparing Exhibit 198 did you reference a task card like Exhibit 126?**
A No, I did not.
**Q Did you reference the Alaska -- Did you review the Alaska Airlines maintenance manual insofar as it concerned the performance of end-play checks?**
A For the aspect of the, with the ingoing message that we were requesting message on I did.
**Q Directing your attention to step 11 in the Alaska Airlines task card, do you recollect from your review of the Boeing/McDonnell Douglas MD-80 maintenance manual whether there was any language that differed from what's in step 11 of Exhibit 126?**
A Yes, there are differences. And the difference would be that we call out an EO that's above and beyond the maintenance manual. And that was



the EO that's referenced on the task card 8-55-10-01. Which is an Alaska Airlines EO that Boeing's not going to have in their maintenance manual.
**Q But apart from the calling out of the EO, did the maintenance manual, as best you can recollect, the Boeing maintenance manual, state that readings in excess of .040 are cause for replacement of the Acme jackscrew and nut?**
A The Boeing maintenance manuals did not say readings in excess of 40. They said check the limits to assure they are between 3 and 40. And any readings in excess are cause for replacement of the jackscrew.
But the Boeing maintenance manual didn't say any readings in excess of 40. It just said 3 to 40. And anything in excess -- between 3 to 40, and anything in excess, cause for replacement of the jackscrew.
**Q Okay. Well, look at the first sentence. "Check that end-play limits are between .003 and .040 inches."**
A Right.
**Q Is that what the Boeing manual said?**
A I believe that's what the Boeing manual said.
**Q Did the Boeing manual also say that**

readings in excess of the above are cause for replacement of the Acme screw and nut?
A I believe that the Boeing Maintenance manual said that.
Q So the Alaska task card was consistent with the Boeing Maintenance Manual; correct?
A It appears to be, yes.
Q Prior to the crash, Alaska Airlines understood that readings at .040 were still serviceable; correct?
A That's my understanding.
Q You were writing Exhibit 198 because there were questions raised not by people at Alaska but by people at the NTSB; correct?
A That's correct.
Q You were designated to testify here as the corporate representative of Alaska on the use of service bulletins and on attendance at twin jet conferences.
I think you told us that you had attended at least one twin jet conference; right?
A I have attended the one in 2002 and I've attended one prior to that, in the early nineties.
Q And you could not ascertain from Alaska's records who, if anyone, attended other twin jet



Alaska?
A I don't know who at Alaska receives these and who would maintain 'em.
Q When you attended twin --
The two twin jet conferences that at least you have attended, would you receive these focus reports while you were attending twin jet conferences?
A What usually happens during the twin jet conference is they have, for each of the items they discuss they have a binder that contains all the items for all the ATA chapters that are given out at the conference.
Q Would a Twin Jet Focus Report be something that would be given out at the conference or --
A I don't know if the Twin Jet Focus Reports, I don't remember seeing the Twin Jet Focus Reports at the conference. But the items that are discussed are laid out in a format like this in the binders that are presented at the conference.
Q Did you ever learn, based either on your attendance at twin jet conferences or through Alaska personnel who attended twin jet conferences, that with respect to lubrication and grease that Boeing did not recommend mixing different types and brands of greases?



conferences?
A Alaska does not keep formal records of who attended which team conferences on what years.
Q And you've searched high and low and couldn't find any information as to, apart from the twin jet conferences that you attended, who on behalf of Alaska attended others?
A I have, John Hoover is the director of project engineering, he attended one in the early nineties.
I did not survey people that had worked at Alaska Airlines that no longer work at Alaska Airlines to find out which ones they have attended.
MR. FRANKEL: Let's have marked as Exhibit 200 a two-page document entitled "Twin Jet Technical Focus Report."
(Defendants' Exhibit 200 was marked for identification)
Q MR. FRANKEL: This is a Twin Jet Technical Focus Report, Mr. Patterson.
Have you seen documents, at least in form, like Exhibit 200 before?
A In form, yes.
Q Who at Alaska Airlines would maintain whatever Twin Jet Focus reports were received by



A I did not receive that information.
Q And you don't know whether anyone else at Alaska received it or not?
A That's correct.
Q And you don't know as you sit here today who at Alaska would be the typical recipients of the Twin Jet Focus Reports?
A That's correct.
Q Even though you're the person who's been designated by Alaska to testify on that subject?
MR. JAQUES: I'm going to object. I think that mischaracterizes what he's here to testify for.
THE WITNESS: I was asked to look at the team conference. Which I think technical focus reports are different than the team conference.
Q MR. FRANKEL: So Twin Jet Technical Focus Reports are different than twin jet conferences?
A Twin jet conferences and Technical Focus Reports, I think, are different things.
Q So there would be someone else at Alaska that would presumably know what, if anything, Alaska did with Twin Jet Focus Reports it received?
A I think that the Boeing rep at Alaska Airlines would probably know who he distributes these to at Alaska Airlines and how they are

distributed.
**Q Is it the field rep at Alaska for Boeing that does that; to your knowledge?**
A I would assume that's how they come in. I don't know.
**Q That's just your speculation?**
A Yes.
MR. FRANKEL: I want to mark as Exhibit 201 a two-page document that bears Bates numbers AA 00025127 through 25128.
(Defendants' Exhibit 201 was marked for identification)
**Q MR. FRANKEL: Do you have Exhibit 201 in front of you?**
A Yes.
**Q Have you ever seen Exhibit 201 before?**
A Let me take a look at it for a second.
I don't believe seeing this in the final draft form.
**Q You saw it in draft form?**
A It was probably in the draft form when I saw it.
**Q Am I correct, though, that at least in the draft form and now in what appears to be the final form, this is the written self-disclosure to**



**Mr. Whittaker, the principal maintenance inspector at Alaska, of the circumstances surrounding the grounding of the fleet, or a portion of the fleet, on August 3rd and 4th because that portion of the fleet that at least had not been checked with a, or you couldn't be certain had been last checked with a Boeing restraining tool was now being checked with Alaska tool -- that had not last been checked with a Boeing restraining tool was now going to be grounded and checked with a Boeing restraining tool for purposes of end-play?**
A This is a correspondence to our PMI, Bill Whittaker, on corrective action and self-disclosure for that. This is the self-disclosure letter for that incident.
**Q When you said that the only other writing that you were aware of concerning the grounding of the fleet, was it this document, Exhibit 201, or at least the draft of Exhibit 201 that you had mentioned yesterday as being that document?**
A That our QC department may have --
**Q Yes.**
A Yes.
**Q When you saw the draft, do you know when in respect to August 9th, 2000 you first saw the draft?**



A It was probably on or before August 9th.
**Q Do you recall whether there are any differences --**
**Did you make any changes to the draft that you saw?**
A I don't remember making any changes to the draft.
**Q Do you know whether anyone else made any changes to the draft?**
A No.
**Q From your review of Exhibit 201, is it in substantially the same form it was when you saw it in draft?**
A I can't remember if it's exactly the same.
**Q Substantially the same?**
A It's similar to the one -- I can't say what the differences were.
**Q Was it your understanding back on August 3rd and 4th, when these matters were called to your attention, that it was possible that the fixtures made by Alaska Airlines may not be an equivalent substitute for the Boeing/McDonnell Douglas fixture as called for in the MD-80 aircraft maintenance manual?**
A Because there were differences in the tool,



the equivalency came into question as to whether it was equivalent or not. That's why Alaska took the action that it did.
**Q And you understand back in August of 199 -- August of 2000 that that may in turn be a violation of FAR 43.13?**
A At that time, yes.
**Q Now, you mentioned in connection with your testimony concerning this subject yesterday that there was a matrix prepared that had readings that were performed prior to August 3rd for Alaska's MD-80 aircraft for purposes of end-play, and also readings that would have shown up after at least the 17 or 19 aircraft that were grounded in August 3rd, 4th time period were then rechecked with the Boeing tool; correct?**
A Correct.
**Q You didn't prepare that matrix; did you?**
A No.
**Q That was something that was prepared, so far as you know, by the NTSB?**
A No. That was prepared internally at Alaska Airlines by Mr. Trimberger, who is the person that signed this letter.
**Q And you simply reviewed it at some point?**

A I'm on distribution of the matrix.
**Q But in terms of a person who would have knowledge as to how it was prepared and under what circumstances it was prepared, that would be Mr. Trimberger; as best you know?**
A He would be the best one.
It was prepared for the purpose of documenting end-play measurements in accordance with an Airworthiness Directive.
MR. FRANKEL: Let me mark as Exhibit 202 a one-page letter bearing Bates number AA 00025121. And it appears to be a May 5th, 2000 letter from Mr. Trimberger to Mr. Whittaker at the FAA.
(Defendants' Exhibit 202 was marked for identification)
**Q MR. FRANKEL: Have you ever seen Exhibit 202 before?**
A Yes.
**Q When did you have occasion to first see it?**
A After it was sent to the FAA on May 5th.
**Q And what is your understanding as to what Exhibit 202 references at least insofar as a self-disclosure to the FAA by Mr. Trimberger?**
A This is the corrective action that Alaska put in place based on the -- let me take a look at



this for a second.
This appears to be the corrective action that was put in place to address the self-disclosure that was the August 9th letter.
**Q So it's your testimony, Mr. Patterson, that the FAA had been advised first about the use --**
A Hold on.
I guess the dates are --
this letter is dated prior to the August 9th letter. So --
**Q Dated in May.**
A Right.
So it was before the August one. I'm not sure what this letter in May --
**Q But at least as of May of 2000, you were not aware of the issue with respect to the use of an Alaska tool restraining fixture to do end-play checks that may not have been in conformity with the Boeing specification; were you?**
A I got involved with the tooling issue in August of 2000, when we put the plan in place to, for the equivalency problem to address the re-inspections of the aircraft.
**Q And you were advised of that first by Mr. Hueto sometime on the afternoon of August 3rd;**



**correct?**
A Correct.
**Q And so far as you knew, that was the first time that either you or Mr. Hueto had become aware of that issue; correct?**
A That's correct.
What this letter is referring to -- the May 5th letter -- in looking at it now we had an MD-80 horizontal stabilizer that had a fitting that was attached to the bottom of the horizontal stabilizer that the restraining fixture attaches to. We had one break on an airplane. And I think this letter is discussing that incident we had with an MD-80 back in May.
It didn't have to do with the restraining fixture. It had to do with the fitting on the aircraft that the restraining fixture attaches to.
**Q But Mr. Trimberger does advise Mr. Whittaker, at least in the first paragraph of his letter, that the correspondence, this letter, Exhibit 202, represented the conclusion of Alaska's investigation and comprehensive fix regarding the use of improper tooling to conduct the inspection referenced in Exhibit 202; correct?**
MR. JAQUES: I object. The document speaks



for itself. There is lack of foundation for this witness to testify as to Mr. Trimberger's intentions and meaning.
**Q MR. FRANKEL: There was --**
**So far as you knew in May, there was an investigation going on prior to the time that Mr. Trimberger wrote this letter concerning Alaska's use of improper tooling; correct?**
MR. JAQUES: I'm going to object. That mischaracterizes the prior testimony. Mischaracterizes this document. There is no foundation that this witness had any involvement in that.
THE WITNESS: I don't believe that the tooling that is referenced in this May 5th letter is the restraining fixture. It's the fittings that the restraining fixture tie into.
**Q MR. FRANKEL: Let's look down to the second-to-the-last paragraph Mr. Trimberger's letter.**
**Does -- Mr. Trimberger does advise the FAA -- Mr. Whittaker as the principal maintenance inspector -- that as a long-term plan, within 18-months engineering intends to modify all of the horizontal stabilizers to have an upper support plate part No. 4596772-11 installed so that only one**

**restraining fixture needs to be stocked; does it not?**
MR. JAQUES: I object. The documents speak for itself. There is no foundation for this witness to testify beyond that.
**Q MR. FRANKEL: You were aware of this self-disclosure; am I correct?**
A That's correct.
**Q And the restraining fixture that is referenced in the next-to-the-last paragraph of Mr. Trimberger's May 5th, 2000 letter is the restraining fixture used to do end-play tests; is it not?**
MR. JAQUES: I'm going to object. Lack of foundation.
THE WITNESS: It is the same restraining fixture. But that's not what this letter addresses.
Douglas had two types of restraining fixtures based on the fuselage number of the aircraft. They had a -1 fixture and a -503 fixture, which Alaska Airlines stocked both. We have both types of airplanes.
And what this paragraph is referring to is we were going to modify the airplanes for the adapters so that they would only take the 503 fittings and there wouldn't be any confusion over which airplanes



took a -1 fitting or a -503 fitting.
**Q MR. FRANKEL: At least as of May 5th, you'll agree with me, that point in time Alaska was still using its fabricated restraining fixture; correct?**
A What I'm going to say is this letter has nothing to do with the Alaska Airlines in-house manufactured tool. It has to do with the fittings that this tool attaches to on the airplane.
MR. FRANKEL: Move to strike as being non-responsive.
**Q MR. FRANKEL: My question was: As of May of 2000, Alaska was still using, so as far as you knew, the Alaska-fabricated restraining fixture to do end-play tests?**
A They had the Alaska-fabricated fixture in inventory. I can't say how often they were using it.
**Q But you knew at least in August, when you were first advised about this issue, that end-play checks had been performed in the months proceeding August using that fixture?**
A That's correct.
**Q I wanted to go back to --**
MR. JAQUES: Let's take a break.
THE VIDEOGRAPHER: Going off record, 10:28



a.m.
(Recess taken)
THE VIDEOGRAPHER: We are going back on the record, 10:41 a.m.
**Q MR. FRANKEL: I'm correct -- going back to Exhibit 202 for just a moment -- that at least with respect to the issue that Mr. Trimberger was advising Mr. Whittaker concerning improper tooling that you received on or about this date -- a copy of this letter -- that Mr. Whittaker was being advised by Alaska that task card 286-27004 was being revised, detailing the proper tooling to use; correct?**
A Not the restraining fixture tooling. The upper support plate part number tooling, which is the part number that is listed on this letter.
495672-1 is not a restraining fixture tool. It's an upper support plate. And that's the tooling that he's referencing in this.
**Q So this only dealt with some improper tooling that Alaska had been using; you hadn't yet discovered that you were still using other improper tooling?**
A Right. This is a totally different subject.
**Q And it took you another three months to**



**figure that out?**
A To figure what out?
**Q That you were using improper tooling in terms of the restraining fixture?**
A I found out when I was advised August 3rd or 4th. I don't know what was going on before that.
**Q Going back to the recovery operation when you were on the Independence and the horizontal stabilizer and jackscrew were recovered, do you recall that after the horizontal stabilizer was rigged on the ocean, from the ocean floor and brought up to the deck that it was manipulated into a position so that it could be secured for immediate transport back to port?**
A When it was brought aboard the Independence, it wasn't in a position to be transported.
**Q But --**
**You can continue.**
A They -- later on they moved the horizontal stabilizer to a barge. And that's how it was transported.
**Q But my question was: When it was brought up onto the deck was it manipulated so that it could be secured so that when the barge arrived it could be transported back to port?**

A It was placed on the deck and supported in preparation for being transported to shore.
**Q Do you recall that a 55-gallon drum was used as a brace or stand so that the jackscrew and associated components would not sustain further damage when it was placed on the deck?**
A Yes.
**Q When it was placed on the drum, was it secured with any straps or lines?**
A I don't remember if it was or not.
**Q You don't have any recollection of the horizontal stabilizer having been dropped on the deck or otherwise compromised?**
A No.
**Q Both the stabilizer and the jackscrew?**
A No, it was not.
**Q Now, you testified I think it was that one of the crew people on the Independence used a fresh water or garden hose to rinse down the stabilizer?**
A Yes.
**Q And did you have an understanding as to what the purpose was of using this low-pressure garden hose?**
A No, I didn't.
**Q Did anyone ever tell you that it was done**



**for the purpose of reducing the corrosive nature of the saltwater on any potential fatigue on the surfaces of the horizontal stabilizer or jackscrew assembly?**
A No.
**Q Do you know who directed the crew person to use the hose?**
A No.
**Q Do you know whether there was any attempt when the garden hose was being used on the surface when the jackscrew assembly and horizontal stabilizer had been placed on the deck to reduce the water flow of the fresh water over the gearbox and gimbal area?**
A No.
**Q Do you know whether there was any effort to avoid spraying the jackscrew with direct flow due to concern about the preservation of the jackscrew, including the spiral, wiry material that you had previously described?**
A No.
**Q Do you recall whether in your examination, your physical observation of the jackscrew assembly when it was on the deck of the ship, whether there were any large dark gray deposits of material at the upper and lower extremities of the jackscrew shaft?**
A I don't remember if there was or wasn't.



**Q Do you have any recollection as to whether the wire or the wrapping threads that you described were part or all discolored in any way?**
A I didn't pay particular attention to the color of the spiral wrap.
**Q Did you have any recollection that the coloration was not unlike that of iron oxide and being a very darkish-gray?**
A Like I said, I didn't pay particular attention to the color.
**Q Now, I take it that it appeared to you that there was this black substance that had sand and silt embedded in it. And it looked like a greasy-like substance to you; is that right?**
A It liked like grease.
**Q But you never touched it; right?**
A Right.
**Q So you don't know whether it was a grease or lubricant or just the silt from the ocean floor?**
MR. JAQUES: I'm going to object. This whole line of questioning has been asked and answered by you previously.
Do you have anything to add to your prior answer?
THE WITNESS: No.



MR. FRANKEL: Let's have marked as the next Exhibit 203 a three-page document dated December 7, 2000.
And there are color pictures attached to the witness' copy, but we will get colored pictures made for those who request them.
(Defendants' Exhibit 203 was marked for identification)
**Q MR. FRANKEL: Before you, Mr. Patterson, is Exhibit 203.**
**Have you ever seen Exhibit 203 before?**
A No.
**Q Mr -- the author of Exhibit 203 is, as best you can ascertain, Mr. Stockhill; correct?**
A Correct.
**Q And he was the NTSB representative on the Independence with you when the horizontal stabilizer and jackscrew assembly were recovered?**
A That's correct.
**Q Have you had an opportunity to review Exhibit 203?**
A No.
**Q Why don't you take a moment and review it?**
A Okay. (Complying) Okay.
**Q Have you had an opportunity to review**

**Exhibit 203?**
A Yes.
**Q Am I correct that Exhibit 203 is Mr. Stockhill's statement pertaining to the recovery of the Flight 261 horizontal stabilizer and jackscrew?**
MR. JAQUES: I object. Lack of foundation.
**Q MR. FRANKEL: You can answer.**
A It appears to be.
**Q And having reviewed Exhibit 203, does it refresh your recollection as to whether or not Mr. Stockhill had a camera with him when the jackscrew and horizontal stabilizer was recovered from the Independence?**
A Obviously he had a camera. I didn't see him take pictures but -- there is pictures, these are pictures of the jackscrew on the Independence -- or the horizontal stabilizer on the Independence.
**Q Is there anything having read Exhibit 203, setting forth Mr. Stockhill's recollections of what occurred in the February 9th, 10th, time period concerning the recovery of the jackscrew assembly and horizontal stabilizer, that's inconsistent with your recollections?**
A I think the dates are probably more along the lines of the 8th and 9th.



**Q I'm sorry?**
A I think the dates are probably more along the lines of the 8th and 9th.
But as far as what his conversations were with the deck crew, I wasn't involved with that at all. So I don't know if that's what was conveyed or if it was followed or --
**Q So you weren't present for any conversations Mr. Stockhill was having with members of the crew while you were on the Independence, that he recounts in Exhibit 203?**
A Right.
**Q Anything else that's inconsistent with your recollection of the events back in 8th, 9th, 10th of February 2000?**
MR. JAQUES: Better go through literally each sentence before you answer that question.
THE WITNESS: There are parts of this stuff that I don't remember if it happened or not. So I can't say that I agree with everything.
There is some of the things that he was looking at that we were looking at other areas.
**Q MR. FRANKEL: I recognize that; there are some things that he saw that you didn't see, there is some conversations that he had that you didn't have.**



**What I'm trying to understand is what, apart from things that you did not participate in, whether anything that Mr. Stockhill sets forth recollecting the jackscrew assembly and recovery in his description of what he saw is inconsistent with what you recollect having seen?**
MR. JAQUES: I'm going to object on grounds that it's not for this witness to say whether or not his observations are consistent or inconsistent with Mr. Stockhill's.
Mr. Stockhill's are written here and he's testified as to what he observed. It's not for him to talk about whether or not those operation are or not inconsistent.
If you want to pick something out specifically and ask him if he agrees, that's appropriate.
I don't want think it's fair ask him to go through a letter like this and agree to the characterization of somebodyelse's observations consistent or inconsistent.
MR. FRANKEL: I think it's a perfectly proper question, and I would like the witness to answer it.
THE WITNESS: I can say that the



next-to-the-last paragraph on the first page where he has no recollection of the horizontal stabilizer and associated parts being dropped on the deck, I disagree with that because we watched 'em drop on the deck. Obviously he didn't see that.
Parts were sent to shore. So obviously they had to come to from somewhere.
MR. READ: I saw you, saw it dropped?
THE WITNESS: When they brought the stabilizer onto the deck of the ship, the lower stop and several bearings fell out of the front of the horizontal stabilizer onto the deck of the ship. And they were picked up off the deck of the ship and placed in a plastic bag and shipped to shore with the horizontal stabilizer.
I don't know if that's the answer you're looking for. That's an example of something.
**Q MR. FRANKEL: But apart from the parts, I think you mentioned was the lower stop that you saw dropping out of the horizontal stabilizer; right?**
A It fell out of the horizontal. I saw it when it hit the deck.
**Q You saw that.**
**The horizontal stabilizer and the jackscrew were not dropped on the deck?**

A No.
**Q And when the lower stop came out of at least what you thought was the horizontal stabilizer, did you notice whether it was compromised in any way?**
A No, I didn't.
**Q Well, why don't you continue on.**
**You didn't see Mr. Stockhill take photographs; correct?**
A I don't recall him taking photographs.
**Q Okay.**
**You didn't notice in terms of how the hose was being used, the garden hose, when it was brought on deck, whether any special care was taken to use the hose on, any restrictions placed on the crew member in terms of washing down the center section that included the jackscrew and the gimbal gearbox?**
A When they were hosing done the part, it didn't appear to me that they were changing procedures when they got next to the jackscrew. It appeared to me they hosed it down the same way for the whole part.
**Q And you observed that whole operation?**
A Not the entire operation.
**Q And you never noticed anyone avoiding spraying the jackscrew with direct flow of the garden hose?**



MR. JAQUES: Objection. Asked and answered. He already said.
**Q MR. FRANKEL: You can answer.**
A Like I said, I didn't see the whole thing. But it didn't look like there was a difference on how they hosed it.
**Q Did you, in examining --**
**Going to the next page of Mr. Stockhill's memorandum, did you see a spiral wrap of unidentified material and deposits of what appeared to be lubricant or emulsified material at various points along its length?**
MR. JAQUES: Objection. Asked and answered. He testified extensively about what he observed, including lubricant and the spiral material.
**Q MR. FRANKEL: Is Mr. Stockhill's description here inconsistent with what you observed?**
MR. JAQUES: I object. It's not for this witness to say what is or isn't consistent with his prior statements.
He can reiterate what he saw. It's up to somebody else to determine whether or not that's consistent with Mr. Stockhill.
**Q MR. FRANKEL: Do you disagree with Mr. Stockhill's description?**



A This is Mr. Stockhill's account.
**Q Do you disagree with it?**
A I don't disagree that he saw what he saw.
**Q Do you disagree with the description from what you saw?**
A I think there was more than what we saw as far as -- I don't think he included the, as a description of the material on the jackscrew, he's got one recollection of it. There were other recollections that had greasy material. I don't see that in his thing. But I don't know what he's looking at.
**Q If you turn to the first picture --**
A Okay.
**Q -- do you know what that, what the first picture attached to Exhibit 203 is?**
A That's a picture of the horizontal stabilizer, looking at it from the front.
**Q When at least --**
**Is that taken on the deck of the ship?**
A Yes.
**Q I think I asked you.**
**You never saw that fixture before?**
A No.
**Q And if you turn to the second photograph --**



A (Complying)
**Q -- do you know what that is a photograph of?**
A It looks like a photograph of the same thing; the front of the horizontal stabilizer with the jackscrew mounted to the center box.
**Q But there are --**
**It's not, as best you can tell by comparing the two photographs, they are not the same, they are taken from different perspectives or angles; aren't they?**
A I don't know if one was an enhanced shot the other or --
It's pictures of the horizontal stabilizer attached to --
**Q Can you see from those photographs the jackscrew?**
A Yes.
**Q Okay.**
**And if you could hold up that picture to the camera and point where on the first photograph attached to Exhibit 203 the jackscrew is.**
A The jackscrew is located right here. (Indicating)
**Q Can you tell from this picture when in the**

**sequence of events when the jackscrew had been recovered when this picture, at least as best you can recollect, would have been taken?**
**Was this after it had been lowered on the deck? While it was lowered on the deck?**
**Can you tell?**
A It's after it was lowered on the deck.
**Q So this is the condition that you saw the jackscrew and horizontal stabilizer as it had been placed on the deck. And you would then -- and before it was then taken away on the barge?**
A From this picture I know it's on the deck of the Independence. I don't know from this picture if it was taken prior to wash or after wash. I can't tell from this picture.
MR. FRANKEL: Let me have marked as Exhibit 204 another photograph.
(Defendants' Exhibit 204 was marked for identification)
MR. FRANKEL: The witness does have a color photograph and we can make color photographs for everybody else.
**Q MR. FRANKEL: Do you have Exhibit 204 before you, Mr. Patterson?**
A Yes.



**Q Have you ever seen Exhibit 204 before?**
A No.
**Q Do you know what Exhibit 204 is?**
A No. I know it's a picture of a jackscrew from the accident aircraft. I don't know when it was taken.
**Q Did you ever see the accident aircraft's jackscrew when you examined it appear, at least from your visual observation, like what is shown on Exhibit 204?**
A I don't recall if I've seen it look like this or --
Not knowing when this picture was taken, I didn't look at the jackscrew every time it was moved around and on the shore or on the ship. So I don't know when it was taken. When this picture was taken exactly, I can't say if I looked at jackscrew at the same time this picture was taken.
**Q Now, let's take a look back at Exhibit 186 I believe.**
A (Complying)
**Q If you look at 186 --**
A B?
**Q You can look at 186-A. And the jackscrew on Exhibit 186-A in comparison to what is shown on**



**Exhibit 204 -- and I'm representing to you that they are pictures of the same jackscrew -- it does at least appear different to you in terms of how they appear?**
A The view appears different.
**Q And you see some black substance at least on 204 that doesn't appear to be present on 186-A?**
A From these pictures, I can't tell what appears. I mean, they are two different pictures. I can't comment on what's in one picture and what's in the other.
**Q They just look different to you; right?**
A The pictures look different. They are different pictures, so they are going to look different.
**Q Now, when you were back in the hangar and the gimbal nut arrived and you observed it and you observed --**
**And I want if you could turn to Exhibit 186-D.**
A (Complying)
**Q -- and in particular, did you observe Mr. Hueto -- where did you observe Mr. Hueto, if you could hold up the photograph and point to where Mr. Hueto placed his finger when you saw him touch the gimbal nut?**



A What I remember, and it's a vague memory, is he ran his finger down inside the gimbal nut. So that would be this area right there (indicating).
**Q Not along the top, but inside?**
A Right.
**Q And what do you recall --**
**Do you recall, apart from you, who else saw Mr. Hueto do that?**
A I don't recall who else saw him do that.
**Q After Mr. Hueto placed his finger as you have just described it, what if anything did he do?**
A I remember he -- if he did anything, he moved it between his fingers. And I don't remember what comments he made or what after that.
**Q Did you notice what the color was on his fingers?**
A I don't remember what the color was on his fingers.
**Q Do you recall him wiping off his fingers?**
A I'm sure he cleaned his hands after he did that.
**Q Did you see him do that?**
A No.
**Q So apart from yourself and Mr. Hueto, you can't tell us anyone else by name who saw Mr. Hueto do**

**what he did?**
MR. JAQUES: I object. It's been asked and answered.
THE WITNESS: There were people in the area. I don't know the exact names of the people that may have saw that.
**Q MR. FRANKEL: Prior to --**
**Did you ever have any conversations with Mr. Hueto about what he observed concerning the gimbal nut at any time?**
A Yes.
**Q When did you have a conversation with him about that subject?**
A At the time the gimbal nut arrived in the hangar.
**Q Do you recall what Mr --**
**Do you recall having any discussions with Mr. Hueto as to whether there was grease on the gimbal nut, in the gimbal nut, around the gimbal nut?**
A No.
**Q With respect to the absence or presence of grease on the gimbal nut or on the jackscrew, have you ever had any discussions with Mr. Hueto about that subject?**
A Could you repeat the question?



MR. FRANKEL: Would you read it back.
(The record was read as follows:
**Q With respect to the absence or presence of grease on the gimbal nut or on the jackscrew, have you ever had any discussions with Mr. Hueto about that subject?)**
THE WITNESS: Yes, on the jackscrew I did.
**Q MR. FRANKEL: When did you talk with Mr. Hueto about that subject?**
A Probably after the crash. I don't know the time frame.
**Q Did you talk with him about it --**
**Did you talk with him about what you saw on the jackscrew as opposed to the gimbal nut?**
A I don't recall if I talked to him about that specific subject.
**Q When in relation to the February 8th through 14th time frame did you first discuss that with Mr. Hueto?**
A After that.
**Q Was it weeks, months afterwards, or a matter of days?**
A It was probably --
The discussions pertained to when the NTSB



came up with the comment that the jackscrew lacked grease in critical areas of the jackscrew.
And my discussions with Gerardo was just the fact that to make a bold statement like that after only seeing what the jackscrew looked like when it got to the hangar didn't seem to me to have any merit. I couldn't understand how they could make a comment like that not knowing what the jackscrew had been through.
They didn't see on the ocean floor. They didn't see it embedded in the silt of the ocean floor. They didn't watch the recovery of the jackscrew. They didn't see it on board the ship. And they are making a comment based on a component that had went through a lot of ordeals before it got to them in the hangar.
And my comments to Gerardo was: I was surprised to hear the NTSB make a comment like that after the jackscrew went through all those operations and to come out with a statement like that.
**Q Am I correct that you had no conversations with Mr. Hueto about the presence or absence of grease on the jackscrew or the gimbal nut in the February 2000 time period?**
A I don't think that was discussed in the February 2000 time period.
**Q And that the first occasion that you**



**recollect having such a discussion with Mr. Hueto about that subject was months later, after the systems group had come out with it's report, I think in November of 2000, about the presence or absence of grease on the jackscrew; is that right?**
MR. JAQUES: I object. That mischaracterizes the facts of the case and date of that statement.
THE WITNESS: I don't recall what the time frame was that -- I know it was after February. I don't know where it was in relation after February.
**Q MR. FRANKEL: You wrote your response to the, in response -- was that in the document that you prepared, I believe it was Exhibit 184.**
A Okay.
MR. READ: That's the Rodriguez.
MR. FRANKEL: 184, 185. We will try to pull it out here.
THE WITNESS: Here we go. 184 was prepared by Terry Clark.
**Q MR. FRANKEL: So it's 185. I'm sorry.**
**That's dated December 8, 2000?**
A That's correct.
**Q That was your statement?**
A That's correct.

**Q When with respect to December 8th, 2000, looking at that as the dates you prepared your statement, can you tell us more precisely when the first occasion you would have had prior to December 8th, 2000 to have first spoken to Mr. Hueto about observations concerning grease or the absence of grease on the jackscrew or gimbal nut?**

A I don't remember when it was in relation to December 8th.

THE VIDEOGRAPHER: I need to change the tape.

This is the end of tape one, day two, in the videotape deposition of Scott Patterson. We are going off the record at one 11:18 a.m.

(Recess taken)

THE VIDEOGRAPHER: This is the beginning of tape two, day two, in the video deposition of Scott Patterson. We are going back on the record at 11:19 a.m.

**Q MR. FRANKEL: You can't tell us more precisely by looking at Exhibit 185 and -- let me strike that.**

**You observed, you had your observations in February of 2000 as to what you saw on the deck of the Independence, what you saw in the hangar; right?**



A Yes.

**Q You then prepared in December a statement about what you recalled back in February; correct?**

A That's correct.

**Q Can you --**

**Is there any way for you to be more precise as to when the first occasion would have been between February of 2000 and December of 2000 as to when you would have first spoken to Mr. Hueto about the presence or absence of grease on the jackscrew assembly and gimbal nut?**

A I cannot recall.

I remember having a conversation. I don't remember the time frame.

**Q Did you have more than one conversation with Mr. Hueto about the subject?**

A Maybe once or twice.

**Q And you kept no memoranda or notes or other memorialization of the conversations that you had with Mr. Hueto about the subject?**

A No.

**Q And you don't know whether Mr. Hueto kept any such records; do you?**

A No, I don't.

**Q In terms of the exhibits that you have been shown during the course of your deposition yesterday and today, did you review any other documents with your counsel in preparation for your deposition that you haven't been shown?**

A I don't recall reviewing any other documents.

MR. FRANKEL: At this time I have no further questions of this witness but reserve my rights to call the witness.

MR. MASSEY: Is there an extra microphone around?

MR. LEBOVITZ: Use mine.

EXAMINATION

BY MR. MASSEY:

**Q Mr. Patterson, take a look at Exhibit 203.**

A (Complying)

**Q Turn to the second page and about the one, two, three, four, fifth line down, do you see that line that starts with "my recollection?"**

A There is two sentences that start with "my recollection."

MR. MASSEY: You're absolutely right.

**Q MR. MASSEY: The "my recollection" on the fifth line down.**





A You want me to read?

**Q I'll read it to you.**

**It says, "My recollection is that the spiral wrap and part or all of the compromised threads were also discolored."**

**Do you see that?**

A Yes, I do see that.

**Q Is it also your recollection when you were on the Independence when the jackscrew was recovered, when you looked at the jackscrew, that the compromised threads were discolored?**

A What I remember about the threads is it looked like wire and I assumed it was wire or cable wrapped around the jackscrew.

**Q Do you remember that they were discolored?**

A I don't recall paying any particular attention to what the color was.

**Q You don't have any recollection, either way, whether they were discolored or not; is that true?**

A I don't know what he means by "discolored," so I don't know what he's referring to.

**Q What does discolored mean to you?**

A Discolored means not the right color, I

guess.
**Q Okay.**
**Given that definition, sir, were those threads discolored?**
MR. JAQUES: Object. It's been asked and answered. He said he doesn't know.
THE WITNESS: The threads, I assume the threads were wire. I don't know what that means as far as coloring. It looked like wire. And that's about all I looked at with the threads when it was on the ship.
**Q MR. MASSEY: You don't recall whether they were discolored; do you?**
A I don't know what he means, what he's referring to as "discolored," so I can't comment on whether I agree with him or not.
**Q Sir, respectfully, I understand your response.**
**I'm asking you: Given your own definition, what your understanding of the word discolored means, were those threads discolored?**
**I'm not asking you what Mr. Stockhill thought. I'm asking you what you thought.**
MR. JAQUES: I object. It's been asked and answered.



THE WITNESS: And I don't think my answer --
It looked like wire. I don't know. That's what it appeared to me when we were on the ship.
**Q MR. MASSEY: What color was it?**
A It looked silverish to me, blackish, silverish to me.
**Q Were you in any way surprised by the color?**
A I didn't pay any --
No, I wasn't surprised by the color because I didn't know what it was.
**Q You weren't looking for the color; were you?**
A No.
**Q Take a look at the next sentence there. Says, "My recollection is that they had coloration not unlike that of iron oxide as well as dark gray."**
**Isn't it true, sir, since you weren't looking at the color of those compromised threads you do not have opinion as to whether they looked like iron oxide or dark gray; is that true?**
A I think I would say they looked blackish and silverish, a mixture which I guess you could say matches up with dark gray.
**Q Okay. Take a look at next sentence.**



**Says, "In neither instance did I touch the material in order to attempt to ascertain its composition such as to see if it had the characteristics of grease or lubricant."**
**Do you see that, sir?**
A I see that.
**Q Did you at any time try to ascertain the characteristics of the black, gritty, grimy, greasy substance to see if it had characteristics of grease and lubricant?**
MR. JAQUES: Objection. It's been asked and answered at least four answers.
Do you have anything to add to your prior answers?
THE WITNESS: No.
**Q MR. MASSEY: What's the answer, sir?**
A No. I didn't touch the jackscrew --
**Q Did you ever try to ascertain whether it had characteristics of grease or lubricant?**
MR. JACQUES: Object. Asked and answered.
THE WITNESS: No, I didn't touch the jackscrew or try to ascertain what the greasy-like substance was.
**Q MR. MASSEY: Did you try to ascertain whether it had characteristics of grease or lubricant?**



MR. JAQUES: I object. Its been asked and answered four or five, six times now.
Do you have anything to add to your prior answer?
THE WITNESS: No.
MR. JAQUES: Why don't you move on.
MR. MASSEY: He's not answering the question.
MR. JACQUES: He did.
MR. MASSEY: And this witness is not answering the question.
I'm asking a certain question. I want him to listen carefully.
**Q MR. MASSEY: Did you try to ascertain whether the black, gritty, grimy, greasy substance had characteristics of grease or lubricant?**
A Do you have a method that you would --
**Q In any way.**
A Other than visual, no.
**Q Okay.**
**What did you do visually to ascertain whether it had the characteristics in grease of or lubricant?**
A In looking at it, it looked like a greasy-like substance. And visually, that's what it

looked like. So other than a visual, I didn't do anything.
**Q Do you know, sir, as you sit here today, whether that substance as either Mobil 28 or AeroShell Grease 33?**
A Do I know whether it was?
**Q Yes.**
A I don't know which it was, no.
**Q Okay.**
**This jackscrew, at the time it was at the bottom of the ocean, was completely embedded in the ocean floor; right?**
A That's correct.
**Q And it was in the silt at the bottom of the ocean?**
A That's correct.
**Q Have you ever been to the beach?**
A Yes.
**Q Have you ever gotten on your foot when you're walking along the beach a black or dirty, grimy substance?**
A I don't know if I have or not.
**Q Have you ever seen that at the beach on the sand; a black, gritty, grimy substance?**
A Not like what was on the jackscrew.



**Q Not like what was on the jackscrew.**
**When the jackscrew was first put on the deck and you noticed this black, gritty, grimy, greasy substance, was there also ocean silt on the jackscrew?**
A There was silt embedded in the area, yes.
**Q Do you draw a difference in your own mind and in your own observations between the ocean silt and the black, gritty, grimy, greasy substance?**
A I don't think ocean silt, in my mind, looks greasy to me, no. So there is a difference.
**Q Okay. Do you have any reason to believe -- well, strike it.**
**That black gritty, grimy, greasy substance might not have been grease; right?**
A I don't know what it was. It looked like grease. Most likely I would say it looked like grease.
**Q But it might not have been grease; right?**
A There is possibility it may not have been grease. It didn't look like it.
MR. MASSEY: Thank you very much. I have an Exhibit I would like to have marked here.
///
(Defendants' Exhibit 205 was marked for identification)



**Q MR. MASSEY: This is Exhibit 205.**
**I would ask you to just briefly look through 205, and the part I'm going to ask you about, sir, just so you know, is at the bottom of the first page, Bates AA 00027180. And it's regarding the alert notice regarding the horizontal stab trim motor.**
A Okay.
**Q Have you had a chance to briefly look over that, sir?**
A Let me read that paragraph. Are you referring to that paragraph?
MR. MASSEY: Just that paragraph, yes sir. And of course the title of the document at the top so you know what it is.
THE WITNESS: Let me take a look at that.
MR. JAQUES: Also take a look at the further description of that item on the next page.
MR. MASSEY: I was not trying to confuse you. As long as Mr. Jaques pointed it out, he's absolutely right. There is a further description on the next page.
**Q MR. MASSEY: Okay. All right sir, do you know what Exhibit 205, sir?**
A 205 is actually a composition of several documents. The first page is John Hoover's updates on



reliability items that were on the agenda for the reliability board. And this first is an email page that he wrote in discussing the three items that he was working on, per an update.
And the second page is actually a copy from the Reliability Monthly Report that is a running tally of action items that are being worked through the Reliability Board.
So what this first sheet was, was John Hoover was summarizing what the systems group's latest status was in preparation for a Reliability meeting.
**Q All I'm really going to ask you about is the first page.**
A Okay.
**Q Who is John Hoover, by the way?**
A John Hoover currently now is the director of project engineering.
**Q Do you know what his position was in June of 1998?**
A He was the manager of systems and avionics engineering.
**Q You see the last item at the bottom regarding the horizontal stab trim motor?**
A Yes.
**Q Do you recall the facts and circumstances**

**surrounding the topic that is discussed there?**
A I'm not that familiar with it. I was --
This is just an update that was given to me to pass over at a meeting, so I'm not really knowledgeable about the subject matter of them.
**Q Who at Alaska would be knowledgeable regarding that?**
A Either Dan Nelson or John Hoover would be knowledgeable about that.
**Q Did it ever come to your -- obviously it came to your attention because you saw this memo.**
**But you don't recall any action items taken that you took with regard to the circumstances that are described regarding the brake holding capacity on the horizontal stab trim motor in Exhibit 205?**
A I know we discussed it at the meeting. I was present at the meeting. What follow-on action happened after that, I don't recall the details of that. But I did provide the update from the systems group at the Reliability meeting.
**Q Who would have been the engineer would have worked this problem?**
A Looks like Dan Nelson was the engineer working on this problem.
**Q Okay.**



**Do you recall that this issue was resolved at any time?**
A Like I said, I don't, I'm not familiar with the details, sir, on the subject.
**Q Going back to the deck of the Independence, sir, there were some items which were dropped during the recovery process not at the bottom of the ocean but on the deck of the ship; correct?**
A Not intentionally dropped.
**Q I understand that.**
**Were they dropped from a crane?**
A Which parts are you referring to?
**Q Whatever the parts were.**
**Why don't you tell us what the parts were. I just don't recall.**
A I think they are referring to the lower stop --
**Q Yes.**
A -- nut and ball bearings.
**Q Yes.**
A And they were -- as the horizontal stabilizer was being lowered to the deck of the ship and they touched it down onto the ship, components fell from the horizontal stabilizer to the deck of the ship, was probably a height of about three feet at the



most.
**Q Okay.**
**So the crane was lifting the entire portion of that wreckage --**
A Right.
**Q -- and while it was over the deck of the ship certain parts dropped from the horizontal stabilizer; right?**
A They dropped as the horizontal stabilizer touched the deck of the ship.
**Q I see.**
**From about three feet?**
A Right.
MR. MASSEY: All right. Thank you very much, sir.
MR. READ: Greg Read. I have just a couple.

EXAMINATION

BY MR. READ:
**Q I was confused by your testimony that you gave here at the end of Mr. Frankel's questioning where you were discussing your conversation with Mr. Hueto, where you indicated you were surprised the**



**NTSB had made certain statements because they weren't present to observe the jackscrew on the ocean floor and when it was on the Independence.**
**Did I remember that correctly?**
A Yes.
**Q In fact, Mr. Stockhill was an NTSB representative; correct?**
A That's correct.
**Q Mr. Stockhill had every opportunity to observe, both on videotape and live, the stabilizer and jackscrew assembly while it was on the ocean floor, the same as you; correct?**
A That's correct. But Mr. Stockhill was not on shore at the time the comments and Mr. Stockhill was not the NTSB representative that made those comments.
**Q Okay. Fair enough. I just want to be clear.**
**But Mr. Stockhill was on the ship and observed the videotape and live pictures of the stabilizer and jackscrew on the ocean floor; correct?**
A I'm assuming he did. He was on the ship with us.
**Q And Mr. Stockhill, you have read his statement, had an opportunity to observe the jackscrew**

**before any fresh water was applied to the horizontal stabilizer assembly; correct?**
A I assume he did. I didn't pay attention to what exactly everything Mr. Stockhill was doing on the deck of the Independence.
**Q Where were you when water was applied to the horizontal stabilizer --**
A I was --
**Q -- in relation to the horizontal stabilizer?**
A I was on deck, on the same deck surface that the horizontal stabilizer was on.
**Q How far away from the horizontal stabilizer?**
A Probably five feet away from the stabilizer.
**Q Okay. And you didn't hear Mr. Stockhill give instructions to the people operating the hose?**
A I don't recall him -- if he gave it, when he gave it. I don't recall him talking to anybody.
**Q Do you recall him standing right next to the horizontal stabilizer and jackscrew immediately after the horizontal stabilizer assembly was lowered to the deck?**
A I remember Mr. Stockhill, after they got



done rinsing it, was in the area looking closely at the horizontal stabilizer with the rest of us. I don't remember what he was doing before we all moved in to look at horizontal stabilizer.
**Q Okay. You can't either confirm or refute that Mr. Stockhill observed the jackscrew before any fresh water was applied to the horizontal stabilizer; is that true?**
A That's true.
**Q And you can't confirm or refute whether he took photographs of the jackscrew before any water was applied; is that true?**
A That's true. I don't know when he was taking photographs.
**Q I understand.**
**And you can't confirm or refute whether he took photographs of the jackscrew before any water was applied; is that true?**
A That's true.
MR. READ: Okay. Thanks. That's all I have.
MR. FRANKEL: Do you want to just go with the same stipulations we have been operating under previously.
MR. JAQUES: Not without knowing what those



stipulations are.
MR. FRANKEL: Okay. I will try to recollect them as best I can.
We would relieve, we will stipulate to relieve the court reporter of her obligations under the federal rules and place the original in your custody, Mr. Jaques, for signature, by the way, within 30 days after receipt before any notary.
MR. JAQUES: That's fine.
MR. FRANKEL: Second --
MR. JAQUES: I don't think it can be before a notary. It can be signed under penalty of perjury.
MR. FRANKEL: Signed under penalty of perjury without the requirement of a notary.
MR. JAQUES: That's fine.
**Q MR. FRANKEL: Second, that if within 30 days we are not advised that the witness has made any changes to the transcript, we will stipulate that no changes have been made.**
MR. JAQUES: Unless I contact you otherwise, indicating we need additional time.
MR. FRANKEL: Right. If you need additional time, we will consider that at the time.
That the original would remain in your custody, but for whatever reason the original becomes



not available that a certified copy can be used in its stead.
MR. JAQUES: That's fine.
MR. FRANKEL: And that to the extent the original is requested, you'll make it available, assuming you still have it.
MR. JAQUES: That's fine as well.
MR. FRANKEL: Anyone else think of any other stipulations?
MR. READ: No.
Just so you know, I would be prepared to stipulate that we don't have to have 30 days and you can use it at trial if it's not signed, and it has to be signed, if it's going to be signed, 30 days prior to trial. If you don't want to do that, that's fine.
MR. FRANKEL: Do you want to do that?
MR. JAQUES: That's fine. This will force us to do it quickly. Which is nice.
MR. FRANKEL: No further questions at this time.
THE VIDEOGRAPHER: This is the end of tape two, day two, end of the videotape deposition of Scott Patterson. We are going off record at 11:43 a.m.
(Ending time: 11:43 a.m.)

STATE OF {_____)
) ss.
COUNTY OF {_____)

I, the undersigned, declare under penalty of perjury that I have read the foregoing transcript, and I have made any corrections, additions, or deletions that I was desirous of making; that the foregoing is a true and correct transcript of my testimony contained therein.

Executed this _____ day of _____, 2002, at

_____
QUINTON SCOTT PATTERSON



STATE OF CALIFORNIA )
)
COUNTY OF SAN FRANCISCO )

I, JAN W. SERRA, CSR No. 8207, Certified Shorthand Reporter, certify:

That the foregoing proceedings were taken before me at the time and place therein set forth, at which time the witness was put under oath by me;

That the testimony of the witness and all objections made at the time of the examination were recorded stenographically by me and were thereafter transcribed;

That the foregoing is a true and correct transcript of my shorthand notes so taken.

I further certify that I am not a relative or employee of any attorney or of any of the parties, nor financially interested in the action.

I declare under the penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated this July 28, 2002.

_____
Certified Shorthand Reporter



REPORTER'S CERTIFICATION OF CERTIFIED COPY

I, JAN W. SERRA, CSR No. 8207, Certified Shorthand Reporter in the state of California certify that the foregoing pages 231 through 334 constitute a true and correct copy of the original deposition Volume II of QUINTON SCOTT PATTERSON, taken on July 18, 2002.

I declare under penalty of perjury under the laws of the state of California that the foregoing is true and correct.

Dated this July 28, 2002

_____
JAN W. SERRA, C.S.R. No. 8207

A
AA 280:10 284:11 322:5
able 255:13,15 256:24 265:17
aboard 241:9 242:1,19 291:14
about 247:18 251:25 254:4 256:12,21 260:17 267:5 269:21 269:25 270:20 273:13 285:6 289:19 290:9 293:16 298:13 301:14 308:9,13,23 309:6,10,13,14,16 310:20 311:2,4 312:6 313:3,9,16,20 314:19 315:13 316:10 322:3 323:12 324:5,9 325:25 326:12
above 274:25 276:1
absence 308:21 309:3 310:20 311:4 312:6 313:10
absent 263:20
absolutely 240:2 314:24 322:20
acceptable 268:2 272:3,5,7,14
access 270:2,5,19,22 270:24,25 271:3
accident 235:21 238:2 254:5 305:5,7
accordance 259:13 284:8
account 302:1
Acme 241:7 275:7 276:2
acting 263:19
action 281:13 283:3 284:24 285:2 323:7 324:12,17 333:17
actually 247:24 322:24 323:5
AD 259:6
adapters 288:23
add 294:23 318:13 319:3
additional 330:21,23
additions 332:9
address 285:3,22
addresses 288:16
Administrative 237:4
advise 239:17 286:18 287:20
advised 285:6,24 289:19 290:10 291:5 330:17
advising 290:7
advocate 248:20
AeroShell 320:5
affirmed 237:15
after 242:2 243:10 256:16 265:16 273:10 283:13 284:20 291:10 304:4 304:7,14 307:10,14 307:20 309:11,21 310:4,17 311:2,10,11 324:18 328:23,25 330:8
afternoon 285:25
afterwards 309:22
again 237:21 245:1 252:25
agenda 323:1
agree 289:3 297:20 298:19 316:16
agrees 298:16
ahead 241:4 246:19
air 231:4 232:4 236:4
aircraft 235:21 238:2 240:11 256:6 257:18 258:1,11,15 262:19 264:13 268:7 273:5 282:23 283:12,14 285:23 286:17 288:18 305:5
aircraft's 305:7
airlines 233:19 253:16 255:10,16 256:5,17 256:20 258:11 263:9 263:13,25 264:19 270:4 272:2,16,18 273:18,23 274:13,19 275:2 276:8 277:12 277:12,24 279:24,25 282:21 283:23 288:20 289:7
airplane 274:8 286:12 289:9
airplanes 288:21,23,25
Airworthiness 274:6 284:9
alaska 233:19 235:14 237:10 251:4 253:16 254:8,11,13,15 255:1 255:9,16 256:5,17,20 257:2 258:11,24 259:3,8,14 262:1,5,9 262:10,23 263:9,13 263:25 264:19 265:2 265:5,23 268:8,18 269:17,19,20,21,23 269:25 270:4,18 271:3,5,24 272:2,16 272:18 273:18,23 274:12,13,19 275:2 276:5,8,13,17 277:2 277:7,12,12,24 278:1 278:2,21 279:3,6,10 279:20,21,24,25 280:2 281:2,7 282:21 283:2,23 284:24 285:17 288:20 289:3 289:7,13 290:11,20 324:6
Alaska's 253:19 257:21 260:2 266:14 271:4 276:24 283:11 286:21 287:7
Alaska-fabricated 265:12,23 289:14,16
alert 235:22 322:5
along 244:14 248:14 248:17 296:24 297:2 301:11 307:4 320:20
already 260:17 261:19 301:2
ambiguous 238:9 253:25 254:2
Angeles 234:10
angles 303:10
another 270:6 290:25 304:17
answer 247:15 248:6,7 248:16,22 260:15 261:21 268:25 294:24 296:7 297:17 298:24 299:16 301:3 317:2 318:16 319:4
answered 259:20 294:21 301:2,14 308:3 316:6,25 318:12,20 319:2
answering 319:7,11
answers 248:25 249:2 318:12,14
anybody 328:20
anyone 239:24 240:14 240:21 243:18,19,19 245:11 260:2 273:13 276:25 279:2 282:8 292:25 300:23 307:25 331:8
anything 252:8 275:15 275:16 279:21 294:23 296:18 297:13 298:3 307:11 307:12 318:13 319:3 320:2
anywhere 238:23 265:23
AOL 255:1,12 256:2 257:5
AOLs 254:23
apart 275:4 277:5 298:2 299:18 307:7 307:24
appear 300:18 305:8 306:3,3,6
appearance 249:21
appearances 233:2 234:1 236:16
appeared 244:12 294:11 300:19 301:10 317:4
appears 276:7 280:24 284:12 285:2 296:8 306:4,8
applied 328:1,6 329:7 329:12,18
appreciate 248:15
apprised 262:17
appropriate 248:12 260:19 298:17
approximately 236:15 259:10
area 244:14,20 253:15 258:22 266:22 293:12 307:3 308:5 321:5 329:1
areas 246:13,20,23 297:22 310:2
ARNOLD 234:3
around 252:14 305:15 308:19 314:11 315:15
arrived 251:22 291:24 306:16 308:14
ascertain 276:24 295:14 318:2,7,18,22 318:24 319:14,21
ashore 239:2,8
asked 243:15 259:19 260:17 279:13 294:21 301:1,13 302:22 308:2 316:5 316:24 318:11,20 319:1
asking 248:24 260:24 316:19,22,23 319:12
aspect 274:16
assemblies 258:16 263:3
assembly 238:1 239:18 240:5,19,24 253:14,22 257:16,22 259:4,9,25 260:4,10 262:19 271:8 272:1 293:3,10,21 295:18 296:21 298:4 313:11 327:11 328:2,23
associated 292:5 299:3
assume 248:3 280:4 316:7 328:3
assumed 315:14
assuming 327:22 331:6
assure 275:11
astigmatism 245:22
ATA 278:11
atkinson-baker 231:21 236:13
attached 240:22 251:2 286:10 295:4 302:16 303:15,22
attaches 286:11,17 289:9
attempt 293:8 318:2
attendance 276:18 278:21
attended 276:20,22,23 276:25 277:3,6,7,9 277:13 278:4,6,22
attending 278:7
attention 244:6,18 246:21 255:24 256:8 257:10 264:24 273:15 274:18 282:20 294:4,10 315:18 324:11 328:3
attest 257:2
attorney 333:16
August 235:15 265:5 265:13,16,22 266:2 281:3,25 282:1,19 283:4,5,11,14 285:4 285:9,13,21,25 289:18,21 291:5
author 295:13
authorities 239:10
authority 270:22
available 253:11,15 257:7 269:2,18 331:1 331:5
Avenue 236:9
avionics 323:20
avoid 293:15
avoiding 300:23
aware 258:13,15,20 265:8,9 266:13,16 281:17 285:16 286:4 288:5
away 304:11 328:13,15
a.m 232:18 236:15 290:1,4 312:14,19 331:24,25

B
B 233:20 305:23
back 237:22 241:22 245:1 248:4 250:14 250:17 251:17 259:21 260:17 265:1 273:7 282:18 283:4 286:13 289:23 290:3 290:5 291:7,13,25 297:14 305:19 306:15 309:1 312:18 313:3 325:5
backward 254:5
bag 247:21 248:2,4 249:9,9,11,12 250:2 299:14
ball 248:2 325:19
barge 291:20,24 304:11
base 239:1 250:12 251:21
based 270:23 274:3 278:20 284:25 288:18 310:13
basis 254:14
Bates 257:11 280:9 284:11 322:5
Bay 266:22
beach 320:17,20 23
bearing 284:11
bearings 248:2 299:11 325:19
bears 256:5 257: 1 280:9
became 265:9
become 286:4
becomes 330:25
before 232:19 238:7,10 2 8:11 239:8,1 2 2:13 243:4,6,7,8 2 5:6 247:12 251:18 2 1:23 254:3 256:15 2 6:2 267:12,1 2 2:22 277:22 2 0:16 282:1 284:17 2 5:13 291:6 295:9 2 5:11 297:17 3 2:23 304:10 24 3 5:1 310:14 328:1 3 9:3,6,11,17 30:8 3 0:11 333:7
began 272:4
beginning 312:16
behalf 232:16 236:3,18 2 6:22,24 237 1,3,6 2 7:9 243:18 2 7:6
being 236:8 240: 5 2 0:21 251:9,1 2 3:25 264:7 265:20 2 8:1,22 281:7 20

289:10 290:10,11 292:2 293:9 294:7 299:3 300:12 323:7 325:22
believe 238:4,16 239:10 243:15 247:20 251:4 254:25 256:19 266:21 267:13 272:24 275:23 276:3 280:18 287:14 305:20 311:14 321:11
believed 241:14
beneath 247:11
best 255:10 275:5 284:5,6 295:14 303:8 304:2 330:3
Better 297:16
between 242:16 251:22 258:25 266:21 267:25 272:8 272:11,11,15 275:11 275:15,19 307:13 313:7 321:7
beyond 274:25 288:4
Bill 281:13
binder 278:10
binders 278:18
black 294:12 306:5 318:8 319:15 320:20 320:24 321:3,8,13
blackish 317:6,22
bleach 239:19 245:7
blind 245:24
blurred 245:22
board 240:16 241:16 241:17 242:12,22 245:3,12 263:14,23 264:3,11 310:12 323:2,8
boeing 233:11 236:3 236:19,22 238:13,20 240:3,11 251:9,11,17 251:21 252:2 253:12 254:24 255:3 257:1,6 257:8 258:2,6,15 259:22 261:3,8,10,14 262:7,23 263:2,7 266:7,14 267:7 270:16 271:4,22,24 272:6,13 274:4 275:6 275:9,13,22,23,25 276:3,6 278:23 279:23 280:2 281:6,8 281:10 283:15 285:18
Boeing's 259:17 275:2
boeing.com 270:19
Boeing/McDonnell 260:9 274:20 282:22
bold 310:4
bolts 251:1
both 288:20,20 292:15 327:10
bottom 244:9 247:1 286:10 320:11,14 322:4 323:22 325:7
Boulevard 233:5
bouncing 266:21
box 251:2 303:6
boyle 233:4 237:6,6 253:4
brace 292:4
brake 324:14
brands 278:24
break 286:12 289:24
briefly 322:2,8
BROILLET 233:4
broken 265:7
brought 239:2,8 240:15 241:15,17,20 242:1,7,12,19 244:13 245:6 291:11,14,22 299:9 300:12
bulletins 253:12,20 254:14,22 255:1,2,11 276:18
business 253:20

C

C 233:1 262:10,13 264:17 273:7
cable 315:14
calendar 260:4
california 231:2,4,22 232:2,4 233:6,14 234:5,10 236:5,7,12 236:14 333:1,19 334:6,12
call 274:24 314:9
called 241:8 248:19 257:17 262:7 269:13 282:19,23
calling 275:4
Calls 239:3 240:8 245:10 254:20 255:6 256:23
came 241:9,22 251:17 283:1 300:2 310:1 324:11
camera 244:14 296:11 296:14 303:21
capacity 324:14
card 265:19 272:17 273:5,18 274:10,19 275:1 276:5 290:11
cards 272:19 273:23 274:7
care 300:13
career 263:24
carefully 319:13
case 231:5 232:5 236:6 311:7
cause 275:7,12,16 276:1
causes 238:5
center 234:4 251:2 300:15 303:6
certain 270:24 281:6 319:12 326:7 327:1
certainly 260:25
CERTIFICATION 334:1
certified 331:1 333:4 333:24 334:1,5
certify 333:5,15 334:6
cetera 255:18
chance 322:8
change 312:10
changed 265:18 274:7
changes 282:4,6,9 330:18,19
changing 300:18
chapters 278:11
characteristics 318:4 318:8,9,19,25 319:16 319:22
characterization 298:20
check 261:9,11 262:8 262:13 264:17,18 268:4 271:12,25 273:8,19 275:10,19
checked 281:5,6,7,8 281:10
checking 262:1,6
checks 253:23 261:2,4 261:8,15 262:6,10,18 263:4 265:6,17 271:12 274:15 285:17 289:20
Chicago 233:17
circumstances 235:14 273:2 281:2 284:4 323:25 324:13
clarification 272:6,13
clarified 268:5 272:14
clarify 243:24 244:5,7
Clark 311:20
cleaned 242:13,20 307:20
cleaner 241:25
clear 240:2 243:17 268:20 327:18
clearly 241:1
Cleveland 233:9
closely 329:1
collecting 266:4
color 245:24 249:16 294:5,10 295:4 304:20,21 307:15,17 315:18,25 317:5,8,10 317:12,19
coloration 294:7 317:16
colored 295:5
coloring 316:9
come 262:23,24 263:8 280:4 299:7 310:18 311:3 324:10
comes 260:12 261:16
coming 237:21 252:25
commencing 232:18
comment 306:9 310:1 310:7,13,16 316:15
comments 307:14 310:15 327:14,16
Committee 237:4,5
communications 262:22 263:6
company 233:11 234:2 234:7 236:3,19,22,25 240:4,11 254:24 270:16,24
compared 243:3
comparing 303:8
comparison 305:25
completely 320:11
Complying 256:10 272:21 295:24 303:1 305:21 306:20 314:18
component 241:23 310:13
components 269:14 292:5 325:23
composition 252:22 318:3 322:24
comprehensive 286:22
compromised 292:13 300:4 315:5,11 317:19
concentration 244:1
concern 293:16
concerned 274:14
concerning 255:1 262:19 263:2 264:13 281:17 283:9 287:7 290:8 296:21 308:9 312:6
conclusion 257:14 286:21
condition 304:8
conduct 286:23
conducting 261:4
conference 276:21 278:9,12,14,17,19 279:14,15
conferences 276:19 277:1,3,6 278:5,7,21 278:22 279:17,18
confirm 329:5,10,16
conformity 285:18
confuse 322:16
confused 326:22
confusion 267:17,24 267:25 268:5 288:25
connection 238:1,14 283:8
consider 330:23
consistency 249:18,19
consistent 276:5 298:9 298:21 301:19,23
constitute 334:7
contact 330:20
contained 250:3 332:12
container 250:23
contains 278:10
continue 248:18 291:18 300:6
Continued 234:1
contributing 238:5
Control 263:14,22 264:11
conversation 251:16 251:20 308:12 313:13,15 326:24
conversations 297:4,9 297:25 308:8 310:19 313:19
conveyed 297:6
copy 269:2,18 290:9 295:5 323:5 331:1 334:1,8
corporate 276:17
Corporation 236:20,23
correct 241:11 243:14 245:5,8 247:21 252:16 256:7,14 262:21 263:5,11 265:11 266:9 267:15 269:7 271:17 273:21 276:6,10,14,15 279:4 279:8 280:23 283:16 283:17 286:1,2,5,6 286:24 287:8 288:6,7 289:5,22 290:5,12 295:14,15,19 296:3 300:8 310:19 311:23 311:25 313:3,4 320:13,16 325:8 327:7,8,12,13,21 328:2 332:11 333:13 333:20 334:8,13
corrections 332:9
corrective 246:8 281:13 284:24 285:2
correctly 327:4
correspondence 281:12 286:20
corrosive 293:1
counsel 233:2 234:1 236:16 314:3
COUNTY 332:3 333:3
couple 326:17
course 253:19 314:1 322:13
court 231:1,21 232:1 236:7,13,14 237:11 330:5
covered 241:18 246:23
covering 266:22
crane 325:11 326:3
crash 231:4 232:4 236:4 238:5,15 253:10 254:1,12 256:16 259:1,24 260:8 261:3,13,25 262:16 263:4,8,18 264:4 271:6,13 273:11 276:8 309:11
CRB 231:6 232:6
crew 292:18 293:5 297:5,10 300:14
critical 310:2
CSR 231:24 232:19 333:4 334:5
current 263:16 266:19 269:4
currently 255:22 256:25 257:5 259:7 323:16
custody 330:7,25
C.S.R 334:17

D

D 233:16 235:1
Dallas 234:15
damage 292:5
Dan 324:8,23
dane 233:20 237:9
dark 293:23 317:17,21 317:24
darkish-gray 294:8
date 254:12 256:5 259:1 271:6 290:9 311:7
dated 285:9,11 295:2 311:22 333:21

334:14
dates 264:1 285:8 296:24 297:2 312:2
day 236:1 239:6 249:3 250:14,16,16 312:12 312:17 331:22 332:13
days 241:24 309:23 330:8,17 331:12,14
DC-9 268:7,13,17,21 269:7,8,14
dealing 260:21
dealt 290:19
debate 272:4
December 295:2 311:22 312:1,5,9 313:2,8
decision 271:2,4,4,5
deck 247:23,25 291:11 291:23 292:1,6,12 293:11,22 297:5 299:3,4,10,12,13,22 299:25 300:13 302:20 304:5,5,7,10 304:12 312:24 321:3 325:5,8,22,24 326:6 326:10 328:5,11,11 328:24
declare 332:7 333:18 334:11
defendant 234:2,7,12 236:3
defendants 232:16 233:11,19 235:11 236:19 277:17 280:11 284:14 295:7 304:18 321:24
definition 316:3,19
deletions 332:10
deliberation 264:12
deliberations 264:17
department 269:24 270:17,22 281:21
depict 242:11
deposition 231:15 232:15 236:2,8 248:14 312:13,17 314:1,3 331:22 334:8
deposits 293:23 301:10
derlien 234:12 237:2
describe 241:12 243:25
described 243:13 247:19 249:5 252:12 293:18 294:2 307:11 324:14
description 235:9,11 270:23 298:5 301:17 301:25 302:4,8 322:17,20
designated 276:16 279:10
desirous 332:10
detail 261:24 273:14
detailing 290:12
details 262:12 324:18 325:4
determine 301:22
DETERT 234:3
differed 274:22
difference 242:16 243:2 274:24 301:5 321:6,10
differences 274:23 282:3,17,25
different 241:21 249:3 260:6 278:24 279:15 279:17,19 290:23 303:10 306:3,4,8,11 306:12,13,14
direct 248:24 256:8 257:10 273:15 293:15 300:24
directed 255:24 293:5
Directing 274:18
Directive 284:9
Directives 274:6
director 263:16,16,19 263:19,25 264:7 277:8 323:16
dirty 320:20
disagree 299:3 301:24 302:2,3,4
discolored 294:3 315:6 315:12,16,20,22,24 315:25 316:4,13,15 316:20,21
discovered 290:21
discuss 278:10 309:19
discussed 264:21 278:17 310:23 324:1 324:16
discussing 286:13 323:3 326:24
discussion 249:3 264:12 311:1
discussions 264:16 308:17,23 309:6,25 310:3
distinguishing 242:15
distributed 280:1
distributes 279:24
distribution 284:1
district 231:1,2 232:1,2 236:7,7
docket 236:8
document 257:18 258:2,21 262:7 270:4 272:25 277:15 280:9 281:18,20 286:25 287:11 295:2 311:13 322:13
documenting 284:8
documents 255:7 257:1 261:8 270:25 271:1 273:3 277:21 288:2 314:2,6 322:25
doing 252:6 253:23 259:15 270:20 328:4 329:3
DOMBROFF 233:20
done 239:14 259:13 261:9 292:25 300:17 329:1
doubt 253:18 254:13 254:21
douglas 233:11 236:4 236:19,22 240:4 253:12 255:3 256:12 257:14 260:9 262:24 263:2,7 265:18,19 269:12 274:20 282:22 288:17
down 287:18 292:19 300:15,20 307:2 314:20 315:1 325:23
draft 238:12 280:19,20 280:21,24 281:19,24 281:25 282:4,7,9,13
draw 321:6
Drive 233:17
drop 299:4
dropped 292:12 299:3 299:8,25 325:6,9,11 326:7,9
dropping 299:20
drum 292:3,8
due 293:15
duly 237:15
during 253:9 263:12 264:10 265:17 266:5 266:10 273:7 278:8 314:1 325:6
D.C 233:22 250:13 251:10,18,23

E

E 233:1,1 235:1
each 278:9 297:17
earlier 252:12
early 276:23 277:9
effect 252:3 274:6
effort 293:14
eight 259:10
either 244:3 265:4 269:18 278:20 286:4 315:19 320:4 324:8 329:5
em 255:13 264:7 278:3 299:4
email 323:2
Embarcadero 234:4
embedded 241:19 247:2,3,7 294:13 310:10 320:11 321:5
employee 238:20 270:18 333:16
employees 269:19
emulsified 301:11
end 312:12 326:23 331:21,22
Ending 331:25
end-play 253:23 261:1 261:4,8,15 262:1,6 262:18 263:4 265:6 265:17 267:19 268:4 271:7,11,12,25 272:8 273:19 274:15 275:19 281:11 283:12 284:8 285:17 288:11 289:15,19
end-stop 247:20 249:4
engineer 251:11 266:19 324:21,23
engineering 251:17 255:20 277:9 287:23 323:17,21
engineers 269:20,23
enhanced 303:12
enough 327:17
entire 241:18 242:25 246:14,22 247:4,5,10 248:7 300:22 326:3
entitled 269:8 277:15
EO 274:24 275:1,2,4
Equilon 236:24 237:8 240:4
equivalency 283:1 285:22
equivalent 282:21 283:2
ESQ 233:4,8,13,16,20 234:4,8,9,13
establish 235:19
et 255:18
even 254:3 271:12 279:9
events 297:14 304:1
ever 251:16 252:3,8 256:15 257:24 258:4 260:2 264:11 265:4 267:7 271:24 272:16 272:22 273:13 278:20 280:16 284:16 292:25 295:11 305:1,7 308:8 308:23 309:5 318:18 320:17,19,23 324:10
every 254:24 255:8 258:17 259:10 260:11 261:9,15 262:1 305:14 327:9
everybody 304:22
everyone 241:13
everything 242:2 297:20 328:4
exact 264:1 308:5
exactly 246:15 282:14 305:17 328:4
examination 235:3 237:18 253:6 293:20 314:14 326:19 333:10
examined 237:16 305:8
examining 301:7
example 299:17
excess 275:7,10,12,14 275:15,16 276:1
Executed 332:13
exhibit 244:11 255:25 255:25 256:9,15,20 267:16 269:6 271:16 271:22 272:20,22 273:16 274:9,10,22 276:12 277:15,17,22 280:9,11,13,16 281:18,19 282:11 284:10,14,17,22 286:21,24 290:6 295:2,7,10,11,13,21 296:1,3,9,18 297:11 302:16 303:22 304:17,18,23 305:1,3 305:10,19,25 306:1 306:18 311:14 312:21 314:17 321:22,24 322:1,23 324:15
exhibits 235:8 242:6,9 267:13 313:25
exist 240:23 268:12
existence 237:25 241:14
expeditious 237:22
extensively 301:14
extent 237:25 263:6 331:4
extra 314:10
extreme 244:4
extremes 244:3
extremities 293:24
eyes 246:3

F

FAA 235:17 267:25 268:2 284:13,20,23 285:6 287:21
FAA-approved 259:13 259:16
fabricated 289:4
facility 266:8,15,17 267:1,3,8 270:8
fact 239:18 242:6 310:4 327:6
facts 258:19 260:14 311:7 323:25
fair 262:20 298:18 327:17
familiar 258:1 324:2 325:3
far 256:4 265:11 268:1 268:8,15,22 269:16 283:6,21 286:3 287:5 289:13 297:4 302:7 316:9 328:13
fashion 274:8
fatigue 293:2
FBI 243:19
February 296:20 297:15 309:18 310:21,24 311:10,11 312:24 313:3,8
federal 330:6
feed 252:13
feet 325:25 326:12 328:15
fell 247:24,25 299:11 299:21 325:24
few 263:15
field 266:7,13 267:7 280:2
fifth 314:20 315:1
Figueroa 234:9
figure 291:1,2
FILE 231:25
final 280:18,24
financially 333:17
find 277:5,13
fine 330:9,15 331:3,7 331:15,17
finger 246:11 306:24 307:2,10
fingers 307:13,16,18 307:19
finish 268:25
finished 260:18
first 233:5 237:15 242:3 258:8 260:12

261:16 271:23 272:12 273:10 275:18 281:25 284:19 285:6,24 286:3,19 289:19 299:1 302:13,15 303:21 309:19 310:25 312:4,5 313:7 313:9 321:2 322:4,25 323:2,9,13
fitting 286:9,16 289:1,1
fittings 287:16 288:24 289:8
five 264:8,9 319:2 328:15
fix 286:22
fixture 265:6 282:22 285:17 286:11,16,17 287:16,17 288:1,8,11 288:16,19,19 289:4 289:14,16,21 290:13 290:16 291:4 302:23
fixtures 282:20 288:18
flat 252:21
fleet 235:15 254:4,8,12 254:15 257:7 264:19 265:3 281:3,3,4,18
flight 235:18 238:15 260:11 261:16 262:2 262:11 296:5
floor 232:17 233:5,13 234:5,10 236:9 247:3 247:7,8,11 252:14,18 291:11 294:19 310:9 310:10 320:12 327:2 327:12,21
flow 293:11,15 300:24
focus 235:12 271:14 277:16,20,25 278:6 278:13,15,16 279:7 279:14,16,18,22
follow 253:1
followed 297:7
follows 237:16 309:2
follow-on 324:17
foot 320:19
force 331:17
foregoing 332:8,11 333:6,13,20 334:7,12
forever 254:4
form 238:8 241:1 261:17 268:10 277:21,23 280:19,20 280:21,24,25 282:12
formal 277:2
format 278:18
forth 296:19 298:3 333:7
found 247:22 291:5
foundation 239:4 240:9 244:17 245:9 245:25 246:18 252:7 254:18 255:6 256:23 258:12,19 260:14 261:6 262:3 287:1,12 288:3,14 296:6
four 314:20 318:12 319:2
frame 253:25 264:2,5 309:12,19 311:10 313:14
francisco 231:22 233:14 234:5 266:22 333:3
frankel 233:13 235:5 236:18,18 238:8 239:3 240:7,25 242:4 244:24 245:9 246:17 247:16 248:8 252:7 253:1,3,8 254:1,6,21 255:9 257:5 258:14 258:23 259:23 260:21,25 261:1,10 261:21 262:8 268:15 269:5,25 270:12 277:14,19 279:16 280:8,13 284:10,16 287:4,18 288:5 289:2 289:10,12 290:5 295:1,9 296:7 297:23 298:22 299:18 301:3 301:16,24 304:16,20 304:23 308:7 309:1,9 311:12,17,21 312:20 314:7 329:22 330:2 330:10,13,16,22 331:4,8,16,19
Frankel's 326:23
frequency 257:20
fresh 292:18 293:12 328:1 329:7
Fresno 236:12
from 235:16,20 240:10 240:16 241:24 243:18,21 245:21 246:12 247:3 248:3 249:12 250:19,22 251:5,8,22 252:13 254:4,11,24 259:1 262:23 263:7 264:6,9 266:21 271:22 272:6 272:13 274:19,22 275:4 276:24 277:5 282:11 284:12 291:11 294:19 296:12 298:2 299:7 299:18 302:4,18 303:10,16,25 304:12 304:13,15 305:5,8 306:7 307:7,24 323:5 324:19 325:11,24 326:7,12 328:13,15
front 280:14 299:11 302:18 303:5
further 252:24 292:5 314:8 322:17,20 331:19 333:15
fuselage 288:18

G

garden 242:22,24 243:1,10 292:19,22 293:9 300:12,24
gave 326:23 328:19,20
gearbox 248:3 293:12 300:16
Gerardo 239:23 310:3 310:15
gets 271:3
getting 248:24
GILMORE 233:20
gimbal 238:1,6 239:18 240:5,18,24 241:2,7 241:8 293:12 300:16 306:16,25 307:2 308:9,14,18,19,19,22 309:4,15 310:21 312:7 313:11
give 328:18
given 270:24 278:11 278:14 316:3,19 324:3
giving 248:19
Glendale 236:14
go 241:4 243:7 246:19 259:21 265:1 270:20 270:21 289:23 297:16 298:19 311:19 329:22
going 236:15 248:18 253:24 254:17,19 256:22 258:18 260:13 275:2 279:11 281:9 287:6,9 288:13 288:23 289:6,25 290:3,5 291:6,7 294:20 298:7 301:8 306:13 312:14,18 322:3 323:12 325:5 331:14,23
good 237:21 243:5 246:3 252:17
gotten 320:19
gouthro 234:16 236:11
gray 293:23 317:17,21 317:24
grease 237:25 240:18 240:23 241:15,19 243:12,20 244:2,19 246:15,22,23,25 252:5 278:23 294:15 294:18 308:18,22 309:4 310:2,20 311:5 312:6,7 313:10 318:4 318:9,19,25 319:16 319:22 320:5 321:14 321:16,17,18,20
greases 278:25
grease-like 241:18 247:2 249:14
greasy 244:15 249:6 302:10 318:8 319:15 321:3,8,10,13
greasy-like 294:13 318:22 319:25
great 273:14
greater 244:2,3
GREENE 233:4
Greg 236:24,25 326:16
GREGORY 234:4,9
grime 243:12,21
grimy 318:8 319:15 320:20,24 321:3,8,13
grit 241:19 243:12,20 247:2
gritty 246:23 318:8 319:15 320:24 321:3 321:8,13
grounded 281:9 283:14
grounding 235:15 265:2 281:2,17
grounds 298:7
group 255:20,23 274:3 311:3 324:20
group's 323:10
guess 285:8 316:1 317:23
guys 243:6

H

H 233:13
half 247:14
hands 307:20
hangar 239:15,20 241:23,25 242:8,16 242:18 250:17 251:12 267:1,18 270:8 306:15 308:15 310:6,14 312:25
happened 297:19 324:18
happening 251:6
happens 278:8
happy 249:2
hard 269:1,18
having 237:15 252:12 264:16 292:12 296:9 296:18 297:9 298:6 308:17 311:1 313:13
head 264:15,22
headquarters 250:13
hear 252:8 310:16 328:17
heard 238:3,7,10,11 239:21 271:21
heavy 266:25
height 325:25
held 236:8
HELLER 233:7
her 330:5
hey 252:3
high 277:4
higher 259:5,6
hill 234:9 236:24,24
him 238:22 239:5,6 248:20 251:25 268:25 296:11,15 298:12,16,18 300:9 306:24 307:9,19,22 308:12 309:13,14,16 316:16 319:12 328:19,20,21
hit 299:22
hold 244:13,25 285:7 303:20 306:23
holding 324:14
holds 255:22
Hoover 277:8 323:10 323:15,16 324:8
Hoover's 322:25
horizontal 235:19,22 240:12 247:12,23,24 286:9,10 287:24 291:8,10,19 292:12 293:3,10 295:17 296:5,12,17,22 299:2 299:12,15,20,21,24 300:3 302:17 303:5 303:14 304:9 322:6 323:23 324:15 325:21,24 326:7,9 328:1,7,9,12,13,22 328:23 329:2,4,7
hose 242:23,24 243:2 243:11 292:19,23 293:6,9 300:11,12,14 300:25 328:18
hosed 300:20 301:6
hosing 242:21 300:17
hours 257:17 258:17 260:11 261:16 262:2 262:11
Hueto 239:23 285:25 286:4 306:22,22,24 307:8,10,24,25 308:9 308:18,23 309:6,10 309:20 310:20 311:1 312:5 313:9,16,20,22 326:25
hultquist 233:16 236:21,21

I

idea 258:23
identical 249:12
identification 277:18 280:12 284:15 295:8 304:19 321:25
Il 231:15 232:15 334:9
Illinois 233:17
immediate 291:13
immediately 328:22
importance 253:23
important 247:5
improper 241:3 286:23 287:8 290:8,19,21 291:3
INC 231:21
inches 275:20
incident 281:15 286:13
included 300:15 302:7
including 293:17 301:15
inconsistent 296:22 297:13 298:5,9,14,21 301:17
increased 257:15
independence 241:22 242:1 250:14,16 291:8,15 292:18 295:17 296:13,16,17 297:10 304:13 312:25 315:10 325:5 327:3 328:5
indicate 240:21
indicated 239:9 240:16 326:25
indicating 244:21 247:6 303:24 307:3 330:21
inform 239:17
information 248:19 277:5 279:1
ingoing 274:16
inside 307:2,4
insofar 241:13 243:11 253:13,21 274:14 284:22
inspection 259:25

260:3 286:23
Inspector 235:14 281:1 287:22
Installed 287:25
Instance 318:1
Instruct 248:16,21
Instructions 328:18
Intends 287:23
Intentionally 325:9
Intentions 287:2
Interaction 263:1
Interested 333:17
Interiors 253:17
Internally 283:22
Internet 257:4,7 269:19
Interpretation 268:3
Interval 257:21 258:24 259:2,24 261:9,11 262:6,13
Intervals 253:23 259:15 260:3 262:18 264:13
Inventory 266:6 289:17
Investigation 238:14 238:21 273:4 286:22 287:6
Involved 238:21 261:23 271:11 285:20 297:5
Involvement 287:12
In-house 289:7
Iron 294:7 317:17,21
Issue 285:16,20 286:5 289:19 290:7 325:1
Issued 253:13 255:4 256:11 257:1,6 258:2
Item 322:17 323:22
Items 278:9,10,17 323:1,3,7 324:12 325:6

J

Jackscrew 235:19,20 238:1,6,24 239:1,7 239:18 240:5,12,15 240:18,24 241:6,13 241:17 242:7,11,19 242:22,25 243:3,5,21 244:3,4,6,12,15 245:3 246:12 248:5 249:13,15,25 250:12 250:18,19,21 251:1,9 251:17,22,24 252:1,5 253:13,22 257:16,21 258:16 259:3,9,25 260:3,10 262:19 263:3 267:19 271:8 271:25 275:8,12,17 291:9 292:4,15 293:3 293:10,15,16,21,24 295:18 296:5,11,16 296:21 298:4 299:24 300:16,19,24 302:8 303:6,17,22,23 304:1 304:9 305:4,8,14,17 305:24 306:2 308:22 309:5,8,15 310:1,2,5 310:8,11,17,21 311:5 312:7 313:10 315:10 315:11,15 318:17,22 320:10,25 321:1,2,4 327:2,11,21,25 328:22 329:6,11,17
Jackscrews 270:3
JACQUES 237:9 248:10 253:24 268:25 318:20 319:9
Jamie 233:8 237:3
Jan 231:24 232:19 236:13 333:4 334:5 334:17
January 231:4 232:4 236:5
Jaques 233:20 237:9 254:2,17,20 255:5 256:22 258:12,18 259:19 260:13,24 261:5,17 262:3 267:21 268:10,19 279:11 286:25 287:9 288:2,13 289:24 294:20 296:6 297:16 298:7 301:1,13,18 308:2 311:6 316:5,24 318:11 319:1,6 322:16,19 329:25 330:7,9,11,15,20 331:3,7,17
Jefferson 233:21
Jet 235:12 276:18,21 276:25 277:6,15,19 277:25 278:5,7,8,13 278:15,16,21,22 279:7,16,17,18,22
Job 270:23
John 277:8 322:25 323:9,15,16 324:8
Join 242:4 244:24 247:16 254:19
Joined 269:17
Judge 248:10
July 231:17 232:18 236:10 333:21 334:10,14
June 323:18
Just 240:2 244:14 246:3 248:22 262:15 264:4 268:6 275:14 280:6 290:6 294:19 306:11 307:11 310:3 322:2,4,12 324:3 325:15 326:16 327:17 329:22 331:11

K

keep 247:5 277:2
keeping 262:17
kennedy 234:13 237:1 237:1
kept 313:18,22
kevin 233:4 237:6
kind 242:22 252:18
knew 268:8 269:17 286:3 287:5 289:14 289:18
know 238:3,17,20 248:25 249:3 250:2,7 251:12,13,14 252:4 253:1 256:4 257:20 258:6,8 259:5,7,14 259:17 260:8 261:10 261:20,25 262:5,12 262:13 264:1 265:11 265:15,16 266:18 268:15,22 270:6,9 271:12 278:2,15 279:2,5,21,24 280:5 281:24 282:8 283:21 284:5 291:6 293:5,8 293:14 294:18 297:6 299:16 302:11,15 303:2,12 304:12,13 305:3,4,5,16 308:5 309:11 311:10,11 313:22 315:22,23 316:6,8,14 317:3,11 320:3,6,8,22 321:15 322:4,14,23 323:18 324:16 329:13 331:11
knowing 305:13 310:8 329:25
knowledge 243:23 245:13 251:8 259:2 259:23 269:10 280:3 284:3
knowledgeable 324:5 324:6,9
known 263:13
Kovasak 238:14,17 251:13,15
kristina 234:13 237:1

L

lack 238:5 240:17 254:17 255:5 256:22 258:12,18 261:5 262:3 287:1 288:13 296:6
lacked 310:1
laid 278:18
language 271:14 274:21
large 293:23
last 250:11,15 266:1 269:22 273:7 281:6,8 323:22
later 291:19 311:2
latest 323:10
laws 333:19 334:12
Lawyer 247:17
layer 252:20
learn 257:24 259:8 261:14 265:4 278:20
least 253:11 257:5 264:2 266:10,12 267:6,15 269:17 273:19 276:21 277:21 278:5 280:23 281:5,18 283:13 284:22 285:15 286:19 289:2,18 290:6 300:3 302:19 304:2 305:8 306:2,5 318:12
leaving 243:22 250:12
lebovitz 233:8 235:4 237:3,3,20 238:10 239:5 240:14 241:4,7 242:5 244:25 245:11 246:2,5,19 247:13,17 247:19 248:23 249:4 249:10 252:8,23 254:19 255:24 260:22 267:12 314:12
left 251:23
length 246:14,22 247:10 301:12
lenses 246:8
less 272:11
let 239:16 260:6 268:25 272:23 280:17 284:10,25 304:16 312:21 322:10,15
letter 235:16 256:2,11 257:6 281:15 283:24 284:11,12 285:4,9,10 285:14 286:7,8,12,20 286:20 287:7,15,19 288:10,16 289:6 290:10,15 298:19
letters 253:11,21 254:14 255:2,12
let's 277:14 287:18 289:24 295:1 305:19
level 263:17
library 268:9,14,17,23
lied 267:25 268:5
life 257:15 274:7
lifting 326:3
like 238:3 239:13 241:13 242:7 243:3 249:14 252:9,18 255:21 264:20 273:5 274:10 277:22 278:18 294:9,13,15 298:19,23 301:4,5 303:4 305:9,11 310:4 310:5,7,16,18 315:14 316:9 317:3,20 319:24 320:1,25 321:1,15,16,20,22 324:23 325:3
liked 294:15
likely 321:16
limit 268:2,4 272:2,14
limits 272:8,15 275:10 275:19
line 260:19 294:21 314:20,21 315:1
lines 292:9 296:25 297:3
listed 290:15
listen 248:23 319:13
literally 297:16
litigation 261:19
live 252:13 327:10,20
LLP 233:4
loaded 257:8
Lobby 233:22
local 267:25 268:2
located 236:14 270:7 303:23
long 254:6 255:17 268:17 322:19
longer 277:12
long-term 287:22
look 243:5,8 249:12 259:21 272:23 275:18 279:13 280:17 284:25 287:18 301:5 305:11 305:14,19,22,24 306:11,12,13 314:17 317:15,25 321:20 322:2,8,15,16 329:4
looked 239:13 241:13 241:21,25 242:7,12 243:3,3 249:14,21,23 252:18 272:16,18 294:13 305:17 310:5 315:11,14 316:9,10 317:3,6,20,22 319:24 320:1 321:15,16
looking 252:14 286:8 297:22,22 299:17 302:11,18 312:2,21 317:12,19 319:24 329:1
looks 273:5 303:4 321:9 324:23
Los 234:10
lot 241:21,25 310:14
low 277:4
lower 247:22 249:5,12 250:3 293:24 299:10 299:19 300:2 325:16
lowered 247:22 304:4 304:5,7 325:22 328:23
low-pressure 292:22
lubricant 237:25 244:2 294:19 301:10,15 318:4,10,19,25 319:16,23
lubricant-type 249:6
lubricate 257:16
lubricated 258:16 260:11
lubricating 259:9
lubrication 238:6 240:18,23 241:15 243:20 244:15 246:15 252:4 253:13 253:22 257:21 258:24 259:2,3 262:17,18 263:3 278:23
L.L.P 234:13

M

M 234:13
made 243:11 282:8,21 295:6 307:14 327:1 327:15 330:17,19 332:9 333:10
main 236:12
maint 269:21
maintain 277:24 278:3
maintained 255:17,18 268:8,13,16,22 274:8
maintenance 235:14 257:18 258:2,21 259:12,14,16 260:3 261:23 264:13 267:1 270:1,2 272:8 274:2

274:14,21,25 275:3,5 275:6,9,13 276:3,6 281:1 282:23 287:21
make 243:16 246:3 248:12 252:17 282:4 304:21 310:4,7,16 331:5
makes 248:20 268:11 271:2
making 282:6 310:12 332:10
manager 255:23 323:20
mandated 259:6
manipulated 291:12,23
manual 268:3,7,7,11 268:14,16,17,20,21 268:24 269:2,4,5,6,8 269:11,12,13,15,16 270:7 272:8 274:14 274:21,25 275:3,5,6 275:13,22,23,25 276:4,6 282:24
manuals 275:9
manufactured 289:8
many 267:5 272:18
mark 280:8 284:10
marked 242:6 277:14 277:18 280:12 284:15 295:1,8 304:16,19 321:22,25
Market 233:13 234:14
Marlatt 255:21,22
massey 234:8 235:6 237:8,8 314:10,16,24 314:25 316:12 317:5 318:16,24 319:7,10 319:14 321:21 322:1 322:12,18,22 326:14
matches 317:24
material 242:18 243:2 293:17,23 301:10,11 301:15 302:8,10 318:2
matrix 283:10,18 284:1
matter 236:4 309:23 324:5
matters 263:2 282:19
may 235:16 251:25 256:4 264:14,20 266:3,5 281:21 282:21 283:5 284:12 284:20 285:11,14,15 285:18 286:8,14 287:5,15 288:10 289:2,12 308:6 321:19
Maybe 313:17
MCCARTHY 233:7
mcdonnell 233:11 236:3,19,22 240:3 253:12 255:3 256:12 262:23 263:2,7 265:18
MDL 236:8
MD-80 254:15 256:6 257:7 258:11,15 262:13,19 264:13,19 268:7 269:11,13,13 274:20 282:23 283:11 286:8,13
MD-80s 254:3,8,11 255:3
mean 254:3 306:8 315:24
meaning 287:3
means 315:22,25 316:8,14,20
measurement 267:18 271:8
measurements 262:1 284:8
mechanic 251:4
meeting 323:11 324:4 324:16,17,20
meetings 263:15,23 264:11,20
member 300:14
members 297:9
memo 324:11
memoranda 313:18
memorandum 301:9
memorialization 313:19
memory 307:1
MENDES 234:8
mentioned 266:7 281:19 283:8 299:19
merit 310:6
message 274:17,17
method 319:17
michael 233:16 236:21
microphone 314:10
might 321:14,18
mind 247:5 254:13 321:6,9
mine 314:12
mischaracterizes 258:19 260:14 262:4 267:22 279:12 287:10,11 311:7
Misstates 240:7 246:17
mixing 278:24
mixture 317:23
Mobil 320:4
modify 287:23 288:23
moment 290:6 295:23
Monica 233:6
Monthly 323:6
months 259:10 260:11 261:16 262:2,10,14 289:20 290:25 309:22 311:2
MORAN 234:3
more 241:12 244:8,9 296:24 297:2 302:6 312:3,20 313:6,15
morning 237:21 253:1
most 321:16 326:1
motion 248:11,12
motor 235:22 247:10 322:6 323:23 324:15
mount 234:8 250:22
mounted 303:6
mounts 247:10
move 237:22 242:2 244:22 247:14 248:6 248:13,17 289:10 319:6
moved 239:15 291:19 305:14 307:13 329:3
MSG-2 258:14,21 260:10
MSG2 258:11
much 237:24 261:24 321:21 326:15
muddy 252:21
mugu 231:4 232:4 236:4
myboeingfleet 257:8 269:3,3
myboeingfleet.com 256:25 270:13
myboeing.com 270:11 270:19

N

N 233:1 235:1
name 245:12 266:24 307:25
names 308:5
NATH 233:12,15
nature 293:1
naval 250:12 251:21
Navy 243:19
Near 236:4
need 246:8 270:5 312:10 330:21,22
needed 268:5
needs 288:1
neither 318:1
Nelson 324:8,23
never 264:16 265:9 294:16 300:23 302:23
next 295:1 300:19 301:8 317:15,25 322:17,21 328:21
next-to-the-last 288:9 299:1
nice 331:18
nineties 276:23 277:10
None 235:10
non-responsive 242:3 244:23 247:15 248:7 289:11
North 234:14
northern 231:2 232:2 236:7
notary 330:8,12,14
notes 313:18 333:14
nothing 252:24 262:16 264:14,21 289:7
notice 235:22 300:4,11 307:15 322:6
noticed 300:23 321:3
November 311:4
NTSB 238:21 239:9 243:18 250:8,13 251:5 265:14 266:5 267:25 268:1 272:4 272:10 276:14 283:21 295:16 309:25 310:16 327:1 327:6,15
number 235:9,11 257:11 262:2 265:20 267:1 284:11 288:18 290:14,15
numbers 280:10
NURENBERG 233:7
nut 238:1,6 239:18 240:5,18,24 241:2,7 241:8 275:8 276:2 306:16,25 307:2 308:10,14,19,19,19 308:22 309:4,15 310:21 312:7 313:11 325:19
N.W 233:21

O

Oakland 266:15,17,22 266:25 267:3,8,18,23 270:7,9
oath 333:8
object 240:25 244:17 248:18 253:24 254:17 256:22 258:12,18 260:13 261:17 262:3 267:21 268:10 279:11 286:25 287:9 288:2 288:13 294:20 296:6 298:7 301:18 308:2 311:6 316:5,24 318:20 319:1
objecting 260:22
objection 238:8 239:3 240:7,25 245:9 246:17 248:8 252:7 255:5 259:19 268:19 301:1,13 318:11
objections 248:13 261:5 333:10
obligations 330:5
observation 252:17 293:21 305:9
observations 243:11 298:9,20 312:6,23 321:7
observe 244:1 250:21 306:21,22 327:2,10 327:25
observed 239:7 240:15 242:21 298:12 300:21 301:15,17 306:16,17 308:9 312:23 327:20 329:6
obtain 256:24 270:15
obvious 248:20
obviously 296:14 299:5,6 324:10
occasion 284:19 310:25 312:4 313:7
occasionally 264:3
occasions 267:2,5
occurred 296:20
ocean 240:6,24 247:3 247:7,8,11 252:14,18 291:11,11 294:19 310:9,10 320:11,12 320:15 321:4,7,9 325:7 327:2,11,21
off 231:4 232:4 242:20 252:4 257:3 263:24 264:15 265:19 289:25 299:13 307:19 312:14 331:23
office 236:12 266:20 266:20
often 289:17
Ohio 233:9
oil 234:2,7 236:25 240:4,11
okay 243:9 244:10 245:2,14,17 246:4,10 246:13 247:13 249:10,20 252:11,23 255:9 256:1 257:12 267:14 271:20 272:21 273:17 274:1 275:18 295:24,24 300:10 302:14 303:19 311:15 316:2 317:25 319:20 320:9 321:11 322:7,22 323:14 324:25 326:2 327:17 328:17 329:5 329:20 330:2
once 239:7 241:12 242:7 243:1 244:12 250:18 251:17 313:17
one 234:4 238:4 239:25 240:10 244:4 254:24 255:8 261:22 261:23 265:25 266:1 266:5,12,18 270:6 276:21,22,23 277:9 282:16 284:6 285:13 286:11 287:25 292:17 302:9 303:12 306:9 312:12,14 313:15 314:19
ones 263:18 264:8 266:4 277:13
one-page 284:11
only 239:25 247:7 248:13 265:16 281:16 287:25 288:24 290:19 310:5
Ontario 233:8
onto 247:25 291:23 299:10,12 325:23
on-line 269:4
on-site 238:22 251:11 266:14
operated 258:24
operating 254:16 255:3 256:6 328:18 329:23
operation 291:7 298:13 300:21,22
operations 310:17
operator 236:11 253:11,21 254:14 255:12 256:11 258:11
operators 257:16 258:14 260:10
opinion 317:20
opportunity 295:20,25 327:9,25
opposed 309:15
ordeals 310:14
order 271:8,9 318:2
ordinary 253:19

original 330:6,24,25 331:5 334:8
Originally 274:3
other 251:25 261:22 262:12 263:9 270:25 270:25 276:25 281:16 290:21 297:22 302:9 303:13 306:10 313:18 314:2 314:5 319:19 320:1 331:9
others 277:7
otherwise 292:13 330:21
out 238:4,24 240:6,16 240:24 247:24 251:18 257:17 262:7 264:15,21 266:6 269:12 274:24 275:4 277:13 278:11,14,18 291:1,2,5 298:15 299:11,20,21 300:2 310:18 311:3,18 322:19
outline 238:12
over 267:5 269:18 288:25 293:12 322:8 324:4 326:6
overhaul 268:3,6,14,16 268:17,20,21,24 269:5,6,8,10,13,15 269:16 270:3,7
own 316:19 321:6,7
oxide 294:7 317:17,21

P

P 233:1,1
packing 250:25
page 235:3,9,11 257:11 273:16 299:1 301:8 314:19 322:5 322:17,21,25 323:2,5 323:13
pages 334:7
PANISH 233:4
paragraph 257:13 286:19 287:19 288:9 288:22 299:1 322:10 322:11,12
part 242:25 243:6 247:9 287:25 290:14 290:15 294:3 300:17 300:20 315:5 322:3
participate 298:2
participating 264:12
particular 244:8 246:21 264:24 270:18 294:4,9 306:21 315:17
particularly 246:25 253:21
parties 333:16
parts 239:14,14 241:24 243:7 252:14 297:18 299:3,6,18 325:12,13 325:14 326:7
party 250:8
pass 324:4
password 270:11,12 270:15
patterson 231:16 232:16 235:2 236:2 237:14 242:5 244:25 245:12 247:17 252:24 253:9 254:8 261:2 262:16 277:20 285:5 295:9 304:24 312:13,18 314:17 331:23 332:20 334:9
patty 234:16 236:11
pay 244:8,18 246:21 294:4,9 317:9 328:3
paying 264:23 315:17
penalty 330:12,13 332:7 333:18 334:11
people 249:1 263:9 270:25 272:9 276:13 276:14 277:11 292:18 308:4,5 328:18
per 261:8 272:2 323:4
percent 264:7,8,9
perfectly 298:22
perform 265:6
performance 274:15
performed 261:15 264:18,18 283:11 289:20
performing 273:19
period 253:9 254:11 263:12,21 283:15 296:20 310:22,24
perjury 330:12,14 332:8 333:18 334:11
person 255:21 279:9 283:23 284:2 293:5
personnel 270:1,2 278:22
perspectives 303:10
pertained 309:25
pertaining 235:18 296:4
PES 236:12
Peter 238:13,17
PFC 237:7
photograph 302:25 303:2,4,21 304:17,21 306:23
photographs 300:8,9 303:9,16 304:21 329:11,14,17
physical 293:21
pick 298:15
picked 248:1 299:13
picture 235:20 244:20 245:1 302:13,16,17 303:20,25 304:2,12 304:13,15 305:4,13 305:16,18 306:9
pictures 242:10,11 295:4,5 296:15,15,16 303:14 306:2,7,8,12 306:13 327:20
pieces 248:1
place 243:1 284:25 285:3,21 330:6 333:7
placed 248:1,4 249:9 292:1,6,8 293:11 299:14 300:14 304:10 306:24 307:10
placement 239:19
plaintiffs 233:3 235:8 237:7
Plaintiff's 237:4
plan 285:21 287:22
Planning 257:18 258:2
plastic 247:21 248:2,4 299:14
plate 287:24 290:14,17
please 236:16 237:12 244:14
PLEVIN 233:7
PMI 281:12
point 231:4 232:4 244:13,14 246:13,15 247:6,6,20 250:20 251:22 263:12 283:25 289:3 303:21 306:23
pointed 322:19
points 301:11
port 239:11 251:18 291:13,25
portion 243:21 247:24 281:3,4 326:3
position 253:10 255:10 255:23 263:16,17 291:12,15 323:18
possibility 321:19
possible 237:23 282:20
potential 293:2
power 246:1
power-washed 239:10 245:7
practice 255:15 259:14 259:16
practices 262:18
preceding 263:8
precise 272:25 313:6
precisely 312:3,21
preparation 267:16 292:2 314:3 323:11
prepare 283:18
prepared 238:13 251:10 273:23,25 274:2,3 283:10,20,22 284:3,4,7 311:14,19 312:2 313:2 331:11
preparing 243:7 274:9
presence 240:17 241:14 243:12 252:3 308:21 309:3 310:20 311:4 313:10
present 234:16 240:4 251:5,9 264:6 267:8 297:8 306:6 324:17 327:2
presented 278:19
preservation 293:16
presumably 279:21
pretty 252:21
previous 241:24 257:1
previously 293:18 294:22 329:24
principal 235:14 281:1 287:21
prior 239:19 243:21 246:18 250:12 253:9 254:1 259:24 260:8 261:3,13,25 262:4,16 263:4,18,25 264:4,7 265:4,13 271:6,13 276:8,23 283:11 285:9 287:6,10 294:23 301:20 304:14 308:7 312:4 318:13 319:3 331:14
probably 264:6,8 279:24 280:21 282:1 296:24 297:2 309:11 309:24 325:25 328:15
problem 285:22 324:22,24
problems 245:18
procedures 300:18
proceeding 289:20
proceedings 333:6
process 250:18,24 266:5 325:7
program 259:12
programs 258:22 261:23 274:3
project 277:9 323:17
prompted 267:17
proper 290:12 298:23
properly 241:8
provide 324:19
Pt 236:4
publications 255:20 269:24 270:17,22
pull 244:11 311:18
pulled 238:24 240:5,24
purpose 241:5 284:7 292:22 293:1
purposes 281:10 283:12
put 242:8 250:22 259:12 267:12 269:12 273:3 284:25 285:3,21 321:2 333:8
P.C 233:20

Q

QC 281:21
question 238:9 241:1,3 243:15 248:9,20,22 254:23 260:5 261:18 268:11 283:1 289:12 291:22 297:17 298:23 308:25 319:8 319:11,12
questioning 260:19 294:21 326:23
questions 248:16,24 248:25 249:2 253:3 260:22,23 267:12 276:13 314:8 331:19
quickly 331:18
QUINTON 231:16 232:15 235:2 237:14 332:20 334:9

R

R 233:1,4,8
raised 276:13
ran 307:2
ranged 264:9
re 231:4 232:4 264:14
read 234:4 235:7 236:25,25 242:2 243:15 244:17,22 245:25 247:14 248:6 248:9,15 258:4 270:10 272:8 296:18 299:8 309:1,2 311:16 315:2,3 322:10 326:16,16,21 327:24 329:20 331:10 332:8
reading 271:24 272:3
readings 275:6,10,11 275:14 276:1,9 283:10,12
really 248:17 323:12 324:4
reason 254:25 256:19 321:11 330:25
recall 239:25 246:7 264:11,16 265:25 282:2 291:9 292:3 293:20 300:9 305:11 307:6,7,9,19 308:16 308:17 309:16 311:9 313:12 314:5 315:17 316:12 323:25 324:12,18 325:1,15 328:19,20,21
recalled 313:3
receipt 255:11,12 330:8
receive 255:1 256:20 278:6 279:1
received 253:20 254:13,22,23 255:7,8 255:17 257:2 271:22 277:25 279:3,22 290:9
receives 278:2
Recess 290:2 312:15
rechecked 283:15
recipients 279:6
recognize 297:23
recollect 274:19 275:5 298:6 304:3 311:1 330:3
recollecting 298:4
recollection 266:21 292:11 294:1,6 296:10 297:14 299:2 302:9 314:21,23,25 315:4,9,19 317:16
recollections 296:19 296:23 302:10
recommend 257:15 278:24
recommendation 259:22 261:4,11
recommendations 259:18 260:9 274:4
recommended 261:15
recommends 258:6,16
record 235:12 236:15 236:17 289:25 290:4 309:2 312:14,18 331:23
recorded 333:11
records 276:25 277:2

313:23
recounts 297:11
recovered 240:13 241:3,24 247:12 291:9 295:18 296:12 304:2 315:10
recovery 235:18 291:7 296:4,21 298:4 310:11 325:7
reduce 293:11
reducing 293:1
reduction 268:4
reference 268:11 274:10,12
referenced 275:1 286:24 287:15 288:9
references 284:22
referencing 269:6 290:18
referring 268:20 286:7 288:22 315:23 316:15 322:11 325:12,16
refresh 296:10
refute 329:5,10,16
regard 262:11 264:17 324:13
regarded 235:22
regarding 237:24 251:24 263:3 286:22 322:5,6 323:23 324:7 324:14
regardless 262:2
regards 252:1
reiterate 301:21
related 253:22 254:15
relation 309:18 311:11 312:8 328:9
relative 333:15
relevant 261:19
reliability 263:14,22 264:11 323:1,2,6,8 323:11 324:20
relieve 330:4,5
remain 330:24
remember 238:21 242:9 266:24 278:16 282:6,14 292:10 293:25 297:19 307:1 307:12,13,17 312:8 313:13,14 315:13,16 327:4 328:25 329:3
removal 251:3,24
remove 251:1
removed 250:19,21 251:9 267:20 271:9
removing 250:18 252:5
rep 266:18,20 279:23 280:2
repeat 260:5 308:25
repetitively 257:17
replaced 271:10
replacement 275:7,12 275:16 276:2
report 277:16,20 278:13 311:3 323:6
REPORTED 231:24
reporter 236:13 237:11 269:22 330:5 333:5 333:24 334:6
reporters 231:21 236:14
REPORTER'S 334:1
reports 277:25 278:7 278:15,16 279:7,15 279:17,19,22
representative 240:3 251:21 252:2 255:19 266:8,14,23 267:8 276:17 295:16 327:7 327:15
represented 286:21
representing 306:1
request 295:6
requested 331:5
requesting 274:17
required 274:5
requirement 330:14
reserve 248:13 314:8
resolved 325:1
respect 257:6 261:1 267:15 278:23 281:25 285:16 290:7 308:21 309:3 312:1
respectfully 316:17
response 267:11 311:12,13 316:18
responsibility 253:16
rest 239:13 329:2
restate 240:20
restraining 265:2,5,12 265:24 281:7,9,10 285:17 286:11,15,17 287:16,17 288:1,8,11 288:15,17 289:4,14 290:13,16 291:4
restrictions 300:14
retained 250:7
review 274:13,20 282:11 295:20,23,25 314:2
reviewed 283:25 296:9
reviewing 314:5
revised 290:11
re-inspections 285:22
rigged 291:10
right 241:10 243:13 245:4,7 246:1 247:6 249:25 250:1 252:15 254:9,10 255:22 262:24 266:11 269:2 273:20 275:21 276:21 285:12 290:23 294:14,16,17 297:12 299:20 303:23 306:11 307:3 307:5 311:5 312:25 314:24 315:25 320:12 321:14,18 322:20,22 326:5,8,13 326:14 328:21 330:22
rights 314:9
rinse 292:19
rinsed 242:24,25 243:4 243:6,8,10
rinsing 243:1 329:1
rocky 252:19,20
Rodriguez 311:16
ROSE 234:13
ROSENTHAL 233:12 233:15
routine 253:19 254:14
rule 248:11
rules 330:6
running 323:6

S

S 233:1
saltwater 293:2
same 245:3 248:8 254:2 255:5 261:5 268:19 282:12,14,15 288:15 300:20 303:4 303:9 305:18 306:2 327:12 328:11 329:23
samples 243:20
san 231:22 233:14 234:5 266:22 333:3
sand 241:19 247:2 294:12 320:24
sandy 252:19
Santa 233:6
sat 247:12 263:13,15 264:1,6,8
satisfied 248:24
saw 242:16,17,18 243:19 244:15 245:3 246:15 247:9 249:5 249:11,13,24 250:11 250:15 256:17 273:10,10 280:20,22 281:24,25 282:5,12 297:24 298:5 299:8,8 299:19,21,23 301:21 302:3,3,5,6,23 304:8 306:24 307:7,9,25 308:6 309:14 312:24 312:25 324:11
saying 239:25 272:10
says 257:14 315:4 317:16 318:1
score 262:22
scott 231:16 232:15 235:2 236:2 237:14 245:12 312:13,18 331:23 332:20 334:9
scouring 252:14
screw 241:18 244:7,19 244:20 246:14,21,22 246:24 247:1,4,5,9 247:11 276:2
searched 277:4
Sears 233:16
seattle 231:18 232:17 236:9 266:8,11
second 247:14 257:11 272:23 273:16 280:17 285:1 302:25 314:19 323:5 330:10 330:16
second-to-the-last 287:19
section 300:15
secured 291:13,24 292:9
SEDGWICK 234:3
see 239:5,6 246:1 247:8,9 250:19 257:14,19 284:19 296:14 297:24 299:5 300:7 301:4,9 302:10 303:16 305:7 306:5 307:22 310:9,10,12 314:20 315:7,8 318:3 318:5,6,9 323:22 326:11
seeing 238:22 247:19 265:25 278:16 280:18 310:5
seem 310:6
seen 238:12 242:6 256:15 265:22 266:1 266:5 267:7 272:22 272:25 277:21 280:16 284:16 295:11 298:6 305:1 305:11 320:23
self-disclosure 235:13 280:25 281:14,14 284:23 285:3 288:6
sent 265:13,15 284:20 299:6
sentence 242:3 275:18 297:17 317:15,25
sentences 314:22
September 256:12,21 273:7,8,20
sequence 304:1
serial 265:20
serra 231:24 232:19 236:13 333:4 334:5 334:17
service 236:12 253:12 253:20 254:14,22 255:1,2,11 257:15 266:8,13 267:7 276:18
serviceable 271:25 276:10
set 246:3 333:7
sets 298:3
setting 296:19
seven 259:10
several 248:2 267:3 299:11 322:24
shaft 293:24
shalem 234:8 237:8
sheet 323:9
shell 234:2,7 236:25 240:4,11
ship 238:23 240:5,11 240:15,21 241:2,9,9 241:16,18 242:12,17 242:20,22 243:6,22 245:4,12,15,19 247:23,25 251:23 266:4 293:22 299:10 299:12,13 302:20 305:15 310:12 316:11 317:4 325:8 325:22,23,25 326:7 326:10 327:19,22
shipment 251:10
shipped 248:4 251:18 266:4 299:14
shipping 250:22
shore 239:12 241:20 241:22 242:7 244:13 245:6 248:4 250:15 250:17 292:2 299:6 299:14 305:15 327:14
shorthand 333:5,14,24 334:6
shot 303:12
shown 283:13 305:9 305:25 314:1,4
shows 244:11
sign 265:19
signature 330:7
signed 283:24 330:12 330:13 331:13,14,14
significance 240:17,22
silt 247:11 252:21 294:12,19 310:10 320:14 321:4,5,7,9
silty 252:21
silverish 317:6,7,23
similar 249:15,16,18 249:21,23 282:16
simply 259:9 262:1 283:25
since 255:2 265:22 269:17 317:18
single 254:24 255:8
sir 263:11 316:3,17 317:18 318:5,16 320:3 322:4,9,12,22 322:23 325:4,6 326:15
sit 253:18 263:17,18 264:3 279:5 320:3
sits 241:8
sitting 247:8 263:22 266:19
situation 266:17
six 319:2
Sixth 233:13
solely 260:4
some 242:22 247:20 247:24 249:1,6 250:22 263:11 283:25 290:19 297:21,24,25 306:5 325:6
somebody 301:22
somebodyelse's 298:20
someone 239:17 251:5 251:8 279:20
something 243:24 261:18 264:23 278:13 283:20 298:15 299:17
sometime 285:25
somewhere 299:7
SONNENSCHEIN 233:12,15
sooner 257:18
sorry 297:1 311:21
sort 252:19
South 233:17 234:9
speak 255:11 288:2
speaks 286:25
special 300:13
specific 246:20 309:17
specifically 265:19 298:16

specification 285:19
speculation 239:4 240:8 245:10 254:20 255:6 256:23 280:6
spiral 293:17 294:5 301:9,15 315:5
spoken 312:5 313:9
spraying 293:15 300:24
ss 332:2
stab 322:6 323:23 324:15
stabilizer 235:19,22 241:23 247:12,23,25 286:9,10 291:9,10,20 292:12,15,19 293:3 293:10 295:17 296:5 296:12,17,22 299:2 299:10,12,15,20,24 300:3 302:18 303:5 303:14 304:9 325:22 325:24 326:8,9 327:10,21 328:2,7,10 328:12,14,16,22,23 329:2,4,7
stabilizers 287:24
stand 292:4
standing 328:21
stands 264:14
start 314:22
starting 246:12 254:9
starts 314:21
state 236:16 249:19 271:21 275:6 332:1 333:1,19 334:6,12
statement 235:18 272:14 296:4 310:4 310:18 311:8,24 312:3 313:2 327:25
statements 301:20 327:1
states 231:1 232:1 236:6
status 270:9 323:11
stead 331:2
Steering 237:4
stenographically 333:11
step 273:15 274:18,22
Steve 236:18
STEVEN 233:13
sticks 264:21
still 271:25 276:9 289:4,13 290:21 331:6
stipulate 330:4,18 331:12
stipulations 329:23 330:1 331:9
stocked 288:1,20
Stockhill 295:14 296:11 297:9 298:3 300:7 301:23 316:22 327:6,9,13,14,19,24 328:4,17,25 329:6
Stockhill's 235:18 296:4,19 298:10,11 301:8,16,25 302:1
stop 247:22 249:5,12 250:3 299:10,19 300:2 325:17
straps 292:9
Street 231:22 232:17 233:8,13,21 234:9,14
strike 242:2 243:25 244:22 247:14 248:6 248:11 250:10 258:9 258:25 289:10 312:22 321:12
structures 253:17
stuff 251:25 297:18
subject 279:10 283:9 290:24 308:13,24 309:7,10,17 311:2 313:16,20 324:5 325:4
subjects 263:7
submersible 252:13
submission 238:13
substance 241:19 244:2,16 246:16,23 247:2 249:6,8,11,13 249:14,24 294:12,14 306:5 318:9,23 319:15,25 320:4,21 320:24 321:4,8,13
substantially 282:12 282:15
substitute 282:22
suffering 245:21
Suite 231:22 233:9,21 234:14
summarizing 323:10
support 287:24 290:14 290:17
supported 292:1
sure 243:16 245:14 246:3 285:14 307:20
surface 293:9 328:11
surfaces 293:2
surprise 259:8 261:14
surprised 261:18 310:16 317:8,10 326:25
surrounding 235:15 281:2 324:1
survey 277:11
sustain 292:5
swear 237:12
systems 311:2 323:10 323:20 324:19

T

take 243:20 246:11 270:12 280:17 284:25 288:24 289:24 294:11 295:23 296:15 300:7 305:19 314:17 317:15,25 322:15,16
taken 232:16 236:2 290:2 300:13 302:20 303:10 304:3,11,14 305:6,13,16,16,18 312:15 324:12 333:6 333:14 334:9
takes 270:10
taking 252:4 300:9 329:14
talk 247:17 273:13 298:13 309:9,13,14
talked 251:25 309:16
talking 254:4 328:20
tally 323:6
tape 236:2 312:11,12 312:17 331:21
task 265:18 272:17,18 273:5,18,23 274:6,10 274:19 275:1 276:5 290:11
team 277:3 279:14,15
technical 235:12 255:20 268:9,14,16 268:22 269:23 270:17,21 277:16,19 279:14,16,18
tell 260:2 263:21 292:25 303:8,25 304:6,15 306:7 307:25 312:3,20 325:14
terms 255:16 262:9 264:2 271:2 284:2 291:4 300:11,15 306:3 313:25
Terry 311:20
testified 237:16 241:2 267:11 292:17 298:12 301:14
testify 276:16 279:10 279:12 287:2 288:4
testimony 240:8 246:18 262:4,15 267:22 271:23 283:9 285:5 287:10 326:22 332:12 333:9
tests 288:11 289:15
Texas 234:15
Thank 321:21 326:14
Thanks 237:21 252:25 329:20
their 236:16 262:7 270:23 275:3
thing 247:7 252:19 254:2 258:5 301:4 302:11 303:5
things 279:19 297:21 297:24 298:2
think 239:25 243:12 247:4 248:21,23 249:5 260:18,20 267:17 276:20 279:11,14,19,23 286:12 292:17 296:24 297:2 298:18 298:22 299:19 302:6 302:7,22 310:23 311:3 317:1,22 321:9 325:16 330:11 331:8
Third 231:22 232:17 236:9
third-to-the-last 257:13
Thomas 233:21
though 279:9 280:23
thought 271:21 300:3 316:23,23
thousandths 268:1 272:9,9,10,13,15
threads 294:2 315:5,12 315:13 316:4,7,8,10 316:21 317:19
three 290:25 314:20 323:3 325:25 326:12
three-page 295:2
through 237:22 270:16 270:16,21 274:7 278:21 280:10 297:16 298:19 309:19 310:8,13,17 322:3 323:7 334:7
Thursday 232:18
tie 287:17
tied 260:4
time 247:20 248:12 250:10,11,15 251:21 252:2,25 253:25 254:1 260:4,20 262:9 263:4,8,21 264:2,5 264:10,24 266:1,10 266:15,19 271:23 272:12 283:7,14 286:4 287:6 289:3 296:20 305:14,18 308:10,14 309:12,19 310:22,24 311:9 313:14 314:7 318:7 320:10 325:2 327:14 330:21,23,23 331:20 331:25 333:7,8,10
times 267:4,6 319:2
title 270:23 322:13
today 253:18 270:13 279:5 314:2 320:3
together 259:13 273:4
told 239:22 271:24 276:20
tool 265:2,20,21,24 281:7,8,9,10 282:25 283:15 285:17 289:8 289:9 290:16
tooling 285:20 286:23 287:8,15 290:8,12,13 290:14,17,20,22 291:3
tools 265:12,15,16,18
top 244:9 246:12 247:1 264:15,22 307:4 322:13
topic 324:1
totally 290:23
touch 306:24 318:1,17 318:21
touched 294:16 325:23 326:10
towards 244:2
Tower 233:16
transcribed 333:12
transcript 330:18 332:8,11 333:14
transferred 249:9
transport 291:13
transported 239:8 291:16,21,25 292:2
trial 331:13,15
trig 234:12 237:2
trim 235:22 322:6 323:23 324:15
Trimberger 235:17 283:23 284:5,13,23 286:18 287:7,20 290:7
Trimberger's 287:2,19 288:10
true 315:21 317:18,21 329:8,9,12,13,18,19 332:11 333:13,20 334:8,13
try 237:22 311:17 318:7,18,22,24 319:14 330:2
trying 264:4 298:1 322:18
turn 255:25 271:16 272:20 283:5 302:13 302:25 306:18 314:19
Twenty 233:5
twice 313:17
twin 235:12 276:18,21 276:25 277:6,15,19 277:25 278:4,5,7,8 278:13,15,16,21,22 279:7,16,17,18,22
two 236:1 278:5 288:17 303:9 306:8 312:12,17,17 314:20 314:22 331:22,22
two-page 277:15 280:9
type 245:21 250:22
types 278:24 288:17 288:20
typical 279:6

U

Um 246:7
under 259:7,15 273:2 284:3 329:23 330:5 330:12,13 332:7 333:8,18,19 334:11 334:11
undersigned 332:7
understand 246:2 262:15 268:6 283:4 298:1 310:7 316:17 325:10 329:15
understanding 254:7 258:10 260:7 261:2,7 271:7 272:3 273:22 273:24 274:1 276:11 282:18 284:21 292:21 316:20
understood 276:9
underwent 239:18
unfortunate 249:1
unidentified 301:9
unit 252:13
united 231:1 232:1 236:6
Unless 330:20
unlike 294:7 317:17
update 323:4 324:3,19
updated 274:4
updates 322:25
upper 247:10 248:3 287:24 290:14,17 293:24
use 265:1 276:17 285:6,16 286:22 287:8 290:12 293:6

300:13 314:12 331:13
used 265:6,13,20 269:1 273:5 288:11 292:4,18 293:9 300:12 331:1
using 289:4,13,17,21 290:20,21 291:3 292:22
usually 278:8
utilize 253:16 269:3
utilized 259:3 262:9 265:17

V

vague 238:9 307:1
Vaguely 258:3
various 237:7 301:11
venued 236:6
version 269:4
vertical 241:22
very 294:8 321:21 326:14
video 236:2,11,12 252:13 312:17
VIDEOGRAPHER 234:16 236:1 237:11 289:25 290:3 312:10 312:16 331:21
videotape 312:13 327:10,20 331:22
view 306:4
violation 283:5
vision 245:18,22 246:5 246:7
visual 305:9 319:19 320:1
visually 319:21,25
volume 231:15 232:15 269:14 334:9

W

W 231:24 232:19 333:4 334:5,17
Wacker 233:17
walk 243:8
WALKER 234:13
walking 320:20
want 241:12 243:16 246:3,11,12,14 256:8 257:10 265:1 271:14 273:15 280:8 298:15 298:18 306:18 315:2 319:12 327:17 329:22 331:15,16
wanted 270:18 272:5 289:23
wash 304:14,14
washed 239:9 244:12
washing 239:13,14,19 246:1 300:15
washington 231:18 232:17 233:22 236:9 251:10
wasn't 239:12 242:20 251:15 252:1 260:24 265:8 291:15 293:25 297:5 317:10
wasting 260:20
watch 250:24,25 310:11
watched 251:1 252:12 299:4
watching 251:12
water 238:24 292:19 293:11,12 328:1,6 329:7,11,17
waters 240:6,16
way 246:6 256:24 257:3 259:12 260:6 261:22 270:6 294:3 300:4,20 313:6 315:20 317:8 319:18 323:15 330:7
wear 246:8
weeks 309:22
well 248:23 249:7 250:10 258:25 260:6 260:21 272:10 275:18 300:6 317:17 321:12 331:7
went 310:13,17
were 239:15 240:12 241:9,24 242:6 244:11 245:14,19,21 248:1 250:17 253:10 253:10,15 255:16,17 255:18 259:15,15,18 260:4 261:8 262:10 263:6 264:23 265:15 265:16,17 266:3,6 267:9 269:6 272:9,10 273:3 274:9,17 276:9 276:12,13,16 277:25 278:7 281:17 282:17 282:19,25 283:10,14 283:15 285:15,19,24 288:5,23 289:17,19 290:21 291:3,8,9 293:23 294:3 295:18 297:4,10,22 299:6,13 299:25 300:17,18 302:9 306:15 308:4 315:6,9,12,16,20 316:3,8,13,21 317:4 317:8,12 323:1 325:6 325:6,11,13,14,21 326:24,25 328:6 333:6,10,11
weren't 260:22 297:8 317:12,18 327:1
West 233:22
whatsoever 262:17
WHEELER 233:4
whichever 260:12 261:16
while 267:8 278:7 297:10 304:5 326:6 327:11
Whittaker 235:14,17 281:1,13 284:13 286:19 287:21 290:8 290:10
whole 258:5 294:21 300:20,21 301:4
Wilshire 233:5
wiping 307:19
wire 294:2 315:14,14 316:8,9 317:3
wiry 293:17
wise 248:21
witness 233:19 235:2 237:12 240:10 241:1 241:5 244:18,19 246:20 248:16,19,21 255:7 256:24 258:13 258:20 259:21 260:15,16,18,19 261:7 262:5 267:23 268:13,21 269:1 279:13 287:2,12,14 288:3,15 294:25 295:5 297:18 298:8 298:23,25 299:9 301:19 304:20 308:4 309:8 311:9,19 314:8 314:9 316:7 317:1 318:15,21 319:5,10 322:15 330:17 333:8 333:9
witness's 240:8 246:18
word 316:20
wording 272:7
words 252:3
work 277:12
worked 277:11 323:7 324:22
working 323:4 324:24
worry 247:18
wouldn't 259:11 288:25
wrap 294:5 301:9 315:5
wrapped 315:15
wrapping 294:2
wreckage 326:4
writing 272:6 276:12 281:16
written 235:13 280:25 298:11
wrote 287:7 311:12 323:3

X

X 235:1

Y

year 264:3
years 267:5 277:3
yesterday 242:9 243:16 267:11 271:21 281:20 283:9 314:1

0

00-1343 231:6 232:6
00-1343-CRB 236:8
00025121 284:11
00025127 280:10
00027180 322:5
003 275:19
040 271:24 272:2,5,6 275:7,19 276:9

1

1 288:19 289:1
10th 296:20 297:14
10:28 289:25
10:41 290:4
100 233:5,9
1000-hour 268:3
1025 233:21
11 273:15 274:18,22
11:18 312:14
11:19 312:19
11:43 331:23,25
1201 232:16 236:9
126 272:20,22 274:10 274:22
1370 233:8
14th 309:19
15 262:10,14 267:6
16th 234:5
17 283:13
1701 234:14
18 231:17 232:18 334:10
18th 236:10
18-months 287:23
184 311:14,17,19
185 311:17,21 312:21
186 305:19,22
186-A 305:24,25 306:6
186-D 306:19
19 283:13
19th 234:10
198 267:13,16 269:6 274:9 276:12
1984 256:4
1985 254:9,12
199 267:13 271:16,18 271:19,22 283:4
1991 256:13,21 257:20
1992 264:9 269:17
1996 259:1
1997 273:8,20
1998 323:19

2

2-C 261:9,11 262:6,8
200 234:14 235:12 277:15,17,22
2000 231:4 232:4 235:16 236:5 264:4 265:13 281:25 283:5 284:12 285:15,21 288:10 289:13 295:3 297:15 310:22,24 311:4,22 312:1,5,24 313:8,8
20007 233:22
2001 264:3,6,9
2002 231:17 232:18 236:10 276:22 332:13 333:21 334:10,14
201 235:13 280:9,11,13 280:16 281:18,19 282:11
202 235:16 284:10,14 284:17,22 286:21,24 290:6
202)625-3123 233:23
203 235:18 295:2,7,10 295:11,13,21 296:1,3 296:9,18 297:11 302:16 303:22
314:17
204 235:20 304:17,18 304:23 305:1,3,10 306:1,6
205 235:22 321:24 322:1,3,23,24 324:15
213)955-7700 234:11
214)752-8600 234:15
216)621-2300 233:10
231 334:7
233 233:17
237 235:4
25128 280:10
253 235:5
261 238:15 296:5
261's 235:18
277 235:12
28 320:4 333:21 334:14
280 235:13
284 235:16
284-6930 231:23
286-27004 290:11
29th 256:4
295 235:18

3

3 272:9 [illegible]5 275:11,14 275:1[illegible]5
3rd 235[illegible]5 265:5,13,22 266:2 281:3 282:19 283:1[illegible],14 285:25 291:5
30 260:[illegible] 261:16 262:2 330:8,16 331:12,14
30(b)(6) 260:16
300 235:21
304 235:20
31 231:4 232:4
31st 236:5
310)576-1200 233:6
312)876-2377 233:18
314 235:6
321 235:22
326 235:7
33 320:5
334 334:7

4

4th 235[illegible]5 265:16,22 266:2 281:4 282:19 283:14 291:6
40 268:1 272:9,10,11 272:1[illegible],15 275:10,11 275:14,15,15
415 231:23
415)781-7900 234:6
415)882-2410 233:14
43.13 283:6
44113-1[illegible]92 233:9
4596772-11 287:25
48th 232:17
49th 236:9
495672-[illegible] 290:16

5

5 231:22
5th 235[illegible]6 256:12,21 284:12,20 286:8 287:15 288:10 289:2

5yboeingfleet 257:3
503 288:19,24 289:1
55-gallon 292:3

6

6 258:17 267:1 270:8
600 257:17
60606 233:17
625 231:22
685 233:13

7

7 295:2
7000 260:11 261:16
725 234:9
75 255:25,25
75202 234:15
77 256:9,15,20

8

8 311:22
8th 296:25 297:3,14
309:18 312:1,5,9
8-55-10-01 275:1
8000 233:16
8207 231:24 232:19
333:4 334:5,17

9

9C049B7 231:25
9th 281:25 282:1,285:4
285:10 296:20,25
297:3,14
9:12 232:18 236:15
900 258:17
90017-5419 234:10
90401-2131 233:6
91 257:2
9126 257:11
94103 231:22
94105 233:14
94111-3628 234:5
95 264:7
963 273:6
98104 232:17