

THE SINKING OF THE U.S.S. "GUITARRO"
(SSN 665)

GOVERNMENT

Storage

HEARINGS

BEFORE THE

ARMED SERVICES INVESTIGATING
SUBCOMMITTEE

OF THE

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES

NINETY-FIRST CONGRESS

FIRST SESSION

UNDER THE AUTHORITY OF

H. Res. 105

HEARINGS HELD MAY 26, 27, AND 28, 1969

KSU LIBRARIES



AL1900 474011



U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1969

31-717

COMMITTEE ON ARMED SERVICES

L. MENDEL RIVERS, South Carolina, *Chairman*

PHILIP J. PHILBIN, Massachusetts

F. EDWARD HÉBERT, Louisiana

MELVIN PRICE, Illinois

O. C. FISHER, Texas

CHARLES E. BENNETT, Florida

JAMES A. BYRNE, Pennsylvania

SAMUEL S. STRATTON, New York

OTIS G. PIKE, New York

RICHARD H. ICHORD, Missouri

LUCIEN N. NEDZI, Michigan

ALTON LENNON, North Carolina

WILLIAM J. RANDALL, Missouri

G. ELLIOTT HAGAN, Georgia

CHARLES H. WILSON, California

ROBERT L. LEGGETT, California

FLOYD V. HICKS, Washington

SPEEDY O. LONG, Louisiana

RICHARD C. WHITE, Texas

BILL NICHOLS, Alabama

JACK BRINKLEY, Georgia

ROBERT H. MOLLOHAN, West Virginia

W. C. (DAN) DANIEL, Virginia

WILLIAM H. BATES, Massachusetts

LESLIE C. ARENDS, Illinois

ALVIN E. O'KONSKI, Wisconsin

WILLIAM G. BRAY, Indiana

BOB WILSON, California

CHARLES S. GUBSER, California

ALEXANDER PIRNIE, New York

DURWARD G. HALL, Missouri

DONALD D. CLANCY, Ohio

ROBERT T. STAFFORD, Vermont

CARLETON J. KING, New York

WILLIAM L. DICKINSON, Alabama

CHARLES W. WHALEN, Jr., Ohio

ED FOREMAN, New Mexico

JOHN E. HUNT, New Jersey

G. WILLIAM WHITEHURST, Virginia

ROBERT J. CORBETT, Pennsylvania

JORGE L. CORDOVA, Puerto Rico

Resident Commissioner

ARMED SERVICES INVESTIGATING SUBCOMMITTEE

L. MENDEL RIVERS, South Carolina, *Chairman*

PHILIP J. PHILBIN, Massachusetts

F. EDWARD HÉBERT, Louisiana

SAMUEL S. STRATTON, New York

ALTON LENNON, North Carolina

WILLIAM J. RANDALL, Missouri

ROBERT H. MOLLOHAN, West Virginia

WILLIAM H. BATES, Massachusetts

CHARLES S. GUBSER, California

ALEXANDER PIRNIE, New York

WILLIAM L. DICKINSON, Alabama

JOHN E. HUNT, New Jersey

JOHN T. M. REDDAN, *Counsel*

RICHARD A. RANSOM, *Professional Staff Member*

ALBERT RHETT SIMONDS, Jr., *Professional Staff Member*

SPECIAL SUBCOMMITTEE TO INVESTIGATE THE SINKING OF THE U.S.S. GUITARRO

SAMUEL S. STRATTON, New York, *Chairman*

WILLIAM J. RANDALL, Missouri

JOHN E. HUNT, New Jersey

(II)

CONTENTS

	Page
May 26 (executive session)-----	1
May 27 (executive session)-----	85
May 28 (executive session)-----	205
Statements or testimony of-----	
Stratton, Hon. Samuel S., Member of Congress-----	1
Department of the Navy:	
Brackney, Joe Leon, nuclear ship superintendent-----	235
Christiansen, Edward Andrew, shift test engineer for Nuclear Cognizant Systems-----	146
Collier, Comdr. Byron Henry, prospective commanding officer, U.S.S. <i>Guitarro</i> -----	205
Copp, Robert E., foreman shipfitter-----	198
Frankenberger, Rear Adm. Norbert, commander, San Francisco Bay Naval Shipyard-----	2, 85
Kaufenberg, Richard Lee, below-deck security watch-----	27
Lampson, John, ship superintendent-----	186
Martinez, Eddie W., service group superintendent-----	87
Miller, Harry B., foreman, marine machinist-----	115
McGaughy, Comdr. Richard W., nuclear power superintendent-----	226
Nagy, Ernest Steven, assistant chief design engineer for naval architecture-----	153
Oberdeck, Roger William, assistant shift test engineer-----	137
Palmayesa, Frank F., Jr., assistant shift testing engineer for Nuclear Cognizant Systems-----	149
Robnett, Harold Vivian, general foreman 1, marine machinist-----	241
Rose, Hyman, project manager for U.S.S. <i>Guitarro</i> and U.S.S. <i>Hawkbill</i> -----	170
Thompson, Rodger William, marine machinist (limited), shop 38-----	68
Varing, Emory D., marine machinist-----	54

CONTENTS

1	Introduction
2	Chapter I. The History of the United States
3	Chapter II. The Constitution of the United States
4	Chapter III. The Federal Government
5	Chapter IV. The State Governments
6	Chapter V. The Local Governments
7	Chapter VI. The Judiciary
8	Chapter VII. The Executive
9	Chapter VIII. The Legislative
10	Chapter IX. The Administration
11	Chapter X. The Finance
12	Chapter XI. The Education
13	Chapter XII. The Religion
14	Chapter XIII. The Social
15	Chapter XIV. The Literature
16	Chapter XV. The Art
17	Chapter XVI. The Science
18	Chapter XVII. The Industry
19	Chapter XVIII. The Commerce
20	Chapter XIX. The Transportation
21	Chapter XX. The Communication
22	Chapter XXI. The Health
23	Chapter XXII. The Recreation
24	Chapter XXIII. The Environment
25	Chapter XXIV. The Future

THE SINKING OF THE U.S.S. "GUITARRO" (SSN 665)

EXECUTIVE SESSION

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
ARMED SERVICES INVESTIGATING SUBCOMMITTEE,
Mare Island, Vallejo, Calif., Monday, May 26, 1969.

(These hearings were held in executive session on May 26, 27, and 28, and authorized released by the subcommittee.)

The subcommittee met, pursuant to call, at 3:45 p.m., in room 1073, Building 47, San Francisco Shipyard, Mare Island, Vallejo, Calif., Hon. Samuel S. Stratton presiding.

Members present: Hon. Samuel S. Stratton, Hon. William J. Randall, and Hon. John E. Hunt.

Staff present: John T. M. Reddan, counsel.

Mr. STRATTON. Admiral would you please take the chair there.

Admiral FRANKENBERGER. Fine.

Mr. STRATTON. I will declare the meeting of the subcommittee officially in order.

Admiral, I want to make a brief preliminary statement. Chairman Rivers has directed this subcommittee to make an on-the-spot investigation of the nuclear-powered attack submarine, the *Guitarro*, SSN 665, and to hold hearings to take testimony relative to her sinking on the 15th of May.

This testimony will be taken in executive session. No one other than members of the subcommittee, its counsel, and the subcommittee reporter will be allowed to be in the hearing room during the testimony of any witnesses.

The chairman has also requested that we swear in the witnesses before this subcommittee for testimony, and since each witness will be sworn, he will be allowed to be accompanied by his legal counsel if he so desires, which is in accordance with rule III of the rules and organization of the subcommittee. However, counsel must be of his personal choice and a member of the bar of the highest court of his place of residence or the Supreme Court of the United States.

The members of the subcommittee are myself, as chairman: Mr. Randall of Missouri, and Mr. Hunt of New Jersey. Mr. Reddan is the committee counsel, and Mr. Friedman is the reporter.

We will have a relatively short time to complete our business and, therefore, I would like to move ahead with dispatch. Lieutenant Commander Van Metre has been given a tentative list of witnesses, and I would appreciate the making of such arrangements—and I believe they have been made, Admiral—such arrangements as might be necessary to have them standing by.

Undoubtedly as testimony is taken, the requirement for additional witnesses will appear. The Navy Department sent a message ahead outlining our requirements. Some involved the need for certain documents and their availability at the outset will speed our mission. They have been received and we want to express our appreciation for them.

Before leaving Washington, the subcommittee was furnished with a digest of information developed to date with respect to the matter that concerns us. We understood from this digest that the immediate cause of the sinking has been determined. However, the digest raises a number of questions that we will want to take up with the appropriate witnesses.

In addition, we will want to thoroughly understand the policies, procedures and practices that were in effect on May 15 which led to or permitted the sinking of the *Guitarro*.

I might also add, Admiral, in this preliminary statement, that the sinking of this ship has certainly come at a very bad time. I think undoubtedly, as we are all aware, it not only throws a very bad light on the Navy and on its ability to manage its own affairs, but what I think is even more serious is that it has strengthened the hand of those who are attacking our armed services at this particular time, and being critical of the military departments in general.

The chairman of the House Appropriations Committee, Mr. Mahon, expressed recently on the floor of the House his feeling that this particular incident contributed to a loss of confidence on his part and on the part of others, in the military services.

So we are concerned with an act that I think, under the circumstances, goes beyond what might be regarded as an ordinary Navy matter, not only the costs that may be involved in restoring this ship to its previous conditions, which Mr. Mahon on the floor estimated at \$25 million—this is a point I am sure we will want to explore more fully—but in connection with its overall impact on the armed services and their position with the people. And what I think we want to know is how this could have happened, and how we can develop better procedures and better practices to prevent its occurring again.

With that preliminary statement, gentlemen, we will have as our first witness Rear Admiral Frankenger, who is the commanding officer of the shipyard.

Admiral, if you will just stand, I will administer the oath.

Do you solemnly swear that the testimony you will give before this subcommittee in matters now under consideration will be the truth, the whole truth, and nothing but the truth, so help you God?

TESTIMONY OF REAR ADM. NORBERT FRANKENBERGER, COMMANDER, SAN FRANCISCO BAY NAVAL SHIPYARD, VALLEJO, CALIF.

Admiral FRANKENBERGER. I do.

Mr. STRATTON. Please be seated.

Admiral, let me also point out, as indeed I should before we begin questioning you, that in accordance again with the rules of procedure of the subcommittee and with the general military law, that no person who is a witness before this subcommittee in this hearing will be com-

pelled or may be compelled to incriminate himself or to answer any question, the answer to which may tend to incriminate him. And no person may interrogate or request any statement from an accused, or a person suspected of an offense without first informing him of the nature of the accusation and advising him that he does not have to make any statement regarding the offense of which he is accused or suspected, and that any statement made by him may be used as evidence against him in a trial by court-martial.

Obviously, we are not conducting a trial here before this subcommittee, but we recognize that there is a legal procedure going on at the same time, so we wanted to make certain that we had informed every witness before the subcommittee of his full rights under the general military law.

Mr. REDDAN. Admiral, on the desk in front of you there is a copy of the subcommittee rules which contains rule 11 of the House rules. We make it available to every witness who is sworn. There is also included in that copy subcommittee rule 5, which deals with the right of counsel.

Mr. STRATTON. I think I should ask before we begin whether you desire counsel or not?

Admiral FRANKENBERGER. No. I don't.

Mr. Stratton, one thing—if I may comment? I understand exactly what you are saying, and that your rules and so on require you to do this. You may scare some of the people who will be coming in in the future by this when you mention about incriminating themselves and so on. I realize you have to do it, but I just thought I would prepare you now that some of the people will probably blanch when you mention that.

Mr. STRATTON. I think we probably recognize that, and perhaps much in the same way as the *Pueblo* Court of Inquiry, this is simply a requirement.

Admiral FRANKENBERGER. Certainly.

Mr. STRATTON. That has to be.

Admiral FRANKENBERGER. As I say, I understand it.

Mr. STRATTON. Sure.

Admiral FRANKENBERGER. But some of the people you will be talking to—

Mr. STRATTON. I think this is a problem.

Admiral FRANKENBERGER. (Nods.)

Mr. STRATTON. Admiral, I think what we would perhaps like to start with is your best understanding of exactly what happened in this particular case, and your best understanding of how it happened. I think perhaps if you could just proceed with the chronology. We might interrupt you at various stages to ask for further clarification.

First of all, the sinking occurred on the 15th of May, did it not?

Admiral FRANKENBERGER. That is correct.

Mr. STRATTON. Could you perhaps proceed from that?

Admiral FRANKENBERGER. Yes. I would like to first tell you the manner in which my information came to me. As soon as the court of inquiry was set up, of course I called the President to tell him that we had recorded certain things on tape recorders the night of the sinking, that it seemed to me that we should take some action to tell all the people involved that they should write themselves notes so that they

would have fresh in memory their best remembrance of the events, and I thought it would be best if I refrained myself from calling any group together to try to reconstruct what happened, and he agreed that such would be best.

Now since the court has been here, of course, each witness has been warned, rightly, that he should not discuss his testimony with anyone else, and I too have been warned that I should not discuss my testimony with anyone except the court. This has more or less hampered me in following down various avenues to determine exactly what happened. So what I will give you is my best opinion and as long as you realize that I have not had the access to the witnesses to follow up, for example, what is published in the newspaper or in the press releases which have been going back.

Mr. STRATTON. Yes.

Admiral FRANKENBERGER. Because the court has been on an arm's length type of relationship with me, which they should.

Mr. STRATTON. Could I interrupt at that point, Admiral, and ask you, first of all, who convened the court of inquiry? Do you know that?

Admiral FRANKENBERGER. Yes. The Chief of Navy Material. The precept was signed by Vice Admiral Arnold, who is the Deputy.

Mr. STRATTON. And it began its deliberations on what day?

Admiral FRANKENBERGER. As I recall, they arrived—and I would like to check this, but they arrived on Monday and they actually began their deliberations on Tuesday.

Mr. STRATTON. This would be the Monday after the sinking? The 19th or the 20th?

Mr. RANDALL. On the 19th, you think?

Admiral FRANKENBERGER. Correct.

I have a copy of the precept, naturally, which I can make available to you, which will give the exact dates.

Mr. STRATTON. I think it might be helpful.

Admiral FRANKENBERGER. Would you like that? I will remind myself to send it to you.

Mr. STRATTON. All right, please.

Mr. REDDAN. Admiral, just as we were leaving Washington, the Navy Department supplied us with certain documents. One of them is a document, dated May 24, entitled "Comments From the President of the *Guitarro* Court of Inquiry." It is a page and a half. Then there is a page and a half document attached to that called "Summary of Testimony Given in Open Court before the *Guitarro* Court of Inquiry on May 24, 1969." Have you seen these documents?

Admiral FRANKENBERGER. The second one you mention, I believe I received this morning.

Mr. REDDAN. Yes.

Admiral FRANKENBERGER. Because I mentioned the same thing I told you to the president of the court, that I was in a position where things were going on here that because of the procedures I was not familiar with, and I had no way of going to the people to follow up any line of inquiry myself.

Mr. REDDAN. Have you seen the first one that I mentioned to you?

Admiral FRANKENBERGER. From the title you read to me, I don't believe I have. The second one, again, sounds like what I saw.

Mr. REDDAN. I see.

Admiral FRANKENBERGER. Which was given to me this morning, a summary about three pages worth.

Mr. REDDAN. Yes. Lieutenant Commander Van Metre is getting extra copies of these made, and they will be made available to you just as soon as he comes back.

Admiral FRANKENBERGER. All right.

Now, if you would like, I will proceed.

Mr. STRATTON. Yes, please.

Admiral FRANKENBERGER. On the 14th and also during the day on the 15th, efforts were made to bring the *Guitarro* to within half a degree of list and trim; in other words, to have her on an even keel within half a degree of being absolutely level.

Mr. STRATTON. At this point, Admiral, do you happen to know who directed this operation to take place? In fact, the various chains of command here is something that I think would interest the subcommittee. This might be a good point at least to begin to touch on that.

Who is it that gives an order at a particular time in the preparation of a ship for commissioning?

Admiral FRANKENBERGER. Right. Would you like me then to stop now and go into the shipyard organization?

Mr. STRATTON. Well—

Admiral FRANKENBERGER. Because I would really need that in order to explain the chain from me down through the production, power superintendent and so on.

Mr. STRATTON. You might, if the other members of the subcommittee would not object.

Admiral FRANKENBERGER. In the written material furnished you, we do have the shipyard regulations which give the organization.

Mr. RANDALL. Mr. Chairman, would it be all right just to ask him a direct question? He said efforts were made on the 14th and 15th. Your question was who gave the order. Why can't we ask him directly did he give the order, or who gave the order? Do you follow me?

Mr. STRATTON. I think this might help and then perhaps we could track it down a little bit beyond that if we feel it is required.

Mr. RANDALL. Later on.

Mr. STRATTON. Rather than going into the full table of organization of the shipyard.

Admiral FRANKENBERGER. Well, let me, if I may, try to answer your question. As to—I personally do not know who it was who asked the ship be put on even keel. I don't remember his name. I am sure it occurred in open court.

Mr. STRATTON. Right.

Admiral FRANKENBERGER. I would expect that the request to put that ship on an even keel would have been relayed to the ship superintendent, who would then direct that the appropriate shop bring her to an even keel. The appropriate shop would be 38, shop 38, the outside machine shop.

Mr. STRATTON. You said you believed that the order would have come down to the ship superintendent, did you say?

Admiral FRANKENBERGER. That is correct.

Mr. STRATTON. This would be a superintendent for this particular ship?

Admiral FRANKENBERGER. That is correct, sir.

Mr. STRATTON. Is this different from the project manager for that particular ship?

Admiral FRANKENBERGER. Yes, sir; it is.

Mr. STRATTON. The ship superintendent is an employee of the yard, I take it, a civilian employee?

Admiral FRANKENBERGER. On this particular ship, yes, he was.

Mr. STRATTON. And he would be responsible to whom?

Admiral FRANKENBERGER. He would be responsible ultimately to me, but to the assistant shipbuilding and repair superintendent, and then next to the production officer.

Mr. STRATTON. And then to you; would that be correct?

Admiral FRANKENBERGER. It would be helpful if I gave it.

Mr. STRATTON. All right.

Admiral FRANKENBERGER. Because, you see, we have a deputy commander for industrial operations at Mare Island and at Hunters Point. You remember, the San Francisco Bay Naval Shipyard is really two shipyards.

Mr. STRATTON. Yes.

Admiral FRANKENBERGER. Which adds a further complication as to any discussions of organization.

I do have a large chart which I have used once which will explain the overall organization.

Mr. STRATTON. Captain Mayer is the deputy—

Admiral FRANKENBERGER. Shipyard commander.

Mr. STRATTON. Commander

Admiral FRANKENBERGER. He is for the entire shipyard.

Mr. STRATTON. For the entire shipyard.

Admiral FRANKENBERGER. Entire shipyard. By seniority, he is next senior to me. He also is the deputy for industrial operations at Hunters Point, and as such executes the industrial work down there.

Mr. STRATTON. Well, the job of ship superintendent would involve what? Would he be the man who is primarily responsible for everything going on with regard to the completion of construction?

Admiral FRANKENBERGER. He is responsible for the coordination and direction as far as timing goes of the productive work being done as far as the construction of that ship goes.

Now again one of the items we gave you here is the ship superintendent's manual, which lists many pages of his specific duties, and then enlarges on each of them. In other words, the schedules are drawn up by our scheduling branch and approved. The ship superintendent has an input and so on. This says when certain events take place, the ship superintendent is monitoring to see that on such-and-such a day, say the installation of a pump foundation start—it is laid out that way and then pretty soon the pump should be landed on the foundation. If it is falling behind schedule, he will go to the shop supervisor who has that particular job and find out why they are not doing it on time. And then if, again, the shop fellow should say, "The pump is not here," then he probably would go to his progress man who assists him and tell him to go find out where that pump is.

Mr. STRATTON. Would the ship superintendent be located physically on the ship or would he be located somewhere else?

Admiral FRANKENBERGER. On a submarine he usually has a small enclosure right on the dock alongside the ship. The submarine is too

small for him to be aboard. On the big ships—carriers—we usually move them right aboard the ship.

Mr. REDDAN. Who was the ship superintendent on the *Guitarro*?

Admiral FRANKENBERGER. Mr. Lampson, a civilian.

Mr. STRATTON. If he is not actually on the ship, would he have someone representing him or someone deputized in his behalf who would be on the ship at all times, an assistant ship superintendent?

Admiral FRANKENBERGER. He has an assistant ship superintendent, but again, he would not necessarily be on the ship at all times, either, and his name is Mr. Strothers.

Mr. STRATTON. Now—excuse me. Go ahead.

Admiral FRANKENBERGER. Again, the submarine is so small and where all these people come in to see him and are making reports to him, he couldn't be aboard all the time. He goes aboard to view the work and so on, but his headquarters is right alongside the dock. I don't know whether you saw it when you were down there.

Mr. STRATTON. We saw a small building there.

Admiral FRANKENBERGER. A small aluminum—we call them shacks. They are not shacks, but they are about the size of this table, maybe a little bigger, where he keeps his log.

Mr. STRATTON. It is the place where we picked up our gear.

Mr. REDDAN. Yes.

Admiral FRANKENBERGER. It probably was.

Relative and apparently germane to the sinking, you asked, "Does he have a deputy?" There is a below-decks watch from shop 72 which is the service shop. Seventy-two is the shop. He is required to always be inspecting, to call into his shop headquarters every half hour, and whose duty it is for the ship superintendent to look out for fire hazards or water in the bilges or water entering the ship, and in the event he sees the latter—again, you have a copy of this instruction. I am just quoting from memory, which is about right. He is supposed to stop it himself. If he can't do that, and/or—it is one of these.

Here are the various actions available to him, and he is to call his supervisor and call again the central headquarters back in the shop group, where radio communication is available to all of the supervisors in the yard, and to the fire department, and to the cranes and so on.

Mr. REDDAN. Who was the below-deck watch in this one shift?

Admiral FRANKENBERGER. You have asked for him already. It is the one whose name rhymes with mine; Kaufenberger—I can't recall.

Mr. HUNT. Kaufenberg.

Mr. RANDALL. Is he a civilian?

Admiral FRANKENBERGER. That is correct.

Mr. STRATTON. He is a civilian and he is from shop 72, you said.

Admiral FRANKENBERGER. Yes, sir.

Mr. STRATTON. The employees who are working on the ship are from shop 38; is that right?

Admiral FRANKENBERGER. They will be from all shops.

Mr. STRATTON. Oh.

Admiral FRANKENBERGER. The reason I mentioned shop 38 is because shop 38 are the people who would be adjusting the trim.

Mr. STRATTON. I see.

Admiral FRANKENBERGER. And also measuring the trim.

Mr. STRATTON. I see. Well, now, Mr. Kaufenberger——

Mr. HUNT. Kaufenberger.

Mr. STRATTON. Kaufenberger was the below-decks watch on the second shift on the 15th of May; is that correct?

Admiral FRANKENBERGER. Yes, sir; that is my understanding.

Mr. RANDALL. They came on after 4 o'clock?

Admiral FRANKENBERGER. Yes, sir.

Mr. STRATTON. You would have another one who would be the below-decks watch on each shift.

Admiral FRANKENBERGER. During the day shift and the graveyard; yes, sir.

Mr. STRATTON. And does he have any command or control authority over the men who are working, or is he simply there as a watch against fire and water entering?

Admiral FRANKENBERGER. He is there as a watch.

Mr. STRATTON. I see.

Admiral FRANKENBERGER. And as I said, as far as the actions he should take, the first thing he is supposed to do is try to correct whatever the situation is himself.

Mr. STRATTON. Try to correct, and then notify. I think the fire departments say, "Don't try to put out the fire first, call us. By the time you get us, if you do it the other way around, it may be too late."

Mr. REDDAN. Who does he report to, Admiral?

Admiral FRANKENBERGER. In other words, he works for the head of shop 72, through the supervisors and that chain, and then the group superintendent of the service group. In this particular instance, he would also be under, you might say, the operational command of the ship superintendent.

Mr. REDDAN. Would he report a thing like this to the ship superintendent?

Admiral FRANKENBERGER. In this particular case he obviously didn't, from what I have seen. But I would say he should; yes.

Mr. STRATTON. Do you know whether the arrangement provides that when the ship superintendent is not available or not on the dock or wherever he should be, that there is someone there deputized to represent him?

Admiral FRANKENBERGER. Well as far as being there, at the end of working hours of course we set up a watch up here, right next door in fact, in the watch office. One of the officers on watch—there are three on watch—is to stay in the office all the time and the other has command duty. One is designated as production department duty officer and this is to make sure we wouldn't get three civil engineers on at one time. We have one man from production department who is familiar with production department procedures and the work going on in the production department. He is charged with inspecting new construction ships, ships out of commission, and as he makes his inspection to join up with the below-decks watch, and they go through together, pointing out fire hazards and so on.

Mr. HUNT. Does this go on daily, sir?

Mr. REDDAN. Is this a daily requirement?

Admiral FRANKENBERGER. Yes, sir. Again, the instructions for this are also in the information you have. Now I can't tell you whether on the night of the 15th this was done or whether the sinking happened

before, for the reason I have already told you. I have not pursued with any of these people lines of investigation which have occurred to me.

Mr. RANDALL. Because the court of inquiry is sitting? Is that right?

Admiral FRANKENBERGER. Yes, sir.

Mr. STRATTON. Let me make sure that I understand you. You say after normal working hours, which I take to be the first production shift at 4 o'clock.

Admiral FRANKENBERGER. That is correct; yes, sir.

Mr. STRATTON. The superintendent is no longer in the yard and his authority is turned over to a single officer who will attend a kind of telephone watch here in the headquarters building during the second and third shifts and that at some point during the course of this period he will actually walk through the yard conferring with the individual watch, below-decks watch on the various ships under construction; is that correct?

Admiral FRANKENBERGER. What I mentioned here was that on ships, our instructions as you will see when you look at them, he is required to go on these ships that are not in commission, or under construction, that is correct. So right now we have two of those alongside.

Mr. STRATTON. Right. This would be once during the——

Admiral FRANKENBERGER. A minimum watch; yes, sir.

Mr. STRATTON. During the 16-hour period, or does he stand an 8-hour watch?

Admiral FRANKENBERGER. No, the two men are here from 4 o'clock about, until 7:30 the next morning. So they do sleep. They don't stay up all night.

Mr. STRATTON. Right.

Admiral FRANKENBERGER. Now if I could go back——

Mr. STRATTON. Then except for the period from 8 in the morning until 4 in the afternoon, or 7:30 or whatever it is, there is no direct representative at the pier of the ship superintendent?

Admiral FRANKENBERGER. No, sir, I don't mean to give that impression.

I mentioned the normal hours of the ship superintendents. Now usually the ship superintendent, whenever any major event is going on, will probably go home to dinner and come back. And none of them work just 8 hours. In the instance here—again I haven't pinned them down as to why they didn't do it, but on some ships we will have three ship superintendents and we will have one on each shift. This is so as to have the supervision to make sure if there is any holdup, there is somebody in authority who will solve the problem.

Mr. STRATTON. That is what I was trying to get at.

Admiral FRANKENBERGER. Yes, sir.

Mr. STRATTON. To see if there wasn't some arrangement so somebody would be available throughout each shift.

Admiral FRANKENBERGER. Again, before the court got here, I ascertained here that we had two ship superintendents, but they were both on during the day shift. When they actually went home that night, I can't tell you. And by that night, I am referring to the 15th.

Mr. STRATTON. Now——

Mr. RANDALL. Mr. Chairman, may I go back for 1 minute and try to get some answers. You stated a moment ago and said there were officers on duty. You listed a production superintendent.

Do you mean to say there are some other officers on duty that would be involved? You went ahead to say the production department officer in charge inspects the new ships. Now was there anybody else that had responsibility here? Who is No. 2 and No. 3?

Admiral FRANKENBERGER. Right. We have a command duty officer.

Mr. RANDALL. Thank you. And who is the third one?

Admiral FRANKENBERGER. And there will be two here—you see, the command duty officer would be for the entire shipyard.

Mr. RANDALL. Yes.

Admiral FRANKENBERGER. That is both sites. It so happened that the command duty officer that night was a Commander Walker, who is a captain selectee. And again, the people who stand this watch have to be qualified to succeed to command ashore, and we do have a qualification statement. Then we man our duty office—you see, the command duty officer can stay home and be available on call.

We man our duty office with two officers who are there all night, one of whom has to be from the production department. The other one could be say from civil engineering. He could be from the administrative department.

In other words, it would not be someone who daily is working in the production department and is familiar with the production department procedures.

Mr. STRATTON. OK.

Mr. RANDALL. What about the third one? I am following the two. I am trying to see if there is any joint responsibility here in this thing.

Mr. STRATTON. The command duty officer, and you have two other duty officers, one from the production department and one from the nonproduction department.

Mr. RANDALL. I see.

Admiral FRANKENBERGER. Maybe I could explain it this way. You might have two officers from the production department. Our aim is that there be at least one.

Mr. STRATTON. At least one.

Mr. RANDALL. There may not be three?

Admiral FRANKENBERGER. There are always three.

Mr. RANDALL. That is what I am trying to get, who is the third, and what are the three?

Admiral FRANKENBERGER. The command duty officer, and then there are two here who stay in this room right next door, and they take care of people who are reporting into the shipyard. If there is a fire, they go to the fire. They have a responsibility for notifying me, if it is important enough, or the command duty officer. In other words, they are running the business of the yard out of normal working hours.

Mr. RANDALL. Do they have a title, or what is their—

Admiral FRANKENBERGER. They would be—I forget what you call them, the watch duty or the duty officer.

Mr. RANDALL. The watch officer—

Admiral FRANKENBERGER. Or duty officer.

Mr. RANDALL. Thank you, sir.

Admiral FRANKENBERGER. If I am not mistaken, I believe we have included the requirements in the information that has been furnished to counsel.

Mr. STRATTON. There was a project officer for the *Guitarro*. What is his status in relation to the ship superintendent for the *Guitarro*?

Admiral FRANKENBERGER. This is Mr. Rose, who was project manager for two ships, the *Guitarro* and the *Hawkbill*. This was a fairly recent position, which I set up in anticipation, really, of what I feel will be directed for all large projects. His duty was to act as an overall coordinator, a catalyst, if you will, for all departments involved with building the ship.

You see, the ship superintendent that is down directing it and coordinating productive work—as I mentioned earlier, we have material requirements, we have quality assurance requirements. I wanted one person who in effort would find out what is holding up the ship as far as completing on time.

If the costs started to outmatch our projections, to find out why, and to bring to the department heads' attention that more management attention was needed in whatever area was falling behind. We specifically said in appointing him that his appointment in no way interfered with the responsibility of the operating departments.

Now I would like to contrast the project managers we have here with the midway project manager we have down at the other site. That project manager has an entire organization reporting to him. He has a man who reports to him for fiscal matters, and he has the ship superintendent who reports to him.

In other words, here he is on top and he has everything he needs down below him. And in addition when we have a particularly bad problem, such as farm-out contracts, where it looks like they are all getting in trouble with the contractor not coming through, he will augment the man looking out for that with what we call an action group of people drawn, knowledgeable people, from either supply or planning, who will solve that problem.

Here, having so many new construction ships, I did not feel that we had enough talent even to set up a project manager like that, where the project manager was in charge. So in effect, what the project manager does is report to the deputy for industrial operations; he has access to me; and his job is to alert us if after going to the department heads he has not solved the problems, to let me know through the deputy, or else me directly, that this ship is in trouble either costwise or as far as making a date.

Mr. REDDAN. Admiral, I would like to show you a large blue schematic diagram, which is included in the material which you gave to us. Is this the project manager setup here at Vallejo?

Admiral FRANKENBERGER. No, sir. This is just the production officer. You see, I was referring to departments. This is the production department.

Mr. REDDAN. Yes, but I mean is this in effect, or was this diagram in effect at Vallejo at the time of the sinking of the *Guitarro*?

Admiral FRANKENBERGER. Yes, for the production department.

Mr. REDDAN. Yes.

Admiral FRANKENBERGER. Now I stress that because there are various lines coming in of a coordinative nature which are not shown on this.

Mr. STRATTON. But the project manager is in effect a coordinator not in the line of command or authority at all; is that correct?

Admiral FRANKENBERGER. That is exactly right, sir.

Mr. STRATTON. And he is there more as a kind of cost analyst, scheduler or something of that kind?

Admiral FRANKENBERGER. No, sir. They had a hard time understanding what I wanted them to do, but I finally got it around to them by saying I wanted them to look into the problems of the ship, as I would if I had the full time to devote to that one ship.

I told them what I wanted to finish on the assigned date, within the funds, and earlier if possible, because, of course, if he finished earlier, why that gives you a chance to save money also, which we all want to do.

Mr. STRATTON. But since he had no command responsibility, he wouldn't need to be represented each particular working hour?

Admiral FRANKENBERGER. That is correct, sir.

Mr. STRATTON. This was a job to be carried out in normal working hours?

Admiral FRANKENBERGER. He has no line of authority or responsibility.

Mr. STRATTON. Now the other question I wanted to ask was what about the prospective commanding officer? What kind of authority, if any, does he have in this situation?

Admiral FRANKENBERGER. He has none, in this situation. This is prescribed by the Navy regulations, that as far as the ship goes, until she goes in commission he has no commission.

Mr. HUNT. Is that Commander or Captain Collier?

Admiral FRANKENBERGER. That is correct, Commander Collier.

Mr. HUNT. Commander Collier.

Mr. STRATTON. Is his responsibility, what? More advisory and consultative as far as the production people are concerned, or is he actually there simply to familiarize himself with the ship so that he will be better prepared at such time when he takes over full command?

Admiral FRANKENBERGER. It is that and more. Now on the submarines, especially nuclear submarines, unlike surface ships, we do not run the machinery. We do not light-off the reactor. The ship's crew does that. We are not qualified.

As the ship construction progresses and we finish a system—for example, the auxiliary salt water system, for one—when we finish that, we have tested it and the ship witnesses the test, we have a formal turnover where that ship then, the ship's force will take over the auxiliary salt water system and sign for it. And we have an instruction out, fairly recent, which says the ship's force goes through that. On each valve they put a blue tag and they will move the piping with a blue tape, and the significance of that is that that then belongs to the ship's force and the shipyard can no longer operate, open or close, any of these valves without the ship's force standing there.

The best thing of course, as we say in the instructions, is that the ship's force will operate it. So as the ship is being built, he is gradually taking over more and more systems.

But again, Navy regulations say until it is in commission, as I recall, that he doesn't have the responsibility.

Now when the fissionable material goes aboard, he signs for that. Again, he is the only one, he and his crew, with the training to operate the reactor.

Mr. STRATTON. But he doesn't have any say over the installation of the reactor, does he?

Admiral FRANKENBERGER. Let me say that he—I have nothing in writing that says he does, but he certainly does have some say because I meet with him on nuclear matters once a week. I meet with all the commanding officers once a week and I have a separate meeting with the prospective commanding officers or commanding officers of nuclear ships, at which time he is free, and they do come up with comments on the rate of progress as far as pipe joints, on the rate of completing installation checks, on supervision, of anything, anything affecting the reactor.

I listen to them and if, in my opinion, he has something that warrants our taking action or changing something, I change it.

Mr. STRATTON. Let me ask one other question here. We are getting far afield, but I think it helps the groundwork for trying to understand the relationship.

It is my understanding that there is a somewhat separate set of rules and procedures that are applicable within a shipyard for the nuclear work which are perhaps different from the same rules and procedures for nonnuclear work. Could you explain how that works here, please?

Admiral FRANKENBERGER. Yes. This is a fairly recent change. In the complete implementation of a change to the standard shipyard regulations—now, until August 3 at this shipyard, our nuclear power superintendent, in addition to being the nuclear power superintendent, was the local representative of the naval reactors office. On August 3, a separate naval reactors residence office was set up, and the previous nuclear power superintendent moved over into that billet. And this, in effect, brought us into parallel operation with the setup in all civilian yards, where the shipyard has a nuclear power group, division, department, whatever they call it, and the naval reactors office has their representative there who provides advice to the president of the company—in my case to the commander of the shipyard, as—this is a third party's view of how we are doing as far as safety goes, and meeting the requirements of naval reactors.

The nuclear power superintendent has the responsibility for any technical aspects of the reactor work. The work itself is done by the department responsible. In other words, the planning department will write the job orders based on technical information furnished by the nuclear power division and the production department would carry out the productive work, put it together.

Mr. RANDALL. Would it be possible at this time, in view of certain other conversations we had earlier—could you define “technical” for us? That seems to be an important point. What is technical and what is not technical? Because if it isn't technical, he would have nothing to do with it. His emphasis was on the technical, but does he have any other area of authority, or is it confined to technical. If so, what is technical?

Admiral FRANKENBERGER. All right. I see. Let me think now if I can give you an example. Well, the technical would be, for example, suppose we had a heater which had to heat water to a certain temperature, and this heater maybe brought it up—this is a simple one.

Mr. RANDALL. Yes.

Admiral FRANKENBERGER. But say one degree lower than the specifications. The technical man would decide, is this a fatal mistake? In other words, he would know why that water was being heated up to that temperature—we are getting into an awfully simple one—but would make the technical resolution whether that was satisfactory, if it was within his power locally to do it, or would say, "This must be done," and therefore go back and take whatever steps are necessary to meet the specification.

Now I don't want to give any impression on, say, nondeviation plans, that we deviate without permission, but sometimes something will come up and we will go back to either the lead yard or to naval reactors and say, "Here is a condition, and we think it is all right," and request the technical approval to either leave this as it is, or not change something that might have come in a little bit off spec.

For procedures, as far as safety goes, the nuclear power division will write up work instructions which define in detail all the procedures, to say put in the fuel.

Mr. HUNT. He is the man, Admiral, who actually would define and make corrections in the technical manual pertaining to that operation?

Admiral FRANKENBERGER. Certain chapters of the nuclear power manual are prepared and written as his responsibility, after a recent audit here by Admiral Rickover and the people from O-8, which is the Naval Reactor Branch in the Naval Ships Systems Command that we should have other departments with prime responsibility write the chapters, with the nuclear power division's concurrence. So that is a little different from what you said, sir.

Mr. STRATTON. Do I understand that whenever you have some kind of nuclear activity, either an installation as you indicate, or perhaps an overhaul, that there are also rather detailed checkoff lists that have to be followed?

Admiral FRANKENBERGER. That is correct, sir.

Mr. STRATTON. And does this—what would you call him, now, the local representative of the Naval Reactors Branch—is he the man who is in direct charge of whether these checkoff lists are followed, and whether they are adhered to, and follows the procedure?

Admiral FRANKENBERGER. No, sir; he is not. I am.

Mr. STRATTON. You are.

Admiral FRANKENBERGER. And he is here to help me. It is someone who is not responsible for the work who represents, again, the Naval Reactor Branch. He is here to advise me on how well I am doing, things that I wouldn't know. And he has been very helpful to me.

Mr. STRATTON. Would you say that the requirements for precision, quality control, zero defects, or whatever you want to call it, with respect to nuclear work are more precise and perhaps more effective than those that apply to nonnuclear work?

Admiral FRANKENBERGER. I would say they are more precise, and because of the extra steps needed to insure that this precision is met, there is more supervision and therefore it is more effective.

Mr. STRATTON. Well, Admiral, I have interrupted you here long enough on the chronology.

Admiral FRANKENBERGER. I would like to, if I may, go a little bit further on this.

Mr. STRATTON. All right, please do.

Admiral FRANKENBERGER. As to when I arrived here, in my opinion we were not doing too well in the nuclear area, and by this I mean we were falling behind in our dates. Our rate, for example, of joint completion in the nuclear plant was falling behind every week, getting further and further behind.

Our adherence to these precise requirements was not all it should be, and I knew that this being a nuclear building yard, we could never continue, we could never—you see, we were not awarded another submarine under the new building program, and I wanted to correct this. So I have taken perhaps some rather unusual steps as far as concentrating management attention in the nuclear area.

I think I was successful in this, in that at our—let's see, we were audited about once a year by the Naval Reactors Branch. We were audited just before I arrived, in July of last year, and about a month ago I guess we had our second audit, while I was here. There had been improvement noted.

Our joint rate, pipe joint completion, where we had been going about 90 a week, and requiring maybe 190 a week, by this management attention we went up to 250 a week, which means that we are going to finish these ships on time.

We had been forced to go in—we, I will say the shipyard—with predictions of delay, which is in my opinion unthinkable. Now, again, on the *Guitarro* we had gone back, and because of our success in solving these problems, moved her back 1 month. You see her official date was still November, but we had gone in with something that had not been fully implemented, saying it was going to be January. I had just gone in and said, "Back that up to December and stand by, because we are going to finish it in November."

Similarly, *Hawkbill* had a bad prediction, which had already gone in. I was backing that down, every one along the line, except the last one, the *Drum*, which is the last one we have. I would be pleased if it becomes germane to go into why I put each of these additional people into the jobs I did. It has been successful. That is why when I said that as far as the production department goes, that is correct.

But, for example, in the nuclear area I have set up a civilian who not only reports to me, but also reports to the production officer and who for the production officer is in charge of all nuclear productive work.

Now it is his efforts, plus several other people, that have again brought us back so we are doing things not only right, but on time.

Mr. STRATTON. Let me just ask this: With respect to nuclear operations, supposing you are installing a core, for example, or something of that kind. Do you have some particular individual who is there while the operation is going on to make sure that everything is being carried out correctly?

Admiral FRANKENBERGER. Around the clock, that is correct. In fact, on all these nuclear operations, we bring the people in early and we have a plan-of-the-day meeting—well, first the supervisors come in early and they meet with the supervisors from the last shift, complete turnover, and then new people come in, who are going to work, are brought in, and are told what they are going to do that day.

It is a plan-of-the-day meeting in effect for each shift. Now, again, as you asked me and as I confirmed, the requirements are more rigid in this area than in the rest of the ship, and for good reason. I mean, the way I look at it, we are trying for perfection, and I agree with that, and the only way you can get anywhere near it is by doing just what we are doing in this area.

Now, it is expensive, but needed, and you can see that by comparing the overhead of our two sites; you see our nuclear overhead we apply to Mare Island and we don't do it down at Hunters Point.

Mr. STRATTON. Right. Would this officer be still a member of your organization who is responsible there around the clock while one of these things is going on, or is he a part of the Nuclear Reactors Office staff.

Admiral FRANKENBERGER. Mine.

Mr. STRATTON. Part of yours.

Admiral FRANKENBERGER. Yes.

Mr. STRATTON. Well, I don't have any further questions on that point as of the moment. I just wanted to try to get some idea of the command relationship. Perhaps we could go back to the chronology there where you said the ship superintendent had directed that the ship be prepared for trim, as I remember.

Admiral FRANKENBERGER. I didn't quite say that, sir. What I said was that I would expect that the ship superintendent had been requested to bring the ship to an even trim. The reason I have not verified that is that he has been a witness—

Mr. STRATTON. Right. This would be someone—in other words, he would have gotten an order from someone higher up in the echelon, an assistant repair superintendent or the production officer or somebody along the line.

Admiral FRANKENBERGER. No, sir; not to bring the ship to an even trim. Anyone could ask him to do this, and it is not at all unusual when you are calibrating something to bring the ship to an even trim.

Mr. STRATTON. I see. All right.

Admiral FRANKENBERGER. So the way—and as I again reconstruct this in my mind, it is almost like every other submarine sinking. A series of events gets started, and just one mistake leads to another, if I know what the facts are.

On the afternoon of the 15th, the day shift went down with a gunner's quadrant. I have one of these, if you would like to see it.

Mr. STRATTON. Yes, I think we would.

Admiral FRANKENBERGER. Would you?

If you don't mind, I will ask the sergeant to go get it.

Mr. STRATTON. Fine.

Admiral FRANKENBERGER. Because I think this is germane.

Mr. STRATTON. This is the one we were trying to see.

Mr. HUNT. This is the one we were looking for on the sub, the 665.

Mr. STRATTON. Mr. Randall wanted to see what it looked like.

Admiral FRANKENBERGER. I am getting this from reading the papers, honestly, what went on on this. But I gather that during the afternoon some shop 38 people went down to check to see what the trim was so they could take it off. And the way—I am an engineer, and so I took it on myself. So the way you do it is you put this on a surface that you know to be flat, parallel with the center line of the ship,

and then put the bubble in the center. Then you look down here and you read it.

Now unfortunately this table is absolutely level, so you can't see the problem.

Mr. STRATTON. It is a little tough to read, anyway.

Admiral FRANKENBERGER. It is. But let me put this under, so you know now this end is high. I want to make the rough adjustment for your table.

Mr. STRATTON. Right.

Admiral FRANKENBERGER. Then the vernier brings it to the middle. Then if you look at the zero on this scale, it is below the zero on the reading scale. You see, this goes from below zero up here to 90, about 100°.

Now it appears to me that somebody made a mistake in reading this. You notice that is below it. But you saw how I did it, I raised this end.

Mr. STRATTON. Right.

Admiral FRANKENBERGER. But it reads below. So what that really—by reading below, what that means is that this end is high. So whatever you do, you have to do something to push this end down.

Mr. STRATTON. Yes, I can see that.

Mr. RANDALL. Well, essentially, Admiral, in its lowest basic terms, it is nothing in the world but just a plumb rule, a carpenter's level; is that correct?

Admiral FRANKENBERGER. Yes, sir.

Mr. RANDALL. Is this the actual one they used, or one just like it?

Admiral FRANKENBERGER. One like it.

Mr. RANDALL. The possibility at least existed that instead of watching the bubble there, they were taking this reading off of the side and perhaps they didn't know how to interpret it or read it, would you say that is a possibility?

Admiral FRANKENBERGER. Not quite. You see, the day shift came in and said the bow—and again I am getting this from the paper—the bow is 2° low.

Mr. RANDALL. Day shift?

Admiral FRANKENBERGER. The bow is 2° low.

Now the swing shift came in, that is the second shift, and they went down and checked it and they read this as the bow was 2° high. Now you can see what you do to correct those that are different.

Mr. STRATTON. Right.

Admiral FRANKENBERGER. One of the questions you asked us is where was the water in the various tanks. This was in the message that came out, and this is one thing that the court of inquiry is trying to find out. We have been unable to establish beyond a reasonable doubt the exact status of fluids in all tanks. But we do know that the main ballast tanks 1 and 2 had been filled.

Mr. STRATTON. As of when?

Admiral FRANKENBERGER. This was as of—

Mr. STRATTON. The swing shift coming on.

Admiral FRANKENBERGER. They were already filled; yes, sir.

Mr. RANDALL. Before the swing shift came?

Admiral FRANKENBERGER. Yes, sir. This again is to the best of my knowledge.

Mr. STRATTON. Right, we understand.

Admiral FRANKENBERGER. I realize I am under oath and am telling you what I believe to be true.

Mr. RANDALL. That is all right.

Mr. STRATTON. Fine.

Admiral FRANKENBERGER. Now, you can see—I have a better chart perhaps than this. But one and two are here, if you will. And the people, in order to bring the bow down, were putting water into main ballast tank 3.

Now you notice this—this is why until a couple of days ago the board was pretty sure they knew what happened, and then they took somebody's testimony that indicated this, that somebody put some water from the auxiliary tank back into the after trim and that somebody tried to pump from the after trim up to the forward trim.

Now, again, the court will have all this available to you, or brief you on it. But there had been some changes in the internal water. Now, as this—

Mr. STRATTON. Those would have been made by the normal internal methods of shifting ballast?

Admiral FRANKENBERGER. With the ship systems; yes, sir.

Mr. STRATTON. Yes.

Admiral FRANKENBERGER. Now again, I am pretty sure that the ship had not taken over the systems yet, because I do feel that the ship would not have done this without a better check of what our drafts were and so on, so sometime during the—before the lunch period, which starts at 8, on the second shift on the 15th, our below decks watch was up here at this opening, which is a manhole in the sonar tank. I call this the tank, outside. This is the sonar sphere. They noticed water washing in.

Mr. STRATTON. They were actually below decks at that point?

Admiral FRANKENBERGER. Yes, sir. This is a chart of the whole ship. Here he apparently told one of the people from shop 36, "Water is coming in here, you ought to do something about it."

Mr. REDDAN. Can he tell that to the people who were running the hoses up in the vent; do you know?

Admiral FRANKENBERGER. From reading the little I have seen, why he told one of them, yes, and there is some discussion about whether he told both or one. Again, the man is out here waiting now, so I guess he will be able to tell you directly.

Now this was empty. It is alleged that the 38 man—by this I was referring to the sonar tank—said, "That is free flooding, it doesn't make any difference." Well he is correct.

Mr. REDDAN. What does that mean, Admiral?

Admiral FRANKENBERGER. In that in order for the sonar to work you must have a liquid coupling between it and the water outside. So when you do go to sea, this is flooded. In fact, you have holes here in this bulkhead at frame 11, to let the water in. So that as your transducer sends out a pulse, there is a path for it to follow, right through this water out to the sea water.

Mr. REDDAN. When you are trying to establish the trim of the vessel, it would make a difference if this were empty or full, would it not?

Admiral FRANKENBERGER. Correct, and it was emptied you see, because we were working on the sonar sphere.

Mr. STRATTON. And at that time it wasn't really free flooding?

Admiral FRANKENBERGER. Correct.

Mr. STRATTON. Yes. The water wouldn't stay up to the waterline, in other words.

Admiral FRANKENBERGER. That is correct.

Mr. STRATTON. Yes.

Admiral FRANKENBERGER. So there is mistake No. 2.

Mr. STRATTON. Right.

Admiral FRANKENBERGER. It did make a difference, because if you get water in there where there is none now, it pulls it down. So this manhole cover was the farthest forward. Water lapping in around 8 o'clock, with people gone to lunch, and this man is still aboard—no, I think he went back to the other ship, which is located about 50 feet behind, the *Hawkbill*, on which you were aboard. So as this continued to drip in, lap in, you get lower and lower, and pretty soon you have a steady stream there. You then come back to the construction patch, about 20 by 30 inches, which you might have seen.

Mr. STRATTON. Yes.

Admiral FRANKENBERGER. Which was used for access. This had a ladder down it. That manhole was rather small, so people were actually using this to go down. Then after that it would go into the line locker and then into the hatch, and once you start going in there, it couldn't be stopped because, as you saw the lines and so on, there is no way to close the hatch at that time.

Mr. STRATTON. What I think you didn't say, but I believe you meant, was that when the night shift came in, when the swing shift came on, they read the quadrant as indicating that the bow was 2° too high.

Admiral FRANKENBERGER. Correct, sir.

Mr. STRATTON. And they then took a hose, a fire hose, did they not, and—

Admiral FRANKENBERGER. Whether it was a fire hose—

Mr. STRATTON. Some kind of a hose.

Admiral FRANKENBERGER. Whether it was water or not, a hose.

Mr. STRATTON. A hose, and poured water into the access vent of one of the ballast tanks.

Admiral FRANKENBERGER. That is correct.

Mr. HUNT. Ballast tank No. 3.

Admiral FRANKENBERGER. Correct.

Mr. STRATTON. And this continued from the time that they came on board until the time the ship actually went under.

Admiral FRANKENBERGER. They said that they had, reading again—I hate to keep doing this, but I have read this in the paper—

Mr. STRATTON. Sure.

Admiral FRANKENBERGER. That they turned it off before they went to lunch. So the hoses were not running.

Mr. STRATTON. I see.

Admiral FRANKENBERGER. You have to verify from the people who were doing it.

Mr. STRATTON. All right.

Admiral FRANKENBERGER. But before lunch, again my reading of what has been published, the below-decks watch said there was water lapping at this [indicating].

Mr. REDDAN. This diagram, Admiral, which is dated March 4, 1968, and then updated as of May 15, 1969: How do you determine that this was the status of the tanks as of May 15?

Admiral FRANKENBERGER. I am not sure whether you have this in your information there, but as soon as the ship was in drydock we sent a team, quality assurance inspectors, aboard to ascertain the position of valves and, to the best of their ability, the status of water or fluids in the tanks, in the various tanks.

Now where we have had difficulty is trying to reconstruct the movement of fluids which occurred before the ship sank. Now this actually has been updated. What it says is it is the conditions at 1730 on May 15. I think if you want to go into details of this, the same technical man that we have made available to the court, that prepared this, Mr. Ernest Nagy, who is a naval architect, could go into this and the various assumptions made.

Mr. REDDAN. Do you know whether he prepared this from testimony before the court?

Admiral FRANKENBERGER. Being an expert witness, he was no doubt—I can't say this from my own knowledge, but it would seem to me that the court would tell him what somebody had testified and then get him to correct his drawing. When this originally came up, it did not have these arrows on it.

Mr. REDDAN. Showing the ship from fore to aft?

Admiral FRANKENBERGER. That is right, so that must have developed during the testimony. Whether it was open or closed session, I could not tell you.

Mr. STRATTON. Do we have an exact time when the sinking took place, as near as you can determine?

Admiral FRANKENBERGER. It was about 8:25.

Mr. STRATTON. It was 8:25.

Admiral FRANKENBERGER. I would say approximately.

Mr. STRATTON. Well now, on this summary that we got here, that you referred to, there is a paragraph——

Admiral FRANKENBERGER. Wait. I better correct that because it was still afloat when people came back from lunch, which was 8:30. So I guess it was 25 minutes after they came back, rather than 25 minutes after they left, which would be about 8:55 approximately.

Mr. STRATTON. I see. That is what I wanted to check on, because it said:

Sometime during shift lunch hour starting 2000, sonar dome apparently filled sufficiently through access hatch to pull the bow under and flood ship through forward escape trunk. Water entry through this trunk observed at 2030 by returning workmen.

I assume that that meant that while the water was coming through, the ship still was afloat?

Admiral FRANKENBERGER. Well——

Mr. STRATTON. At 2030.

Admiral FRANKENBERGER. Well, actually people back aboard, some people went back aboard after they came back from lunch.

Mr. STRATTON. Was anybody, to your knowledge, on the ship during the lunch hour?

Admiral FRANKENBERGER. I can't say. I don't know.

Mr. STRATTON. Is it not true that most of the supervisory personnel, the uniformed personnel were actually attending a dinner at which Assistant Secretary Hittle was speaking that night, and therefore the number of supervisory personnel or uniformed personnel were practically nonexistent at this particular time?

Admiral FRANKENBERGER. I would say as far as the more senior people went. If you don't mind my commenting, when I saw this in the newspaper about the Navy brass was wining and dining the Secretary, I thought had this not happened and had we not gone, we would have had a similar statement possibly in the press saying Navy brass ignores Navy Secretary.

But to answer your question, sir, the senior people were invited to this. I was there and most of the department heads, most of the group superintendents who were the top civilians in the yard.

Mr. STRATTON. Well, would you say there was anybody there who normally might be at dockside at 2000 hours?

Admiral FRANKENBERGER. The reason I hesitate is because I might have been there. I sometimes go walking around the yard to get a first hand view of how things go. Whether I would have that night, I couldn't tell you. And similarly the top supervisors come over here at night just to come over and see how things are doing.

Mr. STRATTON. You maintain—

Admiral FRANKENBERGER. So far as being scheduled or having this in their job to be there, I do not believe that the people that were in the dinner in the normal course of events would have been required to have been there by their duties.

Mr. STRATTON. Is there any kind of police officer aboard these ships on a 24-hour-a-day basis to prevent sabotage?

Admiral FRANKENBERGER. Yes, sir. He is for that type of security that no one goes aboard the ship unless he has a correct pass, and this is around-the-clock watch.

Mr. STRATTON. And actually, as we saw with the *Hawkbill*, that pose would have been maintained ashore at the head of the bow rather than on the ship?

Admiral FRANKENBERGER. That is correct, sir.

Mr. STRATTON. As far as you know, that was manned during that lunch hour, is that correct?

Admiral FRANKENBERGER. Yes, sir.

Mr. STRATTON. I think, Admiral, we have perhaps a number of other questions that we would like to ask you, but I think we have gotten at least a general idea of what we wanted, and perhaps it would be well to talk to some of these people who are waiting.

Admiral FRANKENBERGER. All right, sir.

Mr. STRATTON. I would assume we wouldn't need you certainly any further tonight.

Admiral FRANKENBERGER. I am not going anywhere so—

Mr. STRATTON. I mean I don't think we need to have you stay on our account.

Admiral FRANKENBERGER. Well, again, my quarters are right across the street.

Mr. RANDALL. What is his name, Kaufenberg? How about Lampson, a material witness, you think, Mr. Chairman.

Mr. REDDAN. Yes.

Mr. RANDALL. And Mr. Rose?

Admiral FRANKENBERGER. Mr. Rose is the project manager.

Mr. REDDAN. Yes.

Mr. STRATTON. I would think the two people I would like to talk to would be the watch stander, who was Mr. Kaufenberg?

Mr. REDDAN. Yes.

Mr. STRATTON. And the two fellows who were pouring the water down the hatch.

Mr. REDDAN. I think both of them are standing by; are they not?

Admiral FRANKENBERGER. Mr. Martinez, who is the group superintendent once removed—maybe several removed from Mr. Kaufenberg, the one who signed the instruction saying "Here is what your duties are."

Mr. STRATTON. I see.

Admiral FRANKENBERGER. I thought you would want to see him. Then I believe one is Mr. Kaufenberg, and I don't know the other gentleman.

Did anybody give you a list of who we had?

Mr. REDDAN. No. I gave Commander Van Metre the list. I couldn't pull out the names because they weren't identified in the material that I had.

Admiral FRANKENBERGER. Right.

Mr. RANDALL. Did Lampson have a swing shift counterpart? Lampson was obviously the daytime man in the little house there. Did he have somebody on duty at night, instead of the graveyard? Those are the two other shifts? Particularly the swing shift.

Mr. STRATTON. Mr. Lampson is the police officer?

Mr. RANDALL. No, sir. The ship superintendent.

Admiral FRANKENBERGER. To my knowledge, no, sir.

Mr. RANDALL. And there is no one to your knowledge in his place?

Admiral FRANKENBERGER. No, sir.

Mr. REDDAN. Mr. Chairman, I would like to ask the Admiral just one question. In this summary of the testimony that was given to us by the Navy Department, in referring to your testimony, Admiral, it says that you stated you had not been informed of the instructions which divided the below-decks security watch between the SSN 665 and SSN 666 prior to the incident under inquiry. Should that have been normally brought to your attention?

Admiral FRANKENBERGER. No, sir.

Mr. REDDAN. Those instructions are given at a lower level. At what level are they established?

Admiral FRANKENBERGER. This was addenda to an instruction issued by the group superintendent of the service group, Mr. Martinez. And what this said is that effective on the day of launch of *Hawkbill*, the below-decks watch would man both of them, and gave a telephone schedule when he could call into the shop central.

Mr. RANDALL. Just one, if I may, Mr. Chairman. The nuclear superintendent that you say inaugurated this change—you made the change yourself when you came here—as to this particular sub, was who, what was his name?

Admiral FRANKENBERGER. Could I first correct a misconception I must have given you? The change from the nuclear superintendent over to the Naval Reactors Office was not my doing.

Mr. RANDALL. Yours was Rose. Rose was your man?

Admiral FRANKENBERGER. Rose was one of the people I put in; yes, sir.

Mr. RANDALL. Yes.

Admiral FRANKENBERGER. The setting up of the Naval Reactors Office had been set up some time before and the date set. It just so happened I relieved on August 1 and on the 31st this office was set up.

Mr. RANDALL. The thing I am not clear about is that man, that nuclear ship superintendent who was in charge. You went into detail as to certain things that could not be done any longer, except by his orders. Even though none of the nuclear material had gone into ship, he was still in charge. Is this true or not?

Admiral FRANKENBERGER. Let me make this clear. You see, earlier when I was talking about the technical responsibility of a nuclear power superintendent, that is who I meant, the nuclear power superintendent, who in effect is the technical man belonging or working for me for all nuclear matters in this shipyard.

Mr. RANDALL. Did we ever get his name? I don't recall it.

Admiral FRANKENBERGER. This is Commander McGaughy. His output is paper. Now working for the production officer is an assistant superintendent (nuclear) working for the production officer. Working for him is an assistant for nuclear matters, are nuclear ship superintendents. They do not work for the nuclear power superintendent. You see, I might have given that impression earlier. They work for the production officer.

Now the change I said I put in was a civilian who reports to the production officer, who for him was in charge of the operations of all nuclear matters in the production department.

Mr. REDDAN. Would the nuclear people have had any responsibility or control over the particular function or the particular operation which led to the sinking of the *Guitarro*?

Admiral FRANKENBERGER. No, sir.

Mr. REDDAN. They wouldn't have had anything to do with trim or ballast tanks or anything of that sort?

Admiral FRANKENBERGER. They would have had to do with—in fact, they did originate the request to have the ship brought to even keel. There needn't have been a nuclear power person to request that. The fire control man could have wanted to line something up and requested that it be brought to an even keel.

Mr. REDDAN. But in carrying out the operation, the nuclear people had nothing to do with the way in which that was done, is that correct?

Admiral FRANKENBERGER. That is correct, sir. I hope I made it clear, the nuclear power superintendent, his product is paper, technical. Now this doesn't mean he doesn't go down on the ship to see how the ship is doing, but the people who are making the installation work for production. Now, when we are handling fuel, there will be engineers from the nuclear power division down in case a technical question comes up. They are on the spot to answer it.

Mr. RANDALL. For those who are nonsailors?

Admiral FRANKENBERGER. Yes, sir.

Mr. RANDALL. You are talking about the trim. You are not talking about a carpenter finishing a room or something like that? You are talking about bringing this ship to an even keel.

Admiral FRANKENBERGER. To make it level.

Mr. RANDALL. I see.

Admiral FRANKENBERGER. And when we talk about trim, we mean fore and aft. And list would be side to side.

Mr. RANDALL. That is good.

Mr. STRATTON. Well, as I understand it, the test that needed the ship to be in trim, fore and aft, had to do with the nuclear reactor, and therefore the nuclear people requested that the ship be brought to trim. That is right, is it not? Isn't that what you just testified?

Admiral FRANKENBERGER. Yes, sir.

Mr. STRATTON. And is it not also true that there was at the same time some kind of work or test going on on the sonar dome which required that the hatch be off of the sonar dome, a condition that was somewhat unusual, since ordinarily that plate or hatch is always secured, is that right, too?

Admiral FRANKENBERGER. It wasn't this necessarily was unusual. I did explore this avenue because it seemed to me it was worth exploring, and the Court did not. In other words, we had one of the sonars which was late coming and it occurred to me that had that not been late, we might have been in the sonar dome and it might have been closed up. But that is not the case. We were working on the sonar dome the day before, the men had been in checking the transducers. This particular day they were checking the preamplifier and they could have been doing that regardless.

Now, since they were using—here is another of the events. Since they were using the access that had been cut, the 20- by 30-inch rectangular hole, it is really—why didn't somebody close up the manhole which was farther forward and closer to the water? As I said earlier, when you look over these things, they are right along the line, and it seems inexorable if somebody can do something wrong or not do something wrong, they will start or won't, as the case may be.

Mr. STRATTON. One of the reasons I was trying to explore the difference between the nuclear and the nonnuclear was, as I understood it, you had a request that the ship be in trim. Those who were responding to this particular request, or who had directed the request in the first place, had nothing to do with fixing the sonar dome. So they began to undertake the trimming of the ship without apparently being aware of the fact, since there seemed to be no close coordination between what the nuclear side was doing and what the nonnuclear side was doing.

They proceed with this at the very time that the plate was off of the sonar dome so that any slight deviation or any error in the trimming of the ship might create a greater flooding hazard than would otherwise be the case. And my question is, Was there a breakdown of communication between these two groups of individuals, or between one individual who should have said, "Well, look, this is a bad time to trim the ship because we have got this other thing off. You better wait until we finish this up and put the dome back on, put the plate back on, before you start trimming"?

Admiral FRANKENBERGER. Yes, sir. In my opinion, as I mentioned, any one of the engineering groups, or people working on the periscope, could have asked for even trim and list. And when they got it would depend on when the ship superintendent could make the ad-

justment. So I think the fact that it was nuclear power that asked for this really has no bearing.

Now I agree—

Mr. STRATTON. I see the point.

Admiral FRANKENBERGER. No, in the nuclear power we are much more precise on watching every single thing we do because of the nature of the nuclear reactor, and I agree with this.

Mr. STRATTON. Right.

Admiral FRANKENBERGER. In my opinion, where the breakdown came is whoever was putting this water in didn't respond to the man who was on there for the very purpose, and if you read—and I was quoted in the press on this too—if you read the instructions from Mr. Martinez, it was almost as though he wrote them after the *Guitarro* went back, because of his stress where they were looking for water and where water could enter the ship.

Mr. HUNT. That brings me down to something I want to get straightened out. Admiral, I want to put this situation just in capsule form, Starting at 1900 hours when the security watch first observed that they had a low freeboard forward and the water was splashing across the sonar dome access hatch. That was his job to observe this. That was at 1900 hours. He didn't report this to anyone, but again at 7:45, 1945 hours, he again observed this same situation, and then sometime during the shift lunch hour, starting at 2000 hours, this report says the sonar dome apparently filled sufficiently through the access hatch to pull the bow under and flood the ship through the forward escape trunk. The water entry of this trunk was observed by returning workmen at about 2030 hours. So that the 665 submarine sank at about 2055.

Now in discussing the matter, I believe you said that this gentleman's responsibility was to call in every half hour.

Admiral FRANKENBERGER. Yes, sir.

Mr. HUNT. Well, who was he to call in to and why didn't he?

Admiral FRANKENBERGER. I don't know that he did not sir.

Mr. HUNT. You don't know that he did not?

Admiral FRANKENBERGER. Yes, sir.

Mr. HUNT. Is there a possibility he did, then?

Admiral FRANKENBERGER. Oh, I am sure he did.

Mr. HUNT. Yes?

Admiral FRANKENBERGER. Because, again it is too bad I don't have the instruction because it is emphasized in the instruction. It is for his protection.

Mr. HUNT. Yes.

Admiral FRANKENBERGER. If they don't hear from him on the half hour, they are going to come looking for him.

Mr. HUNT. They will look for him?

Admiral FRANKENBERGER. Yes.

Mr. STRATTON. That is a good question.

Mr. HUNT. This to me is the crux of the matter.

Admiral FRANKENBERGER. Yes, sir.

Mr. STRATTON. Well, let's save that until he comes in. If you don't have anything else—I mean we will be able to talk to the admiral again.

Mr. RANDALL. Just this one, the 20-by-30-inch hole.

Admiral FRANKENBERGER. Yes, sir.

Mr. RANDALL. That was actually cut there. On this one now, we have learned the lesson on this 666.

Mr. STRATTON. You mean the sonar hole?

Mr. RANDALL. Yes. Sonar hole.

Mr. STRATTON. It looks like a pipe.

Mr. RANDALL. We have actually learned something from experience. We now put a cofferdam on other ships?

Admiral FRANKENBERGER. This again—if you want to talk to some of the people, this had a cofferdam over it also.

Mr. RANDALL. On the 665?

Admiral FRANKENBERGER. Yes, sir. And this was removed. Now this I have. I don't remember all the details, but this is what someone wrote up when I asked them to write down their remembrance of what went on. This is a shop 11 man.

Mr. REDDAN. Who would that be, Admiral?

Admiral FRANKENBERGER. I don't remember his name, but I have it in my office.

Mr. RANDALL. That is all, Mr. Chairman. I won't have any more questions at this time.

Mr. STRATTON. OK.

Admiral FRANKENBERGER. If I may, Mr. Chairman, add one thing?

Mare Island has built 70 Polaris submarines, five attack submarines, and we have nuclear—the three to go. Now we can always learn something. I am not saying that. But as far as having successfully built this series of nuclear submarines, all of which have gone through this particular time in their construction, something went wrong here, there is no doubt about it, and one of the first things I did was to go and see if in our instructions we left something out. Looking at them, it looks like they are covered. Something went wrong, or the ship wouldn't have sunk. That is why the court of inquiry is here, so to try to pin down who is responsible for this.

Mr. STRATTON. Right.

Mr. REDDAN. Is this cofferdam a usual device?

Admiral FRANKENBERGER. When you are near the water, when you have something near the water; yes, to prevent water coming in.

Mr. REDDAN. Who would have had authority to remove that?

Admiral FRANKENBERGER. I would say it could have been the shop—it would have to be shop 11 who would remove it, the shipfitters, because of trade cognizance. The word to remove the coffer on a job order, say take this off, so we can go in and do something on the sonar.

I haven't given you a very good answer to this, but any job order written for it would say to install and remove it. It could have been—I don't know to my own knowledge who would have said take this off.

Mr. REDDAN. To whom should we talk to get the answer?

Admiral FRANKENBERGER. I think the man from shop 11, whose name I will furnish you—maybe the supervisor on shop 11, whose remembrances I was reading the other night. This is where I noticed this. I will furnish that.

Mr. REDDAN. All right.

Mr. STRATTON. Shall we take a 5-minute break, and then we will get the next witness.

Mr. REDDAN. Yes.

Mr. STRATTON. Should we take Mr. Kaufenberg first?

Mr. REDDAN. I think so.

(A short recess was taken.)

TESTIMONY OF RICHARD LEE KAUFENBERG, BELOW-DECK SECURITY WATCH, SAN FRANCISCO BAY NAVAL SHIPYARD, MARE ISLAND, VALLEJO, CALIF.

Mr. STRATTON. Mr. Kaufenberg, we appreciate your being here. This subcommittee has been designated by the chairman of the House Armed Services Committee to look into the circumstances surrounding the sinking of the *Guitarro*, and we are interested not from the point of view of who to blame or who not to blame, but to try to find out what happened and to see what can be done in the future to prevent any recurrence of this. In order that we might have an accurate record, we have been asked to swear all of the witnesses before our subcommittee and also to advise them of their rights under the applicable statutes whenever witnesses are sworn. Actually, this is simply a procedure which has been directed to us, but we don't regard ourselves as a judicial body or anything of that kind. But as the rules of the House provide, before a witness is sworn, a chairman of a subcommittee, as I am acting today, has to inform you that you have the right to counsel, a counsel who can be a member in good standing of the highest court of his place of residence or of the Supreme Court of the United States. And also that you are not required to answer any questions that you feel might tend to incriminate you. We want to make sure that some of the accusations that have been made in the case of some congressional committees do not apply to this one and we want to make sure you know your rights.

I will ask you whether you would like to have counsel or whether you would be willing to be sworn and to proceed with the hearing?

Mr. KAUFENBERG. I don't think I need any counsel, sir.

Mr. STRATTON. All right, fine.

Would you just stand, raise your right hand and I will swear you.

You do solemnly swear that the testimony you will give before this subcommittee in the matters now under consideration shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. KAUFENBERG. I do, sir.

Mr. STRATTON. Thank you. Will you please sit down.

Mr. REDDAN. Did you give to the reporter your full name?

Mr. KAUFENBERG. I don't know whether he has my full name or not. My first name is Richard Lee.

Mr. REDDAN. Richard Lee.

Mr. KAUFENBERG. Richard Lee Kaufenberg.

Mr. REDDAN. What is your address, Mr. Kaufenberg?

Mr. KAUFENBERG. 220 Amador Street, in Vallejo.

Mr. HUNT. What town?

Mr. KAUFENBERG. Vallejo.

Mr. REDDAN. And how long have you been employed by the shipyard here?

Mr. KAUFENBERG. Oh, approximately a year and 9 months.

Mr. REDDAN. What have been your duties during that time?

Mr. KAUFENBERG. Oh, partly below-deck security watch and then the other part of the time it has been regular rigger helper.

Mr. REDDAN. As of May 15 what were your duties?

Mr. KAUFENBERG. Those were of below-deck security watch.

Mr. REDDAN. And how long had you been continuously performing duties as that?

Mr. KAUFENBERG. Oh, I would say before that it had been about 8 or 9 months. And then when they just launched that new one, it had been off and on—you see, I had taken this guy's place that night for Thursday and Friday. That is all I do, is just take his nights off.

Mr. REDDAN. I see. That wasn't your regular duty, then, as of May 15.

Mr. KAUFENBERG. No, sir, it wasn't.

Mr. REDDAN. Was the substitution for the regular man arranged through channels in the shipyard?

Mr. KAUFENBERG. Yes, sir, it was.

Mr. REDDAN. But you had had about 8 or 9 months of this sort of work before, is that right?

Mr. KAUFENBERG. Yes, sir; I have.

Mr. REDDAN. So that you were thoroughly familiar with the duties and the requirements of that job.

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. Could you give us a little idea of what your regular duties were, Mr. Kaufenberg, as below-deck watch? What did you normally do on the job?

Mr. KAUFENBERG. Well, before I went aboard the boat, I would go to the afterpart of the boat and I would check the draft and then I would walk to the forward part of the boat and check the draft, and I would walk aboard and go down to the control room and check the trim of the ship and the list of the ship. Then I would start from forward down the diesel generator room, check the bilges for water and oil, fire hazards, and come up topside and check the different rooms that weren't locked. For instance, now, 665 had been so far along that ship's force had quite a few of the rooms locked, that only ship sup had a key, and I couldn't check those rooms.

Mr. REDDAN. That is because it had classified equipment in it?

Mr. KAUFENBERG. No, sir. To my knowledge, there was nothing in there. Most of the rooms were staterooms.

Mr. REDDAN. I see.

Mr. KAUFENBERG. And two or three of them were classified areas. In this part I went from forward to the afterpart down to the torpedo room, checked the bilges down there, checked the torpedo tubes to see they were dry, would check to see if the torpedo vents were shut and went on aft, and I came up that ladderway. Before I went up the ladderway, I checked the AMR-1.

Mr. STRATTON. What is that?

Mr. KAUFENBERG. It is auxiliary machinery room No. 1. I checked the bilges down there to see if there was water, oil, or maybe one of the valves leaking water, or what have you. Then I came topside again.

Mr. REDDAN. Before you came topside, how would you check the trim of the ship from below?

Mr. KAUFENBERG. From below I have no way of checking from below, other than the trim meter in operations compartment.

Mr. REDDAN. Is that the clinometer?

Mr. KAUFENBERG. Yes, sir.

Mr. REDDAN. Was that in operation on the 665?

Mr. KAUFENBERG. No, sir; it was not. They had no such meter in that, for about 3 or 4 months.

Mr. STRATTON. You checked the fore and aft trim and the lateral trim as well?

Mr. KAUFENBERG. Yes, sir.

Mr. REDDAN. How did you do that?

Mr. KAUFENBERG. Well, I couldn't check the fore and aft because there was no such meter. All I could do was keep a close eye on the draft.

Mr. STRATTON. Yes.

Mr. KAUFENBERG. The way I would check the list of the ship would be to check this bubble-type affair that they had, which they call—it is behind, about a 2-foot vent pipe I guess you would call it, and it had a piece of plexiglass over it protecting that bubble, glass bubble. I—some places you could hardly see it. You had to crawl up behind it.

Mr. STRATTON. This was in the control room?

Mr. KAUFENBERG. Yes, sir; it was quite hard to see and you really had to get up there and look for it.

Mr. STRATTON. What things were you looking for primarily?

Mr. KAUFENBERG. Primarily I was looking for fire hazards, water and oil in the bilges, valves leaking, and people making, different people making different tests.

Mr. STRATTON. You were primarily there to prevent fire and to prevent sinking; would that be a fair statement?

Mr. KAUFENBERG. Yes, sir; it would.

Mr. STRATTON. I mean you were looking for water in the sense of any excess water that might be coming in?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. That would create a hazard.

Mr. KAUFENBERG. That would be a fair answer.

Mr. REDDAN. What time did you go on duty—

Mr. STRATTON. Let me—just before we get the exact date.

Mr. REDDAN. All right.

Mr. STRATTON. You told us how you started out and went through the ship and you came up the after ladder at the auxiliary machinery room.

Mr. KAUFENBERG. No. 1.

Mr. STRATTON. Then what did you do? Did you just then repeat this cycle throughout the 8 hours, or what?

Mr. KAUFENBERG. Well, up that ladder, up that after ladder and through the mess decks, to the wardroom, then I went aft again, up another ladder to the _____ and then in the _____, lower level, and checked the _____.

Mr. STRATTON. The _____ is what?

Mr. KAUFENBERG. _____.

Mr. STRATTON. Yes.

Mr. KAUFENBERG. I had to check that for, mostly, fire hazards because as often as everybody checked it, there is never any water in the bilges, or oil for that matter. But I see quite often that a lot of people that work in there threw these little "KIM" wipes, that little tissue paper—and they throw them all over the place, they throw their dirty rags on the floor and they don't throw them in a can provided for these things. And you go around and you tell them about this. And if he doesn't pay any attention to it, you just pick it up and put it in

that little can. That is to prevent anything from happening, because it could prevent a fire very easily.

Mr. RANDALL. This compartment was open, it was just a big void, and it was open; wasn't it?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. Now, Mr. Chairman, one question. At this point in construction, is it necessary that you try to keep everything as clean as possible, not simply for fire hazard but for preliminary to installation of the reactor? In other words, to keep it clean at all times; is that right?

Mr. KAUFENBERG. That would be a fair statement; yes, sir.

Mr. STRATTON. But you weren't supposed to clean it up yourself; were you?

Mr. KAUFENBERG. No; I had industrial cleaners. I would ask them to inspect this area and clean it up if it need be.

Mr. STRATTON. Yes.

Mr. KAUFENBERG. They were right on the ball, doing this. But sometimes if they weren't around and I couldn't find one, maybe, right away, I would pick this up myself and go on with my tour of the boat.

Mr. STRATTON. Do you have any kind of a clock or something or other, like a night watchman, that you would plug in at certain spots to indicate that you had made your tour of the boat?

Mr. KAUFENBERG. No, sir.

Mr. STRATTON. Then coming back to my original question, after you had gone all the way through all of these spaces, would you then repeat it?

Mr. KAUFENBERG. Yes, sir; I would.

Mr. STRATTON. How many times would you estimate you would do that in the course of a watch, an 8-hour watch?

Mr. KAUFENBERG. Would this question refer to just one single boat or would that be—

Mr. STRATTON. You had two boats, didn't you, that is right.

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. Then after you had finished one tour on the *Guitarro* you would go over to the *Hawkbill*; is that the way you do it, and do the same thing over there?

Mr. KAUFENBERG. Yes, sir.

Mr. REDDAN. How long would one of these tours take?

Mr. KAUFENBERG. An hour.

Mr. RANDALL. On each boat?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. You mean an hour on each boat?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. So that would be 2 hours. So then you would have about four of these in the course of an 8-hour day.

Mr. KAUFENBERG. Yes, sir; that is exactly right.

Mr. STRATTON. Now suppose you saw something that didn't look good, what would you do about it, other than pick up the dirty rags and so on that you saw around?

Mr. KAUFENBERG. Well, in a case—may I mention a different case, like on the 666?

Mr. STRATTON. Sure.

Mr. KAUFENBERG. I found a main condensate pump No. 3, down in the lower level engine room, that was leaking and I noted the fact that No. 1, 2, and 4 were not leaking, and I notified my shop right away, and I said I would like to have somebody down here that is in charge of this particular space to rectify this situation.

Mr. STRATTON. Let me ask you this: Were you always on the same shift, on the second shift, or did you rotate shifts?

Mr. KAUFENBERG. You mean day shift or——

Mr. STRATTON. Yes; day shift, swing shift——

Mr. KAUFENBERG. I have always been on the swing shift.

Mr. STRATTON. Always been on the swing shift.

You said you notified your shop. How do you contact your shop?

Mr. KAUFENBERG. I phoned 4206.

Mr. STRATTON. Is that a phone on the submarine?

Mr. KAUFENBERG. Yes, sir; it is in the wardroom.

Mr. STRATTON. Is there always somebody at the other end of the phone?

Mr. KAUFENBERG. Yes, sir; there is, always. I would phone them and say shop 56 representative came down there and he said, well, this is not my section, I am nuclear. I said, well——

Mr. STRATTON. This actually happened?

Mr. KAUFENBERG. Yes, sir. I mean, I told him, I said, well how about sending me somebody down there that isn't nuclear, what have you, that can straighten this pump out for me.

Mr. RANDALL. This was on the boat, though, this was on 66.

Mr. STRATTON. Right.

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. Yes.

Mr. KAUFENBERG. So no response after that. I waited a couple of days. I wrote this all up in my log and I phoned the shop once about it, again. I had contacted Commander McGaughy and I told him about it. He relayed the information to the ship superintendent and I told my leadingman about it again and finally I got some action.

Mr. HUNT. How long did it take to get the action?

Mr. KAUFENBERG. Oh, it must have been about a week.

Mr. STRATTON. And the thing was leaking all the time?

Mr. KAUFENBERG. Yes, sir; and I had an industrial cleaner down there pumping that water out constantly. It would get to be a foot deep.

Mr. REDDAN. This was down in the bilge; was it?

Mr. KAUFENBERG. Yes, sir. I mean—if you don't mind me saying so, this is a bit ridiculous.

Mr. STRATTON. I would certainly say so.

Mr. KAUFENBERG. Because the machinist that came down to fix that pump, he said this is normal. I said how could it be normal if No. 1, 2, and 4 were not leaking and No. 3 was. He said that is the way they operate, they leak a little. I said, "Leak a little. They leak more than a little. If they leak fast enough to put a foot of water in there in half a shift, why, it is quite a bit."

Mr. STRATTON. You mean this is the fellow that finally came down from the right shop to take a look at it?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. What was the right shop, if 56 wasn't?

Mr. KAUFENBERG. They had shop 38 come down there, a man from shop 38.

Mr. RANDALL. Now what you don't know, Mr. Chairman, and I hope I am right about this: All of these shops are identified by different color hats, aren't they?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. In other words, you can look and you can see the fellow with the blue hat, and the ones with the white hat are all Navy, is that right?

Mr. KAUFENBERG. Most of them are; yes, sir, except for the head of the shops around here have white hats, too.

Mr. STRATTON. You mean hard hats?

Mr. RANDALL. Yes, hard hats. You can tell what shop he is from because of the hat.

Mr. KAUFENBERG. Right.

Mr. RANDALL. All right, how many different shops are there?

Mr. KAUFENBERG. Oh——

Mr. STRATTON. We are up to 56 already.

Mr. RANDALL. They are not consecutive numbers.

Mr. STRATTON. I suppose not.

Mr. RANDALL. Would you say about eight or 10, or perhaps 12?

Mr. KAUFENBERG. I would say there are about 15 different ones that come aboard the boat.

Mr. RANDALL. All right.

Mr. STRATTON. Now, you had actually no real authority, did you? Suppose you caught somebody smoking and tossing a cigarette into a place where there was some oil in the bilge or something, could you tell him to knock it off?

Mr. KAUFENBERG. That is the point I want to talk to you about, too, because I told—as a matter of fact I asked him, and I guess he thought I was telling him, but I asked him to clean this spot up because there was a little oil down in the one particular bilge, and he said "You talk to my leading man, you don't tell me nothing."

This is the sort of thing I was confronted with all the time. I shouldn't have to be confronted with this.

Mr. STRATTON. Let me ask you another question in that connection. You were always on the swing shift?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. Who was in charge of these submarines at that particular time? If you really had a problem, was there anyone around, the project manager or the ship superintendent, or anybody that you could go to who had responsibility for *Hawkbill* or for *Guitarro*?

Mr. KAUFENBERG. Well, I had never seen a ship superintendent for either one of these boats until maybe either one of them came aboard as watch officer to check the boat out later on that night. And usually it was about 11 o'clock. So other than that, all I had was my chief quartermaster in my shop that I could talk to. He was the only one that even had enough authority——

Mr. RANDALL. What shop do you belong to, what number is your shop?

Mr. KAUFENBERG. Shop 72.

Mr. STRATTON. But every night at some point during the night, one of these watch officers would come aboard, is that right?

Mr. KAUFENBERG. Yes, sir. Sometimes very little at all. Sometimes nobody would come aboard, nobody would show up. Not that they wouldn't stop you, but I wouldn't see them in my tour.

Mr. STRATTON. I see. You would leave at midnight, wouldn't you?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. They might conceivably come aboard after that?

Mr. KAUFENBERG. Yes, sir, they have sometimes.

Mr. STRATTON. So that if you had some problem and you couldn't turn to anybody, at least when the watch officer came through this would be an opportunity to tell, would it not?

Mr. KAUFENBERG. Yes, sir; unload all the problems.

Mr. STRATTON. Would that work very effectively?

Mr. KAUFENBERG. It worked pretty effectively with some, and then again not, especially with Commander McGaughy, that got a pretty good reaction when I showed him that pump.

Mr. RANDALL. You showed McGaughy?

Mr. KAUFENBERG. Yes, I did, and he put his hand underneath that pump, where the packing gland was, and he would confirm the fact that it shouldn't be that way, either.

Mr. STRATTON. He was the nuclear man?

Mr. KAUFENBERG. Yes, sir; he was.

Mr. STRATTON. Okay, I just wanted to get that preliminary out of the way.

Now, Mr. Reddan, do you want to pick up the actual detail on the night of the 15th?

Mr. REDDAN. Yes.

On May the 15th, what time did you go on duty on the 665?

Mr. KAUFENBERG. Well, we got an order issued that we start our tour aboard the 666. I had showed up at 1545 hours to relieve this man.

Mr. REDDAN. That was on the 666?

Mr. KAUFENBERG. Yes. The reason why I show up as early as I do is I have to make a tour of the boat in 45 minutes in order to get down to the 665 at 4:30.

Mr. REDDAN. And on May 15, you got to the 665 at what time?

Mr. KAUFENBERG. At 4:30, sir.

Mr. REDDAN. 4:30. The swing shift was already on at that time?

Mr. KAUFENBERG. Yes, sir; it was.

Mr. REDDAN. Well, now would you tell the subcommittee just precisely what you did that night when you went aboard the 665.

Mr. KAUFENBERG. When I went aboard the 665 at 1640 hours it was mostly routine until, oh, I would say 1830, on my second tour around, when I noticed two shop 38 men up in the control room moving water from one trim tank to another. I didn't think too much about that.

Mr. STRATTON. This was in the control room. They were moving it by pressing—

Mr. KAUFENBERG. There is a pump, some sort of a different pump, and they take one little button and take that water out of there and put it over there.

Mr. STRATTON. Right.

Mr. REDDAN. Do you know who they were?

Mr. KAUFENBERG. Yes, sir; I do.

Mr. REDDAN. What were their names?

Mr. KAUFENBERG. One man was "Red" Varing.

Mr. REDDAN. And the other one was?

Mr. KAUFENBERG. Roger Thompson.

Mr. REDDAN. Now when you went on board, you had to pass the sail as you came on. Was the gangplank right across there where the sail is, on the forward part of the ship?

Mr. KAUFENBERG. Actually, they had two gangways, one on the after part and one on the forward part.

Mr. REDDAN. Which one did you come on, at 4:30?

Mr. KAUFENBERG. At that time I came on the after gangway.

Mr. REDDAN. And as you were making your tour of the ship, eventually you came topside forward, is that it?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. Mr. Reddan, before you get into that, could we get a little bit more detail?

You came onto these fellows in the control room and they were shifting ballast by machinery from one tank to another; isn't that what you said?

Mr. KAUFENBERG. Yes, sir. That was about 1845 hours when I noticed that.

Mr. REDDAN. Did you have any conversation with them?

Mr. KAUFENBERG. Yes, sir; I did. I talked, we had talked about trimming of the boat.

Mr. REDDAN. Tell us your best recollection of what was said, who said what and what did you say?

Mr. KAUFENBERG. Well, Roger Thompson was sitting up on this sort of like a guardrail they have around the periscope thing, you know, and he was up there watching that trim, I mean the list. And they have a trim meter. More or less, there wasn't too much said. I was more or less interested in how they were doing the list of the ship.

Mr. REDDAN. Did you know what they were doing when you walked in and saw them, or did you ask them what they were doing?

Mr. KAUFENBERG. I asked them what they were doing.

Mr. RANDALL. Was he using a trim meter like this quadrant?

Mr. KAUFENBERG. I would say not at the time I noticed them.

Mr. RANDALL. What kind of a meter was he using?

Mr. KAUFENBERG. A few minutes after that he had sent Mr. Thompson—Mr. "Red" Varing sent Mr. Thompson down with a gunner's quadrant, down below, I think in the torpedo room, where they had a machined surface to check the trim.

Mr. STRATTON. Did they tell you what tanks they were shifting from and to, and that kind of thing?

Mr. KAUFENBERG. Well, I was watching the meters on this control board, but—they could tell me, but I wouldn't know, from where this tank was, where they were taking it out of and putting it into.

Mr. STRATTON. I see.

Mr. KAUFENBERG. I am not quite that familiar with the trim system.

Mr. STRATTON. You knew they were shifting water around?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. You said he was watching the bubble, or something or other. This was for the port and starboard trim, is that right?

Mr. KAUFENBERG. Right.

Mr. STRATTON. And then later went down to check the fore and aft trim with the gunner's quadrant.

Mr. KAUFENBERG. Right.

Mr. STRATTON. You didn't raise any objection or have any qualms about whether this was going to create an unstable condition at that time, did you?

Mr. KAUFENBERG. No, sir; I didn't.

Mr. STRATTON. OK.

Mr. KAUFENBERG. I thought—I knew the man was a mechanic of many years and I knew he knew what he was doing. So I had no question at that time.

Mr. STRATTON. Did he tell you the reason he was trying to trim the ship?

Mr. KAUFENBERG. Yes, sir; he did.

Mr. REDDAN. What was it?

Mr. STRATTON. Why?

Mr. KAUFENBERG. He told me they were readying the port for

Mr. STRATTON. Oh, _____.

Mr. KAUFENBERG. And nuclear power required that the boat be within half a degree both ways for _____.

Mr. REDDAN. Who told you this?

Mr. KAUFENBERG. I believe it was Mr. "Red" Varing.

Mr. REDDAN. Did he tell you whether they were pumping forward or aft?

Mr. KAUFENBERG. No, sir; he didn't.

Mr. STRATTON. Now these two gentlemen were on the swing shift, weren't they?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. And did they indicate to you that they had sort of picked up this responsibility from the day shift?

Mr. KAUFENBERG. No, sir. I looked at my log, where the previous entries noted a shift before, and I hadn't noted where this other guy had noted that shop 38 was trimming the ship during the day shift.

Mr. HUNT. That was on your log?

Mr. KAUFENBERG. It was on my log. I had noted it, but I hadn't noted the day shift had.

Mr. STRATTON. Oh, I see.

Mr. REDDAN. You are talking about your counterpart during the day shift?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. You looked at his log and compared it with it yours?

Mr. KAUFENBERG. Yes, sir; I always do.

Mr. STRATTON. I think you testified earlier that the first thing you did when you came on board was to check the free board, the waterline forward, and then checked the waterline aft—didn't you say that?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. Now before you ran into these gentlemen in the control room, had you checked the waterline forward and the waterline aft?

Mr. KAUFENBERG. Yes, sir; I did.

Mr. STRATTON. Do you remember what you saw, or does your log indicate it?

Mr. KAUFENBERG. I don't remember what the draft readings were at the time. It was—I can't hardly say right now.

Mr. STRATTON. You don't have that in your log?

Mr. KAUFENBERG. Yes, sir; I do. I write draft readings in my log. As a matter of fact, I write quite a few things down. They have a four-page checksheet, besides.

Mr. STRATTON. I am just wondering whether that particular log would indicate first of all whether when you came on board there was any noticeable difference of draft, fore and aft.

Mr. KAUFENBERG. Oh, no, sir; not at 1830 when I came aboard.

Mr. STRATTON. OK. So she looked fairly trim, then, is that right?

Mr. KAUFENBERG. Yes, sir; she did.

Mr. STRATTON. And, secondly, and you have really answered this question I think, did you notice that it was down in any serious way at the bow?

Mr. KAUFENBERG. Not at 1839, sir, no.

Mr. STRATTON. OK.

Mr. KAUFENBERG. She was looking fine.

Mr. STRATTON. All right.

Mr. REDDAN. Do you have a copy of your log?

Mr. KAUFENBERG. No, sir; I don't.

Mr. REDDAN. Where is that now?

Mr. KAUFENBERG. I couldn't say where that is now.

Mr. REDDAN. Who normally keeps custody of the log?

Mr. KAUFENBERG. I would say the production head, head officer in production.

Mr. RANDALL. Is the log in your handwriting? You have it in your own handwriting?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. You turn it in every night.

Mr. KAUFENBERG. Well—excuse me. They have a book that is left on the boat every night, and it is not turned in. Like these checksheets, they are put in a little cabinet right across a desklike affair and kept there until the ship sup comes. It can get to be that high [indicating].

Mr. REDDAN. It is just a permanent log that is kept aboard?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. To go back to Mr. Reddan's earlier question, you had your encounter with these two gentlemen in the control room. There came a time when you went topside, did you not; and then you observed certain things topside?

Mr. KAUFENBERG. Yes, sir; I did. I went topside about 1900 and I went—

Mr. STRATTON. This would be on the second trip; was it?

Mr. KAUFENBERG. Yes, sir; it would be—

Mr. STRATTON. No; 1845 was when you ran into them in the control room. OK.

Mr. KAUFENBERG. At 1900, I found myself topside talking—

Mr. REDDAN. Excuse me. Mr. Chairman, before you get topside on that, were you there when the fellow who took the reading with the gunner's quadrant came back?

Mr. KAUFENBERG. Yes, sir; I was.

Mr. REDDAN. Did he say anything with respect to the trim of the ship as he found it, in your presence?

Mr. KAUFENBERG. No, sir. He didn't. I didn't hear him say what the trim of the boat was.

Mr. REDDAN. You didn't hear him say it was down at the bow or down at the stern?

Mr. KAUFENBERG. No, sir; I didn't.

Mr. REDDAN. All right.

Mr. STRATTON. Go ahead.

Mr. KAUFENBERG. OK. At 1900 when I walked forward, topside, just forward of the sail, I noted the fact that the same persons noted before, the same two persons, Mr. Varing and Mr. Thompson, were filling the ballast tanks, just forward of the sail.

Mr. HUNT. With what?

Mr. KAUFENBERG. It is a water-type manifold, sitting right on the staging, with sort of a plastic hose, a clear plastic hose. It was 8- or 9-feet long. They had a little valve to turn it on and stand there and watch it filling up.

Mr. HUNT. Where did they have the hose? What part of the submarine did they have the hose into? I would assume they were putting some water in something.

Mr. KAUFENBERG. Yes.

Mr. HUNT. What were they putting the water in, what part of the vessel?

Mr. KAUFENBERG. The main ballast tank just forward of the sail. I don't know what number ballast tank that would be, but I know it would be the main ballast tank.

Mr. STRATTON. The main ballast, just forward of the sail, on the port or the starboard side?

Mr. KAUFENBERG. It was both port and starboard, both sides.

Mr. STRATTON. Are you talking about something like a garden hose or a firehose?

Mr. KAUFENBERG. No, sir—oh, I would say it is about that big [indicating] around.

Mr. REDDAN. About 2½ inches.

Mr. KAUFENBERG. About 2½ inches.

Mr. STRATTON. You said something about a manifold. I wasn't sure I understood. Were they in effect holding a hose there, letting the water run out into the tank?

Mr. KAUFENBERG. It is sort of a pressure manifold, like you see the manifold used commonly—a lot of workers use these for different purposes. It is a fresh water manifold, I think—I am not sure.

Mr. STRATTON. I am not sure I understand. But go ahead, anyway.

Mr. KAUFENBERG. It has different leads on it. I think you can hook up eight or nine—

Mr. REDDAN. You mean reducers; that is, various sizes of hose are hooked into?

Mr. KAUFENBERG. No, sir.

Mr. HUNT. It is what is called a header, a header manifold, so you can put various size hose sections on it?

Mr. KAUFENBERG. Sure.

Mr. HUNT. In other words, it is a water supply that comes down to a bulkheaded header or a manifold. This manifold has attached to it a number of different sized hose connections?

Mr. KAUFENBERG. Yes, sir.

Mr. HUNT. So you can put a 2 inch, an inch and a $\frac{1}{2}$ inch, a 1 inch or $\frac{3}{4}$ inch garden hose—is that what you mean?

Mr. KAUFENBERG. Sure

Mr. HUNT. That is what they refer to as a manifold header?

Mr. REDDAN. They were run down through two head pipes, did I understand you to say, on the port and starboard sides?

Mr. KAUFENBERG. No, sir. They had about an 8- or 9-foot hose, a 2 $\frac{1}{2}$ - or 3-inch hose, not more than 6 feet away, and they put that down and took the cover off the ballast tank and put that hose down there and turned the valve on. They filled them one at a time.

Mr. REDDAN. They didn't have two hoses? They had just one hose?

Mr. KAUFENBERG. One hose.

Mr. REDDAN. And when you saw them for the first time, they were filling what side.

Mr. KAUFENBERG. The starboard side.

Mr. REDDAN. They had come topside while you were completing your inspection?

Mr. KAUFENBERG. Yes, sir.

Mr. REDDAN. Did you have any conversations with them at that time?

Mr. KAUFENBERG. Not at that minute. I went farther forward on the bow and noted right there at the sonar dome access hole a little water was splashing in, not too much at first, just a little splash. The wave would hit the bow and splash up in there and splash down that little access hole.

Mr. REDDAN. How much freeboard was there between the access hole—

Mr. KAUFENBERG. And the water?

Mr. REDDAN. And the water, yes?

Mr. KAUFENBERG. I would say about a foot and one-half, 2 feet.

Mr. REDDAN. And it would be waves that would wash up?

Mr. KAUFENBERG. Yes, sir. The marines were having maneuvers in their PBR's.

Mr. RANDALL. They were the ones that were creating the waves?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. That is the small boat activity?

Mr. RANDALL. Yes. They used them in Vietnam.

Mr. REDDAN. This was at 1830?

Mr. KAUFENBERG. No, sir; this was at 1900.

Mr. REDDAN. This was about 1900?

Mr. KAUFENBERG. A couple of minutes after 1900, I went farther forward on the bow and noted that water was coming in the sonar dome access hole.

Mr. STRATTON. There was no cofferdam or arrangement such as you have at the present time on the 666; is that right?

Mr. KAUFENBERG. No, sir. There was a 3-foot tall cofferdam about 3 feet in circumference on there about 3 or 4 months ago, but they had taken this off and not put anything in its place.

Mr. STRATTON. Took it off about 3 or 4 months ago?

Mr. KAUFENBERG. Yes, sir.

There should be a plate bolted down tight on there, which there wasn't. I heard something to the effect that it was supposed to be close at hand, which it was not.

Mr. STRATTON. The plate or the cofferdam?

Mr. KAUFENBERG. The plate should have been right next to that hole, maybe even tacked right there, so they could get to it readily and put it on and bolt it down.

But this plate—I noted that I had been in this shipfitters' shack on the seawall, and they refused to make a trip aft across the gangway and back again to the shipfitters' shack. That would be quite a trip. You just might possibly—you wouldn't get there in time to achieve that watertight integrity such as you would want.

Mr. STRATTON. You went over the *Guitarro* every night? Was this particular day unusual, that the plate was missing, or had been off for some time?

Mr. KAUFENBERG. No, it had been off ever since I can remember standing a security watch on that boat. The only thing I can remember is that 3 foot tall cofferdam being on there.

Mr. STRATTON. I see. When the cofferdam was on there, the plate was removed, but then they took the cofferdam off, too?

Mr. KAUFENBERG. Yes.

Mr. REDDAN. Did you log either of these two things as a hazard or a potential threat to the ship?

Mr. KAUFENBERG. No, sir; I didn't. I hadn't thought about it being a danger until such time as they were trimming the boat and making the bow dip quite a bit. That is what started to bother me.

Mr. STRATTON. So what did you do then?

Mr. KAUFENBERG. Well, I told—I went back aft to where they were filling the main ballast tank, and I grabbed Mr. Thompson and showed him where the water was coming in, and he said, "Well, that is a free-flooding area." I said—it sounded funny to me because from my understanding it is not a free-flooding area. Somebody told me—I have been told so many things, it gets to be confusing, that there is a plate in such a place where this would not make it a free-flooding area. When the boat is in operation, on sea trails, then it is a free-flooding area, but not when it is sitting on the seawall.

This is what I told him. I said—he explained to me it was a free-flooding area. And you know, that was that. But I had went down—they got a little regular patch cut for work down there. They replace, I don't know what you call them, little square jobs that are on the dome.

Mr. STRATTON. Transducers, I think.

Mr. KAUFENBERG. Yes, sir. He sometimes replaced those. And he would have to go down this temporary patch they had cut, just about 6 feet aft of the regular access hole.

Mr. STRATTON. Right.

Mr. KAUFENBERG. I went down in there and I climbed down to a little, I don't know what you call it, a place where you could stand, you know, sort of a place, like a webbing, that supported this dome, and I stood there and I could shine my flashlight down there and I could see water gathering up.

Mr. STRATTON. This is on the night of the 15th?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. In the sonar dome?

Mr. KAUFENBERG. Yes, sir—will, it was in that free-flooding area, where it was gathering up, around the dome.

Mr. REDDAN. Could you estimate how deep the water was when you saw it there?

Mr. KAUFENBERG. Oh, I couldn't say how deep it was because of the curvature of the bow. It would make it almost impossible to say how deep it was. I showed one of the officers in the other committee just about where the water came up to.

Mr. STRATTON. But at the same time you went in and took a look at it, the level of the water in the area around the dome was considerably lower than the opening where you saw it lapping in?

Mr. KAUFENBERG. Oh, yes, sir. It was still quite lower than the bottom of the sphere.

Mr. RANDALL. Before we get too far away, may I ask one more question on this?

We have two or three holes up forward there, don't we?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. We have one in which the cofferdam had been taken away?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. Three or 4 months ago. Now, you have one that was cut out?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. So they would have access?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. Did you put your flashlight down in the one where there was no cofferdam, or in the big cutout?

Mr. KAUFENBERG. I went down into the big—

Mr. RANDALL. The big one?

Mr. KAUFENBERG. The big cutout area.

Mr. RANDALL. Was there a ladder there?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. You could see the water coming from where? Back from the ship or where was the water coming from?

Mr. KAUFENBERG. No, it was splashing in this regular sonar dome access hole, and they had sealed the dome, itself, up already, and with this sort of like round webbing that came up to meet the curvature of the boat.

Mr. RANDALL. One more question. You mentioned about this plate that was hanging on the shack that you had seen over there as to 665—

Mr. KAUFENBERG. On 666; yes, sir.

Mr. RANDALL. Is that plate around there now, that is, is it in place in the *Hawkbill*?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. It is there in place on the *Hawkbill* now?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. All right. That is all, Mr. Chairman.

Mr. STRATTON. This diagram, as I understand it, is what you are speaking to. Here is the little access hole?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. You saw the water splashing in there? A little further back there was another hole. You went down there and sort of stood on the top of this dome, as I understand it, and you went down and saw the water in the free-flooding area under the dome, is that it?

Mr. KAUFENBERG. Yes, sir.

May I borrow that pencil. Here, I will show you something here. There was a webbing, sort of like that, that came up to the dome, that I had stood on.

Mr. STRATTON. Stood on this?

Mr. KAUFENBERG. And I had seen the water. It was about a couple of feet below that sphere. I would more than likely say it came about here.

Mr. STRATTON. Right, I see.

Mr. KAUFENBERG. One other thing I would like to make clear is that this round webbing that they had on top of the sphere that came up to meet that part of the boat. There was—I couldn't say how many there were, but I had noticed two or three of them, little holes about the size of half dollars, right where this little webbing meets the dome itself, and the water was coming in here and going out these little holes, and gathering up, down here.

Mr. STRATTON. Oh, I see. It was coming in, you mean, through this forward access?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. OK, fine.

I might just comment to the subcommittee counsel, because we mentioned it earlier, that if the boat were more or less in trim at this stage, when the water was only down here, that by the time the water level came up there, you would have a considerably greater weight in the bow of the boat.

Mr. REDDAN. Yes.

Mr. STRATTON. You mentioned it to Mr. Thompson and he said that is a free-flooding area. Did you argue with him or say, "Don't you think we ought to do something about it?"

Mr. KAUFENBERG. No, sir. I asked him if he would mind doing something about it, you know, like putting a plate on it or having somebody weld the cofferdam, or what have you, you know, something that would avoid this water from splashing.

And at that time I had to go back down below again and check the forward end of the boat.

Mr. STRATTON. Did you mention to either of these two gentlemen anything about the fact that they had been playing around with a trim down in the control room and now they were up doing something more, question them why they felt they had to add additional water to ballast tanks, or anything of that kind?

Mr. KAUFENBERG. No, sir, I hadn't questioned them as to that.

Mr. STRATTON. Did you write up at this particular time any comments with regard to what you saw?

Mr. KAUFENBERG. No, sir, not at that time, I did not.

Mr. STRATTON. And did you try to call the superintendent or your shop, or anything of that kind?

Mr. KAUFENBERG. No, sir; I felt that right at that time it wasn't that serious and I figured that while they had the time, I didn't want to

cause anybody any heartache—which I should have done in the first place, and I realize that this man should have been responsible enough to realize the situation and it should have been taken care of right away and not after lunch, which was too late.

Mr. STRATTON. When did you go to lunch? The same time as everybody else?

Mr. KAUFENBERG. No, sir. As a matter of fact, that night I don't even think I got to eat lunch, I don't remember eating lunch.

Mr. STRATTON. When would you ordinarily go to lunch?

Mr. KAUFENBERG. Ordinarily, I would eat my lunch at 7:30, because at 8 is the critical time that everybody goes to lunch and that is when I want to check the whole boat.

Mr. STRATTON. Is it usually the case that when everybody goes to lunch, nobody is left on the boat, except you?

Mr. KAUFENBERG. Yes, sir; that is usually the case and sometimes ship's officers are on the boat—most of the time. They usually have a man or two men, I don't know how many men they have, but he is usually on watch back in the engineroom, in the maneuvering area, what they would call—where they have the control boards.

Mr. STRATTON. Was there anybody on the boat on the night of the 15th at the lunch period?

Mr. KAUFENBERG. Other than ship's forces; no sir, besides me.

Mr. STRATTON. But there were some people from the ship's own forces?

Mr. KAUFENBERG. Yes, sir; I am pretty sure there was. Well, at lunch—let's see, at lunchtime—let's see, at 1930, I had made my calls to the shop. I hadn't mentioned about the water. I went topside again, to check on the machinists, and they had stopped. At that time they had just turned off the valve filling those main ballast tanks.

Mr. REDDAN. What time was this?

Mr. KAUFENBERG. 1940 hours. I was already late getting up to the 66, and I had just mentioned to them again that they wouldn't mind doing—I mean, you know—I figure once, twice, you know, I don't know, it is starting to just—

Mr. RANDALL. You were delayed in getting to 666 at that time?

Mr. KAUFENBERG. Yes, sir. And I mentioned it to them again, and after that, after they had turned the water off, I left them standing there. And I had to check the other boat. I went off, off the after gangway. They had one of the local cranes in the way, and I was—usually when I walk up to the 666, I usually glance toward, what do you call it? The stern section of the boat, to check the draft, you know, just one last time before I go to the other boat, and I couldn't see it that time. I just walked on to the 666—

Mr. REDDAN. Why couldn't you see that?

Mr. KAUFENBERG. That local crane was in the way.

Mr. REDDAN. I see.

Mr. KAUFENBERG. They get quite close to the seawall.

Mr. STRATTON. Is that the crane that is there now, or was that in just to help raise the *Guitarro*? That is the big yellow crane?

Mr. KAUFENBERG. No, sir. It is a small one—what do you call it, a local. It sits on the tracks right near to it.

Mr. RANDALL. This particular crane sits on a track. The other one is the big floating type. The one we are talking about is a local one that runs up and down tracks. It is not floating.

Mr. STRATTON. I see.

Mr. REDDAN. Was this your second tour on the 665 that night?

Mr. KAUFENBERG. Yes, sir; it was.

Mr. REDDAN. You went on at 4:30?

Mr. KAUFENBERG. Yes, sir.

Mr. REDDAN. And at 4:30 was any water slopping in the hole over the sonar dome?

Mr. KAUFENBERG. No, sir; there was not.

Mr. REDDAN. There wasn't any. But then you came back again at, what was it, 1800?

Mr. KAUFENBERG. 1830.

Mr. REDDAN. 1830. And that is when you saw it coming in the hole, and you reported it at that point?

Mr. KAUFENBERG. No, at 1900 I first noticed it.

Mr. REDDAN. At 1900 you saw it, and then you went below. Now before leaving the 665 at the end of that tour, did you go forward again to check the hole over the sonar dome?

Mr. KAUFENBERG. Yes, sir; and I had checked after that, before I left, oh, it was about 1920—I went down below to the forward end of the boat, and I checked all spaces down there, which were dry, completely dry, and I noted nothing wrong down there, and I felt that maybe this would be all right, seeing how, well, they had two men there. I guess, I don't know—the way I see it, it is just that maybe this boat was sitting in the mud at low tide and when they filled this ballast tank up—the boat wasn't going down like it should have, and all of a sudden the tide started to come in and the boat just sat there. The water came up above it.

Mr. HUNT. Has anybody taken into consideration the time, yet?

Mr. RANDALL. No.

Mr. STRATTON. That is a good point.

Mr. RANDALL. Did you say you turned off the valves at 1900 hours, that at 1940 hours you had seen them turn off the valves?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. In other words, that is why you felt it was all right for you to go over to 666, because they had turned off the valves?

Mr. KAUFENBERG. No, sir; I didn't feel it was all right. I felt—I don't know, at that time I seemed to have a concern—

Mr. RANDALL. There were two of them?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. And you figured, "and surely I can go ahead to 666 because there are two or three of them on 665 and they know what they are doing."

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. And you complained to them twice?

Mr. REDDAN. When was the second time you complained to these shop 38 men about the water coming into the hole over the sonar dome?

Mr. KAUFENBERG. At 1940.

Mr. REDDAN. Had the freeboard materially lessened between the first time you saw it and the second time you saw it?

Mr. KAUFENBERG. I would say—

Mr. REDDAN. My recollection is that you said there was about a foot and one-half of freeboard the first time you saw it.

Mr. KAUFENBERG. The first time it was about 2 foot of freeboard, and the second time it was a little bit less than a foot and a half.

Mr. RANDALL. Off the record.

(Discussion off the record.)

Mr. RANDALL. All right. Go ahead.

Mr. KAUFENBERG. Where was I?

Mr. STRATTON. It was the second time you brought it to their attention that you had the water coming over. You said this was about 1940.

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. This is when you saw them turn off the water?

Mr. KAUFENBERG. Yes, sir; they had turned off that valve and shut off the water.

Mr. STRATTON. Are you pretty sure that this valve was off during the half hour that they were gone for lunch?

Mr. KAUFENBERG. Yes, sir.

Well, I don't know that it was off during the half hour that they were off for lunch, because I had been on the 666 at that time. But I know for sure they had turned that water off.

Mr. REDDAN. They turned it off while you were there?

Mr. KAUFENBERG. Yes, sir.

Mr. REDDAN. That was about 20 minutes before the lunch break?

Mr. KAUFENBERG. Right.

Mr. REDDAN. What happened between 1940 and 2000 you wouldn't be able to testify?

Mr. KAUFENBERG. No, sir; I would not be able to.

Mr. STRATTON. You had already left to go to the other?

Mr. KAUFENBERG. I already left at that time, but I know they didn't take the hose out of starboard side, of the ballast tank.

Mr. REDDAN. Did you go by the access way and again shine your light around the sonar dome?

Mr. KAUFENBERG. No.

Mr. REDDAN. To see how much water had come in?

Mr. KAUFENBERG. No, sir; I didn't. I just noted water just splashing in there just a little bit more so than before. It has a way of coming in and splashing over the top, like that.

Mr. STRATTON. When you next saw the *Guitarro*, had she already sunk?

Mr. KAUFENBERG. No, sir. I noted when I next come back, it was about 2025, and before I had went aboard I hadn't noticed anything yet—I should have, I should have recognized something was wrong. I had a funny feeling. I got a hold of an industrial cleaner and I said let's go abroad and you remember we can put a pump down in that free-flooding area, so-called, and keep this water out of there.

Mr. REDDAN. Why did you say that?

Mr. KAUFENBERG. I figured maybe this would help keep this boat afloat.

Mr. REDDAN. Was it noticeably down by the bow at that point?

Mr. KAUFENBERG. I hadn't noticed while I was talking. I just came up and I saw him and I knew he was a reliable man. He was quite good.

Mr. REDDAN. Did you check the hole over the sonar dome at that time to see whether the water was pouring in or just lapping in?

Mr. KAUFENBERG. No, sir. That time, just after we went aboard, the bow was under and it was under up to the forward escape trunk.

Mr. REDDAN. Oh.

Mr. RANDALL. The bow was under water then?

Mr. KAUFENBERG. Yes, sir; it was.

Mr. REDDAN. Was the water coming in the main escape trunk then?

Mr. KAUFENBERG. Sir, whether the trunk angles like that, it was coming in there.

Mr. REDDAN. Coming in in flood stage or just——

Mr. KAUFENBERG. I would more or less say pouring.

Mr. REDDAN. Pouring in?

Mr. KAUFENBERG. It didn't take long for it to start coming in the top part.

Mr. RANDALL. Mr. Chairman, don't you think we ought to have the name of the industrial cleaner you talked to?

Mr. KAUFENBERG. Yes, sir. It was Al Sabathia.

Mr. RANDALL. And he didn't have any duty or any responsibility or obligation to get a pump, but you said to him, "Let's get a pump," or something?

Mr. KAUFENBERG. Well, he does—he is a snapper.

Mr. RANDALL. What is a snapper?

Mr. KAUFENBERG. A snapper is just like—just under a leadman. He does have the responsibility of controlling these big pumps, which do suck the water out, and I figured that maybe I could suck this water out there, even if it was splashing in a little bit like it was, maybe I could keep the water out of there until they got through trimming this boat, such as it was.

Mr. REDDAN. Of course, it was more than splash. As I understand it, the sonar hold was completely under water.

Mr. KAUFENBERG. Now it was. You see, at this time I didn't know, because I hadn't really looked toward the boat at that time.

Mr. REDDAN. Yes.

Mr. KAUFENBERG. While I was talking.

Mr. REDDAN. Oh, this was before you came on the boat, you were talking to Sabathia?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. You were talking to him off the boat?

Mr. KAUFENBERG. Yes, sir.

Mr. REDDAN. You were on your way back to the boat?

Mr. KAUFENBERG. Yes, sir. I was on the gangway when I talked to him. His leading man came up, Mr. Spence Davis.

Mr. RANDALL. You have quite a chain of command there, don't you?

Mr. KAUFENBERG. Yes, sir, I do.

Mr. RANDALL. We should take note of that, Mr. Chairman.

Mr. STRATTON. Yes.

Mr. REDDAN. When you walked down the gangway there——

Mr. KAUFENBERG. All three of us had walked aboard to check this situation out.

Mr. REDDAN. Was it floodlit? Were there lights on so you had no problem of seeing?

Mr. KAUFENBERG. Well, it wasn't sufficiently dark enough for them to turn the floodlights on at that time. It was just a little bit darker than it is right now. We had walked aboard and right away I had noticed something was wrong with the gangway because it was especially steep, and we went forward after we got on the surface of the

boat. We went up there around—they have a staging that goes around the diving planes on the sail. This was waving like that, up and down. It was awfully weak, and for what reason I don't know. We had got up there. We all three noted that water was coming in the forward escape trunk at that time.

Mr. REDDAN. What did you do right at that point?

Mr. KAUFENBERG. Right at that point—I had went down below again and I had phoned in the alarm, turned on the alarm, and I warned all the people, out immediately, if not sooner, get off the boat, because it is sinking.

Mr. REDDAN. Is this an internal alarm system?

Mr. KAUFENBERG. Yes, sir; it is.

Mr. REDDAN. Like a crash dive apparatus?

Mr. KAUFENBERG. No, sir. It is sort of like a fire alarm.

Mr. REDDAN. Does it connect with any place off the ship?

Mr. KAUFENBERG. Yes, sir; it does. I think it connects with the fire station. They have about eight or nine of these different type boxes, about like that.

Mr. REDDAN. Did anybody respond to your alarm?

Mr. KAUFENBERG. Yes, sir; there was quite a fast reaction. I was thoroughly surprised. It didn't take more than 30 seconds to get a reaction.

Mr. STRATTON. Did the other two help to sound the alarm?

Mr. KAUFENBERG. Yes, sir; they did. Well, one other man I mentioned, Al Sabathia, me and him, we both went down below. We went forward after I turned in an alarm. We went forward to try to achieve watertight integrity through this one watertight door and bulkhead 28. We had gotten all the lines out of there, except for one 440 line. At this time I noted there was one lieutenant and a few other sailors there and the lieutenant was hollering for a fire ax, so he could cut this 440 line to achieve watertight integrity. Well, this didn't make sense to me because I had noted he was standing in water and if he had cut that 440 line in half and dropped it in the water, he would have got us all.

Mr. RANDALL. Please be more specific as to what you mean by 440.

Mr. HUNT. 440 is a voltage designation.

Mr. KAUFENBERG. It has 440 amps running through it.

Mr. REDDAN. It would curl your hair.

Mr. HUNT. We are going to try to get you a tour on shipboard.

Mr. RANDALL. Thank you. I thought no one would be silly enough to want to cut a hot 440 line.

Mr. KAUFENBERG. Well, at that time I guess Mr. Al Sabathia persuaded him to go that way, toward the reactor compartment, to get out of the boat.

Mr. REDDAN. How would you cut the current on that line?

Mr. KAUFENBERG. That would have to be cut topside on the seawall. That is the only way that could be cut on that.

Mr. REDDAN. Would it be a matter of running out across the gangway and pulling the switch?

Mr. KAUFENBERG. It would be a matter of just getting out of the boat, itself, running up the gangway, over to a particular switch. You couldn't really tell. You would have to follow this line out. It would

take some time, maybe 20 minutes to follow that line, in order to find them, the particular box that it came from or——

Mr. HUNT. You mean to tell me that these lines that come in and feed current while the ship is under construction do not have a tag on them at this terminal point telling you where the box is located in case of difficulty?

Mr. KAUFENBERG. Some do and some don't sir. And these lines go through the bulkhead doors——

Mr. HUNT. Yes; I realize there are multiple lines going in there, but usually they have a tag on them just indicating what the voltage is and what the connection is.

Mr. KAUFENBERG. I hadn't noted that there was any tag on there anywhere along the line. There might have been, but I hadn't noticed it.

Mr. RANDALL. The only thing that kept you from closing the door was this 440 line that was going through there?

Mr. KAUFENBERG. Yes, sir. Other than that, we had watertight integrity.

Mr. STRATTON. What about the other lines? Were there other lines that had been going through that were pulled off?

Mr. KAUFENBERG. Yes, sir; there were welding cables and bilge pumps.

Mr. REDDAN. How did you get them out?

Mr. KAUFENBERG. There were a few connections, luckily they were connected just aft of that door and we unplugged the connections real quick like and pushed them forward through there and pulled that one back and we got all the lines out of there, except for that one 440-volt line.

Mr. REDDAN. Was water going through the door at that time?

Mr. KAUFENBERG. We could see water in the forward compartment at that time.

Mr. REDDAN. But it wasn't yet back into the submarine?

Mr. KAUFENBERG. Yes, sir; it was.

Mr. REDDAN. It was. How was it getting in there, if it wasn't going through the watertight door?

Mr. KAUFENBERG. I don't really know how it would be getting through there. It is a fair question. I couldn't answer that one.

Mr. REDDAN. Who was the lieutenant who wanted to cut the 440?

Mr. KAUFENBERG. I don't know the man's name.

Mr. HUNT. Was he part of the ship's crew?

Mr. KAUFENBERG. Yes, sir; he was.

Mr. STRATTON. Was there anybody else on the ship at that time other than the ship's force?

Mr. KAUFENBERG. Yes, sir; there was. There were quite a few workers forward on the boat. Electricians, welders——

Mr. STRATTON. But wasn't this till the lunch hour?

Mr. KAUFENBERG. No, sir. The whistle blows at about 2025 and usually——

Mr. RANDALL. They give you a 5-minute warning, don't they?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. I heard that today. Everybody gets a 5-minute warning.

Mr. KAUFENBERG. And a lot of the workers come back early, too. Sometimes I hear them come back at a quarter after.

Mr. RANDALL. Mr. Chairman, I am interested, what in the world is a ship's force during this construction period? What are their activities? What were they doing, this lieutenant and the sailor down there? What were their activities? What business were they on? What were they actually on, do you know?

Mr. KAUFENBERG. No, sir; I don't know.

Mr. RANDALL. It is a mystery to me.

Mr. HUNT. Mr. Randall, let me explain to you what a ship's force does.

Mr. RANDALL. I would be delighted.

Mr. HUNT. A ship's force usually goes with the construction of the ship they are going to man. They are brought in in a skeleton cadre and they stay with the working construction force and observe the installations of various panels, various wiring facilities, various pumping units, sonar operations. Then, as each system is completed, there are many, many systems on board a ship and as each system is completed or if a compartment is completed, such as the galley or such as the head, then they are tested and when they are tested, they are turned over by the construction force to the ship's complement, and at that time they take control of that facility and lock it up and they become responsible for that until the last system is turned over to them when the ship is formally turned over to the skipper at a ceremony. But they are there to observe in skeleton force, not the entire complement but a skeleton force, the various operations as they progress with the construction.

Mr. RANDALL. From what you have said, they were observers, then, at that point?

Mr. HUNT. Mainly.

Mr. RANDALL. And what type of actual construction was going on that night? What were they doing, what kind of work?

Mr. KAUFENBERG. Well, there were mostly shop 51, which is the electricians, they were still wearing gear, and shop 67 was testing some of the sonar equipment that was put down weeks before that, and shop 26 was welding here and there, and what have you, I don't know.

Mr. RANDALL. Sixty-seven is welders and 51 is electricians?

Mr. KAUFENBERG. Twenty-six is the welders; 67 is, I don't know what you would call them, they are a type of electronics personnel.

Mr. REDDAN. Did their work take them forward into the sonar zone?

Mr. KAUFENBERG. Yes, sir, it did.

Mr. REDDAN. That night?

Mr. KAUFENBERG. Yes, sir, it did. I noted there were a couple of 67 people and a few 51 personnel and a few 26.

Mr. HUNT. Mr. Kaufenberg—excuse me, Mr. Chairman.

Mr. STRATTON. They wouldn't have been in the sonar dome at the time the thing was going down, though, were they?

Mr. KAUFENBERG. No, sir, I don't think so, because I think at that time the sonar sphere inside had been completed. This is a funny thing, though. You tell somebody like that that the ship is sinking and get out now, and they say, are you kidding me? I am not going to tell somebody like that for fun.

Mr. STRATTON. Sure.

Mr. KAUFENBERG. That is no fun.

Mr. HUNT. What time did the ship sink?

Mr. KAUFENBERG. In my estimation, the stern went down finally about 5 minutes to 9.

Mr. HUNT. Twenty fifty-five?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. So it actually took about 25 minutes from the time you came on board and saw the water coming into the escape trunk before the whole ship finally settled down?

Mr. KAUFENBERG. Yes, sir. They had quite a fast reaction. A diving team was on its way. The tug was there bracing itself against the sail, to keep it from rolling.

Mr. HUNT. You have a regular diving apparatus, a diving boat, diving equipment?

Mr. KAUFENBERG. It is a diving barge from Mare Island.

Mr. HUNT. Yes.

Mr. KAUFENBERG. Mare Island divers took charge of this and they were right on the ball.

Mr. HUNT. Mr. Kaufenberg, are you married?

Mr. KAUFENBERG. Yes, sir, I am.

Mr. HUNT. How old are you?

Mr. KAUFENBERG. Twenty-four.

Mr. HUNT. Where were you born?

Mr. KAUFENBERG. St. Paul, Minn.

Mr. HUNT. Been in the Service?

Mr. KAUFENBERG. Yes, sir, 6 years.

Mr. HUNT. Navy?

Mr. KAUFENBERG. Yes, sir.

Mr. HUNT. I don't have to ask you about your discharge. It must have been honorable?

Mr. KAUFENBERG. Yes, sir, it was.

Mr. HUNT. Ever had any difficulty in the Navy or any other place?

Mr. KAUFENBERG. No, sir.

Mr. HUNT. Never had any difficulty with your foremen, your bosses, or anyone since you have been working here for the year and 9 months?

Mr. KAUFENBERG. No, sir, I haven't.

Mr. HUNT. What kind of sea duty did you have?

Mr. KAUFENBERG. I didn't have, sir. They had me stuck on shore duty right after I got out of radio school.

Mr. HUNT. What was your date of birth?

Mr. KAUFENBERG. September 12, 1944.

Mr. HUNT. Thank you.

Mr. STRATTON. I gather you were suggesting by an earlier question that you had a little trouble convincing some of the people on the ship that she really was going down and there was some delay in getting them out, is that right?

Mr. KAUFENBERG. It was only a couple of minutes. After the second time, you tell them the second time, they were ready to get out and now. I told them, well stand up and see what kind of a list it has, and then tell me it is not sinking.

Mr. STRATTON. Did everybody get out through the reactor opening there?

Mr. KAUFENBERG. Most of the people went aft of the reactor and got out that way, but there was, I guess, one 51-year-old man that was the last one out and there was a man in Nuclear Power Division. I guess he came out of the after escape trunk and they got him wet, completely wet. He had changed clothes.

Mr. RANDALL. A 51-year-old man was the last one out?

Mr. KAUFENBERG. Yes, sir, next to the last man out, and the Nuclear Power Division man. I think he was naval personnel, too.

Mr. STRATTON. A rather remarkable job getting everybody out of there alive, it seems to me.

Mr. KAUFENBERG. Yes, sir. I heard—excuse me.

Mr. STRATTON. Go ahead.

Mr. KANFENBERG. I noted some time later one of the guards had told me that just right after it went down, that he had seen somebody's head and arm just above the water saying "Somebody help me, please, somebody help me," and all he could do after that, a couple of seconds later he had went below, and all he could see is his hand grabbing for something to pull him out. I don't know, he said after that one of the chiefs or officers jumped from the seawall onto the boat and pulled this man out. Because he had seen the ambulance get away in quite a fast hurry. I don't know if this is true or not.

Mr. RANDALL. An ambulance came and pulled away?

Mr. KAUFENBERG. Yes, sir. The fire department was there. I have never seen so many people in all my life.

Mr. STRATTON. As far as you know, there was nobody lost, then?

Mr. KAUFENBERG. As far as I know; no sir.

Mr. STRATTON. You just said that somebody said he saw a hand?

Mr. KAUFENBERG. Yes, sir; one of the guard force told me this. I don't know, myself?

Mr. STRATTON. I see.

Mr. REDDAN. When you came back down the gangway this last time, did you notice whether or not the hoses were still in the vents of the tanks?

Mr. KAUFENBERG. No, sir; I hadn't noticed. I was more or less interested in getting the alarm and in getting these people off the ship.

Mr. HUNT. But the last time when you walked away from where the hoses were, the hose was in the vent, they were still there?

Mr. KAUFENBERG. Yes, sir.

Mr. HUNT. That was before the lunch hour started?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. Now, when you came back on board the ship, you said you talked outside here to someone and you said the gangplank was steep, by that do you mean down?

Mr. KAUFENBERG. Yes, sir; that was when we stepped aboard to go forward to look at it.

Mr. RANDALL. Yes.

Mr. KAUFENBERG. I noticed right then it was steeper than usual.

Mr. RANDALL. Actually, the boat was sinking right then?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. And this was immediately after the alarm?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. You said you had to give them two alarms to get them off; is that what you say?

Mr. KAUFENBERG. Yes, sir. You tell them twice. Sometimes you have to tell somebody twice like that, because normally you wouldn't believe a situation like that, because it rarely ever happens, once in a million years.

Mr. RANDALL. Do you have any knowledge or recollection of how many, or could you give an estimate of how many you saw coming off, 20, 25, 30, 50?

Mr. KAUFENBERG. I would say about 15, 20 people.

Mr. RANDALL. And that was all that was aboard? About 15?

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. Fine.

Mr. KAUFENBERG. Some of these were ship forces. They were aboard.

Mr. REDDAN. The two men who had been filling the ballast tanks prior to the lunch break, were they there when you came back on board?

Mr. KAUFENBERG. I think they were. I recall seeing somebody else up there besides us three. I don't remember if it was a machinist or not. It is sort of like a cloud in my memory.

Mr. STRATTON. Did you hear anybody comment at the time or afterward that everybody was up at the dinner for the Secretary of the Navy and nobody was around watching what was happening to the ship?

Mr. KAUFENBERG. No, sir; I hadn't heard a comment like that. If I did, I wouldn't pay any attention to it because in my mind that is not right.

Mr. STRATTON. From what you saw, the number of people who were there, and who were going about their job and so on, was about the same as any other night?

Mr. KAUFENBERG. After this had happened? After the boat sunk or before?

Mr. STRATTON. The situation on the 15th of May was the same as it had been on previous nights?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. If you were in a position to make any recommendations, would you make any with regard to the relationship between yourself and other people in the yard as far as getting faster action on safety complaints of the kind that you are responsible for?

Mr. KAUFENBERG. Yes, sir; I do have quite a few of them. For one, through these watertight doors—now I realize that you can't do it on all of the lines, different types of lines, but I have heard that they have such a thing as a quick release, right at the watertight door, so this would enable you to achieve watertight integrity almost immediately, which would be quite a boon, if they had, believe me.

And another thing is that a lot of these people think you have, I mean the way it comes to me is they know, where they say I have no authority whatsoever to tell anybody to rectify a wrong situation, which I believe is wrong.

Now, if I have got a responsibility of two \$50 million submarines, why shouldn't I have some responsibility. I mean, these two boats are on me. I do care a lot about both of these boats, because I have worked a lot of hours on both of them, and I have watched that, especially the 665, I watched that with growing interest, just like I am watching a brand new baby grow, just waiting for the day I could see it go on sea trials. I have never seen this before.

Mr. STRATTON. In other words, you ought to have the authority to get some action when you see a situation that looks dangerous to you?

Mr. KAUFENBERG. Yes, sir. I would like to have the kind of authority that you do such and such right now and not 2 minutes from now, and you know, because 2 minutes later might make a difference.

Mr. RANDALL. What you have been saying to us is in effect some of these fellows say to you, you see my leadman and you see this person or that person.

Mr. KAUFENBERG. Yes, sir.

Mr. RANDALL. In effect these men said to you: Don't talk to me about this thing. You have said you didn't know who the leadman was and you didn't know who to see; is that what you are saying?

Mr. KAUFENBERG. Yes, sir; that is about what I am saying.

Mr. HUNT. If you had a ship superintendent there, as there is in the daytime, as a ship superintendent during the day shift, if there had been a ship superintendent present when this occurred, you undoubtedly would have gone to him; would you not?

Mr. KAUFENBERG. Yes, sir; I would have.

Mr. HUNT. But you had no one there who was in direct command of the operation during this swing shift?

Mr. KAUFENBERG. No, sir; there was not. Nobody I could grab a hold of real quickly.

Mr. HUNT. The only thing you could do would be to tell those who were on board and then telephone to your shop representative?

Mr. KAUFENBERG. Yes, sir. This is one point I wanted to bring up. The man that answers the phone in my shop, it is something I would like to say about our shop. Not that I am trying to blow a horn or anything, toot my own trumpet, but it is one of the best shops in this yard, because this guy did exactly as I told him to. I just asked him, I said, I want somebody here right now, this 665 is sinking, and I mean immediately. This guy hung up the phone like that, and in not 30 seconds after that there were many, many people up there involved in this whole thing. Before the stern went down, there was, I guess—couldn't guess how many people were there doing a job, and doing a fabulous job.

Mr. STRATTON. Do you have any more questions?

Mr. REDDAN. No; thank you.

Mr. STRATTON. Mr. Hunt?

Mr. HUNT. No, sir, Mr. Chairman.

Mr. STRATTON. Mr. Randall?

Mr. RANDALL. I can't think of any. I want to say that I have been very much impressed by the sincerity of this man and some of the things that he said, such as how he has watched these babies grow as he put it. I think you have been very helpful to us. I want to commend you very much for your testimony. I am personally grateful that you have come in. I followed your testimony, very closely. At this point it is my opinion if they had listened to you we might be better off. I am very anxious to interrogate some of the other gentlemen who were there. I want to thank you for being with us.

Mr. STRATTON. I think we all feel the way Mr. Randall does, Mr. Kaufenberg. You have given us a very fine testimony.

Mr. KAUFENBERG. I appreciate that.

Mr. STRATTON. Incidentally, how many Navy officers showed up in the period while they were waiting for the stern to go down?

Mr. KAUFENBERG. It must have been, I would estimate at least 5 to 20, and there were very high ranking officers, I would say, from lieutenant on up.

Mr. STRATTON. In other words, when you got the word out to your shop, the word must have gone to the top brass?

Mr. KAUFENBERG. Pretty fast; yes. It is a hell of a man that we have on the other side of that phone.

Mr. REDDAN. Oh, I had just one question, Mr. Chairman. Would shop 38 men be permitted to replace the plate over this sonar hole? Would they have authority to do that?

Mr. KAUFENBERG. I wouldn't know whether they would or not. You see, shop 1—it is a conflicting thing. We have to have what you call—

Mr. RANDALL. A jurisdictional point.

Mr. HUNT. A jurisdictional guideline.

Mr. KAUFENBERG. You know what I mean.

Mr. STRATTON. Yes.

Mr. KAUFENBERG. It is a thing between the trades. It is cooperation.

Mr. STRATTON. What is shop 38 again, what is that?

Mr. KAUFENBERG. They are machinists.

Mr. STRATTON. Machinists.

Mr. KAUFENBERG. And your shop 11 people are shipfitters. This plate has to be fitted onto that hole, and the machinists bolt it down.

Mr. REDDAN. Were any shop 11 people around that night when you were on there?

Mr. KAUFENBERG. I had seen one earlier, about 1800 hours, down in the control room. He was working on this patch that they had just welded on there. It was on the port side of the boat, that they used to have. I believe they covered up the boat now, except for the _____.

Mr. REDDAN. Did you say anything to him about the water slopping in the hole?

Mr. KAUFENBERG. No. I hadn't noted it at that time.

Mr. REDDAN. I see. After you noted it, did you see him again?

Mr. KAUFENBERG. No, sir; I hadn't seen him again after that.

Mr. RANDALL. I think Mr. Hunt has done a good job in asking you about some of your background. I will simply ask one more question.

Do you belong to a union here? Are you a part of any particular union, like the AFL-CIO or anything, or do you have any organization here like the machinists or the autoworkers?

Mr. KAUFENBERG. We are, sir, but I am not a member of any certain union.

Mr. RANDALL. You have what they call a machinist council of some kind. Is that a part of the AFL-CIO, would you know?

Mr. KAUFENBERG. I wouldn't know.

Mr. RANDALL. But you are not a member yourself?

Mr. KAUFENBERG. No, sir.

Mr. RANDALL. How do you classify yourself? Are you a security officer? How do you regard yourself, by what title, or how are you classified?

Mr. KAUFENBERG. Well, the way they would have classified me is a below-decks watch stander. The way I would classify myself would be security officer.

Mr. STRATTON. That sounds much better than below-decks watch stander.

Mr. HUNT. Isn't it true, Mr. Kaufenberg, that actually you followed the vernacular of the Navy and that men standing watch are usually the security personnel at night on duty, or day?

Mr. KAUFENBERG. Well, in the Navy, they call them watch standers.

Mr. HUNT. Watch standers. So the terminology of below-decks watch stander is merely an application of the Navy terminology?

Mr. KAUFENBERG. Yes, sir.

Mr. STRATTON. Well, actually, a watch stander can be doing anything. It depends on what kind of a watch he is standing. It might be a watch on the bridge or something like that.

Mr. HUNT. No; he is below the deck—you see, he is designated as below-the-deck watch stander.

Mr. STRATTON. But he stood part of his watch definitely above the deck.

Mr. RANDALL. It is a good thing he did.

Mr. STRATTON. That is right.

Mr. RANDALL. Otherwise he might not be here now.

Mr. STRATTON. Thank you very much. I think we have a couple of other people we want to question. But you have been very helpful and we certainly appreciate your coming in.

Mr. KAUFENBERG. You are very welcome, sir.

Mr. STRATTON. We appreciate your suggestions, too.

Mr. RANDALL. Thank you.

Mr. KAUFENBERG. I had noted those suggestions to my shop head.

Mr. STRATTON. Good.

Mr. KAUFENBERG. And he has already got the ball rolling.

Mr. HUNT. Good.

Mr. STRATTON. I am glad we had you on the ball there that night. Too bad that more people weren't listening to you.

Mr. KAUFENBERG. That is for sure.

Mr. STRATTON. Thank you very much. Nice of you to come in, Mr. Kaufenberg.

Mr. RANDALL. Thank you.

Mr. REDDAN. Thank you.

Mr. HUNT. Good to see you.

Mr. KAUFENBERG. Would you fellows need me any more tonight?

Mr. STRATTON. No. Sorry to cut into your evening there.

Mr. KAUFENBERG. That is all right. Fine.

(Recess.)

Mr. STRATTON. Mr. Varing.

Mr. REDDAN. Mr. Varing, just have a seat over there, please.

TESTIMONY OF EMORY D. VARING, MARINE MACHINIST, SAN FRANCISCO BAY NAVAL SHIPYARD, MARE ISLAND, VALLEJO, CALIF.

Mr. VARING. Thank you.

Mr. HUNT. Have you been working all day, Mr. Varing?

Mr. VARING. No, sir. I come to the swing shift.

Mr. STRATTON. Varing, is it—V as in Victor?

Mr. VARING. Yes, sir.

Mr. STRATTON. Mr. Varing, we appreciate your coming here and we will try to be as brief as possible. We don't want to make you stay any longer than necessary.

I just want to tell you that we have been asked by the Chairman of the House Armed Services Committee to come out here and try to get a full picture as to what happened with the *Guitarro* so we can go back and determine what kind of procedures may be necessary to prevent this kind of thing happening in the future.

The chairman has asked us to put all of the witnesses under oath, and this is not because we are conducting any kind of a trial or even a court of inquiry, but simply because of the procedures that are being conducted by the Navy, we want to make sure that we are operating under the same kind of a sworn record.

The rules of the House call for any witness who is sworn to have the privilege of having a counsel if he so desires and also he is not required to testify to anything that might tend to incriminate him, et cetera.

So I wanted to let you know of that fact, and if you feel that you had to have a counsel, we would be happy to give you that opportunity, but if not, we can swear you now and take your testimony. It is strictly a routine procedure, since we are not in the process of trying to accuse anybody. We are simply trying to get the story.

Mr. VARING. Yes.

Mr. STRATTON. If that is agreeable with you, would you be sworn?

Mr. VARING. If—I just have one question, though. I didn't receive one of those slips of paper. I was sworn to not divulge anything by this naval court of inquiry, and these other fellows received a paper that said that should go with me, I believe.

Mr. STRATTON. Oh, we are not concerned about what you did or didn't say to the court of inquiry, but simply we would ask you ourselves with regard to certain other matters.

Mr. VARING. I mean, to withhold anything. I mean the naval court of inquiry wouldn't object to my apparently being here?

Mr. STRATTON. No.

Mr. REDDAN. No. The Navy is cooperating completely with us and there is no problem about disclosure, because the record of the court is available to us. So you don't have any worries on that score.

Mr. VARING. I am perfectly willing to be sworn.

Mr. STRATTON. Would you just stand and raise your right hand.

Do you solemnly swear that the testimony you will give before this subcommittee in this matter will be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. VARING. I do.

Mr. STRATTON. Mr. Varing, be seated, please.

Mr. REDDAN. Would you give the reporter your full name and address?

Mr. VARING. My name is Emory D. Varing. I live at 2815 Webb Street, in Vallejo.

Mr. STRATTON. And how long have you been in the shipyard, Mr. Varing?

Mr. VARING. Since April of 1960.

Mr. STRATTON. And at the present time what is your job in the shipyard?

Mr. VARING. I am a marine machinist?

Mr. STRATTON. And how long have you held that type of job, or that title?

Mr. VARING. Seven years. I came as a helper and in about 2 years I was one.

Mr. STRATTON. Your shop is shop 38?

Mr. VARING. Thirty-eight; yes, sir.

Mr. STRATTON. On the night of May 15, Mr. Varing, you were along with Mr. Thompson in the control room of the *Guitarro* around 1900, I believe, in the process of shifting ballast from one tank to another, is that correct?

Mr. VARING. We were the two fellows you have reference to; yes, sir. But I can't swear to the time, but I believe by that time we had finished, before 1900, in the control room and we were instructed to go from there, but I believe we had left the control room.

Mr. STRATTON. You may be right. Let's say 1830 or 1845.

Mr. VARING. Very good.

Mr. STRATTON. At some point?

Mr. VARING. Yes, sir.

Mr. STRATTON. Mr. Kaufenberg came into the control room at the same time that you were in the process of shifting ballast, is that correct?

Mr. VARING. I don't recall him in the control room, sir.

Mr. STRATTON. I see.

Mr. VARING. No, sir.

Mr. STRATTON. At any rate, you and Mr. Thompson were in the control room?

Mr. VARING. Yes, sir.

Mr. STRATTON. You would estimate around 1830, would you?

Mr. VARING. Yes.

Mr. STRATTON. And you were shifting ballast?

Mr. VARING. Forward; yes, sir.

Mr. STRATTON. Mechanically through the control panels, is that correct?

Mr. VARING. Yes, sir.

Mr. REDDAN. Who had given you those instructions, Mr. Varing?

Mr. VARING. Well, I might state right now, just like I do to the naval board, that I have never done this before. So there are two 38 machinists come over to the control room with me, my supervisor accompanied, so he realized I wasn't too sharp on that.

Mr. STRATTON. Who is your supervisor?

Mr. VARING. Mr. Miller, who is right out here.

Mr. STRATTON. Pardon me?

Mr. VARING. Mr. Miller.

Mr. STRATTON. Mr. Miller, right.

Mr. VARING. And the day shift pretty well lined us up on how to operate the pumps, how to operate the valves to take water from a certain tank and to another tank and so forth.

Mr. REDDAN. Part of the day shift was on when you came on the swing shift on the 15th, is that right?

Mr. VARING. Yes, sir; there is an overlap, I guess, made especially for that so we can take the turnover, as you refer to it.

Mr. REDDAN. I see. Who told you to shift the ballast?

Mr. VARING. Jimmy Saraiva, I believe.

Mr. REDDAN. Is he in shop 38?

Mr. VARING. Yes, sir.

Mr. REDDAN. Is he your immediate superior?

Mr. VARING. He is not a superior, sir. He is a machinist, like myself, but—Mr. Miller told me to do it, and he is my supervisor. But Jim Saraiva, and there is a Mr. Craig, another on the day shift, were both instructing me on how to pump water and how to transfer water to correct the list and the rise and dive of the boat.

Mr. STRATTON. Mr. Saraiva and Mr. Craig were doing this job on the day shift?

Mr. VARING. No, sir.

Mr. STRATTON. Oh—

Mr. VARING. As I recall now, they got word so close to the end of the day shift it was required that they left the boat up, that they didn't have time, so they said they would rather show the swing shift how to do it.

Mr. STRATTON. I see. So the day shift, as far as you know, had not actually shifted any ballast. They just got the word?

Mr. VARING. Enough ballast, sir; to demonstrate how it is possible to operate certain valves.

Mr. STRATTON. I see.

Mr. VARING. So you take a suction from one tank and exhaust it into another and so on.

Mr. STRATTON. I see.

Mr. VARING. Or you can reverse, take a suction out of this tank and exhaust in the other tank.

Mr. REDDAN. What were you supposed to be doing? I mean, how would you know when you had enough transfer of ballast? What was the end result you were seeking to accomplish?

Mr. VARING. Well, sir, to begin with, there is a leveling block, it is known as a leveling block, in the lower level of the engineroom. It is a very well machined piece of metal that is well protected and is going to stay. So that is probably known as the master, and we put a quadrant on it.

Mr. REDDAN. Like this, right here?

Mr. VARING. Yes, sir. The word we got was to get it within a half a degree of list and within half a degree of rise and dive.

Mr. REDDAN. How far out was it? Were you told, when you went on?

Mr. VARING. We were told, but the information was, I would say, wrong.

Mr. REDDAN. What were you told and who told you?

Mr. VARING. I can't remember whether it was Jim or Craig, now, but they said it was high at the bow by 2° , and I can't remember the list, whether that was correct or not. I can't recall. But it wasn't low at the bow. It was high at the bow.

Mr. REDDAN. You said they told you it was high at the bow by 2° ?

Mr. VARING. It was high at the bow. I stand corrected.

Mr. REDDAN. They said it was low at the bow by 2° and you checked it with a—

Mr. VARING. With a quadrant.

Mr. REDDAN. With a quadrant?

Mr. VARING. Yes, sir.

Mr. REDDAN. Did you check it or did Mr. Thompson?

Mr. VARING. We both checked it.

Mr. REDDAN. You both went down?

Mr. VARING. We both went down.

Mr. REDDAN. And your reading showed it was high at the bow by 2°?

Mr. VARING. Yes, sir.

Mr. REDDAN. Had you ever used one of these quadrants before, Mr. Varing?

Mr. VARING. Yes, sir.

Mr. REDDAN. Do you know whether Mr. Thompson was familiar with its operation?

Mr. VARING. Well, he sure appeared to. He seemed well versed on it, yes.

Mr. REDDAN. Did you doublecheck it, since there was a difference of really 4° between what you were told by the day shift and what you found it to be?

Mr. VARING. Yes, sir. That caused quite a bit of conversation, in checking, yes, sir.

Mr. REDDAN. Were the day shift men gone by that time?

Mr. VARING. Yes, yes, they were.

Mr. STRATTON. Did they give you this word before they went off?

Mr. VARING. Yes, sir.

Mr. STRATTON. Who were they?

Mr. VARING. Well, they were—it was a Mr. Dozler.

Mr. RANDALL. What did they do now? What did Dozler tell you?

Mr. VARING. He said we were low at the bow by 2°.

Mr. STRATTON. You remember the name of the other fellow?

Mr. VARING. He was the only one.

Mr. STRATTON. Mr. Dozler was the only one. OK.

Mr. VARING. In fact, he turned the quadrant in the box over to Roger Thompson and myself.

Mr. STRATTON. Right.

Mr. RANDALL. I thought Jim Saraiva and Craig said it was low at the bow. But Dozler also said it was low?

Mr. VARING. Well, they hadn't checked it, sir.

Mr. RANDALL. Oh, they hadn't really checked it?

Mr. VARING. No, Dozler told them it was low at the bow.

Mr. RANDALL. They relied on Dozler, too?

Mr. VARING. Yes, sir.

Mr. RANDALL. I see. All right.

Mr. VARING. Unless I am all messed up, that is my—

Mr. REDDAN. That is your best recollection?

Mr. VARING. Yes, sir.

Mr. REDDAN. Well, did you report this big difference to your superior?

Mr. VARING. Yes, sir, Mr. Miller was informed of this.

Mr. REDDAN. I see. Was he on the boat at that time?

Mr. VARING. Yes, sir.

Mr. REDDAN. What did he say and what did he do?

Mr. VARING. Well, he says it still got to be trimmed.

Mr. REDDAN. He didn't check it on the level?

Mr. VARING. Not that night. He had checked me out on Tuesday night quite thoroughly, Tuesday night just prior to this, and he trusted me to read it.

Mr. REDDAN. So he told you to go ahead and correct the trim according to your own reading?

Mr. VARING. Yes, sir.

Mr. REDDAN. Did he tell you how to do it?

Mr. VARING. No, sir.

Mr. REDDAN. I mean, did he instruct you—

Mr. VARING. Not specifically, sir. We had some conversation on the information the day shift gave us on running the trim system, to transfer water, internal water in the boat.

Mr. REDDAN. And is that the first thing that you tried by—

Mr. VARING. The first thing we did was correct the list. And if I can—you get all mixed up. But these are notes that I made—I had to write a letter to my shop the very night this happened.

Mr. REDDAN. If that will help you refresh your recollections. Can you just read them?

Mr. VARING. I found the ship to be high at the bow two degrees and port list three-fourths of a degree.

Mr. REDDAN. What else do you have there? You might just as well read the whole thing.

Mr. STRATTON. What did you then do to correct that condition, Mr. Varing?

Mr. VARING. Well, first—there are two auxiliary tanks. They are side-by-side. By pumping out of one into the other, you can create a list or get rid of a list, depending on the sideways balance. Then we transferred water from auxiliary tank to auxiliary tank 1, and then from the after trim tank to the forward trim tank.

Mr. STRATTON. You did this all in the control room?

Mr. VARING. Yes, sir.

Mr. STRATTON. By pushing the appropriate buttons and controls?

Mr. VARING. Yes, sir.

Mr. REDDAN. Now, after having switched the water from the aft trim to the forward trim, did you again check it on the quadrant?

Mr. VARING. Yes, sir.

Mr. REDDAN. What did your quadrant show at that time?

Mr. VARING. I can't remember for sure, sir, but it was in the neighborhood of one degree, I think.

Mr. REDDAN. You think you had corrected it about one degree?

Mr. VARING. Yes, sir.

Mr. RANDALL. Did you use this quadrant down, this leveling block you are talking about in order to give the rise and dive for the trim? Then you check the list, is that correct?

Mr. VARING. Well, each time we would go down we would check the rise and dive and also the list.

Mr. RANDALL. But you would go back—you would finish one operation before you started the other. You weren't trying to do them all at once?

Mr. VARING. No, sir.

Mr. RANDALL. I see.

Mr. VARING. No, sir, I was too green at the job.

Mr. RANDALL. I can see you might think you were trying to move the ship in two directions at the same time?

Mr. VARING. Yes, sir.

Mr. RANDALL. However, the water was not moving except from tank number 1 to tank number 2. That was one operation. Before you started from the fore or aft trim tank, you had finished the other movement of water?

Mr. VARING. Yes, sir.

Mr. RANDALL. I am glad we have those facts in proper order.

Mr. REDDAN. Now, after you found out that this correction was not enough, what did you do then?

Mr. VARING. Well, we went and reported that to our supervisor.

Mr. REDDAN. And that was?

Mr. VARING. Mr. Miller.

Mr. REDDAN. Mr. Miller. And what did he say to you?

Mr. VARING. Well, he said to see if ballast tanks 3-a and 3-b were full and if not, add some water to bring the ship down to level, or one-half degree of level.

Mr. REDDAN. And you checked those tanks?

Mr. VARING. Yes, sir.

Mr. REDDAN. And what did you find?

Mr. VARING. There is no way—there are no gauges for those. We had to take some temporary dust covers off, go down in the ship and open the main ballast tank vent valves for 3-a and 3-b, and shine a flashlight down, and these valves don't open so you can see the bottom. You just kind of go diagonally down. We couldn't see water. It was low enough so we couldn't see it. So he said, get the necessary gear and add a little water until we got it down to the required readings.

Mr. STRATTON. You couldn't do that mechanically, then, by pushing another button?

Mr. VARING. No, sir.

Mr. STRATTON. On the control panel?

Mr. VARING. No, sir.

Mr. REDDAN. Let me see if I understand what you are saying here, Mr. Varing.

How many tanks are there forward there? There is a main ballast tank?

Mr. VARING. There is the main port and starboard—number 1 port and starboard.

Mr. STRATTON. Seven and 8?

Mr. VARING. They are aft.

Mr. STRATTON. Here is 7 and here is 8. These are the tanks 2-a and 3-b?

Mr. VARING. Yes.

Mr. STRATTON. These are the yellow ones. They are right on either side of the sail.

Mr. REDDAN. Those are the main ballast tanks, is that right?

Mr. VARING. Yes, sir.

Mr. REDDAN. I see. Now, you didn't check—it wasn't the main ballast tanks you were just telling us about?

Mr. VARING. Yes, sir, 3-a and 3-b.

Mr. STRATTON. Here is 3-a and 3-b.

Mr. REDDAN. What about the other tanks which were full?

Mr. VARING. They were full.

Mr. REDDAN. Did you check them?

Mr. VARING. Our supervisor said they had been filled on Tuesday night.

Mr. REDDAN. You didn't determine that?

Mr. VARING. We didn't determine that, but our supervisor told us. They were not disturbed in any manner.

Mr. STRATTON. That would be main ballast tank 1 and main ballast tank number 2?

Mr. VARING. That is actually four. When you say ballast tank 1, you have A and B.

Mr. STRATTON. Yes, sir.

Mr. VARING. And 2-a and 2-b and 3-a and 3-b and so forth.

Mr. REDDAN. Tell us what you did then? You looked in the ballast tank and you couldn't see any water?

Mr. VARING. Couldn't see any water. There is a water manifold up on the ship, yard water, fresh water, and we had to hunt up a piece of fire hose and we had to get a piece of what they call tygon. It is pretty rigid, flexed tubing. We didn't want to use metal and scratch the valve. So that is what we did. We got that and we would run water for 5 minutes with a wide open valve and shut it off and put it in the other ballast tank and run it for 5 minutes and continued that once or twice, and then went down and took more readings.

We found that we were improving, but we hadn't reached this half a degree yet that we were striving for.

Mr. REDDAN. Well, now, you only had a degree to go?

Mr. VARING. Yes, sir.

Mr. REDDAN. At the time you went up to the main ballast tank, how long did you run water in there?

Mr. VARING. Well, not so very long, because we would go by the watch—we wanted to maintain our no list. We had it within a quarter of a degree and we thought with 5 minutes on each side we wouldn't have that problem, that we already got rid of, so we shut it off. We went down quite regularly and checked with the quadrant on the leveling block. I don't think the hose was turned on for 30 minutes. I don't believe—

Mr. REDDAN. And when did you make your last check on it?

Mr. VARING. At approximately 7:45, 1945.

Mr. REDDAN. And at that time how far off were you?

Mr. VARING. Three-quarters of a degree rise at the bow yet.

Mr. REDDAN. You are almost there at that time?

Mr. VARING. Almost there.

Mr. REDDAN. What did you do at that point?

Mr. VARING. Well, we just lay the hose, let it lay over the side of the ship, and went to lunch.

Mr. REDDAN. You didn't leave the hose in the valve?

Mr. VARING. No, sir.

Mr. REDDAN. You are sure of that?

Mr. VARING. I am very sure.

Mr. STRATTON. When you went up topside to rig up the hose and start filling these tanks, did Mr. Kaufenberg come by and tell you that the water was splashing into the opening end of the sonar dome?

Mr. VARING. He didn't say there was water splashing there. I took a walk with him on the dock. We were looking at the level of the boat and he took his lunch and went down in there and ate his lunch and he said, "Don't squirt any water on me."

Mr. REDDAN. About what time was this?

Mr. VARING. It was some time before we went to lunch and I couldn't pin it down exactly, but I would say 7 to 7:30 in that area.

Mr. STRATTON. You say he didn't report to you that water was splashing in there?

Mr. VARING (nods negatively). I never heard him say that.

Mr. STRATTON. You say you took a walk on the dock to look at—

Mr. VARING. He says this boat has always had a lot of drag. I said, what do you mean by drag? He says low on the back. And we take a walk and he said, "It is better, anyway." He probably said other things, but that was the reason we took the walk along the seawall.

Mr. REDDAN. This was 7 or 7:30, you say?

Mr. VARING. Yes, sir; in that area.

Mr. REDDAN. Did you go forward to see the bow, see how she was riding in the water at that time?

Mr. VARING (nods).

Mr. REDDAN. How was it riding?

Mr. VARING. Well, it wasn't down to the black paint, yet, sir. The boat, I don't know how to describe it, but it is red.

Mr. REDDAN. Yes.

Mr. VARING. And then the black waterline. It was below that.

Mr. REDDAN. It has numerals painted on the side?

Mr. VARING. Yes, but I can't recall the number.

Mr. REDDAN. It was down in the red, however?

Mr. VARING. Yes, sir.

Mr. REDDAN. Can you visualize approximately how far down it was?

Mr. VARING. Oh, it was no more than probably about a foot or maybe 8 inches.

Mr. RANDALL. Of the black or red showing? As I recall the black is up above and the red is down below.

Mr. VARING. The red was showing.

Mr. REDDAN. A foot or 6 inches of the red was showing?

Mr. VARING. Eight inches or something like that.

Mr. STRATTON. Was any water coming in through that little opening over the sonar dome that you know of?

Mr. VARING. It was right above the waterline.

Mr. REDDAN. About how much freeboard was there?

Mr. VARING. Gosh, I don't know. There was no splashing up there anytime I saw—

Mr. RANDALL. Well, was it 3, 4, or 5 feet?

Mr. VARING. No, not that much.

Mr. RANDALL. Does 3 feet sound about right?

Mr. VARING. Two feet.

Mr. RANDALL. Two feet?

Mr. VARING. Maybe 3.

Mr. STRATTON. After you took the walk along the dock, then did Mr. Kaufenberg go into the space there to have his lunch?

Mr. VARING. Well, I get my times mixed up, sir. I can't remember—I am sure he went in after this. I am quite sure.

Mr. STRATTON. He just went down to eat his lunch and said, "Don't splash any water on me."

Mr. VARING. Yes, sir.

Mr. REDDAN. Did you have the hose turned on after that?

Mr. VARING. Yes, I think we were still filling when he went down in there, yes, I am positive of that.

Mr. STRATTON. Did he, before you left for lunch and before he left the *Guitarro*, go to the *Hawkebill*, the other submarine, did he mention anything then, roughly, say, at 1945, did he mention anything about water coming in?

Mr. VARING. I don't recall him leaving. I remember him going down in there. He says, "Don't get any water on me, because this hose came out once and it soaked me." He and Roger were having a little joke about that. I guess he didn't want me to get even with him or something, but he never said water was getting in there.

Mr. STRATTON. Do you remember any discussion about whether that area up forward was a free-flooding area or not?

Mr. VARING. Well, that is something I still don't understand, just what that is, free flooding or not.

Mr. REDDAN. You were saying you had no conversations with him about a free-flooding area up there in the sonar?

Mr. VARING. I don't recall. I have had a lot of conversations since then with people.

Mr. STRATTON. Yes.

Mr. VARING. But I still haven't learned exactly what takes place up in there.

Mr. STRATTON. Did Mr. Thompson mention it?

Mr. VARING. Possibly, could have.

Mr. STRATTON. To Mr. Kaufenberg?

Mr. VARING. He may have.

Mr. STRATTON. Were the two of you sort of an equal status or was he in charge of the detail or were you in charge of the detail?

Mr. VARING. I would be in charge.

Mr. STRATTON. I see.

Mr. VARING. Yes, sir.

Mr. STRATTON. And Mr. Miller was located where?

Mr. VARING. Well, I don't know, sir, whether he was on the boat then or over in the office. I don't know.

Mr. STRATTON. I think you said you checked with him and said you still had a degree to go?

Mr. VARING. Well, that was—yes, sir.

Mr. STRATTON. Then he told you to fill the 3-a and 3-b tanks. Was he then on the boat or—

Mr. VARING. No, sir.

Mr. STRATTON. Or did you call him on the phone?

Mr. VARING. I saw him over in the office building.

Mr. STRATTON. I see.

Mr. REDDAN. Before you left for lunch, did you check the bow of the boat to see how she was riding in the water?

Mr. VARING. Yes, we did.

Mr. REDDAN. What did you see at that time?

Mr. VARING. I saw nothing unusual. The bow was, of course, must have been lower than before we started, but I thought there was plenty of freeboard.

Mr. REDDAN. Was any of the red showing at that time?

Mr. VARING. Yes, sir.

Mr. REDDAN. And no water was slopping through the hole?

Mr. VARING. I never did see any water slopping through.

Mr. REDDAN. Would you have any explanation as to how the bow would have gotten lower than it was when you left for lunch, if your hoses were cut off and if no water was coming through that sonar opening?

Mr. VARING. I swear that that hose was removed, sir, and I could see no water coming in through any openings up forward that were obvious to me at all.

Mr. REDDAN. You see the problem that poses for us. You leave the boat and she is riding with plenty of freeboard on there. When you come back, it is in a sinking condition. Now, could you help us with any suggestion as to how that additional water could have gotten forward there?

Mr. VARING. I don't know.

Mr. STRATTON. Could you tell us when you came back and what you saw when you came back?

Mr. VARING. Well, I came back on the plank and I saw, oh my God, it was real low, and water was already running in the forward escape trunk. The first thing I thought was maybe I can start this pump and reverse the procedure, pull some of this water out of that forward trim tank into the after. So I run to an opening and down in and Mr. Thompson was already there doing that. So I tried, thought maybe there were some watertight doors I could shut but all of them had these big electric cables and airhoses. There were no fire axes around.

Mr. REDDAN. Did you have any power to blow those tanks?

Mr. VARING. Blow the——

Mr. REDDAN. Yes; to blow the water out of the tanks?

Mr. VARING. No, sir. Those tanks, the ballast tanks you are referring to?

Mr. REDDAN. Yes, sir.

Mr. VARING. Well, that is a peculiar thing. At this stage of the game, or to state it another way, when a ship is in commission there are openings on the bottom and the air blows the water out. But these were all welded shut, until the next time it went into the dry dock, before it was put into commission.

Mr. REDDAN. It has to blow out through the bottom?

Mr. VARING. Through the bottom. If it blew out through the top, there would be nothing accomplished there.

Mr. REDDAN. So there is no way of emptying those tanks?

Mr. VARING. No, no way. The only way you could do it was dismantle the vent valves and put a sucker or a hose down in. Of course, when it sunk, there wouldn't be any advantage.

Mr. REDDAN. Could anybody else have come there and turned on that hose after you had gone to lunch?

Mr. VARING. Well, they could, but it seems unlikely that anybody could possibly do that. They would have to put it in the tank again. I can't think of anyone that would want to do that for any reason.

Mr. RANDALL. Well, do you recall seeing the hose out when you came back from lunch? Do you recall seeing the hose where you left it? You said you left it hanging over the side?

Mr. VARING. Yes, sir.

Mr. RANDALL. Was it still there when you came back from lunch?

Mr. VARING. I can't swear to that.

Mr. RANDALL. You say you can't swear to that?

Mr. VARING. I was pretty excited then. It was taking water. There was a lot of commotion.

Mr. RANDALL. When you went downstairs, you said you found Thompson was already there. Do you recall seeing a lot of persons running around trying to locate an ax to cut wires or hose?

Mr. VARING. No, sir. I recall a chief taken off the boat that I recognized and he was taken up and he was getting awful wet, and he said, "Get the hell out of there, we are going down." That is what happened.

Mr. RANDALL. What time did you get back from lunch, do you recall, Mr. Varing?

Mr. VARING. Well, I was on the boat just about the time the whistle blew. There are two whistles. There is a warning whistle and there is one to be on the job. And I am quite sure that I was on the boat when, or at least on the gangway, when that whistle blew.

Mr. RANDALL. When the first whistle or the second whistle blew?

Mr. VARING. The second whistle.

Mr. STRATTON. You didn't have lunch with Mr. Thompson then?

Mr. VARING. No, sir.

Mr. STRATTON. He was on there before you?

Mr. VARING. He must have been; yes, sir, because he was down at the ballast control panel trying to do what I had in mind to do.

Mr. STRATTON. Right. Did anybody give him the alarm—

Mr. REDDAN. Sound an alarm.

Mr. STRATTON. Sound an alarm? Is there a bell or something or other?

Mr. VARING. Yes, all of a sudden there were all kinds of alarms; yes, sir. And I am not too familiar with alarms. I know there is distinct alarm for each sort of thing. But there were many different alarms, different types of alarms.

Mr. STRATTON. Did you see Mr. Kaufenberg around? Was he saying "Get out of the boat, she's sinking," or anything like that?

Mr. VARING. I never saw him again until here. I haven't seen him. I might have looked right past him. I can't say, sir.

Mr. STRATTON. I don't believe I have any more questions.

Do you have any?

Mr. REDDAN. Yes. You can't give us any suggestion at all as to how this might have taken on additional water?

Mr. VARING. No.

Mr. HUNT. Mr. Varing, at this time when you were transferring the ballast, was this the first time in your entire career in this shipyard that you have attempted or have transferred ballast in a submarine?

Mr. VARING. Yes, sir.

Mr. HUNT. You had never been subjected to this before?

Mr. VARING. No, sir.

Mr. HUNT. And you were only instructed the one time?

Mr. VARING. Yes, sir.

Mr. HUNT. Would there be any possibility that a malfunction on that control board permitted water to be continued to be transferred to the aft tanks? Could a valve have been left open so that water would continue to be transferred aft to forward?

Mr. VARING. No.

Mr. HUNT. No?

Mr. VARING. I am satisfied that it couldn't happen. I am quite sure because these valves have three positions. They have to or from and shut and I know positively that we shut—when we completed what we could do on the ballast control panel, the pumps were shut off and all the valves were secured, to shut.

Mr. HUNT. Did anybody ever check those valves again after the submarine was raised, to see whether or not they were still in the off position?

Mr. VARING. I don't know, sir.

Mr. STRATTON. We had some testimony, Mr. Varing, that between 4 o'clock, 1600 on that afternoon, and about 1730, that there was some ballast transferred from one of the main ballast tanks, I don't know, I guess the auxiliary tanks, back to the after trim tank, and then after about 1730 there was ballast transferred from that after tank to the forward tank as you have indicated.

Do you recall that thing going in two different directions? Was there some ballast transferred aft and then later transferred forward?

Mr. VARING. Only for demonstration or instruction. There was some transferred aft; yes.

Mr. STRATTON. I see.

Mr. VARING. While the day shift was still there, before we had checked the condition of the ship, I mean as far as rise and dive and list is concerned. But there was no appreciable amount moved.

Mr. STRATTON. Well, according to this testimony, there was almost as much transferred back aft as was later transferred forward, was transferred from the auxiliary tank which was about midship back aft, and then about the same amount transferred from the after tank all the way up forward.

Mr. VARING. Not by me; no, sir.

Mr. STRATTON. Well, would that—

Mr. VARING. If any water was transferred aft, it was transferred before swing shift, or before 4 o'clock.

Mr. STRATTON. Before 4 o'clock? I don't know how fast you can do this, but say, take 15 tons of water. Could that be transferred from one tank to another just in the course of demonstrating how you did it or would that take a longer period than you might get in a normal demonstration?

Mr. VARING. It would take a longer period than that, sir. I was watching the counter. Every time it clicked, it is 10 pounds, and it clicked pretty fast, but 15 tons, it would take considerably longer than for demonstrating.

Mr. STRATTON. It clicked off 10 pounds?

Mr. VARING. Well, I noticed——

Mr. STRATTON. Every——

Mr. VARING. It is like the speedometer on an automobile.

Mr. STRATTON. Yes.

Mr. RANDALL. How does it work?

Mr. VARING. Every time the last digit clicks, it says times 10.

Mr. STRATTON. I see.

Mr. RANDALL. Mr. Chairman.

Mr. STRATTON. Yes.

Mr. RANDALL. I am not clear about the method of this transfer. You suggested that there were buttons that you could push on the control panels, which would transfer water from one tank to the other?

Mr. VARING. Well, toggle switches.

Mr. RANDALL. Toggle switches. And that does it without any manual control while you are standing there in front of the panel?

Mr. VARING. Yes, sir.

Mr. RANDALL. Now, it has been developed by yourself and also by another witness that you had a hose. What were you using the hose for?

Mr. VARING. That was later.

Mr. RANDALL. Why did you use it later?

Mr. VARING. There is no provision in the main ballast tanks, except to flood them——

Mr. RANDALL. Then, the use of the hose came much later than the transfer of water by use of control panel?

Mr. VARING. Yes, sir. Those we refer to as internal tanks and are interconnected so you can move water from any tank to another, any other tank.

Mr. RANDALL. Where were you putting the water which came from the hose?

Mr. VARING. We were standing topside, just forward of the sail, where the ballast tank vent valves are, and that is where we were when we were using the hose.

Mr. RANDALL. When you went to lunch, you put the hose over the side?

Mr. VARING. Yes, sir.

Mr. RANDALL. That is all.

Mr. STRATTON. Well, your testimony, as I understand it, is that nobody during the time that you were filling those tanks ever suggested to you that the bow was low and was taking on water or that you ought to do something about not filling the 3-a and 3-b any further?

Mr. VARING. No, sir; it was not.

Mr. STRATTON. Do you have any further questions?

Mr. HUNT. No.

Mr. STRATTON. Mr. Randall?

Mr. RANDALL. No.

Mr. STRATTON. Thank you very much, Mr. Varing.

Mr. VARING. Thank you.

Mr. REDDAN. Thank you, Mr. Varing.

Would you ask Mr. Thompson to come in, please?

Mr. VARING. Yes, sir.

Mr. STRATTON. We better proceed in order here, Mr. Thompson.

We are conducting an inquiry here at the request of the chairman of our committee to try to determine what happened and what steps can

be taken to avoid this sort of thing in the future. We are not trying to find anybody to blame or responsible, or anything of that kind, but in order to conduct our hearing in the proper way, and particularly in view of the fact that there is a Navy court, the chairman has asked us to swear witnesses, and we have sworn the others who have testified.

We are also required under the rules of the House to tell you that if you so desire, you can have counsel accompany you, and you of course are not required to answer any questions or to divulge any information that might tend to be incriminating to you.

If you desire counsel, you are welcome to have it. If not, we will be glad to swear you. We are mainly interested in getting your account of what happened. If that is agreeable with you, we will swear you now.

**TESTIMONY OF RODGER WILLIAM THOMPSON, MARINE MACHINIST
(LIMITED), SHOP 38, SAN FRANCISCO BAY NAVAL SHIPYARD,
MARE ISLAND, VALLEJO, CALIF.**

Mr. THOMPSON. I am ready.

Mr. STRATTON. All right, fine. Will you raise your right hand?

Do you solemnly swear that the testimony you are about to give before the subcommittee in this pending matter shall be the truth, the whole truth and nothing but the truth, so help you God?

Mr. THOMPSON. Yes, sir.

Mr. STRATTON. Fine. Thank you. Would you be seated. Could you give your full name to the reporter, please?

Mr. THOMPSON. Rodger William Thompson.

Mr. REDDAN. What is your address, Mr. Thompson?

Mr. THOMPSON. 411 Pennsylvania Avenue, Fairfield.

Mr. REDDAN. And how long have you been employed in this yard?

Mr. THOMPSON. It has been a little over 4 years now.

Mr. REDDAN. As of May 15, what was your assignment?

Mr. THOMPSON. Was that Thursday?

Mr. REDDAN. I mean what was your rating or what was your job?

Mr. THOMPSON. May 15, what was that—

Mr. REDDAN. That was the date the sub went down.

Mr. THOMPSON. Oh. I had been working along with Red Varing on the drawings normally, but that night we were supposed to trim the boat for some nuclear test that was taking place.

Mr. REDDAN. You were in shop 38?

Mr. THOMPSON. Yes, sir.

Mr. REDDAN. How long had you been in that shop?

Mr. THOMPSON. I have been in shop 38 all the time I have been in the yard.

Mr. REDDAN. I see. And you were on the swing shift?

Mr. THOMPSON. Yes, sir.

Mr. REDDAN. When did you get your instructions as to what you were to do that night?

Mr. THOMPSON. Well, Red had already—he was getting instructions when—or he had got the instructions when I come down into the boat.

Mr. REDDAN. You are talking about Mr. Varing?

Mr. THOMPSON. Yes, sir.

Mr. REDDAN. You refer to him as Red?

Mr. THOMPSON. Yes, that is what I usually call him.

Mr. REDDAN. And he had already gotten his instructions when you came in?

Mr. THOMPSON. He got some more after I got down there. Another man on the day shift had seen him and he got some more instructions, but he had got the major portion, I think, before I got there.

Mr. REDDAN. Did he tell you what you were supposed to do that night?

Mr. THOMPSON. Yes, he said what we were—that we were going to trim the boat.

Mr. REDDAN. And had you ever done this before?

Mr. THOMPSON. No.

Mr. REDDAN. How did you know what to do?

Mr. THOMPSON. Well, I just did what they told me. All I had to do was help Red. They were using a trim pump on day shift and they had been using the main ballast tanks on a previous day which I wasn't working on this job. I just understood that we would put water wherever it was necessary, until we got the boat on an even trim.

Mr. REDDAN. What did you understand that the day shift had been doing with the trim tanks?

Mr. THOMPSON. Well, day shift had been pumping the water aft.

Mr. REDDAN. How did you know that?

Mr. THOMPSON. Well, just from the way the pump—the way they were doing it when I came down, and as soon as we found out what the position of the boat was, then we secured that way and changed it.

Mr. REDDAN. The day shift man was on there when you came on?

Mr. THOMPSON. Well there was one just leaving the boat. In fact he told me that Red was down below and that we were going to trim the boat. That was one of them. Then when I went below, another one came up while I was down there.

Mr. REDDAN. Did he tell you whether it was down by the bow or up by the bow?

Mr. THOMPSON. He didn't tell me; no.

Mr. STRATTON. Why were they pumping the water aft, do you know?

Mr. THOMPSON. Well, I presume that they felt that that is the way it would have to go, according to their calculations.

Mr. STRATTON. Did they tell you how much they had pumped aft?

Mr. THOMPSON. No. Like I said, I didn't get the turnover myself.

Mr. STRATTON. I see.

Mr. REDDAN. Now, when you and Mr. Varing took over, what did you do, after the day men left what did you do?

Mr. THOMPSON. Well, my leading man told me to go down in the torpedo room, on the weapons-handling rails, and check and see what position the boat was in at that time. As soon as I got my readings—I didn't get the list, but I got the trim which I think was the most important of the two right then, since they were correcting that particular one, and then I brought the quadrant, gunner's quadrant which I was using back up in the COC where my leading man, Mr. Miller, and Red were.

Mr. REDDAN. Did you go down by yourself with the quadrant?

Mr. THOMPSON. Yes, sir, I went down by myself at first, and then I told them what I had got and I showed them the quadrant, and they decided they would check it again.

Mr. REDDAN. What did you tell them you had gotten?

Mr. THOMPSON. I said it looked to me like the bow was high.

Mr. REDDAN. By how much?

Mr. THOMPSON. Two degrees.

Mr. STRATTON. And what did they tell you from the day shift?

Mr. THOMPSON. The day shift didn't tell me.

Mr. STRATTON. Oh, they didn't.

Mr. THOMPSON. I didn't get the turnover from day shift.

Mr. REDDAN. Then when you told this—you say your supervisor was up there at that time?

Mr. THOMPSON. Yes.

Mr. REDDAN. Mr. Varing?

Mr. THOMPSON. Yes, sir. He shut the trim pump off.

Mr. REDDAN. Now, did your supervisor go down with you at that time?

Mr. THOMPSON. No, I don't think at that time. Later on he checked it.

Mr. REDDAN. Mr. Varing went down with you at the time?

Mr. THOMPSON. Yes. Mr. Varing checked it. I went down with him. He checked it. Right after I checked it.

Mr. STRATTON. Did Mr. Varing or anybody else say they were told that it was down by the bow 2° rather than up by the bow?

Mr. THOMPSON. I don't remember any measurements, but—I don't know if they said, no, at that time, but I know they must have felt that the bow was low because they were putting water in that for trim.

Mr. STRATTON. I see.

Mr. REDDAN. Had you ever used a quadrant before?

Mr. THOMPSON. I had never used it on this type of operation. I have used it on the fair water planes.

Mr. RANDALL. Did you say planes?

Mr. THOMPSON. Planes; yes, sir. We were calibrating the fair water planes the day before, the mechanical indicator on it, and we had been using it at that time, and I had used it on another boat, the same type job.

Mr. STRATTON. What are these? Are these the ones that are out of the sail?

Mr. THOMPSON. The sail; yes, sir.

Mr. REDDAN. So after checking and finding 2° and Mr. Varing checking—he verified your finding of 2° ?

Mr. THOMPSON. Yes, sir.

Mr. REDDAN. Then what did you do?

Mr. THOMPSON. Then we went back up and changed the line up so that—well, first we just forgot about the trim for right then. We took the list off first, with the auxiliary tanks, and then we started taking water from after trim to forward trim to correct the trim.

Mr. REDDAN. And how much did you move forward, do you know?

Mr. THOMPSON. I don't know of any way of telling how much we actually moved.

Mr. REDDAN. Did you fill the forward trim tanks?

Mr. THOMPSON. Well, I would say it was probably close to full. The gauge on the ballast control panel wasn't, the calibrations weren't in, you know, looking at the other gauges you could see that it was getting up that close to full, I don't know how full.

Mr. REDDAN. How many times did you use the quadrant to determine the trim?

Mr. THOMPSON. Well, on the trim, I don't know how many times. You know, I stayed down in the torpedo room while we were taking the list and I was going to call them up as soon as it was about zero. About the time I was going to call him he called me and I told him it was on zero and to stop on the list.

But on the trim—in other words, on the list, the first time we corrected the list, well, it was continuously watched. But on the trim, I don't know how many times we checked.

Mr. RANDALL. One time you went down. Varing went down another time?

Mr. THOMPSON. Yes, sir.

Mr. STRATTON. And you suggested Miller went down later on?

Mr. THOMPSON. He really did.

Mr. STRATTON. So there were really three times?

Mr. THOMPSON. There was more, but I don't know how many times.

Mr. REDDAN. After you pumped the water forward in the trim tanks, did you go down and check with the quadrant again to see what effect that had on the trim?

Mr. THOMPSON. Yes, I believe. I know Varing checked in the engine-room before we went off the boat.

Mr. REDDAN. What or how was the boat lying in the water at that time?

Mr. THOMPSON. Well, it was still high in the bow.

Mr. REDDAN. You know by how much?

Mr. THOMPSON. When we left—

Mr. REDDAN. When you finished pumping into the forward trim tanks?

Mr. THOMPSON. It was about a degree high, I believe.

Mr. REDDAN. Then what did you do? Did you report this to anybody?

Mr. THOMPSON. I didn't. We were supposed to get it within half a degree, so our job wasn't finished until we had the boat trimmed within half a degree.

Mr. REDDAN. So your next step was what?

Mr. THOMPSON. Well, the next step was in some way putting more water forward so that we could come within this limit.

Mr. STRATTON. Before you get into that, let me ask a question. While you were down there in the COC doing this trimming with the mechanical arrangements, did Mr. Kaufenberg the security watch, come by, what is it, below-decks watchstander, did he come by and watch what you were doing?

Mr. THOMPSON. I don't know. I don't remember seeing him.

Mr. STRATTON. You don't recall seeing him?

Mr. THOMPSON. Not at that particular time, that night.

Mr. STRATTON. All right. Go ahead.

Mr. REDDAN. What did you do next?

Mr. THOMPSON. Well, in order to put water in the main ballast tanks, we had to find some equipment to get it in, because the vent valve, where

you have to get in through, they only open—they leave a small hole. So the fire hose that we had to use, you would be splashing it all over if you just aimed it at the hole.

So we had to find some tubing that they used previously on this job and put it in the fire hose and slip it into the hole so it wouldn't throw it all over the place.

Mr. REDDAN. Did you have any specific instructions or authorization to fill the main ballast tanks to get it within half a degree?

Mr. THOMPSON. Well, I don't know of any myself, but they had been doing this. The previous days that they had trimmed the boat they had done the same thing.

Mr. REDDAN. Who had done it?

Mr. THOMPSON. Well, there were some different men. There was a day shift man that came in on test, I think it was. I don't know if it was more than 1 day. I know, I am sure it was Tuesday that they called the day shift man in. He had been working on this type of thing and this was the way they did it.

Mr. REDDAN. You actually saw them filling ballast through the vents?

Mr. THOMPSON. Yes, sir; they filled, I believe, 1A and—well, I don't know all the numbers, but 1, 2, and 3. If he filled a little bit on the forward ballast tanks, while we were calibrating the fairwater planes I was up—in fact, I was supposed to go up and help them a little bit, because they had a fan, ventilation fan sitting over the covers where they had to go in on 2A and 2B, and they had to get the riggers to take the covers off, and I was up there a little while then. That is all I have seen of it.

Mr. RANDALL. I think—this is important. Was Miller your boss there that night?

Mr. THOMPSON. Yes, sir.

Mr. RANDALL. Did he consult with you at any time while you were in the process of this work? You said he was overboard and he came down and said, you are putting too much water, or you are not putting enough?

Mr. THOMPSON. Well—

Mr. RANDALL. You and Varing, you were just going ahead. Before you went to lunch, now. Was he right there with you all the time?

Mr. THOMPSON. No, he wasn't right there with us all the time.

Mr. RANDALL. What was he doing?

Mr. THOMPSON. He has to go around all the particular jobs. He doesn't stay on one particular job. He has a lot of them working for him and he has to go around and check all the jobs.

Mr. RANDALL. But what I am trying to get at: When you came on you knew you would try to correct the trim?

Mr. THOMPSON. Yes.

Mr. RANDALL. And who had told you to do it, the people ahead of you on the other shift or Miller?

Mr. THOMPSON. Well, mainly we follow the day shift and also our leadingman.

Mr. RANDALL. But the day shift is not your boss. Miller is your boss, isn't he?

Mr. THOMPSON. Well, a lot of jobs the day shift is more our boss, like for instance when we worked hydraulics.

Mr. RANDALL. But they were gone. They were gone weren't they?

Mr. THOMPSON. Yes.

Mr. RANDALL. At the time Mr. Miller was really the man in charge?

Mr. THOMPSON. Yes.

Mr. RANDALL. And he wasn't with you all the time?

Mr. THOMPSON. No; he couldn't be with us all the time.

Mr. STRATTON. Do you know, when you finished doing the job in the control room, whether anybody got in touch with Mr. Miller to find out what to do next?

Mr. THOMPSON. Yes. I am sure that Red did. They got a hold of him and decided that this was what we would have to do, is put water in the main ballast tanks.

Mr. STRATTON. Red would be the senior man of the two of you, is that correct?

Mr. THOMPSON. Yes, sir. He is the mechanic and I am limited. I am under him.

Mr. STRATTON. I see. Now, do I understand you filled these tanks by taking a fire hose and then you had to have some attachment to the hose to reduce the diameter so that you could get it into the small vent opening, is that correct?

Mr. THOMPSON. Yes. You have to be able—on the end of the fire hose you have a fitting so it can hook up to another one if you had to.

Mr. STRATTON. Right.

Mr. THOMPSON. You can't squeeze this down to put it in the hole.

Mr. STRATTON. Right.

Mr. THOMPSON. But with a piece of tygon tubing, you can. You can switch it together and slide it into the hole.

Mr. STRATTON. Tygon tubing, is that what you call it?

Mr. THOMPSON. Yes, sir.

Mr. RANDALL. T-Y-G-O-N, is that it?

Mr. THOMPSON. Yes, sir.

Mr. STRATTON. And what would be the dimensions of the vent that you were putting this thing into, roughly?

Mr. THOMPSON. Well, the hole is about, probably about 5 inches around, but the valve opens, it opens like this, and it is at an angle. So I would say maybe 3 inches or something like that.

Mr. STRATTON. I see.

Mr. THOMPSON. And it is odd-shaped, too, you know, so you wouldn't be able to put a fire hose right into it.

Mr. STRATTON. So you connected the fire hose up with the tygon tubing?

Mr. THOMPSON. Yes, sir; and we hooked it up to the fresh water manifold right up topside that they had been using before.

Mr. STRATTON. Now, the manifold—did the fire hose come out of the manifold or did the tygon tubing come out of the manifold and the fire hose go into the manifold?

Mr. THOMPSON. No; the fire hose hooks right onto the manifold and the tygon tubing hooks onto the end of the hose and the hose slips into the hole.

Mr. STRATTON. I see. Okay. Do you want to carry on from here? I just wanted to make it clear on that point.

Mr. REDDAN. How long did you run water into the tanks?

Mr. THOMPSON. Well, we shifted every 5 minutes. We would put a little, you know—in other words, there are two sizes of tank. You can put some in on one side and then shift the other side so we could hold our list. Oh, we shifted it, I don't know, we must have shifted it about 10 times, anyway.

Mr. REDDAN. How long would you run it at each side before you shifted to the other side?

Mr. THOMPSON. About 5 minutes.

Mr. REDDAN. About 5 minutes.

Mr. THOMPSON. And we had to shut the valve and take the time to pull it out and push it in.

Mr. REDDAN. What time of the day was this? You say you ran it about 10 times?

Mr. THOMPSON. Yes, at least that, I would say.

Mr. REDDAN. When did you start and when did you finish?

Mr. THOMPSON. Oh, I don't know.

Mr. REDDAN. Approximately?

Mr. THOMPSON. What the times are?

Mr. REDDAN. Well, with reference to lunch, how close to lunch were you when you stopped putting water into the tanks?

Mr. THOMPSON. Oh, we stopped right before lunch, within a few minutes before lunch.

Mr. RANDALL. Well, if there were 5-minute periods and 10 of these periods, that it is about an hour. In other words, allowing for a little time between periods it is probably more than an hour.

Mr. THOMPSON. Yes; actual time putting the water in.

Mr. RANDALL. Yes. But you stopped it all before you went to lunch?

Mr. THOMPSON. Right.

Mr. REDDAN. How often during this procedure did you check the trim of the ship?

Mr. THOMPSON. We checked it, let's see, we took coffee breaks, you know, one of us at a time, and we checked it once then and we checked it several times in between. I would say we checked it maybe four or five times, something like that. And we had the quadrant up there with us part of the time, too, so we could just watch it and see how it was going, but it wasn't too accurate that way, I mean because if you just stepped on the staging it would move it, so it isn't too much good in there.

Mr. REDDAN. By the time you had completed or stopped filling the tanks, just before lunch, how much of a correction was still to be made?

Mr. THOMPSON. Well, I believe the bow was still three-quarters degree high, and then we had got a starboard list now of 1°; yes—well, let's see—

Mr. REDDAN. But it was still three-quarters of a degree high just before lunch?

Mr. THOMPSON. (Nodding.)

Mr. STRATTON. Let me just ask a couple of questions here. You said you took a couple of coffee breaks. What would that amount to?

Mr. THOMPSON. You mean in time?

Mr. STRATTON. Yes. Did you mean that you went ashore to the stand and picked up some coffee?

Mr. THOMPSON. No; one of us stayed there, you see, and one of us went ashore and went to the coffee machine and had the coffee and then when Red got back, then I went.

Mr. STRATTON. I see. Go ahead. Excuse me.

Mr. REDDAN. Now, during this process, did you ever walk along the seawall to check how the sub was lying in the water?

Mr. THOMPSON. No; I never did, myself. I don't know if Red did.

Mr. REDDAN. Did Mr. Varing check it?

Mr. THOMPSON. I don't know if he did or not.

Mr. RANDALL. Did you ever walk along with Kaufenberg? Did Kaufenberg walk with you along the seawall?

Mr. THOMPSON. No.

Mr. REDDAN. Did you observe how the sub was lying in the water when you went to lunch?

Mr. THOMPSON. Well, where the waterline is painted was above the water.

Mr. REDDAN. The black was still above the water?

Mr. THOMPSON. Yes, sir.

Mr. REDDAN. About how much freeboard would you estimate, at the sonar opening forward?

Mr. THOMPSON. You mean how much was this opening above the water?

Mr. REDDAN. Above the water.

Mr. THOMPSON. It was about, I would say, a foot or something like that.

Mr. STRATTON. About what?

Mr. THOMPSON. About a foot.

Mr. STRATTON. A foot?

Mr. THOMPSON. Yes; I think so.

Mr. REDDAN. Did you observe any water splashing in?

Mr. THOMPSON. Yes; there had been some water splashed in.

Mr. REDDAN. Did Mr. Kaufenberg say anything to you about the water splashing in there?

Mr. THOMPSON. Yes; he had mentioned that it was uncovered up there and that there was some water splashing in. I don't know exactly what his words were, but he had mentioned it, and we went up and took a look at it.

Mr. REDDAN. Did you go forward with him and take a look at it?

Mr. THOMPSON. Yes; we both went up forward.

Mr. REDDAN. What time was this?

Mr. STRATTON. You mean by "both," you mean Red and yourself, or you and Kaufenberg?

Mr. THOMPSON. Yes; I don't remember exactly who it was, but we both seen the opening, you know.

Mr. REDDAN. When you say "both," do you mean Mr. Varing and yourself?

Mr. THOMPSON. Yes, sir.

Mr. REDDAN. You both went forward to see the opening?

Mr. THOMPSON. Yes.

Mr. REDDAN. And did you both observe the water splashing?

Mr. THOMPSON. Yes.

Mr. RANDALL. Was it coming from waves, from these boats out their training on the river?

Mr. THOMPSON. I don't know if it is from the boats, but it was waves.

Mr. RANDALL. By splashing in, you must be saying then it had to flow up the side or up the sloping surface and wash into the open holes?

Mr. STRATTON. It wasn't a steady stream of water?

Mr. THOMPSON. No.

Mr. STRATTON. But when there was a wave some of it went in; is that right?

Mr. THOMPSON. Yes, sir.

Mr. REDDAN. How much water was taken aboard when a wave would come in?

Mr. THOMPSON. Oh, I would say it was maybe a quarter of a bucket, you know.

Mr. HUNT. Each time?

Mr. THOMPSON. Yes. It wasn't a lot compared to what we were putting in.

Mr. STRATTON. Did Kaufenberg say whether this might be a little bit dangerous and you ought to do something about it?

Mr. THOMPSON. He didn't say that to me. I don't know—I noticed there wasn't a cover up there and if he had said something like that to me, I think I would have told him to get ahold of the shop, you know, that had cognizance over this cover and put it on.

Mr. REDDAN. What did he say to you, to the best of your recollection?

Mr. THOMPSON. I don't think he talked to me directly.

Mr. REDDAN. Well, he must have said something that caused you to go forward to look at it. You and Mr. Varing both went forward. Now, why did you do that?

Mr. THOMPSON. He said the cover was off.

Mr. REDDAN. And he said water was coming in?

Mr. THOMPSON. Yes, he said—I don't know how he said it, but, you know, we had to go and check it.

Mr. REDDAN. Did he tell you this on more than one occasion?

Mr. THOMPSON. No; I don't think so. Just the one time. I mean, he was around there later, you know, before lunch or so.

Mr. REDDAN. Did you understand that this was a free-flooding area up there?

Mr. THOMPSON. Yes, sir; I understood when the boat is normally already in the hands of the crew, that this would be full of water. That is one of the reasons why you have to take on water forward, is to make up for all this air up there.

Mr. REDDAN. Did you say anything to Mr. Kaufenberg about that free-flooding area?

Mr. THOMPSON. I might have. I don't know, because this is what I understood, what this area was.

Mr. STRATTON. Did he decide to go into the area there where the sonar dome was to see how much water had gotten in?

Mr. THOMPSON. I don't know if he went into the sonar dome. That is within—

Mr. STRATTON. I mean the area around the sonar dome.

Mr. THOMPSON. Yes; I seen him in there just before lunch. He was just sitting there—it looked like to me he was sort of going to eat his lunch there. He had his lunch with him.

Mr. REDDAN. Did you cut off the water before you went to lunch?
 Mr. THOMPSON. Yes, sir; we did and pulled the hose out of the opening.

Mr. REDDAN. How long was it before you had lunch?

Mr. THOMPSON. How long before we left to go to lunch?

Mr. REDDAN. Yes.

Mr. THOMPSON. Well, just before we went, Red went and he checked the boat again to see what it was, you know, at that time, and then we pulled it out and went to lunch.

Mr. REDDAN. Just immediately before you went to lunch?

Mr. THOMPSON. Yes.

Mr. REDDAN. I mean, it wasn't 15 or 20 minutes before?

Mr. THOMPSON. No.

Mr. REDDAN. Was it your intention to come back after lunch and put more water aboard?

Mr. THOMPSON. Yes, sir.

Mr. REDDAN. But as I understand your testimony, when you left there was about a foot and a half of freeboard up forward near the entrance to the sonar?

Mr. THOMPSON. A foot and a half?

Mr. REDDAN. Yes.

Mr. THOMPSON. I would say around a foot.

Mr. STRATTON. A foot.

Mr. REDDAN. Around a foot. When you came back from lunch, what did you observe with respect to the position of the boat?

Mr. THOMPSON. Well, I came back right after the second whistle had blown and when I come up on the seawall and I looked down at the boat, I could see it was just slightly down forward, and I went down on the boat topside and went forward, and Red was there and there was, I believe it was an industrial cleaner.

Mr. STRATTON. He was there before you?

Mr. THOMPSON. Yes, sir. This cleaner had opened the door and there was a little building on the forward escape trunk, and he had opened the door there, and I noticed there was water going through down into the boat, and so I told Red, shall I light off the trim pump—that is an expression in the Navy for starting the pump.

Mr. STRATTON. Turn it on.

Mr. THOMPSON. Yes; and so I lighted the pump water overboard from forward, and he said, OK, so I went down below right away and I tried to line it up for overboard, but the valve for overboard discharge wouldn't open, and normally these valves are locked, so I could see why now, and you might also have to supply hydraulics to it, I don't know, but maybe I couldn't get that to open, and it was clear back in the AMR-2, and that was way aft.

So I decided I better just try to pump water from the forward to the after trim and try to get the bow to come back up, so it wouldn't be taking on water through the forward escape trunk. So I lit off the pump and it ran for a few minutes, and I noticed the ampmeter on the panel started dropping off and the pressure dropped off.

So I figured that the power went off the pump, and I shut all the switches for all the valves and proceeded to go aft to get out. By that time everybody up there had already been warned and everything, and

they had left, and when I got to the torpedo-handling, weapons-handling hatch, the crew was up topside trying to pull lines out of there, so I assisted them from down below, and we got all the lines that I could find any ends to or corrections right there out, and there was a couple left going down into the torpedo room, and I looked down there and salt water was up over the upper rails, it was over the hoist which was up level with the upper levels.

So I decided I better not go down there. So I just told them to chop the lines, and then I came on through the hatch, and they tried to close it behind me, and I guess they had a little trouble there. I don't think they got it closed. And I went on off the boat then, and a little while later they all came off and the boat went all the way down.

Mr. STRATTON. When you came back after lunch, was the opening on the sonar access hatch there, was that then under water?

Mr. THOMPSON. Oh, yes; it had to be way under the water by then.

Mr. STRATTON. Because the water was coming into the escape, forward escape hatch, was it?

Mr. THOMPSON. Trunk.

Mr. STRATTON. Trunk?

Mr. THOMPSON. Yes.

Mr. STRATTON. Forward escape trunk?

Mr. THOMPSON. Yes, sir. And that is further up the hole.

Mr. STRATTON. Right.

Mr. REDDAN. When you came back on, did you notice where your hoses were that you had been using?

Mr. THOMPSON. No, I didn't. I wasn't going to look around for them.

Mr. REDDAN. Can you suggest to the subcommittee any way that this ship could have gone down by the bow without the addition of water to some place other than through the sonar opening?

Mr. THOMPSON. Well, there could have been several ways it would have been possible for it, if there was some water taken off aft during lunchtime this would definitely affect it, and also you know, if there was any leakage up forward, anything there.

Mr. REDDAN. Who would have been authorized—you were given the job of trimming the ship?

Mr. THOMPSON. Yes, sir.

Mr. REDDAN. Who would have been authorized to take any ballast from the aft tanks?

Mr. THOMPSON. Well, not from the aft tanks. There are all different kinds of tanks aboard ship. The only ones which entered my mind which would have been possible would have been in the nuclear compartment, in their testing, if they had gotten rid of some water, a large quantity of water.

Mr. REDDAN. Did you discuss this possibility with anybody? Did you talk to any of the nuclear people about this?

Mr. THOMPSON. No; I didn't.

Mr. REDDAN. Do you have any reason to believe that there may have been a shifting of the ballast?

Mr. THOMPSON. Well, I heard rumors of it, but I don't know.

Mr. REDDAN. What had you heard?

Mr. THOMPSON. Well, of course there had been a lot of rumors floating around, and I had learned that there was some off-loading of water.

Mr. REDDAN. Would this have been during the lunch break?

Mr. THOMPSON. Well, that is probably when it would have to be, I mean, yes.

Mr. REDDAN. Wouldn't that have been rather unusual, to have somebody on there during lunch break off-loading water?

Mr. THOMPSON. Well, not necessarily, you know. I mean, they run things through lunchtimes, often run operating things through lunch, if it is something important that has to be done.

Mr. REDDAN. Wouldn't one shop have the total responsibility for trimming that ship?

Mr. THOMPSON. Well, they give us the job, but really we don't know what is going on all over. I mean, it would be possible for something else to be taking place without us knowing about it.

Mr. STRATTON. By "they," are you referring to the ship's company, then?

Mr. THOMPSON. No; anybody.

Mr. STRATTON. Anybody. I see.

Mr. HUNT. What you are actually saying is that men could be working aboard there in different sections of that ship and some different shops would not know what the other shops were doing or the other sections were doing?

Mr. THOMPSON. It has happened before.

Mr. HUNT. Because there is no one particular head aboard the ship to supervise activities on the swing shift, is there?

Mr. THOMPSON. Well, I don't know if there is anybody on any ship that knows about what is going on everywhere.

Mr. HUNT. There is no coordinator there?

Mr. THOMPSON. Well; that is right.

Mr. RANDALL. Well—that is very interesting.

Mr. THOMPSON. Like, for instance, now I have worked on several boats at their last stage, and when it comes time, you have to break into something to fix it. Well, we have what they call rip-outs, and we have to go through our own shop, we have to go through the ship superintendent, we have to go through the crew, and inspection, and everybody knows what we are going to be doing.

We have to have it approved before we do it. Now, that is on taking things apart. But on an operation like this, you need the same thing, but I don't know if it is done or not. I am not aware of it.

Mr. HUNT. Mr. Thompson, I set the quadrant over there. You are familiar with the quadrant, aren't you, gunner's quadrant?

Mr. THOMPSON. Yes, sir.

Mr. HUNT. Assuming that was now down on the plate, the level plate, down in the torpedo room, would you read that quadrant for me and tell me whether the bow is high or the stern is high?

Mr. THOMPSON. Do you want me to read it the way I read it?

Mr. HUNT. Just read that for me now.

Mr. THOMPSON. In other words, I have never had instruction on it.

Mr. HUNT. I just want to see how you read it.

Mr. THOMPSON. Which way it would be turned—I would read it—I would have to tell you which way is forward.

Mr. HUNT. That is the bow and this is the stern (indicating.)

Mr. THOMPSON. If I was going to read it the way I read it, I would have to turn it around because that is the way I read it.

Mr. REDDAN. Then make this the bow and that the stern. Then you won't have to turn it.

Mr. HUNT. Can you read that for me?

Mr. THOMPSON. This is supposed to be the bow here.

Mr. HUNT. Just give me a reading.

Mr. THOMPSON. Well, that is about two degrees here. It is a little over. You mean—

Mr. HUNT. A little over two degrees?

Mr. THOMPSON. Yes.

Mr. HUNT. Which is high, the bow or the stern, the way you read it?

Mr. THOMPSON. I would say the bow would be high on this.

Mr. HUNT. The bow is high.

Mr. THOMPSON. You see, when I go through there to check it, and do it slowly because I am not that used to it.

Mr. HUNT. You read it right. The bow was two degrees high on this quadrant.

Mr. RANDALL. Mr. Chairman, may I ask a question of Mr. Thompson?

Mr. STRATTON. Yes, sir.

Mr. HUNT. Please do, Mr. Randall.

Mr. RANDALL. You mentioned about these nuclear people here, about some rumors about the aft floating. Do you have any reason to believe the nuclear people did anything while you were to lunch?

Mr. THOMPSON. No; I don't have any reason to believe, but it was one possibility.

Mr. RANDALL. But when you came back, Varing was already downstairs?

Mr. THOMPSON. No.

Mr. RANDALL. Well, he was on the job?

Mr. THOMPSON. Yes.

Mr. RANDALL. Did Varing say anything about, we are in bad shape, or this thing is going down, or anything?

Mr. THOMPSON. I think he was worried. Everybody that talked to me that night just from the mere mention of the word of what we were doing, it made us look bad.

Mr. RANDALL. And did Kaufenberg say, everything is over, she is gone? Did you hear him say anything like that?

Mr. THOMPSON. I didn't see him.

Mr. RANDALL. You didn't see them when you came back?

Mr. THOMPSON. Not that afternoon.

Mr. STRATTON. You didn't sound the alarm or anything like that?

Mr. THOMPSON. I don't know.

Mr. RANDALL. Did you see Miller when you came back?

Mr. THOMPSON. No, I didn't see him when I came back on the boat. I didn't see him until after we were all up on the pier. We had a roll-call.

Mr. RANDALL. Pursuing the question I did a minute ago, is Miller your supervisor?

Mr. THOMPSON. (Nodding.)

Mr. RANDALL. But he wasn't there all the time. On the fine tuning of this thing, he wasn't there with you?

Mr. THOMPSON. He is our supervisor, and he has to check on every job that is under him.

Mr. RANDALL. You mean on another boat?

Mr. THOMPSON. Not necessarily on another boat. It is just on the same boat or any of his men.

Mr. RANDALL. What were his other duties?

Mr. THOMPSON. What are they?

Mr. RANDALL. Yes, what else is he doing?

Mr. THOMPSON. He has paperwork to do and he has all kinds of things, sir, to keep him busy. He has to write night notes for the graveyard.

Mr. RANDALL. But on this particular night, wasn't this trim most important? I am not trying to lead you into anything. Please tell me yes or no. Was this trim the most important thing that was going on, or there were other things equally important?

Mr. THOMPSON. I think, myself—the job that we were supposed to start with was on the fairwater planes, to finish them up so the crew could take over. We were supposed to finish the sheet on that, test sheet. We were supposed to finish that up. That was the job we should have got, that we would be following through on from the day before.

That looked like to me would be an important job for us to be doing.

Mr. RANDALL. Well—

Mr. THOMPSON. We didn't get to that.

Mr. RANDALL. The testimony earlier said there were about 15 men who left the boat when it looked like there was trouble. So you and Varing and Miller and all of you were working on the trim. Is there any other operation going on other than the trim that you knew about that night?

Mr. THOMPSON. No.

Mr. RANDALL. You got the nuclear people on there?

Mr. THOMPSON. Right. They are separate from us.

Mr. RANDALL. And the ship's force?

Mr. THOMPSON. Right.

Mr. RANDALL. And that all added up to about 15 that had to get off when she went down?

Mr. THOMPSON. No.

Mr. RANDALL. No?

Mr. THOMPSON. We had guys working, guys working in the torpedo room I know of. I mean, in other words, each one of us in a gang isn't told what everybody is doing.

Mr. RANDALL. Is that number about right, 15 working that night?

Mr. THOMPSON. I don't know. I don't even know if all of our men were in. In fact, I am sure one of them wasn't in that night.

Mr. STRATTON. Do you have any idea as to whether anybody was left onboard the boat during the lunch period?

Mr. THOMPSON. In our gang?

Mr. STRATTON. Well, anybody at all.

Mr. THOMPSON. I don't know anybody that was left on at all. Ship force have people there. They would have to have somebody on there.

Mr. STRATTON. You would have to have somebody on from the ship's force?

Mr. THOMPSON. Yes, sir.

Mr. STRATTON. Is it possible that somebody might have been fooling around during the lunch period, either in the control room or elsewhere in trying to play around with the trim arrangements?

Mr. THOMPSON. It is possible.

Mr. STRATTON. As I understand it, though, is it true that you had transferred forward all of the ballast that you could transfer except the kind that you had to put in by these hoses?

Mr. THOMPSON. Well, we could have put in the auxiliary—well, auxiliary tanks are pretty much in the middle. You can use those for your trim, so it wouldn't have done much good there.

Mr. STRATTON. Yes.

Mr. THOMPSON. We didn't want to run to forward trim too long and overflow the tank.

Mr. STRATTON. What I meant was whether if somebody was, say, fooling around just to see how the ballast transfer worked, whether working at the control room panels you could transfer any more forward or would it have to be transferred aft.

Mr. THOMPSON. As I say, you could overload the tank and it would run right into the diesel generator room.

Mr. STRATTON. I see. Yes.

Mr. HUNT. Let me just ask a question on the record, if I may there. Did you notice at the time when people were trying to get out of the boat or just before they were trying to get out of the boat, individuals trying to secure the watertight door?

Mr. THOMPSON. Well, I have heard a couple of men were trying to secure a watertight door forward to the torpedo room and up on the next level. It is a watertight door for the forward compartment.

Mr. STRATTON. And was there a big electrical line that was blocking it, or something or other?

Mr. THOMPSON. I believe there are all kinds of lines going through there, all the doors and hatches.

Mr. RANDALL. You couldn't close them if you wanted to?

Mr. THOMPSON. Well, you could take a little while to get them closed.

Mr. STRATTON. Somebody looking for an ax to cut one of these lines that was preventing the closing of the door, did you hear anything about that or did you happen to see it?

Mr. THOMPSON. Yes; I heard one of our men say that he was asking for an ax or something.

Mr. STRATTON. Where were you actually during this period?

Mr. THOMPSON. I was in the COC, up in the control room.

Mr. STRATTON. You were in the COC?

Mr. THOMPSON. Yes.

Mr. STRATTON. Was there any water on the deck there?

Mr. THOMPSON. No; but in the COC you have bilge alarms, and it is on this same panel that I was on, and they were going off just right across the line there while I was there.

Mr. STRATTON. The COC, however, that is on the——

Mr. THOMPSON. It is upper level.

Mr. STRATTON. It is on the upper level; right?

Mr. THOMPSON. Yes, sir.

Mr. HUNT. Right here.

Mr. REDDAN. The bilge alarms go on when the water is how deep?

Mr. THOMPSON. I don't know where the alarms are set but when you got water——

Mr. STRATTON. This is just——

Mr. THOMPSON. It would be probably where it would be high enough to where you would want to pump it out but where it wasn't doing any damage.

Mr. STRATTON. These were alarms from bilges that were filling up in other parts of the boat that were registering in the control room; is that right?

Mr. THOMPSON. Yes, sir.

Mr. STRATTON. What is the level below the control room? That is the officers' quarters and wardroom, et cetera, sonar equipment space; isn't it?

Mr. THOMPSON. Yes, sir.

Mr. STRATTON. Was there any water in there, in that section, do you know?

Mr. THOMPSON. I don't know where all the water was, because I was trying to run the pump. All I know is, they were going off right across the board.

At the time I went down in the boat, it was taking water through the forward escape trunk anyway, and it would be running wherever it could. It would come right down the passageway, the forward compartment, through the watertight door, going through the forward compartment into the diesel generator room, and everywhere up forward.

Mr. STRATTON. Were the officers or supervisory personnel or leading-men, or what have you, available on that particular night fewer than might otherwise have been the case because of the fact that there was a dinner going on up here with the Assistant Secretary of the Navy speaking?

Mr. THOMPSON. You mean did we have less supervisors?

Mr. STRATTON. Yes.

Mr. THOMPSON. We only have one anyway. It is the same any night for just our own crew.

Mr. STRATTON. This would be Mr. Miller, you mean?

Mr. THOMPSON. Yes, sir.

Mr. STRATTON. Or somebody——

Mr. THOMPSON. Well, he has just joined our crew. He has only been with us for a short time, but we always have had the one leadingman.

Mr. STRATTON. There is nobody around during the swing shift who is really in charge of the boat; is there?

Mr. THOMPSON. Well, they have started this deal with the project manager, but he is to see that work is being done, I think, is his main concern. You know, if he sees people all off the boat and drinking coffee all the time, why, he will run them back on the boat. But it is a different type of deal, I think.

Mr. STRATTON. Did you have any experience previously with Mr. Kaufenberg indicating fire hazards or possible water coming in or something of that kind?

Mr. THOMPSON. No; I don't recall. A previous security watch we had always let us know when we had a little hydraulic leak and we would fix it, but I don't remember ever being told anything by Kaufenberg.

Mr. STRATTON. OK.

Mr. RANDALL. Who is your project manager? You say you started this deal as a project manager. Was that started recently?

Mr. THOMPSON. Yes. It hasn't been in effect too long.

Mr. RANDALL. A week, 2 weeks?

Mr. THOMPSON. I don't know—

Mr. RANDALL. Was it before the 15th of May, when this sank?

Mr. THOMPSON. It was in effect before I ever knew it was in effect. I found out later. He doesn't have anything to do, I don't think, with what actual jobs are going on on the boat. He is not like a leadingman or something like that.

Mr. RANDALL. What is the difference between a leadingman and a supervisor?

Mr. THOMPSON. It is the same thing. A leadingman is the old term for it. They changed this.

Mr. STRATTON. Do we have any other questions?

Mr. HUNT. When the rest of you have all finished, I just have one.

Mr. STRATTON. Mr. Randall, do you have any more?

Mr. RANDALL. No. I want him to read the gunner's quadrant over here and see if he can read it. I think I have learned to use it.

Mr. HUNT. Yes.

Mr. STRATTON. Mr. Hunt.

Mr. HUNT. You made some mention about this other gentleman who is the below-deck watcher, this young fellow, sitting down eating his lunch.

Mr. THOMPSON. He wasn't eating his lunch. He had his lunch there.

Mr. HUNT. He had it there. Was he sitting there with his feet through the hatch when you left?

Mr. THOMPSON. No; he was underneath—this is not the small opening at the forward.

Mr. HUNT. No.

Mr. THOMPSON. It is the next one back.

Mr. HUNT. Yes. There is a ladder in there. There is an aluminum ladder in there now.

Mr. THOMPSON. There is?

Mr. HUNT. Yes, sir.

Mr. THOMPSON. I don't know.

Mr. HUNT. It is down below. He was down in there? And he had his lunch bucket with him?

Mr. THOMPSON. Yes, sir.

Mr. HUNT. That is all.

Mr. STRATTON. Mr. Randall, is that it?

Mr. RANDALL. No more. I just wanted to see if he could read this thing.

Mr. STRATTON. Who?

Mr. RANDALL. I am hoping to have him read this for me.

Mr. STRATTON. You mean Mr. Thompson.

Mr. RANDALL. Yes, when he gets through. When you are all through with him.

Mr. STRATTON. I mean, is this part of it?

Mr. RANDALL. No.

Mr. STRATTON. All right, if there are no further questions, then we will thank you very much, Mr. Thompson. And the subcommittee will stand in adjournment until tomorrow.

(Whereupon, at 9:07 p.m., the subcommittee was adjourned, to reconvene the following morning, Tuesday, May 27, 1969.)

THE SINKING OF THE U.S.S. "GUITARRO" (SSN 665)

EXECUTIVE SESSION

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
ARMED SERVICES INVESTIGATING SUBCOMMITTEE,
Mare Island, Vallejo, Calif., Tuesday, May 27, 1969.

The subcommittee met at 9 a.m., in room 1073, Building 47, San Francisco Shipyard, Mare Island, Vallejo, Calif., the Honorable Samuel S. Stratton presiding.

Members present: Hon. Samuel S. Stratton, Hon. William J. Randall, and Hon. John E. Hunt.

Staff present: John T. M. Reddan, Counsel.

FURTHER TESTIMONY OF REAR ADM. NORBERT FRANKENBERGER, COMMANDER, SAN FRANCISCO BAY NAVAL SHIPYARD, VALLEJO, CALIF.

Admiral FRANKENBERGER. Good morning.

Mr. STRATTON. Good morning, Admiral. Nice to see you.

We just wanted to call you in for a moment. We will convene the hearing at this point simply to request that you provide us with the logs of the 662 and the 665 for the past, what, 6 months?

Mr. REDDAN. Yes, sir.

Mr. STRATTON. Past year.

Mr. REDDAN. Yes, 665 up to May 15, or up through May 15.

Admiral FRANKENBERGER. Let me jot down this, if I may.

Mr. STRATTON. This would be for the entire period?

Mr. REDDAN. On the 662.

Mr. RANDALL. And the 622, Admiral, also.

Admiral FRANKENBERGER. Now, the 662, you know, is the *Gurnard*, which is completed.

Mr. RANDALL. We understand it is now completed.

Mr. STRATTON. What we want, actually, is the watch stander's log.

Mr. HUNT. During the construction process.

Mr. STRATTON. That is right.

Mr. RANDALL. At the comparable time of the 665 accident, at that stage, too, we want that.

Admiral FRANKENBERGER. That after launch, in other words, at that point after launch.

Mr. STRATTON. That is right.

Admiral FRANKENBERGER. With a spread on each side, is that right?

Mr. STRATTON. That is right.

Admiral FRANKENBERGER. Yes, sir.

Mr. STRATTON. The below-decks watch stander's log for the 662.

Admiral FRANKENBERGER. Yes, sir.

Mr. STRATTON. And the 665.

Admiral FRANKENBERGER. Yes, sir.

Mr. STRATTON. And the 666.

Mr. REDDAN. Yes.

Mr. STRATTON. Then we would also like to get the file of the check lists which the below-decks watch standers were supposed to make out as provided for in the instructions originally issued in April, or originally issued July 11, 1968, by Mr. Martinez, and as I understand it, reissued following the accident of the *Guitarro*.

Admiral FRANKENBERGER. Now, am I correct, sir, that you would like the file of the check list for all these ships, also?

Mr. STRATTON. That is right, please.

Admiral FRANKENBERGER. And again covering a spread on each side of that period comparable to when the *Guitarro* sank, is that right?

Mr. REDDAN. On the 662, I think it should run up to commissioning.

Mr. STRATTON. Commissioning. Perhaps I might also say that we would be interested in questioning a Mr. Garland Massey, who, I understand, left on leave immediately after the sinking and who, I think, was a regular below-decks watch stander.

Admiral FRANKENBERGER. (Nodding.)

Mr. STRATTON. If we could get him back while the subcommittee is still here, we would appreciate that.

Mr. REDDAN. He would have to be here today.

Mr. STRATTON. Or tomorrow morning, if we are going to be here.

Mr. REDDAN. Yes.

Mr. RANDALL. My understanding is, Mr. Chairman, that he is not in the city, and it might be quite a chore for the Admiral. I am simply being practical. If he can, I think we should say if he is available.

Mr. STRATTON. We would like to have him.

Admiral FRANKENBERGER. Yes, sir.

Mr. STRATTON. If we can't get him immediately, we would like to be so advised, and in that event perhaps we could make some other arrangements.

Mr. RANDALL. That is an excellent statement, if we can find out where he is.

Admiral FRANKENBERGER. All right, sir, I will report back immediately as to whether I think we can get him or not.

Mr. STRATTON. I think that is it, isn't it?

Mr. REDDAN. Yes.

Mr. STRATTON. May I ask one other question while you are here, Admiral, because I am not sure whether I asked it yesterday or not. Did I understand that Admiral Rickover came out here the day after the sinking?

Admiral FRANKENBERGER. No, sir, he did not.

Mr. STRATTON. He hasn't been here since the sinking?

Admiral FRANKENBERGER. No, sir; not to my knowledge. I can clarify what I said, though, relative to him, if you would like.

Mr. STRATTON. Well, I don't even recall whether I asked you. It seemed to me I asked somebody or other, I thought it was you.

Admiral FRANKENBERGER. You didn't ask me that question, no, sir, but I had mentioned that he was out here with his audit group, which was about 2 months ago, as I recall.

Mr. STRATTON. That is right. Thank you.

Mr. RANDALL. Again, a direct question, Admiral. Admiral Rickover has not been here since the sinking?

Mr. FRANKENBERGER. Not to my knowledge.

Mr. STRATTON. What you mean is that the Admiral sometimes breezes in and breezes out without notifying anybody, so it is conceivable that he could have been here, but if he was here he didn't speak to you?

Admiral FRANKENBERGER. That is correct, sir. I am sure—whenever he has been here since I have been here, I have gone to see him.

Mr. STRATTON. Sure.

Mr. RANDALL. Here is the question. Has Admiral Rickover had a conversation with you on Mare Island about the sinking since it happened?

Admiral FRANKENBERGER. No, sir.

Mr. RANDALL. That is the question that ties it down. Thank you.

Mr. STRATTON. Thank you very much, Admiral.

Admiral FRANKENBERGER. Yes, sir.

Mr. STRATTON. Mr. Martinez?

TESTIMONY OF EDDIE W. MARTINEZ, SERVICE GROUP SUPERINTENDENT, SAN FRANCISCO BAY NAVAL SHIPYARD, MARE ISLAND, VALLEJO, CALIF.

Mr. MARTINEZ. Good morning.

Mr. STRATTON. Mr. Martinez, would you have a chair, please. We appreciate your coming, Mr. Martinez. Before we begin the questioning, I just wanted to notify you that the subcommittee is here primarily to determine the facts surrounding the sinking of the *Guitarro* and to make recommendations as to how we might avoid this kind of thing in the future.

We are not interested in fixing any blame or pinning any responsibility on any particular individual, but because there is a Naval Court of Inquiry underway, the Chairman has asked us to swear the witnesses before the subcommittee as is done in the court of inquiry.

When we do that, before our Investigating Subcommittee, we are required by the rules of the House to advise you that if you desire, you have the right to be represented by counsel and you, of course, have the right to refuse to answer any questions that you feel might tend to incriminate you.

We just wanted you to be informed of that, as you should. Actually, the other witnesses who testified have not felt the need of counsel, and if you are willing to testify without counsel that would be agreeable with us.

Mr. MARTINEZ. I am, sir.

Mr. STRATTON. In that case, would you please rise and we will swear you. You do solemnly swear that the testimony you will give before this subcommittee in the matters now under consideration will be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. MARTINEZ. I do.

Mr. STRATTON. Thank you. Would you give your full name, please, to the reporter, Mr. Martinez?

Mr. MARTINEZ. Yes. Eddie W. Martinez.

Mr. STRATTON. And your position, Mr. Martinez?

Mr. MARTINEZ. I am the Service Group Superintendent.

Mr. STRATTON. Service Group Superintendent. And how long have you been employed here at the yard?

Mr. MARTINEZ. Forty years.

Mr. REDDAN. How long have you held your present position?

Mr. MARTINEZ. About 9 years, Mr. Reddan.

Mr. STRATTON. As the Service Group Superintendent—I can't recall the exact organization chart—

Mr. MARTINEZ. Yes, sir; in the Production Department there are four groups. There is a mechanical group, an electrical group, a structural group, and a service group. There are four divisions.

Mr. RANDALL. Four divisions in what department?

Mr. MARTINEZ. In the Production Department.

Mr. STRATTON. Your immediate supervisor would be whom?

Mr. MARTINEZ. Captain Adrianse, the Production Officer.

Mr. STRATTON. And who would you have working under you—responsible to you?

Mr. MARTINEZ. It is divided into four principal shops: 64, which is the woodworking shop; 71, which is the paint shop; 72, which is the rigging shop; and 99, which is the temporary service shop.

Mr. RANDALL. These are the ones that are under you?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. Now, you have under you also, do you not, the below-decks watch standers?

Mr. MARTINEZ. Yes, sir; they are a part of shop 72. That is the rigger shop.

Mr. STRATTON. You issued, did you not, some time ago, I believe, a rather detailed set of instructions for below-decks watch standers?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. I think these were originally issued in July of 1968, were they not?

Mr. MARTINEZ. Yes, sir; this was upon launching of the 665.

Mr. STRATTON. And then I understand, that you reissued them again following the sinking of the 665?

Mr. MARTINEZ. No, sir. I have to put this in perspective for you, Congressman.

Mr. STRATTON. Please.

Mr. MARTINEZ. When the 665 was launched, she was the sinking boat on the seawall, and in April of this year the 666 was launched. These ships were placed at about 150 feet between their extremities, and when we had below-decks watch roving by, we had precedents where we would have an individual take care of more than one ship.

In order to understand the performance of this roving patrol, you have to put some parameters on his responsibilities and his job. He is assigned to patrol below decks on the ship, on the topside, on the seawall, and internally to be alert for fires, leaking valves, arcing electrical circuits, fire hazards, and topside to be aware of debris floating into the ship that could adversely affect the ship, to maintain draft readings, the condition of the mooring lines and the gangways.

My instruction to him is to maintain a constant patrol. Now, in order to provide him some backup and for his own protection and to

see that he does his job, I have provided a system of logging and telephone calling to our duty office. He was required to call, from alternative shifts, on the hour the duty supervisor was to make an inspection on his shift below decks principally to see that the below-deck watch was doing his job.

The watch officer made a visit to the ship during the night hours, and so that the lunch periods would not be unattended when everyone else was going to eating time, we had some component cleaners man the ship at that time because of its space limitation and accessibility and also provided some people shipboard during those times when the yard workmen normally would go to lunch.

Mr. STRATTON. All right. These are contained in the document that you released on July 11?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. And which still stands unchanged, as I understand it, except for the names and telephone numbers of people to call?

Mr. MARTINEZ. Yes, sir. You raised the question about why the additional instruction was issued. When either one of those ships moved berths or went to drydock or went to sea trials, you changed the picture because they are no longer 150 feet apart, and now we have at the present time one of them in drydock 3 and one of them up in berth 9.

One man could not physically patrol both ships. There is standard operating procedure for the below-deck watch. If you had a larger surface ship, you might have two or three people on. On the SSNB submarines we had one man per ship.

Mr. STRATTON. Let me just make sure I understand. You are referring now to what as the additional instruction?

Mr. MARTINEZ. There was one came out on the 666, because the minute that the 665 was moved to drydock on Sunday, then we issued an instruction to the 666.

Mr. STRATTON. I don't think we have that, Mr. Martinez. I think perhaps we would want to have that. I was under the impression that the same document that you had drafted in 1968 was simply——

Mr. MARTINEZ. That was for the 665; was it not?

Mr. STRATTON. That is right.

Mr. MARTINEZ. Yes, sir; and we had one for the 662 before this, and we have one currently for the 666.

Mr. STRATTON. Then you had or you issued a notice in April of——

Mr. MARTINEZ. 1969; yes, sir.

Mr. STRATTON. 1969, pointing out that watch standers would take in both ships rather than just the one?

Mr. MARTINEZ. Yes, sir; because of their location, and I gave the individuals a reporting schedule to follow.

Mr. STRATTON. Well, now, what grade, pay grade or rank did these watch standers have?

Mr. MARTINEZ. These are helper type, Congressman.

Mr. STRATTON. This would be the lowest pay grade; would it not?

Mr. MARTINEZ. No, sir; the laboring type would be lesser pay. They are what you would call the equivalent of a W-5.

Mr. REDDAN. What would that pay scale range?

Mr. MARTINEZ. In dollars?

Mr. REDDAN. Yes.

Mr. MARTINEZ. I couldn't tell you this, because we have W-1, W-2, W-3, W-4, and W-5, but this is the helper category of all of the tradesmen.

Mr. HUNT. Are they on an hourly basis?

Mr. MARTINEZ. Yes, sir; they are.

Mr. STRATTON. They are wage board employees?

Mr. MARTINEZ. Yes; wage board employees, and this is a wage level 5.

Mr. STRATTON. You say the only lower pay category would be the laborers?

Mr. MARTINEZ. One, two, three, and four.

Mr. STRATTON. I see.

Now, isn't it a little strange that we have men who are charged, as you point out in this document, with millions of dollars' worth of equipment and material, as well as months of work; and for that assignment we put somebody in just about the lowest wage category, and someone who is apparently a novice in the business?

Mr. MARTINEZ. I wouldn't say that he was a novice. The individual had 6 years in the Navy.

Mr. STRATTON. In order to be a helper you have to have 6 years in the Navy?

Mr. MARTINEZ. No, sir; I said this individual.

Mr. STRATTON. I am not talking about any one individual. I am talking about the watch-stander category. The admiral has commented in his testimony, I think, before the court of inquiry that he was very much impressed with this document and, in fact, said that in rereading it after the sinking, it almost appeared to have been written as a result of the sinking, but actually it was written in 1968.

He also testified that he wasn't aware of the document issued in April, that indicated that watch standers would assume the responsibilities for both ships. But I am wondering how you can justify the statement of the responsibilities of this job with the category of individuals.

"The importance of your responsibility as a ship below-decks watch stander can't be overemphasized." That is the beginning sentence, and I am sure, in view of what has happened, that you would certainly not want to disagree with that statement.

Mr. MARTINEZ. No, sir.

Mr. STRATTON. As more equipment is installed aboard SSN class submarines, the need for alert, well-qualified watch standers becomes more vital. Many millions of dollars' worth of equipment and material, as well as months of work, have been put into this vessel, and at times the vessel will be solely under their vigilance.

And yet for that, we take somebody with a W-5 helper category. What authority did this individual have? Could he direct anybody else to do anything around the ship?

Mr. MARTINEZ. The authority is where part of the failure hinges.

Mr. STRATTON. Well, if he is only a W-5 nobody is going to pay much attention to him.

Mr. MARTINEZ. Would it have made any difference if he were a W-9 or a W-10?

Mr. STRATTON. I don't know. I am asking you as to whether—

Mr. MARTINEZ. Sir, when you take individuals, you are taking quality people and individuals that have a potential for growth, promotion, certainly should be alert to this type of job. You say, yes, he has the responsibility, but his job is a patrol job, to discover, uncover and report, and whether the individual was a W-5 or a W-9 or a W-10, which would be benchmark—

Mr. STRATTON. Let me ask you this, Mr. Martinez. What training did you give these men before they were assigned to this duty?

Mr. MARTINEZ. On the particular individual—

Mr. STRATTON. I am not talking about any individual. Let me make this clear. I am talking about this particular assignment. This ship could have gone down on anybody's watch. What I am concerned about is the gap between this very eloquent statement that you have drawn up and what actually was happening in the yard.

It is one thing to have a beautiful document. It is another thing to know whether that is actually carried out. This is what I am talking about. I have started out with the first sentence. Here is a man who has responsibility for millions of dollars' worth of equipment which at times will be solely under his vigilance.

That was perfectly true, because there wasn't another soul around there at the time this went down that had any authority at all, except the watch stander, a W-5. Now, what kind of training did you give these fellows?

Mr. MARTINEZ. The individuals are taken through the ship by their supervisor and shown the compartmentation in the ship, how to read the draft numbers, how to read the inclinometer.

Mr. STRATTON. Do you accompany them on these occasions when you take on a new man?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. Well, to your own personal knowledge, do you know how this training was carried out?

Mr. MARTINEZ. No sir.

Mr. STRATTON. You don't?

Mr. MARTINEZ. No sir.

Mr. STRATTON. Isn't it a fact that they got no training at all and that in some cases the—who did you say it was—the ship superintendent, that took them through?

Mr. MARTINEZ. No; the supervisor.

Mr. STRATTON. The supervisor? This would be what, their leading man, you mean?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. Isn't it true that in some cases they just said, well, here you are, you are on your own? Isn't that what actually happened?

Mr. MARTINEZ. It could have possibly happened; yes, sir.

Mr. RANDALL. Mr. Chairman, may I just ask two questions? I am going to have to be leaving. If you would yield, I would be grateful.

Mr. STRATTON. Certainly.

Mr. RANDALL. Mr. Martinez, I was interested in the name of an individual you mentioned. You said something about a novice, over here 6 years. May I have his name?

Mr. MARTINEZ. Kaufenberg.

Mr. RANDALL. Kaufenberg. Thank you. Now, just two other questions. Is it true on this particular night of May 15, that this chain of

authority, or this chain of command, or these instructions to trim the ship came down originally from a gentleman by the name of Robnett, is that correct?

Mr. MARTINEZ. I read that in the paper this morning.

Mr. RANDALL. Is that true or untrue?

Mr. MARTINEZ. I do not know. I do not know.

Mr. RANDALL. I will ask you this question. You, as head of this group of four here, the four categories—

Mr. MARTINEZ. No; I am not the head of the four categories. I am the head of one of those categories.

Mr. RANDALL. Yes; that is right. But on this night of the 15th you gave the instructions to trim the ship?

Mr. MARTINEZ. No, sir.

Mr. RANDALL. No?

Mr. MARTINEZ. No, sir.

Mr. RANDALL. Who gave the instructions? Robnett?

Mr. MARTINEZ. I don't know, sir.

Mr. RANDALL. I see.

Mr. MARTINEZ. It was not in my group.

Mr. RANDALL. Weren't you in authority there that night in one group?

Mr. MARTINEZ. No, sir. We have four groups in the production department. Mr. Robnett works in the mechanical group.

Mr. RANDALL. Well, do you know if Robnett gave orders to someone, if not to you, that the trim was to proceed on this particular night? You were on duty that night, were you not?

Mr. MARTINEZ. No, sir.

Mr. RANDALL. You were not on duty the night of the 15th?

Mr. MARTINEZ. No, sir; I was called in.

Mr. RANDALL. Later, after the accident happened?

Mr. MARTINEZ. Yes, sir. I received a call at about 10 minutes to 9 and arrived just shortly before 9.

Mr. RANDALL. Had the boat sunk at that time?

Mr. MARTINEZ. Yes, sir; she had.

Mr. RANDALL. Already down?

Mr. MARTINEZ. She was down on the bottom, with a perceptible list.

Mr. RANDALL. Do you work at nights at all? Was this your night off?

Mr. MARTINEZ. No, sir. I am ordinarily a day employee, but I come back at nights to progress jobs. No, sir; I am a day shift employee.

Mr. RANDALL. Who is your counterpart at night, then? You have a counterpart, surely.

Mr. MARTINEZ. Yes, sir. Pearson.

Mr. RANDALL. Was he working this night?

Mr. MARTINEZ. Yes, sir.

Mr. RANDALL. Mr. Chairman, I suggest that there is a witness you should call, Mr. Pearson.

Now, was Robnett working this particular night, or do you know?

Mr. MARTINEZ. I do not know, no. He is not even in my group.

Mr. RANDALL. In other words, it would appear from your testimony that you are sort of a vertical controller. You don't know what is going on in these other categories. Yours is what kind of group then?

Mr. MARTINEZ. The service group.

Mr. RANDALL. Yours is the service group?

Mr. MARTINEZ. Yes, sir.

Mr. RANDALL. What I am trying to do is to find out who we should call as witnesses.

Mr. MARTINEZ. Yes, sir.

Mr. RANDALL. You established you were not there and you didn't come back, and we mentioned Mr. Pearson.

Mr. MARTINEZ. I did come back.

Mr. RANDALL. You came back?

Mr. MARTINEZ. Yes, sir.

Mr. RANDALL. You mentioned the industrial cleaners here a moment ago. Are they under you?

Mr. MARTINEZ. Yes, sir.

Mr. RANDALL. Mr. Martinez, I would hope that either you or Mr. Pearson could provide us with the names of the industrial cleaners that were working just prior to the accident, during the lunch hour.

Mr. MARTINEZ. Yes, sir.

Mr. RANDALL. All right. That is all.

Mr. REDDAN. We have a list of all persons.

Mr. RANDALL. Thank you very much.

Mr. STRATTON. Thank you, Mr. Randall.

Mr. RANDALL. I regret that it is necessary that I must be excused if I am going to get to the airport in time for my flight.

(Mr. Randall departed at 10 a.m.)

Mr. STRATTON. Sorry to lose you.

Mr. RANDALL. Off the record.

(Discussion off the record.)

Mr. STRATTON. If I can come back, Mr. Martinez, to the question I was asking. We have established, I think, that there is some question about the kind of training that these individuals get.

Mr. MARTINEZ. Yes.

Mr. STRATTON. You said they were taken through these ships by their leadingman.

Mr. MARTINEZ. Supervisor.

Mr. STRATTON. Or their supervisor.

Mr. MARTINEZ. Yes.

Mr. STRATTON. This would be the shop 38—

Mr. MARTINEZ. No, sir; this would be the 72 supervisor.

Mr. STRATTON. But you had not personally supervised this training. Wouldn't you think it would be a good idea, as to somebody who is going to be charged with this responsibility, that there ought to be a pretty careful training period so he would know what to look for, for example, so that he would know in this multiplicity of gauges and machinery just where the trouble might occur?

Mr. MARTINEZ. Yes, sir. I agree with what you are saying. However, this individual is a—

Mr. STRATTON. I must insist, Mr. Martinez, that we are not talking about any individual.

Mr. MARTINEZ. All right.

Mr. STRATTON. We are talking about the system.

Mr. MARTINEZ. Excuse me. These individuals are supposed to patrol and press the panic button if it gets beyond their means of being able to cope with the situation.

Mr. STRATTON. Well, I don't know how you can press a panic button unless you know what to look for and what to get panicked about.

I am sure that many of us probably wouldn't know what to get frightened about. My information is that many of these individuals have gone on duty without any instruction at all, other than just where to sit in the bilges.

How can they perform this very responsible duty if there isn't some sort of instruction?

Mr. MARTINEZ. They did not perform it effectively.

Mr. STRATTON. Didn't this ever occur to you, Mr. Martinez, to determine just what information they did have?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. But you didn't make any effort to get them in and explain to them what their duties were and to point out where water might be coming in and so forth?

Mr. MARTINEZ. To say that all of the people have been trained would be a misnomer. I am sure we couldn't be all inclusive. But we have excellent people that have been indoctrinated and have been trained, that when new employees come along with their supervisors they ask questions and call the shop. If in doubt, they are required to call the shop.

Mr. STRATTON. This document of yours in paragraph B, 1B, points out that "except in emergencies you will maintain a continuous patrol of the below-decks area and insure that unsafe conditions are detected and promptly brought to the attention of the proper people for correction."

Who were the proper people for correction, and how do they bring them to their attention?

Mr. MARTINEZ. Yes, sir. The proper procedure for correction is to dial 4206 at our duty office. This is the same office that receives the reporting calls.

Mr. STRATTON. That is up here in this building?

Mr. MARTINEZ. No, sir; it is down in the service group duty office. They are on radio communication. If I might talk to the same subject, about training. The individual, this individual, who was on duty this night was at the right spot at the right time, and when he brought to the attention of the mechanics that water was entering the sonar dome, he was either convinced, in my belief, that it would be taken care of, or he didn't fully realize the impact of this water.

I feel that he was convinced it would be taken care of.

Mr. STRATTON. What would have happened if he had called 4206?

Mr. MARTINEZ. Then Mr. Pearson, his supervisor, would have come up and looked at it.

Mr. STRATTON. Well, we have had testimony that actually on several occasions one of these watch standers called and nothing happened. In fact, it took him 2 weeks to get somebody to—Mr. Kaufenberg saw a leaking pump on the *Hawkbill* and called shop 56 and a fellow said, "That is not my responsibility, it is nuclear."

It took him a week to get any action on that particular complaint.

Mr. MARTINEZ. Yes, sir. I still feel that he should have called his own supervisor.

Mr. STRATTON. Well, now, in paragraph D you say, "You will maintain the rough log and below-decks checkoff list which will be furnished you." What happens to these logs and below-deck checkoff lists?

Mr. MARTINEZ. The log was recovered from the sunken ship.

Mr. STRATTON. Well, what happens? We have three watch standers in every 24 hours, do we not?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. So every day there are three more logs and, as I understand it, three more checkoff lists. After each watch, another one is filed. Where are they filed and what happens to them?

Mr. MARTINEZ. Well, to answer your first question, there is only one log. It is a ledger type, in which the log is kept.

Mr. STRATTON. Where is that located?

Mr. MARTINEZ. It was turned over to the court of inquiry.

Mr. STRATTON. No, but where is it normally maintained?

Mr. MARTINEZ. Normally it is maintained below decks, and it was in the wardroom, until it was being made habitable, and it was moved to the ship's activity room, which is right across the passageway. It went down with the boat and was recovered.

Mr. STRATTON. And what about the checkoff list?

Mr. MARTINEZ. The checkoff list—there were several checkoff lists in the book at that time.

Mr. STRATTON. What do they do with these checkoff lists?

Mr. MARTINEZ. The ship superintendent is supposed to pick them up.

Mr. STRATTON. All right. Now, who checks the log every day?

Mr. MARTINEZ. The log is checked by the duty supervisor, and the entry that was particularly concerned was on the night of the 15th, that the duty supervisor checked this log at 1914, a Mr. David Lee, and he signed the log at that time, Congressman.

Mr. STRATTON. 1914, and that was the duty supervisor?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. The duty supervisor for shop 72?

Mr. MARTINEZ. Seventy-two.

Mr. STRATTON. A Mr. Lee?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. He came aboard and signed the log?

Mr. MARTINEZ. Yes, sir. He told me that he went through the internals of the ship and signed the log at 1914.

Mr. STRATTON. Did you say the duty supervisor was supposed to go through the ship once every watch?

Mr. MARTINEZ. Yes, sir. The notice says at least twice a shift, and because sometimes they go through at the beginning or at the end of the shift—they get tied up. It is insistent that they go through at least once a shift. Sometimes it is physically impossible for them to make it twice a shift.

Once a shift is signed by the duty supervisor.

Mr. STRATTON. Do you make any check on these logs from time to time to see that these men are carrying out their duties?

Mr. MARTINEZ. On the 665, yes, sir; I have.

Mr. STRATTON. How often did you make that check?

Mr. MARTINEZ. I don't know, but my name is signed in the log.

Mr. STRATTON. Well, how do you know that these fellows are carrying out their assignment unless you check the log, unless you check in some way?

Mr. MARTINEZ. Well, the condition of the ship reflects to me whether they are doing their job.

Mr. STRATTON. You mean if nothing happens everything is all right. It is only when something happens?

Mr. MARTINEZ. No, sir; eliminating fire hazards.

Mr. STRATTON. Well, if they have been lucky and haven't had a fire or haven't had a sinking, the watch stander could be asleep below, couldn't he?

Mr. MARTINEZ. This is one of the reasons, and it might be a point at issue, but I am against overkill, on saturating the people or saturating the ships with watch standers.

Mr. STRATTON. I am not worried about overkill, Mr. Martinez. I am wondering whether you are carrying out this very eloquent statement of instructions to the watch standers. As I say, what good does it do to write an elaborate set of rules if you don't make any effort to see whether they are carried out or not?

If you don't check the log, if you don't check the checkoff lists, how do you know what is happening? You have to supervise to see whether something is being performed, don't you?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. Now, you have in paragraph F an instruction to report to this extension 4206, 30 minutes after the hour, every hour. Did you check to see whether these men are calling every hour on the half-hour?

Mr. MARTINEZ. They are not calling every hour on the half-hour. That was superseded by our April instruction. I have a copy of a log in which they called in every hour, if you would like to see that.

Mr. STRATTON. "Upon making your hourly call, to code 351, operations office from one vessel proceed to the other vessel and resume continuous patrol." It doesn't say anything about changing the time.

Mr. REDDAN. What is the date of that, Mr. Chairman?

Mr. STRATTON. This is April 9, 1969.

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. "Your instructions will be the same as in reference A for both vessels." Reference A is what I have just been reading from. "Except your hourly phone calls to code 351 operations office, telephone 4206, will be made alternately from each vessel."

It doesn't say that you are not supposed to call every hour. It talks about your hourly call.

Mr. MARTINEZ. You see the times on that, sir.

Mr. STRATTON. And reference—well, 1630, 1730, 1830, 1930.

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. Every hour on the half-hour. That is exactly the same.

Mr. MARTINEZ. 1630, 1730—that is an hour.

Mr. STRATTON. That is right.

Mr. MARTINEZ. That is an hour.

Mr. STRATTON. Pardon me?

Mr. MARTINEZ. Isn't that an hour?

Mr. STRATTON. That is on the half-hour.

Mr. REDDAN. 1630, 1730, 1830, 1930. That is at the half-hour, every hour.

Mr. MARTINEZ. They called every hour.

Mr. STRATTON. That is right, on the half-hour.

Mr. MARTINEZ. All right. I wasn't receiving. I was thinking of every half-hour they called.

Mr. STRATTON. Now, how do you know they were making their calls?

Mr. MARTINEZ. May I exit and bring in the copy of the log?

Mr. REDDAN. How current is that, Mr. Martinez?

Mr. MARTINEZ. It is up through the 15th.

Mr. REDDAN. It is? All right.

Mr. MARTINEZ. I have it here.

Mr. REDDAN. Fine. Would you describe this document you just handed us, for the record?

Mr. MARTINEZ. Yes. It is the recording of the hourly calls from the below-decks watchers for 24 hours a day.

Mr. REDDAN. This covers May 13, 1969, through May 16, 1969?

Mr. MARTINEZ. Yes, sir.

Mr. REDDAN. And this is a photostatic copy?

Mr. MARTINEZ. Yes, sir. The original went to the board of inquiry. If you will notice, on the night of the 15th of May, he made a call at 1925 from the 665.

Mr. STRATTON. Now, there was no call at the 1800 hour.

Mr. HUNT. 1830.

Mr. STRATTON. He made one at 1728 and one at 1925; is that right?

Mr. MARTINEZ. Yes, sir; and the 1830 should have been from the 666; isn't that right?

Mr. STRATTON. All right.

Mr. HUNT. Yes.

Mr. STRATTON. Good, 1825. I see.

Mr. MARTINEZ. This was one way—we tell the individual it is for his own protection as well. Of course, it is a followup for us to see that the guy is doing his job and is, say, not hanging off in a corner going to sleep. We know that he is on the move because of his recording. The only problem at that 1925: the individual did not report.

Mr. STRATTON. I mean this isn't too helpful, because you don't know exactly what it is or what it is from. Whose log is this?

Mr. MARTINEZ. Well, this is the log in the duty section of the service group. This is the call-in log, that records the calls from the below-deck watches.

Mr. STRATTON. Now, we seem to have the same handwriting here for the log from the 8 to 4 shift and the 4 to 12 shift.

Mr. MARTINEZ. Yes, sir; this would be true. This would be the dispatcher that would be on the shift, from the day shift, the swing shift or the graveyard.

Mr. STRATTON. It looks as though it is the same handwriting, as though somebody filled the whole thing in later on. You wouldn't have the same people, the same person making out the log on the 8 to 4 shift as you would have on the 4 to 12 shift, would you?

Mr. MARTINEZ. No, sir.

Mr. REDDAN. Mr. Martinez, most of them carry a place for remarks. On the 15th, with reference to the 665, it says "ship under water."

Mr. MARTINEZ. That was recorded after—there was a phone call at 2033, Congressman, which said that the ship was taking water.

Mr. REDDAN. Now, had there been an entry in the remarks prior to writing?

Mr. MARTINEZ. No, sir.

Mr. REDDAN. Can you explain why that particular entry, "ship under water," is much less legible than the rest of the paper? Had anything been erased there?

Mr. MARTINEZ. No, sir.

Mr. REDDAN. Do you know that?

Mr. MARTINEZ. I assume—yes, sir. It was either written in an ink pen of this type, because he made the entry and put the asterisk at the time that he received this, 2033 call, and said "ship under water." But on the original it was legible and no erasures.

Mr. REDDAN. The asterisk is very legible. The line leading over to the entry, "ship under water," is very legible, but the writing, it is printing, "ship under water," is very illegible and the illegibility suggests that something had been written there before and erased.

Mr. MARTINEZ. Yes, sir. Very perceptive, and the only way I would suggest that this could be ascertained would be obtain the original, which is in the hands—

Mr. REDDAN. Who made the entry? We could ask him, too.

Mr. MARTINEZ. Yes, sir; there is a Frank Brown who is the dispatcher on the swing shift.

Mr. STRATTON. I thought you said that this is in the ship.

Mr. MARTINEZ. No, sir, no, sir; that is at the other end of the telephone, Congressman.

Mr. STRATTON. Where was that?

Mr. MARTINEZ. That is in the service group duty office.

Mr. HUNT. That is at the same station where you have telephone 4206?

Mr. MARTINEZ. Yes, sir.

Mr. HUNT. And normally, on the swing shift, Mr. Pearson would be somewhere around there?

Mr. MARTINEZ. No, sir. Mr. Pearson, if he is not in the office, would be on Punjab racks 36. He operates by transceiver, from the 4206.

Mr. HUNT. Now, the dispatcher that night at the time when these particular entries were recorded, on May 15, 1969, was a man by the name of Frank Brown; is that right?

Mr. MARTINEZ. Yes, sir.

Mr. HUNT. Right?

Mr. MARTINEZ. Yes, sir. He also received a call from the 2033 that the ship was taking water.

Mr. STRATTON. What was the report at 1925?

Mr. MARTINEZ. The report as far as I know at 1925 was that conditions was normal.

Mr. STRATTON. This was 25 minutes after—

Mr. MARTINEZ. Seven.

Mr. STRATTON. Mr. Kaufenberg noted that water was being taken into the opening over the sonar dome.

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. That was not reported.

Mr. MARTINEZ. No, sir; not reported to 4206.

Mr. STRATTON. Well, that is where he is supposed to report; isn't it?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. I think we will probably want to talk to Mr. Brown and find out what these calls amounted to.

Mr. HUNT. Off the record, Mr. Reporter.

(Discussion off the record.)

Mr. MARTINEZ. Yes, sir; we do have a log, that the call was received at 2033, and whom they notified at that time.

Mr. STRATTON. "After making the report, you will take whatever action is available to you to correct the condition, control the casualty, or minimize damage." Here you have got a very junior officer with a limited amount of training charged with the responsibility for millions of dollars' worth of equipment.

What can he do in terms of taking action to correct the condition?

Mr. MARTINEZ. Sometimes he could close the valve. Other times he could close a hatch.

Mr. STRATTON. If he knew what the valves were.

Mr. MARTINEZ. If it was a leaking valve, you should close it, if he could close the hatch. If it was a fire, he could take an extinguisher to it.

Mr. STRATTON. Did these individuals wear any distinctive hats to provide rapid identification as provided for in subparagraph J?

Mr. MARTINEZ. We have had distinctive marked hats. Some of them look like Easter eggs. We have had stripes on them, and we have had letters.

Mr. REDDAN. How long have you had them, Mr. Martinez?

Mr. MARTINEZ. Oh, off and on, I would say for 4 years.

Mr. REDDAN. How much off and how much on? Has it been continuously required over 4 years?

Mr. MARTINEZ. Well, no, sir; no, sir.

Mr. STRATTON. You just instituted that recently; didn't you?

Mr. MARTINEZ. Well, not instituted it. We went back and shook them up again on it.

Mr. STRATTON. You weren't enforcing the regulation; isn't that what it amounts to?

Mr. MARTINEZ. Well, distinctly marked hat.

Mr. STRATTON. Now, subparagraph O. "You will check and record inclinometer readings hourly on the below-decks checkoff list. You will check mooring lines and record draft readings every 2 hours." How can you record an inclinometer reading if the inclinometer isn't there and doesn't work?

Mr. MARTINEZ. You can't. You can't.

Mr. STRATTON. Was anybody aware of the fact that those readings were not being recorded on the check-off list?

Mr. MARTINEZ. I was not, sir.

Mr. STRATTON. Well, you are the man responsible for seeing these fellows do their job, aren't you?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. What about the draft readings every 2 hours? Were those recorded regularly?

Mr. MARTINEZ. They were on the night of the 15th, as I read the log.

Mr. STRATTON. Where would they be, in the log itself?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. "If at any time you observe water coming into the vessel through any opening, you will take immediate action to correct the condition. Check topside to see if the condition is corrected. Second. If more canvas is needed, call the riggers. Third. If conditions are beyond your control, notify your supervisor."

Mr. MARTINEZ. Yes, sir. What they are talking to in this particular instance is during the rainy seasons, that you get pockets of water that stream into the ship.

Mr. REDDAN. Wouldn't this also cover water coming into the sonar hatch?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. I don't have any more questions here at the moment. Mr. Reddan, do you have any?

Mr. REDDAN. Mr. Martinez, was Duty Supervisor Lee supposed to make the same tour of the boat that the below-deck watch stander did?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. When he came on to check the log——

Mr. MARTINEZ. He came on to check the log to see that the below-deck watch stander was doing his job, was available, and to look, satisfy himself that conditions were normal.

Mr. STRATTON. And that would require a tour of the boat, would it not?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. Do you know whether Supervisor Lee, who signed the log at 1914 on the night of May 15, observed any water coming into the sonar opening?

Mr. MARTINEZ. No, sir, I do not.

Mr. STRATTON. If the water was coming in and he made the proper inspection of the vessel he should have seen it, should he not?

Mr. MARTINEZ. If the water was coming in.

Mr. STRATTON. Did you ask if there was any notation in the log that water was coming in?

Mr. REDDAN. No, sir.

Mr. STRATTON. Was there any such notation?

Mr. MARTINEZ. No, sir; there was none legible.

Mr. REDDAN. Was watertight integrity of the boat part of your responsibility? In other words, not the actual physical preparation of the ship, but an examination of the vessel to see whether there was any condition which would breach watertight integrity. Is that part of your responsibility? That is, sort of preventive maintenance?

Mr. MARTINEZ. You are talking about leads going through hatches?

Mr. REDDAN. No; I am talking particularly about a cofferdam around the opening up on the sonar?

Mr. MARTINEZ. Oh, up on the sonar?

Mr. REDDAN. Yes, sir.

Mr. MARTINEZ. No, sir.

Mr. REDDAN. If you saw that opening there with water up within a couple of inches of it, wouldn't it be part of your responsibility to see that a cofferdam was placed there?

Mr. MARTINEZ. No, sir.

Mr. REDDAN. If you saw water coming into the——

Mr. MARTINEZ. If I saw water coming in personally, I would see that a blank was put on there.

Mr. REDDAN. Up until the moment that the water started to go in, would you have any responsibility for taking action to prevent it from coming in?

Mr. MARTINEZ. If I were on the scene, I would.

Mr. REDDAN. That is what I mean.

Mr. MARTINEZ. Yes, sir.

Mr. REDDAN. And your agents would have the same responsibility, then, would they not?

Mr. MARTINEZ. At least to report that the hole was open.

Mr. REDDAN. Was it ever reported to you that the inclinometer was not functioning?

Mr. MARTINEZ. No, sir.

Mr. REDDAN. Do you know if it was ever reported to anybody?

Mr. MARTINEZ. No, sir.

Mr. REDDAN. Is the inclinometer reading an important function of the watch stander's log entries?

Mr. MARTINEZ. It is an indication of the condition of the boat. You can determine the same by the draft readings.

Mr. REDDAN. Well, is it an important function?

Mr. MARTINEZ. No, sir. I wouldn't say that it is a major requirement, because if you didn't have an inclinometer you could determine the list or the draft by visual observation.

Mr. REDDAN. Well, if that is so, then, Mr. Martinez, why in the instructions of May 24, 1967, do we find this:

Paragraph 6, Instructions. As a minimum, the detailed instructions to the watch prepared by the service group superintendent, Code M-351, shall include provisions for, A, recording, one, draft readings fore and aft once every 2 hours.

That is your No. 1 instruction.

Mr. MARTINEZ. Yes, sir.

Mr. REDDAN. No. 2, inclinometer readings once every hour.

Now, those are the two top recommendations and from their position in this instruction, it looks as though these are major matters to report. Why were they singled out if you don't think the inclinometer reading is very important?

Mr. MARTINEZ. Well, there are other ways to determine the condition of the ship without a glass instrument.

Mr. REDDAN. That is perhaps true. But Captain Adrianse thought it was sufficiently important to make it his No. 1 instruction here, as a minimum. Now, is he overemphasizing it, or, on reconsideration would you say, that actually the inclinometer reading was important?

Mr. MARTINEZ. I think it is important, but I can't say that it is of major importance.

Mr. REDDAN. Well, you are suggesting, then, that the things he is putting down here as a minimum aren't necessarily major. If these aren't major, the rest must be extremely minor. He says you should at least have this. And they didn't at least have this.

Mr. STRATTON. What are the two most serious things that watchstanders are supposed to be guarding against, Mr. Martinez?

Mr. MARTINEZ. Fire and flooding.

Mr. STRATTON. Right. And how do you determine whether the ship is flooding or sinking?

Mr. MARTINEZ. By the draft recordings.

Mr. STRATTON. Or by the inclinometer, don't you?

Mr. MARTINEZ. This is a backup; yes, sir.

Mr. STRATTON. So that would be pretty important, wouldn't it? Since there are only two main things you are guarding against, it would be pretty important.

Have you any more?

Mr. REDDAN. I just have one other question, Mr. Martinez.

One of the problems that we have noted which contributed to the sinking of the *Guitarro* was the fact that the watertight openings in the bulkheads could not be closed because of lines leading through there.

Mr. MARTINEZ. Yes, sir; service lines.

Mr. REDDAN. Has anyone ever recommended that couplings be placed on each line as it goes through the bulkhead so that they could be readily detached and the watertight door dogged down?

Mr. MARTINEZ. Yes, sir; there have been engineering studies made to the effect, and another one is under way right at this time. There are some technical complications.

Mr. REDDAN. Could you tell us when and who made the studies which recommended these detachment fittings through the bulkhead?

Mr. MARTINEZ. This would be—I would say the design.

Mr. REDDAN. Do you know who in the design department could help us with that?

Mr. MARTINEZ. Well, offhand I would suggest Mr. Graybeal.

Mr. REDDAN. Mr. Graybeal?

Mr. MARTINEZ. Graybeal—G-r-a-y-b-e-a-l.

Mr. REDDAN. Do you know how long ago these studies were made?

Mr. MARTINEZ. No, sir.

Mr. REDDAN. Have you ever seen the studies?

Mr. MARTINEZ. No, sir.

Mr. REDDAN. What makes you think that they were made?

Mr. MARTINEZ. Well, the problem of exit and egress to the access to the submarines has always been a matter of concern, and the matter of establishing foot disconnects for 440-volt leads or high-charged air-lines is not a simple technical matter.

Mr. REDDAN. That is true.

Mr. MARTINEZ. It can be done.

Mr. REDDAN. It can be done, and you say that studies have been made?

Mr. MARTINEZ. Yes, sir.

Mr. REDDAN. You know that?

Mr. MARTINEZ. Yes, sir.

Mr. REDDAN. And the design department, Mr. Graybeal, could tell us about it and furnish us with copies?

Mr. MARTINEZ. Yes, sir.

Mr. REDDAN. I have no further questions, Mr. Chairman.

Mr. STRATTON. Mr. Martinez, would you say that you are the safety officer for the yard?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. Well, when it comes to the safety of ships that are alongside prior to commissioning, you are as much responsible for their safety or more responsible than anyone else, are you not?

Mr. MARTINEZ. If we have below-decks patrol on them, I have a personal interest in them; yes, sir.

Mr. STRATTON. Who would be the safety officer? Who would be more responsible than you with regard to seeing that we don't lose these ships before they are commissioned?

Mr. MARTINEZ. I believe it is the responsibility of the ship superintendent.

Mr. STRATTON. Well, you prepared a very elaborate document to indicate that to a large extent the responsibility lay with the watchstanders, very junior, low-paid officials. You were their superior, were you not?

Mr. MARTINEZ. I am not their immediate supervisor, no, sir; but I am their superior.

Mr. STRATTON. And therefore—their assignment is to protect against the two major hazards, fire and flooding, and, therefore, insofar as we are protecting against those two hazards you really were in charge of that operation, were you not?

Mr. MARTINEZ. No, sir; I do not consider that I had full responsibility for it.

Mr. STRATTON. Well, I kind of got the impression around this yard that nobody is responsible for anything, and I think this is one of the problems here. Nobody is responsible because everybody is responsible.

Mr. MARTINEZ. Congressman, this is true, but you can't be responsible until you know what is going on in the ships.

Mr. STRATTON. Well, that is your duty. You are in charge of these fellows. You have told them that they are responsible and that at times it will be solely under their vigilance. Your responsibility was to oversee them, was it not?

Mr. MARTINEZ. To see that they did their job.

Mr. STRATTON. That is right.

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. So you, to that extent, were responsible for their safety, were you not?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. Were you aware of the fact that for some time there had been no plate over the forward sonar entrance on the *Guitarro*?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. You weren't aware of that?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. You didn't bother to go on the ship itself and take a look at it, then?

Mr. MARTINEZ. I made inspections of the ship; yes, sir.

Mr. STRATTON. But you didn't happen to see that?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. This wasn't reported to you by the duty superintendent?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. Well, for somebody who was charged with the safety of the ships, that was a rather remarkable gap in your knowledge, wasn't it?

Mr. MARTINEZ. You talk about charged with the safety of the ship. I provide a patrol to assist in the safety of the ship.

Mr. STRATTON. Who was in charge of the ship itself, Mr. Martinez? Who was in charge of the *Guitarro*?

Mr. MARTINEZ. The ship superintendent.

Mr. STRATTON. Who was he? Mr. Lampson, is it?

Mr. MARTINEZ. Mr. Lampson.

Mr. STRATTON. How many hours a day does he work?

Mr. MARTINEZ. Possibly 12.

Mr. STRATTON. Twelve, and then he goes home the other 12; is that right?

Mr. MARTINEZ. To my knowledge; yes, sir.

Mr. STRATTON. Who is in charge and responsible for the ship when Mr. Lampson is not on board, not on the base?

Mr. MARTINEZ. Well, they have more than one ship superintendent.

Mr. STRATTON. But they don't have more than one ship superintendent for each ship, do they?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. They do?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. And is there always somebody around responsible for each ship, 24 hours a day?

Mr. MARTINEZ. We have shipyard watch officers.

Mr. STRATTON. You mean these are the fellows who are sitting at the other end of the telephone?

Mr. MARTINEZ. No, sir; naval officers.

Mr. STRATTON. But there is nobody who is really responsible for the particular ship, is there, when the ship superintendent is ashore?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. You issued this document on the 9th of April 1969 when the *Guitarro* was launched—no, when the *Hawkbill* was launched, I guess?

Mr. MARTINEZ. Right.

Mr. STRATTON. Saying that from now on the watch standing responsibilities would be extended to cover two ships instead of one?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. Whose idea was this?

Mr. MARTINEZ. That was mine.

Mr. STRATTON. And when you are dealing with such an important responsibility involving so many millions of dollars' worth of equipment and material, why did you decide to cut it in half?

Mr. MARTINEZ. I didn't decide. I followed the precedents which we had had for many years, Congressman, that this is a practical approach to a roving patrol, with the ships this close, that part of the time the individual is below deck, part of the time he is on the dock, part of the time he is on the topside.

Mr. STRATTON. You were really cutting the protection in half, weren't you, that these watch standers were providing?

Mr. MARTINEZ. No, sir; no more than if I had put two on each boat would I have been multiplying it by four.

Mr. STRATTON. How many of these submarines have you had alongside at the same time?

Mr. MARTINEZ. Oh, probably not over two.

Mr. STRATTON. Have you ever had three?

Mr. MARTINEZ. Not alongside of each other; no, sir. During the war we have had, oh, six and eight of them.

Mr. STRATTON. So you have never had more than two at one time?

Mr. MARTINEZ. Before I answer this, I am trying to just go back when we were putting together the SSN's whether or not some of them had been taken over by ship's force or whether we were still manning them below decks. I couldn't answer that.

Mr. STRATTON. I am not trying to pin you down, but just as a general practice, was it your practice to have one watch stander for all of the submarines that happened alongside the dock waiting for commissioning?

Mr. MARTINEZ. It depends on the size of the boat and their location.

Mr. STRATTON. Now, you issued this document over your signature, "E. W. Martinez," from service group superintendent to below-decks watch standers. How is it possible that this was issued without any approval from either anybody above you or even any information copy sent to anybody above you?

Mr. MARTINEZ. That is not possible.

Mr. STRATTON. Well, the admiral testified that he was not aware of this change.

Mr. MARTINEZ. I believe that is true.

Mr. HUNT. Mr. Chairman—

Mr. STRATTON. Yes; just one second. Wouldn't he have to approve it?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. Or be notified of it?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. He wouldn't have to approve it?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. You had full authority in this field to cut the security protection by half, without even checking with anybody above you?

Mr. MARTINEZ. That is not true.

Mr. STRATTON. Well, you just said that you didn't have to go to anybody else to get it approved.

Mr. MARTINEZ. I didn't say that.

Mr. STRATTON. What is your testimony, then?

Mr. MARTINEZ. My testimony is that I discussed this with the ship-building and repair superintendent, Commander Walker, and he said, let's try it.

Mr. REDDAN. Did he think it was an innovation?

Mr. MARTINEZ. This was no change in previous precedents that we had done. You have an individual that could watch more than one ship when they are adjacent to each other.

Mr. REDDAN. Why would he say, "let's try it," if this had been the standard procedure?

Mr. MARTINEZ. Well, because, you see, up until April of 1969 we had had only one ship in the water.

Mr. REDDAN. And he didn't know you used to do it when you had more than one; is that it?

Mr. MARTINEZ. Yes, sir; I told him.

Mr. STRATTON. What about Captain Adrianse? Did you check with him?

Mr. MARTINEZ. I might have mentioned it to him, but I can't certify to that.

Mr. STRATTON. Well, he was your direct supervisor; was he not?

Mr. MARTINEZ. That is right.

Mr. STRATTON. Rather than the ship repair superintendent?

Mr. MARTINEZ. Yes. For waterfront matters, I deal with the ship-building and repair superintendent.

Mr. STRATTON. Mr. Hunt, I am sorry. You wanted something.

Mr. HUNT. Excuse me.

Mr. STRATTON. Was there in effect any distribution of this other than to the watch standers themselves?

Mr. MARTINEZ. A copy went to the ship superintendent.

Mr. STRATTON. How about production, how about your production officer and some of these other individuals?

Mr. MARTINEZ. Not to my knowledge.

Mr. REDDAN. Excuse me, Mr. Chairman. Is there anything on this document that shows that it was distributed to any one other than the watch standers?

Mr. MARTINEZ. No, sir.

Mr. REDDAN. How do you know, then, that it went to anyone else?

Mr. MARTINEZ. Well, the only thing that I know of is that when I asked if the ship superintendent got a copy of it, the individual that mailed them out said he did.

Mr. REDDAN. Who was this?

Mr. MARTINEZ. His name is LaSalle.

Mr. REDDAN. LaSalle. And when did you ask him that question?

Mr. MARTINEZ. Oh, about a week ago.

Mr. REDDAN. After the ship went down?

Mr. MARTINEZ. Yes, after the ship went down. Of course you dig out and you look at all your instructions to see what happens, and I raised the question, I mean, who got copies of this, who know about this.

Mr. REDDAN. And LaSalle said he sent a copy to Captain Adrianse?

Mr. MARTINEZ. No; he did not.

Mr. REDDAN. Oh.

Mr. MARTINEZ. To the ship superintendent.

Mr. REDDAN. Oh, to the ship superintendent, who was Mr. Lampson.

Mr. MARTINEZ. Yes; in building 51.

Mr. REDDAN. You can ask Lampson if he got a copy of that.

Mr. STRATTON. Right. Just a couple of questions here. Where is Mr. Massey, Mr. Martinez?

Mr. MARTINEZ. Mr. Massey is a day shift below-decks watcher.

Mr. REDDAN. Do you know where he is at this time?

Mr. STRATTON. He was the regular——

Mr. MARTINEZ. He is an 8 to 4 man, sir.

Mr. STRATTON. He is an 8 to 4 man, and he left Vallejo rather suddenly following the sinking of the ship, did he not?

Mr. MARTINEZ. No, sir; I didn't know this.

Mr. STRATTON. He is not on board now, is he?

Mr. MARTINEZ. To my knowledge he is.

Mr. STRATTON. He is still around?

Mr. MARTINEZ. I can call and find out.

Mr. STRATTON. Well, we have already asked to get him to testify. But I had understood that he was away on vacation and had left right after the 15th.

Mr. MARTINEZ. Oh, he might be, he might be.

Mr. STRATTON. Mr. Carl is what?

Mr. MARTINEZ. He is a watch stander on swing shift.

Mr. STRATTON. He is the regular watch stander, is he not?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. Where was he on the 15th?

Mr. MARTINEZ. He was either on leave, or he was rotating for the weekend, for the 7-day coverage.

Mr. STRATTON. What is Mr. Kaufenberg's regular assignment?

Mr. MARTINEZ. If he wasn't below-deck watch, he would be working as a rigger's helper.

Mr. STRATTON. Well, was he a regular below-deck watch?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. Well, the log that you have shown us here indicates that Mr. Carl is on the 4 to 12 on the 13th and was on 4 to 12 on the 13th—wait a minute. I am sorry. This is the employee's number. Yes, on the 13th, on the 14th, and then Mr. Kaufenberg was on the 15th?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. Well, is Mr. Kaufenberg a supplement, sort of an auxiliary utility outfielder, so to speak, or something?

Mr. MARTINEZ. No, sir; no, sir. We are required to cover these boats 7 days a week, Congressman, three shifts a day, and 2 of the days during the week that the watch standers are relieved. If they go on annual leave, if they are sick, then someone takes their place.

But you interest me on this Massey leaving town. I didn't hear this one.

Mr. STRATTON. I am just trying to find out, that is all. We have asked to have him. So if he is here, I hope he will be here.

Mr. Martinez, recalling the fact that you are under oath, did you have occasion to discuss with the watch standers the kind of testimony they should give, either to the Naval Court of Inquiry or to this subcommittee?

Mr. MARTINEZ. No, sir. I was very careful not to do this.

Mr. STRATTON. You didn't indicate to them that they should just answer yes or no and not volunteer any information?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. What would happen to a watch stander who came before this subcommittee to express dissatisfaction with the way in which the job was being handled, for example?

Mr. MARTINEZ. If he—

Mr. STRATTON. Would you welcome that kind of—

Mr. MARTINEZ. Yes, sir; constructive criticism is always welcome. If he brought this to me, then we would do something about it, trying to improve his condition.

Mr. STRATTON. He wouldn't find himself out of a job in short order?

Mr. MARTINEZ. No, sir; no, sir.

Mr. STRATTON. Do you have any questions?

Mr. HUNT. Yes, sir.

Mr. STRATTON. Mr. Hunt.

Mr. HUNT. Mr. Martinez, as I read this, Mr. Brown was the dispatcher on duty who received the call, then at 2333 hours on May 15, 1969?

Mr. MARTINEZ. 2033.

Mr. HUNT. 2033?

Mr. MARTINEZ. Yes, sir.

Mr. HUNT. That would be roughly corresponding to about 3 or 4 or 5 minutes after the expiration of the usual lunch hour?

Mr. MARTINEZ. Yes, sir.

Mr. HUNT. Now, considering the fact that we have two ships, the 665 and the 666, berthed adjacent to the seawall and that your watch

stander would be required to alternately take on one and then the other, and then the reverse, how long would it normally take this watch stander to make his usual tour, just roughly, in your estimation?

Mr. MARTINEZ. Well, he does make a complete cycle. He would go through the boat on one alternate trip, he would go topside on another one.

Mr. HUNT. Yes.

Mr. MARTINEZ. He would go out on the dock. When he was getting ready to leave the boat, he would then go through the inside, he would come up and go through the topside, and then go out on the dock and collect the draft measurements, and then go to the other ship.

Mr. HUNT. Now, where is the telephone located that he would use to call his supervisor?

Mr. MARTINEZ. The telephone is down in the ship's activity room, internal in the ship.

Mr. HUNT. That is on the second level, is it not?

Mr. MARTINEZ. Yes, sir; yes, sir.

Mr. HUNT. That is just above the second plate?

Mr. MARTINEZ. Yes, sir.

Mr. HUNT. So he would be required every hour, making the inspection, to go to that location on the second deck, above the second plate?

Mr. MARTINEZ. Yes, sir.

Mr. HUNT. To make that call on the half hour?

Mr. MARTINEZ. On the hour—yes, on the half hour.

Mr. HUNT. Half hour.

Mr. MARTINEZ. Every hour on the half hour in intervals, yes, sir.

Mr. HUNT. Yes. That seems to be a little bit of—

Mr. MARTINEZ. Well, this is one thing that concerns me, because when the individual came back and went aboard the ship, the 665, he went down below decks, at that time, and it certainly doesn't seem to me that a person would go aboard a ship if that ship was in a hazardous condition at that time.

Mr. HUNT. This is exactly what I am getting to. It would appear to me, then, that your watch stander, regardless of who he was, who made that phone call, in this case being Mr. Kaufenberg, had to go down below deck to notify the dispatcher at the dial phone you have indicated—

Mr. MARTINEZ. 4206.

Mr. HUNT. 4206, that the ship was in precarious condition, taking on water.

Mr. MARTINEZ (nodding).

Mr. HUNT. Now, I notice on the log that is kept at 4206 a call here at 1925.

Mr. MARTINEZ. From the 665?

Mr. HUNT. From the 665. Wouldn't it normally be that at 2025 Mr. Kaufenberg would have been back again on the *Hawkbill*, because the *Hawkbill* entry here indicates that at 2025 Mr. Kaufenberg called in from the *Hawkbill*.

Mr. MARTINEZ. That is right.

Mr. HUNT. Which would be on the second leg. Now, how could Mr. Kaufenberg have called in from the *Hawkbill* at 2025—

Mr. MARTINEZ. Eight minutes later.

Mr. HUNT. And 8 minutes later be over on the 665, below decks, to call in? What I am trying to determine here is, I find a discrepancy in time on the recording.

Mr. MARTINEZ. Yes, 2025——

Mr. HUNT. 2025.

Mr. MARTINEZ. On the 666.

Mr. HUNT. Which would be down below deck, below the second plate?

Mr. MARTINEZ. Yes.

Mr. HUNT. And then I find that at 2033, which was exactly 8 minutes later, he called in from the 665.

Mr. MARTINEZ. Did you ask him?

Mr. HUNT. No, not yet, but I am just wondering whether or not you did.

Mr. MARTINEZ. No, sir; I didn't.

Mr. HUNT. Had you noted this?

Mr. MARTINEZ. Yes, sir.

Mr. HUNT. But you——

Mr. MARTINEZ. I tried very carefully not to influence or to talk to these individuals because, believe me, I am as concerned as you are to get to the bottom of this, what happened. I feel that the below-deck watch was in the right place at the right time. The only difficulty was that he didn't notify his supervisor when he thought something was happening, which he couldn't take care of.

Mr. HUNT. Well, I trust that you will not make any remark about this after you leave here, until we have an opportunity to delve deeper into it.

Mr. MARTINEZ. I think we should take this thing in proper perspective and try to determine what really happened, where these people were, and what they were doing and why they did certain things.

Mr. HUNT. Mr. Martinez, isn't it a fact that the inclinometer only measures the fore and aft trim?

Mr. MARTINEZ. Yes.

Mr. HUNT. So it wouldn't be possible by reading the inclinometer to even get a degree of list; would it? There is nothing that shows list on the inclinometer. All you have—the head of the pendulum——

Mr. MARTINEZ. You have a plumb bob effect or pendulum effect.

Mr. HUNT. So it only determines your trim fore and aft?

Mr. MARTINEZ. Well, you can have an inclinometer that would do athwartships as well.

Mr. HUNT. Have you ever had a submarine in this yard with an inclinometer athwartships and one that also measured your trim fore and aft? Have you ever had a ship so equipped during construction, after launching, that would indicate both positions?

Mr. MARTINEZ. I can't answer that. But they are available. They are available.

Mr. HUNT. Yes, sir. Then so if your watchers, your below-decks watch standers, are checking for trim and list, then the only way they could actually check for list would be visually, to your knowledge?

Mr. MARTINEZ. To my knowledge, yes; but you see, the internals of these submarines are such that you have difficulty unless you come in from the outside to know what conditions are developing internal

in the submarine. I think it is important that these individuals leave the inside of the ship and get on topside.

Mr. HUNT. Mr. Martinez, are you familiar with the construction of the 662—I assume you were here when the 662 was constructed?

Mr. MARTINEZ. Yes, sir.

Mr. HUNT. I would assume you were topside many times on that. Did you ever have occasion to inspect on the 662 the sonar hatch opening, to your knowledge?

Mr. MARTINEZ. I am not familiar with that; no, sir.

Mr. HUNT. Would you be familiar with the fact that the 662 did have a cofferdam about the sonar hatch while under construction after launching?

Mr. MARTINEZ. Well, I know that we had cofferdams on some of the hatches during launch, but on the sonar dome hatch on the 662, I am not familiar with that.

Mr. HUNT. You are not familiar with that?

Mr. MARTINEZ. No, sir.

Mr. HUNT. Would that cofferdam forward of the sonar hatch be standard equipment during launch procedure?

Mr. MARTINEZ. I would say that the hatch would be blanked off at that time. It would be easier to put a blank on the opening rather than a cofferdam. A cofferdam is only required when you leave the hatch off and then go in from the top.

Mr. HUNT. Is it customary to use a cofferdam at the sonar hatch while they are working and the ship is in the water?

Mr. MARTINEZ. I would say that any time that you have an opening adjacent to the water level, that you should provide protection.

Mr. HUNT. Now whose job would it be to see that a cofferdam would be placed in that position? Who would that come under, what shop?

Mr. MARTINEZ. Whoever was taking the hatch off.

Mr. HUNT. And who would they go to? The ship superintendent?

Mr. MARTINEZ. Yes, sir; yes, sir.

Mr. HUNT. Now, on the night of May 15, on the swing shift, to your knowledge, do you know who the ship superintendent was?

Mr. MARTINEZ. At that hour?

Mr. HUNT. At that hour.

Mr. MARTINEZ. No, sir; I do not.

Mr. HUNT. Has anybody indicated to you who the ship superintendent was or if they even had one there at that time?

Mr. MARTINEZ. Mr. Strothers was notified—I noticed this on the log—who is a ship superintendent—S-t-r-o-t-h-e-r-s.

Mr. HUNT. Yes.

Mr. MARTINEZ. Was notified at that time.

Mr. REDDAN. At what time is that?

Mr. MARTINEZ. At 2033.

Mr. HUNT. Your log would not indicate where Mr. Strothers was, could it?

Mr. MARTINEZ. No, but Mr. Brown can answer the question.

Mr. HUNT. As to where he reached him?

Mr. MARTINEZ. Yes, sir.

Mr. HUNT. He wouldn't have reached him at a dinner for somebody who was making a speech at the base, would he?

Mr. MARTINEZ. The dinner was not at the base.

Mr. HUNT. Off the base?

Mr. MARTINEZ. Yes, sir.

Mr. HUNT. Was Mr. Strothers attending that?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. Where was the dinner, Mr. Martinez?

Mr. MARTINEZ. At Foley Park.

Mr. STRATTON. Where is that? In Vallejo?

Mr. MARTINEZ. Yes, sir; out in the northeast quadrant.

Mr. REDDAN. How far is that from the yard?

Mr. MARTINEZ. About 7 miles.

Mr. STRATTON. Did it ever disturb you or concern you that there seemed to be so many people doing different things on these new ships, that the right hand doesn't know what the left hand is doing?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. You have one group from one shop trying to trim the ship, and another group from another shop trying to fix the sonar dome, and the two never seem to get together.

Mr. MARTINEZ. Never the twain meet.

Mr. STRATTON. Has this ever been a matter of discussion or concern in the yard?

Mr. MARTINEZ. Yes, sir.

Mr. STRATTON. What has anybody done about it?

Mr. MARTINEZ. Well, in scheduling these type of situations—Mr. Hunt raised the question about who takes off a patch or who takes off a valve. Whoever opens up a valve or takes off a patch, right then they should fix it and not leave it and go for spare parts or depend on somebody else to follow through on the thing.

There were two patches cut in the nose of the submarine at that time. One was an 18-inch plate which was at the 24-foot-6 water level, to port, right on the nose, and the second one was a rectangular plate that was cut back on the starboard side.

Both of those hatches were open. I know because we put them on with the divers.

Mr. HUNT. Mr. Martinez, the gap appears to be—in the discussions we have had, the gap appears to be during the lunch hour period, starting at 2000 hours, and it is in this particular area we have difficulty in ascertaining what occurred on board that vessel and who was on board at the time it occurred.

Mr. MARTINEZ. (Nodding.)

Mr. HUNT. And we can't so far ascertain who was the ship superintendent at that time and where he was.

Mr. MARTINEZ. At that time?

Mr. HUNT. At that time.

Mr. MARTINEZ. Yes, sir.

Mr. HUNT. This is what we are trying to find out, because apparently there was some indication prior to 2000 hours that she was shipping water through the sonar hatch in small quantities, and then at 2033 it became quite apparent she shipped a lot of water.

Mr. MARTINEZ. Yes, sir.

Mr. HUNT. So in about 33 minutes she had shipped a lot of water forward, or else a lot of water had been transferred from ballast tank aft to ballast tanks forward, that brought that nose down so she shipped water in that second aperture. Is this your conclusion, too?

Mr. MARTINEZ. Yes, sir; because not only the free-flooding spaces in the dome but then additional water in the ballast tanks made her nose heavy.

Mr. HUNT. Yes.

Mr. MARTINEZ. Dipped the 18-inch plate under water and, of course, then the water level moved back to come under this rectangular plate and from then on, because she took a bow-down attitude, every bit of free surface in that boat ran forward, and the water then entered in through the escape hatch, and it wasn't until that time, when the water came in the escape hatch, that they had water inside the pressure hull.

Up until this time it was in the ballast tanks and the free-flooding area.

Mr. STRATTON. In your 40 years here in the yard, Mr. Martinez, has there ever been a similar sinking or similar serious flooding of any submarine?

Mr. MARTINEZ. Not as serious.

Mr. STRATTON. Never so serious that she sank?

Mr. MARTINEZ. No, sir.

Mr. STRATTON. Do you have any other questions, Mr. Reddan?

Mr. REDDAN. No.

Mr. STRATTON. Mr. Hunt?

Mr. HUNT. No, thank you.

Mr. STRATTON. Thank you very much—

Mr. REDDAN. Just one other question. Could you suggest to the subcommittee how these conditions on board the 665 could have changed between or during the lunch hour period to cause the sinking?

Mr. MARTINEZ. There is one possibility, and this is at 1926 was low water.

Mr. HUNT. 1926 was low water?

Mr. MARTINEZ. Was low water.

Mr. REDDAN. You mean low tide?

Mr. MARTINEZ. Yes, sir; at 2.7.

Mr. STRATTON. How could that have any effect?

Mr. MARTINEZ. 1929. That if—yes, you are ringing a bell. If the ship was on the bottom at that time and was so full of water that she could not rise, that the incoming tide would progressively flood that ship.

Mr. REDDAN. Is there any evidence that that is or could have been a possibility?

Mr. MARTINEZ. There is a study being conducted, being investigated by the Board of Inquiry on this situation. This is a new development.

Mr. REDDAN. Well, isn't the testimony before the Board of Inquiry to the effect, that when the swing shift came back from lunch, the 665 was in fact floating and subsequently went under?

Mr. MARTINEZ. Yes, sir; and to support this, that at 2033, 2033, we still had a call below decks from the patrol man.

Mr. REDDAN. Wouldn't that suggest, then, that she was not caught on the bottom but was in truth, in fact, floating?

Mr. MARTINEZ. Which is approximately an hour after low tide.

Mr. REDDAN. Yes. She was still floating when they came back from lunch. It wasn't caught on the bottom. If she were, the tide—how much tide had come in during that time?

Mr. MARTINEZ. We ought to have picked up about a foot of water.

Mr. REDDAN. Well, she went down a lot more than a foot, didn't she, after the lunch break? In other words, you see what I am getting at? If she were caught on the bottom, she wouldn't have sunk after the lunch break. She went down how far after the lunch break?

Mr. MARTINEZ. I don't know. I don't know that.

Mr. REDDAN. Well, she went down to the point that only a portion of her sail was above water.

Mr. MARTINEZ. She went down bow first attitude and, of course, then progressively aft and then sank, and the sail was the only one sticking out of the water with a perceptible list to port.

Mr. REDDAN. Would you say she went down 10 feet, 15 feet?

Mr. MARTINEZ. I would say about 10 feet. You see her hull is 33 feet in diameter and the top side couldn't have been much more than 10 feet under water. We had a 5.6 from high to low Thursday, and we had a 6.9 to minus 5. So we had about a 7-point tide on Friday.

Mr. REDDAN. But as I understand the testimony, shortly after the end of the lunch break, the bow went down rapidly, and the whole ship settled on the bottom, is that right?

Mr. MARTINEZ. This is what I have also heard, that she settled bow first.

Mr. REDDAN. I would think now, and correct me if I am wrong, that if she settled by the bow, that would indicate that she was not resting on the bottom when they returned from lunch.

Mr. MARTINEZ. Well, in looking at that sonar plate, which is about 6 inches above the boot topping—

Mr. REDDAN. You refer to the boot topping. That is what?

Mr. STRATTON. The black paint. I wanted it for the record.

Mr. MARTINEZ. Yes.

Mr. REDDAN. That is the black painted area?

Mr. MARTINEZ. Yes, sir. This was 24 foot 6, top of the boot topping, and the sonar opening was about 6 inches up on the curvature of the hull. So somewhere between 24 foot 6 and 25 foot would have meant that water would have entered it. It is only a theory.

Mr. REDDAN. I have no further questions.

Mr. STRATTON. Anything further?

Mr. HUNT. No.

Mr. STRATTON. Thank you very much, Mr. Martinez. I think that concludes our questions, unless we should think of any others later. But we appreciate your patience, and thank you for your help.

Mr. MARTINEZ. Yes, sir. May I talk a little bit off the record?

Mr. STRATTON. Well, I don't know about off the record, but if you have something more on the record.

Mr. MARTINEZ. No, sir, nothing more on the record.

Mr. REDDAN. Do you have anything to say with respect to matters involving the sinking of this ship?

Mr. MARTINEZ. No, sir.

Mr. REDDAN. Well, what did you want to speak off the record to?

Mr. MARTINEZ. I wanted to say, particularly in the interest of my man Kaufenberg, that he has been subjected to a lot of interrogation and inquiry, and I think, he has taken a beating, and I get concerned about my people like this. He is being called back again at 1530, 1530, or 1530 today.

Mr. REDDAN. Who do you say is giving him a beating?

Mr. MARTINEZ. No, I mean—well, you kindly gentlemen, in your interrogating him—he is 25 years old. I am sure he feels, has deep concern about the ship. He is a key witness. I mean, he is the individual that was there and talked to people.

Mr. STRATTON. He is the only person that seems to have been even remotely aware of what was happening. I think our feeling is, I will speak for myself, that he was the sharpest guy in a yard that was not very notable for having anybody awake to what was happening.

Mr. MARTINEZ. He did everything right, except report to the central office.

Mr. STRATTON. Well, having heard what I have heard about what happens when he reported, I am sure that wouldn't have done any more than when he mentioned it to the people that were flooding the ballast tanks.

Mr. MARTINEZ. He has never once said he reported it to shop 27.

Mr. STRATTON. As I say, I am not convinced myself that this would have made much difference. In retrospect, it might leave a little hole, but at least he was aware of the problem. There wasn't anybody else around even to be aware of it.

Mr. MARTINEZ. He was on top of it.

Mr. STRATTON. I don't think you have to worry about him too much.

Mr. MARTINEZ. You don't think so. Okay, sir.

Mr. HUNT. Mr. Martinez, who would you be alluding to when you said he was taking a beating?

Mr. MARTINEZ. No. I mean just the interrogation and the questioning and this type of thing.

Mr. HUNT. The only reason the question is—

Mr. MARTINEZ. I understand you have a job to do.

Mr. HUNT. Is to fill in some gaps.

Mr. MARTINEZ. I know. But he also was interviewed by the court of inquiry. I noticed him when he came out. He was in here 1 hour and 32 minutes last night. He then wanted to go home on leave, and we let him go home and told him to rest up.

Mr. HUNT. He is a very personable young man.

Mr. MARTINEZ. I think he is sincerely interested in his job. He was an ET type in the Navy, electronics. Militarywise, he understands about reporting and logging and call-ins and follow-up. It would be interesting to ask him how he made a phone call at 2025 from the 666 and then 2033 from below decks.

But I know that he was below decks at that time.

Mr. REDDAN. You said he was being called back this afternoon.

Mr. MARTINEZ. By the court of inquiry, yes, sir, at 1500.

Mr. REDDAN. How many times has he appeared before them?

Mr. MARTINEZ. At least two, to my knowledge.

Mr. REDDAN. And how many hours and minutes did he spend with them?

Mr. MARTINEZ. I don't know, sir. I noticed that he was appearing haggard.

Mr. REDDAN. Do you know whether he was haggard when he came out of the court of inquiry?

Mr. MARTINEZ. I think he is tired. I think he is tired. The man is tired.

Mr. REDDAN. I think we all are.

Mr. MARTINEZ. I agree. I agree.

Mr. HUNT. Do you know what time you came in today, Mr. Martinez?

Mr. MARTINEZ. Yes, sir. It was 0920.

Mr. HUNT. You came in here at 0919.

Mr. MARTINEZ. 0919?

Mr. HUNT. Yes, you did.

Mr. MARTINEZ. My watch is probably off by a minute.

Mr. HUNT. I recorded the time for Mr. Kaufenberg yesterday. My minutes reflect that he was here for 1 hour and 31 minutes.

Mr. MARTINEZ. My watch is still off that minute.

Mr. HUNT. My time was 1 hour and 31 minutes.

Mr. MARTINEZ. I missed them both by 1 minute.

Mr. HUNT. You came in at 19.

Mr. MARTINEZ. 19. Thank you, sir.

Mr. STRATTON. Well, we have taken a good deal of your time, Mr. Martinez. Thank you very much.

Mr. MARTINEZ. I hope I have contributed.

Mr. HUNT. Let's get our watches coordinated, Mr. Martinez. What do you have now?

Mr. MARTINEZ. I am standing at 1108.

Mr. HUNT. I am at 1107. 1108. Okay. Thank you.

Mr. MARTINEZ. You are welcome.

Mr. STRATTON. I think 1107 is closer to it.

Mr. HUNT. I am just trying to get the time coordinated so we have the right time. I think mine is off 1 or 2 minutes every day.

Mr. MARTINEZ. Thank you.

(Recess.)

Mr. STRATTON. Before we proceed, I just want to advise you as we have advised all of the other witnesses that the chairman of the committee has asked us to swear all of the witnesses in. We are not here in any judicial capacity or trying to nail anybody or accuse anybody. We are simply here to try to develop information and make recommendations as to how this sort of thing might be avoided in the future. But because the court of inquiry is going on, we have been asked to swear in our witnesses. And under the rules of the House, before we do that, we have to advise you that first of all you have, if you so desire, the right to have counsel present with you, and also, since you are under oath, you will not be required to answer any questions that you feel might tend to incriminate you. These are relatively routine legal matters to protect the rights of all witnesses. Actually, our previous witnesses have waived the right to counsel, and you have that privilege, too, but I do have the responsibility to advise you before we do that. If you don't desire to avail yourself of counsel, we can swear you in and proceed, if that is all right with you.

TESTIMONY OF HARRY B. MILLER, FOREMAN, MARINE MACHINIST, SAN FRANCISCO BAY NAVAL SHIPYARD, MARE ISLAND, VALLEJO, CALIF.

Mr. MILLER. Yes, that is perfectly all right.

Mr. STRATTON. All right, would you stand just briefly and I will administer the oath.

Do you swear that the testimony you are about to give before this subcommittee in the matters now under discussion will be the truth, the whole truth and nothing but the truth, so help you God?

Mr. MILLER. I do.

Mr. STRATTON. Be seated, please.

Mr. MILLER, your responsibility is what, please?

Mr. MILLER. Employment—

Mr. STRATTON. Your job.

Mr. MILLER. Foreman, marine machinist.

Mr. STRATTON. That is in shop 38?

Mr. MILLER. Shop 38, yes, sir.

Mr. STRATTON. And are you regularly a night foreman?

Mr. MILLER. No, I just was assigned to this job around the first of the month.

Mr. STRATTON. By "this job," you mean as night foreman on the *Guitarro*?

Mr. MILLER. Yes, sir.

Mr. STRATTON. Or as night foreman in shop 38?

Mr. MILLER. Both.

Mr. STRATTON. And how long have you been here in the yard?

Mr. MILLER. Since October 1961.

Mr. STRATTON. And as the night foreman or as a machinist, marine machinist foreman in shop 38 and with the *Guitarro*, what was your primary responsibility?

Mr. MILLER. Well, I had the primary responsibility of not only the *Guitarro*, which is the 665, but the 666 as well, of carrying on whatever jobs were in progress from day shift. I followed four different leading men, day shift leading men.

Mr. STRATTON. At this point could I interrupt you?

Mr. MILLER. Yes, sir.

Mr. STRATTON. Do leading man and foreman mean the same?

Mr. MILLER. Yes; I am sorry.

Mr. STRATTON. So you are a leading man?

Mr. MILLER. Yes. The foreman is a new term just used recently.

Mr. STRATTON. Right.

Mr. MILLER. I followed Foreman Baker on the 665 on the forward end of the boat, torpedo room, and so forth, Foreman McGuirk, who had the engine room or reactor aft, and also I followed Foreman Pye on the 666, who had the fore and aft end of the board, in other words, the whole boat.

Mr. STRATTON. When you say you followed them, do you mean that you came on duty on the swing shift after these individuals went off duty?

Mr. MILLER. Yes, sir; that is correct.

Mr. STRATTON. Does this apply just to May 15 or was this the standard shift arrangement during the period?

Mr. MILLER. No; this was the standard shift arrangement. I took on these duties and transferred from day to swing shift around the first of the month, when the foreman who was assigned to the shift previously retired.

Mr. REDDAN. Are these individuals you have just mentioned the ones you followed—were they all from shop 38?

Mr. MILLER. Yes, sir. And also we followed Foreman Pritchett, who had the shop 38 test gang, who ran the various T-sheet tests for all of the different boats that shop 38 was concerned with.

Mr. REDDAN. Would this include calibration tests?

Mr. MILLER. Yes, sir; tank calibration and so forth.

Mr. STRATTON. Does this mean that the day shift had four or five leading men, whereas the night shift had just one?

Mr. MILLER. In this particular area; yes, sir.

Mr. STRATTON. Now, it is our information, Mr. Miller, that the *Guitarro* was trimmed for some particular purpose on May 13. Let me ask you first of all, is that right, to your knowledge, and, second, if so, did you have anything to do with it?

Mr. MILLER. Yes, to both questions.

Mr. STRATTON. All right. First of all, what was the purpose of the trimming?

Mr. MILLER. The purpose of the trimming as it was explained to me by my general foreman, a man by the name of Robnett—it was a nuclear power division requirement to trim the ship within half a degree pitch and roll so that they could _____. Due to the fact that this was the _____ tank in this system, they had the requirement of having one-half degree or less pitch and roll.

Mr. STRATTON. Now, Mr. Robnett, you said, is your supervisor?

Mr. MILLER. Yes, sir.

Mr. STRATTON. What would be his position?

Mr. MILLER. General foreman.

Mr. STRATTON. General foreman. And is he also a night general foreman?

Mr. MILLER. No; he is day shift.

Mr. STRATTON. Then on the 13th, did this trimming operation take place on the day shift?

Mr. MILLER. No; this took place on the swing shift.

Mr. STRATTON. Now, Mr. Robnett, as the general foreman, directed you to undertake the trimming of the boat on the swing shift on the 13th of May for this particular purpose?

Mr. MILLER. Yes, sir. I might explain that a little bit. Now, I know it sounds peculiar. He is day shift, but as it is set up at the present time the general foreman runs the day shift and whatever crews follow work through swing and graveyard. On this particular day apparently they had a meeting, what they call a 4 o'clock meeting, and this requirement was brought up at that time, and apparently Mr. Robnett was not aware of this until right at 4:10, quitting time, or in that area. So he caught me on the dock around 4 o'clock, it may have been a few minutes before or after, and this was the first that he knew of this requirement, and, of course, he explained to me that we would have to trim the ship to meet the requirement, but he was aware that I was not familiar with the trim system and had never trimmed a boat before, so he stayed here until well after 5, I don't know exactly how long, and lined me up with day shift people whom I could call to come back in to accomplish this trimming operation.

Mr. STRATTON. Excuse me. Who laid on this requirement in the first place, do you know?

Mr. MILLER. Apparently nuclear power division.

Mr. REDDAN. Is it normal to crank in and schedule requirements on the spur of the moment?

Mr. MILLER. I couldn't say yes or no to that, really, because I don't know.

Mr. REDDAN. Don't you have regular scheduled work sheets for the week in advance advising the foreman as to what work is scheduled for a particular ship for a particular week?

Mr. MILLER. Not as far as our crew is concerned; no, sir. I am sure they must have this at a higher level, but they tell us what work they want accomplished. For our information, when I come on the shift, I pick up the turnover sheets from day shift to swing.

Mr. REDDAN. You get your orders then, as you come on each day?

Mr. MILLER. Yes, sir.

Mr. REDDAN. You don't know before that time what you are going to do?

Mr. MILLER. No, sir. Some jobs, of course, are continuing jobs which normally we do continue on.

Mr. REDDAN. Yes.

Mr. MILLER. But there are new jobs, such as this one, that come up. On this one it was so late that it wasn't even written on the turnover sheet.

Mr. STRATTON. Now, Mr. Robnett directed you to undertake this and stayed until after 5 to show how it was done?

Mr. MILLER. Not to show me personally, but to line me up with day shift test gang personnel who were familiar with the operation.

Mr. STRATTON. So these people came back on the job?

Mr. MILLER. I called Mr. Powell, on Mr. Robnett's instructions, and asked him to come back on to assist in trimming the ship.

Mr. STRATTON. And he came back in?

Mr. MILLER. Yes, sir; he arrived back on the yard, in fact, on the boat, at 6 o'clock, or about 6 o'clock.

Mr. STRATTON. And was there anybody else who was there to assist in this?

Mr. MILLER. I had two men whom I assigned to him at that time, Mr. Varing and Mr. Beckstead.

Mr. STRATTON. Now, was it at this point that you indicated to Mr. Robnett that you were—that shop 38 was not qualified to trim the ship?

Mr. MILLER. Not 38 was not qualified. I personally had never trimmed a ship before.

Mr. STRATTON. Well, the paper this morning has a story that you had told the court of inquiry that shop 38 is not qualified to trim ships.

Mr. MILLER. No.

Mr. STRATTON. That is not correct?

Mr. MILLER. That is not true, no.

Mr. STRATTON. You told him that you were not qualified?

Mr. MILLER. Right. In other words, the question was did I feel that I was qualified, had I ever attempted to trim a ship before, and I said no, absolutely not. This was my first attempt, and on instructions and with qualified personnel to assist.

Mr. STRATTON. Was there any objection on your part? Did you say, "I would rather not do it because I am not qualified, get somebody else"? Or did you just say, "I will be glad to do it, but I want you to

know I don't know how to do it and you will have to bring in somebody to tell me how"?

Mr. MILLER. I told Mr. Robnett I was not familiar with the trim system. He says, "I realize this, we will go in and look at the shop roster and get the names of the people who are qualified to assist in the trim operation."

Mr. STRATTON. Do you agree—again, I am just quoting from the paper. We weren't there. We don't have the record yet. I gather this took place yesterday. A statement by Mr. Halloran, who is a superintendent of something or other.

Mr. MILLER. He is superintendent of shop 38.

Mr. STRATTON. He is the superintendent of the shop?

Mr. MILLER. Yes, sir.

Mr. STRATTON. "I wouldn't have taken this assignment on the crash basis that this supervisor did. This judgment was made at the last minute, on the basis of a last-minute request." Is that what he said?

Mr. MILLER. I was not there at the time. He was interviewed privately, ahead of me.

Mr. STRATTON. Right. I mean you didn't discuss it with Mr. Halloran?

Mr. MILLER. No; I did not. It is not normal to go to the head of the shop when you are working for a supervisor down the line from him.

Mr. STRATTON. I see.

Now, was it, as you understood it, the practice when there was to be a trimming of the boat in connection with some test, that some representative from that particular test group had to be present to direct what was going on?

Mr. MILLER. The representative from the test group was present. This was the man we called back in.

Mr. STRATTON. Mr. Powell, you mean?

Mr. MILLER. Yes, sir. He is the shop 38 test group. That was the reason Mr. Robnett instructed me to call him back in, because he was familiar with this operation.

Mr. STRATTON. "When ships are trimmed by yard personnel," Halloran said, "the yard test group is in charge of achieving actual trim." I thought by that he meant the group that is responsible for carrying out the particular test, in this case the nuclear power test. That is not what he is referring to?

Mr. MILLER. No; he is talking mainly, sir, about the trim itself.

Mr. STRATTON. Then the members of this test group in shop 38 are fully familiar with the procedure for trimming the ships?

Mr. MILLER. Yes; I am sure they are, although I had never been involved in this before with them or at any time on my own. So I am taking Mr. Robnett's word that this is so.

Mr. STRATTON. OK.

Mr. REDDAN. Did Mr. Robnett explain why it had to be done the night of the 13th, on such a crash basis that you were required to do it, even though you had had no training?

Mr. MILLER. Yes; he said in this 4 o'clock meeting that they had to have this right now, they were holding up nuclear power division operations, until this could be accomplished.

Mr. REDDAN. Did this suddenly develop at 4 o'clock? They didn't know it at noontime on that day?

Mr. MILLER. I am sure our shop did not know it.

Mr. REDDAN. Yes.

Mr. MILLER. In other words, he told me personally that this came out of this 4 o'clock meeting, and this is the reason normally he would have gone home at 4:10.

Mr. REDDAN. Yes.

Mr. MILLER. But he stayed over when he found out about this requirement, to get us lined up to accomplish this requirement.

Mr. REDDAN. They called back a man who did have the experience and did know how to trim a ship; is that right?

Mr. MILLER. Yes, sir.

Mr. REDDAN. Now, did he actually do the trimming on the 13th?

Mr. MILLER. With the assistance of the two people that I assigned to him; yes, sir.

Mr. REDDAN. Did the people you assigned have any experience in ship trimming?

Mr. MILLER. No; they had had no experience previously, that I know of. Now, you must understand here, too, I was just assigned a week and a half previously to the swing shift, and it is a brandnew crew. I did not know the people. I did not know their qualifications. Now, possibly either one of these men I assigned had been through this operation before. I can't say for sure on this. But I know the man who was called back in was qualified, according to Mr. Robnett. He had worked in this test gang for quite some time.

Mr. STRATTON. Did I understand that at some point, and we are talking now about the 13th rather than the 15th—

Mr. MILLER. Yes.

Mr. STRATTON. But I was under the impression that on one or the other of these days that you requested some men in shop 38 to assist you on this job, and that some of them actually refused. They said "We will not do this because we don't know anything about it," and that then you went to Mr. Varing and somebody else and got them to do the job. Is that right?

Mr. MILLER. No, sir; not to my knowledge.

Mr. STRATTON. Nobody refused that you know of?

Mr. MILLER. No, sir.

Mr. STRATTON. This job of trimming as I understand it consists of two steps. One is the use of this quadrant to determine how far out of trim the boat is.

Mr. MILLER. It is to determine the attitude of the boat.

Mr. STRATTON. Yes.

Mr. MILLER. Before you start; yes, sir.

Mr. STRATTON. And then secondly, to push the appropriate switches on the control panel to transfer the water from one tank to another to achieve the trim: that is correct?

Mr. MILLER. This is partially correct. On this first night now we are speaking of, on the 13th, there was no water transferred internally with the switches whatsoever to my knowledge. It was done strictly externally through the main ballast tank vent valves.

Mr. STRATTON. All right.

Mr. REDDAN. You mean putting the water through with a hose into the main ballast tanks?

Mr. MILLER. Yes, sir.

Mr. STRATTON. With respect to this particular aspect of it, where was the quadrant when you began the operation?

Mr. MILLER. On the 13th now?

Mr. STRATTON. Yes.

Mr. MILLER. It was in the control room at the time.

Mr. STRATTON. And what was the attitude of the boat when you started?

Mr. MILLER. Wait a minute. I am wrong. I am thinking of the 15th now. On the 13th Mr. Powell brought the quadrant and the machinist level aboard with him when he came aboard.

Mr. STRATTON. But I mean did you set them up in the control room, or did you set them up topside, or did you set them up somewhere else?

Mr. MILLER. No. We at first set it up in the torpedo room. On the forward rail.

Mr. STRATTON. And what was the attitude?

Mr. MILLER. The attitude was 1.75° bow up and approximately a degree, I think it was list to port. I wouldn't swear now because I might be confusing the two nights.

Mr. STRATTON. Well, this is, I think, rather important to try to distinguish the two, if possible, and I appreciate some of the difficulty. How did you then go about bringing it into trim?

Mr. MILLER. Well, at this time I wasn't involved in it at all now. This was strictly Mr. Powell, was in charge of the trimming operation. This is the night of the 13th now.

Mr. STRATTON. Right. You were there?

Mr. REDDAN. Did you do anything at all on the 13th?

Mr. MILLER. I was there off and on. Of course, I had 17 other men that I was running checks on also to see that they were assigned work.

Mr. STRATTON. I see. So when Mr. Powell came in, you simply said this is what we would like you to do, carry on from here, and you have these two gentlemen to help you; is that right?

Mr. MILLER. Yes, sir; this is true.

Mr. STRATTON. What do you know about what they did? Anything at all?

Mr. MILLER. I know that they attempted to put water in tanks 1A and 1B, externally, through the vent valves. These tanks were full, already full.

Mr. STRATTON. These are the forward tanks?

Mr. MILLER. Yes, sir. Then they attempted—

Mr. REDDAN. These are forward ballast tanks?

Mr. MILLER. Yes, sir. Then they attempted to put water in 2A and 2B and did get a small amount in each one. However, they were practically full.

Mr. STRATTON. By the time they got through, they were full; is that right?

Mr. MILLER. Yes, sir.

Mr. REDDAN. Do you know who had filled those tanks and for what purpose?

Mr. MILLER. No; I have no idea. They apparently—

Mr. REDDAN. Who could tell us that?

Mr. MILLER. I would think that Mr. Pritchett or—

Mr. REDDAN. Could the ship superintendent tell us?

Mr. MILLER. I imagine he would have a record of it, yes sir. I am sure the test crew would know when it was done.

Mr. STRATTON. Well, since there wasn't much space in tanks 2A and 2B, either, that didn't change the situation appreciably. So what did they then do?

Mr. MILLER. Then they removed the dust covers on 3A and 3B, main ballast tanks, and started adding water to the two tanks, in 15-minute intervals, first to port and then to starboard, or to 3A and then 3B, to—I think originally they put more on one side than the other to get the list out of the ship, and then after they got it on an even keel athwartship, they kept adding at 15-minute intervals, first 3A and then 3B, to bring the bow down.

Mr. STRATTON. This was what manifold—

Mr. MILLER. And the firehose.

Mr. STRATTON. And what was the name of that thing, sort of a nozzle on the front—

Mr. REDDAN. The plastic tubing.

Mr. STRATTON. Plastic tubing on the front of the firehose, so as to get it into the vent valve which had a smaller aperture?

Mr. MILLER. Yes, sir; a solid brass fitting, threaded fitting on the end of the firehose would not go through the vent valves, so there was a piece of tygon or plastic.

Mr. STRATTON. Tygon, yes.

Mr. MILLER. Adapter slipped over the end of the fire hose that would collapse and go in through the vent valve.

Mr. STRATTON. Did they then complete the job?

Mr. MILLER. They had not completed it when it was at 1230. They were down to five-eighths of a degree by this time, bow up. They were fairly good—they were within the half degree requirement from roll. So at this point it was turned over to graveyard to complete the trim operation.

Mr. REDDAN. And do you know whether it was completed?

Mr. MILLER. Yes. As a matter of fact, I have a copy of their T-sheet here. They left a copy for day shift, where they had completed, and the readings at that time.

(Mr. Miller hands document to committee.)

Mr. REDDAN. Less than half a degree.

Mr. MILLER. Yes, sir.

Mr. REDDAN. Both ways.

Mr. STRATTON. Grave—is that the man's name or is that the shift?

Mr. MILLER. That is the shift, the graveyard shift, 2 days.

Mr. STRATTON. Two days from grave, approved by Cruz.

Mr. HUNT. Is it a work turnover report from the day shift to the graveyard shift?

Mr. MILLER. From graveyard shift to day shift.

Mr. STRATTON. To the day shift from the graveyard.

Mr. MILLER. Right.

Mr. STRATTON. So this was completed. You are the foreman or the leading man. What responsibility is there for these people to check in with you? Did they check in with you or did you check in with them at the end of your shift at 12 o'clock to find out how they are coming along?

Mr. MILLER. I check continually on the various jobs all night long, to see if they need any material or everything is going all right, if they have any problems.

Mr. STRATTON. But when you went off at 12, did you turn it over to somebody else?

Mr. MILLER. Yes. Actually as to personally turning it over, no. Mr. Powell turned it over. But I was in charge of the operation.

Mr. STRATTON. But was there another leading man, another foreman from 12 to 8?

Mr. MILLER. Yes, and his name is there, Cruz.

Mr. STRATTON. Did Mr. Powell remain on board or did he simply get Varing and the other gentleman, Beckstead, started and then leave?

Mr. MILLER. No, he worked with them all through the shift.

Mr. STRATTON. I see.

Mr. MILLER. I checked in with them several times to see that everything was going all right. That is how I knew they were opening these tanks and what tanks they were filling.

Mr. STRATTON. In other words, it took 8 hours, roughly, of pouring water into tanks 3 A and B to bring the ship within the required percentages?

Mr. MILLER. Yes. Now, of course, not continual, because every time they would shut down to take a quadrant reading, they would secure the water completely.

Mr. STRATTON. Right.

Mr. MILLER. Then they would have to down through the hatch back in the engineroom and take a reading and then after they would determine what the attitude of the ship was, they would go back up and continue.

Mr. STRATTON. Having achieved that trim, why was it necessary to trim all over again on the 15th?

Mr. MILLER. I can't answer that truthfully because I have no idea of what was transferred internally, what weight was shifted, and so forth, during this period of time.

Mr. STRATTON. Do you know of your own knowledge whether, having achieved that trim by the morning of the 14th, the necessary work on the cores or establishing their level or whatever it was in the reactor compartment was then carried out?

Mr. MILLER. I can only tell you what I heard on this the following—not the following day now, but on the day it sunk, on the 15th. When we came to work as usual in the afternoon, I took the turnover.

Again Mr. Robnett told me we would have to go through this same procedure again because nuclear power had not followed the procedures in establishing _____ in the system, that we would have to trim the ship again to the requirement of half a degree or less.

Mr. STRATTON. Was this on the 14th or the 15th?

Mr. MILLER. This was on the 15th.

Mr. STRATTON. On the 15th?

Mr. MILLER. Yes, sir.

Mr. STRATTON. He told you on the 15th that they hadn't done what they gave you as this very urgent requirement—

Mr. MILLER. They had gone through it, but they hadn't followed the procedure. At least, this is the way it was explained to me now.

Mr. STRATTON. Yes.

Mr. MILLER. That is where they had missed following the procedure, so they had to do it over again.

Mr. STRATTON. All right.

Mr. MILLER. This is merely what he told me. I have no way of proving this one way or the other.

Mr. STRATTON. Then on the 15th, did you get this word when you came on at 4 o'clock?

Mr. MILLER. Yes, a little earlier this time, I would say approximately a quarter to 4, that we would have to do this again, and at this time we went back into the office, Mr. Robnett's office now, and he at first started to hold day shift people over to help accomplish this test, and then he said, no, I guess I won't do it this time, and turned it over to us. Well, having been through it and knowing what they did before, why I felt that we could accomplish this again. In fact, I didn't think it would be out anywhere near as far as it was. And day shift had already started this. Apparently they had known about it before because there were test gang people down in the control center when we went aboard. There was Mr. Saraiva, who went with us from Mr. Robnett's office down on the boat, Mr. Thompson, Mr. Varing and my crew accompanying us, and when we arrived in COC, the control center, Mr. Craig and Mr. Powell were already in the process of trimming the ship.

Mr. REDDAN. The day shift, in other words, had started trimming?

Mr. MILLER. Yes, sir.

Mr. STRATTON. Mr. Craig and Mr. Powell were in the process—

Mr. MILLER. I don't know how long they had been there, but they were there when we arrived and in the process.

Mr. REDDAN. Do you know whether or not they checked with the quadrant to find out the trim condition?

Mr. MILLER. I am not sure whether they had used the quadrant or the machinist's level. Mr. Powell was more prone to use the machinist's level than he was the quadrant.

Mr. REDDAN. I see.

Mr. MILLER. He believed—

Mr. REDDAN. What did they tell you about the bow?

Mr. MILLER. They told me it was bow down at the time. So immediately, like any time you go on the job where you have to determine the attitude of the boat, I assigned Mr. Thompson to take a reading immediately, to verify one way or the other their reading, and he came back with a 2 degrees bow up, which was contradictory to the information I had received from the day shift.

Mr. REDDAN. Mr. Powell was still around at that point?

Mr. MILLER. No. Powell I think had just left. This was—well, I am sure all the day shift people had already left by the time we got this reading back. And when I got down there, they were transferring water from the forward end to the aft end, with the trim pumps.

Mr. REDDAN. Who was doing this?

Mr. MILLER. Mr. Craig and Mr. Powell were on the panel.

Mr. REDDAN. Now—

Mr. STRATTON. Let me just ask a question here, if I may, at this point. Wasn't Mr. Dozler—was he part of that group, too?

Mr. MILLER. Dozler?

Mr. STRATTON. Yes. Is there a Dozler?

Mr. MILLER. That isn't familiar to me. I don't believe I knew him.

Mr. STRATTON. I thought we had testimony that he is the fellow that said the bow was down the 2 degrees.

Mr. MILLER. I don't recall any Dozler. In fact, I don't know any Dozler.

Mr. STRATTON. All right. Now, in this particular process, there was a different procedure being used from that used on the 13th?

Mr. MILLER. Yes, sir.

Mr. STRATTON. The use of the automatic, mechanical mechanism for shifting from one tank to another.

Mr. MILLER. Yes, sir.

Mr. STRATTON. Did Mr. Powell or anybody else check you out on this?

Mr. MILLER. Yes.

Mr. STRATTON. Who?

Mr. MILLER. Mr. Powell, Mr. Craig and Mr. Saraiva were all there, and mainly I was looking on to see what was going on, but they were instructing Mr. Varing, who worked for me and had been in on this previous operation, on the use of controls for shifting water fore and aft and across ship. I was there, however, and I was very interested in it, because I had never seen this accomplished before.

Mr. STRATTON. Weren't there, at this point, on these switches some little tags that said do not operate?

Mr. MILLER. I couldn't say for sure on that. Now, I don't recall any at the time; now there had been some there—they were already in the process of doing this when we arrived on the scene. Now, there may have been some previously, but I did not notice any at this time.

Mr. STRATTON. We had some evidence that there were some tags that said do not operate because of the fact that the hatch was off of the sonar beam entry area. You didn't see anything like that?

Mr. MILLER. No. There was none visible to me at this particular time.

Mr. STRATTON. And nobody in your presence or to your knowledge said, well, we can't help out on this because the tag says not to use these switches?

Mr. MILLER. No, sir, not to my knowledge. However, there were—when I arrived on the scene there were ship's personnel standing by the panel, and it was my understanding that they had control of the activation of the panel at this point, that they had taken over this system.

Mr. STRATTON. This would be part of the ship's company, you mean?

Mr. MILLER. Yes, sir.

Mr. STRATTON. According to the summary here of the second day's testimony from the assistant shipbuilding superintendent, nonnuclear, it says the required time conditions obtaining after required trim conditions established on May 13 included filling main ballast tanks 1 and 2 completely and putting some water in No. 3, which was what occurred as you mentioned. The aft main ballast tanks were left dry, forward and after trim tanks also dry.

Now, you testified to the effect that it was your understanding that water was being transferred from the forward trim tank to the after trim tank?

Mr. MILLER. Yes, sir.

Mr. STRATTON. Which were supposed to be dry as of the 13th of May.

MR. MILLER. This I don't know. I know they were transferring water from forward to aft when we arrived at the scene.

MR. REDDAN. How would they fill those trim tanks, do you know?

MR. MILLER. This is with the pumps on the control panel. They were transferring internally.

MR. REDDAN. Yes, that is to transfer internally, but how did they get—

MR. MILLER. On the after end.

MR. REDDAN. No, how did they get the water into the tanks? On the 13th, according to this summary of testimony, the trim tanks were dry. Now somehow they had to get water in there.

MR. MILLER. Well, if they were transferring from forward to aft, this would automatically put water in the aft trim tanks.

MR. REDDAN. But it says the forward and aft trim tanks were dry.

MR. MILLER. Oh.

MR. REDDAN. That means there was nothing in the system on the 13th. Now, how did they get water into the system to transfer it on the 15th?

MR. MILLER. I am only guessing at this, but I know how it could be done.

MR. REDDAN. How could it be done?

MR. MILLER. It could be done by transferring to the forward trim tanks from auxiliary 1 or 2, which you would do normally to take the roll out or get a zero zero list.

MR. REDDAN. Do you know whether there was any water in the auxiliary tanks?

MR. MILLER. Auxiliary 1 and 2 I am sure—remember looking at the board, there was water in auxiliary 1 and 2.

MR. REDDAN. So they could have pumped from auxiliary 1 into the trim system.

MR. MILLER. Yes, sir.

MR. REDDAN. I see.

MR. MILLER. This I learned that night down there. I didn't know this previously, but they were transferring water, I remember, from auxiliary 1 and 2 back and forth, and also from forward to aft, and then later we transferred it from aft to forward when we determined that it was bow up rather than bow down.

MR. REDDAN. Do you know how much you transferred?

MR. MILLER. I don't know in gallons, no. I know in a period of time that we transferred approximately 25 minutes from aft to forward.

MR. STRATTON. Who is Mr. Sweikert, S-w-e-i-k-e-r-t? Do you know him?

MR. MILLER. No, I don't.

MR. STRATTON. He might be a member of the ship's company, I guess. Craig, Powell, Sweikert, yes.

MR. MILLER. Sweikert might be part, probably is part of the test gang.

MR. REDDAN. 353. Does that mean anything?

MR. MILLER. 353 would be shop 38.

MR. STRATTON. I think he was listed on that ship's company register that you had.

MR. REDDAN. Well, this chart which we have been supplied indicates that 15 tons were shifted aft between 1600 and 1730 on May 15, and that about 13 tons were shifted aft forward after 1730 on the 15th of

May. Now, that would have been your contribution on that day, would it not?

Mr. MILLER. Somebody figured it from the length of time, then, and the revolutions per minute or gallons per minute of the pumps.

Mr. REDDAN. Did you have any gage on the pipes that would measure the amount of fluid going through?

Mr. MILLER. I don't think in gallons. Now, I am not positive of this. I know that the pumps will put out 250 gallons per minute in a wide-open position, but we were not running them wide open, and I don't—I have no way of knowing for sure how many gallons or how much weight actually transferred. I know that we did transfer until we had gotten down to from 2 degrees to about three-quarters of a degree, and this was in a period of 25 minutes overall running time now. I am talking—of course, we shut down in between and took quadrant readings and so forth to be sure we didn't go over and go the wrong direction.

Mr. REDDAN. You got within three-quarters of a degree?

Mr. MILLER. Yes, sir.

Mr. REDDAN. Just using the trim tanks?

Mr. MILLER. Yes, sir, and that is when we decided to add a little more water to 3A and 3B.

Now, to clarify this a little bit, too. When we first took on this job, on the night of the 13th, both Mr. Robnett and Mr. Powell didn't think it possible to get enough water in 1A, 1B, 2A, 2B, 3A, and 3B to get the bow down to the requirement. They thought at that point that we would probably have to build a platform on the bow and add lead weights, because of the air bubble in the sonar, which they could not at that time flood, so they told me. However, we were able to do this, as graveyard proved. They did get down within that requirement. So when we couldn't get the requirement with the trim tanks, there was no more water that I knew how to transfer internally, then we decided to add a little more water to 3A and 3B to get this other quarter of a degree requirement.

Mr. STRATTON. What you did this night was first of all when you came in Mr. Craig and Mr. Powell were transferring water from the forward trim tanks to the after trim tanks under the impression that the bow was down?

Mr. MILLER. Yes, sir.

Mr. STRATTON. You then reversed this procedure after you had taken your reading of the inclinometer and began transferring ballast from the after tanks to the forward tank?

Mr. MILLER. Yes. In fact, when our first reading disagreed with their reading, we immediately took another reading on the master level block in the engine room. I had Mr. Thompson first of all take the first reading in the torpedo room. Then I wasn't sure that Mr. Thompson was really familiar with the quadrant, but I had been through the whole procedure. I had taken a reading, and Mr. Varing had taken a reading, and then we compared them on the level plate in the engine room on the night of the 13th. So I knew he was qualified. But when our readings didn't agree with day shift, our first reading, I immediately sent Mr. Thompson and Mr. Varing back to the engine room, the master level block, to take another reading.

Mr. STRATTON. This is back aft in the engine room?

Mr. MILLER. Yes, sir.

Mr. STRATTON. Not in the control room?

Mr. MILLER. No. It is about frame 85, I believe.

Mr. HUNT. The torpedo room is on your lower level?

Mr. MILLER. Yes, on the forward end.

Mr. HUNT. It is on your third plate?

Mr. MILLER. Third platform.

Mr. STRATTON. Did you say frame 35 or 85?

Mr. MILLER. Eighty-five.

Mr. STRATTON. When you began to reverse the procedure that Mr. Craig and Mr. Powell had undertaken, was Mr. Powell still there?

Mr. MILLER. No. I think all the day shift people had left at this time. By the time we got this reading back and determined that we were going the wrong way with water—of course, we had shut down, when our readings didn't agree, immediately to take another reading to verify.

Mr. STRATTON. Then you didn't actually have, while this was going on, any member of the test group who was aboard.

Mr. MILLER. Not—I think they left just as Thompson came up with the first reading.

Mr. STRATTON. So this rule that any transfer of water internally, and presumably externally as well, is handled by marine machinists under direction of the test group section for a given angle of trim was not actually carried out when Mr. Powell left?

Mr. MILLER. No, this is true, very true.

Mr. STRATTON. And you were unfamiliar with the procedure except insofar as you had picked it up the previous night?

Mr. MILLER. That is right, yes, sir.

Mr. REDDAN. How can you determine how full the trim tanks are?

In other words, you were pumping aft forward. How do you know when your trim tank is full?

Mr. MILLER. There are gauges on the control panel that tell you, not in gallons but there is a level indicator on there that shows you when you are getting down toward empty, and we did not transfer all of the water out of the trim tanks because we didn't want to take a chance on burning up the pump, in other words, running it dry.

Mr. REDDAN. If there was more water in the forward trim tank than you had thought by pumping the aft trim tanks virtually dry, but not quite dry, is it possible that the forward trim tank would have vented within the submarine itself?

Mr. MILLER. No, not to my knowledge. There is no way for it to get out of the trim tank.

Mr. REDDAN. It is not vented into the bilge?

Mr. MILLER. Not that I know of, no, sir. However, the forward trim tanks, as I remember it, were not full at this point, because I remember looking at the gauges on the aft trim tanks and the gauges on the forward trim tanks and the forward trim tanks were not full at this point.

Mr. REDDAN. There were calibrated and operating gauges.

Mr. MILLER. On those systems I understood from the day shift that these were all right. Now, I had already asked them about the inclinometers indicating pitch and roll on the boat, and they said that they had not been calibrated yet. That was the reason for taking the quadrant readings, rather than trusting the instruments on the boat.

I had asked day shift about this, and they said no, they had not been calibrated.

Mr. REDDAN. Do you have inclinometers aboard the 665 for roll?

Mr. MILLER. This is the one I am speaking of. There was an inclinometer for roll and pitch on the instrument panel in the forward end of COC, where the diving controls are.

Mr. REDDAN. Was there an inclinometer installed for trim?

Mr. MILLER. Well, you would normally use these two instruments in trimming the boat, if you knew that they had been calibrated and were accurate.

Mr. REDDAN. Yes, but did you have an inclinometer that was in operation to determine the trim of the vessel?

Mr. MILLER. No. Well, like I say, they were there, but the day shift told me they had not been calibrated, not to depend on them.

Mr. REDDAN. Oh, I see.

Mr. MILLER. That was the reason we were using the quadrant, to determine the angle.

Mr. STRATTON. This checks with the statement that one fellow as he was leaving the submarine just as she was sinking, noticed she had 1 degree up on the bow.

Mr. MILLER. Oh. The bow was down quite a bit by then.

Mr. HUNT. What is that?

Mr. STRATTON. One fellow said when he left the ship he looked at the inclinometer as he was going by, it showed 1 degree up on the bow, and at that time the bow was way down.

Mr. MILLER. I am sure I asked Jim Saraiva about these instruments because he had gone down there with us and I was talking to him principally.

However, Mr. Powell and Mr. Craig were showing Mr. Varing the lineup on the boards, but I remember asking him about the inclinometer on the control panel, if this was—could we use this or not, and he said no, they had not been calibrated. So this is when we begin taking quadrant readings.

Mr. STRATTON. Did you say when you finished transferring the water from the after trim tank to the forward trim tank that the forward trim tank was still not full?

Mr. MILLER. Yes, sir.

Mr. STRATTON. Then why didn't you undertake to put some more water in that, to accomplish the remaining half a degree or whatever you had?

Mr. MILLER. Well, I was not familiar enough with this to do it, except from transferring—I knew they had already transferred from the forward trim to the aft trim and when we got that water back again, the only thing I knew to do at that point was to 3A and 3B like we had done previously.

Mr. STRATTON. Were there any members of the ship's company there to help you in using those switches and so forth?

Mr. MILLER. Not at this point. Now, the day shift had turned it over to us with instructions for Mr. Varing on how to operate the pumps. Then they had left, and apparently the ship's force had left, too.

Mr. STRATTON. Then is there any doubt in your mind that at that point the transfer machinery had been turned off?

Mr. MILLER. No, I am sure that it was all secured because I was there when they shut down the pumps. They were about to run dry in the aft trim tanks. I was there at that point. This was when we decided that we would add water to 3A and 3B in order to accomplish the final quarter of a degree that we needed.

Mr. STRATTON. Now, as I understand it, at that point you left and turned over to Mr. Varing and Mr. Thompson the job of filling 3A and 3B, is that right?

Mr. MILLER. In fact, we all three left COC, and I went over to the shop to check the night notes for the other jobs that I had going, because I hadn't had a chance up to this point to check any other job I had in progress, and they went to get a firehose and get equipped to start operating 3B and 3A to further fill them.

Mr. STRATTON. Did you ever come back to the ship thereafter to see how they were doing?

Mr. MILLER. Yes, I did.

Mr. STRATTON. When did you leave, roughly, and when did you get back?

Mr. MILLER. Well, roughly, we all left the control room now. Around 6 o'clock. It may have been 15 after or 10 minutes to, I don't know, but in that area.

I went to the office. We had a new instruction over there on system turnover that Mr. Robnett had asked me to read over and become familiar with. This was in a box on his desk. So at this time I had started to look this over and Mr. Cooper, who was our shop runner, that runs material for us on swing shift, came in, oh, sometime within 10 or 15 minutes of when I arrived there, and he had some material for us, and we talked about that. In the meantime, in the same basket I had picked up a copy of the Maryland Association, with a list of my crew that we were supposed to contact to see if they wanted to join this. So I gave this to Mr. Cooper to let him contact the various people to see about collecting the \$1.25 for membership and so forth. At that time we had been discussing a leave chart and an overtime chart, so that this being a new crew to me, I wanted to get their leave schedules and so forth for the year, and also I wanted to know what overtime had been worked, to try and distribute it as evenly as possible among the crew. Now, this was an hour that I lost yesterday in front of the other board in there. I want to let you know I found it.

Mr. STRATTON. OK.

Mr. MILLER. I am going to talk to them again on this, too. So at this point I had previously when I was working on the 672—this is where I was before I got transferred to swing shift on the 665 and 666.

Mr. STRATTON. Is that the *Pintado*?

Mr. MILLER. Yes, sir.

Mr. STRATTON. She is on the way?

Mr. MILLER. I was foreman—well, I had the forward end of the ship, reactor forward on the *Pintado*.

Anyway, I had just made up an overtime chart over there. So I took—Mr. Cooper and I walked over to building 62, which was my old office, and I showed him this chart and asked him to make up a chart similar to this. Altogether, probably in talking this over and walking over there, getting the chart and getting back, I would say 35, 40 minutes, something like this, maybe even a little longer. At this point I just returned to Mr. Robnett's office when Mr. Varing and

Mr. Thompson came in looking for this tygon adaptor to put on the firehose, so that they could start the filling operation on 3A and 3B.

Now, this would have been, oh, say a quarter to 7 or 10 minutes to 7, somewhere in this area. So we found the piece of tygon. They went on back to the ship and set up to fill the tanks, 3A and 3B, and I went—at this time I had picked up what night notes I needed and so forth and and gone down to the 666 to check on the crew down there, the operations that were going on. I was down there, oh, 25 or 30 minutes. I got back to the 665. I remember looking at my watch as I ran into my head mechanic on the dock, who was in charge of the engine room and torpedo room on the 665. He takes over for me in my absence and so forth. It was just 7:30. So I had not yet had time to go down to the boat and check on the other jobs I had in progress on the 665. So we went into the, well normally it would be a hatch, but it is open at this particular time, _____. We went to AMR2 and we were checking—we had a lube oil cleanup going on down there, and also we were cleaning up, preparing for an oxygen generator test the following morning. We were cleaning the units up in AMR1 and AMR2. So we went to AMR2 and checked with the fellows working down there, came out of there and up through the _____, and into, down into AMR1 and the torpedo room. I came up out of the torpedo room at 5 minutes to 8. As I got up on top, Mr. Varing and Mr. Thompson had just secured the water that they had been filling 3A and 3B with. I walked up to the forward end where they were just taking the hose out of the tanks and hung it over the side, because it was almost lunch time. They were securing for lunch.

Mr. REDDAN. At any of these times, leaving and coming back to the 665, did you observe the draft of the ship?

Mr. MILLER. Yes, I did. As I walked on board at 7:30, I observed the draft, and there was approximately a foot of waterline yet showing.

Mr. REDDAN. Below the boot topping?

Mr. MILLER. Yes, right. In other words, it is red and black.

Mr. REDDAN. Yes. There was about a foot of red still showing at 7:30?

Mr. MILLER. Yes, sir.

Mr. REDDAN. When is the next time you saw it?

Mr. MILLER. When I went off the boat at 8 o'clock. I was talking, well there was Bill Seehuber, who is my lead mechanic, and he and I went down through the boat together and back up. We came off at 8 o'clock, the four of us—there were Thompson, Varing, Seehuber, and myself, and I remember Bill and I both stopped and turned around and looked down the length of the ship, at the waterline. At this point there was still at least a foot of red paint showing.

Mr. REDDAN. Did any of your men who were performing the hose function there say anything to you about water coming in through the opening in the sonar dome?

Mr. MILLER. No, sir.

Mr. REDDAN. Did you observe any water coming in in there?

Mr. MILLER. No, I did not.

Mr. REDDAN. Were the waves, any waves on the surface of sufficient height to slop over into the dome, into the opening, I mean?

Mr. MILLER. It was a little rough out there that night. I remember

when I went down to 666 seeing the sailboats out beyond, that were bouncing around pretty good. But I was not aware that there was any opening open on the 665.

Mr. REDDAN. Well, was the flood lit, was it sufficiently light out so you could have seen the opening up there in the extreme forward end?

Mr. MILLER. It might have been possible. I think there probably was light enough. However, over the forward hatch there was a house built over with it, with a door and so forth on it, which would have obscured anything forward of that, and this was just beyond, well actually between tanks 1A and 1B and forward of tanks 2A and 2B.

Mr. REDDAN. How far forward did this obstruction extend?

Mr. MILLER. Well, actually it was only, say, a 4 by 4 house, but out there on the bow, why if you are behind it, it covers the whole.

Mr. REDDAN. Did you walk up along the wall, up to being even with the bow of the ship?

Mr. MILLER. On the seawall.

Mr. REDDAN. Yes, sir.

Mr. MILLER. No, no, I didn't, because there were buildings all along there. You couldn't actually get out to the seawall and walk from where the bow was.

Mr. REDDAN. I see.

Mr. MILLER. Up along the side of the boat forward to the bow.

Mr. REDDAN. When you said there was a foot of red paint showing, were you looking up along the bow, all the way up to the bow?

Mr. MILLER. Well, I looked in both directions really, but I couldn't see all the way to the bow, but I looked the length of the ship as far as I could see.

Mr. REDDAN. Approximately where were you standing with respect to amidship?

Mr. MILLER. Well, I was forward of amidship. That patch would actually be about halfway, and this was back quite a little ways behind the sail. I was forward of that, oh, I came off the boat forward of the patch itself maybe 10 or 15 feet, something like that, where the aft bow was.

Mr. REDDAN. Would the nose of the bow be considerably further down in the water? In other words, could there have been less than a foot below the boot topping?

Mr. MILLER. I don't believe so.

Mr. REDDAN. At the very bow?

Mr. MILLER. Well, on the extreme forward end of the bow, it might be possible, but looking up the side of it, like you normally do when you go on or off the boat, it looked level.

Mr. REDDAN. Yes.

Mr. MILLER. And our quadrant reading at this point now was still three-quarters of a degree.

Mr. REDDAN. Where were you taking your quadrant at that point?

Mr. MILLER. The quadrant reading was taken on the level plate in the engine room. Of course, this is level now with the center line of the boat.

Mr. REDDAN. Were any quadrant readings taken topside?

Mr. MILLER. No, sir. Actually there is no level plate up there to take a quadrant reading.

Mr. REDDAN. After you left, you don't know where the readings were taken, do you?

Mr. MILLER. I am sure they were taken on the level plate, because we established—well, it really wouldn't have made any difference had it been either the forward torpedo rail or the level plate, because we had determined at this point that they were equal.

Mr. STRATTON. I think we had some testimony that they may have brought the level up topside after you had left.

Mr. MILLER. Oh, I am sure that this wouldn't happen. There is absolutely no level plate of anything topside. There is nothing to set an instrument of that is equivalent to the center line of the boat.

Mr. STRATTON. Well, there was a little wooden staging there.

Mr. MILLER. This wouldn't be worth a darn for anybody.

Mr. STRATTON. No; that is true. But it is a long way down, isn't it, to go down there every time and check that thing?

Mr. MILLER. This is true. That was one reason there hadn't been as much water transferred as one might think in this length of time, because it takes quite awhile to go down there and take a quadrant reading and come back up again.

Mr. STRATTON. I mean actually as far as your own testimony is concerned, you don't know that they might not have been checking the quadrant somewhere else in the torpedo room?

Mr. MILLER. Well, no, I can't prove it positively, but I did run through this whole check with Mr. Varing, who was taking the quadrant readings on the 13th, the night of the 13th, and we took it on the level plate in the engine room, the master level plate, and I am sure that he is an oldtime machinist and knows how to use the quadrant, and I am sure he knows better than to set it on a piece of staging up on the deck.

Mr. REDDAN. When you came back just prior to the lunch break, did you actually check with the quadrant at that time?

Mr. MILLER. I did not check it personally, but I read the quadrant at that time.

Mr. REDDAN. Where was the quadrant?

Mr. MILLER. They had the quadrant up on deck at that time.

Mr. REDDAN. I see.

Mr. MILLER. No; I am sorry he didn't. I saw that in the control room before I went up on deck.

Mr. REDDAN. How would you read it in the control room? Do you have a plate there, a level plate?

Mr. MILLER. No; but it was set and locked to that last reading.

Mr. REDDAN. I see.

Mr. MILLER. They told me what this was, and I had looked at it on the way up through the boat.

Mr. REDDAN. I see.

Mr. MILLER. As a matter of fact, when the boat was pulled back up again, the quadrant was still locked in that same position. We recovered it, and in front of Mr. Halloran, I opened the box and showed him what the reading was, and at that time I locked it up in a box that I have down in drydock, and it was there until the board called for it, yesterday morning. And it was still locked in the same position yesterday morning, as it was when the boat sank, or our last reading before lunch. It read about 40 minutes bow up.

Mr. STRATTON. Do you have any idea how the ship could have switched from at least a level position, possibly even bow up position,

to shipping water through the forward escape trunk in the half hour that it took for lunchtime?

Mr. MILLER. No, sir. This I am sure surprised everybody. It seems utterly impossible. I had no idea how this could happen in such a short time and still be relatively level when we left at lunchtime.

Mr. REDDAN. Is it possible that the cutoff valves on the trim tanks were not operating properly and they continued to put water into the forward trim tanks?

Mr. MILLER. No. I don't think this would be possible at all because, in the first place, we had already transferred all the water from the after trim to the forward trim, and everything had been secured at that point.

Mr. REDDAN. Is there any possibility that water was coming out of the auxiliary tank into the forward trim tank?

Mr. MILLER. This is a possibility. I have no way of knowing this.

Mr. REDDAN. If there was a malfunction in the switching, could this have occurred?

Mr. MILLER. I can't really say. I am not familiar enough with the system to say one way or the other.

Mr. REDDAN. You can pump out of the auxiliary tank into the trim tank?

Mr. MILLER. Yes, sir; I know you can do this, but I don't know whether this could happen on the panel or not. As far as the lights on the panel and so forth, it indicated everything was off and secured when we left it to start filling 3A and 3B manually.

Mr. REDDAN. That would show all the switches off, you say, when you left?

Mr. MILLER. Yes, sir. This is about 6 o'clock. It would take a few minutes.

Mr. STRATTON. Is there a Mr. Christiansen connected with your shop, or would he be one of the ship's personnel?

Mr. REDDAN. He was on *Bounty*, wasn't he?

Mr. STRATTON. No; that was Mr. Christian.

Mr. REDDAN. That is right.

Mr. STRATTON. You showed me that sheet there.

Mr. MILLER. I don't know him.

Mr. REDDAN. Here it is.

Mr. STRATTON. Oh, yes. It is actually his statement: "My name is Ed Christiansen. I was the ship's engineer. My code is M-23029." And it is signed here for Nuclear Cognizant Systems.

Mr. MILLER. Yes, 2302 would be nuclear.

Mr. STRATTON (reading):

About 2030 we had completed blowing down _____ and were preparing to vent the _____. We had approximately 20 pounds of air in the tanks. We started to vent and at the same time the word was passed, flooding forward.

Then he describes how he left the ship, including noticing that the inclinometer had a positive one-half a degree up angle, while the ship was actually down.

But what are the _____?

Mr. MILLER. _____ are back in the—I want to say in the _____ but I am not positive they are in the _____. They could be just aft of the _____ bulkhead. I am not positive now. They are either in the _____ or just aft of it.

Mr. STRATTON. Is it possible that somebody could have been blowing some tanks in the stern of the ship while your fellows were filling them up in the bow, without ever getting together?

Mr. MILLER. This is exactly the rumor I heard, but this is the first confirmation that I have heard of it. Now, if this happened, this could dump it over right fast.

Mr. STRATTON. In a hurry.

Mr. MILLER. Right. And that is the only possible way that I can see, without somebody poking a hole in the bottom in the forward end of it to go down that fast.

Mr. REDDAN. Mr. Miller, have you seen this report on the results of the inspection of the 665 after she was brought up?

Mr. MILLER. I have not.

Mr. REDDAN. On enclosure 1, page 9, there is a statement here with respect to the trim system. This says, "Trim system cover off. Trim pump discharge switch was 'to main.' All other tank switches were shut." What does that mean?

Mr. MILLER. I don't know, but I would say that this was the main control on the panel, in other words, to light the panel off.

Mr. REDDAN. Well, it says trim pump discharge switch.

Mr. MILLER. I really don't know.

Mr. REDDAN. Would that suggest that the trim—

Mr. MILLER. I do know—now this may have some bearing on this—I do know that Roger Thompson, who was one of the men working on this trim, when he came back aboard, about 25 minutes after 8, and at this time the bow was starting to go down, ran down to the control room and tried to pump water from the forward end to the aft end. Now, he may have had this switch on, because he was trying.

Mr. STRATTON. That is right.

Mr. MILLER. He did get the pump started.

Mr. STRATTON. And then—

Mr. MILLER. And then they lost power.

Mr. STRATTON. That is right. He testified to that.

Mr. MILLER. All right. This could have happened at that point. I know the board was secure when we left there at 6 o'clock, but during this operation I don't know what happened there.

Mr. REDDAN. Would he pump that with the hydraulic plant pump control?

Mr. MILLER. Yes, with the panel that we were using originally in COC.

Mr. REDDAN. Here is another entry on page 10 of enclosure 1. This says, "Hydraulic plant pump control section. Main toggle switch was off, head toggle switch was off, vital toggle switch was off."

Mr. MILLER. Oh, no.

Mr. REDDAN. What does that mean?

Mr. MILLER. This would be a different thing entirely. This would be on the hydraulic system, which was entirely different from the trim system.

Mr. REDDAN. Well, now, down here, in the next paragraph, it shows trim pump flow indicator was on.

Mr. MILLER. Now—

Mr. REDDAN. What would that mean?

Mr. MILLER. This would be very probably from him trying to pump water from the forward end to aft end, when it was starting to go down. That was when they lost power.

Mr. REDDAN. It also shows that the trim pump speed control was on.

Mr. MILLER. Well, this would be normal. At that time he was trying to pump water aft. So both of those would have been on.

Mr. REDDAN. Unless somebody—this doesn't say whether it is going forward or aft.

Mr. MILLER. No. I know it was—he told me it was going aft, which would be—I am sure—had I been there, that is the direction I would have been going.

Mr. REDDAN. I am sure he wanted to.

Mr. MILLER. Right.

Mr. REDDAN. But with that thing thinking under his feet—

Mr. MILLER. At this point it wouldn't have made any difference. It might have helped had he been able to keep it going aft, but he lost power so fast that he didn't actually get anywhere. It was probably only a matter of a few seconds before he lost power.

I am real concerned about this blowing tanks aft, because that is about the only possible way that this could happen. Lightening the aft end while we were loading the bow, it would have dumped it over in a hurry.

Mr. STRATTON. That is right.

Mr. HUNT. Mr. Miller, what tanks aft would have contained water? Because you testified a little earlier that the aft trim tanks were dry and the pumps were shut down.

Mr. MILLER. I am talking about the _____.

Mr. HUNT. That is right. We are talking about _____.

Mr. MILLER. Right.

Mr. HUNT. All right.

Mr. MILLER. Which was in the Nuclear Power Division area.

Mr. STRATTON. What would they _____?

Mr. MILLER. Yes, yes, sir.

Mr. STRATTON. _____.

Mr. MILLER. I am not familiar enough—

Mr. HUNT. They are aft the _____ bulkhead, aren't they?

Mr. MILLER. They are either in the _____ area itself or just behind that, yes, just after that, one of the two. I am not positive exactly where they are, but they have to be in that area.

Mr. STRATTON. Do you have anything else?

Mr. REDDAN. No, sir.

Mr. STRATTON. Mr. Hunt.

Mr. HUNT. No. I think you covered it all pretty thoroughly, Mr. Stratton.

Mr. MILLER. Do you have any idea of how large those _____ are. I don't know.

Mr. HUNT. I was just about to ask you if you knew.

Mr. MILLER. No, I don't. You see, this is the _____. I have no idea.

Mr. HUNT. This is the _____.

Mr. MILLER. Yes, this is the reason for this requirement. This had _____.

Mr. STRATTON. They are not shown on that sketch.

Mr. REDDAN. Yes, _____, 61.

Mr. STRATTON. Oh, _____.

If we have gotten through with all the questions with Mr. Miller, we can excuse him.

Mr. REDDAN. Yes.

Mr. STRATTON. We will have to break here for a sandwich.

Mr. Miller, we appreciate your cooperation. You have been very helpful.

Mr. MILLER. I hope we have done some good. I hope to never see this happen again.

Mr. REDDAN. Thank you so much.

Mr. STRATTON. Thanks a lot.

Mr. MILLER. You bet.

Mr. STRATTON. The committee will break for a sandwich.

(Whereupon, at 12:50 p.m., the subcommittee briefly recessed.)

AFTERNOON SESSION

The subcommittee met, after a brief recess, at 1:10 p.m. in room 1073, building 47, San Francisco Shipyard, Mare Island, Vallejo, Calif., the Hon. Samuel S. Stratton presiding.

Members present: Hon. Samuel S. Stratton and Hon. John E. Hunt.

Staff present: John T. M. Reddan, counsel.

Mr. STRATTON. We will call Mr. Oberdeck now.

Mr. Oberdeck, before we begin, I just want to advise you that we are here primarily to try to find out what happened and how it happened, and to make recommendations to the committee and to the Congress to try to avoid a repetition of such an incident as this. We are not out to try to pin any responsibility or anything of that kind.

However, the chairman has requested, in line with the court of inquiry that is going on, that we should also swear our witnesses. So we are asking that all of the witnesses be sworn. All of them have been sworn to date. When the subcommittee does that, under the Rules of the House and military law, we have to advise everybody first of all that if you desire, you can be represented by counsel and also that you have the right to refuse to answer any question that might tend to be incriminating.

Actually, we don't expect to get into this kind of thing and so far no one has expressed a desire to be represented by counsel, but we have the obligation at least to inform you of this. If you desire to waive the right to counsel, we can then proceed to swear you.

TESTIMONY OF ROGER WILLIAM OBERDECK, ASSISTANT SHIFT TEST ENGINEER, SAN FRANCISCO BAY NAVAL SHIPYARD, MARE ISLAND, VALLEJO, CALIF.

Mr. OBERDECK. Yes, I will waive the right to counsel.

Mr. STRATTON. Thank you very much. Will you stand and raise your hand? Do you swear the testimony you are about to give before the subcommittee in this matter will be the truth, the whole truth, and nothing by the truth, so help you God?

Mr. OBERDECK. I do.

Mr. STRATTON. Be seated please. Would you give your full name to the reporter, please?

Mr. OBERDECK. Roger William Oberdeck.

Mr. REDDAN. What is your address, Mr. Oberdeck?

Mr. OBERDECK. 2600 Silverado Drive, Pinole.

Mr. STRATTON. Your assignment, as I understand it, is assistant shift test engineer?

Mr. OBERDECK. Yes; that is right.

Mr. STRATTON. That assistant shift test engineer, does that mean for the swing shift?

Mr. OBERDECK. Well, the classification for a nuclear power is shift test engineer. That means he is qualified shift test engineer. He has gone through the qualification program.

Mr. STRATTON. I see.

Mr. OBERDECK. And he runs the shift for nuclear test. I was one of his assistants.

Mr. STRATTON. I see.

Mr. OBERDECK. Until I finish my qualification, I am qualified as assistant shift test engineer.

Mr. STRATTON. I see. And how long have you been here in the yard in that assignment now?

Mr. OBERDECK. I started a year ago, January 30. So it is about a year and a half.

Mr. STRATTON. And you are part of the nuclear cognizance system, is that right?

Mr. OBERDECK. Right.

Mr. STRATTON. And report to what is it, Commander McGaughy?

Mr. OBERDECK. Yes. My branch head is Ted Allen and through him to Commander McGaughy.

Mr. STRATTON. Now you were on the *Guitarro* the night that she sank?

Mr. OBERDECK. Yes. I came aboard approximately 8 p.m., and we had word that flooding—there was flooding forward at approximately 8:30, and about 8:45 I left, and the ship was almost under. These times are approximate, but the ship was just about under water when I left.

Mr. STRATTON. You have filed a brief statement here, "Statement by Robert W. Oberdeck, 2030, May 15, 1969." The first sentence is "Commenced venting _____ after blowdown per T/P, 783-23, and S/220 and _____."

Mr. OBERDECK. O.K.

Mr. STRATTON. Could you describe that in a little more detail for us?

Mr. OBERDECK. That is 783-23, a test procedure, a Bettis test procedure. That is the Atomic Energy Commission test procedure. It is run by Westinghouse. We were performing paragraph D-6 of this procedure. This calls for calibrating the tanks, then blowing them down, and venting them, and during this time taking various data.

Mr. STRATTON. Let me just interrupt here. We have here a statement by Commander McGaughy listing the number of nuclear power division personnel who were on the ship. You said that you came aboard at 8 o'clock.

Mr. OBERDECK. Approximately 8 p.m., yes.

Mr. STRATTON. This says from 1600 until ship sank.

Mr. OBERDECK. Well, I came on the shift at 1600, but I was required by my supervisor to write several changes to test procedures, to review

some completed test procedures, and to get JTG signature for several changes we had written, and I had to stay up in the office until approximately 8 o'clock to do this. At that time I went down to the ship.

Mr. STRATTON. All right. At the time you came aboard, had the blow-down taken place?

Mr. OBERBECK. The blowdown was in progress when I came aboard.

Mr. STRATTON. The blowdown was in progress?

Mr. OBERBECK. Yes.

Mr. STRATTON. First of all, what are the _____?

Mr. OBERBECK. Well, this is classified information. Is it OK—this is a closed session, right? We can do it?

Mr. STRATTON. That is right, yes.

Mr. OBERBECK. We have _____.

Mr. STRATTON. I see.

Mr. OBERBECK. They are approximately _____ gallons each, or a total of _____ gallons.

Mr. HUNT. _____ of them?

Mr. OBERBECK. _____.

Mr. REDDAN. I will show you a diagram here.

Mr. OBERBECK. Right.

Mr. REDDAN. And these are indicated as No. 61, _____.

Mr. OBERBECK. OK. But these are not _____, as far as I understand, they are not _____.

Mr. STRATTON. According to this, they are _____.

Mr. OBERBECK. They are _____.

Mr. REDDAN. Yes.

Mr. OBERBECK. That is the ones.

Mr. STRATTON. But these are _____?

Mr. OBERBECK. Right. They come off what we call our _____.

Mr. STRATTON. Oh, I see. Now then this _____?

Mr. OBERBECK. Right, _____.

Mr. STRATTON. They _____ you mean?

Mr. OBERBECK. Right.

Mr. STRATTON. _____.

Mr. OBERBECK. Or _____.

Mr. STRATTON. I see. You said _____ gallons. This says _____ tons each.

Mr. OBERBECK. Well—

Mr. STRATTON. Would that be about the same thing?

Mr. OBERBECK. I assume so. According to the _____ manual, they are _____ gallons apiece.

Mr. STRATTON. Well, now, of course there was _____.

Mr. OBERBECK. No, we have _____.

Mr. STRATTON. You had pure water?

Mr. OBERBECK. Yes.

Mr. STRATTON. You were just testing the tanks themselves?

Mr. OBERBECK. Pardon me. That was not _____. That was _____.

Mr. STRATTON. OK _____.

Mr. REDDAN. How was the water put in the tanks?

Mr. OBERBECK. The water was put in through a hard hose, with an isolation valve and a flow meter.

Mr. REDDAN. When was it put in, do you know?

Mr. OBERBECK. That last time I can't say for sure, because when I was coming down, when I came on shift, they had already started blowing down. So I can't say when the water was put in the last time. I can say we did exactly the same test the night before with no problem. We had just—they were just doing a calibration check just last night. We had done exactly the same test the night before with no difficulty whatsoever.

Mr. STRATTON. What you were doing, if I understand it correctly, is that at roughly 8 o'clock you were blowing out——

Mr. OBERBECK. Right, we applied——

Mr. STRATTON (continuing). Gallons of water on both sides.

Mr. OBERBECK. Well, yes. We were using approximately 100 pounds air pressure and blowing this _____. We actually have what we call a _____.

Mr. STRATTON. Right. Then at 2030 you had completed blowing the water out and then venting them——

Mr. OBERBECK. Yes.

Mr. STRATTON (continuing). Was simply to open the valves and allow the water to come back up.

Mr. OBERBECK. No. This is venting _____ and what is called the _____. This was just to relieve the air pressure on the tanks.

Mr. STRATTON. Were you aware of the fact that when this was going on that forward in the ship there was an effort to try to bring the ship into a precise trim?

Mr. OBERBECK. I was aware that a trim was required. I was not aware that they were trimming the ship at the time. I assumed because the test had been done, the actual calibration of the tanks had been done before I came aboard, that the ship had been in trim. What we were doing at this time didn't require any trim. We were just emptying the tanks.

Mr. STRATTON. Right. But obviously, if you empty some tanks, it has some bearing on the trim of the ship; does it not?

Mr. OBERBECK. I would think _____ gallons wouldn't affect it very much. It is a 4,100-ton ship. We have tanks that the ship's force fills daily that hold a larger capacity than that. In fact, it is a normal operation, our pure water tanks.

Mr. REDDAN. When did you start blowing these tanks?

Mr. OBERBECK. Blowdown had commenced before I came aboard. It is approximately a 40-minute blowdown. I would say 15 minutes of it had been done before I came aboard.

Mr. STRATTON. Do you know whether, in your experience, any operation that is going on with respect to the nuclear portion of the ship, whether it has to be coordinated in any way with what may be going on elsewhere?

Mr. OBERBECK. Right. We have to have JTG concurrence, which is a joint test group, before we do any evolution on that ship.

Mr. STRATTON. Now, would Mr. Christiansen be the fellow that would be responsible, be in charge of this particular operation?

Mr. OBERBECK. He, as the STE, is responsible for all testing, all

nuclear testing on the ship during his shift. We have to have JTG permission to do any test before we can do it.

Mr. REDDAN. Who comprises JTG?

Mr. OBERBECK. JTG is a nuclear power division member in our code.

Mr. REDDAN. Could you tell us specifically who it was?

Mr. OBERBECK. Vince Abano.

Mr. REDDAN. He is from the nuclear group?

Mr. OBERBECK. He is from the nuclear.

Mr. REDDAN. And who else is on that, do you know?

Mr. OBERBECK. A Mr. Tellman, who is the NRO representative.

Mr. STRATTON. Have you discussed at any time or considered the fact that this particular operation might have had something to do with what happened to the ship?

Mr. OBERBECK. What do you mean, the sinking of the ship?

Mr. STRATTON. Yes.

Mr. OBERBECK. Well, I feel that the request for trimming the ship caused them to perform an improper evolution, which caused the sinking of the ship.

Mr. REDDAN. Would you go over that again, please?

Mr. OBERBECK. I feel that we requested that the ship be trimmed.

Mr. STRATTON. Right.

Mr. OBERBECK. I feel that they improperly trimmed the ship and therefore sunk it.

Mr. STRATTON. What I am asking you is whether you or anybody associated with you that night have ever considered whether the blowing of these _____

Mr. OBERBECK. No; definitely no.

Mr. STRATTON (continuing). Had anything to do with it.

Mr. OBERBECK. It is out of the question. It just couldn't.

Mr. REDDAN. The whole thing is out of the question?

Mr. OBERBECK. Well, I mean blowing the _____ couldn't sink a ship. This is a _____.

Mr. STRATTON. Well, yes, but you don't try to trim a ship daily. Do you know where the center of gravity is on the ship by any chance?

Mr. OBERBECK. I would assume it is _____.

Mr. STRATTON. If the _____ were right at the center of gravity, then it wouldn't have any effect, would it?

Mr. OBERBECK. I don't think it would have any effect no matter where they are.

Mr. STRATTON. Well, it only takes a straw to break the camel's back, doesn't it?

Mr. OBERBECK. Yes, but what matters is where the straw is. If you put yourself in a condition where one straw can sink a ship, you are in pretty bad shape.

Mr. STRATTON. We are not concerned about that. But to say it doesn't have any impact—

Mr. OBERBECK. I just don't feel—well, let me put it this way: I don't feel that blowing down a _____ would cause a noticeable change in the trim of a ship. I just don't think—

Mr. STRATTON. You have got to find out where the center of gravity is.

Mr. OBERBECK. I don't think it would change it less than a 10th of a degree.

Mr. STRATTON. You have played on a seesaw, so you know how that works.

Mr. OBERBECK. Yes.

Mr. STRATTON. And according to this chart that we showed you, each one of these tanks was _____. So that would be _____. That would be a fairly sizable straw, wouldn't it, if it were at the right point on the seesaw?

Mr. OBERBECK. Yes, but I am an engineer by training, and I would take a ratio of _____ over 4,100, which is the total weight of the ship.

Mr. HUNT. On balance?

Mr. OBERBECK. No, the total weight of the ship, per the weight of the water.

Mr. STRATTON. That is only half of that on one side, isn't it?

Mr. OBERBECK. I don't follow you there.

Mr. STRATTON. I mean total weight of the ship is 4,100 tons, is that it?

Mr. OBERBECK. Yes.

Mr. STRATTON. So if you are trying to figure on the pressures on both sides of the fulcrum, it would be 2,000.

Mr. OBERBECK. Yes, OK.

Mr. STRATTON. _____, right?

Mr. OBERBECK. The whole point I am trying to make is I don't think you could notice a change in the trim by blowing down the _____.

Mr. STRATTON. You may be right. I don't know. I am just trying—

Mr. OBERBECK. I could be wrong, too. But that is what I feel about it.

Mr. REDDAN. Had you ever considered that possibility?

Mr. OBERBECK. No.

Mr. REDDAN. This is something you are giving us right now?

Mr. OBERBECK. No. This was brought out. People questioned us about this before. But again I just don't feel—

Mr. STRATTON. Have you been before the Court of Inquiry?

Mr. OBERBECK. No, nobody asked me to.

Mr. STRATTON. You know, the interesting thing—I am not sure that we want to go into this, but the interesting thing that we found is that according to all of the evidence, the situation appeared to be still quite stable on the ship when most of the people onboard left for lunch at 8 o'clock, and when they came back at 8:30, the ship was in a condition where it was taking water aboard through the forward escape trunk.

Mr. OBERBECK. Yes, but from what I understand—

Mr. STRATTON. The only thing that happened significantly during this period was the blowing down of these tanks.

Mr. OBERBECK. Yes.

Mr. STRATTON. From what I understand, and again this is just from what I read in the newspapers, they were taking water at 7 o'clock, and this thing was steadily taking water from 7 until 8:30.

Mr. HUNT. That, Mr. Oberbeck, brings me up to the point I wanted to discuss with you. Considering that this report might be true, they

were taking on a certain amount of water from 1900 hours, and considering the fact they had some water forward, would not the blowing of your tanks, an almost _____ ton differential, cause a little bit more tipping of the ballast?

Mr. OBERBECK. I really can't say. I just can't say.

Mr. HUNT. You see, I am looking at this from the center of gravity of the ship, and if you put a little bit in the nose and take a little bit out aft, you could attain the necessary degree of tip to permit the water to come in the trunk hatch.

Mr. OBERBECK. This is possible, but I don't know. I don't know—I am not involved with the design of the whole ship.

Mr. STRATTON. We don't want to argue the thing.

Mr. HUNT. No. I am just wondering. I am just curious.

Mr. STRATTON. Do you have any other questions?

Mr. HUNT. No.

Mr. STRATTON. Mr. Reddan?

Mr. REDDAN. No.

Mr. STRATTON. Could you explain to us what is meant by blowing and venting the tanks?

Mr. OBERBECK. What we do is just blow the water out and then vent off the air pressure that is left in the tanks, is all that is involved.

Mr. STRATTON. In the sense that you were calibrating, were you trying to see how much water went out with each blow or something like that?

Mr. OBERBECK. No, no. We had calibrated it during the fill.

Mr. STRATTON. I see.

Mr. OBERBECK. What you do is add 100 gallons, record the gage indication, add another hundred gallons and record it.

Mr. STRATTON. I see. Did I understand—if this isn't classified—that _____.

Mr. OBERBECK. I understand there are several others, one Polaris and another fast attack, I don't know which.

Mr. STRATTON. I see.

Mr. OBERBECK. There is a _____.

Mr. STRATTON. Fine. I think we have finished.

Mr. OBERBECK. I don't know whether that is classified or not. Anything to do with _____ is probably classified.

Mr. STRATTON. I understand. We respect it.

Mr. OBERBECK. I am sorry I couldn't give you any more information. That is about all we knew.

Mr. STRATTON. That is all we wanted to get.

Mr. HUNT. Mr. Oberbeck, just one question. Did I understand you to say you had completed a similar test of this nature the day before?

Mr. OBERBECK. Right. We had calibrated or run one calibration run and then blew the tanks down and vented it off.

Mr. HUNT. And then refilled them?

Mr. OBERBECK. And then refilled them.

Mr. HUNT. Yes. That was the day before, when you preformed this first calibration test?

Mr. OBERBECK. Right.

Mr. HUNT. You prepared by filling the tanks again?

Mr. OBERBECK. Right.

Mr. HUNT. For the ensuing day.

Mr. OBERBECK. You see we do the calibration runs, and then you have to do a check run.

Mr. HUNT. Right.

Mr. OBERBECK. To make sure you are getting the same data.

Mr. STRATTON. That raises one more question. What was the condition of the _____ on the 13th of May?

Mr. OBERBECK. The 13th of May? I don't have any idea.

Mr. STRATTON. When did you conduct this previous test? It was on the 14th?

Mr. OBERBECK. On the 14th.

Mr. STRATTON. This would be roughly what shift?

Mr. OBERBECK. I was on swing shift and when I came aboard I took over a test called an _____ test. I completed that, and the STE requested me to finish, the shift test engineer, asked me to complete the calibration test he had already started. I believe they started it on the day shift, the 14th.

Mr. STRATTON. You don't know whether the water was in or out before that test began.

Mr. OBERBECK. The test that I took over? Well, I believe—

Mr. STRATTON. On the 14th.

Mr. OBERBECK. Let me think.

Mr. STRATTON. You said it was completed before you—

Mr. OBERBECK. Well, it was in progress when I took over, and there was, I believe, about _____ gallons in the tank, and I completed the test up to _____ gallons. In other words, adding at 100 gallon increments.

Mr. STRATTON. Do they have the same set up in the 666?

Mr. OBERBECK. I believe they do, yes.

Mr. STRATTON. One other thing. You said that no test is carried out without the concurrence of the joint test group.

Mr. OBERBECK. Right. In fact that is what I was doing that night, was getting concurrence for several other tests before I came on the ship.

Mr. STRATTON. Right. But is his joint test group a strictly nuclear organization, or does it include the nonnuclear?

Mr. OBERBECK. This is a nuclear organization.

Mr. STRATTON. One of the problems that the subcommittee has run into is that we find it extremely difficult to find anybody who really knows everything about what is going on on one of these ships.

Mr. OBERBECK. I would think the Ship's Superintendent should have overall control.

Mr. STRATTON. Well, would it be a fair statement to say that no test of yours could go on without the knowledge or concurrence of the Ship Superintendent?

Mr. OBERBECK. Well, I don't know if I could answer that.

Mr. STRATTON. OK.

Mr. REDDAN. He does not have a representative on the joint group?

Mr. OBERBECK. The joint test group, no, he doesn't.

Mr. STRATTON. We will try to track that down. Thank you very much.

Mr. OBERBECK. OK.

Mr. STRATTON. Sorry to bring you in in such a hurry, but this seemed to be an important point and we wanted to get a chance to talk to somebody about it.

Mr. OBERBECK. OK. Well, all I got to say, I am sorry I couldn't give you any more information. I was on there for 45 minutes, and that was it.

Mr. STRATTON. You are lucky you got out in one piece.

Incidentally, I notice you cut the cables and hoses and attempted to get the operations hatch shut.

Mr. OBERBECK. This was weapons shipping hatch.

Mr. STRATTON. Right.

Mr. OBERBECK. At this time the water wasn't too far from that hatch.

Mr. STRATTON. But it wasn't too far from the forward part of the hatch, is that right?

Mr. OBERBECK. Well, yes. The water was coming over the forward end of the ship and when I got up to the water, it was to the back of the sail, and that is about 5 feet from its hatch. Chris, the STE, and I were trying to clear this hatch.

Mr. STRATTON. What I was asking you was there any water on the deck where you were trying to cut the cables?

Mr. OBERBECK. Not at the time, but before I left I think my left foot was wet.

Mr. STRATTON. Somebody mentioned the fact that if you cut some of those electric cables while you were standing in water it might be a little difficult.

Mr. OBERBECK. It might be a hazardous situation. That is one of the problems I think was the reason they didn't save the ship and possibly could have. You see, you can't cut those cables very easily with an ax.

Mr. STRATTON. All right, sir. Thank you very much. We appreciate it.

(Whereupon, the subcommittee proceeded to executive session.)

Mr. STRATTON. Mr. Christiansen, I appreciate your coming up. I am sorry if we interrupted your schedule there, but we wanted to talk to you because we had an opportunity to read your statement.

We have been instructed as a subcommittee to put our witnesses under oath because the Navy Court of Inquiry is doing the same. Actually, we are not trying to pin the responsibility or accuse anybody or anything of that kind. But it was felt that since the witnesses in the other inquiry are under oath, they should be under oath before us. In that case, under the Rules of the Congress, we have to do two things.

First of all, tell you you have the right to be represented by counsel, if you so desire, and second, if we ask you any questions, the answers to which might tend to incriminate you, you could certainly have the constitutional privilege of refusing to answer them.

All of our witnesses have testified on this basis. None of them has requested counsel. But you have that right. And so I wanted to see whether you desire to waive the right to counsel and if so, we can swear you in and just ask you a few questions.

TESTIMONY OF EDWARD ANDREW CHRISTIANSEN, SHIFT TEST
ENGINEER FOR NUCLEAR COGNIZANT SYSTEMS, SAN FRANCISCO
BAY NAVAL SHIPYARD, MARE ISLAND, VALLEJO, CALIF.

Mr. CHRISTIANSEN. Yes; I believe I can.

Mr. STRATTON. Do you want to stand, please, and raise your right hand. You swear the testimony you are about to give before this subcommittee in these matters shall be the truth, the whole truth and nothing but the truth, so help you God?

Mr. CHRISTIANSEN. I do.

Mr. STRATTON. Would you give your full name, please, and address?

Mr. CHRISTIANSEN. Edward Andrew Christiansen.

Mr. STRATTON. And your local address?

Mr. CHRISTIANSEN. 120 Arjuelo.

Mr. STRATTON. And your position is shift test engineer for nuclear cognizant systems, is that correct?

Mr. CHRISTIANSEN. Yes, sir.

Mr. STRATTON. And how long have you been in that position?

Mr. CHRISTIANSEN. I have been qualified at Mare Island approximately a year and a half.

Mr. STRATTON. And were you on board the *Guitarro* on the night she sank?

Mr. CHRISTIANSEN. Yes, sir.

Mr. STRATTON. And you have filed, in fact, a statement here, which was brought to our attention, with regard to your experiences at the time that the ship began to go down. You came aboard approximately when?

Mr. CHRISTIANSEN. I would say an area of around 3 o'clock.

Mr. STRATTON. And then you remained on board until about 2030, or thereabouts?

Mr. CHRISTIANSEN. Yes, sir.

Mr. STRATTON. According to your statement, and I will come to it right now, about 2030 you had completed blowing down _____ and were preparing to vent the _____. Now, could you tell us just a little bit about what this operation was?

Mr. CHRISTIANSEN. Yes, sir. This is an operation where we calibrated the level gauge for the _____. This was done by adding water in 100-gallon increments and marking the gauge face with a water meter. We had completed filling the tanks and we had blown them down.

Mr. STRATTON. That means to blow the water out?

Mr. CHRISTIANSEN. To empty the water out of the tanks.

Mr. STRATTON. Out _____?

Mr. CHRISTIANSEN. Yes, sir.

Mr. REDDAN. When did you start filling the tanks?

Mr. CHRISTIANSEN. When I came on shift. I believe it was about 1630.

Mr. REDDAN. And at what time did you complete the fill of the tanks?

Mr. CHRISTIANSEN. The filling of the tanks was completed, I would say, around 5 minutes to 8, 10 minutes to 8, or so.

Mr. REDDAN. Then, shortly thereafter, you started to blow them out?

Mr. CHRISTIANSEN. Yes, sir. Just the time it took for us to make the valve line up, to blow the tanks.

Mr. STRATTON. And the _____?

Mr. CHRISTIANSEN. Yes, sir.

Mr. STRATTON. Took about _____ hours to fill them, _____?

Mr. CHRISTIANSEN. Yes, sir.

Mr. REDDAN. The _____ was completed about what time?

Mr. CHRISTIANSEN. Around 25 after 8.

Mr. STRATTON. Do you know how much water is in those tanks?

Mr. CHRISTIANSEN. Yes, sir. There was about _____ gallons.

Mr. STRATTON. In the _____ tanks?

Mr. CHRISTIANSEN. Yes, sir.

Mr. STRATTON. And do you know roughly how much that weighs?

Mr. CHRISTIANSEN. Less than _____ tons.

Mr. STRATTON. Less than _____ tons?

Mr. CHRISTIANSEN. Yes, sir.

Mr. STRATTON. We have a ship's chart here that indicates the _____, and it says _____ each.

Mr. REDDAN. Tons.

Mr. STRATTON. In tons. That would mean the _____ of them would be about _____ tons?

Mr. CHRISTIANSEN. Yes, sir.

Mr. STRATTON. Would that be about right?

Mr. CHRISTIANSEN. That would be about right.

Mr. STRATTON. Who ordered this particular test?

Mr. CHRISTIANSEN. This test was scheduled by my supervisor, who told me when I came on shift to complete this test. This test had been in progress for 2 previous days, the calibration of these tanks. I was to complete it on my shift.

Mr. STRATTON. When you say it had been in progress, did that mean that during this period they were filling up and blowing them out?

Mr. CHRISTIANSEN. Yes, sir.

Mr. STRATTON. Going through the calibration procedure?

Mr. CHRISTIANSEN. Yes, sir.

Mr. REDDAN. This was a double check of your calibrations, was it?

Mr. CHRISTIANSEN. Yes, sir.

Mr. REDDAN. I mean, did you repeat the identical process on each one of these days?

Mr. CHRISTIANSEN. Yes. You use a different method of checking the level each time, but you do the same, identical process of filling them and blowing them.

Mr. STRATTON. Who was your supervisor?

Mr. CHRISTIANSEN. My immediate supervisor would be Mr. Quittschriber.

Mr. STRATTON. Were you aware of the fact or was Mr. Quittschriber aware of the fact that the nuclear people had requested that the ship be level for some other test that was to take place the next day, the ship was to be trimmed, and that efforts were being made for that night to trim the ship?

Mr. CHRISTIANSEN. I can't say that Mr. Quittschriber is aware of it. To my knowledge, there was no evolutions going on at all that involved the trim or the list of the ship.

Mr. STRATTON. Is it possible for the nuclear section to carry out certain things in the ship without other people in the ship being aware of what is going on?

Mr. CHRISTIANSEN. No sir. Not really, because the fact is, that all evolutions are scheduled, plan-of-the-day meeting, whereby all representatives of the different organizations are present.

Mr. REDDAN. Including nonnuclear?

Mr. CHRISTIANSEN. Yes, sir.

Mr. STRATTON. This takes place in the morning?

Mr. CHRISTIANSEN. Yes, sir; it takes place usually around 8 o'clock.

Mr. STRATTON. Where would that take place?

Mr. CHRISTIANSEN. It has been, up until we moved to drydock, it has been taking place in building 273, the second floor.

Mr. STRATTON. Who would be normally represented at that kind of a meeting?

Mr. CHRISTIANSEN. For nuclear power, for the testing group, it would be Mr. Allen and Mr. Quittschriber.

Mr. STRATTON. And do you know who would be also represented for the nonnuclear?

Mr. CHRISTIANSEN. No, sir; I don't usually go to those meetings.

Mr. REDDAN. Now, this was not a final bind on the work to be done during the day, was it? I mean, other requirements could be cranked in if they arose during the day?

Mr. CHRISTIANSEN. Yes, sir. This was just a general run, just to give everybody an idea of what would be accomplished during that day.

Mr. STRATTON. Was there ever any documentary poop put out as to what the plan was, the following things will be done today according to our agreement, that was ever committed to paper, do you know?

Mr. CHRISTIANSEN. No, sir. I don't know. I can't tell you.

Mr. STRATTON. Do you have any idea, just off hand, where the center of gravity in the ship might be?

Mr. CHRISTIANSEN. I would say someplace back in the area of —

Mr. STRATTON. The forward part of the _____?

Mr. CHRISTIANSEN. Well, I would say in the _____.

Mr. STRATTON. Did it ever occur to you, now looking back in retrospect, that the blowing of these tanks might have contributed to the sinking?

Mr. CHRISTIANSEN. Yes, sir. I have thought about that. If that had been the case, with no trimming of the ship or anything, the ship should have been taking water when I came on shift as the tanks were drying, when I took over the shift at 3 o'clock, and we never experienced any flooding that I knew of until 8:30.

Mr. REDDAN. At what point had they started to fill the forward main ballast tank?

Mr. CHRISTIANSEN. I don't know, sir. I had no idea that they were ever doing that.

Mr. STRATTON. Have you mentioned this to anybody, the possibility—what happened was that in the course of half an hour, and it is just about the time that the ship got into trouble, you dispensed roughly _____ tons of water _____. Has this actually occurred to you or have you mentioned it to anybody?

Mr. CHRISTIANSEN. Yes, sir; this has been brought up. I believe people have thought about this.

Mr. STRATTON. Have you appeared before the court of inquiry?

Mr. CHRISTIANSEN. Yes, sir, I have.

Mr. STRATTON. Did they ask you about it?

Mr. CHRISTIANSEN. No, sir, they didn't.

Mr. REDDAN. In blowing these tanks, did anyone ever measure the effect that would have on the position of the sub in the water?

Mr. CHRISTIANSEN. Not to my knowledge, sir; no.

Mr. STRATTON. Any other questions?

Mr. HUNT?

Mr. HUNT. I am satisfied. No, I think you covered it all. The main thing is there was displacement of almost _____ tons of water.

Mr. REDDAN. We will get somebody from stability on that.

Mr. HUNT. Of course, as he said—you didn't know there was water being added to the ballast tanks forward?

Mr. CHRISTIANSEN. No, sir.

Mr. HUNT. No one told you this?

Mr. CHRISTIANSEN. No, sir.

Mr. HUNT. You thought you were conducting your own, independent operation for the purpose of calibration, not knowing that a machinist group was forward adding ballast forward?

Mr. CHRISTIANSEN. Yes, sir; that is correct.

Mr. REDDAN. Your group continued to work during the period that the nonnuclear group was at lunch?

Mr. CHRISTIANSEN. Yes, sir.

Mr. REDDAN. Do you know who else was on the shift during that period?

Mr. CHRISTIANSEN. Well, during the lunch hour, my people usually don't leave the ship. So there was just myself, Mr. Palmaymesa and Mr. Oberbeck. We were the only nuclear people. As far as the people up forward, I don't know who was up there.

Mr. REDDAN. Do you know whether there was someone on there, or you just don't know one way or the other?

Mr. CHRISTIANSEN. I just don't know one way or the other, sir.

Mr. REDDAN. Yes.

Mr. STRATTON. Thank you very much, Mr. Christiansen. I appreciate your coming in.

Mr. CHRISTIANSEN. Yes, sir.

Mr. STRATTON. Hope we haven't disturbed you too much.

Mr. CHRISTIANSEN. No, sir.

Mr. STRATTON. Is Mr. Palmaymesa in there?

Mr. CHRISTIANSEN. Yes, sir.

Mr. STRATTON. Will you ask him to come in, too, please?

Mr. REDDAN. Come over and have a seat there, please.

TESTIMONY OF FRANK F. PALMAYMESA, JR., ASSISTANT SHIFT TESTING ENGINEER FOR NUCLEAR COGNIZANT SYSTEMS, SAN FRANCISCO BAY NAVAL SHIPYARD, MARE ISLAND, VALLEJO, CALIF.

Mr. PALMAYMESA. Yes.

Mr. STRATTON. Mr. Palmaymesa, we appreciate your coming up here and hope we haven't interrupted your schedule too much, but we did want to talk to you here briefly in connection with the *Guitarro* sinking.

But before I ask any questions, I want to just indicate to you that this subcommittee has been requested by our chairman to swear all of

the witnesses before us, not because we are trying to pin anybody down on anything or make any accusations. We are simply trying to get the full facts and to make our recommendations to the Congress as to what might be done to prevent this in the future.

But since witnesses are being sworn before the court of inquiry, we thought we would do the same thing. And, in order to do that, we must advise you of two things.

First of all, you do have the right to counsel, if you so desire, when you appear under oath, and secondly, if you so desire, you can decline to answer any question, the answer to which might tend to be incriminating.

This is more or less routine procedure, to protect the rights of witnesses before Congressional committees.

Actually, the witnesses that we have had, from the admiral on down, have not indicated any desire to have counsel, but we wanted to let you know of your rights. And if you desire to proceed without the counsel, why then we can proceed to swear you in.

Mr. PALMAYMESA. Yes, I will proceed without counsel.

Mr. STRATTON. Will you stand and raise your right hand?

Do you swear that the testimony you are to give to the subcommittee on these matters will be the truth, the whole truth and nothing but the truth, so help you God?

Mr. PALMAYMESA. I do.

Mr. STRATTON. Thank you.

Could you please give your full name and your address to the reporter?

Mr. PALMAYMESA. It is Frank F. Palmaymesa, Jr.

Mr. STRATTON. And your local address is?

Mr. PALMAYMESA. 307 Patrick Drive, in Vallejo.

Mr. STRATTON. And you are Assistant Shift Testing Engineer for Nuclear Cognizant Systems?

Mr. PALMAYMESA. That is correct.

Mr. STRATTON. How long have you been here at the Mare Island shipyard?

Mr. PALMAYMESA. Mare Island? Let's see, I graduated in 1962. So I came here—June 1962, I came on the yard. So it is almost 7 years.

Mr. STRATTON. You were on the *Guitarro* the night she went down?

Mr. PALMAYMESA. Yes.

Mr. STRATTON. And when did you come aboard?

Mr. PALMAYMESA. I came aboard about a quarter of four that day. I had come in early for a briefing on a test evolution, about 2:30 and about 3:30 the briefing was dismissed and I went back to the office to check with the shift test engineer to see what we were going to be doing that night. He mentioned let's just go down aboard ship and we will discuss the night's events.

Mr. STRATTON. This test which was being carried on was a test of calibrating the _____, as I understand it?

Mr. PALMAYMESA. That is correct.

Mr. STRATTON. And that meant filling the tanks up and then blowing them out?

Mr. PALMAYMESA. That is correct. The procedure called for us to add in 100 gallon increments water, and we stopped after adding 100 gallons and we would sound the tank, and we would take the measurement on a Barton Gauge—it is part of the system—and we recorded it

in our test procedure, the reading of the Barton versus our fresh water flow meter that we had from our fresh water supply.

Mr. STRATTON. And——

Mr. PALMAYMESA. We proceeded right on through. There was some increments.

Mr. STRATTON. And then——

Mr. PALMAYMESA. You see, after that——

Mr. STRATTON. This test started, what, about 6:00 o'clock, something like that, or 4:00 o'clock.

Mr. PALMAYMESA. 4:00 o'clock. If I can remember, I think it was 4:10, is when we first started flow into the tanks.

Mr. STRATTON. And then they filled up around 8, was it, about a quarter of 8 was it?

Mr. PALMAYMESA. About a quarter of 8 we completed our fill.

Mr. STRATTON. And then they were blown out shortly thereafter?

Mr. PALMAYMESA. Immediately thereafter I had the ship's forces make a lineup per the director of the plant manual.

Mr. STRATTON. What do you mean by lineup?

Mr. PALMAYMESA. A valve lineup.

Mr. STRATTON. Oh.

Mr. PALMAYMESA. To blow the tanks. I got to be careful here. I speak, you know, down on board ship. We are not concise.

Mr. STRATTON. Right.

Mr. PALMAYMESA. Because the test team works as a group, but I will try to correct myself now.

Mr. STRATTON. If we don't understand anything, we will try to ask you.

Mr. PALMAYMESA. All right.

Mr. STRATTON. And that blowing was completed about 8:30; is that about right?

Mr. PALMAYMESA. That is about right.

Mr. STRATTON. And that was about the time that you noticed the sudden down angle being taken by the boat?

Mr. PALMAYMESA. There was a sudden down angle, but it was just a little angle. It was abnormal. We felt the ship rock before due to ships traveling by, but this was a different type. It was a dip forward.

Mr. STRATTON. Right.

Mr. PALMAYMESA. To myself, I said this isn't right. So I immediately rushed forward, to see what the problem was.

Mr. STRATTON. Were you aware of the fact that while you were conducting this test, that there was going on forward in the ship an effort by the shipyard personnel to bring the ship into perfect trim in response to a request made by the nuclear section for something, I think, that was going to be conducted the next day?

Mr. REDDAN. _____, or something?

Mr. STRATTON. _____ or checking _____ or something?

Mr. PALMAYMESA. No.

Mr. STRATTON. You weren't aware of anything?

Mr. PALMAYMESA. I wasn't aware of it. I had heard they were trimming the ship during the day, and we were in trim.

Mr. STRATTON. Yes.

Mr. PALMAYMESA. In fact, the word around 5 o'clock—I don't know who it was, I think it was Ed Christiansen passed the word that the

ship was in trim. We had heard earlier, when I come aboard the ship, that trim was within a half a degree, which was the requirement.

When I heard that they were trimming that afternoon, I was surprised because we had been in trim the previous 2 nights, the previous 2 nights we were doing tank calibrations on these tanks. Well, later on, which is after the fact, I was told that they had to take the ship out of trim, for some reason I can't recall.

Mr. STRATTON. Would it seem to you to be possible that the sudden removal of _____ gallons of water from these tanks might have a bearing on the trim of the ship?

Mr. PALMAYMESA. Well, to correct you, it would be _____ gallons, not _____.

Mr. STRATTON. _____.

Mr. PALMAYMESA. Which is roughly _____ tons, and _____ tons versus the weight of that ship; no.

Mr. STRATTON. What is the weight of the ship?

Mr. PALMAYMESA. Roughly 2,000, 3,000 tons, I believe.

Mr. STRATTON. Well, if the ship were very delicately in trim, wouldn't _____ tons or _____ tons have an effect, if it were applied at the right place?

Mr. PALMAYMESA. At the right place? I imagine if you put it on one of the ends, bow or stern, it would have an effect. How much, very slight.

Mr. STRATTON. Have you considered this at all since the accident?

Mr. PALMAYMESA. Since the accident?

Mr. STRATTON. Yes.

Mr. PALMAYMESA. Yes, I have, and I don't see how—

Mr. STRATTON. Has anybody discussed it or raised the question?

Mr. PALMAYMESA. Yes; it has been raised.

Mr. STRATTON. Have you been called before the court of inquiry?

Mr. PALMAYMESA. No; I haven't.

Mr. STRATTON. I don't have any other questions. How about you, Mr. Hunt?

Mr. HUNT. No. Only one thing. Mr. Palmaymesa, you said you had been told the 2 preceding nights while you were conducting these tests that the ship was in trim?

Mr. PALMAYMESA. Yes.

Mr. HUNT. Do you recall who told you this?

Mr. PALMAYMESA. No, I don't.

Mr. HUNT. Would it have been a prerequisite for the ship to be in trim?

Mr. PALMAYMESA. Yes.

Mr. HUNT. For you to conduct your tests?

Mr. PALMAYMESA. Yes. I can't recall exactly who it was.

Mr. HUNT. Thank you.

Mr. PALMAYMESA. But I do know it was in trim. In fact, I checked one night, I believe I checked, just for my own sake.

Mr. HUNT. Are you a former Navy man?

Mr. PALMAYMESA. No, I am not. I have just been at the shipyard, as I mentioned, 7 years. I have been in test and test group, nonnuclear, before I came to the nuclear test group at the shipyard.

Mr. HUNT. How long have you been with the nuclear test group?

Mr. PALMAYMESA. Let's see, about a year and one-half.

Mr. STRATTON. All right, sir. Mr. Reddan, anything else?

Mr. REDDAN. No.

Mr. STRATTON. Thank you very much, Mr. Palmaymesa. I appreciate your coming up.

Mr. PALMAYMESA. Fine.

Mr. STRATTON. Mr. Nagy.

Mr. NAGY. Yes.

Mr. STRATTON. Let me just, before we start questioning, Mr. Nagy, make a few preliminary comments, as we have done with all of the other witnesses.

The first is that we have been asked by the chairman of our committee to swear in the witnesses before our subcommittee, which is, of course, the same thing that has been done with those who appear before the court of inquiry, although we are not primarily interested in trying to fix blame or responsibility or anything of that kind.

But in accordance with the rules of the House and the military law, if we do require witnesses to be sworn, then we also have to do two things. First of all, advise you that if you so desire, you have the right to counsel, and secondly, that if you so desire, you are not required to answer any question, the answer to which might tend to incriminate you. The fifth admendment protects. We don't anticipate we will get into anything of that kind, but it is a requirement to make sure that our congressional investigations are being carried out fairly and under the Constitution.

Those who have appeared from the admiral all down have all waived the right to counsel, but you have that right. And if you do desire to waive it, I can swear you in and we can proceed, if that is agreeable with you?

**TESTIMONY OF ERNEST STEVEN NAGY, ASSISTANT CHIEF DESIGN
ENGINEER FOR NAVAL ARCHITECTURE, SAN FRANCISCO BAY
NAVAL SHIPYARD, MARE ISLAND, VALLEJO, CALIF.**

Mr. NAGY. Yes, sir.

Mr. STRATTON. Do you solemnly swear that the testimony you are about to give before the subcommittee in the matters under investigation shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. NAGY. I do.

Mr. STRATTON. Thank you. Please give your name and address.

Mr. NAGY. Ernest Steven Nagy. My address is 683 Montecito Blvd., Napa, Calif.

Mr. STRATTON. Your job here, Mr. Nagy is?

Mr. NAGY. I am the assistant chief design engineer for naval architecture.

Mr. STRATTON. And you have been in that job how long?

Mr. NAGY. I have been in that particular job about 1 year.

Mr. STRATTON. One year. And prior to that, you were?

Mr. NAGY. Prior to that I was a design program manager for new construction submarine.

Mr. STRATTON. And your whole area of attention has been in ship design and construction, particularly with respect to submarines, is that right?

Mr. NAGY. Ever since—yes, sir. Every since I graduated from college.

Mr. STRATTON. So would it be a fair statement to say that in terms of matters of design you would be regarded as an expert?

Mr. NAGY. It would be fair to say, yes.

Mr. REDDAN. Are you a graduate marine architect?

Mr. NAGY. No, I am a graduate architect. I have had undergraduate and graduate study in naval architecture.

Mr. REDDAN. I see. What school?

Mr. NAGY. University of Berkeley, the University of California at Berkeley.

Mr. REDDAN. Both your undergraduate and your graduate work?

Mr. NAGY. Yes, sir.

Mr. STRATTON. We have two simple questions to ask you, Mr. Nagy. One is where would the center of gravity of the *Guitarro* be at the time she sank? Practically in the centerline?

Mr. NAGY. Very close—you see, you have the center of gravity and the center of buoyancy. The center of gravity, of course, is the weight acting up and the center of buoyancy acting up. They are very close to that, a little bit ahead.

Mr. STRATTON. A little bit forward?

Mr. REDDAN. Let's see. You have the _____.

Mr. STRATTON. The _____.

Mr. REDDAN. No, but I mean you have the _____ right there.

Mr. NAGY. It is about _____, which is amidships.

Mr. STRATTON. Then it would probably be at the _____, something like that?

Mr. NAGY. Slightly forward, yes, sir.

Mr. STRATTON. We are talking, now _____?

Mr. NAGY. Right.

Mr. STRATTON. Aren't we?

(Mr. Nagy nods.)

Mr. STRATTON. That would add considerable weight, I suppose.

Mr. NAGY. That is not necessarily the point that the ship pivots, though, as you shift.

Mr. STRATTON. Yes.

Mr. NAGY. You understand that?

Mr. REDDAN. You are talking about slightly forward of the aft section of the _____? Is that right?

Mr. NAGY. No; I am talking about slightly forward _____, which would be about right in here, slightly forward of that.

Mr. REDDAN. Yes. This is the _____.

Mr. NAGY. Right.

Mr. REDDAN. As I understand it, from here to here?

Mr. NAGY. Right.

Mr. REDDAN. So it would be forward?

Mr. NAGY. Forward this way.

Mr. REDDAN. Yes, it would be forward of this bulkhead here?

Mr. NAGY. That is right.

Mr. REDDAN. It would be up here, at frame _____?

Mr. NAGY. That is midships.

Mr. REDDAN. Yes, midships.

Mr. NAGY. Slightly forward of that.

Mr. STRATTON. When you talk about midships, you are going all the way back here, are you?

Mr. NAGY. I am going between these forward and aft perpendiculars.

Mr. STRATTON. In terms of weight, you probably—

Mr. NAGY. No, much more weight aft.

Mr. STRATTON. Much more weight aft. I mean it wouldn't go all the way back?

Mr. REDDAN. So it is right up—let's see, this particular line just runs through there—is it forward or aft of that particular line?

Mr. NAGY. You realize I am talking now about the center of gravity of this ship as it is loaded, as we know it, with a lot of water forward.

Mr. STRATTON. Right.

Mr. NAGY. And a lot of empty tanks aft. Even though the bulk of the machinery and the heavy things are aft, it still is slightly forward.

Mr. STRATTON. All right.

Mr. REDDAN. If you could tell us this: As of 1600 on May 15, what was the condition of the tankage which would determine the center of gravity there? In other words, could you tell us where the center was at about that time, the condition of the ship at that time?

Mr. NAGY. At 1600. Let's see if we made any shifts. I would say it was still slightly forward at—you see, I don't exactly know what the tankage was, other than what I have been told by the naval court.

Mr. REDDAN. Yes.

Mr. NAGY. All right. I have been told to assure that at 1530, the No. 1 main ballast tank was full.

Mr. STRATTON. And No. 2?

Mr. NAGY. No. 2 was full, and No. 3 had a quantity of water in it that we still don't know. The latest figure shows anything from 50 to 60 percent full.

Mr. REDDAN. How was that determined?

Mr. NAGY. Testimony, I assume.

Mr. REDDAN. Are there gauges to determine how full that tank was?

Mr. NAGY. Well—

Mr. REDDAN. Or are these estimates, if you know?

Mr. NAGY. These are estimates, to the best of my knowledge.

Mr. STRATTON. What time are you giving us now? 1500 you say?

Mr. NAGY. 1530.

Mr. STRATTON. All right. Suppose we go down to 1945?

Mr. NAGY. Yes, sir.

Mr. STRATTON. According to what we know, this, I gather this is added 31,000 gallons. I don't know whether it is enough to fill it up, but pretty well?

Mr. NAGY. No.

Mr. STRATTON. All right. In addition to that, by that time the trim which had been shifted aft was then shifted back forward?

Mr. NAGY. Yes, sir.

Mr. STRATTON. That would then again move the weight quite a bit forward, would it not?

Mr. NAGY. Yes. You have just about—well, not quite twice the amount, but you are moving it back here and then shifting it forward, so the result should be slight down angle.

Mr. STRATTON. Now, you said that the center of gravity is not necessarily the point at which she will pivot?

Mr. NAGY. No, sir.

Mr. STRATTON. I don't know whether you are talking about pivoting starboard—

Mr. NAGY. Fore and aft.

Mr. STRATTON. Starboard and port?

Mr. NAGY. No, no. You see—remember the trim. You see, the center of flotation—

Mr. STRATTON. Where would she pivot then?

Mr. NAGY. The center of flotation of this ship—you see the water—normally a ship sitting at dockside runs right through here, above the main axis here, but some point in through here—

Mr. HUNT. Indicating about two-thirds.

Mr. NAGY. And in order to determine where she is going to pivot, you have to look at the long tunnel center of flotation, and that is located by taking the area of that water plane that she is sitting in and dividing that area up, and that is the point she would pivot. You can see every time you change this, because of the changing contour of this thing, that something is shifting back and forth all the time.

Mr. STRATTON. Do you have any idea where it might be as of—

Mr. NAGY. I would have—

Mr. STRATTON. 1945.

Mr. NAGY. I didn't bring my detailed calculations. I wish I had brought them. I would have to go get them. I can tell you exactly where it would be.

Mr. STRATTON. Well, how long would it take you to get your detailed calculations?

Mr. NAGY. Five minutes, or 2 minutes. Just run upstairs and back.

Mr. STRATTON. All right, why don't you do that?

(Pause in hearing.)

Mr. NAGY. OK, the longitudinal center of flotation is about frame

Mr. STRATTON. ————. Just about there. Yes.

Mr. NAGY. Now, the center of gravity is about frame ————.

Mr. STRATTON. Now, in these calculations, have you assumed a certain amount of water in here from sloshing in through the vent?

Mr. NAGY. What I have been doing is I have been taking a rather conservative, I think, height of chop that we get out here, of about 10 inches.

So I am saying as long as that hole, that axis hole was 10 inches or greater above that chop, you took on very little, but as soon as you get it down within 10 inches or even to 8 inches, you start to take on—

Mr. STRATTON. Well, we had a witness who told us that he thought about half a bucket was going in every time a wave hit it.

Mr. NAGY. At what time? You see I have to know time, because this thing is flopping up and down.

Mr. STRATTON. I think this is around 1900.

Mr. NAGY. You see, according to the 1530 draft that we have—

Mr. STRATTON. 1945. Excuse me. Go ahead.

Mr. NAGY. According to the 1530 draft we have, the hole was about 10½ inches above the water.

Mr. REDDAN. At 1530?

Mr. NAGY. That is right.

Mr. STRATTON. You see, you took on 3,000 gallons here in an effort to try to bring the thing down.

Mr. NAGY. That is right, that is right. Well, just by this shift here, we brought it down, which is—the first thing that took place was this shift.

Mr. STRATTON. Right.

Mr. NAGY. That brought the bow down to where the hole was somewhere around 8 inches more. I say at that time we were taking on small amounts of water, maybe—

Mr. STRATTON. You mean even before they put in the 3,000?

Mr. NAGY. Yes, sir.

Mr. REDDAN. How close was the waterline to the boot topping at that point?

Mr. NAGY. Well, the boot topping—

Mr. HUNT. Well, it was while they were putting the water in, with the hose in the vent pipe.

Mr. STRATTON. That is right.

Mr. HUNT. That Kaufenberg took them forward and showed them the water is slopping in the hole.

Mr. STRATTON. Right. That is right.

Mr. NAGY. Well, you see I have two boot toppings. This is a problem, too. Let me show you the chart here.

Mr. HUNT. 1945, I think he said.

Mr. STRATTON. Yes, 1945.

Mr. NAGY. I would say—let's see. Here is the actual boot topping, as measured on the ship.

Mr. REDDAN. This is looking down?

Mr. NAGY. Yes, right. And this is the actual waterline at 1730, or somewhere near. This is the actual boot topping line. So you can see that there isn't—when you got the bow down to the boot topping line, why you are damn near under.

Mr. STRATTON. I see.

Mr. REDDAN. As of what time is this?

Mr. NAGY. I don't know when the boat was at boot topping.

Mr. REDDAN. Oh, I see.

Mr. NAGY. I can tell you by weight distribution when I think it got there.

Mr. STRATTON. Well, let me ask you this question: Our information seems to suggest that in spite of the fact that water was sloshing into this manhole, the ship was still basically in trim at 2000 when everybody went ashore to get chow, and when they came back at 2030 the water was already up and coming into the escape trunk.

Mr. NAGY. Yes, sir.

Mr. STRATTON. So something happened between 2000 and 2030.

Mr. NAGY. (Nods.)

Mr. STRATTON. Now, I don't know whether you are aware of it but these _____ were being tested by the nuclear boys, and they had filled them up, _____ gallons in each one, _____ tons. They had filled them up from 1600 to 2000. At 2000 they blew them, got them all out in half an hour. The statement of one of these fellows said, "As soon as we had completed the blowing down," he felt a distinct forward angle, and given this condition of stability of the ship, is it conceivable that the elimination of _____ tons at this point

would be enough to just trigger it a little bit more, so that it began to come in in a hurry.

Mr. REDDAN. That is _____ tons between frames _____.

Mr. STRATTON. You have this thing just a few inches off the waterline.

Mr. NAGY. Let's see. _____ tons. We are talking about a ship that has a ton per inch of immersion of somewhere in the neighborhood of _____. So to immerse 1 inch, you have to add _____ tons. So if you take _____ tons off, you are going to raise it—if you took it right off at the CG, you would raise it _____ of an inch.

Mr. STRATTON. But you are taking it off back aft?

Mr. NAGY. But you are taking it off with a slide arm. I would say that it wouldn't—it would have less than a half inch or so effect down there. It would no doubt help it go under, because a half inch is a half inch. And it may have sped up the process to some degree. But it is a rapid process, to begin with. I have just made some kind of rough predictions of what this dash curve might look like in terms of time, how this water was splashing into that hole, and it must have gone on real slow here for a long period of time, as long as it was within 10 or 12 inches. Even when it is within 12 inches, as a large boat goes by, it is going to get some. So I would say it was taking some on, small amounts, not on a regular basis, not every chop.

Mr. HUNT. You had some demonstration out there. The Marines had some boats, and they were kicking additional waves, did you know that?

Mr. NAGY. That night?

Mr. HUNT. Yes.

Mr. NAGY. I did not know it. Admiral Lacey has promised me a river traffic report, but I haven't got that yet.

Mr. STRATTON. Here is a statement by a fellow on back in the nuclear compartment.

"At 2030 I was observing vent operations of the _____, in _____, when I noticed a sudden down angle being taken by the boat."

Mr. NAGY. That is 2035. We were already—the forward room was spilling water into operations compartment at that time. I am fairly confident of that.

Mr. REDDAN. They were blowing these tanks.

Mr. NAGY. That was what the down angle was the result of.

Mr. STRATTON. Yes, but I mean the only thing that we can discover that took place that would contribute to the weight would be the blowing of these tanks.

Mr. NAGY. You mean after 2000?

Mr. STRATTON. Yes.

Mr. HUNT. You see, Mr. Nagy, the entire crux of the matter is the time period now, where between the hours of 2000 and 2030 something occurred on board that ship to give it some added impetus, whether it be added shipping of water from the nose or whether it be the subtraction of water aft of the gravity center, and perhaps the combination of both—we are trying to determine what actually occurred. The only thing we can find that actually occurred in this 30-minute period was the blowing of those tanks, of _____ gallons of water, a little bit

short of _____ tons. We know that earlier in the day that she was shipping some water through her sonar hatch being removed, up forward. In fact, it was called to the attention of the fellows who were filling 3A and 3B at that time. But the only thing that significantly happened insofar as the sudden changing of weight would have been the reduction of _____ tons of water.

Mr. NAGY. I feel from all the calculations and all that I have done for the other board, that there was sufficient weight on that ship, and there are so many variables in the conditional loading of that ship, that I could not say that unloading those _____ had a bearing on this at all.

Mr. STRATTON. Have you ever been aware of the fact they were unloaded?

Mr. NAGY. No, sir.

Mr. STRATTON. I don't think anybody else was either.

Mr. REDDAN. They would have some effect on the trim of the ship?

Mr. NAGY. Oh, no doubt. Let me put it this way. If those _____ were blown—do you know the precise time?

Mr. STRATTON. They were blown from 8 o'clock to 8:30. It took 4 hours to fill them, and they blew them in half an hour. That is twice as much as you got in your after trim tank. Of course, that is way back there, with a lot more leverage.

Mr. NAGY. No, sir.

Mr. REDDAN. You got _____.

Mr. NAGY. _____ tons—oh, you mean, left in there?

Mr. REDDAN. Yes.

Mr. NAGY. That is a previous diagram, that we just put _____ tons in there. I understand the testimony now as it is more reliable, and they just put _____ tons and took _____ tons out.

Mr. STRATTON. After trim tank, _____. I guess that means the amount that was in it.

Mr. NAGY. Was left in it.

Mr. STRATTON. I see, all right.

Mr. NAGY. After they removed the water. But that, like I say, is the one they told me to cancel.

Mr. REDDAN. That is not the capacity of the tank?

Mr. NAGY. No, sir.

Mr. REDDAN. It is a little confusing because the whole thing is colored yellow and it says _____.

Mr. NAGY. No. The capacity of that tank is somewhere in the neighborhood of _____ tons.

Mr. REDDAN. Well, now, just to go to another point for a minute, Mr. Nagy. What offsetting effect would the filling of these two tanks back here have on the attempt to bring the bow down by putting water in your No. 3 ballast tank? In other words, they are filling, the nuclear people are filling these tanks back here at the same time the fellows are trying to bring down the bow.

Mr. STRATTON. They are putting in _____.

Mr. NAGY. Gallons?

Mr. STRATTON. Gallons here in the _____, and at the same time these fellows are trying to get the nose down by adding 3,000 gallons up here. _____.

Mr. NAGY. It no doubt lead—it could lead to confusion with some angles, but—

Mr. REDDAN. You see—

Mr. NAGY. Once again, I think the influence of this is fractions of an inch in the movement of this bow. The influence of that filling or blowing is fractions of an inch in the movement of that bow.

Now, bear in mind that 1 degree on this ship, the difference between here and here, is about 4 feet.

Mr. HUNT. One degree.

Mr. NAGY. One degree. The difference of the draft marks is about 4 feet. A half a degree, 2 feet. A quarter of a degree—

Mr. REDDAN. You mean the bow would have to go 2 feet in order to make a half a degree?

Mr. NAGY. The bow would have to go down 2 feet and the stern up 2 feet to make 4 feet.

Mr. HUNT. One degree.

Mr. NAGY. One degree, to make 1 degree.

Mr. REDDAN. Yes.

Mr. NAGY. So, how much—when you are talking a fraction of an inch, how much—you can't even read it, I don't think, in terms of degrees.

Mr. STRATTON. Putting it another way, there are two other things that intrigue in this investigation. One is the fact that this ship was supposedly brought into trim on the 13th of May, but on the 15th they find they have to retrim it. And yet, in retrimming it, one group says it is 2-degrees down and the other gang says it is 2-degrees up. Query: The fact that this blowing and filling were going on back here, what effect would that have? Relatively little, I assume.

Mr. NAGY. Let me tell you what my figures show. My calculations, given the draft marks that I was given, at 1530, at 1730, and the tank lineup, there is no way of shifting water internally without taking on water from external sources to get 2-degree up angle. You just can't do it.

Mr. STRATTON. Yes.

Mr. NAGY. You can fill this after trim tank completely full and shift all the water you possibly can aft, and the most you could possibly get is about a degree and a half up angle. I can't believe a 2-degree up angle, with this amount of water.

Mr. REDDAN. Well, the first reading was 2-degree down at the bow, and they were shifting the water aft to correct it.

Mr. NAGY. The 2-degree down at the bow—to have sunk the ship with that manhole open.

Mr. HUNT. It did?

Mr. NAGY. Earlier, when they had the 2-degree down.

Mr. HUNT. They were putting it down 2 degrees.

Mr. NAGY. That is what sunk it.

Mr. STRATTON. He reported it was 2 degrees.

Mr. REDDAN. What I am trying to say is that the day shift on the 15th in taking their measurement, reached the conclusion that the bow was down 2 degrees and, therefore, they were shifting water to the aft trim tank to offset that 2-degree down angle.

Mr. NAGY. What I am saying is that the ship would have sunk during the day shift if it had a 2-degree down angle, instead of swing shift.

Mr. STRATTON. Yes, OK.

Mr. NAGY. If that manhole was open.

Mr. STRATTON. That is a clearcut error, then.

Mr. REDDAN. It could not have been down by the bow?

Mr. NAGY. Two degrees, no, sir.

Mr. REDDAN. Two degrees. How far could it be down before it would ship water forward through those vents?

Mr. NAGY. You are going to ship water forward, once again I have to qualify everything, with the loading I have been given, at about half a degree, up.

Mr. REDDAN. Half a degree up?

Mr. NAGY. Up.

Mr. REDDAN. If they were within three-quarters of a degree of being level, then they would have only had a quarter of a degree to go before they would sink the thing, wouldn't they?

Mr. NAGY. Yes. My opinion is it was taking on water at that time, through the hole, quite a bit.

Mr. REDDAN. Now, the testimony we have is that at 2000 it was three-quarters of a degree up angle and a visual observation of the draft showed the red paint below the boot-topping to be about 6 inches, running about 6 to 8 inches above the water level.

Mr. STRATTON. What was this? At 2000?

Mr. REDDAN. At 2000, yes, when they knocked off for lunch. There was a freeboard of about a foot to a foot and one-half.

Mr. NAGY. Vertical?

Mr. REDDAN. Yes, sir.

Mr. STRATTON. If Mr. Nagy is correct, it could never have gotten down, if it was really that far.

Mr. NAGY. At 2000 it had 6 inches vertical?

Mr. REDDAN. Yes.

Mr. HUNT. By the same token, there is some testimony that as early as 1730 she was taking on water in that sonar hatch opening, sloshing in there.

Mr. NAGY. I would believe that one, slightly. I would say there was a quarter or so of water sloshing in there, because I think about that time she was 8 to 12 inches vertical distance to that hole and I think we get chops. There are things like a beach up here, you know, it doesn't take much of a chop to slosh a little over into it and I would say, it is conceivable that that could have been happening that early. But, once again, and this curve is very slow, you take on a quarter, pretty soon that quarter becomes two-quarters, then it is a gallon. At the point along here where that hole starts getting closer, when a 10-inch chop comes along and 8 inches of that water falls through when it is 2 inches from being under, you are taking on a lot of gallons per minute at that rate. We can estimate 36 chops a minute.

Mr. STRATTON. The nuclear people who were conducting this test, incidentally, were completely unaware of the fact that there was a major effort being made forward to get the bow down.

Mr. NAGY. You mean they had finished their test—

Mr. REDDAN. No, they were both being conducted simultaneously; they were still working on their tests.

Mr. NAGY. I did not know that.

Mr. STRATTON. They had finished their calibrations.

Mr. NAGY. I thought that was the purpose of the trim, was to—

Mr. HUNT. To establish a _____ or to calibrate the

Mr. NAGY. I see. I did not know that. But I do know—I was asked what the effect of the weight of those _____, filling those _____ was, and I knew it was sinking the ship.

Mr. HUNT. You estimated, Mr. Nagy, about 36 chops per minute?

Mr. NAGY. Yes, sir.

Mr. HUNT. Now, considering the fact that this had been going on since at least 1830, and that at 1945 they estimate that you are shipping water by at least half a bucket per chop—

Mr. NAGY. Yes.

Mr. HUNT. And then between the hours of 2000 and 2030 we should get another half inch by virtue of displacement on the blowing of the tanks, this would probably give you just about what you would want, wouldn't it, insofar as a forward surge? Would not, as the sub tilted, suddenly get an added impetus to pull it down at about that time, if the water shifted and ran forward? Like you are holding a pan full of water and you just shifted it a little bit and a lot of it goes forward. It doesn't take much to move it all farther.

Mr. NAGY. I see, the free surface of that water.

Mr. HUNT. Yes.

Mr. REDDAN. Yes.

Mr. HUNT. It would pull it down quite suddenly, wouldn't it?

Mr. NAGY. It could help if you got a real surge, yes.

Mr. REDDAN. Once you got below the level—

Mr. NAGY. That would just accelerate the water coming in that hatch. It might bounce back up free, but then if it bounced several times, it would just accelerate this process.

Mr. REDDAN. Once you got below the level trim, would that cause a movement of water within the tanks inside to hasten the dip of the nose?

Mr. NAGY. I don't think so. Once you got a constant flow over the lip of that axis, a radical sharp increase in gallons per minute—

Mr. REDDAN. You mean a mass of flooding as it were, through that hole?

Mr. NAGY. Yes. As compared to slosh.

Mr. REDDAN. Yes.

Mr. NAGY. As compared to the wave action of 36 per minute, of the water going in there. Now, that is fairly—well, while you get the thing close, you are still taking on a good quantity of water during each chop. But once it becomes constant, the curve really flips up and I believe, and my estimate, at least, is you get up around 250 gallons a minute at that rate.

Mr. REDDAN. How much would that forward compartment, sonar compartment hold?

Mr. NAGY. About 30,000 gallons, something like that.

Mr. REDDAN. What would the weight be of that?

Mr. NAGY. 140 tons.

Mr. REDDAN. And 140 tons on that—

Mr. NAGY. Here is something I could show you. You see, the low point here—this is the low point, of the water to get into this cavity, to get into the lip of this escape trunk and ultimately get this side of the ship. It would take—let's see—somewhere around 27,000 gallons in here to get the water to that lip. You see, it is not even quite full yet. So it is somewhere around 27,000, 28,000 gallons. But it is being helped, too, there is another hole up here. As soon as this hole gets under, I think, like I say, it is shipping at least 300 or 400 gallons probably when it is completely flooded and then when it gets up here, it is going through that one too, another hole, so it is a rapid process.

Once you get a constant flow over this hole, why, it is a matter of short time.

Mr. STRATTON. You have said here earlier, and I didn't get a chance to ask you again, we may have to go back and check the record, but I thought you said you have been asked what the effect of blowing and filling these tanks would be on the ship, itself, but I thought you said it would be enough to sink it.

Mr. NAGY. No, sir. If I said that—

Mr. STRATTON. I didn't think you meant that, but I thought that is what you said.

Mr. NAGY. I have been asked by the head nuclear power engineer, right after the accident, what I thought the effect of filling those tanks would be, and I told him that they were _____ to the center of gravity and I thought it would fairly uniformly immerse the ship about _____ of an inch, without any great angle, not creating any great angle, and I still feel that way.

Mr. REDDAN. Now, at the same time—

Mr. NAGY. I did not know about the blowing at that time. I was answering a question about filling.

Mr. REDDAN. At the same time these _____ were being filled, there was an offsetting to a certain degree, the filling of the No. 3 main ballast tank, which would cause a certain amount of lowering of the sub?

Mr. NAGY. Yes.

Mr. REDDAN. Now, with that condition and the testimony which we have that a quadrant reading showed a three-quarter of a degree up bow at 2000, what effect, in your opinion, would the blowing of these _____ tanks back here have on the nose position, on the bow position?

Mr. NAGY. Three quarters of a degree up angle. I can't possibly see how it could make any more than—other than the surge action, if there were water in that sonar hole, if it were a sudden blowing that you could feel, that would surge that water forward, I can't see where it could make any more than an eighth or a quarter of an inch on that bow.

Now, it may surge more than that, but I mean, if you had lifted it off of there slowly—

Mr. REDDAN. A quarter of a degree is what distance?

Mr. NAGY. One foot.

Mr. REDDAN. One foot.

Mr. NAGY. One foot difference between these two points.

Mr. STRATTON. Are these _____ ?

Mr. NAGY. I am sorry, sir, I don't know that.

Mr. REDDAN. _____.

Mr. STRATTON. _____. You might have a little jet action ?

Mr. NAGY. Thruster.

Mr. STRATTON. You could blow the submarine up in the air.

Well, I think we probably pretty well covered that point.

Mr. HUNT. Mr. Nagy, let me ask you one question in response to something you just said. You say you have discussed this with someone from nuclear prior to today, the possibility of the blowing of these tanks having an effect.

Mr. NAGY. No, no. I was asked the specific over the phone, I think it was the day after the accident or the Monday morning, I think, after the accident. I was acting Chief Design Engineer that day, and I had a call from the head nuclear power designer here, and he asked me specifically what effect would filling these two tanks have on the trim of the ship, and my answer to him was that I didn't think it would make a significant change to the trim, but it would immerse the ship about _____ of an inch more than it was.

Mr. HUNT. Who was it that made the call to you ?

Mr. NAGY. Mr. Carl Knudson.

Mr. STRATTON. As Mr. Reddan said earlier, these people were trying to get the ship back into balance, by flooding these tanks, as they had succeeded in doing the previous night. They seemed to be going very slowly and they weren't taking that angle off, partly because of the fact that to some extent they were being offset by the adding of the weight back here.

Mr. NAGY. Well, wasn't this water added prior to the weight coming off here ?

Mr. STRATTON. No, this water was being added at the same time the water was being added back here.

Mr. NAGY. I understand.

Mr. STRATTON. So—

Mr. NAGY. They were just sinking the ship, because they were putting it at the same distance.

Mr. STRATTON. That is right, I mean they were trying to balance it by putting up here, and they didn't know that they were being offset to some effect back here. Then all of a sudden, having put all of this weight on, the little kid gets off the other end of the teeter-totter and whamo, the effect here is greater.

Mr. NAGY. This 3,000 gallons added here, in main ballast tank 3—let me see—as compared to _____ gallons here—

Mr. HUNT. _____.

Mr. STRATTON. _____. You have _____ of them.

Mr. NAGY. _____, yes. It undoubtedly would influence the situation, yes, sir. All my calculations have assumed the _____ full.

Mr. STRATTON. Well, they were empty.

Mr. NAGY. And that there was no change to them, there was no—

Mr. HUNT. You see what happened, Mr. Nagy ?

Mr. STRATTON. Mr. Christiansen's statement was, "At about 2030 he had completed blowing down _____ and were preparing to vent _____". They started blowing about 2000.

Mr. REDDAN. And isn't he the one who stated that at that point, when they completed the blowing, they felt, he felt a definite lurch, a change in the trim, which was unnatural and caused him to run forward to find out what was going on?

Mr. NAGY. My opinion would be that this had so much water in it at that point that there was a lot of free surface and it is possible that just—it was so heavy at the bow at that point that just this slight—

Mr. STRATTON. That is right. That is the straw that—

Mr. NAGY. Would have helped the situation.

Mr. STRATTON. Broke the camel's back.

Mr. NAGY. I am not sure—I am not convinced it created the situation. It sure helped to expedite it.

Mr. STRATTON. Sure, it is a combination of a number of things.

Mr. HUNT. Under normal circumstances, it probably may not have affected it too much, but with the additional weight of water slopped in there—you see, they were filling this simultaneous with this, and these people here stopped, almost at the identical same time that they began to blow those tanks. These people stopped and went ashore to get lunch.

Mr. STRATTON. That is right, they said—

Mr. HUNT. At this time, when they went ashore, that in shop 38 men, the nuclear people began blowing the _____, and so when they came back, 30 minutes later, she was down by the nose.

But at about 2025 or 2030 is when they felt the sudden lurch, just as they had completed the _____ and begun to vent, then they noticed a slight tilt forward, quickly, and that is when she started to take on water very heavily.

Mr. REDDAN. Now, if those tanks had not been blown, even though this nose had filled up to quite an extent by that time, even a difference of a half an inch would have given them some additional time to get those hoses and lines out of there to close the watertight bulkheads. It may have been just that difference on the weight of those tanks which took away from them a 10-minute advantage, because once the massive flooding started the whole thing was gone.

Mr. NAGY. Well, there is no doubt—

Mr. REDDAN. Yes?

Mr. NAGY. Whether it was 10 minutes or not, it is hard—I would have to do some predicting about what this effect would have, and assume some condition of flooding in here.

Mr. REDDAN. Yes.

Mr. NAGY. It would be hard to put a time span on it, but no doubt it aggravated the situation.

Mr. STRATTON. You said that your calculations have assumed that these were full?

Mr. NAGY. And no delta, no change.

Mr. STRATTON. No difference?

Mr. NAGY. No difference.

Mr. STRATTON. You see, I took calculus, and that shows how much I learned. That is about all I learned in calculus, too, I will tell you that.

Well, this apparently is something that the court hasn't been aware of.

Mr. NAGY. They haven't brought it to my attention, sir.

Mr. REDDAN. Unless somebody comes up with a better idea, this is it.

Mr. STRATTON. Well, I don't think we have any more questions, do we?

Mr. HUNT. No, I don't think so.

Mr. STRATTON. Can you leave this, or is this your only copy?

Mr. NAGY. No, sir. You can have that.

Mr. STRATTON. If you want to make some more computations on this that you feel would be helpful, we would be glad to get whatever you have there, Mr. Nagy.

Mr. REDDAN. After you complete your computations based upon these tanks being empty, if you could send them to us with an explanation of how you interpret this and what your conclusion are——

Mr. NAGY. Well, like I say, just emptying the tanks themselves, I don't think too much of that. I am going to look at how they are blown. If it takes 30 minutes to blow them, I wouldn't imagine there would be too drastic a surge. I can't think of that thing causing a surge.

Mr. STRATTON. Obviously somebody thought of this and called you up, and when you told them it wouldn't have any effect that was the last it was heard of. But apparently, nobody has brought it up and nobody has mentioned it. It sort of eased their consciences. But the idea of conducting a major effort to trim the ship at the same time somebody else in another part of the ship is going ahead filling and blowing _____ tons of water is just insane, without one side knowing what the other is doing.

Mr. NAGY. I have to agree with that.

Mr. STRATTON. And on top of that, to have a hole about 6, 7 inches off the waterline, with wild motor boats up and down the river——

Mr. NAGY. Well, I will try and do a little bit more on predicting what might have occurred, but I certainly agree that these two people should have known and not canceled each other's work out, which essentially they were doing.

Mr. STRATTON. Right.

Mr. NAGY. But I still feel that the effect of blowing that thing——

Mr. HUNT. Mr. Nagy, if they were canceling each other's work out, then there must have been some side effect when they blew those tanks?

Mr. NAGY. That is right.

Mr. HUNT. Because nothing from nothing leaves nothing.

Mr. NAGY. I certainly agree with you, that if I can take and if I can put 3,000——

Mr. HUNT. And balance it with that?

Mr. NAGY. That is right.

Mr. STRATTON. You don't deny that the ship sank?

Mr. NAGY. No, sir.

Mr. REDDAN. At that critical point, it doesn't take much to reach the difference between flotation and massive flooding?

Mr. NAGY. Yes, sir.

Mr. STRATTON. Unless there is something else that occurs, the only alternative is that this helped to trigger it, or else that you just had a gradual building up of sloshing to the point where it finally built up enough weight to turn it. This added weight at this particular point, of course, would be much more effective than weight back there, but

this is coming in at half a bucket a throw and that is coming in at _____ tons.

Mr. HUNT. Originally at a bucket a throw, and as Mr. Nagy pointed out, with the nose being on a slope like a beach—

Mr. STRATTON. Right.

Mr. HUNT. 36 times per minute, then the intake at that point would become gradually greater.

Mr. STRATTON. Yes.

Mr. HUNT. Until you reached the point of where by displacement of _____ ton, you may have finally unbalanced to a half an inch or 2 inches, whatever it might be, and that was the ballgame.

Mr. REDDAN. In your computations, Mr. Nagy, could you make estimate of how the blowing of these tanks, these tanks being empty, at 2030, how that might have accelerated the massive flooding through the large opening? I feel sure that the thing would have sunk even if these tanks had remained full.

Mr. NAGY. No question about that.

Mr. REDDAN. But if you can, if you can determine, how the blowing of these tanks did accelerate the flooding, thinking in terms now of how much additional time might they have had. The watch was coming back just as the *Guitarro* started to sink. If they had had another 10 minutes, they might have saved the ship. I am just wondering how critical that blowing was.

Mr. NAGY. About all I could do is, would be: I could take a small amount of water that I think was flowing into the ship at that time, or not a small amount, quite a large amount at that time.

Mr. REDDAN. Quite a bit would be coming in here.

Mr. NAGY. This is full at that time.

Mr. REDDAN. Oh, I see.

Mr. NAGY. I am sure.

Mr. REDDAN. Yes.

Mr. NAGY. And it is filled up to here and flowing into the ship, through, over the lip of this access hole. Now, all I can do is lift this at that time and see what the flow increase might be there and give you some horseback estimate, but I think—from the time that the water got to that lip to the time it was spilling into operations compartment and they couldn't close that door was less than 9 minutes, I would say, with that hole dome full.

Mr. REDDAN. Now, with the hole dome filled with water, no more weight is being added to this particular area of the ship?

Mr. NAGY. No, but it is being added forward, inside the ship.

Mr. REDDAN. No, but this is a watertight bulkhead which separates—

Mr. NAGY. No, this has holes through here. There are holes into this cavity here, by this path right here.

Mr. REDDAN. This is different from the testimony we were given. So maybe we better get this straightened out.

Mr. NAGY. I will show you how it gets through there.

Mr. STRATTON. That is outside the pressure hull, in other words?

Mr. NAGY. Here is the hole we are talking about.

Mr. STRATTON. When was this? Was this taken before she went down?

Mr. NAGY. After she came up.

Mr. STRATTON. I see.

Mr. NAGY. This is the hole we are talking about. Here is another hole that they had into there for a construction access. It is marked on that. Here is a hole into a line locker. There is a hole in here into this—this is a cavity space around this trunk.

Mr. REDDAN. Yes.

Mr. NAGY. So these main ballast tanks come up and wrap up to this point and then there is just a cavity, free-flooding cavity space where this trunk sits in here. There is a sonic buoy here. There is a line locker here. Now this line locker opening is right in here.

Mr. REDDAN. Can the water come from here—I am indicating the area around the sonar sphere—and get back into the ship itself?

Mr. STRATTON. Back into the free-flooding area.

Mr. NAGY. The answer to that question is it can, but the holes are very small. It would go through the rope locker first, because the lip of the rope locker is lower than the holes in this bulkhead. There are two vent holes, and I think a hole with some electrical cables running through it.

Mr. STRATTON. How big are the holes you are talking about?

Mr. NAGY. Very small, 1 inch, something like that. Maybe the hole that has electrical cable going through it might be a 2-inch hole. It is just a clearance hole. But the lip of the rope locker is lower than these holes, see.

Mr. STRATTON. Yes.

Mr. NAGY. I think you can appreciate that from here, because these holes are up in here. This is the low point of it, to get into the cavity and the next point is to get in here. There is only 5 inches of difference between—

Mr. STRATTON. This is the bell, or whatever it is?

Mr. NAGY. This is the forward escape trunk, and this is the side access. From this point here to the lower point of this line locker or rope locker is only 5 inches, 6 difference.

Mr. STRATTON. I think you said that if the ship got to within a half a degree of being exactly trim, you said earlier, the water, the ballast would then tend to shift forward, is that what you meant?

Mr. NAGY. No, sir. I said if the ship under the conditions that have been given of tank loading and water and draft readings, that if the ship got within half a degree of trim, that that access hole would be right at the lip.

Mr. STRATTON. Oh, I see.

Mr. REDDAN. It would flood then.

Mr. STRATTON. I see. I see. Well—

Mr. NAGY. It is pretty close, a half, maybe four-tenths of a degree, somewhere in there.

Mr. STRATTON. Yes.

Mr. NAGY. That lip's going to go under.

I think you have really been very helpful, Mr. Chairman.

Mr. STRATTON. Fine. I guess that is it. Do we have any more, Mr. Hunt?

Mr. HUNT. Not me. Thank you.

Mr. STRATTON. Thank you very much, Mr. Nagy.

Mr. NAGY. I am only upstairs and if I can help you in anyway, be glad to.

Mr. STRATTON. You have been very helpful.

Mr. NAGY. You want to keep this? You can have it if it will do you any good.

Mr. STRATTON. Why don't we hang on to it. It will come in handy.

Mr. HUNT. You will prepare that information for committee?

Mr. NAGY. I better make sure. I will do two things. I will consider the effect of simultaneous filling in of about 3,000 gallons and filling _____ tanks with _____ gallons simultaneous operation.

Mr. REDDAN. Yes.

Mr. NAGY. To see how one offsets the other.

Mr. STRATTON. And then determine what happens when the _____ are eliminated.

Mr. NAGY. And that is going to be kind of a wild one, probably, because I don't know what the status of the sonar tank is, but I will try and find out as much as I can and do the best I can with it.

Mr. REDDAN. All right. Thank you so much.

Mr. STRATTON. Thanks a lot.

(Discussion off the record.)

Mr. STRATTON. Mr. Nagy, let me make just one more statement. As I see this situation, the critical problem is the tilt of the ship and what factors were bearing on the tilt of the ship as of 2000 or 2030, on the 15th of May. Your calculations have been based on the idea that the _____ were full and as a matter of fact, the _____ as of 2030 were empty.

Therefore, the difference between the real situation and the situation involved in your calculations, insofar as the factors tending to tilt the boat forward, represent not _____ tons but _____ tons, just the same way.

Mr. NAGY. No. sir.

Mr. STRATTON. Just the same way in which I as a Democrat running for office, if I can get a Republican to vote for me, it is not one vote, it is two votes, because I take a vote away from my opponent and I get one myself. And when you assume that you had _____ when you assume you had _____ tons of water weight back in the _____ and it turns out that you have none, the actual difference _____

Mr. NAGY. No, sir, I don't agree. And here is why I don't agree. I would agree with you if I had assumed that we had filled the _____ in my calculations and then, when in fact, I should have figured that we emptied them, then I would agree with you, but I did not assume that we had filled them during that time. I assumed they were full when I took my draft readings, so, therefore, there is no change to those tanks. The only change was the emptying of them.

Mr. STRATTON. All right.

Mr. NAGY. Okay?

Mr. STRATTON. I think you are right; yes. I was convinced I had a point there, but I think you are correct. It is still only a difference of _____ tons.

Mr. NAGY. Yes, sir.

Mr. STRATTON. Okay, thank you. I am sorry to bring you back again.

Mr. NAGY. No problem.

Mr. STRATTON. Mr. Rose, sorry to keep you waiting so long. We will try not to keep you long. We want to begin, first of all, by simply telling you what we are trying to do.

We are not running ourselves a court of inquiry, of course, to try to pin anybody or to pin any responsibility. We are simply trying to find out what happened and try to make some recommendations for avoiding it in the future.

Because there is a court of inquiry going, our Chairman requested that we swear the witnesses before our subcommittee, as they have themselves. Under the rules of the house we have to inform you that when witnesses are sworn, you have, first of all the right of counsel if you so desire and secondly, of course, you have the right not to answer any questions where the answer might tend to incriminate you, the fifth amendment.

These provisions we have to insist on to make sure everybody realizes that Congress is conducting hearings fairly and with proper protection for everybody that appears before them. Actually, all of the witnesses who have appeared have elected to waive their right to counsel, from the admiral on down. If you desire to waive that right as well, we can then proceed to swear you in and ask you the few questions we have.

TESTIMONY OF HYMAN ROSE, PROJECT MANAGER FOR U.S.S. "GUITARRO" AND U.S.S. "HAWKBILL," SAN FRANCISCO BAY NAVAL SHIPYARD, MARE ISLAND, VALLEJO, CALIF.

Mr. ROSE. I waive that right.

Mr. STRATTON. All right. Fine.

Do you want to just stand and raise your right hand, please.

Do you solemnly swear the testimony you are about to give before this subcommittee on the matters under consideration shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. ROSE. I do.

Mr. STRATTON. Thank you. Could you give your full name to the reporter, please, Mr. Rose.

Mr. ROSE. My last name is Rose—R—O—S—E. My first name is Hyman—H—Y—M—A—N.

Mr. HUNT. Do you have a middle initial, Mr. Rose?

Mr. ROSE. No, sir.

Mr. STRATTON. How long have you been with the shipyards, Mr. Rose?

Mr. ROSE. Pretty close to 30 years.

Mr. STRATTON. And you are the project manager for the *Guitarro*?

Mr. ROSE. And the *Hawkbill*.

Mr. STRATTON. And the *Hawkbill*. And how long have you been in that position?

Mr. ROSE. About a month.

Mr. STRATTON. Could you give us a little idea of what the responsibilities are of a project manager as contrasted with the ship superintendent, for example?

Mr. ROSE. The project manager duties are defined in a Naval Shipyard, Mare Island notice, which I gave to the other board, and specifically, the duties are to coordinate and report. I have no responsibility of directing people to do their jobs which they are assigned to do. This is not the intent of the project manager. We try to herd the

people together, you know, make them improve schedules, identify any problem areas and so forth.

I could get you a copy of that instruction, which is more explicit. You may want to have it for your record as an exhibit, if you so desire.

Mr. STRATTON. Can you readily quote the number or anything of that kind?

Mr. ROSE. I believe it is—I will get it. 5,450 of March 1969. Why don't you just take a copy of this and mark it whatever exhibit you want. That is the one that assigned me as a ship project manager.

Mr. HUNT. Thank you.

Mr. STRATTON. It also, as I understand it, involves making some studies and recommendations with improving cost consciousness, effectiveness, and so forth.

Mr. ROSE. Yes, sir. As a matter of fact, my job previous to this one was the new construction, type desk. If you are not familiar with the term, this job relates to the entire new construction and conversion program of the shipyard and it deals with finances, plans, material.

In essence, I was a project manager there, if you really wanted to consider it a project manager. This job here is a different facet. It is a new concept, which shipyard commanders have agreed was necessary and particularly our admiral, who, I might mention, since he has been here, has done a terrific job of trying to improve our new construction costs, and in putting the right people in these key positions to improve our delivery dates and, of course, in improving delivery dates, it follows that you will reduce ship's costs. So he has done a tremendous job. It is unfortunate this accident happened. That could, well, sort of, dilute the project manager concept. You know, it casts a little shadow on everything we are doing, which is not the case, unfortunately.

I hope I can get this across to you during my discussions with you, that we are a good shipyard, we have dedicated, loyal, hard-working Americans at this base. What has happened is an accident and should not be, if I may say so, it should not cast reflection on all the people that have done a good job over the many years.

Mr. STRATTON. In your brief time in this job, did you identify any particular problem areas with respect to the *Guitarro* or the other ship?

Mr. ROSE. I was in a rather peculiar position in this job because I happened to have worked the new construction program for many years, and there are problems in shipbuilding that all shipbuilders have. The biggest problem in all shipbuilders' organizations is having an efficient means of reporting problem areas. And I had noted one area that needed improvement. I had been at the very beginning of my assignment, I associated myself with the Nuclear Power Division. It was an area that I always had respected, the way they operated, and I wanted to learn the minute details of how they operated, in the hopes that I can take some of their ideas and sort of cross fertilize it with the nonnuclear areas.

I saw a need for several improvements. This doesn't necessarily mean that there was an area, nonnuclear segments, that was not being tended to properly. I was just of the mind where I was always improving things, you know, betterment, based on what my experience was, improvements in systems, improvements in peoples' efforts and that sort of thing.

Mr. STRATTON. How would your job compare with that of the ship superintendent?

Mr. ROSE. I am not a superintendent, but my job is just akin to what he was doing. Actually, we are trying to achieve the same results, but ship superintendent mainly concerns himself about the ship under, or the work under his cognizance. He just concerns himself about the non-nuclear areas, whereas they have another ship superintendent who concerns himself about the nuclear areas. I, in fact, concern myself on the whole ship concept, that takes in the plans, the material, everything that had to do with the progress of the schedules. My aim and I guess the real reason I was put with this ship was twofold.

One was because of the fact that the commanding officer of the ship needed somebody that he could go to, a single source of information, rather than going through various and sundry individuals and getting a status. I served that one purpose. The other purpose I served with my background is to try to improve delivery of the *Guitarro*. We had planned to deliver the *Guitarro* on the 31st of January, excuse me, the 31st of December and early January. That is what our official yard reports reflect. However, we were shooting for November 17, which we had thought was attainable, because in this particular ship our performance was better than the last three ships. We were getting ready for hot _____; that is, _____ operations. As I said, we were building the other three ships and we felt that we could attain the November 17 date. So I felt that I made a contribution here because I would come here at night, you know, and talk to people and see somebody really working hard and I would thank him and tell him how much the management appreciates the efforts.

And, strangely enough, a man said to me, you know, you are the first white hat that ever come out here and gave me a pat on the back. The guy almost killed himself. It is working out. I try to get the message to the people and show an appreciation of what the people are doing, and it did reflect on their performance.

Mr. STRATTON. The superintendent for the *Guitarro* was a Mr. Lampson?

Mr. ROSE. Yes, sir.

Mr. STRATTON. And then was there another nuclear superintendent?

Mr. ROSE. Yes, sir.

Mr. STRATTON. On the *Guitarro*?

Mr. ROSE. There are two superintendents.

Mr. STRATTON. Who was the other one?

Mr. ROSE. A Mr. Brackney, Warrant Officer Brackney. He comes under code 340 cognizance. It is production department, also.

Mr. STRATTON. Did you ever get the impression that there were so many different areas of command that nobody really had much responsibility or authority for the ship, particularly but not exclusively the fact that you have these two branches, the nuclear and the nonnuclear, and you have a variety of different shops with their own leadmen.

How does anybody ever pull this all together? It is a maze to somebody coming in from the outside.

Mr. ROSE. As I told you earlier, the Nuclear Power Division holds the plan-of-the-day meeting. I attend that every morning at 7:30.

Mr. STRATTON. You do attend it?

Mr. ROSE. Yes, sir. They also have a plan-of-the-day meeting at 4 o'clock in the evening. They have——

Mr. STRATTON. You attend that one, too?

Mr. ROSE. Yes, sir. I am here all the time.

Mr. STRATTON. Did you attend the plan-of-the-day meeting for May 15?

Mr. ROSE. Yes, sir.

Mr. STRATTON. What was scheduled for the Nuclear Division, do you remember?

Mr. ROSE. I have a copy of the plan of the day for that particular time, which I will be glad to give you as an exhibit. It spells out in detail what was planned for that day. So I don't have to rely on memory or suppositions. But I do recall one specific thing that had to be done, and that was performing certain events leading toward the successful conclusion of the _____ operations, a particular test.

Mr. STRATTON. You know what that test was?

Mr. ROSE. It had to do with _____ and so forth. I think you can get it from the person who was performing the test, a little more eloquently.

Mr. STRATTON. It had to do with filling and calibrating, did it not?

Mr. ROSE. Yes, sir.

Mr. STRATTON. And then blowing them out?

Mr. ROSE. Draining.

Mr. STRATTON. Pardon me?

Mr. ROSE. Draining.

Mr. STRATTON. Yes. I think the term "blowing-out" was used here. Do you remember what time of the day that was supposed to be scheduled for?

Mr. ROSE. In the late hours. They had, if I recall, performed one of the tests and it wasn't successful and they were, I think—let's say—I am just guessing, by going back now, but I think this was the third try. I guess they had that—I don't really——

Mr. STRATTON. But it was scheduled for the swing shift, wasn't it?

Mr. ROSE. I believe so. But, as I said, it would be better if I gave this plan-of-the-day agenda.

Mr. STRATTON. I would be interested in it. But I think——

Mr. ROSE. Swing shift was a time which it was being done.

Mr. STRATTON. All right.

Mr. ROSE. That was the time when this accident occurred.

Mr. STRATTON. Of course, if you weren't aware then, you are aware now of what was happening with respect to the nonnuclear section on the swing shift, aren't you?

Mr. ROSE. Be a little more specific, please. I was aware of what was happening—in what areas?

Mr. STRATTON. You are familiar with what was the major job being carried on by the nonnuclear personnel during the swing shift, aren't you?

Mr. ROSE. Sir, if I could tell what was going on in the other parts of the ship, I would have been very delighted.

Mr. REDDAN. Didn't they discuss this at the meetings that you attended in the morning and afternoon?

Mr. ROSE. Not in the nuclear areas.

Mr. STRATTON. I am talking about nonnuclear.

Mr. ROSE. I said I was seeking the list of incompleated work in the nonnuclear areas. This was one of my programs.

Mr. STRATTON. Well, wasn't this plan-of-the-day meeting devoted to conveying the information that the nuclear division wanted the ship brought into trim?

Mr. ROSE. Yes, sir.

Mr. STRATTON. Again——

Mr. ROSE. But they have, the nuclear division has shop 38 personnel under their cognizance, that details what has to be done, trim the ship.

Mr. STRATTON. This was also going to be carried out on the swing shift, was it not?

Mr. ROSE. This is one of the things, the one that happened; yes, sir.

Mr. STRATTON. Did anybody point out at that meeting that if you were going to try to trim the ship, it was a heck of a time to start filling and blowing tanks in some other part of the ship?

Mr. ROSE. Absolutely not.

Mr. STRATTON. Isn't this the kind of thing that somebody in a position to see the ship as a whole ought to be able to see?

Mr. ROSE. Let me give you a little information that may help you in your questioning of me. As I said, I had a pretty good handle on what was going on in the nuclear areas, workwise, scheduling. Pretty well defined. But if you will, I was seeking information that was forward and aft of the reactor compartment, of what work, planned work and unplanned work, that had to be done.

As a matter of fact, I had called a meeting, when I first got the job, I had called a meeting with the principal individuals concerned with the nonnuclear areas and asked them to expedite or accelerate the habitability specs of the ship and also to expedite the internal subsafe audit of the ship. My reason for doing this is that I wanted to shake out any of the deficiencies that existed on the ship that required corrective action. Work can be defined in deficiencies in two categories, that work which has not been started yet, such as testing of systems, and that work that has been started but remains incomplete, such as the sonar dome area and some TR-155 transducers that required replacement.

Now, the reason that those transducers required replacement is that we had received the signal from Navships that certain transducers manufactured by a certain company were defective.

Mr. STRATTON. I don't want to interrupt you here, Mr. Rose, but we are short on time, and I think we are going to have to try to cut it down a little bit.

Mr. ROSE. OK.

Mr. STRATTON. We just can't cover all of these things. It is just too vast.

Mr. ROSE. All right, let me go back then——

Mr. STRATTON. Are you trying to tell me when you went to the plan-of-the-day meeting, the nuclear people made it fairly clear what they wanted to be done but the nonnuclear people didn't, for some reason or other.

Mr. ROSE. They don't have a similar type of reporting system of work that had to be done that particular day. They have a system

that reports on the sheet status once a week. I don't personally, it is my own opinion, don't think that is satisfactory to me as a Project Manager, because I would like to know what work is being done, particularly important work. I don't want to know about small items. I need some sort of a program, just like the nuclear power people have, and I would like to have this type of information available. I attend these meetings, so I know what the problem areas are.

Mr. STRATTON. So it was difficult even for you, as the project manager, to have a clear, overall picture of what was going to go on in the ship in any particular day?

Mr. ROSE. Yes, sir, as a matter of fact, I was working on this problem, I and the captain both. We pursued this with such vigorousness that we did receive a concurrence, after this big meeting I had held, from the production department to compile a list of the deficiencies and the incomplete work which would have been available to me at the end of June.

Mr. STRATTON. I think in your message, Mr. Reddan, you asked you be given such a list. It would be interesting to me how you made out. Did you get that list?

Mr. REDDAN. What was that?

Mr. STRATTON. Did you get that list of the work scheduled and completed?

Mr. REDDAN. Yes.

Mr. STRATTON. Who has responsibility for the safety of the ship?

Mr. ROSE. Well, the responsibility is shared by everybody that goes on board ship, but so far as the instructions are concerned, the production officer has the responsibility, and he delegates that responsibility for the safety and security of a ship not in commission, which is assigned to shipyard for construction, conversion or activation, it is the responsibility of the assigned ship superintendent from the time of arrival through the period of construction or availability preceding commissioning.

I cite to you the production department instructions 5500.10, of May 24, 1967.

Mr. STRATTON. Your answer, then, is that the ship superintendent has the responsibility for safety?

Mr. ROSE. He is one of the people. There are also safety inspectors who tour the ship for personnel hazards. I consider an open manhole, such as the area over the sonar dome, a safety hazard.

Mr. STRATTON. That is what I was thinking of. Did anybody take any responsibility for pointing that out? Why is it everybody's responsibility usually ends up in being nobody's responsibility; isn't that correct?

Mr. ROSE. Perhaps one step in the right direction is that each supervisor is given a set of instructions to acknowledge that he has read them.

Mr. STRATTON. Well, if the supervisor is in charge of the safety of the ship, who is in charge when the supervisor goes ashore, when he goes off the base?

Mr. ROSE. Every man wouldn't stick his finger in a socket and see if there is any juice there. First basic requirement for safety is in the individual. If a man opens a manhole, if he has worked in a shipyard for any length of time, he is well aware of the fact that a manhole

has to be protected by a handrail or a coaming around there. A man also, in opening a manhole, or a supervisor, for that matter, when he opened an area that has a freeboard of 2 feet and putting coamings on that particular location in the past, would have had the moxie to put the coaming on, or make some provision to shut the thing at the close of working hours or some other means.

Mr. REDDAN. If he didn't, what would be your conclusion?

Mr. ROSE. If he didn't, my conclusion could be any number of things. I could consider giving the man the benefit of the doubt, by having him say the manhole was closed and somebody with a spanner wrench or a crescent wrench could come along and open the thing up.

Mr. HUNT. Stop right there, Mr. Rose. Why would anybody come along with a spanner wrench to remove some nuts from three-quarter studs?

Mr. ROSE. I have been in the shipyard for many years.

Mr. HUNT. I am a construction man.

Mr. ROSE. And I have seen on new construction ships, where you don't have a crew on board, where they are checking an interphase. Say you are going to do some welding on a tank on the other side or you are not going to make a weld against a bulkhead without checking the other side. So a man will say, "I have to check it to see if that tank is gas free, and so forth," so he makes a check. To my knowledge, he won't go out and tell somebody. He would just open up the tank.

Mr. HUNT. You mean this man, of his own volition?

Mr. ROSE. Possibly, yes.

Mr. HUNT. Remove the hatch plate on the sonar hatch, for the——

Mr. ROSE. If you want to say sonar, let's say it.

Mr. HUNT. That is what it is, it is the sonar hatch, that first projection there, that first aperture.

We heard in here during the testimony that one department who wants that removed has to have another department remove it for them.

Mr. ROSE. (Nods).

Mr. HUNT. Is this true?

Mr. ROSE. This is the way it is supposed to be. The job order specifies shop 11, that is the structural shop, shall open and close manholes for the shop that wants to get in there. But my point in telling you of a situation that could occur, after a man opening a manhole on the other side to do some work.

Now, the cognizance of opening manholes lies with shop 11, the structural shop, but as I mentioned, in the many years I have been in the shipyard, building a ship on the waves, many things could happen, you know, in the urgency of doing a job.

Maybe in the case of a machinist wants to get in there and he can't find a shop 11 man, and he is the type of a man that wants to get the job done in a hurry, so he is not proud, he will open the manhole.

Mr. HUNT. Mr. Rose, going back to ship safety, I think you indicated in response to Mr. Stratton's question that the ship superintendent was responsible for the ship safety?

Mr. ROSE. Yes, sir.

Mr. HUNT. In other words, he is the man directly responsible?

Mr. ROSE. Yes, sir.

Mr. HUNT. We can delegate authority, but we can't delegate responsibility, is that correct?

Mr. ROSE. That is what the instruction says.

Mr. HUNT. So in the long run, in the ultimate conclusion, we say who is responsible for ship's safety, we come down to one man and he is the ship superintendent?

Mr. ROSE. Yes, sir; he is the focal point.

Mr. HUNT. Now, bearing in mind that we have two ship superintendents, are they both equally responsible on this question, such as Mr. Brackney and the man who has nuclear, and the other superintendent who has the nonnuclear? Are they coequal for the ship safety, or does one supersede the other?

Mr. ROSE. I can't really answer that question because if you applied a case of theory, theoretically, nuclear power wanted to perform a test. So they have the responsibility for trimming the ship, you know, what provisions have been made.

So you say, well, he is the causation factor. He caused it, because he wanted the test done. But the area in which the manhole was located, the offender, was some other person's responsibility. So, in this particular case, it would take a Philadelphia lawyer to say who was responsible. I couldn't answer the question.

But the fact remains that there are two different pieces of work going on. And we must remember one other facet here, that we haven't hit upon, and that is the test conductor, the test group. He has the responsibility of assuring that the tests they are about to perform, that all considerations have been made and are ready for the performance of that test.

Mr. HUNT. There is a new factor. Know who it is? Who was the test conductor on the 665?

Mr. ROSE. This was a 2,302, that particular facet. Let's see if I remember his name.

Mr. HUNT. Test conductor?

Mr. ROSE. Christiansen, I believe.

Mr. STRATTON. This is the nuclear thing? This is what we went through before.

Mr. HUNT. Yes, we have that one. Mr. Christiansen.

Mr. ROSE. Now, there is another instruction to all shipyard testing—

Mr. REDDEN. Excuse me, Mr. Rose. Are you saying, then, Mr. Christiansen should have known everything that was going on on the 665 when he was conducting these calibration tests on May 15?

Mr. ROSE. I think he should have been aware what was going on; yes, sir.

Mr. REDDAN. He should have been aware of any other activity on the ship at the same time which in any way conflicted with or interfered with—

Mr. ROSE. I think the responsibility is shared by the ship superintendent, who attended the plan-of-the-day meeting. I don't know if he was there that particular day, but he usually attends these things.

Mr. HUNT. Do they keep an attendance list of those who attend?

Mr. ROSE. No, sir.

Mr. HUNT. Each day?

Mr. ROSE. No, sir, they don't. They do keep the particular schedule of events that took place that day.

Mr. HUNT. As to who attended, you have no record of that?

Mr. ROSE. No, sir.

Mr. STRATTON. Well, I asked a question here, Mr. Rose. If I can come back to that, as to who is in charge of the ship or who is responsible for the safety when the ship superintendent is not here in the yard. You answered me by saying, well, everybody has to assume a certain amount of responsibility. That certainly isn't what happens when we take a ship to sea. When we take a ship to sea, the captain is responsible and if the captain is not on the bridge, somebody else is up there exercising the responsibility. When the ship superintendent walks off the yard, as far as I can see, nobody is really in charge.

Mr. ROSE. No, sir. They have a superintendent on each shift.

Mr. HUNT. A ship superintendent on each shift.

Mr. STRATTON. That is contrary to what we have been told.

Mr. ROSE. I have been here on the swing shift, and I have seen the ship superintendent. So I don't know what you have been told.

Mr. STRATTON. Who are the superintendents for the *Guítarro* then?

Mr. ROSE. All right. There was a Mr. McKay on the swing shift.

Mr. STRATTON. This is the swing shift?

Mr. ROSE. Yes, sir.

Mr. STRATTON. Well, how could he do this job if nobody knew he was the fellow that was in charge?

Mr. ROSE. I can't answer what everybody else told you. I just know they do have a ship superintendent on the swing shift.

Mr. HUNT. Do you know his first name?

Mr. ROSE. No, sir.

Mr. STRATTON. Well, you are familiar with below-decks watch standers, aren't you?

Mr. ROSE. Yes, sir.

Mr. STRATTON. You know who they report to?

Mr. ROSE. Watch standers—anyway the watch stander reports to the ship superintendent. He also has other responsibilities, but he notes problem areas.

Mr. STRATTON. He reports to a telephone extension, doesn't he?

Mr. ROSE. No, they have telephone lines, but they usually contact the 38. OK. Now, when I read to you the instructions 5500.10, it says that they are responsible to the ship superintendent for safety of the ship. It further goes on to say that the ship superintendent will request the establishment or disestablishment of below-deck security watch from the service group superintendent, code 351, as the situation dictates.

Mr. STRATTON. That is Mr. Martinez?

Mr. ROSE. Martinez.

Mr. STRATTON. The ship superintendent can take the watch standers away from Mr. Martinez control, is that what it says?

Mr. ROSE. It says that he will get the watch standers from the service group.

Mr. STRATTON. Oh.

Mr. ROSE. And the point I have highlighted here, you said, who does he inform. In this particular instruction, it states that he will inform the production department duty officer of any actions to be taken that will decrease the overall safety or security of the ship.

Mr. STRATTON. Who is "you"?

Mr. ROSE. Pardon?

Mr. STRATTON. Who is "you"? You say, you will—

Mr. ROSE. No. This says the ship superintendent will, and that is item F of this instruction, and this below-deck—

Mr. STRATTON. There wasn't any ship superintendent around the *Guitarro* on the evening of May 15. We had this whole ship with millions of dollars of effort entrusted to one W-5, who was trying, as far as we can see, to do a good job, but didn't have anybody to back him up.

Mr. ROSE. Who is this W-5?

Mr. STRATTON. This is the watch stander.

Mr. ROSE. It that what he is, a W-5?

Mr. STRATTON. That is right. That is not very high in the hierarchy, is it?

Mr. ROSE. They are helpers. When I came here that night—

Mr. STRATTON. Is that the best kind of guy to entrust this sort of a ship to?

Mr. ROSE. Well, that is a matter of conjecture, the best guy. I mean, just because a man is low paid, that doesn't necessarily mean that he is not intelligent to carry out and assignment.

Mr. STRATTON. You are not going to get anybody to do a responsible job at low pay. Are you familiar with the first paragraph of this instruction for below-deck watch standers?

It says, "The importance of your responsibility as a ship below-decks watch-stander can't be overestimated. Many millions of dollars worth of equipment and material as well as months of work have been put into this vessel and at times the vessel will be solely under your vigilance."

When the ship gets to sea, it is under the captain's vigilance, but here we put it under the vigilance of a W-5. Did this ever bother you at all as a coordinator?

Mr. ROSE. Congressman, there is a lot of things that bothered me in my life, but I can't lay down on the floor and gnaw table legs, but I think, to straighten out, you must—

Mr. STRATTON. We are just trying to get the picture, that is all, Mr. Rose.

Mr. ROSE. I will give you the picture here.

Mr. REDDAN. Did this bother you, Mr. Rose? The Chairman has just—

Mr. ROSE. No, it didn't bother me because I felt that the shop heads who selected these people made the wise decisions as to who they put on the job. Going back to the below-decks safety watches, you must remember that the below-decks safety watches are either assumed by the yard forces or by the commissioned ship's preconditioning crews and these preconditioning crews who take the below-deck watch are seamen, equal to, what did you call him, a W-5.

So they are entrusted with the safety of the ship.

Mr. HUNT. But, Mr. Rose, they are under supervision of a responsible officer, either in the petty officer class, or else they are under the direct supervision of a commissioned officer. What we are trying to establish here is why do they put this or entrust this entire situation to the care of a below-deck watch stander? And if they do place him

in this position, where was Mr. McKay on the night of May 15, who seems now to have bobbed up out of nowhere, whom we never heard of before?

Mr. ROSE. Maybe we better ask Mr. McKay if he was a ship superintendent at night. I don't know. Going back to your question about competent people, the instruction further says that the responsibility of service group superintendent, 351, Mr. Martinez, will be as follows:

He will assign competent, capable, and qualified individuals to the below-deck security watch.

Mr. REDDAN. It wouldn't have said incompetent and incapable, would it?

Mr. ROSE. No, sir.

Mr. STRATTON. He didn't even bother to train them or to find out whether they were checked out.

Mr. ROSE. This is something that I am not——

Mr. HUNT. Didn't Mr. Martinez write that?

Mr. ROSE. I don't know who wrote it, to be frank with you. It was written by code 310, and that represents the shipbuilding superintendent.

Mr. STRATTON. I would like to get on with the questions, because we do have a number of other witnesses.

Do I understand that your testimony, Mr. Rose, is that you were not aware of the fact on the 15th of May, in spite of your attendance at the plan-of-the-day meeting, that at the same time certain efforts were going to be made to shift ballast and trim the *Guitarro* by the boys in shop 38, that there was also a filling and a blowing of tanks in the nuclear section of the ship?

Mr. ROSE. I don't understand your question. Are you telling me I should know everything.

Mr. STRATTON. I am just asking you the question. Did you or did you not know as a result of having attended that meeting?

Mr. ROSE. I attended the meeting and knew what they were going to do. But that is not my responsibility.

Mr. STRATTON. I didn't say it was. I am just wondering whether you acquired that information.

Mr. ROSE. I told you earlier that I acquired the information that they were going to trim the ship.

Mr. STRATTON. And you also were familiar with the fact that they were going to be conducting certain filling and blowing of the _____ in the nuclear section?

Mr. ROSE. That is part of the nuclear work events.

Mr. REDDAN. Did you learn that?

Mr. ROSE. At the meeting?

Mr. REDDAN. Yes.

Mr. ROSE. Yes, sir. They discussed it, if memory serves me correctly.

Mr. STRATTON. If you were charged with trying to trim a ship, would you like somebody to be filling tanks and blowing them out while you were engaged in this operation at the same time?

Mr. ROSE. I would say that we have one test conductor on a ship——

Mr. STRATTON. Just answer the question for me, would you please?

Mr. ROSE. Repeat your question, please.

Mr. STRATTON. If you were engaged in trying to balance and trim a ship, would you like to have somebody else, somewhere else on a ship, filling and blowing tanks while you were trying to trim the ship?

Mr. ROSE. No, sir. I mean, this is an evolution that requires minute control.

Mr. STRATTON. That is right. And yet this is what went on, on the *Guitarro*, and the swing shift on the 15th of May, and the people who were conducting the ballasting were not aware of what was going on in the nuclear section and the nuclear boys were not aware of what was going on forward.

Mr. ROSE. No——

Mr. STRATTON. I am telling you this as a statement.

Now, I am trying to find out whether you, as the result of having gone to that meeting, were aware of this conflict?

Mr. ROSE. It seems to me that the trimming of the ship was in behalf of the nuclear power people.

Mr. STRATTON. It may have been in behalf of the nuclear power people——

Mr. ROSE. And they had the tanks filled for that purpose.

Mr. STRATTON. But it wasn't being carried out by the nuclear power people. We had two separate worlds on the *Guitarro* on the night of the 15th of May.

Mr. REDDAN. Mr. Rose, is what you are telling us that you knew this was going to happen, but you didn't recognize the significance of it? Was that your testimony?

Mr. ROSE. You mean I knew this accident was going to happen——

Mr. REDDAN. No, no, that they were going to try to trim the *Guitarro* and at the same time they were going to be filling and blowing the——. You knew those two events were going to take place simultaneously?

Mr. ROSE. The problem doesn't penetrate my cranium, but I knew they had to trim the ship to perform their evolution, what we call drawing the bubble.

Mr. REDDAN. The two are entirely separate?

Mr. ROSE. Well, if you say so. I don't know.

Mr. REDDAN. Yes.

Mr. STRATTON. If you were the captain of a ship and you were going to paint the topside during the day and somebody else said, well, we are going to blow the tubes at the same time that you plan to paint the ship, this would not be a very good way to run a ship, would it?

Mr. ROSE. You are talking about a surface craft, I suppose.

Mr. STRATTON. This is the same situation. This is the same situation you have here. Wasn't the plan-of-the-day designed to eliminate that kind of thing?

Mr. ROSE. Sir, I am striving for——

Mr. STRATTON. Would you just answer the question, please, because we really have got a lot of people to talk to and we are going to have to confine ourselves just to these things. I am just trying to find that out, Mr. Rose.

Mr. ROSE. I would say that the people should know what is going on throughout the ship.

Mr. REDDAN. Just knowing doesn't do much good. You knew it.

Mr. ROSE. Particular people are tasked with that responsibility. I, the project manager——

Mr. STRATTON. Who is tasked with the responsibility of trying to see if two different groups are going in opposite directions on one ship at the same time. Nobody?

Mr. ROSE. The ship superintendent.

Mr. STRATTON. Was he at the meeting?

Mr. ROSE. The plan-of-the-day meeting?

Mr. STRATTON. Yes.

Mr. ROSE. I stated that previously, that he was at the plan-of-the-day meeting, I believe on the 15th, but I am not positive.

Mr. REDDAN. Did you have any responsibility in this area, Mr. Rose?

Mr. ROSE. No, sir. My job, my opening statements were that I coordinate and report.

Mr. STRATTON. That is right. I appreciate this, and nobody is suggesting that you had any responsibility at all. You were trying to coordinate, and from what I have seen of this shipyard, it certainly needs a lot of coordination, and I was asking you whether on some lack of coordination, which in the judgment of the subcommittee has a rather important bearing on what happened to the matter under investigation, whether you were aware of this lack of coordination and were perhaps a little concerned about it?

Mr. ROSE. I was concerned of this interphase problem, yes, sir.

Mr. STRATTON. OK.

Mr. REDDAN. What did you do about it?

Mr. ROSE. Well, I called—as I mentioned previously, I had called together a meeting of the nonnuclear responsibility.

Mr. REDDAN. No, I mean the specific instance that the chairman has referred to.

Mr. ROSE. About this trimming?

Mr. REDDAN. The trimming of the ship versus the filling and blowing and calibrating of the——.

Mr. ROSE. Based on the experience I have had with shipyard people here in how they have gone about in delivering ships and building ships, I had no reason to believe that we didn't have competent people look into the matter and we didn't have competent people on the job.

Mr. REDDAN. You felt somebody else was doing the coordinating?

Mr. ROSE. By the responsibility of their profession or their trade cognizance.

Mr. STRATTON. Why was the absence of the cover on the sonar dome never logged, reported, corrected, or even commented on?

Mr. ROSE. Well, first of all, was the cover—who took the cover off, and was the ship superintendent notified of this? How can I answer that question?

Mr. STRATTON. We are asking you.

Mr. REDDAN. Did you ever observe the cover off the sonar dome?

Mr. ROSE. I observed the cover off the sonar domes——

Mr. REDDAN. On the *Guitarro*?

Mr. ROSE. No, I haven't.

Mr. REDDAN. Do you know how long it was off?

Mr. ROSE. I did a little research, and I dug out the job orders which authorized the work to be performed in that dome, the purging test

I started to explain to you a little while ago, and it was dated sometime in March.

Now, conceivably the cover could have been off since March, because there is a presently high freeboard, in normal condition of that ship, as you saw on the 666 when you made your tour. Now, again, this is supposition, I just don't know if the cover was taken off or placed back on. I am not qualified to say.

Mr. STRATTON. Were you here when the 662 was being completed?

Mr. ROSE. I was here from the permit on. I have been in new construction type desk for 9 or 10 years.

Mr. STRATTON. Do you remember they had a cofferdam over the access to the sonar dome on the 662?

Mr. ROSE. Yes, a cover.

Mr. STRATTON. And that is the same cofferdam that is now on the 666; is it not?

Mr. ROSE. You are talking about the coaming around?

Mr. STRATTON. That is right.

Mr. REDDAN. We are talking about the coaming or cofferdam or whatever you want to call it.

Mr. ROSE. It is not, it is a coaming, c-o-a-m-i-n-g.

Mr. REDDAN. Some of the people on the *Guitarro* have referred to it as a cofferdam.

Mr. STRATTON. Was this never placed on the *Guitarro*, or why was its absence never noted or commented on? Do you have any thoughts on that?

Mr. ROSE. You might ask the shipfitter boss.

Mr. STRATTON. I realize that. But you are the project manager, Mr. Rose, of this ship that has just sunk. I don't know whether you have any responsibility or not, and I am not trying to suggest that you do. We are simply trying to find out what kind of a system it was that made it possible for this sort of thing to happen without anybody apparently feeling that he had any responsibility to do anything to stop it.

Mr. ROSE. Well, I think the evidence will bear out what each person was doing, but being the project manager for 30 days doesn't make me have the wisdom of Solomon.

Mr. STRATTON. I realize that.

Mr. ROSE. Or the osmosis of everything that is going on in the ship.

Mr. STRATTON. I appreciate that.

Mr. ROSE. In a \$50 million vessel.

Mr. STRATTON. I think the subcommittee would be interested in trying to get your thoughts as to what perhaps might have been done to have things operated more effectively.

Mr. ROSE. Yes, sir. Let me just, hopefully, if I haven't contributed anything else, I would like to go away from this meeting with one thought in mind, that I have aggressively pursued the improvement of communications between all persons involved with the construction of that ship. That includes the ship's forces and yard force people. And, if this thing had not occurred, I would have succeeded in, No. 1, my main objective being to get a composite list of all known completed work on that ship, and further to get meetings held either daily or twice a week, that would have defined the work that had to be performed.

Mr. HUNT. Actually, Mr. Rose, this is a totally new concept and a totally new job that was projected and put into being by Rear Admiral Frankenberger?

Mr. ROSE. Yes, sir.

Mr. HUNT. And, as the project manager, the first one of your kind in this Mare Island Shipyard, your duty was to, your first duty was, of course, to the rear admiral, to locate and find projects that were either lagging in production time, lagging in economic stability, or where workmen were not completing jobs to the full extent of the time that they were using. In other words, you took on a project which, in some other areas, like in the commercial factory, would be designated as "efficiency expert" for the management?

Mr. ROSE. You could consider it that.

Mr. HUNT. Yes. But you had no actual duties insofar as saying to someone, I want you to do this and I want you to do that. Your job was a job of correlation?

Mr. ROSE. Yes, sir. As I said, it was pretty difficult for me to transfer my job I had previously as a director to a requester.

Mr. HUNT. Am I right when I say this was a 39-day job in lifespan? Order issued April 22, 1969, and to be canceled on May 30, 1969; is that right?

Mr. ROSE. That is when this project would have completed. I was to return to my position as a supervisory production controller.

Mr. STRATTON. Do you have any thoughts as to how this tragedy might have occurred?

Mr. ROSE. If I were to be candid with you, I have read the accounts in the newspaper. When the accident occurred, the first thing I did, I took statements from people. I even got out my tape recorder and had them record some of the things, because I felt that any moment the ship was going to keel over and I wanted to be sure the people were out of the spaces.

Mr. STRATTON. We are trying to find out how it happened, and I just wonder if you can give us any thoughts or suggestions or advice?

Mr. ROSE. I think the information available to you is the fact that the manhole cover over the sonar dome was open, the area in that outer dome, the free-flooding area filled up, and you had water in main ballast tanks 3-a and I believe 1-a, and when the bow went down, taking on additional tonnage of water, the forward escape trunk was open at the forward end with cabling and so forth, so when the water started going in there, you couldn't shut that access trunk, so you shipped the water through there, and then when the water got down into the operations compartment, then you couldn't shut the first hatch.

Mr. STRATTON. Well, if I were to tell you, Mr. Rose, that the testimony that we have gotten indicates that at 2000, when the people who were filling main ballast tank No. 3 secured for lunch, the ship had a three-quarters of a degree up angle, they turned off the water, went ashore; and we have other testimony that indicates that the ship was still in trim position, but when they came back at 2030, water was coming into the trunk, the access trunk, how would you account for the rather dramatic change that took place in that half hour?

Mr. ROSE. You would have to talk to the experts on that.

Mr. STRATTON. Well, I appreciate that. And that is what we are here for. But you are one of the experts. Do you have any thought at all as to how this might have happened?

Mr. ROSE. Well, you take a scale. Picture the one that Justice uses. And you keep putting things on one side of the pan and it comes down.

Mr. STRATTON. What are these things?

Mr. ROSE. A man standing up there with a salt-water hose and filling a couple of tanks, and he is just putting another straw to break the camel's back.

Mr. STRATTON. Yes; but he turned that off at 2000.

Mr. ROSE. I don't know.

Mr. STRATTON. Okay. Do you have any other questions?

Mr. REDDAN. No.

Mr. STRATTON. Mr. Hunt?

Mr. HUNT. No.

Mr. STRATTON. Thank you very much.

Mr. ROSE. Yes, sir.

Mr. STRATTON. I appreciate it.

Mr. ROSE. But off the record, you give me time and I will have the people eating out of my hand. It is too bad it had to be, that this accident had to happen.

Mr. STRATTON. You are in a bad position, no question about it, in an unfortunate position in not having been with it long enough.

Mr. ROSE. Yes, sir. I am not giving you a commercial, but I have been here night and day without compensation trying to do this job, and I think we were doing a real fine job until this unfortunate thing happened, and as a result everybody is getting the stigma, and I don't like that.

Mr. STRATTON. It is just a question of trying to find out what happened and how to prevent it, that is all.

Mr. ROSE. I think if everybody had to lay down their life and prevent it, I think you would have had 15 or 30 volunteers or backups.

Mr. STRATTON. We are smarter in hindsight, but the point is at least we want to learn the lessons that we can learn.

Mr. ROSE. As a matter of fact, right now I have in my car, I should have brought one, but I have been scrounging around the shipyard—I was trying to get quick disconnects and trying to come up with ways and means how we can fix these ships that are out there now, and I am even coming and putting Plimsoll marks, which gives a draft mark, you know, when you reach that point, somebody better be concerning themselves.

So I am painting these on the mark, which is a temporary thing.

Mr. STRATTON. Good.

Mr. ROSE. These are the sort of things I am doing. I am also recommending that we put warning plates on hatch covers saying "Do not open," and following the same instruction for any critical hand wheel that must be controlled. These are the sort of things. You say hindsight. If we don't benefit by what we have done here, then we haven't really learned anything.

Mr. STRATTON. Thank you.

Mr. ROSE. Yes, sir.

Mr. STRATTON. Thanks a lot, Mr. Rose.

Mr. ROSE. Yes, sir.

Mr. STRATTON. Mr. Lampson, we are sorry to have kept you waiting here. The inquiry has moved along a little more slowly than we hoped that it would. We will try not to detain you too long. We are here, of course, to try to get some details of about what happened so we can make some recommendations as to how to prevent it in the future.

We are not here to try to accuse anybody or fix any responsibility or anything of that kind.

TESTIMONY OF JOHN LAMPSON, SHIP SUPERINTENDENT FOR U.S.S. "GUITARRO," SAN FRANCISCO BAY NAVAL SHIPYARD, MARE ISLAND, VALLEJO, CALIF.

Mr. LAMPSON. Yes, sir.

Mr. STRATTON. However, the chairman of our committee, since there is a naval court of inquiry here under way at the same time, has suggested that we also swear our witnesses. So we have done this throughout our inquiry today and yesterday. And when we do that, we are required by law and by the rules of the House to advise each witness who is to be sworn, first of all he has the right to counsel if he so desires it, and secondly, that of course he has the constitutional right to refuse to answer any question the answer to which might tend to incriminate him.

Actually, everybody from the admiral down has waived the right to counsel and if you are agreeable to that, too, why, then we can proceed to swear you in and ask you the questions.

Mr. LAMPSON. Yes, I am agreeable.

Mr. STRATTON. Fine. Would you mind standing, then. Do you solemnly swear that the testimony you are about to give before this subcommittee in this matter now pending shall be the truth, the whole truth and nothing but the truth, so help you God?

Mr. LAMPSON. I do.

Mr. STRATTON. Thank you. Would you be seated, please. Your first name, Mr. Lampson?

Mr. LAMPSON. John.

Mr. STRATTON. John. You are the ship superintendent for the *Guitarro*?

Mr. LAMPSON. Yes, sir.

Mr. STRATTON. And how long did you have that job, Mr. Lampson?

Mr. LAMPSON. For 1 year.

Mr. STRATTON. Is it more correct to say that you were the nonnuclear superintendent for the ship?

Mr. LAMPSON. Yes, sir.

Mr. STRATTON. Is there also a nuclear superintendent?

Mr. LAMPSON. Yes, there is.

Mr. STRATTON. What kind of coordination or contact do the two of you have?

Mr. LAMPSON. Daily communication, many times a day, to the extent of having, I believe, good communications and good cooperation.

Mr. STRATTON. You don't find this a problem of just being responsible for sort of half a loaf, so to speak?

Mr. LAMPSON. Yes, I don't mean to imply that this isn't a problem, but it is not an insurmountable problem. It is one that is generally overcome with communications and cooperation.

Mr. STRATTON. One of the things that has concerned the subcommittee has been the feeling that unlike a ship that is at sea, there are periods of the day, during the day or during the 24-hour period, when a ship that is in the position the *Guitarro* was in is without any one person who is responsible for it.

I suppose that you, as the ship superintendent, come as close to that responsibility as anybody, but who exercises it when you are off the base in the swing shift and in the graveyard shift, for example?

Mr. LAMPSON. The shipyard instruction that covers this particular phase places the responsibility with the group superintendent, who carries it on by the use of below-decks watch.

Mr. STRATTON. Do you know a Mr. McKay?

Mr. LAMPSON. RPQ, I believe, reactor plant quartermaster.

Mr. STRATTON. Reactor plant quartermaster?

Mr. LAMPSON. Is this the McKay we are talking about?

Mr. STRATTON. We had testimony that he was the swing shift acting superintendent. Is that true or is that just with respect to nuclear affairs?

Mr. LAMPSON. If it is the McKay that I am familiar with, it would be primarily nuclear.

Mr. STRATTON. F. McKay?

Mr. LAMPSON. Frank McKay; yes, sir.

Mr. STRATTON. General foreman, reactor plant?

Mr. LAMPSON. Right.

Mr. STRATTON. This must all be nuclear, then. Code M-340 personnel. Those are nuclear personnel; is that right?

Mr. LAMPSON. Yes, sir.

Mr. STRATTON. I see. So for that nonnuclear portion, the man who really exercises the responsibility is in the last instance the below-decks watch?

Mr. LAMPSON. Yes, sir.

Mr. STRATTON. You are aware that these people are only W-5 employees?

Mr. LAMPSON. Yes, sir.

Mr. STRATTON. Do you really seriously mean to say that the safety and security of the ship are entrusted to somebody at that level of responsibility?

Mr. LAMPSON. It would seem to be; yes, sir. I don't believe this removes from me the charged responsibility, but they are the tools that have been provided to do the job.

Mr. STRATTON. How do you carry out this responsibility if you are not there or there isn't somebody there to act for you? I remember I used to be a lifeguard when I went to college, and as a matter of fact until I closed up that pool and locked the gate, I used to be worried that I would find somebody floating on the bottom of it. Whether I was there or wasn't there, I was concerned about this responsibility. Now, if you are off the yard and your responsibility is being exercised by a 23- or 24-year-old boy doesn't this bother you a little bit?

Mr. LAMPSON. It hadn't. From my contacts with the people on the normal day shift and offshifts, when I was around, I had no reason to believe that they were not proficient.

Mr. STRATTON. Did you ever check them out to see whether they knew what to look for and so on?

Mr. LAMPSON. The Board asked a very similar question, and I have to answer "No." I had communications with them. I observed from their logs what they were doing, but as far as interrogating them at any time; no, sir, I did not.

Mr. STRATTON. And Mr. Martinez, who was in a sense their direct supervisor, testified similarly, that he hadn't really checked them out either or even given them any training. And yet the notice which he put out here, which the admiral cited with some pride, because it was dated before the tragedy rather than afterward, said, "The importance of your responsibility as a ship below-deck watch stander can't be overestimated. Many millions of dollars worth of equipment and material as well as months of work have been put into this vessel and at times the vessel will be solely under your vigilance."

Would you in retrospect think that perhaps there ought to be a little bit clearer chain of command?

Mr. LAMPSON. Hindsight is obviously always 20-20. Yes, sir, there are many things that could have been and should have been done differently.

Mr. STRATTON. Did you as the ship superintendent, Mr. Lampson, attend the plan-of-the-day meetings that were held every morning?

Mr. LAMPSON. Yes, during this sequence of events I was attending the plan-of-the-day meetings, both morning and afternoon.

Mr. STRATTON. I think I speak for the members of the subcommittee that we have a feeling that went on here with regard to this ship and some of the other ships is that a lot of people were doing other things and nobody knew exactly what the other fellow was doing. Did you ever get that feeling yourself?

Mr. LAMPSON. Yes, sir.

Mr. STRATTON. Was this plan-of-the-day arrangement designed to eliminate that, plan-of-the-day meeting?

Mr. LAMPSON. The plan-of-the-day meeting was primarily a nuclear device, and it is used to further or to improve the accomplishment of their particular phases of work. Now, as they interphase with the non-nuclear portions of the ship, there was a requirement for me, the non-nuclear people, to provide prerequisites to certain of their phases.

Mr. STRATTON. Well, if they were doing something that was going to complicate what you were doing during that day, wouldn't you want to know about it?

Mr. LAMPSON. Yes, sir; this was one of the reasons for attending the plan of the day.

Mr. STRATTON. If you were captain of a ship at sea and you wanted to paint the topside, you wouldn't want the engineer to blow the stacks when you were in the process of painting it; would you?

Mr. LAMPSON. No, sir; that is right.

Mr. STRATTON. Did you attend the plan-of-the-day meeting on the morning of the 15th of May?

Mr. LAMPSON. Yes, I did.

Mr. STRATTON. Were you aware of what the nuclear schedule called for for that day?

Mr. LAMPSON. I can't recall it now, but, yes; I was aware in general terms what the nuclear schedule called for.

Mr. STRATTON. Were you aware of what the nonnuclear schedule called for?

Mr. LAMPSON. Once again, in general terms; yes, sir.

Mr. STRATTON. Well, let me put it this way. Again in hindsight, you were aware of what has proved to be the most significant nonnuclear action that was taken that day; weren't you?

Mr. LAMPSON. If you mean the request or the requirement to trim the vessel—

Mr. STRATTON. That is right.

Mr. LAMPSON. Yes, sir; this occurred sometime after 1600 on Thursday afternoon.

Mr. STRATTON. That is right. Now, were you aware of what was scheduled for a similar period in the nuclear section?

Mr. LAMPSON. I knew that the requirement to trim the vessel was to support the calibration of a _____.

Mr. STRATTON. Which was going on the following day; was it not?

Mr. LAMPSON. Well, when the vessel was in the trimmed attitude, the confirmation of the calibration was to have been made.

Mr. REDDAN. Excuse me, Mr. Chairman. Are you talking about a calibration of the tanks, or are you talking about the calibration of a _____.

Mr. LAMPSON. Neither one, really. And I am not personally familiar with the part that the _____ plays in the nuclear scheme of things. It had been located in the _____.

Now, we had, the requirement had come up.

Mr. STRATTON. _____ operations, meaning the _____?

Mr. LAMPSON. No, sir; it means _____.

Mr. STRATTON. Oh.

Mr. LAMPSON. Of the nuclear systems prior to _____.

Mr. STRATTON. I see.

Mr. LAMPSON. It is one of the prerequisites for _____. Where was I?

Mr. STRATTON. Well, it was a question of the calibration of the _____. Actually, the ship never did get into trim until, let's say, perhaps just before it sank, on the night of the 15th of May, did it?

Mr. LAMPSON. I don't believe so.

Mr. STRATTON. Yet there was activity going on in the nuclear section that night which involved the calibration of the _____. Were you aware of that, either at the time or in hindsight?

Mr. LAMPSON. Once again, I knew that the nonnuclear people had to provide a trim ship so that the nuclear people could accomplish the calibration of _____.

Mr. STRATTON. Well, the fact of the matter is that the nuclear people were calibrating this particular tank without any regard for whether the ship was trim or not. I was under the impression that there was some other requirement for the trim condition, actually.

Mr. LAMPSON. No. I don't believe—you see, we have actually _____ on the boat. _____ are _____, and to my knowledge there is no capability of calibrating these. The tank that required calibration was a rather _____ tank, and within my limited knowledge couldn't possibly have affected the trim of the boat.

Mr. STRATTON. Well, how many gallons do you think—there were _____ of them, weren't there?

Mr. LAMPSON. The _____ tanks——

Mr. STRATTON. No, the _____.

Mr. LAMPSON. Well——

Mr. REDDAN. Perhaps this will help you, Mr. Lampson. You can point to the tanks you are talking about.

Mr. LAMPSON. The _____ are here, but also there is a _____ down in this area, and this is the only one I know of that has calibration.

Mr. REDDAN. Well, these were the _____ tanks they were calibrating.

Mr. LAMPSON. OK. Once again, I am totally ignorant. I crawled those tanks. I made the basic inspection prior to the ship being launched. At that time there was no manner in which the tanks could have been calibrated. There are no capacity gauges, no probes, no transonics, nothing in there that would allow the tank to be calibrated.

Mr. STRATTON. What was that gauge he said he used, Eton gauge or something? I have forgotten—the Barton gauge.

Mr. LAMPSON. Barton is basically a different-type gauge.

Mr. STRATTON. Well, actually, the tanks as indicated here, each contain about _____ gallons and this figures out to go roughly about _____ tons.

Mr. LAMPSON. [Nodding.]

Mr. STRATTON. If you were engaged in the rather delicate job of trying to trim the ship, wouldn't you be interested in knowing whether somebody was filling and blowing _____ tons of water in another part of the ship without any awareness of the fact that you were trying to trim the ship?

Mr. LAMPSON. Yes, sir; and I have to say that the _____. I thought they were talking about was the one in _____, that does have _____, which I believe is a type of gauge, on it.

Mr. STRATTON. Well, it may be _____, but it had _____ gallons of water each.

Mr. REDDAN, do you want to question him with regard to the cofferdam?

Mr. REDDAN. Yes. One of the things that the subcommittee has been looking at, Mr. Lampson, is the cofferdam or the coaming over the 666.

Mr. LAMPSON. Yes.

Mr. REDDAN. Now, there was no such coaming on the 665.

Mr. LAMPSON. There had been a coaming on the 665 at the time of launch. We had progressed to the point where the coaming was removed, and we had a bolted cover installed.

Mr. REDDAN. Excuse me. The coaming had been removed?

Mr. LAMPSON. Yes, sir.

Mr. REDDAN. And what had——

Mr. LAMPSON. The bolted cover had been installed.

Mr. REDDAN. Well, now, on May 15, what was the condition of that sonar bubble, or the hatch or the manhole above the sonar sphere?

Mr. LAMPSON. The normal bolted cover had been removed. Further there was an access, about a 3 by 4 foot access cut in this general vicinity, to facilitate the removal of defective transducers.

Mr. REDDAN. How long had those openings existed, Mr. Lampson?

Mr. LAMPSON. The work access, in the neighborhood of a couple of

months. I have to once again state that my last recollection of the bolted cover was—the cover being installed, the test cover, the one that was used to accomplish the purge test and the transducer still being installed, and I have racked my mind, my brain, and I can't pin down when it could have been removed.

Mr. REDDAN. Should there have been a work order on that before it was removed?

Mr. LAMPSON. Well, I was shown a job order that said remove it.

Mr. HUNT. Wasn't that dated March 1969?

Mr. LAMPSON. That was dated in March, yes, sir.

Mr. HUNT. Somewhere around March 15?

Mr. LAMPSON. Right. Yes, this was about the time, shortly after we had accomplished the purge test and about the time we were replacing transducers.

Mr. HUNT. Have you ascertained from those persons who removed the sonar hatch cover?

Mr. LAMPSON. When they did it? No, sir, I haven't talked to them.

Mr. HUNT. And you haven't asked them why they didn't report it or anything?

Mr. LAMPSON. Correction, yes. I did talk to Mr. Copp and asked him about the removal of the cover, he said he had removed it to modify it from a test cover to the installed cover; in other words, he had a pipe to take out of it, a plug to put in it and weld it up.

Now, this particular access was not used for the replacement of the transducers primarily because its egress into the tanks is extremely difficult, and to try to handle _____ transducers that route would have been really ridiculous. So we cut the access higher so that we could rig them directly in and out, mechanically.

Mr. REDDAN. Did you observe this work at the time it was done?

Mr. LAMPSON. At the time it was being done, yes, sir.

Mr. REDDAN. When the larger access was being cut in the hull, was the bolted cover off the forward part of the sonar area?

Mr. LAMPSON. To the best of my knowledge, yes, to the best of my recollection, yes, the bolted cover was still installed at that time.

Mr. REDDAN. Did there come a time thereafter when you saw it was not installed?

Mr. LAMPSON. If I saw it, I certainly didn't notice it. And if I had seen it, if I had noticed it, then I would have taken some action.

Mr. REDDAN. What action would you have taken, sir?

Mr. LAMPSON. I would have gotten a cover on it, or a cofferdam around it.

Mr. REDDAN. Why was the cofferdam taken off?

Mr. LAMPSON. The permanent patch or access to the sonar sphere had been installed and welded.

Mr. REDDAN. The cofferdam was taken off at that time?

Mr. LAMPSON. I believe so; yes, sir.

Mr. REDDAN. Then after that, that permanent cover was removed, and you don't know when that happened?

Mr. LAMPSON. That is right.

Mr. REDDAN. No one ever brought it to your attention that that was open?

Mr. LAMPSON. No, sir; not—I normally read the below-decks report every day, and I normally go through the logbook every day or after

the weekend. I can't recall any comment, either verbally or in writing, that would have indicated to me that the cover had been removed.

Mr. REDDAN. Do you ever look at the deck of the ship when you go aboard?

Mr. LAMPSON. Yes, sir; that was going to be my next statement. That does not excuse in any way my noticing it, because I make inspections daily.

Mr. REDDAN. Do you know where the cover was?

Mr. LAMPSON. I am told it was in the storage area.

Mr. REDDAN. Did anyone tell you how long it had been there?

Mr. LAMPSON. No, sir.

Mr. REDDAN. What should have been done with it when that covering was removed?

Mr. LAMPSON. The permanent bolted cover should have been replaced. If it required any considerable period of time for a work evolution to take place, then we should have put a cofferdam around it.

Mr. REDDAN. Whose responsibility was it to see that that was done?

Mr. LAMPSON. Well, Shop 11 normally would have the work operation.

Mr. REDDAN. Would Mr. Copp have taken that off?

Mr. LAMPSON. Yes, sir.

Mr. REDDAN. And did you ask him why he did it?

Mr. LAMPSON. Of course, by this time the vessel had been sunk; yes.

Mr. REDDAN. That is right, but you have other vessels you are building.

Mr. LAMPSON. He told me that he had taken the cover off to modify it from a test cover to the installed cover.

Mr. REDDAN. Did he take it to the storage area?

Mr. LAMPSON. I don't know whether he personally took it there or whether it was shipped by the riggers. It is just a few hundred feet on the docks, and they have a fork truck that runs back and forth.

Mr. REDDAN. If you were going to have it off for a relatively short period of time, would you have normally left that right on the deck for reinstallation?

Mr. LAMPSON. Well, except that in this case there was a modification required for it.

Mr. REDDAN. Oh, they took it off to modify it?

Mr. LAMPSON. Yes, sir.

Mr. REDDAN. Why then did they put it in the storage area?

Mr. LAMPSON. I have no idea.

Mr. REDDAN. Was the cover ever modified? Have you examined the cover?

Mr. LAMPSON. I have not examined the cover. I don't know.

Mr. REDDAN. Who could tell us whether that cover was ever modified?

Mr. LAMPSON. Mr. Copp. He is in the waiting room now.

Mr. REDDAN. I don't have any further questions.

Mr. STRATTON. Mr. Lampson, the summary of the testimony given before the court of inquiry, which we have gotten some briefs of, indicates that Admiral Frankenberger identified the ship superintendent, nonnuclear, as the lowest level of shipyard command with authority to make a decision to ballast a ship under construction and direct how ballasting is accomplished.

Mr. REDDAN. That would have been you, would it not?

Mr. LAMPSON. Yes, sir.

Mr. STRATTON. Did you approve and direct the ballasting that took place on the 15th of May?

Mr. LAMPSON. At the time I left, the arrangements made were to take a half degree of list off the boat and bring the bow up one degree.

Mr. STRATTON. Were you aware of the fact that the people that you entrusted this responsibility to were unfamiliar with it and had never really one it before?

Mr. LAMPSON. I was dealing with the general foreman, marine machinist, Mr. Robnett.

Mr. STRATTON. Let me ask the question again. Were you aware that the people who were assigned to this job were unaware of how to do it?

Mr. LAMPSON. No, sir.

Mr. STRATTON. You didn't even take the time to go in and see that they did the thing correctly or to make sure that it was proceeding properly?

Mr. LAMPSON. We have been in the process of calibrating tanks ever since launch, a period of roughly a year, 11 months. The movement of water has been a pretty much continual thing. There had been nothing that would indicate to me that the people were not capable of doing it.

Mr. STRATTON. Well, you read the paper this morning, didn't you, with regard to what Mr. Miller said, that he was not qualified to trim ships?

Mr. LAMPSON. I haven't read the paper. I live in Napa and I believe this is the Vallejo Times-Herald, probably.

Mr. STRATTON. That is right, and they are quoting a fellow from Napa by the name of Mr. Halloran, who was rather critical of the whole operation. In fact, he said:

I wouldn't have taken the assignment on the crash basis that this supervisor did. This judgment was made at the last minute on the basis of a last-minute request.

Miller, the night leadingman for shop 38, was recalled to the stand after having testified last week. He told the court he had never previously trimmed a ship but undertook the assignment May 5 because Mr. Robnett ordered me to do it and he knew I had never done it before.

Isn't that a rather damaging admission?

Mr. LAMPSON. Yes; it is.

Mr. STRATTON. Don't you have people that are qualified to do this sort of job in shop 38?

Mr. LAMPSON. I would think so.

Mr. STRATTON. Don't you think that as ship superintendent, Mr. Lampson, you have a responsibility that goes beyond just turning to somebody else and saying, chief, you take over? Don't you have to make sure at least that your orders are being carried out properly and by competent people?

Mr. LAMPSON. I am quite sure I have that responsibility; yes, sir.

Mr. STRATTON. But in this case it didn't happen?

Mr. LAMPSON. And we could probably find many other cases where it didn't happen also.

Mr. STRATTON. Then there is also another quotation here from this summary. It says:

The superintendent, nonnuclear, was recalled and testified that he did not feel qualified on submarine systems operation, including trim and ballast.

Now, you had the responsibility for deciding whether to ballast, and yet is it true that you testified that you didn't feel qualified on handling trim and ballast?

Mr. LAMPSON. That is correct; yes, sir.

Mr. STRATTON. Was Mr. Robnett qualified?

Mr. LAMPSON. I have to assume that he was qualified because he is the man I have been dealing with for 11 months in the trimming of the ship and the calibration of tanks.

Mr. STRATTON. You had a requirement to trim on May 13; did you not?

Mr. LAMPSON. Yes, sir.

Mr. STRATTON. That developed along about 4 in the afternoon. Do you have any recollection of why that developed so late?

Mr. LAMPSON. It developed from the nuclear test code as a prerequisite for _____ operations, not listed, not previously listed as a prerequisite because _____. It came up as a late requirement.

Mr. STRATTON. The ship was trimmed on the 13th; was it not?

Mr. LAMPSON. Yes, it was—well, the swing shift the 13th and graveyard the 14th.

Mr. STRATTON. On the 14th. Then how did it happen to get out of trim by the 15th? Have you figured that one out?

Mr. LAMPSON. Not really. The only movement of water I am aware of is the firing of water slugs, which would move some water into the auxiliaries.

Mr. REDDAN. Was there any installation of heavy equipment during the 14th which would have changed the trim?

Mr. LAMPSON. Not to my knowledge. We were beyond the state of installation of heavy equipment.

Mr. REDDAN. If anything had gone in that size, to have changed the trim, you would have known it; would you not?

Mr. LAMPSON. Yes, sir.

Mr. REDDAN. Wasn't it true that either on the 13th, or on the 15th, there were certain tags on the switches in the control room handling the shifting of ballast that said "Do not operate," because the sonar hatch is open?

Mr. LAMPSON. If there were, I am not aware of it.

Mr. STRATTON. Well, as the ship superintendent, you would have been aware of what was on the machinery in the control room; wouldn't you?

Mr. LAMPSON. Not necessarily. As the ship superintendent, it would be impossible for me to be aware of everything and the condition of everything on that boat at any one particular time.

Mr. STRATTON. Well, isn't this what a captain is supposed to do on a ship?

Mr. LAMPSON. This could very well be; yes, sir.

Mr. STRATTON. Do you have any thoughts as to how this sinking occurred?

Mr. LAMPSON. I know the mechanics of how it occurred. Sometime during the swing shift, for one reason or another, it was decided that the bow was up 2° instead of down, and water was put into the 3 group, which dipped the bow down to the point where the bolted cover started shipping water and once it started shipping water it

accelerated rather rapidly. There was no positive buoyancy left forward and the vessel went down.

Mr. STRATTON. Well, are you aware of the fact that the water into the No. 3 ballast tanks was turned off prior to 2000 when the two individuals who were filling it secured for lunch?

Mr. LAMPSON. I would have to assume that this was, but I wasn't personally there, so I have no personal knowledge.

Mr. STRATTON. And when they went ashore, we have had testimony that the ship was still in trim. When they came back from lunch, the water was coming in at the forward trunk. What happened in that 30-minute period there?

Mr. LAMPSON. I have no idea. I could guess; strictly conjecture. A tug may have gone up the channel and started a wake; that is, a wake may have started it. At that point in time, I would imagine the vessel was in a pretty delicate condition and that the shipping of any water into the sonar dome could have created the unrecoverable situation.

Mr. STRATTON. When you approved the ballasting, you had forgotten about the fact that there wasn't any cap on the sonar dome; is that right?

Mr. LAMPSON. Well, to the best of my recollection, the cap was there, and the raising the bow 1° would have improved our situation rather than—

Mr. STRATTON. You didn't raise the bow. You were trying to get the bow down by a degree.

Mr. LAMPSON. This was the evolution that created the problem, but when I left at the end, well, after day shift was over, after the swing shift was lined up, with the discussion, shop 38 was taking a half a degree off the list of the boat and raising the bow 1° , and this would bring it into trim. Now, what happened after that to change that situation I have no knowledge of.

Mr. STRATTON. Well, if you had, if she was down by the bow 2° , your sonar head would have been under water then, even 1° .

Mr. LAMPSON. I know at that time we had about a foot and a half of freeboard to the boot top.

Mr. STRATTON. I am surprised that you could have approved this, knowing that you had an open sonar.

Mr. LAMPSON. I have to say I didn't know I had an open sonar, the bolted cover. The access cut was substantially higher, further above the waterline, and should not have presented any problem.

Mr. STRATTON. Did you ask, Mr. Lampson, when they took that cover off?

Mr. REDDAN. He knows they took it off in March.

Mr. HUNT. March 15.

Mr. REDDAN. That was the work order.

Mr. LAMPSON. Well, once again, there is some confusion in my mind here. The work order authorized the removal of that cover for the replacement of defective transducers. That wasn't the access used for the replacement of defective transducers. We cut a work access for the reasons I had stated previously. You can't handle 75-pound transducers over the eyebrow.

Mr. REDDAN. You say Mr. Copp, however, can give us the precise details on this?

Mr. LAMPSON. Yes.

Mr. STRATTON. There is a ship superintendent, a project manager, a ship superintendent, nuclear. You have below decks watch standers. You have a group superintendent responsible for them. Yet this cover remains off from March, and nobody apparently reports it, comments on it, logs it in, or does anything to correct that.

Mr. LAMPSON. It sure seems that way, but I find it extremely hard to believe.

Mr. STRATTON. Well, we have found no record of anybody mentioning it. What is everybody's responsibility apparently is nobody's responsibility. Do you have any questions, Mr. Hunt?

Mr. HUNT. I want to come back, Mr. Lampson, just to that discrepancy in whether the bow was low or whether the bow was high.

Mr. LAMPSON. Yes, sir.

Mr. HUNT. Now, in talking to the machinist foreman from shop 38, who said he had no knowledge of the trim situation, apparently they brought in a man by the name of Powell, on the 14th. At that time they used a gunner's quadrant to get a reading. This gentleman says he took a reading down in the torpedo room and found that the bow was 2° high. They later took another reading from a position up in the control room or the engineroom.

Mr. LAMPSON. The engineroom, the master leveling plate.

Mr. HUNT. The master leveling plate?

Mr. LAMPSON. Yes, sir.

Mr. HUNT. And that indicated that the bow was 2° high. Now, we have had further information that 2° represents roughly between 6 and 7 feet between the bow and the stern.

Mr. LAMPSON. Well, this would depend entirely upon the pivot point, yes.

Mr. HUNT. Yes. Now, if that were 2° high and they lowered that 2° , would that mean they lowered that roughly around 6 feet, the bow?

Mr. LAMPSON. Well, I can't really answer this question, because it is dependent upon the pivot point of the boat. If it pivoted up near the bow, yes, it would be a long swing. If it pivoted back at the stern, it could be a very short swing.

Mr. HUNT. And by this calibration on the gunner's quadrant, they determined they were just within about half a degree of getting it level, by their calibrations. Now, somebody is wrong on their reading here, because in my book it would be totally immersed, all the plate openings, all the hatch openings, if they continued to go down to get a reading of zero zero on that gunner's quadrant.

I am wondering just how this difference of opinion apparently comes to exist. Who told you that the bow was 1° low? Who gave you that information?

Mr. LAMPSON. Mr. Robnett.

Mr. HUNT. Then Mr. Robnett, as I understand, was in charge of the trimming?

Mr. LAMPSON (nodding).

Mr. HUNT. And as a result, he assigned it to some men from 38 shop?

Mr. LAMPSON. Yes, sir.

Mr. HUNT. Who in turn, they brought in a Mr. Powell, who instructed them as to how to trim it?

Mr. LAMPSON. Yes, sir.

Mr. HUNT. Now, all the time they were trying to trim this ship by 1°, the nuclear crew in the back was working on the other tanks, trying to trim that up for the bubble for the reactor situation to be included on the following Thursday; is that correct?

In other words, on the 13th they were trying to trim the ship, on the 14th they were trying to trim the ship, on the 15th when she went down, they were trying to trim the ship, but they had a different reading from the 13th to the 14th to the 15th, and they were working at a different project, but back there on these other tanks was a group of nuclear men who were blowing those tanks and venting them of _____ tons of water, without the ship 38 men who were forward knowing anything about it?

Mr. LAMPSON. This could have happened; yes, sir.

Mr. HUNT. Was this called to your attention?

Mr. LAMPSON. No, sir.

Mr. HUNT. It has never been called to your attention?

Mr. LAMPSON. No, sir.

Mr. HUNT. The most amazing thing is that they have had these meetings, and yet we can find no one who coordinated the activities. Plan-of-the-day meeting was held at 0800 on the 15th of May and again at 1600 hours?

Mr. LAMPSON. Negative.

Mr. HUNT. Not at 1600 hours?

Mr. LAMPSON. No, sir.

Mr. HUNT. Just 0800. So the 1600 hours is not correct?

Mr. LAMPSON. There was no plan-of-the-day meeting on Thursday. I was there to attend it, but there was no meeting.

Mr. HUNT. Someone else couldn't have been there, too, then?

Mr. LAMPSON. Is that contrary to other testimony?

Mr. HUNT. One gentleman said there were two meetings. So the gentleman then who will know when the sonar compartment hatch cover was removed will be Mr. Copp?

Mr. LAMPSON. Yes, sir; he certainly should.

Mr. HUNT. He should know, then, likewise why the cover was moved to the storage area?

Mr. LAMPSON. Yes, sir.

Mr. HUNT. And when?

Mr. LAMPSON. Yes, sir.

Mr. HUNT. Thank you, Mr. Lampson.

Mr. STRATTON. Have you got another one?

Mr. HUNT. No; I am all through. I am all through, Mr. Chairman.

Mr. STRATTON. Do you have anything more?

Mr. REDDAN. No, not a thing, Mr. Chairman.

Mr. STRATTON. I think that pretty well covers it, Mr. Lampson.

Mr. LAMPSON. Yes, sir.

Mr. STRATTON. Thank you very much, and we appreciate your coming in. We are sorry to hold you up as long as we did.

Mr. REDDAN. Will you ask Mr. Copp to come in.

Mr. STRATTON. Mr. Copp, before we begin here, I just want to give you the same preliminary information that we have given to all of the other witnesses.

We are here primarily to try to get some information on what has happened and to make recommendations to try to prevent its

occurrence in the future. We are not trying to pin anybody for responsibility or make any accusation of that kind at all. However, our chairman has asked us to swear the witnesses who appear before us in the same way that the witnesses are being sworn before the court of inquiry and when we do that, according to the rules of the Congress and the rules of the subcommittee, we have to inform you of two things; first of all, that you do have the right to be represented by counsel if you so desire, and, secondly, in accordance with the fifth amendment to the Constitution, you don't have to answer any questions where the answers may tend to be incriminating.

Actually, everybody that has testified has waived their right to counsel, and nobody, I think, has bothered to avail himself of this other point. But we are required to advise you under the rules, and make sure that you understand it. If it is agreeable with you and you want to waive your right to counsel, I can administer the oath and we can proceed.

TESTIMONY OF ROBERT E. COPP, FOREMAN SHIPFITTER, SAN FRANCISCO BAY NAVAL SHIPYARD, MARE ISLAND, VALLEJO, CALIF.

Mr. COPP. Yes, sir, fine.

Mr. STRATTON. Thank you.

Do you solemnly swear that the testimony you are about to give before this subcommittee in this matter shall be the truth, the whole truth and nothing but the truth, so help you God?

Mr. COPP. I do.

Mr. STRATTON. Thank you.

Mr. COPP, your position is what at the yard?

Mr. COPP. I am a foreman shipfitter. This is a first-line supervisor.

Mr. STRATTON. What shop is this?

Mr. COPP. This is shop 11.

Mr. STRATTON. Just very simply, what we are concerned with primarily is that we understand that you had something to do with the removal of the cover from the access to the sonar dome on the *Guitarro*.

Mr. COPP. Yes, sir, I did, very definitely.

Mr. STRATTON. Could you give us what information you have on when that occurred and why it occurred?

Mr. COPP. Right. The cover itself, in February we had to fill the sonar dome itself with water in order to have a transducer test that was required. The cover at this time was removed. We put a test fitting on the cover.

Mr. REDDAN. Excuse me, Mr. Copp.

Mr. COPP. Yes, sir.

Mr. REDDAN. At that time was the cofferdam or——

Mr. COPP. No, sir, this cofferdam had been removed about 2 or 3 weeks prior to the time of this test. This cofferdam I had put on this area because it had been done on the 662, because the access was open from the shell into the sonar sphere itself, and the main purpose for this was to keep water off the electronics gear that was down inside the sphere.

Mr. REDDAN. You put the cofferdam on the 662, yourself?

Mr. COPP. No, sir, I put it on the 665.

Mr. REDDAN. Oh, I see, yes.

Mr. COPP. But I put it on by talking to a supervisor from the 662, is the reason I did install it.

Mr. REDDAN. Did you have—was there an opening at that time when you put the cofferdam on?

Mr. COPP. Yes, sir, there was. We had to leave this open during launch because we hadn't had all the equipment inside the sphere itself. So this access had to be left open.

Mr. REDDAN. And you said you talked to someone on the 662?

Mr. COPP. Right.

Mr. REDDAN. What did they tell you about the requirement for a cofferdam?

Mr. COPP. As far as they knew, the reason this had been done is that the exact situation we had when they launched and this was put up there mainly to keep occasional water that you might run into from going down onto this electronics gear that they had inside.

Mr. REDDAN. All right, sir. Go ahead.

Mr. COPP. So we had finished loading the electronic gear in the sonar dome in early February, the sphere itself the early part of February. There was a welded access patch we put in. Then this is the time that we put the bolted cover on the top itself. It was about 2 weeks later that the test requiring the dome to be filled with water came up, and this is when I removed this access cover.

Mr. REDDAN. That is the forward plate, the one furthest forward?

Mr. COPP. Yes, that is right.

Mr. REDDAN. What did you do with it when you took it off?

Mr. COPP. We took it off and put a hose connection into it. Due to the shape of this bow of the submarine you couldn't make up a temporary test plate for it. So we took it off and put a hose connection in it so they could use this for running water into it.

Mr. REDDAN. Then did you rebolt it?

Mr. COPP. We pulled it back on, and they filled the dome through their cover.

Mr. REDDAN. How long did it take you to put this hose connection in?

Mr. COPP. About half a day.

Mr. REDDAN. The same day?

Mr. COPP. Yes. This was filled with water, the test was run, and they had a failure of about 75 transducers. So we had to pump the dome out. In order to do this, the cover was again removed. The dome was pumped out, and we went in to survey the situation to see what the problems were in removing these transducers. It turned out that we had to cut another access a little higher up on the boat in order to be able to remove the transducers. I was told at this time it was very possible that the sonar dome would have to be filled with water again for another test after the new transducers were in, and I didn't remove the test fitting. This area up there where the bolted patch was was approximately 4 to 5 feet above the waterline, and we didn't see any danger with any water in this area.

Mr. REDDAN. Did you bolt the cover back on with the hose fitting in it?

Mr. COPP. No, sir; I did not.

Mr. REDDAN. You left that. What did you do with the cover plate?

Mr. COPP. It was sitting right off the gangway. We left it right off of the gangway.

Mr. REDDAN. Up on the seawall, or—

Mr. COPP. Yes; on the seawall. We had an area just right off the gangway of the boat where we stored material that we were going to be using in the near future.

Mr. REDDAN. Fine. This was when, that you took it off?

Mr. COPP. I checked back on my records, and this was March 6 when we removed this for the last time.

Mr. STRATTON. At this point, Mr. Copp, you say "this access hatch was 4 to 5 feet above the waterline at this time and we didn't think there was any need to worry about it," or something to that effect. Who is "we"? Who did you confer with on this point?

Mr. COPP. Well, I don't really believe I conferred with anybody, to be honest with you. We were up, like I say, about 4 or 5 feet, and we were working right in that area, as a matter of fact, quite a few people were working here, and for a time we had ventilation run into this hole because we were welding and burning down inside the dome. We used one for access and one for ventilation.

Mr. STRATTON. Who would have been responsible for the safety of the ship at that particular time who might say, "Well, you are going to have to put that back on or you will have to put a cofferdam around it," or something of that kind?

Mr. COPP. Well, the ship superintendent probably.

Mr. REDDAN. Was he aware that it was off at that time?

Mr. COPP. I assume he was because there had been quite a bit of discussion about this job on the dome between the machinists, myself, and the ship superintendent.

Mr. REDDAN. After you completed the installation of the transducers, what happened?

Mr. COPP. We never did complete the change of transducers. We ran into approximately 25 that couldn't be changed without drydocking the boat and cutting holes in the side of the boat and changing them. So approximately a week before the accident, I had contacted the design division, and we had been down in there and spent some time down looking at the problems that we had.

Mr. REDDAN. So that as of May 15, you still had transducers to replace?

Mr. COPP. Yes, sir; we did.

Mr. REDDAN. And the access that you cut in the hull was still open?

Mr. COPP. Yes, sir.

Mr. REDDAN. And that had been open since March?

Mr. COPP. Since early March.

Mr. REDDAN. And the plate which you had taken off the forward end was still up in storage?

Mr. COPP. Yes, sir.

Mr. REDDAN. By that time, how much freeboard did you have?

Mr. COPP. Any time that we were up in the area, there was always between 4 and 5 feet of freeboard.

Mr. REDDAN. When was the last time you were in the area?

Mr. COPP. The Friday before the accident.

Mr. REDDAN. That was the week before?

Mr. COPP. Yes, sir.

Mr. REDDAN. At any time between March and May 15, did the ship superintendent come up to look the situation over?

Mr. COPP. I can't really give—

Mr. REDDAN. I mean in your presence.

Mr. COPP. No, sir; not that I can think of right offhand.

Mr. HUNT. Mr. Copp, the superintendent was aware of the fact that you had these defective transducers; wasn't he?

Mr. COPP. Yes, sir; very definitely.

Mr. HUNT. You talked to him about that situation?

Mr. COPP. Yes, sir; very definitely.

Mr. HUNT. Knew they had to be replaced before the ship could even go out on trial?

Mr. COPP. Yes, sir.

Mr. REDDAN. Just what is the general purpose of a transducer?

Mr. COPP. It is a little, well, it is a sounding device, is really what it is. It is like a microphone and a receiver at the same time. They will send out sound impulses, and it will hit something and bounce off and it will be received back by the same units.

Mr. REDDAN. And how many transducers ordinarily are contained in this sonar compartment?

Mr. COPP. In this particular area, I would estimate probably 1,000.

Mr. REDDAN. And how many do you estimate are defective? You say 45?

Mr. COPP. No, sir; there were about 75 that were defective after the test.

Mr. REDDAN. About 75. And they still haven't been replaced?

Mr. COPP. Part of them had, and we ran into the interference problem. There are still about 25 that still have to be replaced.

Mr. REDDAN. Does each transducer weight about 75 pounds?

Mr. COPP. Yes, sir; it does.

Mr. REDDAN. And the superintendent, of course, knew this all the time?

Mr. COPP. Yes, sir; because we had talked to him, the machinist and I.

Mr. REDDAN. You had been working down there without any further discussion, you had been progressing with the repair job?

Mr. COPP. Yes, sir.

Mr. REDDAN. Now, the plate, the hatch cover plate, for the sonar dome, as we understand it, has been located in the storage area, somewhere near the 665?

Mr. COPP. Yes, sir. I got a call the night of the accident, wanting to know where the cover was, and the individual that called me, I told him where it was located, and he couldn't find it.

Mr. REDDAN. Who was it who called you?

Mr. COPP. Mr. Herkenrath. He is a foreman shipfitter on the graveyard shift. The salvage people had contacted him and wanted to know where the cover was.

Mr. HUNT. The ship was down, then, on bottom?

Mr. COPP. Yes, sir.

Mr. HUNT. Apparently what they wanted it for would be to put it in place so as to effect some airtight security.

Mr. COPP. Right; yes, sir. I told him where it was, and he couldn't locate it. So the following morning, when I came in, the first thing I did was start looking for this cover. I found out why. During the night in order to clear the area adjacent to the ship for the salvage operation, they had moved the material down approximately, maybe 25 yards or so, and it was just down the dock from where I told him it was. But it was still out there. And it was eventually used for the raising of the bow area.

Mr. HUNT. Is the valve still in the plate?

Mr. COPP. Yes, sir, it is sir. It was left on there, and I haven't done anything with it. I have kept it right out there with the fitting in it.

Mr. HUNT. But when—in finality, when the plate goes on, the valve will be removed, and that part welded over?

Mr. COPP. No, sir; it will be removed, but it will be bolted. It is a bolted access.

Mr. HUNT. I mean the apperture—

Mr. COPP. Oh, oh, yes, sir.

Mr. HUNT. The apperture where the valve is now attached?

Mr. COPP. Yes, sir, right.

Mr. HUNT. So it will not be part of the operation when she goes to sea?

Mr. COPP. Right.

Mr. REDDAN. When was the decision made to abandon the idea of replacing these transducers by going through the deck and waiting until you got it in to drydock to cut through the sides?

Mr. COPP. Well, actually, the problem you have in this area is the construction of it is such that these transducers are approximately—I think you need about 18 inches in order to back them straight out of the sphere and then to swing them around. The construction of your bow is such that there is about a third of these transducers that you don't have 18 inches from the face of the transducer to the shell of the ship.

Mr. REDDAN. So the only way to get them is through the side of the ship?

Mr. COPP. Yes, sir. What we were going to have to do is end up cutting individual holes for each of the remaining transducers, in order to change them.

Mr. REDDAN. When was that decision made?

Mr. COPP. I—

Mr. REDDAN. Approximately.

Mr. COPP. I would say this was about 2 weeks before the, well, before the accident, about 2 weeks before the accident.

Mr. REDDAN. At that point, then, there would be no longer any requirement to have the plate off and the cut access open.

Mr. COPP. Well, the only requirement was that we still hadn't firmed up the exact way we were going to do this job. Like I say, the Friday prior to the accident I had design people down in there, and we were making the final decisions on just exactly how we were going to do this job.

Mr. REDDAN. Are you cutting through the sides now to replace the transducer?

Mr. COPP. No, sir. We haven't had any—all job orders have been held up, and the only thing we are authorized to do now is to remove and preserve—

Mr. REDDAN. Have any instructions been given with respect to the use of a cofferdam since the accident?

Mr. COPP. The only thing that has changed is on one of the access holes that we had to cut in order to remove the equipment from the inside of the ship, is now on the job order. I noticed it states, "Install cofferdam." We got together with design on the areas, and they are going to have to give us a fix on some of the areas with cofferdam, a requirement.

Mr. REDDAN. We noted that the 666 has the old 662 cofferdam installed. Did you install that?

Mr. COPP. No, I did not. This is the same one we had used on the 665, though.

Mr. HUNT. That sonar plate on the 666 is off, too?

Mr. COPP. It is? I didn't realize this; no, sir. But this cofferdam was just put on, just a short time ago.

Mr. HUNT. Yes, that is very apparent from the newness of the welding of the bolts to the hull, the studding.

Mr. REDDAN. I don't have any further questions.

Mr. STRATTON. Do you have anything more?

Mr. HUNT. No.

Mr. STRATTON. Thank you, very much, Mr. Copp. We appreciate it.

Mr. COPP. Yes, sir.

Mr. HUNT. Off the record, Mr. Copp.

Mr. COPP. Yes.

(Discussion off the record.)

Mr. STRATTON. If no one has any further comments, the subcommittee will stand in adjournment until 8 o'clock tomorrow morning.

(Whereupon, at 5:58 p.m., the hearing adjourned to reconvene at 8 a.m., Wednesday, May 28, 1969.)

THE SINKING OF THE U.S.S. "GUITARRO" (SSN 665)

EXECUTIVE SESSION

HOUSE OF REPRESENTATIVES,
COMMITTEE OF ARMED SERVICES,
ARMED SERVICES INVESTIGATING SUBCOMMITTEE,
Mare Island, Vallejo, Calif., Wednesday, May 28, 1969.

The subcommittee met at 8:30 a.m., in room 1073, Building 47, San Francisco Bay Naval Shipyard, Mare Island, Vallejo, Calif., the Honorable Samuel S. Stratton presiding.

Members present: Hon. Samuel S. Stratton and Hon. John E. Hunt.

Staff present: John T. M. Reddan, counsel.

Mr. STRATTON. Commander Collier, it is nice to see you. Just sit down.

Before we begin, I want to give you the same preliminary comments we have to the other witnesses. We are here primarily to try to find out what happened, and make recommendations to our committee chairman as to how it might be prevented in the future. However, since there is a Navy court of inquiry underway, the chairman has asked us to swear in all witnesses before our subcommittee. So we have done that. And under the rules of the subcommittee, and the rules of the House, we have to advise witnesses before we swear them in of two things.

First of all, they do have the right to counsel if they so desire, and secondly, of course, in accordance with the Constitution, they have the right to decline to answer questions, the answers to which might tend to incriminate them. We have to review these facts so it is perfectly clear that we are conducting an orderly and proper hearing.

As a practical matter, everybody who has testified has waived the right to counsel, but you have the right if you so desire. If you are willing to waive the right to counsel, we can swear you in now and proceed.

TESTIMONY OF COMDR. BYRON HENRY COLLIER, PROSPECTIVE COMMANDING OFFICER, U.S.S. "GUITARRO"

Commander COLLIER. Yes, sir; I am.

Mr. STRATTON. Please stand and raise your right hand.

Do you solemnly swear the testimony you will give before the subcommittee in the matters now under consideration will be the truth, the whole truth and nothing but the truth, so help you God?

Commander COLLIER. I do.

Mr. STRATTON. Give your full name to the reporter, please.

Commander COLLIER. Byron Henry Collier.

Mr. STRATTON. Commander, you have been assigned as the prospective commanding officer for the *Guitarro* since when?

Commander COLLIER. I reported to the shipyard in late December of this past year, with orders as the commanding officer of the precommissioning unit, to give me that jurisdiction over them, and as prospective commanding officer of the ship, and to assume officer-in-charge status when the ship is placed in service, which was to have been sometime in August.

Mr. STRATTON. One of the things that has bothered us, and I am sure from what I know it has also bothered you, has been what seems to be the lack of clearcut lines of authority in this shipyard and in the arrangements with regard to the ship during this period, which of course are in sharp contrast to what is true of any ship that is in commission.

Commander COLLIER. Yes, sir.

Mr. STRATTON. And afloat. I am sure this must have disturbed you. In fact, I think the record indicates that you have expressed your concern about some of these matters to the Admiral and that some changes have taken place as a result.

Could you, perhaps, give us a little of your own thoughts on this subject? As commanding officer of the precommissioning unit you have, I take it, at least some command responsibility.

Commander COLLIER. Yes, sir.

Mr. STRATTON. I would be interested in just what it is, and secondly, as prospective commanding officer, you don't, I imagine, have a great deal of authority and yet it must have been a little bit frustrating to see some of the divided authority that exists.

We would be interested in your reactions and any recommendations you might have as to how this might be improved.

Commander COLLIER. Yes, sir.

A little bit of background: I have been through new construction before. I have been in the shipyard many times. I went through the first nuclear refueling up here at Mare Island, that Mare Island had. Back in 1962 I put the *Sam Rayburn* in commission at Newport News as executive officer.

My executive officer, this is his third new construction submarine in a row. So between the two of us we have had quite a bit of shipyard experience behind us. We had the benefit of routines at Electric Boat at Groton, at Newport News Shipbuilding and Drydock Co., and Mare Island, the way Mare Island was operating when they were at peak efficiency building the Polaris submarines.

This is why we were able, we thought, to offer criticism, helpful criticism for the shipyard, areas that were obviously lacking in controls. This is why we suggested and recommended, and at times wrote, actually wrote shipyard instructions, ghosted it for the shipyard, for Admiral Frankenberger's signature, on areas that we deemed to be unsatisfactory and sometimes even dangerous.

Mr. STRATTON. Yes.

Mr. REDDAN. Do you have copies of those documents?

Commander COLLIER. Yes, sir; we do. One thing that we have actually accomplished is the method of turnover of systems from the shipyard to the ship. Both my executive officer and myself were use to the systems used at Newport News and Electric Boat, where positive identification of systems takes place.

For your own background, as a particular system on the ship is completed, checked out, and offered to the ship's force for inspection and turnover to the ship's force for operation, operational control, we felt it mandatory that these systems are identified with an obvious visual identification, which other shipyards use.

Mr. STRATTON. Blue tape.

Commander COLLIER. Yes, sir.

We procured samples of this from Newport News to show the shipyard. The group superintendents and the Admiral, once they heard our side of it, Admiral Frankenberger agreed to the necessity and henceforth put out an instruction to the effect that this is the way they do it from then on.

The next undertaking was the——

Mr. STRATTON. If I could just make it clear. As I understand it, this means that you put a blue tape over those lines?

Commander COLLIER. And blue tags.

Mr. STRATTON. Or blue tags on certain items of machinery which you have accepted?

Commander COLLIER. Yes, sir.

Mr. STRATTON. As an indication, I suppose, particularly to the shipyard personnel.

Commander COLLIER. Yes, sir.

Mr. STRATTON. To keep their hands off of them.

Commander COLLIER. Yes, sir.

Mr. STRATTON. Because they are your responsibility.

Commander COLLIER. I would ask how these systems are identified, and they would say a piece of paper was promulgated periodically as a status change so everybody knew what belonged to us and what still belonged to the shipyard. I said that was sad. I refused to accept systems under this scheme.

Mr. STRATTON. Right. You said you had been here at Mare Island before?

Commander COLLIER. Yes, sir.

Mr. STRATTON. Do you think this system is more unsatisfactory and more fractured and confusing than it was before?

Commander COLLIER. The shipyard, sir?

Mr. STRATTON. Yes, the arrangements for handling new construction.

Commander COLLIER. I think in the past 7 or 8 years they have lost a lot of senior talent in the shipyard, people who took tremendous personal pride in the product that Mare Island put out. Mare Island enjoys within the service community a tremendous reputation for a good product equally with the two other yards I had previously mentioned. In fact, when I asked for assignment, I asked in particular for new construction, and I asked for Mare Island.

Mr. STRATTON. Would you say that your experiences have measured up to what you expected?

Commander COLLIER. When I arrived here, and I saw or observed some of the areas that I thought were run a little what I would say is more or less slipshod, we started working on these areas, feeling that we had the obligation to the shipyard, and to ourselves as a user of a shipyard product, to do anything and everything that we could to help rectify this.

I think this is a problem that the shipyard commander recognized that they had here, and he also was doing everything within his power to pull the shipyard together.

Mr. STRATTON. How would you say this compares with a private yard, like Electric Boat or Newport News?

Commander COLLIER. I would say—

Mr. STRATTON. In terms of coordination.

Commander COLLIER. It is weaker.

Mr. STRATTON. Weaker?

Commander COLLIER. It is weaker in nonnuclear areas. I have used and cited the nuclear power division of the shipyard and the organization that reviews, originates test documents, coordinates productive work in the nuclear power areas, and actually on board ship monitors day by day, hour by hour, progress of the work, as an example that the nonnuclear areas of the shipyard could well emulate.

Mr. STRATTON. Right.

Commander COLLIER. So it goes from one extreme, where there is really a large group of people, and an awful lot of talent looking over the nuclear power area, and with everyone knowing exactly what has been done, what is being done and where you are going, in detail.

Mr. STRATTON. Yes.

Commander COLLIER. For myself—

Mr. STRATTON. Excuse me. These are procedures developed within the nuclear reactor division?

Commander COLLIER. Yes, sir.

Mr. STRATTON. That apply everywhere in every yard, wherever any nuclear activity or construction is going on?

Commander COLLIER. Yes, sir. It is the direct influence of Admiral Rickover, that there be positive control over what he has jurisdiction of, his area of responsibility.

Mr. STRATTON. Excuse me. One of the things that has disturbed me, for example, is just this matter of safety, as to who is responsible for the safety on board. There is a ship superintendent. We found that the ship superintendent very rarely actually comes on the ship. A lot of things that went on on the ship, including the absence of the cover over the access to the sonar dome, he apparently hadn't either seen or wasn't aware of. When he leaves the yard, there is no individual carrying on his responsibility for him. In fact, we had testimony that the responsibility for safety of this \$50 million ship devolved on a below-decks watch stander who was a W-5, about as low in the hierarchy as you possibly can get.

Commander COLLIER. Yes, sir.

Mr. STRATTON. And he had no authority to accomplish anything. This compared to what would take place on a ship at sea, we really found incredible. I wonder, is this something that has concerned you too?

Commander COLLIER. Yes, sir. The next area that we undertook to rewrite or to really initiate was a system of nonnuclear taking-out procedures. A taking-out procedure is a procedure whereby you use either red danger tag, or yellow caution tag, either in piping or electrical systems, for control work or entry into the system, so that no one inadvertently tears into a piping system that is under pressure or goes

into a switchboard that is energized. This has been in existence for years. It is a shipboard routine. It started with the nuclear power program.

Mr. STRATTON. These are little tags, red tags, that say "Do not operate, see other side"?

Commander COLLIER. Yes, sir.

Mr. STRATTON. We heard a report that these tags had been placed on the trim switches in the control panel, the ones that were used by the men from shop 38, to shift some ballast, before they finally went up and put the hose into the new ballast tank. Is that right. Do you recall where they were there?

Commander COLLIER. There were some tags on there. The shipyard was in the transition period of putting—implementing this instruction, which we pushed through to rid themselves of the multitude of tags that had been in existence before, that really had no meaning and where you would see "Danger, high voltage" tag on a valve and this type of example.

Within the last month I turned in to the ship's superintendent a list of four pages of erroneous tags that had been installed by the shipyard on the ship and asked that they all be replaced with proper tags, in light of the new instruction that was on the street so we could all be working under the same system.

Mr. STRATTON. Do you recall whether these tags made any reference to the fact that the hatch was off, the cover was off of the sonar dome and that it was, therefore, not appropriate to trim the tanks?

Commander COLLIER. No, sir, I do not.

Mr. STRATTON. This seems to be another indication of one of the problems, that you have one shop, the electricians, I guess, or the shipfitters who are fooling around with the sonar dome, shop 11 or shop 77 or whatever it is, and shop 38 is doing the trimming and neither one is aware of what the other is doing.

Commander COLLIER. This was when we, my executive officer, my engineer, and I, presented at a meeting over in Mr. Wally Clark's office, who is the group mechanical superintendent in the yard, and is a special assistant to Admiral Frankenberger, for nuclear construction, at a meeting in his office to write the taking-out procedures, my stand at this time, with the ship superintendent present and Lieutenant Commander Sheldon, who is the immediate superior of the ship superintendents on the waterfront. Our stand in writing this instruction is that the ship superintendent's shack, out of which he operates, should be manned on a 24-hour-a-day basis.

Mr. STRATTON. Right.

Commander COLLIER. That there should be a central control for all systems being tagged out, that they have a central issuing authority for all danger and caution tags in the nonnuclear portion of the ship.

Now on the nuclear portion of it, it is. It is controlled by those people involved in the test program directly, mainly my engineering officer of the watch, who is on each shift, and the shift test engineer who works for the nuclear power division. They are there 24 hours a day. And we felt that it was necessary that the nonnuclear portion of the ship, which is much more complex and spread out, over many more compartments, should be manned on a 24-hour-a-day basis, too.

Mr. STRATTON. When did you make this recommendation?

Commander COLLIER. This was made I would say—it must have been last March. This was discussed in this meeting.

Mr. STRATTON. I see.

Commander COLLIER. With Mr. Leveque and Mr. Brown, both assistants of Mr. Clark. Our comments were acknowledged, but overridden.

Mr. STRATTON. Overridden?

Commander COLLIER. By the shipyard representative, saying it wasn't feasible. We felt that this was a step, at least we gained in creating a system, this identical system nonnuclear that we had nuclear. So we felt this was round 1 for us, and we were proceeding on doing what we could to establish a central control or to get people to talk to each other more.

Mr. REDDAN. Excuse me, Commander.

Commander COLLIER. Yes, sir.

Mr. REDDAN. You say your position was overruled. Who overruled, or failed to accept your position?

Commander COLLIER. This was the attendees at the meeting.

Mr. REDDAN. I see.

Commander COLLIER. Lt. Commander Sheldon and Lampson, our ship superintendent.

Mr. REDDAN. The admiral was not present at this meeting?

Commander COLLIER. No, sir; he was not.

Mr. REDDAN. Did they explain in more detail why this was not a feasible suggestion?

Commander COLLIER. Well, they said it was just too complex and no one group could have control like this at that stage of construction we were. We felt it was reasonable. The shipping commission that comes in here goes through an overhaul and the ship's force in fact runs such a system for a commissioned ship.

Mr. STRATTON. We are talking now about your recommendation for manning the office of the superintendent on a 24-hour basis?

Commander COLLIER. Yes, sir.

Mr. STRATTON. Or are you talking about creating a nonnuclear system?

Commander COLLIER. Both, sir. We had recommended—

Mr. STRATTON. That also was turned down, was it, the idea of a nonnuclear system, did I understand that?

Commander COLLIER. Well, this was our initial foot in the door, to start this.

Mr. STRATTON. Right.

Commander COLLIER. The week before the ship sank, I had received from Commander Walker, who is Captain Adrianse's assistant, an agreement to start a nonnuclear plan-of-the-week meetings, which the senior man in each trade who is working aboard the ship would meet with representatives of the weapons system and the navigation system and some of the technical branches, with myself and my executive officer and my engineer present, with production personnel present, so we could all talk over where we were going and what we were doing.

This was a start towards getting to where the nuclear people were.

Mr. STRATTON. Is this the plan-of-the-day meeting that was actually under way on the 15th?

Commander COLLIER. No, sir. The nuclear, all nuclear associated people have a plan-of-the-day meeting every day.

Mr. STRATTON. You have had for some time?

Commander COLLIER. Yes, sir; we have had that for months.

Mr. STRATTON. Does this take place just in the morning?

Commander COLLIER. It took place in the morning for a great while and the last month before the ship incident, we had one—I met at 7:30 in the morning as more or less a prelude to the plan-of-the-day. The plan-of-the-day was at 8 o'clock in the morning. Then at 1600, my engineer and myself would meet with the key people, once again to decide where we were going that night.

Mr. STRATTON. Good.

Commander COLLIER. And what progress had been made during the day and what was going to happen during the night, until 7:30 the next morning.

Mr. STRATTON. This was a nuclear plan?

Commander COLLIER. Yes, sir; purely nuclear, sir.

Mr. STRATTON. At any time prior to the sinking was this plan-of-the-day meeting broadened to include the nonnuclear people?

Commander COLLIER. My nonnuclear ship superintendent, Mr. Lampson, attended the nuclear plans of the day for coordinating work in nuclear areas, to determine how many, what actual numbers of people we would allow, shipyard workers, in those areas, so they wouldn't become an interference item and a confusion factor for the testing we were doing.

Once we start our sequence testing, our reactor plant testing, it is very important that noise level and traffic and everything be held to a minimum, so it is a controlled, orderly basis.

Mr. STRATTON. But up to the 15th of May you never had any really full representation from the nonnuclear sections at these meetings so that you knew as much about what they had—

Commander COLLIER. No, sir.

Mr. STRATTON (continuing). On their part of the job as they knew about yours?

Commander COLLIER. The first one was scheduled for the following Tuesday.

Mr. STRATTON. I see. I am glad you cleared this up, because I was under the impression that there had been an attempt to try to bring the nuclear and the nonnuclear people together and that the plan-of-the-day meeting was in effect the device that was used.

Commander COLLIER. No, sir.

Mr. STRATTON. But we got the impression if it was, it wasn't too successful. But I can see now that it wasn't really a full-scale meeting, but you were shooting in this direction.

Commander COLLIER. Yes, sir. Like I said, the first non—we started with an agreement for a plan-of-the-week nonnuclear meeting.

Mr. STRATTON. Yes.

Commander COLLIER. And this first one was to have been the following Tuesday, after the incident.

Mr. STRATTON. I see. On the 15th were you aware at this plan-of-the-day meeting, or were you aware when you met with your people

on the 15th, that there was a trim evolution planned by the nonnuclear people for that day?

Commander COLLIER. No, sir.

Mr. STRATTON. We have been told that this trim arrangement, which first was undertaken on the 13th of May, was for the purpose of meeting a requirements of the nuclear people, that the ship had to be trimmed before certain tests could be undertaken.

Commander COLLIER. That is right.

Mr. STRATTON. It originally was set for the 13th of May?

Commander COLLIER. Yes, sir.

Mr. STRATTON. And the ship was brought into trim on the 13th or very early on the 14th.

Commander COLLIER. Yes, sir.

Mr. STRATTON. Now was this for the purpose—as I understand it—of establishing some kind of a _____?

Commander COLLIER. No, sir; it was not.

Mr. STRATTON. Was this for the calibration of the _____?

Commander COLLIER. Yes, sir, yes, sir.

Mr. STRATTON. That was the purpose of the trim?

Commander COLLIER. Yes, sir.

Mr. STRATTON. Well, now, the ship was brought into trim on the 14th, but for some reason or other the ship was found to be out of trim on the 15th and was in the process of being brought into trim again in response to your requirement—not yours, but the requirement of the nuclear people.

Commander COLLIER. Yes, sir.

Mr. STRATTON. Is that correct?

Commander COLLIER. What had happened, in reviewing—this is hindsight.

Mr. STRATTON. Yes.

Commander COLLIER. In reviewing the data collected on the 14th, early morning of the 14th, every piece—before we can go from one phase to another, all data has to be reviewed by what we call the joint test group in the nuclear power division, which has representatives from naval reactors, from Westinghouse, from the shipyard, and from the ship force. They review all the collected data and agree—it agrees with what it should be, and signs it off. In viewing the data there were some data points that had not been taken in the calibration of the level gauge for the _____, and this is why they said they needed to take some more data points.

Mr. HUNT. Commander, did not the leveling test begin on the 13th of May?

Commander COLLIER. Yes, sir.

Mr. HUNT. At the conclusion of the day shift, and then into the swing shift and then into the graveyard shift on the 14th?

Commander COLLIER. Yes, sir.

Mr. HUNT. So actually they were working on this trim situation for roughly around 3 days. It was on the third day that the 665 went down.

Commander COLLIER. Well, I attended the meeting on the 15th when it was decided that we would have to calibrate this gauge. We were getting it ready. We had finished one phase of the reactor testing and were ready to start another one.

Prior to starting the second phase, the next phase, which was the _____ operations of the plant, we had to calibrate this gauge. This is the _____.

Mr. HUNT. In other words, it was a prerequisite prior to the beginning of your _____ operation?

Commander COLLIER. Yes, sir.

Mr. STRATTON. You were _____?

Commander COLLIER. We are the _____.

Mr. STRATTON. But the ship was reported in trim on the 14th?

Commander COLLIER. Yes, sir.

Mr. STRATTON. And then actually on the 15th you began—again I say “you.” It is not your responsibility.

Commander COLLIER. Yes, sir.

Mr. STRATTON. I understand it. It is the nuclear section. The nuclear section began the calibration of the _____ on the 15th.

Commander COLLIER. Yes, sir. They had checked the calibration of the gauge on the 14th, early in the morning of the 14th. In reviewing the data, found they had insufficient data and needed to collect more data points.

Mr. STRATTON. But were they aware that you know of, in retrospect, that on the 15th—

Commander COLLIER. The ship had to be retrimmed.

Mr. STRATTON. The ship was found to be out of trim and that an evolution was underway to get it back into trim?

Commander COLLIER. Some of the people did; others did not.

Mr. STRATTON. It was my impression that the trim of the ship was highly important.

Commander COLLIER. Yes, sir.

Mr. STRATTON. For conducting this operation. Yet the fact of the matter is that the operation was underway while efforts were being made to bring the ship back to trim.

Commander COLLIER. Yes, sir. The personnel involved with doing the collecting of the data were the same personnel involved collecting the data on the previous shifts.

The assumption was made that they knew the ship was in trim 24 hours ago. They assumed the ship was still in trim.

Mr. STRATTON. I see.

Commander COLLIER. My engineering officer of the watch and the shift test engineer, to the best of my knowledge, speaking for him also, did not know that the trimming evolution was being undertaken simultaneously with what they were doing back aft.

Mr. STRATTON. That is right. This is the crowning irony. In fact, I wasn't clear until just now that the purpose of the trim was for the conducting of these tests. I say “crowning irony” for two reasons. First of all, the tests for which the trim was being made again were already underway.

Commander COLLIER. Yes, sir.

Mr. STRATTON. You, as I understand it, were not aware, yourself, that this new trim operation was being undertaken on the swing shift?

Commander COLLIER. No, sir; I was not.

Mr. STRATTON. You were aware, I take it, that the calibration tests were underway?

Commander COLLIER. I was—on Tuesday when we knew we had to trim the ship, I asked my engineer, I said “What is the proposed method?” He said “By shifting water internally in our variable ballast tanks.” I said “Fine.” This is the normal way of doing this. On Thursday evening, I received—just before I went home my engineer told me that they had to fill the _____ up again and get additional data points. It wasn’t a complete rerun of the tests, as explained to me, just that they needed to get some confirming data. And this is what my engineering officer of the watch, in engineering spaces, understood, too; that is why he did not think there was any trimming going on. I believe this is why the Nuclear Power Division representative was also under this impression, that there was no trimming going on in the ship.

We were collecting this final group of data prior to all of us assembling down there that evening to _____. This was going to be an all-night evolution for most of us.

Mr. STRATTON. On the 15th?

Commander COLLIER. On the 15th.

Mr. STRATTON. I mean, you were aboard?

Commander COLLIER. I was at home waiting for a call from my engineer, that the final data had been reviewed, and we had met all prerequisites for _____ operations. Then I was planning on coming in.

Mr. STRATTON. What do you mean by _____?

Commander COLLIER. _____

Mr. STRATTON. _____

Commander COLLIER. Sir, we had _____

Mr. STRATTON. Oh.

Commander COLLIER. What you do, you have _____

Mr. STRATTON. I see.

Commander COLLIER. This was one of the first evolutions. It is a very controlled evolution.

Mr. HUNT. Isn’t it true, then, Commander, that the prerequisite to establish your _____ is the ultimate trim of the vessel within one-half of 1°?

Commander COLLIER. No, sir. The requirement was that when we established the _____

Mr. STRATTON. So the trim was for calibration.

Mr. HUNT. That is right.

Mr. STRATTON. Of course, this is the situation. I didn’t realize it was quite this bad. Obviously we have got to get, it seems to me, on a

crash basis, the nuclear people and the nonnuclear people in the yard working together so they know what each is doing.

Were you aware of the fact, or are you aware of the fact now, because I gather there has been some lack of recognition of this, that at the very time the ship 38 crewmen were desperately seeking to put the ship into trim, not only by transferring ballast from the after trim tank to the forward trim tank, and then going up and putting what eventually amounted to about 3,000 more gallons into ballast tanks? A and B in an effort to get the nose down, that back in the _____, they were also taking on some _____ tons of water in the _____?

Commander COLLIER. Sir, I knew this was part of the evolution for the _____. I was not, had not been briefed or made aware of what was going on forward.

Mr. STRATTON. You didn't know at the time?

Commander COLLIER. No, sir.

Mr. STRATTON. I mean, have you thought of this since?

Commander COLLIER. As a matter of fact, I believe the _____ had been blown dry at approximately a quarter after 8.

Mr. STRATTON. Yes. But to go back a little earlier, the _____ were being calibrated, and to be calibrated they have to put 100 gallons in and then check it, and another hundred and so on; right?

Commander COLLIER. Yes, sir.

Mr. STRATTON. This began roughly, what, about 1600, wasn't it?

Mr. REDDAN. About 1600 or 1630, something like that.

Mr. STRATTON. 1630.

Commander COLLIER. Yes.

Mr. STRATTON. Just at the same time they began fooling around up forward in an effort to get the nose down by adding ballast up there.

Commander COLLIER. That is right, yes, sir.

Mr. STRATTON. So while they were adding first to the forward trim tanks and next to the main ballast tanks 3A and 3B, they were also taking on board what amounted to _____ gallons or roughly _____ tons of water in the _____. So what was happening in the calibration operation was to some extent offsetting what they were trying to do forward.

Commander COLLIER. Yes, sir.

Mr. STRATTON. Neither one knew what the other was doing?

Commander COLLIER. It is a classic example of not talking to each other.

Mr. STRATTON. Right. Then at just before 8 o'clock, the boys up forward having put 3,000 gallons of water in these ballast tanks, took a look at their level and said we are still, what is it, 1° off?

Mr. HUNT. 1° off.

Mr. STRATTON. They were 1° off, and they had to get within half a degree. They still hadn't been able to do the job.

They turned off the water. It was lunchtime, so they got off the ship. And according to the testimony we have, although there had been reported water lapping into the sonar hole, the ship still appeared to be in trim, and some question as to just how far the sonar hole was above the waterline.

They went ashore. When they came back at about 20 minutes after eight, 2025, the ship was down at the head and water was coming into the escape trunk. The thing that has concerned us is what happened between 2000 and 2025 that altered this situation so drastically and so rapidly, and we suddenly learned that the filling of the _____ for the calibration was completed about 5 minutes or 10 minutes to 8, and then they blew the tanks.

Commander COLLIER. Yes, sir.

Mr. STRATTON. They blew them out. It took them about 4 hours to fill them, but they blew them in about half an hour.

Commander COLLIER. Yes, sir.

Mr. STRATTON. Forty minutes, or something like that, and just as they completed the blowing out of the tanks, I think it was Mr. Palmaymesa.

Mr. REDDAN. Yes.

Mr. HUNT. Palmaymesa.

Mr. STRATTON. Yes, Palmaymesa, who felt a sudden lurch of the bow down. Of course by that time the water was coming in the trunk.

It is our feeling that this sudden elimination of _____ tons of water weight aft may have been the straw that broke the camel's back on this balance of the ship, and neither one knew what the other was doing.

Commander COLLIER. Yes, sir.

Mr. STRATTON. Does that make sense to you, too, I mean in terms of an explanation of what it was that triggered this thing?

Commander COLLIER. It is plausible, yes, sir, the fact, and unbeknownst to me or any of my officers or men, that water had been put into the ballast tanks. This is why in a shipyard on new construction ship you weld up the flood ports and you put plates over the vents to insure that you are not in an unsafe status.

Mr. STRATTON. Right.

Commander COLLIER. To put water into a main ballast tank, to a person in submarines, is—you don't do this unless you want to submerge, or unless it is a very deliberate, controlled evolution.

Mr. STRATTON. Right.

Commander COLLIER. At times in port we will put water into ballast tanks, to list the ship, or to flood down forward, but it is an evolution where you have people, personnel stationed throughout the ship. Usually the captain is on the bridge when it happens. It is very deliberate.

You have phone talkers throughout the ship, and you have officers spread throughout the ship. It is something you don't do very often, and when you do, you make sure it is done under extreme conditions.

Mr. STRATTON. That is a very important point. Never put water in the ballast tanks in port unless it is very carefully controlled evolution.

Commander COLLIER. Yes, sir.

Mr. STRATTON. And this evolution was not only not controlled, but the people who were performing it said that they themselves weren't quite clear as to what was supposed to be done.

Commander COLLIER. Sir, from reading their testimony in the paper, I understand they had never been allowed in this type of evolution before.

Mr. STRATTON. Fantastic.

Commander COLLIER. The ship's force had not been consulted, and to the best of my knowledge, the ship superintendent, although a civilian, which is abnormal—usually your ship superintendents are qualified submarine officers.

Mr. STRATTON. He said he didn't feel he was qualified in submarines.

Commander COLLIER. Yes, sir. He doesn't have that innate feeling for this work.

Mr. HUNT. He doesn't have the naval community spirit, Commander, that the submarine people have.

Commander COLLIER. There are things you do and things you don't do in the submarine community, and putting water in a ballast tank is—well, in fact, from what I was reading from one of the previous ship superintendents, Lieutenant Commander Evverly, here in the shipyard, who had testified, and his statements in the paper were that whenever any trimming was done on the ship, he was always present.

Mr. HUNT. Prior to this?

Commander COLLIER. Yes, sir. This is on another ship, sir.

Mr. HUNT. Yes.

Commander COLLIER. Yes, sir. He said he had been ship superintendent on a previous ship.

Mr. HUNT. Yes.

Commander COLLIER. And the same thing could have happened had not—there is no written instructions, it is just what he knew as a submariner, that when you trim the ship, it is, as I described, a very controlled evolution, and his testimony in the newspaper, as I read it, is that he was always present whenever this type of evolution occurred.

Mr. HUNT. Commander, let me ask you this question. It might appear to be hypothetical.

Commander COLLIER. Yes, sir.

Mr. HUNT. Wouldn't it appear strange to you as a man who has been associated with nuclear and nonnuclear building of submarines—wouldn't it appear strange to you that for 3 days the nonnuclear work force of the shipyard had been unable to trim a vessel?

Commander COLLIER. On Tuesday evening they satisfactorily trimmed it, sir.

Mr. HUNT. Well, at that time, then, I believe they again took a reading on it, on Wednesday, and found a discrepancy. The crew that trimmed it—

Mr. STRATTON. Thursday, I think it was, the 15th.

Mr. HUNT. Tuesday—was it Thursday it went down?

Commander COLLIER. Yes, sir.

Mr. STRATTON. Yes.

Mr. HUNT. It went down Thursday. The first time it was trimmed they thought they had it within 1 degree. The next time it was checked, on the 14th, they decided it was 1 degree low at the bow. But on the 15th, when the men who were assigned to it, who had never trimmed a submarine, went to work on it and looked at the gunner's quadrant, they decided that the bow was 2 degrees too high. Were you aware of this?

Commander COLLIER. No, sir; I was not.

Mr. HUNT. For the reason—they explained it being too high, 2 degrees, which is an awful lot on freeboard, 2 degrees forward—

Commander COLLIER. Yes, sir.

Mr. HUNT. They decided to flood 3A and 3B by injecting a fire hose down the vent pipe and forcing open the check valve. Would this seem a feasible operation to you?

Commander COLLIER. No, sir; it would not.

Mr. HUNT. And if this had been talked over with you by the ship superintendent, you would undoubtedly have made some suggestions.

Commander COLLIER. I think I would have done more than that, sir. I know I would have.

Mr. HUNT. That is what I want to know. I never heard of this before in any shipyard operation.

Commander COLLIER. Yes, sir.

Mr. HUNT. I was amazed.

I didn't say too much. When I first went aboard there, when they told me they stuck a fire hose down the vent of 3A and 3B for the purpose of flooding that tank, I said, "Well, how did you get past the check valve?", which I know can be operated, it can be operated manually, but usually hydraulically.

Commander COLLIER. Yes, sir.

Mr. HUNT. Internally. Then I found out they have a special piece of plastic hose, attached to the nozzle and ran the plastic hose down so as to unseat the check valve.

Commander COLLIER. Yes, sir.

Mr. HUNT. Which undoubtedly you will check now, if there was any damage to the seat.

Commander COLLIER. Yes, sir.

Mr. HUNT. It is amazing.

Mr. REDDAN. What would you have done, Commander, had you known they were going to take this action?

Commander COLLIER. They were contemplating flooding the main ballast tank?

Mr. REDDAN. Yes.

Commander COLLIER. First, I would ask them if there is any other way to trim. My initial reaction, when I found out, is why didn't we use external weights. We have a multitude of concrete weights, which you can normally place on deck to as far forward as possible, to change, or to give you a moment arm, to give you a trim, a desired trim.

Mr. STRATTON. Moment arm?

Commander COLLIER. This would have triggered the question "If you are going to put water in the main ballast tanks, have we ever done it before?" Myself, I did not know water was in No. 1 and 2. None of my people knew that water was in No. 1 and 2. You don't put water—as I said before, you do not put water in the main ballast tanks.

The previous ship, in conducting this evolution, trimmed down by putting water in the sonar dome.

Mr. HUNT. I was about to ask that question, Commander. If you were to desire additional weight forward, you would flood the sonar dome?

Commander COLLIER. Yes, sir; I would make sure my ballast tanks were dry and flood the dome.

Mr. HUNT. Blow your ballast tanks No. 1 and No. 2 and No. 3A and B, and fill your sonar aperture?

Commander COLLIER. We were using——

Mr. HUNT. Your sonar cavity.

Commander COLLIER. We were using that sonar cavity in effect as an auxiliary main ballast tank to achieve flotation. It was dry. It holds 144 tons of water.

Mr. HUNT. So you could use that at any level.

Commander COLLIER. That one cavity up there holds nearly twice what No. 1 main ballast tank does.

Mr. STRATTON. But there is no way of getting it out, is there?

Commander COLLIER. Yes, sir. We just put a submersible pump in there and pump it out, sir. There is no ship's system installed to pump it out or blow it out.

Mr. STRATTON. It is free-flooding when it is at sea——

Commander COLLIER. Well, it is not really a free-flooding area. It is an area that we fill up with fresh water before we go to sea.

Mr. STRATTON. I see.

Commander COLLIER. And we leave it full. Then when you come in port, if there is any work you want to do in there, you pump it out by using a portable, submersible pump.

Mr. STRATTON. I see.

Would you feel it would be a desirable recommendation, first of all, that when a ship is afloat, even before it is in completion, that there ought to be one person who has charge of the ship and is in a position to not only know, but to make directions in regard to all of the activities affecting the ship, similar to the commanding officer when afloat?

Commander COLLIER. Yes, sir.

Mr. REDDAN. You mean on a 24-hour basis?

Mr. STRATTON. Surely, delegating that on a 24-hour basis.

Commander COLLIER. Ideally, this is the ship superintendent. This in the past——

Mr. STRATTON. You can really stress that "ideally."

Commander COLLIER. Yes, sir.

Mr. STRATTON. Has this actually been the case in other yards, on other occasions, that the ship superintendent really is the man in charge, far more than obviously he was in this particular case?

Commander COLLIER. Yes, sir, I believe so. It is my personal opinion it is, yes, sir.

Mr. STRATTON. And certainly would you not feel that that officer ought to be in a position to have control over the nuclear as well as the nonnuclear activity? I don't want to get into this business of whether he should be nuclear qualified, but obviously you can't have a ship with two captains.

Commander COLLIER. There would have to be direct liaison between the nuclear and nonnuclear.

Mr. STRATTON. Right.

Commander COLLIER. We do have a nuclear ship superintendent, a naval officer, who is the Nuclear Power Division's and my liaison with the Production Department.

Mr. STRATTON. This is Mr. Brackney?

Commander COLLIER. Yes, sir, Mr. Brackney.

Mr. STRATTON. He is the nuclear ship superintendent?

Commander COLLIER. He is the nuclear ship superintendent.

Mr. STRATTON. And would you also feel that an individual who oc-

cupied this role ought to be not necessarily qualified to command a submarine at sea, but ought to be knowledgeable in submarines?

Commander COLLIER. Yes, sir.

Mr. STRATTON. If he is going to be a superintendent of submarines.

Commander COLLIER. He definitely should have submarine training behind him.

Mr. STRATTON. Right.

Commander COLLIER. I think that is a prerequisite.

Mr. STRATTON. And would you perhaps also feel, and I am just sort of taking it off the top of my head here, that in any arrangements affecting a ship of this kind, the prospective commanding officer ought to be not only informed of everything that is going on, but perhaps even have a kind of veto power over what is being done?

Commander COLLIER. Yes, sir. For an evolution like this, I would have been present.

Mr. STRATTON. Yes.

Commander COLLIER. If this was the only way they could have—the shipyard could have proven to me it could achieve a trim, with my background I know it isn't the only way. No matter how we did it, if I had any inkling that anybody contemplated putting water in the main ballast tank, I would have been there myself.

Mr. HUNT. Commander, along those lines, on May 15, 1969, which is the day the 665 went down, did you attend the plan-of-the-day meeting?

Commander COLLIER. Yes, sir.

Mr. HUNT. That was in the morning at 0800?

Commander COLLIER. Well, our initial meeting was at 7:30 on the plan-of-the-day. We had been during all the tests, the previous test phases, we had been having a 7:30 meeting with the representatives from Nuclear Power Division, the senior test coordinator, the Naval Reactors representative officer there, and the Westinghouse people—just a small group—my engineer and myself. Then at 8 o'clock the tradesmen, representatives from the various shops, test branches, technical codes, come in and join us, and we discuss in more detail and a broader picture. So there are really two meetings.

Mr. HUNT. Did you see Mr. Lampson at the second meeting, who was your ship superintendent? That is John C. Lampson.

Commander COLLIER. Yes, sir, I know. I would say yes, because he had been—the last 2 weeks I think he attended just about every one of them. I can't say for sure. He always would come in and join with the second group of people. I am sure he was there, because he came every morning to find out how many people, nonnuclear workers, we would allow to work in the engineering spaces.

Mr. HUNT. At that meeting, or after that meeting, did he discuss with you the calibration or the trimming of the ship?

Commander COLLIER. No, sir.

Mr. STRATTON. Did they go into this matter of the filling of the _____ with you at all?

Commander COLLIER. We discussed it, yes, sir.

Mr. STRATTON. Insofar as it might bear on the question of trim?

Commander COLLIER. No, sir, not in my discussion with them.

Mr. STRATTON. As I understand it, you said this is the _____?

Commander COLLIER. In this _____.

Mr. STRATTON. In this _____?

Commander COLLIER. Yes, sir.

Mr. STRATTON. These tanks, as I understand it, are designed to

Commander COLLIER. Yes, sir.

Mr. STRATTON. So that you _____.

Commander COLLIER. Yes, sir.

Mr. STRATTON. Is that basically what it is?

Commander COLLIER. Yes, sir.

Mr. STRATTON. I also understand that the sonar that they are putting on this ship—is this the SSQ?

Commander COLLIER. No, the BQS 13.

Mr. STRATTON. The BQS 13.

Commander COLLIER. Yes, sir.

Mr. STRATTON. Yes. This is already an outmoded sonar, isn't it? Isn't there a later model going into the *Hawkbill*?

Commander COLLIER. No, sir. We have the first BQS 13 in this shipyard.

Mr. STRATTON. I see. What is the previous one, the 11?

Commander COLLIER. No, the BQS 6.

Mr. STRATTON. Six.

Commander COLLIER. The BQS 6 was the sonar that was put on the *Thresher* class and *Permit* class submarines.

Mr. STRATTON. I see. This is the latest model, then?

Commander COLLIER. Yes, sir. We have it produced by Raytheon and I believe Electric Boat has it, the *Bergall*. And one at Newport News has it. I think this is either the third or fourth production model to come out of the factory.

Mr. STRATTON. I see.

Mr. REDDAN. In view of the problems involved in replacing defective transducers, do you feel that the ship is properly designed?

Commander COLLIER. Yes, sir. Our defective transducers—we had very few in comparison with some of the other shipyards.

Mr. REDDAN. How are you going to replace these transducers? The testimony the subcommittee has received is that it is impossible to replace them without cutting through the hull to permit the backing out of the transducer and the replacing with the new one.

Commander COLLIER. No, sir. There were approximately 80 that required replacement, of the _____ we have installed. The majority of these had already been replaced.

Mr. REDDAN. Yes.

Commander COLLIER. In the water. There were some that could not be replaced until the ship was put in drydock.

Mr. REDDAN. I see.

Commander COLLIER. The remainder of those were going to be replaced when the ship went in drydock the next time.

Mr. REDDAN. How are they going to be replaced without cutting through the hull?

Commander COLLIER. You probably would have to cut through the hull.

Mr. REDDAN. That is my question.

Commander COLLIER. Yes, sir.

Mr. REDDAN. In view of the fact that you have to cut through the hull to replace them, does this indicate any defect in the design of the vessel?

Commander COLLIER. No, sir.

Mr. REDDAN. Could it be better designed? This seems like—

Commander COLLIER. This is an abnormal—you routinely do not replace hydrophones, transducers. It is on an occasional basis. Where you would have maybe over the next 3 or 4 years have 1 percent of them fail and of the 1 percent, probably 80 percent of those could be replaced without any structural rearrangement; the others that you couldn't get to you, you would not degrade the system by allowing them to remain intact, knowing they had a stepdown capability.

Mr. REDDAN. You would degrade the capability, however?

Commander COLLIER. When you are talking one or two transducers out of _____, that is right. It is not 100-percent efficiency, but it is 99-plus.

Mr. REDDAN. In this case, however, you had considerably more than one or two?

Commander COLLIER. Yes, sir; and this is why they were going to be replaced in drydock.

Mr. REDDAN. Collaterally, Commander, I don't know whether you know the answer or not, I assume it is a rather expensive operation to cut through the hull to replace these transducers. Now, if they were adequately tested in advance, and they failed for defects in the construction of the transducer itself, is Raytheon responsible for assuming the cost of replacing these things?

Commander COLLIER. This I do not know. I do not know who is picking up—

Mr. REDDAN. We can look at that later.

Commander COLLIER. I don't know how they are proportioning the cost of the actual replacement. The *Finback* at Newport News is replacing all _____ of their's, I understand.

Mr. HUNT. Yes. They were by Raytheon, too, weren't they?

Commander COLLIER. Yes, sir.

Mr. HUNT. They were defective.

Commander COLLIER. The same system.

Mr. HUNT. The same system. They are cleaning those out.

Commander COLLIER. Yes, sir.

Mr. HUNT. Was not that done in the past 6 months?

Commander COLLIER. It is being done right now.

Mr. HUNT. They put in the same system, by Raytheon?

Commander COLLIER. That is right.

Mr. HUNT. Then we found there is insufficient clearance between the point of rejection of the transducer when being removed versus the hull?

Commander COLLIER. Yes, sir.

Mr. HUNT. There is insufficient head space in there? That is, not enough clearance to remove a transducer?

Commander COLLIER. Yes, sir.

Mr. HUNT. And the only way to replace some of the transducers will be to cut through the hull, reach in and pull them out through the hole, put in the new transducers and weld up the hole again, is that correct?

Commander COLLIER. Yes, sir.

Mr. STRATTON. Does this bother you at all as the prospective commanding officer, all of these cuts in the hull, even though they are going back in and are going to be welded? In some cases it looks as though they even had to cut through the I-beams.

Commander COLLIER. Yes, sir; they have.

Mr. STRATTON. To take out sections. I would say, no matter how well they welded it, it creates a possible safety problem.

Commander COLLIER. The quality control, the magnetic tests that are run, the weld X-rays that are taken, are very detailed. They find defects, and this is why each defect is then ground out, repaired, and re-X-rayed. As the commanding officer, I have no misgivings.

Mr. STRATTON. I see.

Commander COLLIER. Insofar as taking the ship—

Mr. STRATTON. Which shop is going to be doing this? 38?

Commander COLLIER. No, sir. The welders in shop 11.

Mr. STRATTON. Yes.

Commander COLLIER. This is a normal thing, the number of patches. It is a normal evolution.

Mr. STRATTON. They put the I-beams back, too?

Commander COLLIER. Yes, sir. When the patch comes back aboard, they cut it out. They cut the patch out of the hull and the I-beam intact and lift that section out, with that portion of the I-beam still attached to the section of the hull. When set back in place, the I-beam is welded right along with the frame. The structural frame is welded right along at the same time.

Mr. STRATTON. So I guess theoretically the welds are supposed to be even stronger than the initial material, is that right?

Commander COLLIER. Depending on who you talk to; yes, sir.

Mr. STRATTON. Commander, it has been very helpful to talk to you and I wish we had more time. I think we see eye to eye here on a lot of things. I hope that maybe our report can be helpful to you and others that are in your same position.

I think because of our limited time, we probably are going to have to bring this to a close. I wonder first of all if you could arrange to get a copy of the recommendations you have made, if they are in writing?

Commander COLLIER. Yes, sir. I can get hold of the two instructions.

Mr. STRATTON. Fine.

Commander COLLIER. And I think some of the minutes of the meetings, in smoothing out these instructions, might be helpful to you.

Mr. STRATTON. Very good. Is there anything else we haven't touched on that you would like to comment on or give us your thoughts about?

Commander COLLIER. No, sir. I think we have mentioned most or nearly every area. As I mentioned before, I, and my other more experienced officers, did see a gap, a hole here in the shipyard. We saw things that we felt, with our background, we could contribute to clearing up.

The shipyard, Admiral Frankenberger, has done a lot to coordinate and bring people back to proper perspective. When I say bring them back, I think the shipyard had slipped some in the past couple of years. I think they were on the road to becoming a coordinated naval shipyard again, with a coordinated effort.

We felt it our moral obligation to point out anything that we saw wrong and to do our best to bring it—that is rectify it. I feel we have

made, or gained, quite a bit of ground since last December, when I reported here. There are other areas that I feel still need correction. It is like I told the court of inquiry. You don't undertake everything at once.

We picked out the areas that we were immediately going to come up against, the turnover of systems, the tagging out of systems, to prevent any casualty or damage or personal injury, and then we were working on the nonnuclear coordination, trying to pull——

Mr. STRATTON. Obviously, we have got to get the various branches at least speaking to each other immediately, don't we, or else we are going to run into this same kind of thing again.

Commander COLLIER. Yes, sir.

Mr. STRATTON. In that connection, talking about this word "coordination," I was a little bit intrigued by the appointment of a Project Manager for the *Guitarro* and the *Hawkbill* who turns out to have no real authority, but to just coordinate. Again it seems to me that this is a case of something that we are sometimes guilty of in Washington, and that is if you have a problem, instead of really resolving it, you create another committee to look into the other committees that are working on the problem, and the net result is confusion compounded. Instead of having somebody who really has control and can bring these two together, you have somebody who just hopefully may be able to talk to them, but you never quite know who is doing what.

Is that your impression of what this job has turned out to be, or is it a step in the right direction?

Commander COLLIER. As you know, the project manager position has been in existence on my ship for a very short time.

Mr. STRATTON. Yes.

Commander COLLIER. I feel that it was established partly at my request. I habitually would meet with Mr. Clark, the mechanical group superintendent, which I mentioned before, and Mr. Martinez, the service group superintendent, and the three of us in endeavoring to do what we could to get this ship completed properly, in the shortest possible time, and pointing out obvious areas that needed attention, picked on the project manager concept as a probable means whereby instead of having to talk to 15 different people to find out what was happening in the nonnuclear area, we could go to this one person.

I feel that his charter may not be as—to be a true project manager, he undoubtedly needs line authority.

Mr. STRATTON. What you really need is the kind of superintendent we have been talking about, isn't it?

Commander COLLIER. Yes, sir.

Mr. STRATTON. Then you don't have to worry about a project manager to coordinate the various superintendents.

Commander COLLIER. Yes, sir. I went to Admiral Frankenberger and requested that a project manager be assigned the ship. Mr. Clark on the same day followed me up with a similar request, and within the week he was appointed.

Mr. STRATTON. I see.

By the way, what is your interpretation of what Mr. Martinez' responsibility is?

Commander COLLIER. Mr. Martinez, as the service group superintendent, controls the various shop superintendents that do work on the ship. He also under his purview has the below-decks watch.

Mr. STRATTON. The below-decks watch standers?

Commander COLLIER. Yes, sir.

Mr. STRATTON. I just wondered whether his responsibility went beyond that, beyond the below-decks watch standers.

Commander COLLIER. He and Mr. Clark are the two people that have been working with me mostly in the shipyard in an endeavor to talk over problems and see which way we are going to go.

Mr. Martinez and Mr. Clark and I decided, for example, to use paint out of the interior of the ship as a ploy to prod the other trades to extend themselves, to try to get the ship finished, as a means of economically aiding completion of the ship, to close out areas, to close out job orders, to, as I said before, endeavor to finish the ship properly in the shortest amount of time.

Mr. STRATTON. So that he would provide some kind of coordination between the various shops who at least to us appear to be operating as a world of their own.

Commander COLLIER. Yes, sir. I received nothing but cooperation from these two gentlemen. Nearly every suggestion that I or my ship's officers or crew have come up with has been received extremely well.

Mr. STRATTON. Fine.

Commander COLLIER. Very fortunately, I have probably a fourth of my crew who have had new construction experience before, and those people have a lot to offer.

Mr. STRATTON. Right.

Commander COLLIER. And have been through many of the different shipyards. So we compare how things are done at various localities, and hopefully what we have been able to suggest to the shipyard has been the best of what we have seen everywhere.

Mr. STRATTON. Good.

Well, I don't believe I have any more questions.

Mr. HUNT. I have one question.

Mr. STRATTON. Mr. Hunt.

Mr. HUNT. The Commander said he had made recommendations in March of 1969 to correct certain conditions, but he had been overridden by shipyard representatives.

Commander COLLIER. Yes, sir.

Mr. HUNT. Who were they, Commander?

Commander COLLIER. This has been Mr. Sheldon and Mr. Lampson.

Mr. HUNT. Mr. Sheldon and Mr. Lampson.

Commander COLLIER. I have a copy of the minutes of that meeting, which I will send up to you. I write myself notes after meetings. It isn't an official minutes. It is what transpired. But with your concurrence, I will send that up along with the instructions.

Mr. STRATTON. Fine. We would like that.

Commander COLLIER. Yes, sir.

Mr. STRATTON. How about Captain Adrianse, where does he fit into the picture?

Commander COLLIER. Captain Adrianse is a Production Officer here, as you know.

Mr. STRATTON. I don't know enough about what these terms mean. Commander COLLIER. He is responsible for the waterfront, to coordinate all production on the shipyard.

Mr. STRATTON. He can't give orders directly to Mr. Martinez or to any other shop?

Commander COLLIER. Well, they do come under his jurisdiction, yes, sir. All productive efforts—he is responsible for all productive efforts of the shipyard, as I understand, from my personal definitions of his responsibility.

Mr. HUNT. My understanding is that they all come under him.

Commander COLLIER. Yes, sir, yes, sir.

Mr. HUNT. He can make any corrections he so desires.

Commander COLLIER. He has line of authority over all the productive shops.

Mr. HUNT. That was my interpretation of his duties.

Commander COLLIER. Yes, sir.

Mr. STRATTON. I see.

Mr. HUNT. Over 7,000 men total he has under his command.

Commander COLLIER. Yes, sir.

Mr. HUNT. He seems to be quite efficient.

Commander COLLIER. (Nods)

Mr. HUNT. In knowledge. I don't know how he employs it, but knowledgeable he appears to be very well versed.

Commander COLLIER. Yes, sir.

Mr. STRATTON. Mr. Reddan, do you have any questions?

Mr. REDDAN. No questions, Mr. Chairman.

Mr. STRATTON. Thank you very much, Captain Collier. We certainly appreciate your being here.

Mr. HUNT. Off the record.

(Discussion off the record.)

Mr. STRATTON. Thank you very much. Good luck.

We will now have Commander McGaughy.

Commander, before we proceed, I just want to mention that we are following the procedure of swearing in our witnesses. When we do that, we have to advise you of two things, first of all of your right of counsel if you so desire it, and secondly of your constitutional privilege not to answer any question, the answer to which might tend to be incriminating. These are mere formalities.

Actually, all of our witnesses have waived the right to counsel, but we are required under the rules of the House to make this known to all witnesses when their testimony is taken under oath.

If you would like to waive the right to counsel, we can then swear you in and proceed.

TESTIMONY OF COMDR. RICHARD W. MCGAUGHY, NUCLEAR POWER SUPERINTENDENT, SAN FRANCISCO BAY NAVAL SHIPYARD, MARE ISLAND, VALLEJO, CALIF.

Commander MCGAUGHY. Yes, sir, I will so waive it.

Mr. STRATTON. Fine. Please stand and raise your right hand.

Do you solemnly swear the testimony you are about to give to the subcommittee in the matters under consideration shall be the truth, the whole truth and nothing but the truth, so help you God?

Commander McGAUGHY. I do.

Mr. STRATTON. Will you please be seated.

Commander, could you give us your position again in the shipyard?

Commander McGAUGHY. I am the nuclear power superintendent of the shipyard.

Mr. STRATTON. Because of our requirements in getting out some kind of a report before we leave, I am going to ask the committee counsel and Mr. Hunt if they would conduct the questioning, and I may interrupt occasionally while I am making out this report. I hope the typewriter doesn't distract you too much.

Commander McGAUGHY. Yes, sir.

Mr. STRATTON. But we are trying to do two things at once.

So Mr. Reddan, do you want to take over the questioning?

Mr. REDDAN. Off the record.

(Discussion off the record)

Mr. REDDAN. Commander, what is your present address?

Commander McGAUGHY. I live on the shipyard here, at 217 Marcus Village, on Mare Island.

Mr. REDDAN. And how long have you held your present assignment?

Commander McGAUGHY. Since the end of October, 1968.

Mr. REDDAN. Could you just describe for us briefly the nature of your assignment and responsibilities?

Commander McGAUGHY. I have technical responsibility for the shipyard, for reactor plant work.

Mr. REDDAN. What do you mean, technical responsibility?

Commander McGAUGHY. This means that I am responsible to insure that work which is done is done technically correctly. I am not responsible for doing the work myself. That is done by production department, but I am responsible for insuring that procedures are correct, that work which is done is in fact correct, and instructions are correct, that plans are correct, and things of that sort.

Mr. REDDAN. How do you carry out that assignment? How do you insure that these things which you want to determine are correct, are correct?

Commander McGAUGHY. Well, there are several different areas, of course, in new construction, as far as construction itself is concerned, this is done primarily through the engineers who work in several different codes, who review all aspects of the plans and planning and insure that this is correct, and to then further as construction proceeds review the situation that we have, review any discrepancies which come up, review or actually site the work and make sure they find nothing wrong.

Mr. REDDAN. Do you have periodic reviews of these activities, or is this a constant flow of review by you and your people, your shop?

Commander McGAUGHY. Pretty much a constant flow. I personally try to at least once a week get specific personal review of the status in each of the areas. It is pretty much a continuous flow of information all week, so that my once a week checkup really doesn't usually tell me much that I hadn't already known.

Mr. REDDAN. Are you responsible for all nuclear power work in the yard, or just the *Guitarro*?

Commander McGAUGHY. For all nuclear-power work, technical aspects of it, of course.

Mr. REDDAN. Do you seek to achieve any coordination between the nuclear-power construction and the nonnuclear power?

Commander McGAUGHY. We do, of course, in those areas where there is—

Mr. REDDAN. In other words, where there may be conflicting operations, do you take steps to attempt to eliminate those conflicts and make sure that there is coordination between these two groups?

Commander McGAUGHY. Yes, sir, we do. This is done primarily on a day-to-day basis by means of what we call the plan-of-the-day. We have a daily meeting, when we get down to the point where there are operations which are likely to conflict, at which we have representatives of various parts of the shipyard.

Mr. REDDAN. Both nuclear and nonnuclear?

Commander McGAUGHY. Both nuclear and nonnuclear. Most of them are nuclear, of course, because most of our work is nuclear. We do have some interfaces and we normally have a representative, quite normally it is the nonnuclear ship superintendent who will attend the plan-of-the-day.

Mr. REDDAN. The interfaces, I would think, would be the things of primary concern in these particular matters that we are discussing now.

Commander McGAUGHY. Yes, sir.

Mr. REDDAN. How effective do you feel that these daily meetings are in solving the problem of possible conflict and the obtaining of smooth interface?

Commander McGAUGHY. I believe that they are satisfactorily effective at any rate. The interfaces are really not very great in general, but we do normally identify any problem which exists at the plan-of-the-day. Although we don't always solve them at the plan-of-the-day, we at least identify them, and then are able to take action to solve any problems which have come up.

Now there are, of course, some individual problems which may come up separately from this, but that is not normally the case. Normally the plan-of-the-day does solve the problems.

Mr. REDDAN. Now coming up to the date of May 15, the testimony before the subcommittee is that the nuclear group at approximately 1600 to 1630 hours began a calibration exercise.

Commander McGAUGHY. That is correct.

Mr. REDDAN. Had that been arranged for, or discussed at the morning meeting of the group?

Commander McGAUGHY. No.

Can I check which date the 15th is on my calendar?

Mr. REDDAN. Yes.

Commander McGAUGHY. Is that Friday?

Mr. HUNT. No, Thursday.

Mr. REDDAN. Thursday, I believe.

Commander McGAUGHY. Thursday. That had not, as I remember, been discussed that day at the plan-of-the-day. We had thought that that test was completed the previous day, and only after reviewing the data discovered that it was not in fact completed and had to be redone.

Mr. REDDAN. I see. This was then cranked into your operations at some time after the morning meeting on the 15th?

Commander McGAUGHY. Yes, sir, that is correct.

Mr. REDDAN. At what time, approximately, was it determined that you had to rerun this calibration test?

Commander McGAUGHY. I am not sure exactly, but I believe it was around 1500 or 1600, 3 or 4 o'clock in the afternoon.

Mr. REDDAN. Was this discussed with you at that time?

Commander McGAUGHY. No, it was not discussed with me.

Mr. REDDAN. Who made the determination that they had to return it?

Commander McGAUGHY. Our test branch head, Mr. Allen, and his operations assistant, Mr. Quittschriber.

Mr. REDDAN. Do you know of your own knowledge what took place after they made that decision?

Commander McGAUGHY. I don't of my knowledge, because I wasn't present. I was given reports subsequently as to what had occurred.

Mr. REDDAN. Well, in your assembling of the official information, the reports on this happening, could you tell the subcommittee what did take place?

Commander McGAUGHY. All right. According to the reports that were given to me, after the data review, we determined we were missing some data. Mr. Quittschriber as a result contacted the members of the joint test group to get their concurrence to rescheduling this test.

Mr. REDDAN. Now, are any nonnuclear people on this joint test group?

Commander McGAUGHY. No, the joint test group is all nuclear people.

Mr. REDDAN. All nuclear. All right.

Commander McGAUGHY. Having gotten their concurrence, or lack of objection at any rate, he then contacted the nonnuclear ship superintendent, Mr. Lampson, and informed him that we would again need a zero list and trim within half a degree, plus or minus in both cases, in order to run this test.

Mr. REDDAN. Now the day before, you had run the test?

Commander McGAUGHY. Yes, sir.

Mr. REDDAN. And you had the proper trim at that time?

Commander McGAUGHY. We had; yes, sir. It had been scheduled as the plan-of-the-day the previous day and had also gone through the ship superintendent in order to obtain the proper list and trim.

Mr. REDDAN. Why was the ship superintendent requested to again obtain trim? Had anything happened to disturb the trim during that 24-hour period?

Commander McGAUGHY. I don't know what, if anything, had occurred that might have caused it. I believe in fact the bow was too high at that time. I think it was trimmed up by the bow. I would have no knowledge of what might have caused this.

Mr. REDDAN. In any event, your calibration tests couldn't be performed without the vessel being in the trim that you have described?

Commander McGAUGHY. Yes, sir; that is correct.

Mr. REDDAN. In view of that, Commander, how do you account for the fact that at 1430 on that date your nuclear group began its testing?

Commander McGAUGHY. We began the testing—again now I wasn't present, but I am telling you reports which I received—

Mr. REDDAN. Yes.

Commander McGAUGHY (continuing). Because when the swing shift personnel came on they were informed that the preparations were complete.

Mr. REDDAN. That what preparations?

Commander McGAUGHY. Well, the report they received—

Mr. REDDAN. If you will identify who "they" was.

Commander McGAUGHY. "They" meaning in particular Mr. Christiansen, who was the senior test engineer on the swing shift.

Mr. REDDAN. For nuclear?

Commander McGAUGHY. For nuclear.

Mr. REDDAN. Yes.

Commander McGAUGHY. They have nothing to do with nonnuclear.

Mr. REDDAN. Yes.

Commander McGAUGHY. He was informed by the man he relieved, and there was a log entry, that preparations were complete.

Mr. REDDAN. Who was that?

Commander McGAUGHY. Let's see. Mr. Taylor, I believe, was the day shift.

Mr. REDDAN. Mr. Taylor, the day shift of nuclear, informed Mr. Christiansen on the swing shift that the vessel was in trim?

Commander McGAUGHY. No; he didn't specifically inform him that. He informed him that the preparations were complete, as I understand it.

Mr. REDDAN. What preparations did he have reference to?

Commander McGAUGHY. There had been a question concerning whether the air was lined up to the gauge which they needed. He didn't specify that, that being one of the items. However, this was one of the things they would have been interested in, and trim. Obviously a water supply in order to fill the tank was necessary.

Mr. REDDAN. Now you say trim. Are you talking about trim of the vessel?

Commander McGAUGHY. Yes, sir; trim of the vessel.

Mr. REDDAN. He advised them the vessel was in trim?

Commander McGAUGHY. He did not to my knowledge specifically state the vessel was in trim. He only stated that preparations were complete.

Mr. REDDAN. That preparations were complete for the test which the nuclear group was to perform.

Commander McGAUGHY. Yes, sir.

Mr. REDDAN. Well, this would certainly have conveyed to Mr. Christiansen, then, that the vessel was in trim?

Commander McGAUGHY. He understood it to mean that, as I understand it.

Mr. REDDAN. Wouldn't you interpret it that way?

Commander McGAUGHY. I would have also; yes, sir.

Mr. REDDAN. So at that point your group began its assignment.

Commander McGAUGHY. Yes, sir.

Mr. REDDAN. Now, at that very time, according to testimony the subcommittee has received, the nonnuclear group were beginning an operation to trim the vessel, and there was a conflicting position between the day and the swing shift nonnuclear people as to whether the vessel was up or down at the bow—I mean up at the bow two degrees, or up at the stern two degrees.

We were further informed that this trimming was undertaken on a crash basis at the request of the nuclear side.

Commander McGAUGHY. Yes, sir.

Mr. REDDAN. Now, who on the nuclear side discussed this with the nonnuclear side and requested that this work be done on a crash basis?

Commander McGAUGHY. The only communication that I am aware of which occurred was the one which I mentioned previously between Mr. Quittschriber and the nonnuclear ship superintendent, Mr. Lampson. I am not aware of any other request.

Mr. REDDAN. He just told Lampson that he was going to rerun the test, is that right?

Commander McGAUGHY. That is correct, and asked for a zero list and trim.

Mr. REDDAN. Is it your testimony that to your knowledge Mr. Lampson didn't tell Quittschriber that the vessel was out of trim?

Commander McGAUGHY. To my knowledge, he did not. And to my knowledge, no report was ever received of the vessel being in trim.

Mr. REDDAN. Do you know whether or not Mr. Quittschriber asked Mr. Lampson to check the trim of the vessel?

Commander McGAUGHY. The only communication I know of which occurred was when Mr. Quittschriber asked to have the vessel put in proper trim. I am not sure if that answers your question or not.

Mr. REDDAN. That was on the 13th, however; was it not?

Commander McGAUGHY. No; that was——

Mr. REDDAN. You see, the vessel was put in trim on the 13th.

Commander McGAUGHY. All right. On the day that we ran the test——

Mr. REDDAN. Yes; on the 15th.

Commander McGAUGHY. Yes, sir. On that day Mr. Quittschriber did ask Mr. Lampson to have the vessel put in proper list and trim.

Mr. REDDAN. Now, he would have to make the assumption, then, or this would indicate that he wasn't sure whether the vessel was in trim?

Commander McGAUGHY. Yes, sir.

Mr. REDDAN. Now if he was not sure it was in trim—did he have anything to do with the ordering of the nuclear exercise of calibration immediately thereafter?

Commander McGAUGHY. No. What he did was to order the test calibration you are speaking of to commence when the preparations were completed, including when the vessel was in trim.

Mr. REDDAN. But then your swing shift supervisor advised Mr. Christiansen at or about that very time that the arrangements had been completed?

Commander McGAUGHY. Yes, sir.

Mr. REDDAN. You see, there is a breakdown of communications here somewhere, Commander. According to the testimony we received, the nonnuclear side was unaware of this requirement until 1600, approximately, and thereafter on a crash basis they attempted to trim the ship. At the very time that they were starting their operation to trim the ship, the nuclear people were beginning their calibration.

Commander McGAUGHY. Yes, sir.

Mr. REDDAN. Now, how do you account for this condition?

Commander McGAUGHY. To my understanding, what occurred was that the swing shift incorrectly assumed that the list and trim had been brought into specification, and they assumed this on the basis of a report which I mentioned earlier, that all preparations had been made.

Mr. REDDAN. There was no communication, then, between the swing

shift superintendent and the man who went to take up this problem with the nonnuclear side?

Commander McGAUGHY. To my knowledge, there was no communication between any of the swing shift personnel on this subject. The swing shift test engineer, for example, Mr. Christiansen, did not receive any specific report that the ship was in trim, nor did he request anyone to get it into trim.

Mr. REDDAN. He did receive a report, however, that all the conditions were completed for the test which he was supposed to make?

Commander McGAUGHY. Yes, sir.

Mr. REDDAN. Which would include the trim of the ship.

Commander McGAUGHY. He assumed it to, incorrectly.

Mr. REDDAN. Yes. Who should have told Mr. Christiansen that a request was just then being made to ensure that the ship was in trim? Who should have told him that?

Commander McGAUGHY. Well, Mr. Quittschriber, although he probably would have told it to the day shift and the day shift should have passed it on to him in reality.

Mr. REDDAN. Well, of course this didn't come up apparently until the end of the day shift.

Commander McGAUGHY. Yes, sir. I believe it occurred just before the end of the day shift.

Mr. REDDAN. Then there seems to be a failure of communication over in the nuclear side between Mr. Quittschriber and Mr. Christiansen. Wouldn't you agree, under those circumstances, Mr. Quittschriber knew, or did Mr. Quittschriber know that this test was going to be done before the vessel was put in trim?

Commander McGAUGHY. He did not know, I don't believe, that it would commence before the vessel was in trim, and as a matter of fact, I don't know that it did commence before it actually was in trim. As far as I know, no one that I know of specifically checked to see what the trim was at the time.

Mr. REDDAN. Well, the testimony, as I say, is that it was checked by a number of people, some of whom said it was 2° up at the bow, and some who said it was 2° up at the stern. So how informative that checking was, is, of course, open to question.

Commander McGAUGHY. Yes, sir. I was going to add that I believe that Mr. Christiansen noted that he didn't know just from standing there that there was any noticeable list or trim, but he didn't check any instrumentation.

Mr. REDDAN. No, that was not part of his job to check the trim, was it?

Commander McGAUGHY. I would have expected him to check.

Mr. REDDAN. You would have?

Commander McGAUGHY. Yes. I feel he should have checked the trim prior to commencing the test.

Mr. REDDAN. I see.

Mr. HUNT. Are you saying now that Mr. Christiansen should have, in your estimation, checked the trim?

Commander McGAUGHY. Yes, sir, and I would have expected him to do this by looking at instrumentation himself, not just by receiving a report from someone.

Mr. REDDAN. I think that covers everything that I need on the thing.

Mr. Hunt, if you have anything.

Mr. HUNT. Mr. McGaughy, you undoubtedly now are aware of the fact that at the time the nuclear power division were starting their calibration exercises for the _____, at that same time, almost to the minute, shop 38 of the nonnuclear force from Mare Island was attempting to bring down the nose of the 665 by 2°.

Commander McGaughy. I am aware of that now. I had not heard the 2° until it was mentioned in here.

Mr. HUNT. The testimony we have is that they were told originally that the ship bow was down by 1°. This is on May 15, 1969. They checked it with a gunner's quadrant, and their reading indicated that this was erroneous, that in actuality the nose, the bow, was 2° too high. So for the purpose of correcting the trim situation and getting the ship on an even keel, so the calibration could be made by the nuclear people, they were in the process of actually trimming the ship or trying to trim the ship at the same time the nuclear people began to conduct their calibration tests.

Commander McGaughy. Yes, sir.

Mr. HUNT. Did you know that just before the nuclear force blew the _____ that the shop 38 men ceased trying to try to trim the ship and at that time still had not yet been successful in bringing the nose down to the required trim level—did you know that?

Commander McGaughy. I knew subsequent to the event that they were still trying to do something in the way of trimming, but I don't have any real knowledge of what they thought they were trying to do.

Mr. HUNT. This, of course, perhaps, may be something beyond your realm, but you have been with nuclear submarines, I assume, quite some time.

Commander McGaughy. I have been with nuclear submarines only since I have been at Mare Island.

Mr. HUNT. Only since you have been here? Have you been in submarine service prior to that?

Commander McGaughy. No, sir.

Mr. HUNT. Are you familiar with the trimming of a ship or a submarine?

Commander McGaughy. Only in very general terms.

Mr. HUNT. So you wouldn't know whether it was trimmed properly or whether it wasn't trimmed properly?

Commander McGaughy. I would only know what the condition of trim by looking—

Mr. HUNT. At the gauge?

Commander McGaughy. At the gauge to see what it was.

Mr. HUNT. The inclinometer.

Commander McGaughy. Yes, sir.

Mr. HUNT. Is Mr. Christiansen qualified to accept the posture of a ship trim? Would he know from reading the instrumentation whether or not the ship was in proper trim prior to the beginning of the calibration by the nuclear power force?

Commander McGaughy. I would expect him to be able to ascertain by looking at an inclinometer.

Mr. HUNT. Has he been associated with submarine shipbuilding prior to the 665 assignment?

Commander McGAUGHY. He has. He has been working in the nuclear power division here at Mare Island for, I believe, in the vicinity of 3 years. I don't know exactly.

Mr. HUNT. I would think that would qualify him to understand a little bit about nuclear powered submarines and trim and calibration.

Commander McGAUGHY. Yes, sir. I don't believe he has any special qualification in how you go about changing the trim.

Mr. HUNT. No?

Commander McGAUGHY. But he is certainly competent to read an inclinometer.

Mr. HUNT. But he certainly should be cognizant of the fact that prior to attempting a final calibration of _____ in the nuclear section, that he should at least find out whether or not that ship was in proper trim.

Commander McGAUGHY. Yes, sir.

Mr. HUNT. What I am trying to say is there was no coordination insofar as you know between the nuclear power supervisor at that time and the nonnuclear force who were trying to trim the ship at the same time, no coordination that you know of?

Commander McGAUGHY. None that I know of. I don't think my people knew there was any trimming going on, as a matter of fact.

Mr. HUNT. Thank you very much, Commander.

Mr. REDDAN. I have just one other question, Commander.

Do you know whether or not on May 15, on the *Guitarro*, there was an operational inclinometer?

Commander McGAUGHY. No, sir; I do not know.

Mr. REDDAN. The testimony that we have was that there was not.

Commander McGAUGHY. I have heard comments that there was conflicting indications, but that is as much as I know about it.

Mr. HUNT. We have information that there was an inclinometer on the panel, but that the panel had not been energized, therefore it was not in operation, and for that reason they were using a gunner's quadrant to ascertain trim.

Commander McGAUGHY. Yes, sir; I have been told that also.

Mr. HUNT. We have also been advised that the reading taken on the ship's quadrant was being taken by men who had no prior knowledge of the situation, of ship trim.

Commander McGAUGHY. That may well be. I have no personal knowledge of it.

Mr. HUNT. On May 15, 1969, in regard to the plan-of-the-day meeting, it is my understanding that nuclear meets around 0730 hours.

Commander McGAUGHY. That is correct.

Mr. HUNT. To discuss their problems. Then at about 0800 there is a combined meeting with nonnuclear.

Commander McGAUGHY. Yes, sir.

Mr. HUNT. Did you attend that day?

Commander McGAUGHY. No, sir; I did not attend that day.

Mr. HUNT. So you would not have known whether Mr. Lampson was there or not?

Commander McGAUGHY. No, sir.

Mr. HUNT. Thank you, Commander. I think that is about all. Sorry to have kept you waiting so long.

Commander McGAUGHY. Yes, sir.

Mr. HUNT. But we run into time differentials once in a while and things do arise. We are driving into pretty definite deadlines.

Commander McGATHEY. I understand that.

Mr. REDDAN. Thank you for coming, Commander. Thank you for your help.

Mr. STRATTON. Mr. Brackney, before we begin to question you, I just wanted to mention to you a couple of things here.

First of all, we are instructed by our chairman to swear all of the witnesses in this subcommittee hearing, not because we are trying to put any blame on anybody, but simply because it is being done in the Naval Court of Inquiry and it was felt best for us to do it as well.

Under the rules of the subcommittee and of the House, we have to advise you of two things when you are sworn. First of all, that you do have the right to counsel if you so desire it, and secondly, in accordance with the Constitution, you don't have to respond to any questions where the answers might tend to be incriminating.

All of the witnesses have waived counsel so far, and we have had no problems, but I did want to inform you of your rights under the rules of the House and the Constitution. If you are willing to waive counsel, I can swear you in and then we can proceed to question you.

TESTIMONY OF JOE LEON BRACKNEY, NUCLEAR SHIP SUPERINTENDENT, U.S.S. "GUITARRO," SAN FRANCISCO BAY NAVAL SHIPYARD, MARE ISLAND, VALLEJO, CALIF.

Mr. BRACKNEY. I am willing to waive counsel.

Mr. STRATTON. All right. Please stand and raise your right hand. Do you solemnly swear that the testimony you are about to give before this subcommittee in the matters under consideration shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. BRACKNEY. I do.

Mr. STRATTON. Will you be seated, please?

Mr. Brackney, I will ask Mr. Reddan, the subcommittee counsel, to begin the questioning. Because of deadlines and limitations of time, I am doubling as committee typist over here, and that may complicate a little bit your testifying, but I hope it doesn't make too much noise.

I may interrupt occasionally with questions, and Mr. Hunt.

Mr. REDDAN. Mr. Brackney, did you give the reporter your full name and address?

Mr. BRACKNEY. He has my name.

Mr. REDDAN. Fine. Will you give him your home address, please?

Mr. BRACKNEY. My full name is Joe Leon Brackney. My address is 1006 Madrone, here on Mare Island.

Mr. REDDAN. What is your present assignment?

Mr. BRACKNEY. I am assigned to the production department as a nuclear ship superintendent on board the *Guitarro*.

Mr. REDDAN. How long have you held the title of nuclear superintendent?

Mr. BRACKNEY. I reported aboard in August of 1968, at which time I was assigned as a nuclear ship superintendent and became—I was assigned to work aboard the *Guitarro*, under another warrant officer. I was given the ship solely—I was the only ship superintendent assigned here in October, from 1968 until now.

Mr. REDDAN. Prior to this assignment on the *Guitarro*, had you previously been a nuclear superintendent?

Mr. BRACKNEY. No, sir. I was chief petty officer in the Navy and made warrant in June of 1968.

Mr. REDDAN. Were you on submarines?

Mr. BRACKNEY. Yes, sir; I have been in submarine service since 1953.

Mr. REDDAN. On nuclear subs?

Mr. BRACKNEY. No, sir. I have been attached to the nuclear submarine program since 1955.

Mr. REDDAN. Could you tell the subcommittee very briefly what your duties are as a nuclear superintendent?

Mr. BRACKNEY. As nuclear ship superintendent on the *Guitarro*. I am responsible to the production officer for the timely completion of all work and meeting schedules. I work more or less as a coordinator between various shops, trades, and codes, in order to progress work.

Mr. REDDAN. Do you have any responsibility for assigning job orders or work to be done on the ship?

Mr. BRACKNEY. Actual signing of job orders?

Mr. REDDAN. At someone else's direction? I mean, are you the middleman between the workers, those who perform the work and those who make the decision that the work shall be performed.

Mr. BRACKNEY. I am indirectly. I am in the chain, but the work is identified by the time the information is given to me, and it is simply a matter of getting the codes geared up so to speak, or getting them tooled up and telling them when we want to do it. It is getting the thing scheduled, is really where I get into the picture.

Mr. REDDAN. We would like to zero in on the May 15 date, particularly the calibration exercise which the nuclear group was engaged in during the swing shift on that date. What can you tell us about the assignment of that activity to the swing shift? How was it done?

Mr. BRACKNEY. The actual test, calibration test of these tanks, had taken place prior to that time.

Mr. REDDAN. The day previous?

Mr. BRACKNEY. Right. I don't recall exactly what shift. I had been informed later in that day—we were just getting ready to go into another operation.

Mr. REDDAN. Later on the 14th or the 15th?

Mr. BRACKNEY. It was the 15th.

Mr. REDDAN. Late in the afternoon?

Mr. BRACKNEY. Yes, sir.

Mr. REDDAN. Of the 15th.

Mr. BRACKNEY. I had been informed that we had missed some what we call I points, or inspection points, as we dewatered these tanks that the nuclear people were calibrating?

Mr. REDDAN. Who told you that, do you recall?

Mr. BRACKNEY. I received the information from either of two people. We were in a conversation. Mr. Vince Abano or Mr. Quittschriber. I was in a conversation with them and was told that we had missed these I points, and that we were going to have to redo the test.

Well, his people, meaning the 2302 D code test people, were aware of this prior to my knowledge, and had already communicated I

think, and I say "I think"—I was never told we were going to do it again. It was just to be scheduled to be done.

Mr. REDDAN. Yes.

Mr. BRACKNEY. And that was about, right around 4 o'clock in the afternoon, is the first time I recall having knowledge that it had to be redone.

Mr. REDDAN. Did you have any conversations with Mr. Christiansen or any of the group who was to perform this calibration test on the afternoon of the 15th?

Mr. BRACKNEY. I did not have any direct—I was aware of a conversation, in that it was being taken care of. I have a shack in which I work out of. I have reactor quartermen who cover the job three shifts, and who are basically my lieutenants, so to speak, and carry out my orders, or carry on when I am not there in my capacity.

I was aware of it, and I had gone back to my shack after I had been notified of this and the conversation was in process at that time between my reactor plant quartermen and Mr. Jack Lampson in regard to the fact—

Mr. REDDAN. Lampson was nonnuclear, was he?

Mr. BRACKNEY. Right—in regard to the fact that we did have to rerun this test. They were in a conversation in regard to the fact that the ship had to be put in trim and I was just aware—

Mr. REDDAN. Did you hear them discussing that the ship had to be put in trim?

Mr. BRACKNEY. Yes, sir; I knew this. Then when I arrived at my shack, I could tell that they already knew it from their conversation, and I did not get involved in that conversation.

Mr. REDDAN. The subcommittee is trying to reconstruct that one particular part right there, as to what the conversation was between Mr. Lampson and—who was he talking to?

Mr. BRACKNEY. I am sure it would have been Gary Adams.

Mr. REDDAN. Do you recall overhearing any of that conversation with respect to the requirement for the trim of the ship?

Mr. BRACKNEY. No, sir; I do not. I was aware they were having a conversation. I was doing paperwork. Mr. Adams being a very reliable individual, I knew it was being taken care of.

Mr. REDDAN. Did you have anything to do with the preparation of the instructions to the swing shift with respect to this test?

Mr. BRACKNEY. Well, I have a swing shift reactor plant quartermen that comes on, and I usually stay over from 1 to 2 hours, and sometimes longer, and we discuss what has gone on during the day, and what is to be done during the shift.

As far as actual involvements in the test, we do not get involved unless we are asked for assistance from a trade.

Mr. REDDAN. Did you have anything to do with instructions to Mr. Christiansen to the effect that the conductions prerequisite to the testing had already been achieved, in other words, that he was free to begin his tests immediately?

Mr. BRACKNEY. No, sir; I am not aware of any conversation with Mr. Christiansen that afternoon. I might have spoken to him, but I don't recall having seen him prior to the sinking.

Mr. REDDAN. Did you know that the calibration tests were to begin immediately?

Mr. BRACKNEY. I knew that they were—we were going to try to do them on swing shift.

Mr. REDDAN. Did it occur to you that in view of these conversations between your man and Mr. ——— who was on the nonnuclear side?

Mr. BRACKNEY. Mr. Lampson.

Mr. REDDAN. Mr. Lampson—in view of those conversations that perhaps the ship was not in trim for the test?

Mr. BRACKNEY. No, sir; I knew that the ship had been put in trim a couple of days prior to this time, and insuring that the ship was in trim was of no real importance to me at the time. I knew it had to be in trim, but I was not aware that it was not.

Mr. REDDAN. Do you have any questions, Mr. Hunt?

Mr. HUNT. Mr. Brackney, you are the superintendent for Nuclear Power Division there on the 665, on the swing shift?

Mr. BRACKNEY. No; I am the only nuclear ship superintendent assigned to the ship.

Mr. HUNT. You are the only one?

Mr. BRACKNEY. Yes.

Mr. HUNT. All right.

Mr. BRACKNEY. And I work for the production officer, not the Nuclear Power Division.

Mr. HUNT. All right. You are with the production officer.

Now, in the course of your duty there, would you normally discuss sometime during the day the activities and the progress of work with Mr. Lampson?

Mr. BRACKNEY. Yes, sir; we have quite a lot of interface, so to speak, in other words, boundaries of nuclear and nonnuclear. What our requirements might be that the nonnuclear superintendent will gear the trades up for to provide us with something that the nuclear department might require.

Mr. HUNT. You were aware of the calibration requirements for the _____?

Mr. BRACKNEY. Yes, sir.

Mr. HUNT. You were aware of the fact that the ship was reportedly trimmed several days prior to that, when the calibration first began in the nuclear section?

Mr. BRACKNEY. Right, I knew that the ship had been in trim because we had run this test once.

Mr. HUNT. Right; and it wasn't until about 1600 hours, as I understand it, that it became apparent that the tests had not been completed on the calibration of the _____ and that additional mark-ups would be required; this was correct?

Mr. BRACKNEY. That is when I found it out.

Mr. HUNT. Yes, sir. Now you, from that time on, had no discussion with Mr. Lampson on this posture, per se? You didn't discuss this with Mr. Lampson after 1600 hours?

Mr. BRACKNEY. No, sir. I was present during a conversation but I was just in my shack, and Mr. Lampson was there and Mr. Robnett and Mr. Adams.

Mr. HUNT. You think Mr. Adams was the man he was talking about?

Mr. BRACKNEY. Yes, sir. I feel that it was.

Mr. HUNT. Were you aware of the fact that while the calibration of the _____ was being conducted for the nuclear people, a

simultaneous attempt was being made by shop 38 of the nonnuclear forces to bring the ship into trim? Were you aware of this?

Mr. BRACKNEY. For this specific test?

Mr. HUNT. Yes.

Mr. BRACKNEY. I was not aware when they started trimming the ship.

Mr. HUNT. Did you know that at about 1630 hours, when the nuclear group began to flood the _____, that at the same time, forward, nonnuclear people from shop 38, Mare Island, were flooding 3A and 3B?

Mr. BRACKNEY. No, sir, I was not aware of that.

Mr. HUNT. You were not aware of that?

Mr. BRACKNEY. No, sir.

Mr. HUNT. Were you present on board at about 2000 hours when the nuclear force decided to blow the _____ and vent them?

Mr. BRACKNEY. No, sir.

Mr. HUNT. You weren't there?

Mr. BRACKNEY. I was there when the ship went down. I was called from my quarters by Mr. McKay, who is the swing shift reactor plant quartermaster, and notified that the ship was sinking. This was sometime shortly after 8:30, as best I can establish it. I immediately left my quarters and went to the ship, and I was there in a very short period of time, from what I am told, and boarded the vessel. As I boarded, the water level was at the after end of the sail structure. The ship had gone down by the bow. The first man I saw was Lieutenant Hartman. Would you like for me to go into this?

Mr. HUNT. That is all. I am just trying to establish where you were.

Mr. BRACKNEY. O.K.

Mr. HUNT. What I am trying to establish, Mr. Brackney, is the fact that you were really not physically present.

Mr. BRACKNEY. That is correct, sir.

Mr. HUNT. At the time when they were conducting the calibration tests in the final stage.

Mr. BRACKNEY. That is correct.

Mr. HUNT. What time did you leave the 665, approximately?

Mr. BRACKNEY. The area of the 665, it was probably around 5 to 5:30 in the evening.

Mr. HUNT. Around 1700 or 1730?

Mr. BRACKNEY. Yes, sir.

Mr. HUNT. So you would not have been present when this took place?

Mr. BRACKNEY. No, sir, I was certainly not on board.

Mr. HUNT. Mr. McKay, then, would have become your counterpart?

Mr. BRACKNEY. Yes, sir.

Mr. HUNT. And he was present when you came back?

Mr. BRACKNEY. Yes, sir.

Mr. HUNT. Now Mr. Brackney, considering your long experience with submarines, have you ever been on a submarine that was being constructed where the No. 1, No. 2, and No. 3 tanks forward were flooded in an attempt to bring it into trim?

Mr. BRACKNEY. No, sir.

Mr. HUNT. Have you ever known them to try to trim a ship without flooding the sonar compartment?

Mr. BRACKNEY. Have I known them to trim a ship without—

Mr. HUNT. Without flooding the sonar compartment.

Mr. BRACKNEY. Not this particular vessel, but the way I see it—in other words, I am speaking from things I have learned since.

Mr. HUNT. I am asking you from actual experience, not from theory, actual practicability, the trimming of a submarine prior to calibration.

Mr. BRACKNEY. Is not done in the manner in which it was being done, on board a submarine that is under the control of Navy people.

Mr. HUNT. In other words, what you are saying is Navy people who have knowledge of the ship trimming would not have conducted it in this manner?

Mr. BRACKNEY. I think I can say that in all sincerity, that that is absolutely true.

Mr. HUNT. It would have been a direct violation, would it not?

Mr. BRACKNEY. Yes, sir.

Mr. HUNT. Somebody would have gone for doing a job in that manner?

Mr. BRACKNEY. Yes, sir. Submarines submerge by filling ballast tanks and no other means.

Mr. HUNT. Is it not true that for dive posture, dive procedure, that is when 1, and 2, and 3A and B are flooded?

Mr. BRACKNEY. That is correct, sir.

Mr. HUNT. And that puts you in dive posture?

Mr. BRACKNEY. Yes, sir.

Mr. HUNT. So in effect, when the people in this shipyard were attempting to trim that ship by flooding 1 and 2 ballast tanks, and then filling 3A and B, they were actually putting that ship in a dive posture?

Mr. BRACKNEY. Yes, sir.

Mr. HUNT. Thank you.

Along those same lines, would you be in position to understand the _____ capabilities?

Mr. BRACKNEY. Yes, sir.

Mr. HUNT. Would it be your interpretation that when filled, when the _____ were filled—and they, I understand, are _____ in the line of nuclear submarine construction—that they would hold roughly, together, about _____ gallons of water?

Mr. BRACKNEY. I would have thought that it was more than that.

Mr. HUNT. More than that. Would it be your interpretation that when filled, that is the _____ only, that a general overall approximation of weight would be about _____ tons?

Mr. BRACKNEY. Yes, sir.

Mr. HUNT. Now would you think that the blowing of those tanks between the hour of 2000 and 2025 could have contributed to the dropping of the bow?

Mr. BRACKNEY. I can certainly see that it would have raised the after end of the ship, possibly, but I can't see that it would have thrown the forward end of the ship down any.

Mr. HUNT. No; but it would have raised the aft end to a certain degree in your estimation?

Mr. BRACKNEY. Yes, sir; which would tend you to, cause you to appear to have a down bubble. Whether the bow actually would go down further or not is unknown to me.

Mr. HUNT. That is right.

With your experience on submarines, and in your construction work on submarines and all of your time there, have you ever seen a submarine under construction in the water with the sonar hatch cover removed forward?

Mr. BRACKNEY. Submarine construction is very new to me, and I am not normally engaged in the forward part of the ship except on my duty nights, where I make an inspection of the ships that we have in the water. I can't say that I have never seen it, but I don't recall having seen it before, because after the ship was raised, I had to go down and look, or I went to the 666 and looked to try to understand what actually happened, and until that time I was not aware of the hole from the sonar dome into the pressure hull, nor was I aware of how the sonar dome was actually constructed.

Mr. HUNT. Thank you, Mr. Brackney.

Mr. REDDAN. All right. Thank you so much.

Mr. BRACKNEY. Thank you.

Mr. STRATTON. Mr. Robnett, we appreciate your coming here and we are sorry that we have been delayed in getting to you.

Before we begin, I want to advise you, as I have the other witnesses, that we have been requested to swear the witnesses before this subcommittee. When we do, according to the rules of the House and the subcommittee, we are required to advise you first of all that you have the right to counsel if you so desire it, and secondly, you don't have to answer any questions that may tend to be incriminating. Everybody has been sworn, all of our previous witnesses. We are not really seeking to nail anybody. We are trying to simply get the picture and make recommendations how to prevent it in the future.

Everybody has waived the right to counsel. If you are willing to waive the right to counsel, we can swear you in now and proceed. Is that agreeable to you?

**TESTIMONY OF HAROLD VIVIAN ROBNETT, GENERAL FOREMAN 1,
MARINE MACHINIST, SAN FRANCISCO BAY NAVAL SHIPYARD,
MARE ISLAND, VALLEJO, CALIF.**

Mr. ROBNETT. Yes, sir.

Mr. STRATTON. Stand and raise your right hand.

Do you solemnly swear that the testimony you are about to give before this subcommittee in this proceeding will be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. ROBNETT. I do.

Mr. STRATTON. Thank you. Be seated, please.

Mr. Robnett, you are the chief foreman, as I understand it.

Mr. ROBNETT. My title, sir, is general foreman 1, marine machinist.

Mr. STRATTON. General foreman 1, marine machinist.

Your full name?

Mr. ROBNETT. Harold Vivian Robnett, R-o-b-n-e-t-t.

Mr. STRATTON. And your address locally, Mr. Robnett?

Mr. ROBNETT. 2953 Laurel Street, Napa.

Mr. STRATTON. And how long have you been employed here at the shipyard?

Mr. ROBNETT. Thirty-nine and a half years. I came here in January, 1930, and served my apprenticeship.

Mr. REDDAN. You must have laid the keel for the yard, didn't you?

Mr. ROBNETT. Practically, sir.

Mr. STRATTON. It is a remarkable job.

Mr. REDDAN, you want to start the questioning?

Mr. REDDAN. Mr. Robnett, will you tell us briefly what your duties are as general foreman No. 1?

Mr. ROBNETT. Usually we are assigned to a particular area, a ship, normally, and our duties are to plan the work and coordinate the work and control generally from the day shift. We line up our work and be sure we are passing it to the next shift.

We are normally responsible for the work procedures, the work system, and the priority of the jobs that we work, and other requests that come in during the day.

Mr. REDDAN. Your area of responsibility, however, does not extend beyond the nonnuclear phase of construction, does it?

Mr. ROBNETT. That is correct at this time, yes, sir.

Mr. REDDAN. When you refer to coordination, you are talking about coordination of activities within the nonnuclear operations?

Mr. ROBNETT. Yes, sir. I have the test group and the construction group here, and my responsibility is to coordinate the test and the finish of the building and the remainder of the work that has to be done on the ship, and that it is ordinarily coordinated from one ship to another and all the trades in our particular needs are coordinated from one shift to the other.

Mr. REDDAN. I would like to call your attention now to the afternoon of May 15, which is the afternoon of the day the *Guitarro* sank. I want particularly to ask you to tell the subcommittee all that you can about the events which led up to the trimming of the *Guitarro* on that day.

Mr. ROBNETT. We went ahead with our normal procedure of lining up—

Mr. REDDAN. How did it come to your attention that trimming of the vessel was required?

Mr. ROBNETT. Well, Mr. Gray Adams, the reactor plant quartermaster for code 340, at about 10 minutes to 4, came down to the dock. I was on the dock, and he told me the nuclear people had to perform another test over and they wanted me to check the ship to see it was within a half a degree fore and aft, that they had requested us to keep the boat in.

Mr. REDDAN. So what did you do, sir?

Mr. ROBNETT. When I got this request from Mr. Adams, I had one of my people check the trim of the ship to see what station the ship was in, to see what action we would have to take. At this time I was told that the ship was 35 minutes to port and 1 degree down at the bow.

Mr. REDDAN. Who told you that, sir?

Mr. ROBNETT. By the man that I told to check the trim of the ship.

Mr. REDDAN. Who was that, sir?

Mr. ROBNETT. Mr. Powell.

Mr. REDDAN. Mr. Powell?

Mr. ROBNETT. Was the man I sent to do it.

Mr. REDDAN. Was he experienced in matters of this sort?

Mr. ROBNETT. Oh, yes, sir.

Mr. REDDAN. He knew how—

Mr. ROBNETT. He had been checking them.

Mr. REDDAN. How did he check the trim of the ship?

Mr. ROBNETT. We have tow systems. They check it with a level, and they check it with a quadrant.

Mr. REDDAN. Do you know which system Mr. Powell used?

Mr. ROBNETT. I believe Mr. Powell had the level and Mr. Dozler had the quadrant. Mr. Dozler, I believe, was the man that checked the trim actually.

Mr. REDDAN. I am familiar with the quadrant. What does the level look like? A carpenter's level?

Mr. ROBNETT. Yes, sir. It is a machinist's level, they call it. It is shorter. It is generally within a degree or a degree and a half—it is fairly accurately checked with the machinist's level.

Mr. REDDAN. And that is used by placing it on a predetermined plate?

Mr. ROBNETT. Yes, sir.

Mr. REDDAN. And Mr. Powell came back and reported to you that the *Guitarro* was down at the bow—how far, sir?

Mr. ROBNETT. One degree.

Mr. REDDAN. One degree down. Did you observe how she was lying in the water at that time?

Mr. ROBNETT. I observed as I went aboard that we had still showing the black line, and generally we watch the distance between the black line and the water line and see that we have safe margin in that area. The boat had been laying approximately where it had been for—oh, all week.

Mr. REDDAN. Well, now, it had achieved the required trim the day before, had it not, sir?

Mr. ROBNETT. I believe that was Tuesday, sir; the Tuesday night shift or swing shift, and the graveyard shift finished it up Wednesday morning.

Mr. REDDAN. Now, how did the attitude of the ship appear to you on the afternoon of the 15th, as compared to its attitude in the water at the time when you knew it was in even trim?

Mr. ROBNETT. To the best of my knowledge, she was all in the same position that we had left her Wednesday morning for the day shift people. It was still in the same relative position, and I didn't notice any change to it at all.

Mr. REDDAN. Well, in a ship the size of the *Guitarro*, how much movement would there be to the bow in a 1-degree change in attitude?

Mr. ROBNETT. That is a rather hard question to answer, sir; because I really don't know what point we are pivoting on.

Mr. REDDAN. You would be pivoting on the same point on the 15th as you had on the 13th.

Mr. ROBNETT. Not more than 2 or 3 inches at the most, that we have had any movement of the *Guitarro*.

Mr. REDDAN. But my question was, do you know—maybe you don't know the answer to this question—if your bow moved down 1 degree,

under the loading conditions you had on the 15th, would you know how far the bow could expect to decline?

Mr. ROBNETT. No, sir; I really can't answer that question.

Mr. REDDAN. In any event, this was reported to you, this condition was reported to you by Mr. Powell, and what did you do, sir?

Mr. ROBNETT. I instructed my people to line the swing shift up to start transferring water from forward to the after trim tank, so we could get the bow to come up.

Mr. REDDAN. Now, this was the afternoon——

Mr. ROBNETT. Yes, sir; this was between 10 minutes to 4, and I believe it was about 5 minutes after 4 when I instructed the people to take the swing shift and line down the ballast control panel, to move water back to the after trim tanks.

Mr. REDDAN. Who did you tell to do that?

Mr. ROBNETT. I told Mr. Saraiva, I believe. He was my head mechanic, and I told him to see that the swing shift was lined up with proper instructions to pump water back.

Mr. REDDAN. In the trim tanks?

Mr. ROBNETT. In the after trim.

Mr. REDDAN. It was your idea to correct the down nose condition by movement of the water internally in the trim tanks?

Mr. ROBNETT. Yes, sir. I knew we had water forward, because we had been exercising the tubes on Thursday afternoon, and we secured those approximately 3:30 and drained those down. I know we had taken on some water forward in the WRT tanks, and consequently in the auxiliaries.

Mr. REDDAN. Now, when you obtained the desired level of trim on Tuesday, or whatever day it was, was this achieved simply by the movement of water within the trim tanks internally?

Mr. ROBNETT. Yes, sir. I think we ballasted it with ballast water in the No. 2A and B ballast tanks, and No. 3A and B ballast tanks.

Mr. REDDAN. You added water on Tuesday to the ballast tanks in addition to moving the trim tank water?

Mr. ROBNETT. I believe Tuesday we just used ballast tanks. I don't believe there was any trim movement.

Mr. REDDAN. I see.

Mr. ROBNETT. Other than to level it athwart ship, back and forth between the auxiliaries.

Mr. REDDAN. Did you require any authorization, specific authorization, to put water in the ballast tanks?

Mr. ROBNETT. The only authorization we got was when we talked to the ship superintendents and tell them what we are actually planning to do and get their concurrence.

Yes, we got——

Mr. REDDAN. Who did you talk to on this, when you initially put water in the ballast tanks on Tuesday?

Mr. ROBNETT. Only on Tuesday, Mr. Lampson, the ship sup, asked me to go ahead and do it, to trim the ship this half degree requirement himself. I got my authority and request from Mr. Lampson, the ship superintendent.

Mr. REDDAN. Yes. Did he tell you how it was to be done, or did you tell him how you planned to do it?

Mr. ROBNETT. No, sir; he didn't tell me how it was to be done. We normally use the water ballast system.

Mr. REDDAN. Is that a normal practice in this yard, to ballast submarines at this stage of completion by adding water to the ballast tanks, sir?

Mr. ROBNETT. To the best of my knowledge; yes, sir. Either lead weights or water.

Mr. REDDAN. Yes, lead weights. But had you ever done it by putting water in ballast tanks before?

Mr. ROBNETT. Yes, I believe it is done before.

Mr. REDDAN. I mean, had you done it?

Mr. ROBNETT. No, sir; I hadn't done it.

Mr. REDDAN. Do you know of your own knowledge that it had ever been done before?

Mr. ROBNETT. No, from firsthand information, no, not personally in contact with it.

Mr. STRATTON. Whose idea was it to do it by the water instead of weights?

Mr. ROBNETT. I don't know that it was anyone's idea. I think we just agreed that this was the most economical and convenient way to do it, among the ship suvs and myself.

Mr. STRATTON. You didn't check with the ship's prospective commanding officer, did you, on that question?

Mr. ROBNETT. I didn't, sir; no sir. I believe the request came to Mr. Lampson from the ship's engineer officers, to ballast the ship, as I understood it.

Mr. REDDAN. Did you give any consideration to the flooding of the sonar compartment?

Mr. ROBNETT. Yes, sir; we had been watching this—

Mr. REDDAN. No, I mean instead of filling your ballast tanks, to flood the sonar compartment.

Mr. ROBNETT. No, sir. We didn't consider flooding the sonar at this time because I believe the people were checking out the BQS 13 gear, and they were working at the time in there. We hadn't planned on putting any water in the sonar compartment.

Mr. REDDAN. Are you sure that they were performing work in there at that time?

Mr. ROBNETT. I am rather positive that shop 67 was in there Wednesday doing some checking in there, transducers.

Mr. REDDAN. In any event, you instructed the day shift to take the swing shift on board and tell them that you wanted them to achieve the necessary trim?

Mr. ROBNETT. Yes sir. We took them aboard and showed them.

Mr. REDDAN. Now, who was assigned to this job on the swing shift?

Mr. ROBNETT. I believe Mr. Varing was the man that did it, that they sent aboard to receive the lineup from the day shift.

Mr. REDDAN. Who selected Mr. Varing?

Mr. ROBNETT. I would imagine it was the night shift leadingman, Mr. Miller.

Mr. REDDAN. Who else besides Mr. Varing?

Mr. ROBNETT. That is the only man I knew of.

Mr. REDDAN. Did you know what experience Mr. Varing had had in trimming ships?

Mr. ROBNETT. Yes, sir; I believe I did. I knew that he had been working from time to time in these areas. He is one of our more competent shift people.

Mr. REDDAN. Excuse me.

Off the record.

(Discussion off the record.)

Mr. REDDAN. Do you know whether Mr. Thompson was also assigned to that operation?

Mr. ROBNETT. I don't personally know, sir. I didn't assign them. The night leadingman generally assigns his own men to the jobs.

Mr. REDDAN. Then you had nothing to do, as I understand your testimony, with the selection of Varing and Thompson?

Mr. ROBNETT. No, sir. I generally don't tell the night leadingmen what people to put on any particular job. I feel—I normally—

Mr. REDDAN. You say you generally don't. But did you in this particular case?

Mr. ROBNETT. No, sir; I didn't do it.

Mr. REDDAN. Was it reported that neither Varing nor Thompson knew how to trim a ship?

Mr. ROBNETT. No, sir.

Mr. REDDAN. And had never done it before?

Mr. ROBNETT. No, sir; I never got the word back from anyone.

Mr. REDDAN. Did you learn at any time that they were so deficient in this regard that a day shift man had to stay with them to show them the rudiments of trimming a vessel?

Mr. ROBNETT. I was aware of this on Tuesday, sir, when they first started the original trim, that they were asked for more instructions, and that is when I told Mr. Miller—I went back and looked up the phone number and told him to call Mr. Powell, who was a man that we had doing it, and get information, and if he didn't get what he wants, to call back in. Yes, sir; I gave him that order Tuesday night.

Mr. REDDAN. Well, if they had gotten it properly in trim on Wednesday—the trimming as I understand it, was not completed during the swing shift Tuesday night, was it?

Mr. ROBNETT. No, sir. The graveyard crew finished it up.

Mr. REDDAN. The graveyard crew finished it on Wednesday morning. Can you suggest to the subcommittee any reason why it would be so far out of trim on Thursday?

Mr. ROBNETT. No, sir; I have no idea, other than the fact that we had—we asked the nuclear if they were through with their tests about Thursday, and they said they were, so we were going to go ahead and exercise the torpedo tubes. That would be the small amount that we were moving in exercising the torpedo tubes, was the only—

Mr. REDDAN. But that would not have affected—

Mr. ROBNETT. If it did anything, it would probably have taken the bow down a little bit, but not a great deal.

Mr. REDDAN. But had you exercised the torpedo tubes at the time your man took the reading which showed the bow was down?

Mr. ROBNETT. No, sir. He took the reading after we did that in the afternoon. We stopped at about 3 o'clock, and he took the reading about 4.

Mr. REDDAN. The addition of the necessary water for that torpedo exercise, however, would not have caused the down bow condition that your man found. He measured it at 4 o'clock.

Mr. ROBNETT. Yes; it could have. We took on two water rounds, they call it. We filled the torpedo tubes.

Mr. REDDAN. How much water was that, sir?

Mr. ROBNETT. One complete torpedo tube full.

Mr. REDDAN. How much was that?

Mr. ROBNETT. I don't know the actual gallonage.

Mr. REDDAN. Approximately?

Mr. ROBNETT. About 21 inches in diameter and they are about 30 feet long. So I would say probably we took on maybe 8,000, 10,000 pounds, not more than that at maximum.

Mr. REDDAN. Do you know—

Mr. ROBNETT. I don't know exactly.

Mr. REDDAN. Do you know how many tons of water they took on forward to try to achieve trim on the 13th?

Mr. ROBNETT. On Tuesday, sir?

Mr. REDDAN. Yes, sir.

Mr. ROBNETT. No, sir; I don't know the actual number of tons. I just know we filled two; No. 2 ballast tank completely and partially No. 3.

Mr. REDDAN. Well, it was many times the amount of water that you would take on in the torpedo tube?

Mr. ROBNETT. Oh, yes, sir.

Mr. REDDAN. And yet they were still unable to bring that bow down the half a degree they required. So I think it is obvious that the mere flooding of the torpedo tube would have had no appreciable effect on the trim.

Mr. ROBNETT. I checked both Wednesday morning, when I came on, after the trimming Tuesday night and Wednesday, and there was still plenty—we had over a foot and a half from the waterline to that sonar dome at that time, sir.

Mr. REDDAN. The point I am trying to determine, Mr. Robnett, is whether or not when your man told you that the ship was down by the bow over a degree on the 15th, and you knew that there had not been any substantial change in the loading of the ship since the last time it was trimmed, wouldn't this suggest to you that either your man had taken an improper measurement, or the ship had never been in trim prior to that time? It seems to me either one of those two is true.

Mr. ROBNETT. It could very possibly, sir, but I knew what we were doing with the water in the front end, and I felt if any change had been made, that it would have been down. We couldn't have possibly come up.

Mr. REDDAN. Did you subsequently learn that the swing shift made an independent measurement and decided that instead of the ship being up at the stern, it was actually up at the bow by approximately 2 degrees?

Mr. ROBNETT. No, sir. When I checked with the swing shift as I left for home Wednesday afternoon, I heard no more from them until the call at about 9:30 that the boat had sunk.

Mr. REDDAN. Under those circumstances, do you feel that the swing shift should have reported this discrepancy to someone in higher authority?

Mr. ROBNETT. Yes, sir, it could very possibly be that they should have reported it. They are generally—or the rules we go by: that if

anybody has any doubts after I leave, they generally call me at my home.

Mr. REDDAN. Well, the difference of 4 degrees, either is 2 up at the bow or 2 up at the stern, combined would make a movement of about 8 feet in the attitude of the submarine. It seems to me that this is an incredible difference.

Mr. ROBNETT. I personally, in my own mind, don't see how we could do anything like that.

Mr. REDDAN. I don't either. I am just wondering if there were any procedures that should have been followed which were not followed in doublechecking this with somebody who had experience.

Mr. ROBNETT. There is no written procedure that I know of, but like I say, our regulations—when there is a confusion between the shifts, I am generally called into it.

Mr. REDDAN. Do you know whether at this time—that is, the afternoon of the 15th—there were any tags on the switches, valves, or lines, which would normally be used to transfer water internally between the trim tanks, containing the admonition that these switches were not to be used?

Mr. ROBNETT. Yes, sir, I am aware of the tagging system that the ship has. They had control of the electrical system, and they had their blue tags on it, and we had to go to them to get permission to operate the pumps.

Mr. REDDAN. What was the legend on the tags? Now, these are trim tanks.

Mr. ROBNETT. I think this was on the ballast control panel. They have their electric panel tagged out with these blue tags. It says "Do not operate, under ship's force control."

Mr. REDDAN. Your ballast control mechanism, however, was not functioning at this time, was it? I mean you couldn't shift, or could you shift ballast mechanically within the vessel from the control panel?

Mr. ROBNETT. No, sir; not unless we got permission to start the trim pump to move water.

Mr. REDDAN. Now, did these tags state on the back why the system should not be operated without permission?

Mr. ROBNETT. Yes, sir; in our tagging system that we have, we put on the tag the number and what test is on and why they are not to be operated, moved, or changed position.

Mr. REDDAN. Could you tell the subcommittee precisely the explanation contained on these particular tags as to why this system, transfer system should not be used?

Mr. ROBNETT. I don't really know, sir, other than it was under the ship's force control, and I don't know what nomenclature they had on their tags.

Mr. REDDAN. Did you ever read the tag?

Mr. ROBNETT. I have never read them.

Mr. REDDAN. I mean any of these particular tags.

Mr. ROBNETT. No, sir.

Mr. REDDAN. Had it come to your attention that there was any restriction on the use of these controls for the shifting of water because of the opening which existed in the sonar area?

Mr. ROBNETT. Yes, sir; I was aware of that myself, and watching that for the number of tests and other work that we were doing

throughout the boat. I was watching these areas, and I was aware of the restrictions generally through the boat, because we were running a number of tests other than concurrently, so we were tagging and checking them, aware that we don't do one test that might interfere or disrupt another one. Yes, sir; I was well aware of this.

Mr. REDDAN. Were you aware of the fact that there would be danger to the ship if the sonar area became flooded?

Mr. ROBNETT. Oh, yes, sir; I was well aware of it.

Mr. REDDAN. You went off duty on the 15th at what time, sir?

Mr. ROBNETT. I generally leave about 4:30. Our shift stops at 4:10, but I generally don't go until I check with all the people. I generally leave about 4:30, 20 minutes to 5.

Mr. REDDAN. In your absence from the vessel, who would be responsible for this very critical watch on the sonar area of a ship to make sure it did not become flooded?

Mr. ROBNETT. In my absence, the only man that I would assume would have this responsibility is Mr. Miller, the leadingman.

Mr. REDDAN. Did you specifically instruct Mr. Miller to keep track of this condition?

Mr. ROBNETT. I did not specifically instruct him this night; no sir, but we have warned them before about moving the water. We have generally instructed them to be careful every night.

Mr. REDDAN. But—

Mr. ROBNETT. But I didn't specifically instruct him this night; no, sir.

Mr. REDDAN. Did you at any time specifically warn him of the danger of the sonar area becoming flooded inadvertently?

Mr. ROBNETT. I believe Tuesday night we warned him about this, in checking the sonar, if they are going to fill them, and to be careful the water isn't run in. That night I believe there were people—to the best of my knowledge, people were still working.

Mr. REDDAN. You knew then that the open manhole constituted a hazard?

Mr. ROBNETT. Oh, yes, sir.

Mr. REDDAN. To the safety of the vessel?

Mr. ROBNETT. Yes, sir.

Mr. REDDAN. In view of that, did you make any recommendations for the installation of a cofferdam or coaming?

Mr. ROBNETT. No, sir.

Mr. REDDAN. Around the opening?

Mr. ROBNETT. I did not.

Mr. REDDAN. Would that have been part of your responsibility, to make such a recommendation?

Mr. ROBNETT. I believe it would have been my responsibility and Mr. Lampson's, the ship superintendent, to request the shipfitters to put a cofferdam around the opening if he wanted a cofferdam constructed in this area.

Mr. REDDAN. In view of your concern for the safety of the ship and a recognition of the danger which this opening presented to the safety of the ship, could you tell the subcommittee why you didn't recommend that a cofferdam or a coaming be placed around that opening, as long as the hatch cover was off?

Mr. ROBNETT. All the time we have been working in there we have been watching it and the water never came within, closer to a foot and a half of it. So we were watching this area, and to the best of my knowledge it never got to a point where we deemed it necessary to put a cofferdam in there. We were watching the water level from the edge of the plate to the waterline.

Mr. REDDAN. How much time would you spend watching it?

Mr. ROBNETT. Oh, I generally just check it, the number of times I go aboard during the day, on my rounds checking the ship out. I generally try to check all of these areas as I go through the ship, a number of times a day.

Mr. REDDAN. How long would it have taken you to install a cofferdam?

Mr. ROBNETT. I can't answer that, but I don't think it would have taken more than a couple of shifts at most.

Mr. REDDAN. Well, it took half a shift to install it on the 666, the subcommittee has been advised.

Mr. ROBNETT. Were they?

Mr. REDDAN. The thing that concerns me, Mr. Robnett, is that here is a matter that apparently has continually preyed on your mind, because it was a safety hazard, and yet you didn't make a recommendation which would ease your burden of responsibility here. I am just trying to understand why.

Mr. ROBNETT. Well, sir, I have responsible areas all through the ship.

Mr. REDDAN. That is right.

Mr. ROBNETT. I have various tests going on, and I try to watch every one of them.

Mr. REDDAN. And this would be one less thing you would have to watch if you put a cofferdam around there. There weren't so many areas on the ship which if something went wrong would sink it, but this is one that would, and did. Would you agree that plain good housekeeping practices would suggest that it should have been protected, either with a watertight cover or a cofferdam or coaming, even with 20-20 hindsight now?

Mr. ROBNETT. I really felt, sir, that we were watching it, and it was close enough, and it was in a safe zone, that we weren't to the stage of where we actually needed a cofferdam on it. I thought we were controlling it pretty good with our controls, that we were watching.

Mr. REDDAN. Who was supposed to be watching it the night of the 15th, when they were trying to lower the bow?

Mr. ROBNETT. Mr. Miller was the leadingman and the only one I could say. He was supposed to be taking his normal precautionary measures, throughout the ship, on his shift.

Mr. REDDAN. Have you ever discussed this with him since the sinking?

Mr. ROBNETT. No, sir; I haven't. I haven't discussed anything with him since the sinking.

Mr. REDDAN. Didn't you ask him why he wasn't watching?

Mr. ROBNETT. I didn't, but—

Mr. REDDAN. I bet you did.

Mr. ROBNETT. I believe the man has been asked that a number of times since Thursday the 15th. All of us have.

Mr. STRATTON. Mr. Robnett, let me just ask one question here. This may have been asked before, at least indirectly. Didn't you have anybody under your control who was really qualified in ballasting a ship?

Mr. ROBNETT. Yes, sir; I have people under my control. I believe Mr. Powell is qualified. He was sent to school on tank trimming and this type of thing, and I believe we are aware——

Mr. STRATTON. Then why wasn't he the man who actually did the job?

Mr. ROBNETT. He is a day shift man, sir. He is the man we called back Tuesday night to specifically instruct them on this ballasting system.

Mr. STRATTON. You didn't have a single person on the swing shift who was qualified; is that right?

Mr. ROBNETT. I wouldn't say that, sir; no, sir.

Mr. STRATTON. Then why didn't you get somebody who was qualified? Why did you get two people that were unqualified except for the preliminary checkout that they had the day before? Here we are dealing with a \$50 million ship, and what is supposed to be one of the finest naval yards in the country, and yet to undertake a maneuver which is certainly a delicate one, if you talk to any submarine commander, you picked two people who never had any training. Is the answer that you don't have anybody else qualified in the Mare Island Naval Shipyard?

Mr. ROBNETT. No, sir; I wouldn't say we don't have anybody qualified.

Mr. STRATTON. Why then didn't you insist on having somebody who knew what he was doing? Why didn't you call Mr. Powell back and say, "Look, we have an important job that has to be done, it is so important it has to be done on the swing shift, and you better get back here and do it"?

Didn't that ever occur to you?

Mr. ROBNETT. Yes, sir; it occurs to me quite often, but we try not to call our people back unnecessarily or anything. We try to keep our people on the shift and keep them leveled out.

Mr. STRATTON. You are the General Foreman in this yard in your particular specialty; are you not?

Mr. ROBNETT. Yes, sir.

Mr. STRATTON. Do you make it a practice to assign jobs to people who are unqualified in that particular field?

Mr. ROBNETT. Not knowingly, sir.

Mr. STRATTON. You mean you didn't know these men were not qualified?

Mr. ROBNETT. No, sir; I didn't.

Mr. STRATTON. You called Mr. Powell back to make sure that somebody could tell them what to do; didn't you?

Mr. ROBNETT. I did Tuesday night; yes, sir.

Mr. STRATTON. Well, you knew they weren't qualified on Tuesday night, then?

Mr. ROBNETT. I felt they needed some help; yes, sir, so I made arrangements to get it.

Mr. STRATTON. The fact that they worked under Mr. Powell's supervision on Tuesday night was hardly enough to regard them as qualified and experienced on Thursday; was it?

Mr. ROBNETT. I would say it was; yes, sir. We don't forget this thing from Tuesday to Thursday, sir.

Mr. STRATTON. Well, you don't learn to do something on your own without any supervision at one try, do you?

Mr. ROBNETT. Yes; I think there is a lot of areas where we have to learn to do things by studying and making our decisions without a lot of training program. I think there is a lot of things we operate and run; yes, sir. We study books and study plans.

Mr. REDDAN. Mr. Robnett, you have since learned the way they handled this job on the 15th, haven't you?

Mr. ROBNETT. I have heard some rumors. I haven't heard officially, sir.

Mr. REDDAN. Well, would what you heard suggest to you that they really knew their business with respect to trimming the ship? You think they learned their lesson on Tuesday?

Mr. ROBNETT. I think they were trying to do the same thing they did Tuesday night, yes, sir.

Mr. REDDAN. It would suggest that they didn't know what they were doing Tuesday, and they didn't know what they were doing on Thursday?

Mr. ROBNETT. I believe they knew what they were doing Tuesday, and I believe they knew what they were doing Thursday.

Mr. REDDAN. Then your testimony is you think they performed their job correctly, and you couldn't think of any way to improve what they did?

Mr. ROBNETT. No, sir.

Mr. REDDAN. Are you saying no, that you couldn't or no, I am wrong?

Mr. ROBNETT. No, sir; I couldn't think of any better way to do what they were doing than what they did.

Mr. STRATTON. Let me just quote a couple of things from a newspaper account of testimony at the court of inquiry. "The superintendent of the marine machinist shop at Mare Island"—now, this is a Mr. Halloran—"Harold Halloran of Napa, is quoted as saying "Shop 38 is not qualified to trim ships." Is that true in your opinion?

Mr. ROBNETT. No, sir; it is not true in my opinion.

Mr. STRATTON. All right. Now, he also is quoted as saying, "I wouldn't have taken this assignment on the crash basis that this supervisor did." Referring to Mr. Miller. "This judgment was made at the last minute on the basis of a last-minute request."

He is the superintendent. Would you take issue with him on that statement, that anybody who took the assignment from you to do this was doing an unwise thing?

Mr. ROBNETT. I would have to take issue, sir, because I believe we are required to do a lot of things, and we are supposed to be able to figure the most economical, safe way to get them done, sir, to build ships. So I believe that we take on many, many requests and master them and get them completed. That is the way we get boats out.

Mr. STRATTON. How about this statement here? "Miller, the night leadingman for Shop 38, was recalled to the stand. He told the court he had never previously trimmed a ship, but undertook the assignment May 15 because Mr. Robnett ordered me to do it and he knew I had never done it before."

Is that correct, that you knew he had never done it before?

Mr. ROBNETT. I ordered him to trim the ship, but it was never brought to my attention that he had never done it before.

Mr. STRATTON. You brought Mr. Powell to help him, didn't you? Wasn't that at his request?

Mr. ROBNETT. Yes, sir.

Mr. STRATTON. And didn't he say I would rather not do it, and you said, "You better do it, we will get you some help"?

Mr. ROBNETT. I told him if he needed help; yes, sir. I went back and got the man's name and number to call for the help, if he needed help.

Mr. STRATTON. I don't have any other questions. Do you have any, Mr. Hunt?

Mr. HUNT. Just one or two. Mr. Robnett, I am trying to reconcile your statements. On the first hand we have a trim reading of 1 degree down at the bow?

Mr. ROBNETT. Yes, sir.

Mr. HUNT. That would be on the 13th and the morning of the 14th. Then we have another reading on the 15th of 2 degrees up at the bow, is that right?

Mr. ROBNETT. The last reading that I got, sir, after the trim that we did Tuesday night and Wednesday morning—we were zero athwartships and 22 minutes up at the bow. That is the last reading I got Wednesday morning. That is the last figures that I had reported to me.

Mr. HUNT. Well, the testimony here has been, from some individuals, that it was a reading of 1 degree down at the bow on the 13th and the early morning of the 14th, and they attempted to bring this into position by transferring some water aft. This was true. But then on the 15th, at around 1630 hours, they began to try to trim the ship 2 degrees down at the nose.

Obviously, somebody was wrong there. It couldn't have been 1 degree down or 2 degrees up. It had to be one or the other. And this, of course, was the reason why they added more water to 3A and 3B, by injecting a nozzle, fire hose nozzle into the vent of 3A and 3B.

Now, you said these people were qualified. Somebody in this particular reading must have read that gunner's quadrant wrong, otherwise there could not have been a difference of 3 degrees. Do you agree with that?

Mr. ROBNETT. Yes, sir. But with the fact that I knew she was 22 minutes up, and we did some changing of the water with the torpedo tube exercise, I felt that the 1 degree down reading was normal where we had been, and that is the reason we feel or we felt we should shift water from the forward area back aft, to bring the forward end up.

Mr. HUNT. Well, Mr. Robnett, isn't this true, that with submarines, with your experience in submarines, that in dive position, in dive posture on a submarine, Nos. 1, 2, and 3 tanks forward are the flood zones, and this also in conjunction with the flooding of the sonar compartment would put them in crash position to dive, if the sub were operable at that time?

What I am saying is that the removal of ballast aft and the flooding of all forward compartments—of course, the sonar compartment is flooded when operational. In this case it was not. But the flooding for-

ward of 1, 2, and 3A and B tanks constitutes dive position for a submarine?

Mr. ROBNETT. Not normally, sir. This is a level position.

Mr. HUNT. You mean to tell me the submarine sails with the sonar compartment full of water and No. 1 and 2 and No. 3A and B tanks are full of water, is normal posture for submarine operation?

Mr. ROBNETT. I can't answer this, sir. I am not qualified enough on operating submarines. But I do know that the sonar dome is a free-flooding area and it has water in it under normal operating conditions.

Mr. HUNT. Yes.

Mr. ROBNETT. And generally from what I understand, submarines run about a degree or 2 degrees up at the bow all the time.

Mr. HUNT. Yes, sir.

Mr. ROBNETT. From what little I know——

Mr. REDDAN. Yes, but you have a buoyant action from outside of the sub, in a running condition, which would make it differ from being tied up alongside.

Mr. ROBNETT. You probably have some control action from your stern planes, too, on this area.

Mr. HUNT. That is all, Mr. Robnett.

Mr. REDDAN. Thank you very much, Mr. Robnett.

Mr. STRATTON. Thank you, sir.

Mr. ROBNETT. Thank you, sir.

Mr. STRATTON. The subcommittee will stand adjourned, subject to the call of the Chair.

(Whereupon, at 11:45 a.m., the subcommittee was adjourned.)

○



