

ORIGINAL
OFFICIAL TRANSCRIPT OF PROCEEDINGS

Agency: Nuclear Regulatory Commission

Title: Investigative Interview of
Edward Silberstein (CLOSED)

Docket No.

LOCATION: Cincinnati, Ohio

DATE: Thursday, May 17, 1990

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EXHIBIT 16
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INVESTIGATIONS

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Interview of: :

EDWARD SILBERSTEIN :

(Closed) :

-----X

University of Cincinnati

5 Basement, H Pavilion

237 Goodman

Cincinnati, Ohio

Thursday, May 17, 1990

The above entitled interview was conducted,
pursuant to notice, at 9:41 a.m., before:

OFFICE OF INVESTIGATIONS

RICHARD C. PAUL, NRC Investigator

JAMES D. DOCKERY, NRC Investigator

~~JAMES N. KALKMAN, NRC Investigator~~ *rcp*

KENNETH S. RESNICK, Esquire, on Behalf of the

University of Cincinnati

P R O C E E D I N G S

[9:41 a.m.]

MR. PAUL: On the record. This an interview of Dr. Edward Silberstein, spelled S-i-l-b-e-r-s-t-e-i-n, who is currently employed by the University of Cincinnati.

The location of this interview is the University of Cincinnati in Cincinnati, Ohio. Present at this interview in addition to Dr. Silberstein are Kenneth Resnick, an attorney representing Mr. Silberstein, and Richard C. Paul, P-a-u-l, and James D. Dockery, D-o-c-k-e-r-y, who are Investigators with the U.S. Nuclear Regulatory Commission.

As agreed, this interview is being transcribed by Court Reporter Lincoln Davis. The subject matter of this interview concerns the University of Cincinnati Hospital.

Dr. Silberstein, please stand and raise your right hand.

Whereupon,

EDWARD SILBERSTEIN,

a witness, was called for examination, and, having been first duly sworn, was examined and testified as follows:

MR. PAUL: Mr. Silberstein, is Mr. Resnick here as your personal counsel in this matter?

THE WITNESS: No.

MR. PAUL: Who does he represent?

1 THE WITNESS: The University of Cincinnati. Would
2 that be fair?

3 MR. RESNICK: Fair.

4 MR. PAUL: Do you wish him here as your
5 representative at the interview?

6 THE WITNESS: I do.

7 MR. PAUL: Mr. Resnick, earlier, before the
8 interview, we discussed a matter regarding obtaining the
9 transcript. There were some things that you wanted to make
10 apparent to us.

11 MR. RESNICK: Sure. Before we went on the record,
12 we had discussions relating to receiving copies of the
13 transcript, number one; number two, whether it would be
14 appropriate for Dr. Silberstein or myself to make a tape
15 recording of this interview.

16 We are notified by Mr. Paul that that would not be
17 appropriate under apparently some unwritten policy. I
18 object to this type of proceeding where no record is
19 permitted to be made by the Witness or his counsel, and that
20 transcripts of the interview won't become available until
21 after the investigation has ended, which may not be until
22 after a notice of violation or after referral to the
23 Department of Justice, years hence.

24 So we object to that. We're going to go ahead and
25 let the interview take place with the understanding that at

1 the time that Dr. Silberstein reads the transcript for
2 transcription errors, both Dr. Silberstein and counsel be
3 permitted, without making a verbatim copy of the transcript,
4 to take notes from it.

5 MR. PAUL: Mr. Resnick, do you represent Dr.
6 Silberstein personally at this interview?

7 MR. RESNICK: I'm representing him as University
8 counsel.

9 MR. PAUL: Do you anticipate any conflicts of
10 interest between Dr. Silberstein's position and the
11 University's position in this matter?

12 MR. RESNICK: No, I don't.

13 MR. PAUL: If you perceive this problem or a
14 conflict of interest arising, could you let us know at that
15 point?

16 THE WITNESS: Could you explain what that means?

17 MR. PAUL: Well, obviously, there's two parties
18 here at the interview. The University is a separate entity.
19 They're the licensee before the U.S. Nuclear Regulatory
20 Commission. You're an employee of the University.

21 I'm interviewing you as a person, a separate
22 entity from the University. As two different people,
23 obviously, I don't know what you have to say, but there
24 could be a conflict between the University's position as a
25 licensee and your personal position if, in fact, you had any

1 culpability in that.

2 THE WITNESS: I see. I see. I understand.

3 MR. PAUL: And with Mr. Resnick representing the
4 University, their interest may not be the same as yours.

5 THE WITNESS: I understand.

6 MR. RESNICK: I've heard what you said and I've
7 told you what my response was, and at some point that
8 analysis breaks down because I'm not representing an
9 abstract institution where there are no people. The people
10 that run the institution and make policy are people like Dr.
11 Silberstein and others. So there is no conflict of
12 interest, as I see it.

13 MR. PAUL: Currently, I don't perceive this
14 conflict of interest, but if I do, I'm going to stop the
15 interview and we'll make a decision at that point, because I
16 don't know what Dr. Silberstein --

17 MR. RESNICK: It's up to you.

18 MR. PAUL: But you do want Mr. Resnick present,
19 understanding that he also represents the University, which
20 is the licensee in the matter.

21 THE WITNESS: Yes; since my actions in relation to
22 what I believe this investigation concerns have all been
23 University-related roles. Virtually all of them have been
24 in University-related roles. Yes. I perceive no personal
25 conflict, nor have any concern of culpability whatsoever.

EXAMINATION

BY MR. PAUL:

Q Dr. Silberstein, could you give us your background for the record in relation to nuclear medicine and the handling and use of radioisotopes?

A My initial training came during hematology fellowship at Newman Medical Center, Boston, Massachusetts, where I took my first course in radioisotope physics at the Massachusetts Institute of Technology, and was certified by the New England Roentgen Ray Society.

Subsequently, I came to the University of Cincinnati beginning at the Assistant Professor level, now as Full Professor, where, for 22 years, I have been involved in the handling of radioactive materials. I have been certified by the American Board of Nuclear Medicine.

I am -- you'll have to tell me if there's conflict -- a consultant for the Nuclear Regulatory Commission in misadministration concerns for several of the regions, including the Glenn Ellyn region and the King of Prussia region, and have been involved in the administration of and research with radioactive materials since 1967.

Q So you're currently a consultant to the Nuclear Regulatory Commission.

A That is correct. I am a paid consultant.

Q What is your current position here at the

1 University of Cincinnati?

2 A Professor of Radiology and tenured, and separately
3 a Professor of Internal Medicine, also tenured.

4 Q Do you -- are you listed on the University's
5 Nuclear Regulatory material license as an authorized user or
6 in any other capacity?

7 A I can't answer the question.

8 Q You just -- you don't know?

9 A I don't know. I have always assumed that that was
10 a Radiation Safety Office function and that if all those who
11 are certified as users are up here on the list, I sure as
12 hell should be because I've been around a long time, and
13 have been on the Radiation Safety Committee, etcetera.

14 Q Okay. But you don't know whether you're on --

15 A I haven't looked at the license for that. That is
16 correct.

17 Q Are you currently on the Radiation Safety
18 Committee?

19 A No.

20 Q Were you at one time on the Radiation Safety
21 Committee?

22 A I was.

23 Q And what was the timeframe that you were on the
24 Radiation Safety Committee?

25 A I can't recall when I initially joined. Probably

1 in the early '80s, possibly before my duty was terminated at
2 the end of '89 or early '90 when the Radiation Safety
3 Committee was restructured, made smaller as part of the
4 agreements in working with the NRC, and also at the time
5 which I was asked by the President of the University to act
6 as Deputy Radiation Safety Officer for the University, at
7 which time there would be a conflict where I, on the
8 Committee, supervising the Deputy Radiation Safety Office,
9 the Officer.

10 Q Do I understand you right; you were the Deputy
11 Radiation Safety --

12 A I am the Deputy Radiation Safety --

13 Q You currently are the Deputy Radiation Safety --
14 and it's my understanding that an individual by the name of
15 Prince Jason was in that position prior to you?

16 A That is correct.

17 Q And who --

18 A Either Deputy or Associate or Assistant, I can't
19 be certain of his title.

20 Q In the timeframe 1988-1989, it's my understanding
21 that Ken Fritz was the Radiation Safety Officer; is that
22 correct?

23 A That is correct.

24 Q And do you recall at what point in time that he
25 was removed as Radiation Safety Officer?

1 A Well, I'm certain that it's a matter of record in
2 someone else's hands. I heard about it secondhand and would
3 believe that this would have been after July of 1989, but I
4 can't give you a date since I was not involved in that
5 action.

6 Q Who is the current Radiation Safety Officer?

7 A Howard Elson, Ph.D.

8 Q Is he acting or has he been formally appointed?

9 A He has been --

10 MR. RESNICK: What do you mean by formally
11 appointed --

12 THE WITNESS: He --

13 MR. PAUL: There's a formal notification process
14 that --

15 THE WITNESS: I believe the NRC has been notified
16 --

17 MR. RESNICK: That's what I thought. Okay.

18 THE WITNESS: -- that he is the Radiation Safety
19 Officer for the University at this point. However, the
20 University, since he is -- he came from the Division of
21 Radiation Oncology and wishes to return there, and the
22 University is involved in a search for a Radiation Safety
23 Officer at this time.

24 Therefore, I cannot be certain whether he is
25 appointed as the acting or as the permanent, since it was

1 understood that there would be a search for a permanent
2 Radiation Safety Officer, permitting Dr. Elson's return to
3 his radiation oncology duties.

4 BY MR. PAUL:

5 Q In your position now, who is your immediate
6 supervisor?

7 A In the table of organization, Dr. Elson would be,
8 since he is the Radiation Safety Officer.

9 Q Prior to you becoming Deputy Radiation Safety
10 Officer, at the timeframe you were in the Radiation Safety
11 Committee, who was your immediate supervisor?

12 A On the Radiation Safety Committee?

13 Q Right.

14 A The Chairman, Dr. Jerome Wiot, and before him, Dr.
15 Eugene L. Saenger would have worked -- be supervisors of
16 that -- the Directors of that Committee.

17 Q What about in your day-to-day activities as a
18 Professor at the University and the hospital?

19 A Dr. Eugene Saenger was Professor and Director of
20 the Division, and followed by Dr. Harry R. Maxon, III, who
21 is the current Director of the Division at the University of
22 Cincinnati.

23 Q In the timeframe 1988 and 1989, how many members
24 were on the Radiation Safety Committee?

25 A I would have to guess, since I was not responsible

1 for keeping attendance, that there were between 15 and 20.

2 Q And how often did the Radiation Safety Committee
3 meet?

4 A Quarterly.

5 Q And in regards to radiation safety, did the
6 Radiation Safety Committee -- what was their objectives?
7 Did they handle the day-to-day activities of the Radiation
8 Safety Department or were they a policy-setting type body?

9 A I would characterize the activities as policy-
10 setting, with the addition that all protocols involving
11 human use, and then at my insistence, all protocols
12 involving in vitro use; that is in animals or in laboratory;
13 were brought to the Radiation Safety Committee for final
14 ratification.

15 Q Did the Radiation Safety Officer report to the
16 Radiation Safety Committee, or how was the organization
17 structure as far as the RSO, meaning Radiation Safety
18 Officer, set up?

19 A In the table of organization, the RSO reported to
20 the Radiation Safety Committee.

21 Q Did the Radiation Safety Officer, who, I
22 understand, in that timeframe, was Ken Fritz --

23 A Yes.

24 Q Did he attend all the meetings of the Radiation
25 Safety Committee?

1 A To the best of my recollection.

2 Q Would -- I believe it was Dr. Wiot you said
3 earlier was the Chairman of the Committee.

4 A Yes.

5 Q Was he the immediate supervisor of the Radiation
6 Safety Officer?

7 A The pause is because many communication -- I think
8 many -- since the table of organization indicated the
9 Officer was reporting to the Committee, it would be
10 difficult for me to say that Dr. Wiot was Mr. Fritz' direct
11 supervisor. Practically, there were communications from the
12 Committee that would go through Dr. Wiot to Mr. Fritz, but
13 it would be difficult to characterize Dr. Wiot's role as Mr.
14 Fritz' supervisor.

15 Q The Radiation Safety Officer, Mr. Fritz, was he
16 responsible for the day-to-day activities of the Radiation
17 Safety Department?

18 A He was. And Mr. Resnick, correct me if I'm wrong,
19 but that is a University-wide committee. I mean, that's not
20 a committee that's appointed by Dr. Wiot or by the
21 Department of Radiology --

22 MR. RESNICK: The Radiation Safety -- Yes.

23 THE WITNESS: -- Safety Officer, is appointed by
24 the President of the University, if I'm not mistaken, as a
25 University-wide committee.

1 BY MR. PAUL:

2 Q Well, then how did they appoint the Radiation
3 Safety Committee? Is that University-wide also?

4 A Yes.

5 MR. RESNICK: That's what he was talking about.

6 THE WITNESS: Yes. This is a University as
7 opposed to a departmental or a medical center committee.
8 It's a University-wide committee, since this campus --
9 basically, we look on it as an east and west campus
10 geographically, and there are some users on the west campus,
11 some, although there has been some large sources, for
12 example, that -- and laboratories that are over there.

13 And so this has had representation from the entire
14 University. So this is not a medical center committee,
15 which is why, when you asked if Dr. Wiot is his supervisor,
16 I would -- I can't answer that. I don't think that that
17 would be structurally true.

18 BY MR. PAUL:

19 Q I believe it was late '88, early '89, there was --
20 several of the -- I believe they call them the Health
21 Physics Technicians, appeared before the Radiation Safety
22 Committee; do you recall that particular meeting?

23 A I recall at least one or two coming -- wanting to
24 come before the Committee. I also recall some concern of
25 Mr. Fritz or -- that they should come before the Committee.

1 I honestly can't recall individuals making statements at
2 that time. Subsequently, in -- it was agreed by the
3 Radiation Safety Committee that a technician could be an
4 observer at the Radiation Safety Committee meetings. But in
5 1988, I believe that that was -- that had not been settled
6 by Mr. Fritz, their supervisor. I can't recall that.

7 Q Did you have any discussions prior to this with
8 any of the Health Physics Technicians regarding their
9 concerns?

10 A Prior to which date, please?

11 A The meeting where the Health Physics Technician
12 sat as observers, prior to the issues that they -- that the
13 Health Physics Technicians raised to the Committee. It's my
14 understanding that they raised several radiation safety
15 issues to the Committee at this timeframe. The question is
16 did they come to you personally before that?

17 A The Radiation Safety Technologists, most, if not
18 all, came to this office with concerns during a period 1988-
19 1989. I cannot relate that to the times that they appeared
20 before the Committee. The answer to your question, did they
21 come to me, yes. I just don't have the chronology.

22 Q Eventually, they wrote several memos, or at least
23 one or two memos regarding their concerns.

24 A Yes.

25 Q Do you recall that?

1 A Yes.

2 Q And maybe I have some paperwork that may help you.

3 MR. PAUL: We'll make this Exhibit 1 to the
4 interview.

5 [Silberstein Interview Exhibit No.
6 1 was marked for identification.

7 MR. PAUL: It's a draft minutes of the meeting
8 held January 4, 1989, and in the attendees, it lists Dr.
9 Silberstein, and also Mr. Barbro Boyd, Estes, Harris, Jason
10 and Williams.

11 I'll give that to you and you can look over that.

12 MR. RESNICK: Let me make another question. Do we
13 -- are we entitled to copies of exhibits?

14 MR. PAUL: It will be an attachment to the --

15 MR. RESNICK: In other words, we're not allowed to
16 -- you will not provide him with a copy now, but you're
17 marking it as an exhibit.

18 MR. PAUL: I don't see --

19 MR. DOCKERY: It might be available through the
20 University.

21 MR. PAUL: Yes. I assume that this was --

22 MR. RESNICK: Is that where you got it?

23 MR. PAUL: Right.

24 MR. RESNICK: Okay.

25 MR. PAUL: I assume that they have this.

1 MR. RESNICK: All right. Well, I just wanted to
2 know where you got it.

3 MR. PAUL: Yes. Right.

4 MR. RESNICK: All right.

5 MR. PAUL: It wouldn't be proper for me to give
6 you a copy of their correspondence. I mean, I'm sure it's
7 available; you can get it.

8 THE WITNESS: I do remember -- actually remember
9 the meeting, yes.

10 BY MR. PAUL:

11 Q Could you -- what did you understand their
12 concerns to be?

13 A I felt that if -- let me just refer to the
14 document.

15 Q Sure.

16 A There were clear conflicts between the
17 technologists and their supervisor over a variety of areas.
18 These included whether they were being permitted to do their
19 duties as they saw fit; when problems were noted, were
20 contamination procedures being followed fully.

21 There were some administrative concerns within the
22 office as to job descriptions and there were concerns, as
23 noted in here, that the technicians had been told that they
24 could not take time during their work week for professional
25 courses, etcetera. I do recall that one.

1 They wanted to be -- they wanted to have -- the
2 felt that Mr. Fritz was not representing the technologist
3 group concerns to the Radiation Safety Committee. That was
4 perhaps the most important focus of the meeting that was
5 held. And you will notice that at that meeting, Mr. Fritz
6 was not present. And I --

7 Q Why was that?

8 A And I believe that was because Dr. Wiot wanted to
9 have the input of the technologists without any concerns
10 that their supervisor would in any way inhibit testimony or
11 free discussion between them.

12 There were other questions that the exhibit -- I
13 recall the contents of what I'm reading as corresponding to
14 my recollection of technologist concerns at that time. The
15 response to that, to this document, you perhaps have as
16 another document, which was a meeting of a group to attempt
17 to solve some of these problems, which I volunteered to
18 chair.

19 Q Was that later than this meeting?

20 A That would be something like sometime in early
21 February of 1989, where a subcommittee developed
22 recommendations to bring back to the Radiation Safety
23 Committee on the issues as raised. Unionization was an
24 issue in there. The document speaks for itself. But we
25 addressed virtually every one of their -- there were some 13

1 issues that our subcommittee that I chaired addressed those.

2 Q And that subcommittee was formed subsequent to
3 this particular Radiation Safety Committee meeting?

4 A And because of it, yes.

5 Q Was it your understanding that some of the
6 concerns expressed by the Health Physics Technicians were
7 related to safety, radiation safety, in addition to being
8 administrative?

9 A It was -- yes. Yes. Such concerns were raised at
10 that time.

11 Q And it's my -- would -- who appointed you to the
12 subcommittee?

13 A ^s Dr. Wiot.

14 Q So then you issued the report as of February 1989.

15 A That's -- yes.

16 Q And who was that addressed to?

17 A Radiation Safety Committee and its Chairman.

18 Q And were there any actions taken as a result of
19 your findings?

20 A The report's -- all of the report's
21 recommendations were adopted by the Radiation Safety
22 Committee.

23 Q Did the -- I don't have a copy of the report, but
24 did the report address the concerns of the technicians
25 related to Mr. Fritz, their ability to interact with him or

1 the problems that they thought they had with him?

2 A It addressed some of them. The major concern had
3 been brought to the attention of the Radiation Safety
4 Committee concerning the --

5 MR. PAUL: Let's go off the record.

6 [Discussion off the record.]

7 MR. PAUL: Back on the record.

8 THE WITNESS: -- concerning the method by which a
9 radiation technologist who found a problem could communicate
10 with his supervisor. And if there had been -- if there was
11 a disagreement for how to resolve that problem, what to do
12 in further communication.

13 And our Committee made it clear that the path of
14 communication was, indeed, to the immediate supervisor
15 first, but then on to the Committee and its Chairman. And
16 if there still was a problem, we made it very clear and
17 reenforced that which I believe is already in the CFR,
18 direct communication -- Code of Federal Regulations direct
19 communication with the NRC, but tried to spell out a series
20 of problems all in steps that had been, in the Committee's
21 mind, an area of technologist concern which we addressed at
22 that time.

23 BY MR. PAUL:

24 Q Did the Subcommittee have any findings regarding
25 whether, at that time, the current relationship between the

1 technicians and Mr. Fritz, as RSO, was that impeding the
2 reporting and addressing of safety concerns, health concerns
3 related to radiation safety?

4 MR. RESNICK: Let's take them one at a time. What
5 kind of concerns?

6 BY MR. PAUL:

7 Q Health and safety concerns. Were they being
8 effectively addressed before any changes took place as a
9 result of the subcommittee's findings?

10 A It was impossible to tell. The specific concerns
11 at that time had not been brought to the Radiation Safety
12 Committee or to me, to the best of my recollection. The
13 issue -- one of the issues that we addressed had to do with
14 preventing any impedance to direct communication should
15 conflicts arise.

16 Conflict resolution was not satisfactorily being
17 approached in the Radiation Safety Office. There was no
18 clear appeal mechanism for a technologist disagreeing with
19 his supervisor, and our subcommittee and the Radiation
20 Safety Committee, to whom I -- Full Committee, to whom I
21 reported, adopted a policy that made it very clear that
22 there was always and had to be an appropriate appeal
23 mechanism when there was disagreement.

24 The individual disagreements or concerns were not
25 addressed nor known at that time. So we were addressing a

1 policy of conflict resolution.

2 Q What specific actions were implemented as a result
3 of the subcommittee's findings in regards to radiation
4 safety as opposed to administrative problems? I'm not
5 really interested in what -- they had administrative
6 concerns, the Health Physics Technicians, in addition to the
7 radiation safety concerns. I'm just asking you to respond
8 to what changes were implemented in this regard as a result
9 of your findings.

10 A I would have to go to my file to look up my report
11 of early February as to specific details, since many of the
12 areas we were dealing with were of an administrative nature.
13 At that time, we were unaware of safety concerns, to the
14 best of my recollection, that there was no concern for
15 anyone's safety being or health being in any way affected by
16 the operation of the Radiation Safety Office.

17 These were administrative matters as to the
18 communication within the office between the Committee and
19 the Radiation Safety Officer and the people he supervised.
20 I don't recollect that there were safety issues to be dealt
21 with.

22 Q At this point, I'd like to show you another --
23 it's a University of Cincinnati letter or -- it's a
24 memorandum, and it's dated June 30, 1988. It was to the
25 Radiation Safety personnel, University of Cincinnati, from

1 George W. Alexander, Jr., and Kenneth M. Fritz. The subject
2 is problem notification process for Radiation Safety Office
3 personnel.

4 MR. PAUL: This will be Exhibit 2 to this
5 interview.

6 [Silberstein Interview Exhibit No.
7 2 was marked for identification.]

8 BY MR. PAUL:

9 Q And I'm going to ask you if you ever saw this
10 before?

11 A [Perusing document.]

12 Yes.

13 Q And when did you first see this memorandum?

14 A My recollection is that it was sent to the
15 Radiation Safety Committee anonymously with a cover letter
16 from what I believed at that time to be one or more of the
17 Radiation Safety Technologists, and that memorandum was sent
18 at the end of 1988. I had not seen that memorandum before
19 that time, to the best of my recollection.

20 Q Was this a policy of the University of
21 Cincinnati's Radiation Safety Committee? Did they
22 promulgate this policy --

23 A Unequivocally not. This was not a policy of the
24 Radiation Safety Committee.

25 Q Was this one of the concerns that the technicians

1 addressed as part of their numerous concerns that they
2 brought to the Committee early 1989?

3 A This was a concern that they addressed and a
4 concern that I addressed strongly in early 1989, having seen
5 that memorandum, and perhaps it's the reason that I became
6 the Chairman of that Committee, because my reaction to this
7 memorandum was a very strong one. But it was not University
8 policy and was, in fact, inappropriate and violated the
9 right of a radiation -- anyone to contact the NRC.

10 Q Did the -- did you ever have any individual
11 discussions with the technicians concerning this particular
12 memorandum?

13 A I think any discussions concerning that memorandum
14 occurred -- would have occurred at the meeting that we had
15 with them. That meeting -- I think Exhibit 1 indicates that
16 meeting was in early January, and this document -- the cover
17 letter to that document was, if I recall, at the end of --
18 just before the New Year's holiday. And so as soon as --
19 that was -- we didn't need to meet one-on-one with any one
20 individual. We sort of all got together, and this was an
21 issue at that time.

22 Q Did the technicians ever represent to you that
23 they felt that this particular memorandum would have impeded
24 them from contacting the NRC? Did it have an effect on
25 them, did it prevent them from contacting the NRC?

1 A The technicians' behavior, to the best of my
2 recollection, has always been, at this University, that if
3 there were significant problems, that someone was going to
4 call the NRC or write the NRC. So that operationally, I
5 don't think that this would have stopped or did stop them
6 from doing it. But, yet, it is theoretically possible it
7 might have inhibited someone -- I have no knowledge that
8 someone had a burning issue which would not have gone to the
9 NRC at least in anonymous form with or without that policy.

10 That policy did inhibit issues from coming to the
11 Radiation Safety Committee over, apparently, some period of
12 time, however. I think that would be a fair statement.

13 Q Did you discuss the memorandum at all with Mr.
14 Fritz or Mr. Alexander?

15 A Mr. Alexander.

16 Q And what was the essence of that discussion?

17 A The essence of that discussion was that this was
18 an absolutely incorrect, wrong, probably illegal way to deal
19 with the individuals being supervised.

20 Q Did he ever discuss why this memorandum was
21 issued? What was the purpose of this memorandum?

22 MR. RESNICK: Who is he?

23 MR. PAUL: Mr. Alexander.

24 THE WITNESS: Yes. To the best of my
25 recollection, we had had, the University had had an

1 individual on the Radiation Safety Office -- a technician of
2 the Radiation Safety Office who had communicated a wide
3 variety of concerns directly to the NRC without ever going
4 to the Radiation Safety Committee or its Chairman or anyone
5 else.

6 And my impression at the time of the writing of
7 this was that there was ferment in the Radiation Safety
8 Office, which I suspect the technologists -- you've already
9 talked, am I correct, to some of the radiation
10 technologists?

11 MR. PAUL: That's correct.

12 THE WITNESS: That they've probably detailed to
13 you, and my -- it would be only speculation, because --

14 MR. RESNICK: Don't speculate. He's not here to
15 ask you to speculate or guess.

16 THE WITNESS: Okay. Fair.

17 MR. RESNICK: Just testify to what you know.

18 THE WITNESS: Fair.

19 BY MR. PAUL:

20 Q As to Mr. Alexander, what he told you is what --
21 for the reason why he authored this memo.

22 A I recollect his telling me that we -- that he did
23 not want to have the proper channels bypassed, as they had
24 been bypassed in 1986, that the Radiation Safety Office and
25 Radiation Safety Committee should have an opportunity to

1 solve problems detected by its technologists without a
 2 leapfrog over all of the problem-solving capabilities at the
 3 University to the NRC. That was the -- and my response was
 4 that's not what this says.

5 This inhibits conflict resolution. If a
 6 technologist finds something and you or Mr. Fritz disagree
 7 with their findings or choose not to implement or whatever,
 8 the implication is that you could censor what they are
 9 saying, and you may not do that.

10 Q I believe the technician that you referred to as
 11 bringing these allegations to the NRC was an individual by
 12 the name of (b)(7)(C) is that correct? 6,7C

13 A Yes. (b)(7)(C)

14 Q And was (b)(7)(C) by the University? Do you
 15 know the reason for (b)(7)(C) leaving?

16 A I don't know if (b)(7)(C)
 17 I was not involved in the hearings at -- that (b)(7)(C) and the
 18 University had. So I don't know what -- how that happened.
 19 Obviously, (b)(7)(C) no longer employed, but I don't know whether

20 (b)(7)(C)

21 Q As a result of the subcommittee's, that you
 22 chaired, investigation or whatever it was actually termed,
 23 when you looked into the concerns of the technicians, did
 24 you have any findings specific as to Mr. Fritz' performance
 25 as RSO?

1,7C not sure

1 A At that time, there were none that I recollect
2 that indicated that his actions were impeding the safety,
3 radiation safety or health-related radiation effects within
4 the University.

5 The concerns of that Committee were largely
6 administrative. Mr. Fritz was viewed as a knowledgeable
7 Radiation Safety Officer. Mr. Alexander was appointed as
8 Administrative Director of -- I think that was his title.

9 You'd have to ask him his precise title. My
10 recollection was that was his title. Because Dr. Saenger,
11 who I believe made the appointment, he was Chairman of the
12 Radiation Safety Committee, felt that Mr. Fritz needed
13 administrative assistance. The workload was such that Mr.
14 Alexander could help administratively.

15 So the concerns that we dealt with were
16 administrative. For example, we made it clear that
17 technologists had the right to take courses during -- to
18 improve their skills during their work day, etcetera,
19 etcetera. But there were no allegations brought to -- that
20 that subcommittee dealt with that Mr. Fritz was not doing
21 the job of Radiation Safety Officer.

22 Q Going back to the memorandum again, Exhibit 2, was
23 it your understanding that Mr. Alexander wrote the
24 memorandum or Mr. Fritz?

25 A They both signed it, and I honestly don't know who

1 was the first author. I would believe that they both would
2 have had the same motivation in writing it to have a proper
3 chain of command. I don't -- my belief is it wasn't done
4 right.

5 MR. RESNICK: Don't guess.

6 THE WITNESS: Okay.

7 MR. RESNICK: Tell him what you know.

8 THE WITNESS: Fair. I don't know which co-
9 authored -- I mean, which was the primary author. They both
10 signed and agreed on it, however, clearly.

11 BY MR. PAUL:

12 Q To your understanding, did Alexander have any line
13 authority over the Health Physics Technicians?

14 A I never understood how the table of organization
15 worked when there were two directors. Mr. Fritz is a
16 technical director, Mr. Alexander is an administrative
17 director, and it was never clear to me how the two meshed,
18 since they both had to deal with the Radiation Safety
19 Technologists, since radiation safety matters and
20 administrative matters merge so closely.

21 Q As a result of your review of the policies set
22 forth in Exhibit 2 and the memorandum --

23 MR. RESNICK: I'm going to object to the
24 characterization. I think he said it wasn't University
25 policy.

1 MR. PAUL: As far as the --

2 MR. RESNICK: To the document.

3 MR. PAUL: To the steps outlined in the document.

4 BY MR. PAUL:

5 Q Was there a revision or another memorandum sent
6 out as to what the current method of reporting problems?
7 Was that ever authored as a result of --

8 A Yes.

9 Q -- your concerns?

10 A And appeared in the minutes of the Radiation
11 Safety Committee during mid-1989.

12 Q And basically what did that entail as to the
13 process of reporting safety concerns?

14 A To the best of my recollection, the Radiation
15 Safety Technician was to bring concerns, first, to his
16 immediate supervisor, the Radiation Safety Officer. If
17 these concerns were not answered, dealt with, or if there
18 was a disagreement, the technician, technician-
19 technologist, clearly had the right to bring these to the
20 Radiation Safety Committee through its Chairman.

21 Q Did it discuss at all the ability of the
22 technicians to go to the NRC with any concerns?

23 A I don't believe that the document did, because
24 there is posted the statement that anyone can do that.

25 Q You're referring to the NRC Form 3?

1 A I have to see it to -- it has a map of -- and the
2 districts and a statement that -- yes. And that just needs
3 to be posted and --

4 Q Is that posted here at the University?

5 A I've certainly seen it posted. I couldn't point
6 to it if I walked out in the hall, but I know what it looks
7 like. I know it pretty well.

8 Q You are familiar in some way --

9 A Yes.

10 Q -- Safety Department. Did the Radiation Safety
11 Committee conduct any types of audits on the Radiation
12 Safety Program, per se, as a routine matter? Did you
13 periodically review the Radiation Safety Committee?

14 A The Radiation Safety Program --

15 Q Excuse me. Not Radiation Safety Committee, but
16 the Radiation Safety Program.

17 A Program, an annual audit is required in which the
18 Committee -- to the Committee were brought the data on the
19 numbers of protocols reviewed, problems with protocols,
20 amount of waste disposed of, a summary of the actions of the
21 Radiation Safety Officer through the year with temporal
22 trends over -- compared to previous years, with discussions
23 of problems of waste disposal, of individuals who might --
24 who were -- studying individuals who were offenders and
25 where had they been an offender; the i.e. or e.g., food in

1 the refrigerator was found more than once.

2 So these kinds of things were reviewed at least
3 annually.

4 Q Who actually performed the audits?

5 A The Radiation Safety Officer brought the data
6 requested by the Committee to a Committee meeting and
7 discussed his actions, answered questions.

8 Q In the timeframe -- well, in '89, was there an
9 audit conducted?

10 A To the best of my recollection, that -- if it was
11 -- were, it should be found in the Radiation Safety
12 Committee minutes, which I obviously don't have before me.
13 But that was to be an annual affair.

14 Q So if I understand you correctly, the audit didn't
15 actually involve members of the Safety Committee or their
16 designee going out and physically looking at various aspects
17 of the problem. It was a process where the RSO, Mr. Fritz,
18 came in and responded to questions. Is that a correct
19 characterization of the process?

20 A That is correct.

21 Q Regarding the NRC's periodic inspections, do you
22 have any particular involvement in when the NRC came out on
23 their annual inspections or periodic --

24 A No. No. I don't -- there may have been times
25 where Gene Saenger or Harry Maxon weren't there that I would

1 have tried to obtain any requested information, but I don't
2 really recall interacting with NRC Inspectors when here.
3 It's possible someone stopped in to ask some questions, but
4 I really don't recall that.

5 Q Regarding the Health Physics Technicians, there
6 were a number of personnel turnovers in the timeframe '86
7 through '88. Did you notice that there was any or consider
8 that that was a high frequency of turnover in that position?

9 MR. RESNICK: I'm going to object. Assuming
10 that's the case, you're assuming that's the case and you're
11 asking him to respond, you might want to find out if that
12 was the case or if he believes that to be the case, first.

13 BY MR. PAUL:

14 Q It's my understanding that there were three --
15 there was a total of four technicians in the Health Physics
16 -- Health Physics technicians, is that correct?

17 A Yes. That sounds like -- okay.

18 Q And from the information I obtained so far, I
19 understand there have been three who resigned or quit in the
20 last three or four years. Is that your understanding, also?

21 A I don't have knowledge of that. I know my -- what
22 I had believed was that an understaffed office was trying to
23 find the funds to bring on more technologists. So that when
24 I heard new names in the office, I assumed that this was an
25 attempt to increase an understaffed office. I was unaware

1 of high turnover in the Radiation Safety Office.

2 Q So that particular concern was never brought up to
3 the Radiation Safety Committee.

4 A It was not brought to me, that I remember. Just
5 refresh my memory one moment, if you would. This was
6 Exhibit 2 and Exhibit 1 was the minutes of the -- okay,
7 great.

8 [Silberstein Interview Exhibit No.
9 3 was marked for identification.]

10 BY MR. PAUL:

11 Q I'll show you Exhibit 3, and it's a memorandum
12 dated July 28, 1989, and it's to Edward Silberstein, M.D.
13 Radioisotope Laboratory, from Health Physics Technicians,
14 Radiation Safety Office. Could you please look at that, and
15 the question is do you recall that specific memorandum?

16 A [Perusing document.]

17 I do.

18 Q And did you have any knowledge that this
19 memorandum was coming to you? Did they first contact you by
20 phone or was there a meeting in regards to this memorandum?

21 A Technologists, one or several, began bringing to
22 me concerns about the Radiation Safety Office, allegations,
23 and sometimes in writing, sometimes verbally. And there
24 came a point where I responded to some of the allegations,
25 that we can bring this up to the Radiation Safety Committee,

1 or you haven't talked to your supervisor about this and
2 you're coming to me and that's not appropriate, we have a
3 procedure for handling that.

4 But at some point in the late spring or summer,
5 the allegation was made to me that during an NRC inspection,
6 there was a piece of data that was concealed from the
7 Inspector. And whichever of the technologists brought that
8 to me, my immediate reaction was that is a profoundly
9 serious allegation; that if you make this allegation, be
10 prepared to swear to it, to put it in writing, because this
11 could be -- this sounds, to a non-legal mind, as a possible
12 violation of law; and, if the Radiation Safety Committee is
13 to deal with this by discussing the problem with the
14 University -- my personal intention was to determine
15 precisely what the legal implication was with the University
16 Counsel.

17 And then if it was as I feared, bring it to NRC.
18 First I indicated that I wanted that in writing and signed
19 by those people who were making the allegation, so that the
20 Radiation Safety Committee could proceed in dealing with
21 what I perceived to be a very serious charge.

22 Q And did they, in fact, do that?

23 A The document, Exhibit 3 --

24 Q Well, this is a result of --

25 A It is a result of the conversations and multiple

1 meetings in this office by Radiation Safety Technologists
2 saying we've got a problem, what do we do about it.

3 Q What happened as a result of this memorandum?
4 What were the events that took place after that that you
5 were involved with?

6 A To the best of my recollection, I called Dr. Wiot
7 to tell him that we had a serious allegation, and I think
8 that I must have sent him a copy of this, because I wasn't
9 going to hide it. This was something that I had asked for
10 that we needed to take action on.

11 From that point, I was not involved in the
12 University's actions with the NRC in regard to that. After
13 I had obtained that piece of information and had these
14 individuals sign it, I sent that on to Dr. Wiot, as I almost
15 certainly did. I can't give you 100 percent certainty, but
16 I can't believe that I would have done anything else but
17 send it to him and phone him, that Dr. Wiot then took the
18 lead, to the best of my knowledge, in contacting the NRC
19 about this.

20 Q This was the first you became aware of this
21 particular incident?

22 A When the technologists came to me with the
23 allegation was the first that I knew anything about the
24 allegation that during an inspection, a record had been
25 concealed.

1 Q As part of the Radiation Safety Committee, was the
2 subject of missing sources ever -- did that ever come up
3 before the Committee?

4 A There were reports of sources, generally small
5 sources which occasionally, perhaps once or twice would have
6 been discarded. I can't recall precise details, but I
7 recall a COBALT-57 source found missing from a laboratory,
8 that it was believed to be discarded, and that was reported
9 to the Radiation Safety Office, and a number of us spent a
10 great deal of time going through a lot of garbage trying to
11 find that source, and reported the loss of that.

12 I believe it was a COBALT-57 source. This is a
13 somewhat hazy recollection, but I -- you're asking have lost
14 sources been brought to the Radiation Safety Committee, and
15 I know that I had knowledge of lost sources and that we
16 tried to deal with that.

17 And the Radiation Safety Officer, to the best of
18 my knowledge, was instructed to contact the NRC about these
19 which were considered kind of a small -- a small COBALT-57
20 source, but it was still -- we felt it serious. And when
21 you stand in a lot of garbage, you remember the experience.
22 We tried very hard to find the source, and then Mr. Fritz
23 was told to report that sort of thing to the NRC.

24 Q In your discussions with Mr. Barbro Boyd and
25 Harris in relation to this memo which is Exhibit 3, did they

1 ever explain to you what took them a year to bring this
2 allegation forward?

3 A No.

4 Q Did you ever ask them? Did you have any concern
5 that this was a year later?

6 A I think that that -- let's see. That's August of
7 '88.

8 Q The inspection --

9 A The inspection takes place August of '88. No, I
10 didn't.

11 Q They never brought this -- is it correct that they
12 never brought this particular concern up to the Committee at
13 the time there were these meetings between the technicians
14 and the Committee?

15 A At that time, that is correct. A process of trust
16 was being established between the technologists and certain
17 members of the Radiation Safety Committee, and the
18 allegations that began to come to my office came as a result
19 of that process of trust which had to do with my chairing
20 the subcommittee and making it clear that there was free
21 access to the Committee if there were problems.

22 Q Did you ever have discussions with Ken Fritz or
23 Prince Jason concerning this particular allegation?

24 A I did not.

25 Q So if I understand you correct, you raised the

1 concern to Dr. Wiot, and that was basically the end of your
2 participation in the affair?

3 A That's correct, because he is Chairman of the
4 Committee; then, to the best of my knowledge, took this to
5 the NRC.

6 Q There was one other incident I wanted to go back
7 on. It involved Mr. Boyd. He's a Health Physics
8 Technician. Do you recall him coming to you in early '89 in
9 regards to an allegation that was made to the NRC, and he
10 had concerns that he was being identified as the source of
11 that allegation?

12 A I do recall that.

13 Q Do you recall any of the specifics as to that
14 matter?

15 A No. No. I recall that he was concerned that he
16 was -- my recollection is that he was concerned he was being
17 singled out as a troublemaker, and my recollection is that I
18 told him the Radiation Safety Committee didn't -- had not
19 shared such a concern, and tried to reassure him that the
20 Radiation Safety Committee was not fingering him in any --
21 pointing a finger to him, as accusing him as being a
22 troublemaker in any way, that we had no knowledge of the
23 author of communication with the NRC, which, I believe, was
24 done anonymously.

25 My recollection is that that was -- that whatever

1 went -- I just -- I don't recall which allegation or
2 allegations went to the NRC, but I believe that there were
3 allegations going to the NRC around this time. Am I
4 correct?

5 Q Yes.

6 A And I believe they were anonymous. And I simply
7 reassured Melvin we had no knowledge of who was the author,
8 but the allegations had to be dealt with.

9 Q Did you have any direct communications with anyone
10 from Region III in regards to these anonymous allegations?

11 A I don't recall Region III calling me, and any
12 communication with Region III would have been done through
13 the Chairman of the Committee.

14 Q As a result of the allegations detailed in Exhibit
15 3, the missing cards that were withhold from the Inspector,
16 that was certainly after that series of events in which the
17 University retained Nuclear Energy Services, a consultant.
18 Is that correct?

19 A Yes.

20 Q Did you participate at all in the hiring of --

21 A No, I did not.

22 Q Who was the one who hired them as --

23 MR. RESNICK: Do you know?

24 BY MR. PAUL:

25 Q Do you know?

1 A I do not know whether that was -- no. No. I do
2 not know which individual in the University of Cincinnati
3 was responsible for that choice.

4 MR. PAUL: At this time, I'd like to go off the
5 record for a second.

6 [Discussion off the record.]

7 MR. PAUL: Back on the record. I just have a
8 couple of followup things here.

9 BY MR. PAUL:

10 Q When the Health Physics Technicians came to you in
11 regards to their concern, specifically the July 28th
12 concern, did they indicate that they had ever attempted to
13 bring those concerns forward through Ken Fritz or any other
14 source within the University?

15 A I don't recall. There were a series of meetings
16 which almost became a weekly parade of technologists through
17 this office with rather amorphous allegations that were
18 often administrative. When, however, certain allegations
19 became safety matters, I then said these must be put in
20 writing, you must document -- if you feel a license
21 violation has occurred, this must be documented with the
22 part of the license that you feel is being violated, so the
23 Radiation Safety Committee can deal with these at once.

24 There are certain issues -- if they're personality
25 issues, that's something administrative that is not an

1 immediate concern to the Radiation Safety Committee.
2 License violations we must deal with at once, and it -- so
3 that they began to draw up, and did draw up a document with
4 written allegations.

5 This -- when they brought this one to me, this was
6 the one that I said put it in writing immediately; we must,
7 at once, act on this.

8 MR. DOCKERY: Richard, if I may.

9 MR. PAUL: Sure.

10 BY MR. DOCKERY:

11 Q Doctor, procedurally, how should that have been
12 addressed, that particular allegation? Under the normal
13 circumstances, who should they have addressed that concern
14 to? Would that have been you?

15 A Procedurally, first to their supervisor, since --
16 look at the -- let's see. If I may just refer to the --
17 allegation is -- Deputy is quoted, and so procedurally, this
18 should then have gone to the Radiation Safety Officer saying
19 your Deputy has told us to do something that I think is --
20 and if the Radiation Safety Officer then sent back up the
21 Deputy, then that should have gone according to the policy
22 that we developed in the -- following that January meeting,
23 to the Radiation Safety Committee, presume of innocence.

24 Procedurally, one does that through a member of
25 the Committee, so that -- whether this was brought to the

1 Radiation Safety Officer, I have no knowledge of that, but,
2 procedurally, this was brought to a member of the Radiation
3 Safety Committee to go to the Full Committee. And from that
4 point of view, I felt that the procedure was -- that we had
5 set out was being followed.

6 And my reaction was to get it to the Chairman to
7 get it out to the whole Committee, to deal with it, find out
8 if this was a violation of, as I feared it was, of not only
9 license, but law, or license and law, and to then bring it
10 to the NRC.

11 Q Did they represent to you in any way -- by they, I
12 mean the three cosignatories on this -- represent to you in
13 any way that they had tried to go another route? Was this
14 an alternative route in any way coming to you via the note?

15 A With respect to this concern?

16 Q Yes.

17 A Not that I recall. I recall that a series of
18 concerns were brought -- about the office and this
19 performance were brought to me, and when the concerns --
20 when I demanded specifics, that they began to produce
21 specifics. And when I asked them to refer to the license,
22 parts of the license, if they could give me a name and a
23 source or whatever had problems, they had brought.

24 And when they got around to telling me -- and I
25 can't -- I can't give you the date they first told me this,

1 but I can tell you that as soon as they told me, I said
2 that's got to go in writing, you've got to sign this, we've
3 got to deal with this at once. That is very serious.

4 Q And this document results --

5 A And this document results and was brought then,
6 with what I considered and do consider proper procedure, at
7 once to the Radiation Safety Committee through its Chairman,
8 and subsequently NRC contacted and so forth.

9 BY MR. PAUL:

10 Q Did the Full Radiation Safety Committee ever
11 address this specific incident that you participated in?

12 A I can't answer that, because when I brought this
13 to Dr. Wiot's attention, I don't know what his actions were,
14 vis-a-vis University counsel, NRC, President of the
15 University. I know that he took action to contact the NRC,
16 and took action administratively with the individual or
17 individuals involved, but I cannot recall subsequent
18 detailed discussions in the Radiation Safety Committee.

19 But the Safety Committee was being restructured
20 and I may not have been on the Radiation Safety Committee
21 much longer after this, because it was very -- as I
22 remember, it was made -- the President acted very quickly to
23 make it a smaller, more responsive Committee, more --
24 opposite unwieldy, if the word wieldy exists -- by being
25 smaller.

1 And at that point, I was off the Committee and
2 Deputy Radiation Safety Officer, and I don't have that
3 chronology solidly. My impression was that actions took
4 place very rapidly. I learned of these secondhand. I was
5 not present at decisions on administrative leave or hiring
6 of consultants, but I was aware that they were happening
7 very quickly once these data were brought to light.

8 MR. PAUL: Mr. Resnick, there was a matter you
9 wanted to clear up?

10 MR. RESNICK: Yes. On Exhibit 3, Doctor, you
11 testified that the technicians first came to you with an
12 oral allegation regarding the subject matter of Exhibit 3.
13 Is that right?

14 THE WITNESS: Yes, that's right.

15 MR. RESNICK: And how long -- what was the period
16 of time between the time they came to you with the oral
17 charge and you told them to put it in writing?

18 THE WITNESS: Only within a day or a few days,
19 because that seemed to me to be so serious that, at that
20 point, I felt I couldn't wait to compile a list of alleged
21 license violations for us to look into. This was much more
22 serious, and I wanted that in writing, that they were all
23 prepared. My words I do remember very clearly, saying to
24 the technologists, if you make this allegation, be prepared
25 to swear to it in a court of law, because I felt it was so

1 serious.

2 MR. RESNICK: So if July 28th is, indeed, the day
3 that you received this memo, because it's not clear that you
4 did, but if it is, assuming it is the date you received
5 this, you would have first learned about this orally when in
6 relation to that date?

7 THE WITNESS: I would guess no earlier than July
8 20 to 25, somewhere in that vicinity.

9 BY MR. PAUL:

10 Q Did you ever consider contacting the NRC directly
11 yourself on this allegation?

12 A No, because the channel was to go to the Committee
13 Chairman and the entire Committee, and then to contact the
14 NRC through that mechanism. If the Committee had refused to
15 deal with this or had said this is not something which did
16 not happen, I would have called -- under those
17 circumstances, I would have called the NRC with the
18 allegation, because of its serious nature.

19 But the Radiation Safety Committee and the
20 Chairman were responsive to the memorandum, and at that
21 point, I felt it appropriate to follow the channels of the
22 Committee, which I was, in part, responsible for setting up.

23 Q So if I understand, Dr. Wiot had that
24 responsibility, being to notify the NRC of this allegation.

25 A He took that responsibility.

1 Q Dr. Silberstein, have I or any other NRC
2 representative here threatened you in any manner, offered
3 you any rewards in return for this statement?

4 A No.

5 Q Have you given the statement freely and
6 voluntarily?

7 A I have.

8 Q Is there anything further that you care to add for
9 the record on the matter that we didn't address here, that
10 you want to add? Do you want to discuss --

11 MR. PAUL: Let's go off the record.

12 [Discussion off the record

13 MR. PAUL: Back on the record. As we were
14 discussing off the record, there is possibly one other
15 document that we mentioned in the interview, and it concerns
16 the findings of the subcommittee. I've looked through my
17 records and I don't have it. But from what I understand, it
18 does exist and you or possibly Dr. Wiot have that?

19 THE WITNESS: I was its author and sent --
20 certainly sent a copy to Dr. Wiot, because it was the basis
21 for the subsequent policy on notification, problem-solving,
22 channels to go through before one went to the NRC. But I
23 want to be really, really clear that the purpose of all of
24 this was not to block NRC communication, but to allow
25 internal problem-solving, which is why I asked the

1 technologists to bring to me specifics of license violations
2 so that we could correct these ourselves, and then say to
3 the NRC at the time of next inspection, here are problems,
4 this is what we're doing about them.

5 So that there was never -- because I've never
6 given deposition before, I want to be really clear that we
7 were -- I was data collecting for the purpose of complying
8 with a license where allegations were being made we were out
9 of compliance.

10 MR. PAUL: I guess when I come back down for you
11 to review your transcript, I was wondering if you could make
12 this document available at that point in time?

13 MR. RESNICK: I'll talk it over with Dr.
14 Silberstein.

15 MR. PAUL: Is there anything further that you
16 gentlemen care to add for the record?

17 MR. RESNICK: No. Just give me a call to let me
18 know, please, when you're coming so I can schedule that with
19 Dr. Silberstein.

20 MR. PAUL: Sure.

21 MR. RESNICK: If you would do that, I'd appreciate
22 it.

23 MR. PAUL: Okay. This interview is concluded.
24 Off the record.

25 [Whereupon, at 11:19 a.m., the interview was

1 concluded.]

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REPORTER'S CERTIFICATE

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission

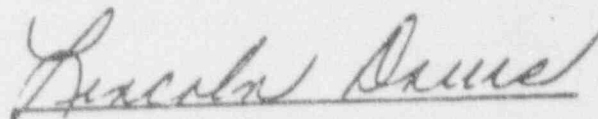
in the matter of:

NAME OF PROCEEDING: Investigative Interview

DOCKET NUMBER:

PLACE OF PROCEEDING: Cincinnati, Ohio

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.



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Transcript

July 17, 1990, NBC

p 10 p 11 - Summer = New England Medical Center

p 12 p 17 - makes no sense

p 17 p 18 - who = they

~~p 19 p 20 - ...~~

p 19 p 20 - ... Regulation permits direct
(continued)

p 19 p 20 - of steps to address problems that had been
...
...
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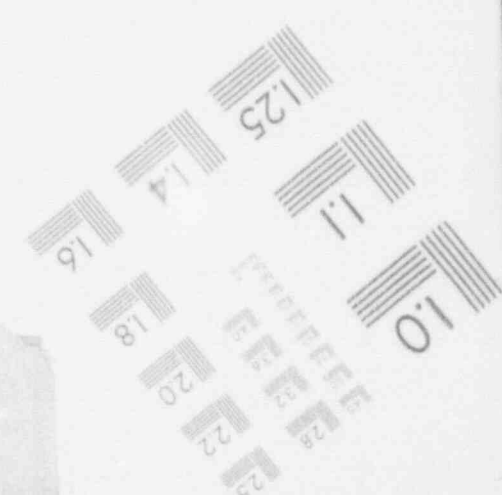
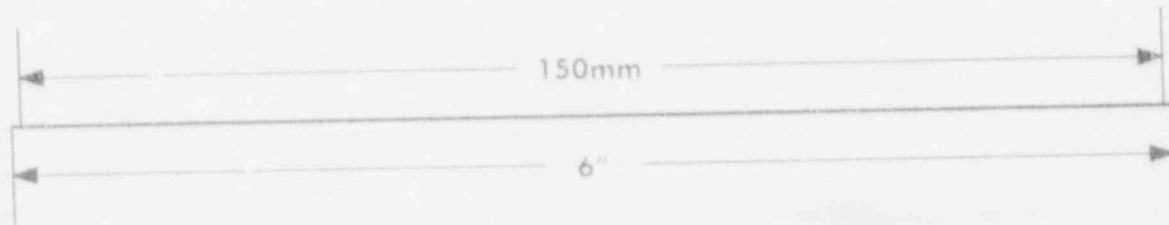
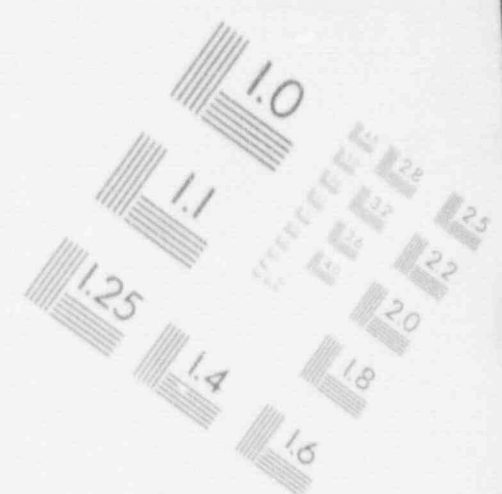
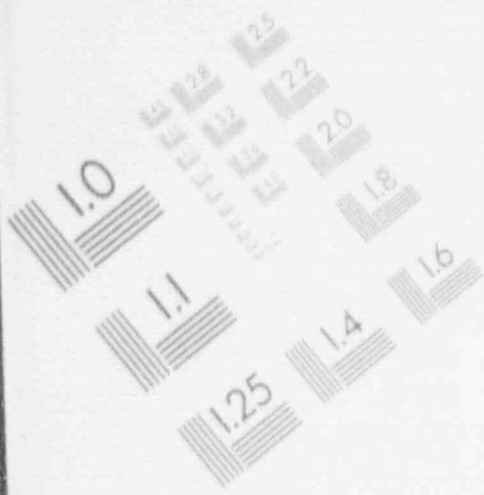
p 24 p 25 - that = with that

p 24 p 25 - ... make no sense

Eugene B. ...
17 July 1990

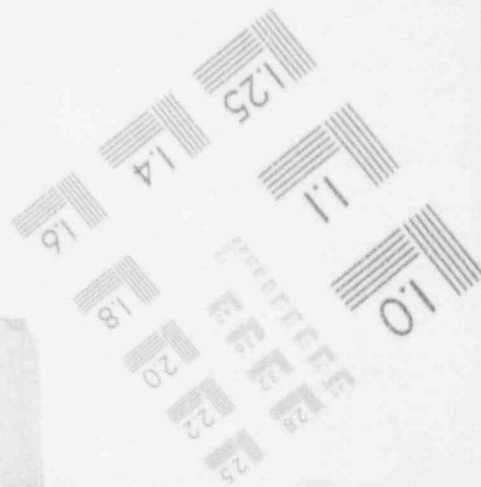
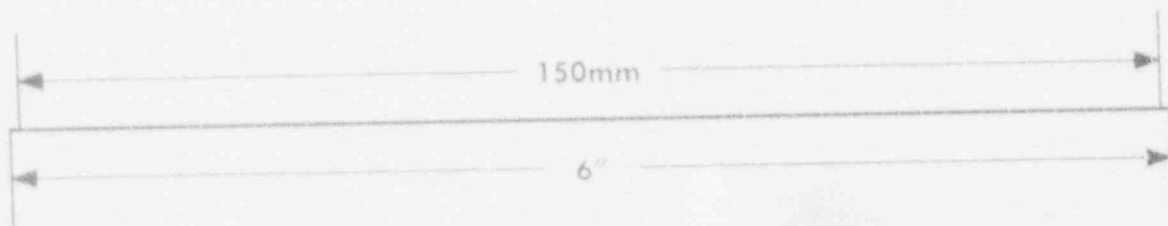
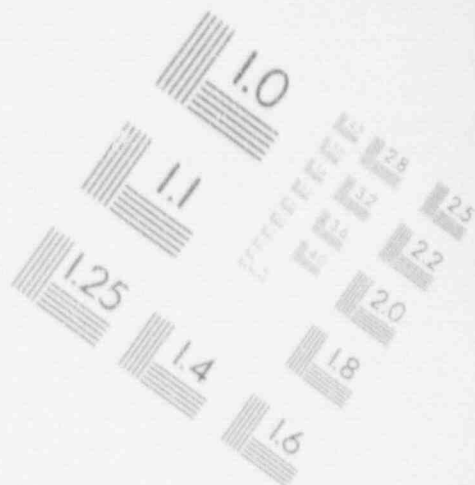
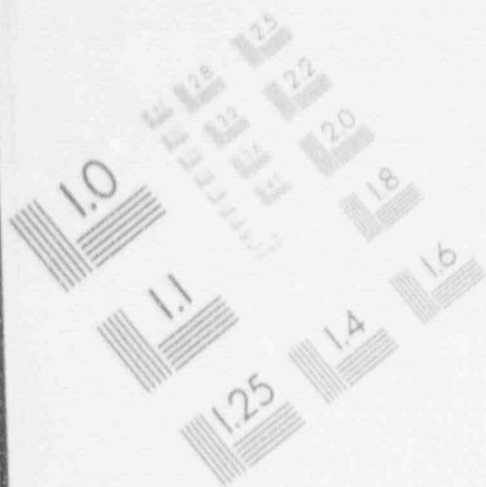
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IMAGE EVALUATION
TEST TARGET (MT-3)



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IMAGE EVALUATION
TEST TARGET (MT-3)



DRAFT

Minutes of Meeting held January 4, 1989

Attendees: Messrs. Elson, Maxon, Vestal and Silberstein; Messrs. Alexander, Barbro, Boyd, Estes, Harris, Jason and Williams. The meeting was chaired by Jerome F. Wiot, M.D., Chairman of the Radiation Safety Committee. Mrs. S. Karns served as recording secretary.

Dr. Wiot opened the meeting by expressing the hope that the Health Physics Technicians of the Radiation Safety Office would feel that this was an open forum where they could state their concerns to the Committee membership. He also stated that there was no objection to the technicians' membership in the union. Mr. Fritz was not invited to the meeting so as to foster a sense of open communication between the technicians and the Committee.

Mr. Barbro served as spokesman for the group. He first explained that the technicians opted to join the union due to their concern for the status of the radiation safety program and its administration (attachments #1 - #5b). They felt uncomfortable with some of the decisions regarding their assigned duties. In order to serve their best interests, they joined the union. One assigned duty for which Mr. Barbro has (had?) initiated a grievance concerned the decontamination of hospital rooms by RSO personnel instead of RIL personnel. UC stated that the Radiation Safety Committee is the policy making body with regard to radiation

safety. The techs mistakenly thought that the RSC merely went along with Mr. Fritz's recommendations. The techs felt that the changing membership of the Committee could result in continual changes in their duties and responsibilities; this would not guarantee any consistency in the future.

Mr. Jason commented that he had been dissuaded from joining the union by Mr. Fritz and Mr. Williams (UC Labor Relations) based on the fact that he is considered a supervisor in the table of organization.

Dr. Wiot responded that his personal opposition to the union was limited only to the money issue, i.e. the out of pocket cost to its members. The Committee has no feelings regarding union membership. However, Dr. Wiot is concerned about why the techs feel compelled to join the union.

Mr. Jason stated that job description changes could be initiated at the whim of the Committee based partly on the changing membership. Mr. Alexander noted that there was only one change in membership from 1988 to 1989.

Mr. Barbro again noted the I-131 decontamination problem. He said the techs see their role as inspection and enforcement and that to be responsible for decontamination of hospital rooms was a conflict of interest. Mr. Boyd concurred and stated that it was a conflict of interest for the Senior Health Physics Technician to be

the Deputy Radiation Safety Officer. This results in the other staff techs doing the Senior Health Physics Technician's duties. In effect, there was no job ladder for promotion or advancement available.

Commentary on a memo dated June 30, 1988 (attachments #5a and #5b) was distributed. The techs felt the memo should be rephrased to suggest employees use properly approved channels for communication.

Mr. Barbro said the techs felt there was a slow response from management regarding safety concerns as well as environmental and occupational health issues. He stated the techs felt an "ostrich syndrome" situation existed in which management did not respond to their concerns and questions. An example of their concerns is the public restroom facility at the Holmes RIL. This problem was discussed briefly and will be investigated further.

The techs stated they had been discouraged from taking courses, attending professional meetings and seminars or any other type of continuing education (attachment #6). They had inquired of Mrs. Clayton regarding educational advancement and were told there was no money available for this purpose. Dr. Wiot will check this with the Business Office.

Mr. Barbro stated the techs recommended a) that the permanent Committee membership include a representative from Environmental

and Occupational Health; and b) that a health physics technician be a member of the Committee.

The techs' concern over non-human use protocols was addressed (attachment #7). They feel that changes initiated via telephone result in confusion and that all requests should be made in writing.

Concern for adherence to regulatory guidelines was addressed (attachment #8). The techs felt that principal investigators and their laboratory personnel should have documented instruction. The Lab Animal Medicine program was suggested as a model. (See also the NRC Regulatory Guide 8.29 appended).

The transport of radioactive materials in private and rented vehicles was discussed (attachment #9). Mr. Williams stated this issue had been discussed at length with UC Legal Department. Mr. Barbro said UC was in violation of DOT requirements. Dr. Wiot asked Mr. Barbro to supply the appropriate DOT regulations and requirements that bear on this issue for further review.

The use of our license for commercial purposes was discussed (attachment #10). Evidently, there still exists on the premises of UC radium sources used for calibration of instruments. This calibration is done by Mr. Fritz and Dr. Kereiakes and the techs feel this is a violation of our non-commercial license. Mr. Boyd noted we need to dispose of this radium prior to 1992 when this

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disposal would be very difficult due to new low level waste disposal regulations. Dr. Wiot asked that a plan to inform the PI, dispose of the radium, find a replacement for calibration and the costs of this disposal, etc. be prepared for Committee review. If such a change in calibration methods is undertaken, an amendment to our license would be required.

Mr. Boyd suggested that a lab hazard classification system similar to that used at Purdue University be investigated. This system is based on the amount of radioactive materials present, the inherent hazards, the written protocol, etc. This information will be provided to the Committee for further review.

The techs also suggested that a schedule of radiation safety infractions and appropriate disciplinary measures be instituted. This could be published and distributed to principal investigators.

The meeting was concluded with Dr. Wiot stating that he was most interested in discussing the techs' concerns and that he could be reached at any time to discuss these problems. He felt that this meeting served as a beginning to more open dialogue regarding the operation of the Radiation Safety Office and the relationship between the Committee and the health physics technicians.



University of Cincinnati
Radiation Safety Committee

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Cincinnati, Ohio 45267-0591

Mail Location #591

Telephones:

Radiation Safety Office 558-4110
Administration 558-9081

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June 30, 1988

TO: Radiation Safety Personnel
Univ. of Cincinnati

FROM: George W. Alexander, Jr. B.S. *S.A.*
Kenneth M. Fritz, M.S. *KMF*

SUBJECT: Problem Notification Process for
Radiation Safety Office Personnel

In the event that there are any problems related to Radiation Safety Office programs, Radiation Health Technicians must notify either the Deputy Radiation Safety Officer, Radiation Safety Officer or Administrative Director of Radiation Safety immediately. Under no circumstances should any employee state either policies or problems related to radiation safety to anyone within the University of Cincinnati or outside of the University of Cincinnati unless told to do so by one of the above mentioned supervisors. Please be reminded that the Radiation Safety Committee makes radiation safety policies for the University, and we act upon the provisions of our NRC Broad License. Your specific jobs are to comply with assigned duties from the supervisors. In the event that there is a discrepancy related to this policy by an employee, disciplinary action will be taken.

NAME

DATE

Collected

July 28, 1989

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TO: Edward Silberstein, M.D.
Radioisotope Laboratory

FROM: Health Physics Technicians
Radiation Safety Office

We the undersigned state that prior to the Nuclear Regulatory Commission (NRC) inspection of August 22-25, 1988, of our Broad Scope License that the Deputy Radiation Safety Officer handed the Staff Health Physics Technicians sealed source wipe test records for seal sources that had been unaccounted for. The approximate wording used by the Deputy Radiation Safety Officer were, "Here, do something with these."

During the NRC inspection these records were kept from the NRC inspector and were essentially unavailable for his inspection.

These sealed source wipe test records are identified as follows:

- Card # WH-4 - Isotope Ni-63 Activity on 5-24-69 was 10 mCi
 - Card # 106 - Isotope Ni-63 Activity on 5-24-69 was 10 mCi
- Both of these sources were originally purchased by Dr. Henry Tan.

Affirmed on July 28, 1989 by:

Jeffrey E. Barbur
Michael D. Boyd
Patrick W. Harris

attachment B4
REMI