CROSS-EXAMINATION BY MR. SMIT:

Q. When you came into the employee of the company, you were examine, a pre-employment was given to you and you gave them a history.

A. Yes, sir.

Q. At that time, you told them you did have some difficulties associated with sensitization.

A. Yes.

- Q. That was before you went to work for them. A. I had the allergies then.
- Q. Then, when you want to work for them you said that you had no instructions with relation to the radiation and safety work.

A. No formal work.

Q. You were given the small handbook which is known as the "ABC of Radiation."

A. Yes.

- Q. I take it that you dutifully read it. A. Oh, yes.
- Q. And you understood it. A. Yes.
- Q. As a matter of fact, you had seen the same book at one time, long before you ever thought about going to work. Brookhaven, is that right? [23]

A. No.

- Q. When you went to high school? ***
 - A. No, I never saw him while I was in high school but I did see an exhibit at Port Jefferson.

Q. You did have this book and you familiarize yourself with it.

A. Yes.

- MR. YANNACONE: Is the book now in evidence?
- MR. SMIT: Yes, I will offer that in evidence. ***
- MR. YANNACONE: The date on this is 1957. Now, are you going to claim there was before 1957, a boat, or that she was given it in 1957?
- MR. SMIT: No she was given one in 1954. This is a 1957 edition.
- MR. YANNACONE: Were there any changes between 1954 and 1957?
- MR. SMIT: We will have another witness to tell [24] us about it. Also, as a matter of fact, we can find the original if you insist.

THE REFEREE: All right. It is received. It is received only with respect to the publication of the 1957 edition. ***

- Q. Now, with respect to your work in the hot lab, the Referee brought out the fact that you wore a badge.A. Yes.
- Q. You will furnish the badge at the time you first started to work for the Lab, isn't that right?

A. Yes.

Q. You always had the badge during your working hours, isn't that right?

A. That is right.

- Q. And you always wore it? A. Oh, yes.
- Q. There was always film on the badge, is that right? A. I never looked.
- Q. The badge was furnished to you how often? [25]A. I think it was bi-weekly, but it might've been weekly. I am not sure when they change them.
- Q. During the five years that you were in their employee, will you ever called in and the subject of the badge findings discuss with you?A. Yes, only once.

- Q. On that one occasion, you were told a while you were called in, nevertheless, it was still
 - A. (Int'g.) All, I wasn't called in. Someone else told me to report so I called the health physicist that was in our section.
- Q. You were told that the reading of the film was A. (Int'g.) He said was just probably the X-ray machine.
- Q. It was within normal limits, is that right? MR. YANNACONE: Objection.
 - A. I don't remember what I was told. I know he told me it was probably just the X-ray.
- Q. When you are operating the X-ray machine, was that the Maxitron? A. That is right.
- Q. Both in the new and old buildings, the machine that emitted the xray, or Maxitron was in the room, is that correct, in the old building?
 - A. In the old building there was one big room they had built with a partial wall the middle of it. [26]
- Q. And on one side of the wall was the Maitron, is that right?A. That is right.
- Q. How far away from the wall was it?... How far away from the wall, the separating wall.
 - A. I guess a good 15 feet.
- Q. Was there a doorway in the wall? A. Yes.
- Q. Was there a window on the wall? A. Yes.
- Q. Did the window have lead glass? A. I don't know what it was.
- Q. Was the door lead-lined? A. Yes.
- Q. Was the floor of the room lead-lined?
 - A. No, there was a small patch of lead that was under the control box.
- Q. Now, when you worked in that room or when you worked in the area in which you were to operate the Maxitron machine, you generally work there with animals or with other substances, is that right? [27] A. That is right.

Q. The purpose of the operation being to place the substances are animals in the Maxitron where it would be exposed to x-rays, is that right?

A. That's right.

- Q. When you brought the animals in, they generally were in some sort of a container, where a day, the mice that you would put in the tube, plastic tube, is that correct?
 - A. Oh, yes ... A few times you would tape the animals and the animal would be under sedation. They would be taped.
- Q. Your job would be to position these animals or the substances for the X-ray?

A. That is right.

- Q. The exposure, is that correct? A. Yes
- Q. Now, at that point, while you were positioning the animals or substances, the Maxitron was not in operation, is that so? ***A. That is right.
- Q. No rays were coming from the Maxitron at that point. A. That is right. [28]
- Q. When you positioned the animals for substances under the Maxitron, you left that area, went through the doorway and closed it, is that right?

A. That's right.

- Q. And then you will behind the dividing wall, is that right? A. Yes.
- Q. And it was from that point that you had to that you had the control board from which you would operate it.
 A. Yes.
- Q. All the time you were wearing your badge. A. That's right.
- Q. And having these two other pencils, that you call them, in your pocket, is that right?A. Yes.
- Q. They were to check radiation, too, is that right? A. Yes.

- Q. Now, after this specific period of time had elapsed for the exposure, you would turn off the machine, is that right?A. Yes.
- Q. And it was after you turned off the machine, that you would return or would you return to get the animals are substances exposed is that right?
 - A. Oh, yes.
- Q. So that you would open this door and walked in and the Maxitron [29] was not in operation then, is that right?

A. Yes, that's right.

Q. And you were diluting these – what was the substance that you diluted on occasion?

A. The iodine 131, sodium 24 - it's just the stock isotopes that came in for the doctors that were there.

- Q. When you did that first of all, the shipment of these substances generally was the radioactive substances wasn't it?
 A. Yes.
- Q. Would that come in what you call a lead pig? A. Usually, yes.
- Q. And, in other words, that was a lead container. A. That's right.
- Q. I understand the lead container would be a container which contained the substances, whatever they might be is that right? A. Yes.
- Q. You took the lead pig and you brought it over to the point where you said this castle wall was built, is that right?A. Yes.
- Q. And the castle wall was built out of lead blocks, is that right? A. That's right.
- Q. And you placed that lead pig container inside or behind the enclosed castle wall, is that right?
 - A. Sometimes. The sodium came in large containers that were [30] put in one section on the side, and I didn't move them from there. I could've left them there. So, I would open it and take the sodium out and bring it around the outside and over the wall.
- Q. When you used the tongs, what would you pick up with the tongs?A. The glass bowl that the sodium was in.

- Q. And you were wearing your rubber gloves? A. Yes.
- Q. You had your badge on? A. Yes.
- Q. And the two pencils in your pocket, is that right? A. Yes.
- Q. When you work, when you did some work behind, the work of diluting or apportioning the material behind the blocks, you did it by observing the material with the mirror above the blocks, is that right?

A. That's right.

Q. At the top of the small cubicle in which the radioactive material was located is that right?

A. That's right.

Q. And between you and the material was this block wall, is that right? (Indicating)

A. Not that high, but yes, there was a block wall.

Q. Now, what's in the block wall up to the level of your chest? [31] A. I'd say it was just about here.

THE REFEREE: Indicating the middle of the chest.

- Q. And you were wearing your badge.
 - A. Yes ... (Int'g.) the badge wasn't on my hand or my nose when I would be leaning over the wall, though.
- Q. And your hands were covered with the rubber gloves. A. Yes.
- Q. In that connection, after you diluted the material or measured it out and put it in another container, it was again placed in a lead pig?A. Yes. I would take it over the wall into the pig.
- Q. And it was then distributed. A. Yes.
- Q. Now, when you worked in the area that you described as the Pile, the area of the Pile, was that in the old building?... Or just a separate structure on the ground.

A. That's another building entirely.

- Q. When you went in, when you went in the area where the Pile was located to do anything, you wore your badge?A. Yes. [32]
- Q. And you had those pencils with you? A. Yes.
- Q. Now, generally, you took the animals which were to be placed inside of a Pile you placed them in, these mice, you would place them in small tubes?

A. Yes.

Q. And larger mice, you would place them in some larger type of container, is that right?

A. Yes.

- Q. You didn't open the Pile, did you? A. Yes, I did.
- Q. How often, in your entire experience of five years, did you open the Pile?
 - A. Well, there is a crane there. I did it quite frequently.
- Q. Where were you when you were opening it? A. As far as I am to you now.
- Q. Were you behind any wall?A. No, there is that the wall there.
- Q. Did you know Mr. Gilmartin?
 - A. Yes. Jimmy would be the one that would be putting them down in the Pile.
- Q. It was a fact that Mr. Gilmartin placed the animals in the Pile, not you?

A. Yes. [33]

- Q. Or the substances?
 - A. Not always. Jimmy didn't always go up for this. For instance, I had some bacteria that were radiated for Dr. Drew and I would put them in because it was a small container and it wasn't necessary for Jimmy to come up. So, you just lifted the thing and booked it on a long handled thing and loaded into the space you wanted to have it irradiated and you closed it.
- Q. You did that on that occasion when you did something for Dr. Drew? A. Yes, and a few times that was, too.

- Q. How many times would you say you did that? A. Not too often, under a dozen.
- Q. In your entire career. A. Yes.
- Q. And the rest of the time was Jimmy Gilmartin the one who would put the animals or the substances into the Pile?A. Yes. ***
- Q. Now, with respect to these calculations which you said you used [34] gold foil, that was done in connection with the Maxitron operation, is that right?

A. No, that was strictly with the Pile.

- Q. And you would use them with the animals and the substances. A. Everything.
- Q. And it was in those operations, with the exception of less than a dozen times that Mr. Gilmartin actually placed them and remove them from the Pile.
 - A. The gold foil flux is just the gold that is on the tubes, and you counted it in the back and take it the medical and calculating. The gold foil flocks actually isn't work in the Pile. You have to be there –
- Q. (Int'g.) This is removed from the Pile and you take it back to the lab, is that right?

A. Yes.

Q. It was removed by Mr. Gilmartin with the exception of a dozen occasions.

A. Yes. He would take it out and handed to me and I would go.

- Q. Now when you went to the doctor... Shapiro... You went to him for a checkup, is that right? [35] A. Yes.
- Q. And, at that time, I presume that Dr. Shapiro asked you for your complaints and also for your history, is that right?A. Yes.
- Q ... Prior to the time that you saw him in January 1959 had you had a spontaneous abortion?... In January, 1960.A. Yes.

Q. In January, 1960, when you went to Dr. Shapiro, had you suffered a spontaneous abortion?

A. Yes.

Q. In January, you saw him January 4, 1960, how long as you suffered the spontaneous abortion prior to that?

A. One in July and one some months before.

- Q. In other words, there were two of them, one in July and one in A. Two, possibly a third one. The third one I didn't see a doctor on it.
- Q. You didn't see a doctor. A. That's right.
- Q. So that they might've been three between July and January, 1960. [36]
- [Page 37 of the transcript is missing]
- Q ... To check the type of soap you were using and to change it? A. Yes. That was excluded.
- Q. Is that right?
 - A. Oh, yes. We tried about three types of soap and decided that wasn't it we tried hand lotion, and that was in it, and about this time I finish the boron work and it cleared up. Then I put a salve on it that I got from one of the doctors and cleaned up good enough.
 - MR. SMIT: I have no further questions of the claimant at this time, Mr. Referee.
 - MR. YANNACONE: All right. I would like to go back to the discussion of the shielding with respect to the GE Maxitron.