

**TRACK 2 32:35**

**\*\*same two speakers as in Track 1 [32:17]:** *Speaker 1 is male [old childhood friend of Roger's?] and Speaker 2 is female—might be Norma? This is the continuation of the personal interview, again—reference the other transcriptions NOT from APA California.*

Speaker 1: [INAUDIBLE 00:00:01], didn't you? [INAUDIBLE 00:00:03 - 00:00:08] We've got hydrogen lines across, we've got gas [INAUDIBLE 00:00:12] we're all uptight. [INAUDIBLE 00:00:16 - 00:00:30] If I can't improve on the process he's developed and [INAUDIBLE 00:00:34]. I realize what I'm doing, I've got to [INAUDIBLE 00:00:40]. [Laughs] Few years later, I thought that he's the head of research up here at [INAUDIBLE 00:00:52]. I walk in the [INAUDIBLE 00:00:57] I thought I recognized your name. [INAUDIBLE 00:01:01 - 00:01:17] The stuff we made has made it possible to make the bomb very easily. That's what those huge bombs were, that they had to have this particular material. And I knew that because when we shipped out of [INAUDIBLE 00:01:32] called me in and said, "You're on vacation." [INAUDIBLE 00:01:36] He handed me two pieces of paper. One was a little piece of newspaper. He said, "That almost appeared in the British newspaper [INAUDIBLE 00:01:47]." It said if America doesn't hurry, Hitler's going to beat us to the atom bomb. [INAUDIBLE 00:01:54 - 00:02:06] August 6th without fail. [INAUDIBLE 00:02:12 - 00:02:24] for two weeks. I have a cottage down there for [INAUDIBLE 00:02:25]. I said, [INAUDIBLE 00:02:27] just you and I. [INAUDIBLE 00:02:33] ten a.m., Sunday morning on the 6th [INAUDIBLE 00:02:39]. What's the other condition? I said [INAUDIBLE 00:02:46]. Silence. "I thought you'd never ask!" [Laughs] [INAUDIBLE 00:02:58] So, [INAUDIBLE 00:02:57] and I listened to that [INAUDIBLE 00:03:01] and he's out there. [INAUDIBLE 00:03:04 - 00:03:11] never said a word for an hour and a half. Finally he turned to me. He said, "I'll tell you something." [INAUDIBLE 00:03:21] And I said, [INAUDIBLE 00:03:27], I had nothing to do with it. I said, [INAUDIBLE 00:03:30] won't even hear about it. But the men that did that, lived that 24 hours a day, seven days a week [INAUDIBLE 00:03:40] no time for them to [INAUDIBLE 00:03:43] the only excuse you can give. [INAUDIBLE 00:03:49 - 00:04:01] It's amazing how that happens [INAUDIBLE 00:04:03] go through college together and we were very close, and we separated for two years. My first job was in [INAUDIBLE 00:04:13]. His first [INAUDIBLE 00:04:13] is 35 miles away [INAUDIBLE 00:04:15]. So, we were together all during the war. But that Manhattan Project, that [INAUDIBLE 00:04:32]. The pressure they put us under was just absolutely [INAUDIBLE 00:04:36].

Speaker 2: What was it?

Speaker 1: Pardon?

Speaker 2: What was it?

Speaker 1: Apparently I can't say. I said I would never say unless I was cleared. Otherwise, it'll be in the book. I think what it would do, it would just make it so much easier for these countries that are trying to make atom bombs to make them. So, they don't want that information. That's the only thing I can think of. I knew. I guessed what it was when we were doing it. And because of that [INAUDIBLE 00:05:14] couldn't get his first [INAUDIBLE 00:05:17 - 00:05:30] We had our desks together, but we weren't allowed... It was another condition. We could talk to each other about anything else, but not, not what we were doing. So, and that... That was put to us in a way that that would be [INAUDIBLE 00:05:47 - 00:05:54] So, Bert goes in [INAUDIBLE 00:05:56] sledgehammer and a piece of metal about an inch thick. I'd hear him banging. He came out with his [INAUDIBLE 00:06:06] right down to his foot. And they [INAUDIBLE 00:06:09] beautiful little laboratory-sized [INAUDIBLE 00:06:15] made with special [INAUDIBLE 00:06:17]. Everything [INAUDIBLE 00:06:18] special stainless steel. And I heard that bang in there just once. He came out and [INAUDIBLE 00:06:25]. Four out of five hammers were broken. So, I knew what he was trying to do. He had something he was trying to break up and he couldn't break it up. And I'd see him go in with a container of a liquid. I knew he had the powder in there. And I've seen all this stuff. Anyway, I just guessed what he

was doing, and he was mixing a liquid and a solid and getting a glass he couldn't break. It was just too hard. And he obviously had given up. He was getting nowhere after two months. I had finally... I was all ready to go, [INAUDIBLE 00:07:07] being built. I finally looked at him and I said, "Bert," [INAUDIBLE 00:07:13]. He had been gone for weeks at a time [INAUDIBLE 00:07:17] all over the country. And I said, "Well, Bert, let's talk about it." [INAUDIBLE 00:07:24] but don't you say a word. [INAUDIBLE 00:07:32 - 00:07:44]. Let's go see the engineer. Engineer was a good friend of mine, [INAUDIBLE 00:07:51 - 00:08:03] It just needed to get done. I said, "All you have to do is use ten times as much [INAUDIBLE 00:08:12] that you need," [INAUDIBLE 00:08:17 - 00:08:28]. Whatever you have to use, use it, because you're going to reuse this stuff [INAUDIBLE 00:08:32]. You're going to heat it, dry the gas off, and take it [INAUDIBLE 00:08:34] that's probably not the best way, but it will work. So, we go to see the engineers, and then I said, "Now, another thing." I said, "The incident we talked of [INAUDIBLE 00:08:49] that engineer [INAUDIBLE 00:08:52]". He was going to squeal on me right away. So, I said, "You shut up. Don't say a word." [INAUDIBLE 00:09:03] We go in, and just like I said, the old timer, he said, "Hey, that's great." He said, "I've been all over the country trying to find [INAUDIBLE 00:09:17]." We said, "Sure, great." So, and I left and said [INAUDIBLE 00:09:25] just like I told Bruce. [INAUDIBLE 00:09:31 - 00:09:40] As I come in, he said, "Close that door." "Yes, sir." [INAUDIBLE 00:09:44] we're good friends. [INAUDIBLE 00:09:52] "You know you're in trouble, don't you?" "Yes, sir." He said, "Well," he says, "you've got a choice. You can [INAUDIBLE 00:10:04] or you can join the military intelligence [INAUDIBLE 00:10:17]." "I have to think about it." I thought about it. [Laughs] I had to sign another [INAUDIBLE 00:10:26] and I was as good and attached to military intelligence. They didn't dare [INAUDIBLE 00:10:33]. Those two guys sitting there, Bob and I are [INAUDIBLE 00:10:35 - 00:10:43] Funny things happen. Oh, boy. So, that was kind of fun. [INAUDIBLE 00:10:53] So, I was... One thing I was getting to... Three weeks... We shipped out this [INAUDIBLE 00:11:08] three weeks before that. Military intelligence called me and had me meet with all them and [INAUDIBLE 00:11:20], and they told me that the Japanese had [INAUDIBLE 00:11:27], that the war was over, there was no more problem, that was the end of it, and they thanked me for [INAUDIBLE 00:11:39]. But anyway, that's why I was so mad when they dropped those bombs. And when that [INAUDIBLE 00:11:47] the cities they chose, they had seven of them, were totally non-military. That's the reason they were chosen. They had not been [INAUDIBLE 00:11:59]. They wanted to know what the bomb would do to a city. They wanted proof of it. The stuff they did out here in the desert wasn't proof enough. They wanted to see it. That's why those bombs were [INAUDIBLE 00:12:16]. That's why I was shaken up. That's what... [INAUDIBLE 00:12:23] argued against so badly, that they got [INAUDIBLE 00:12:28] I got taken off security, you know. [INAUDIBLE 00:12:35] listed as a communist and everything else, the men that made the bomb. You know, [INAUDIBLE 00:12:44 - 00:12:57] that wasn't necessary. If they hadn't done it, they could have told the world we hadn't been successful. You can't make it. It's just too much [INAUDIBLE 00:13:07] atom bomb today. At least, I think [INAUDIBLE 00:13:17].

Speaker 2: Well, I think that someone would come up with it, don't you?

Speaker 1: Well, like they say, that probably was awful close, but I know they didn't get it. It was close before we even started, but they didn't get it. The Russians would never have gotten it without stealing all the information over here. At least, they claim they wouldn't have. They were going down the wrong path, too. I don't know what the secret was. I don't know [INAUDIBLE 00:13:48]. I don't know. [INAUDIBLE 00:14:05] Wiping out 200,000 people that was is a disgusting reason. [INAUDIBLE 00:14:15] When they ran it out here in the desert, they had a 300-foot steel tower vaporizer that [INAUDIBLE 00:14:26]. But anyway, [INAUDIBLE 00:14:38 - 00:14:45]. We had 16 of us, kids who were picked out of high school [INAUDIBLE 00:14:52] sent to colleges to get their science degree in three years. [INAUDIBLE 00:14:57] And some of them, of course, were very good. They had another real problem come up [INAUDIBLE 00:15:07]. Once I was [INAUDIBLE 00:15:09] military intelligence, I could go all over the building and get to know about everything. [INAUDIBLE 00:15:18]. He was getting a 50% yield in the first task and then recovering 47% of them, of 97% of the 50 [INAUDIBLE 00:15:31] and he figured that for a 97% yield. I'm sitting here talking to [INAUDIBLE 00:15:42]

again, and I said, “[INAUDIBLE 00:15:45] there’s something wrong with that calculation,” and then he said, “Yeah, now that you bring it up.” He quickly came up with a formula and he said, “Yeah, that’s 86.5% overall yield.” I said, “Well, you better tell [INAUDIBLE 00:15:58]”. So, Bob came out to the round table [INAUDIBLE 00:16:09] six of these [INAUDIBLE 00:16:14]. And Bob, he said, “Well, let’s start with you.” And I said, “I don’t know any way to anything about it.” I said, “I didn’t figure” [INAUDIBLE 00:16:24 - 00:16:38] down in the center, have it attached [INAUDIBLE 00:16:41] comes on and heats whenever the pressure gets to a certain point, that’ll melt it and keep it open. [INAUDIBLE 00:16:49 - 00:17:13] Everything I needed. And I had six inch tube, six feet long, a water condenser, it came off the water condenser and then down to a dry ice condenser, and I had five of these [INAUDIBLE 00:17:27] but then I’m running on the number two, and the fifth was a clean-up, which was heated all the time, with the same [INAUDIBLE 00:17:39] to catch any stray that might get past the [INAUDIBLE 00:17:42] three-way valve, you had two-way valve, you could go any way you want. And I thought that was good enough, see. [INAUDIBLE 00:18:01 -- 00:18:19] the engineer, I went in [INAUDIBLE 00:18:21 - 00:18:28] carpenters and electricians and all that took care of all our work. All of them signed [INAUDIBLE 00:18:33 - 00:18:46] Two walls, but they put cubby holes in it, the whole thing. A couple of them [INAUDIBLE 00:18:52 - 00:19:36] special stainless steel [INAUDIBLE 00:19:38 - 00:19:56]

Speaker 2: You remember Nanna’s parents?

Speaker 1: Oh, yeah. Her father and her mother.

Speaker 2: Was her mother already dead?

Speaker 1: Oh, I’m sure.

Speaker 2: What was her father like?

Speaker 1: Big fella. He was a [INAUDIBLE 00:20:13] always dressed beautifully, gray hair. [INAUDIBLE 00:20:25] That’s about all I remember about them. [INAUDIBLE 00:20:32]

Speaker 2: Was he the one who was in a wheelchair?

Speaker 1: [INAUDIBLE 00:20:43]

Speaker 2: [INAUDIBLE 00:20:46] Roger said he remembered some grandfather or grandfatherly figure who was in a wheelchair at the end.

Speaker 1: Well, he may have been for a very short time, but he was in good health. The last time I remember him was I had [INAUDIBLE 00:21:07] he could have been for a short time. I don’t know.

Speaker 2: How old was he when he died, do you know?

Speaker 1: I don’t know. My judgment would be around 80, 75.

Speaker 2: And he was retired, certainly.

Speaker 1: No, [INAUDIBLE 00:21:28].

Speaker 2: He was still working?

Speaker 1: [INAUDIBLE 00:21:30] Far as I know, we did all the [INAUDIBLE 00:21:36].

Speaker 2: I have the brush set that [INAUDIBLE 00:21:44]

Speaker 1: [INAUDIBLE 00:21:51]

Speaker 2: I have some flatware that has Roger's name on it. [INAUDIBLE 00:22:00] Oh, I have the...

Speaker 1: [INAUDIBLE 00:22:16]

Speaker 2: Well, I have three different kinds. I have two [INAUDIBLE 00:22:25] their initials on them, and then I have two bigger odd ones.

Speaker 1: [INAUDIBLE 00:22:43]

Speaker 2: [INAUDIBLE 00:22:48]

Speaker 1: [INAUDIBLE 00:23:03]

Speaker 2: [INAUDIBLE 00:23:11]

Speaker 1: Knives and forks [INAUDIBLE 00:23:14].

Speaker 2: Oh, I have those you brought down. Yeah. But they are all [INAUDIBLE 00:23:22]. William Rogers.

Speaker 1: What?

Speaker 2: From William Rogers Silver Company.

Speaker 1: [INAUDIBLE 00:23:30]

Speaker 2: That's what I see.

Speaker 1: Yeah. [INAUDIBLE 00:23:42].

Speaker 2: Yeah. I remember Nanna saying there were three deaths pretty close together. I guess he was the first and then your father and then... Well, I guess there were four. Your father and Harry and Uncle Irving.

Speaker 1: Yeah. Yeah, [INAUDIBLE 00:24:13].

Speaker 2: Yeah, certainly. And then with Patterson getting upset and breaking off. That eliminated one set of persons you might have known.

Speaker 1: Yeah. I don't believe I ever met any of them.

Speaker 2: Really?

Speaker 1: I don't think so. [INAUDIBLE 00:24:49 - 00:25:14]

Speaker 2: Did you know Beatrice and Burton Kramer?

Speaker 1: Oh, yeah. [INAUDIBLE 00:25:18].

Speaker 2: He was the son of Nanna's brother. Is that right? Did he have any other siblings?

Speaker 1: I don't think that side of the family... Uncle Irving and Dad [INAUDIBLE 00:26:29] So, he wasn't very much there. Uncle Irving was certainly [INAUDIBLE 00:26:36] everybody after he passed away. He had his brother drive us out [INAUDIBLE 00:26:43] college.

Speaker 2: Uncle Irving's brother?

Speaker 1: Peter, yeah. [INAUDIBLE 00:26:50]

Speaker 2: Whatever happened with him?

Speaker 1: [INAUDIBLE 00:26:54]

Speaker 2: He just dropped out of the picture after Irving died?

Speaker 1: Yeah. Mother never cared for... Peter, I guess, he tried to get up [INAUDIBLE 00:27:09] license and never did. But [INAUDIBLE 00:27:14] Uncle Irving.

Speaker 2: Hm. And Uncle Irving, did he have an [INAUDIBLE 00:27:17] license?

Speaker 1: Oh, sure. He had a big business. In the Depression, he would [INAUDIBLE 00:27:28] business and tremendous accounts receivable. That's what they were, receivable. He'd borrow against them. So, that was [INAUDIBLE 00:27:38] ended up tremendously in debt. No way in the world he didn't [INAUDIBLE 00:27:43]. But he was president of that private golf course over there, too, and I went and played with him for two weeks [INAUDIBLE 00:27:56 - 00:28:18]

Speaker 2: I thought there was some sort of scandal connected with...

Speaker 1: [INAUDIBLE 00:28:24]

Speaker 2: Yeah, but I mean, financial scandal.

Speaker 1: No, that's it. [INAUDIBLE 00:28:31] in debt [INAUDIBLE 00:28:32] accounts receivable, and the bank had to borrow money [INAUDIBLE 00:28:39] receivable. [INAUDIBLE 00:28:44]. I don't know fine detail, [INAUDIBLE 00:28:50] shouldn't really... That was just my feeling from everything I heard.

Speaker 2: I thought he was doing government something or other too, wasn't he?

Speaker 1: He was quite a politician, but I mean, in the sense that he was always talking to them. I remember a meeting one time, a meeting they had at his place, with some of the big shots from [INAUDIBLE 00:29:13 - 00:29:20] something against politicians in the first place. I didn't like even the looks of those guys. But they're sitting down and drink [INAUDIBLE 00:29:28].

Speaker 2: I can remember your mother saying that Bush, when he was...last time she went to visit him, he had said that if anything happens to me, be sure you don't let Irving take care of your money.

Speaker 1: No, they didn't get along well.

Speaker 2: [INAUDIBLE 00:29:54] daughter, he didn't trust his financial acumen, either, having done that.

Speaker 1: Well, he knew [INAUDIBLE 00:30:01 - 00:30:10] But then again, [INAUDIBLE 00:30:13]. They should know better than to lend a man 100% on his receivables. You can lend him maybe 50%. [INAUDIBLE 00:30:26] stock market crash was a complete surprise to all the big shots and [INAUDIBLE 00:30:35], just the same as it was in [INAUDIBLE 00:30:39]. If I got out right ahead of it, but it was impossible for them to know. [INAUDIBLE 00:30:51]

Speaker 2: So, he would have been sent to prison because he couldn't hand you the bags back?

Speaker 1: Well, yeah, sure, he's [INAUDIBLE 00:31:02]. Sure. But I'll tell you [INAUDIBLE 00:31:07], with the accounts receivable, I would think you'd have to blame the bank for lending to him, [INAUDIBLE 00:31:14 - 00:31:32]

Speaker 2: Was it an itchy thing, or did it get...?

Speaker 1: Oh, it's definitely poison.

Speaker 2: Really?

Speaker 1: The story I heard, I don't know how true it is, but he went to a local [INAUDIBLE 00:31:42 - 00:32:04]

Speaker 2: This was several days later, or right after the...

Speaker 1: Well, right after [INAUDIBLE 00:32:10].

Speaker 2: Oh, they didn't.

Speaker 1: [INAUDIBLE 00:32:14] But then again, I never heard him talk about it, so I didn't understand. [INAUDIBLE 00:32:22]

Speaker 2: [INAUDIBLE 00:32:29]