

**Dorothy Brand  
John Brand  
Manhattan Project**

**Robert Gutzman  
Interviewer**

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Location not specified**

My name is Robert Guzman. I'm a volunteer with the Veterans History Project conducted by the Chemung County Historical Society under authorization from the Library of Congress. The date is June 25, 2004. The interview today is with Dorothy and John Brand, two participants in the Manhattan Project conference that is being held here on this date.

**Q:** Let's start with you, Mr. Brand. You grew up in Massachusetts. How did you, let's talk about your education first. Where did you go to school?

**JB:** I attended classical high school in Worcester, Massachusetts, and then went on to Worcester Polytechnic Institute. Now WPI University in Worcester, Mass. I got my degree in mechanical engineering in 1936. It was the Depression time, but I was fortunate enough to get a job with the DuPont Company immediately upon graduation.

Seven years later, I was assigned to the Gillian, New York plant of the Remington Arms Company, a subsidiary of the DuPont Company, where they were making Springfield rifles for the U. S. Army. I was area supervisor of the wood shop at that plant in Ilion. That had somehow gotten me a deferment from the draft up to that point. However, it may have been an important job, but apparently it wasn't a key one because in March 19,43, I was summoned to the works manager's office and told that I was being transferred on March 1st, 19,43, to the University of Chicago for three months of training on a secret war project. April, I'm sorry. April. First of April, yes, correction. It was the middle of March; I still broke the news.

First of April, I was to go to Chicago for three months of training on a secret war project without my family. Following that training, I would go to Site X, which was in Tennessee with my family. It was anticipated I would be at Site X for approximately one year, and then would go to Site W. He did not know where Site W was.

**Q:** Let me stop you for a second, because there's some things here that really are kind of mysterious to me, so I'm going to ask the questions that I hope somebody listening to the tape would ask. A man is called into his boss's office and told, you're going to be transferred to Chicago. You can't take your family. At that time, you and Mrs. Brand were married, and did you have children?

**JB:** We had a two-year-old daughter. And expecting another child. Okay. And was there ever a point where you said, wait a minute, time out? Uh, how can this be? Yes, I was able to say that to Bill Wood, the plant manager. I said, 'Bill, we are expecting our second child in August and that transfer date of July 1st to Cydex sounds like it would be a problem.' He said, 'Check with your doctor.' We called Doctor the obstetrician and he said he didn't see any problem with that. They had obstetricians in Tennessee, not concurred, and the move was consummated.

**Q:** When you were going to this secret project, did you have any idea that we're talking about atomic energy, or even what atomic energy was?

**JB:** It was the strangest thing. I was a mechanical engineer, graduated with my degree in mechanical engineering. I was told to report at the University of Chicago to a Dr. Walter Dew, who was the DuPont Company's personnel manager on the site. I would find Dr. Dew, they told me, in the metallurgical laboratory. And that seemed a very strange assignment for a mechanical engineer. Of course, when I met Dr. Dew, he enlightened me. The metallurgical laboratory was simply the code word for the project there. I had no idea. He then, in the course of our discussion, my introduction to the job, you know, salary, hours of work, da-da-da-da, he withdrew from his desk drawer a metal cylinder about an inch in diameter, about six inches long, and handed it to me. Except that it was pretty heavy, it was quite unremarkable.

And this is where he introduced me to the project. That, he said, is a piece of uranium. From uranium, we expect to produce a weapon using atomic energy for its explosive power. Now, I should have fallen off my chair when he said that, but I didn't know enough about atomic energy, so my reaction was very restrained, and I think he was a little disappointed. Well, of course, you were several hundred miles away from home. You've got a wife and child, an expectant wife and child, sitting way back in Illinois. I think that that would mute a lot of us. I mean, I spent three months in Chicago, and then we did move to Tennessee. And the move was kind of an adventure.

We moved around the middle of July, July 15th, I think it was, 16th, I think it was, we moved. And I would like my wife Beth to say a little bit about that move.

**Q:** Yeah, I'd love to hear it. We had shipped our car by rail.

**DB:** Took the train down, and our best reservations we could get were two upper berths. So, Jack and Jean, who was two years old, were in one upper berth, and I in the other. And let's just in case anybody forgets, we're talking about the middle of July for a lady expecting in August. Right. Okay. I just want that on the record. So, we arrived at the hotel. Uh, on Tuesday, I think yes, and the following Monday morning, I said, 'We better call the doctor.' We had gotten enough obstetricians' names, and I was going to see him that afternoon, but instead we went to the hospital.

And actually, we went about seven o'clock or 7:30, and our son was born at 8:20. So I was in the hospital for two weeks, which was unheard of down there, all the other

mothers went home quite promptly after having a baby, but I had no place to go, no home, no diapers. Uh, and Jack was in the hotel with a two-year-old. He managed to get a nursery woman to come and stay with her in the daytime while he went to work at Oak Ridge. This was in Knoxville that we were in the hospital. So, after two weeks, they decided that we could have a borrowed cottage. One specified for us was not finished. We moved into a temporary cottage.

Having moved from an eight-room house to a four-room house, Jack sat on the front steps and said to the movers, 'Put that in storage, put that in the house.' Put that in storage, put that in the house. And he did an excellent job. So, we were there another week. And then moved to a house which was assigned to us, the same size and a couple, who the man had worked with Jack, and we had become acquainted in the hotel with his wife. They moved in with us in this small house. We had a studio couch which within the living room, along with living room and dining room furniture, and they stayed with us temporarily.

**Q:** Temporarily? Temporarily. How long is temporary?

**DB:** Well, when we moved to the house that was assigned to us, they were assigned to the house next door, but their furniture hadn't arrived. Therefore, they took the studio couch and two porch chairs and moved in next door, ate with us, played bridge every night for another week or two, when he was transferred back to Wilmington the day his furniture arrived. So, then we had the house to ourselves. I want to tell you though. With his furniture. I want to tell you, though, about her last day in the hospital. I had put the furniture in this little house the day before. We had a little Studebaker Champion, a coupé car. And so, we had the two-year-old sitting between us, and she had the baby in her arms.

And we drove up to the entrance gate for the reservation. And the MP, of course, stopped us. And I knew they had been checking the trunk and everything, so I started to get out of the car. And he looked at Bob, and he looked at the baby, and he looked at the baby. The child sitting between us, he said, 'I think you're okay.' And as we drove along, I said to Don, 'I think he's right, we're okay.'

**Q:** How long did the four of you live in these four rooms?

**DB:** Nine months. Because Jack was scheduled to go to Washington. Hanford. Hanford. Ten days before our scheduled leave for Hanford, Jack, well I'm trying to think of his name, Bill Overbeck, who was Jack's boss, was sent there instead.

He was hired by DuPont, and he went to Hanford. And Jack then became head of the instrument department group there at Oak Ridge. So, our transfer was canceled, and we stayed another year and a half or so. At that point, Don said, if we're going to stay here and we're going to have a bigger house, we moved to a little larger house. Yeah. Four people in four rooms. It doesn't matter if one of them is an infant. Infants take up a lot of space with all their stuff.

**Q:** That is quite a story. You know, it's unique and yet of the era. It's kind of reflective of the way people had to live and the things that people did. It was an amazing era. It was an amazing time.

**JB:** Let me just tell you about the closing out of this story of ours, I guess. On the 6th of August 1945, I was summoned to the office of M. D. Whitaker, who was the director of Clinton Laboratories, along with all the other staff members. And he read to us the release, which President Truman had just announced, that the bomb had been dropped on Hiroshima with the force of 20,000 tons of TNT and so on, and gave us instructions of what to say to our people. And so, each of the department heads went back to his department. Some of those people, I got my people in the machine shop because that was the only area big enough and read this statement from Dr. Whitaker. But while they were assembling, I called back and said, turn on the radio. And that's the first she knew after two and a half years of what I was working on.

**Q:** Really?

**JB:** That is not unusual.

**Q:** The fact that you knew that you were working on a weapon, an atomic weapon, from the other interviews that I've done, you were on the inside compared to some, especially at Oak Ridge.

**JB:** Yes. I had full technical information with respect to the plutonium project. I was given no information about the bomb or its design. And nothing about the separation of uranium-235 except that it was being worked on. So, my information was limited, but I had full secrecy clearance for the plutonium project. I was in the instrument work. We served the research laboratories.

We served the production areas. We had to know what we were doing. And so that's how we got that information. Of the 75 people in the instrument department, I think about 20 were cleared for the information, and the other 55 did what we asked them to.

**Q:** Now, did you know about the test explosion in Trinity?

**JB:** No, I did not know.

**Q:** That word never got to you?

**JB:** No, I did not know.

**Q:** And did you know that you were that close to the bomb actually exploding?

**JB:** No. We thought we were pretty close. In a terrific rush at Clinton Laboratories, they put up a whole new building to produce radioactive lanthanum. Radioactive? Lanthanum. Lanthanum. Well, it's an element, I think somewhere near, I don't know where it is in the periodic table. It is an element in the periodic table.

And somehow or other, some of us guessed that it was an initiator of some kind for the bomb, and so we felt, gee, they must be getting close. And there was quite a bit of traffic, secret trucks coming up with MPs at the gate and leaving and everything, and it just seemed to, but it was, yes, we had no knowledge. We really had no direct knowledge.

**Q:** Let me go back to you for a minute, John. I hope you don't mind.

**JB:** That's fine.

**Q:** You've got to realize that you're in a very, very secret place with guards at the gate and so on and so forth, and everything else you've been through trying to lead a life of a housewife and mother, and yet you had no idea what your husband was doing. How did you deal with that?

**DB:** Since he had been told that this was a very important job, effort for the war, I said, 'okay, that's what he has to do.' And at least we're together. We're not separated. He's not overseas as a serviceman. We're here. Sure, we have trouble buying beef. This, that, and the other at the store. But we had enough to eat, and we had comfortable living. If heating with soft coal can be called comfortable, we really put up with quite a few inconveniences. On the other hand, all of those inconveniences-still you were able to, I guess, rationalize in some way. The fact that you couldn't say to your husband, well, you could say, did you have a good day, but you couldn't get anything more than that out of him.

He had said, well, eventually I'll be able to tell you some interesting stories. The other thing is there were a whole bunch of wives.

**JB:** Yeah, she certainly wasn't alone in that situation.

**DB:** And of course, there were the other 55 people that worked for you that didn't even know. So, I guess in a secret place, in a secret society, I guess you don't stand out as the woman that doesn't know what's going on. Right, and many of our neighbors and people that we knew were our age. It was a young community, so we had that in common too. Babysitting was a problem because everybody that was young needed a babysitter if they wanted to. Not that there were a lot of social life opportunities, but we did play bridge, and we attended some concerts in Knoxville.

But there were some grandmothers who lived with some of the young couples, so we were able to get out. There weren't many teenagers.

**JB:** That's right. That's right. All of the typical babysitters and people who do menial stuff were absent in this life.

**DB:** And we didn't have gas to go anywhere to speak of. We made very few trips for pleasure. Among the wives.

**Q:** I'm going to pursue this. Since I've got this opportunity, I don't think that there are going to be many interviews like this with a non-service wife. Okay, non-participant. Among the other wives. I mean, you took the children out on a nice summer day and

took them for walks and so on and so forth. You obviously would see them, the other women.

How did you relate to each other in this secret society that you're stuck in the middle of and can't?

**DB:** You know, can't know what you're in the middle of.

**Q:** Well, I mean, did you commiserate a lot with each other?

**DB:** I don't know that we did. They talked about working at the bubblegum factory, but I don't think that we referred to that. The thing I can remember is that when we turned the radio on and heard the announcement, all these kitchen doors opened, and we said, 'So that's what they've been doing. All right.' The other thing they talked about was the shortages. Oak Ridge had complement stores, grocery and so on, but they were new stores, and they didn't have very good relationships with wholesalers who wanted to keep their old customers.

So, baby food, canned baby food, couldn't get. It was very hard to get. And then some kind of a shipment came in. The wives all communicated: 'Get down at the store. It's in.' Okay. In our little area, there were four or six of us. We were all about 26 years old with children. But we had the only telephone.

**JB:** Because of my job.

**DB:** Because of his job. So, people were coming to use our phone. And we had a car, and one or two of the others did, but some of them didn't. So, if I went to the store and found they had baby food, then we spread the word, and they all wanted me to go back and get them some baby food. With their ration coupons. Yeah.

So, we shared that way, and there were lines to wait in at the post office for your mail, and I used to go up. And stand in one line and get mail from A to M for two or three people, and then I'd go to the next window and get it for the rest of the alphabet.

**Q:** So, you drove?

**DB:** Yes. That was not a rarity, but certainly not the norm.

**Q:** You had a car.

**DB:** You had a car, but to have a wife that was a driver-was not a common thing up until the 50s, really, in my recollection. Okay. So, with the phone and the car, I mean, you were the queen. I didn't get stuck in the mud. Which a lot of people did because the roads were not paved.

**Q:** Those roads were muddy. Okay. Let's talk about what happened from the time you started working there until the bomb was exploded. Your recollections of the work that was going on, the things that happened.

**JB:** One of the memorable days, our installation had a reactor-now called a reactor. We called it a chain-reacting pile. Okay. And the pile went critical. I forget the exact date,

but in the fall of 1940. Three, I think. I forget. I had that date, but anyway. It went critical. And when I got into work that morning, the word was passed around the cleared personnel: a baby was born last night. What that meant was that the pile was producing sufficient neutrons to be chain-reacting, an excess of neutrons to be chain-reacting, and so it was working.

Later that morning, I went up to Building 105, the pile building. And I looked over the shoulder of the operator at the console desk. The activity in the pile was the primary indicator. There were several redundant instruments, but the primary indicator was an ionization chamber in the center of the pile. The current was measured by a Darsen-Ball galvanometer. And the galvanometer had an indicator on the console. And I looked over this guy's shoulder, and sure enough, you know, he'd turn around, give me a big grin, thumbs up, and things are going. I went from there over to the side of the pile. I have to know that this is a 24-foot cube of graphite surrounded by seven feet of concrete for the shielding. And so, I was standing outside seven feet of concrete.

You couldn't hear anything. You couldn't see anything. But I was aware of an intense nuclear reaction going on inside this pile, and I just got goosebumps standing there. I did, literally.

**Q:** How long had you been at this by that point?

**JB:** Two years. Two years, okay. Not quite, not quite. Okay. Yeah, that's got to be, well, a baby was born. The gestation period of the project coming to fruition.

**Q:** Yes, exactly. So that was an outstanding day. Okay. Beyond that, let's talk some more up until then, because I want to separate the story at the dropping of the bomb, okay? So, let's keep on talking about what happened until then.

**JB:** Well, backing up again, in about October of 1943, we had gotten there in July, the plant construction was completed in October of 1943.

And the first job the instrument group had to do was to install the instruments. The construction people had run all the cabling and all the wiring to power the instruments and also to take the signals from one place to another. But we had all the instruments in the instrument shop, and we got them guys out of the way when we took our instruments up. Bill Overbeck was, at that time, superintendent of instruments, and he was one technically a superior guy, and also a wonderful, wonderful manager to work for. And he had procured uniforms for everybody in the instrument department, white coveralls with a blue insignia, 'Instrument Department' on the branch pocket. And I was 10 feet tall when I went up to the building to install those, or supervise the installation of those instruments.

I was a supervisor under Bill at that time. So that was a kind of a, really kind of a day for us. From then on, we maintained the instruments, built new ones as the researchers asked for them. It was a 24-hour day, seven-day-a-week operation. I was a supervisor under Bill.

**Q:** What was a normal work schedule for you? Not for you as a supervisor, because that sometimes stretches.

**JB:** Yes, we stretch that a little. But the normal work week was eight hours a day, six days a week. Okay. Which was very much the norm everywhere. I think so, yes. I can remember. My father was talking about getting a job at a five-and-a-half-day job and that was a boom to have a five-and-a-half-day job going backwards; it was not normal that billion when I was there because I was working 65 hours a week, I wouldn't believe it-wow.

Some weeks we worked seven days; we got what alternate Sunday; no, we got three Sundays off out of four and one Saturday off out of four. It was. We were making Springfield rifles, and I had a fairly responsible job, and it just worked. I was getting my salary. I had a 40% bonus for the overtime, and that got reduced when I went to Chicago, of course. Shorter hours. Shorter hours, less money for more work and more responsibility-that sounds normal to me. It must be a government job. And besides your 65 hours that you worked, they called in the middle of the night, and he had to go in if there was a problem. Speaking of calls in the middle of the night, we got mentioned that we had a phone in Oak Ridge, one of the few phones.

When we first got it, it was on a party line. The other party on the line was a bigger house down the street from us, which they were using temporarily as the isolation ward for contagious disease children. So, they had nurses down there. Well, regularly the phone rang about midnight, and I would lie in bed and get up and answer it. And the operator had rung the wrong one on the party line. She was checking to make sure that the nurses had all arrived for the change of shift. And I went on. Several nights in a row. Every night I would say, they're calling the hospital. No, gee, it might be the lab. You can't let it go. I know from my past job, but we'll talk about that later.

**Q:** Once the bomb dropped, how did life change for you?

**JB:** Well, that night that we got the notice of the bomb, I went home. Absolutely in a state of almost euphoria. I was very proud of what had been accomplished. It had been a question, you know, is this going to work or not going to work? Sure. I was very proud of it. I was even proud of, you know, I had a lesser role in the thing, but I was proud of what I had done. I really felt good. Well, during the project, when I've been on it, I had a mixture of feelings. We knew we were making history, no question about it; we knew we were, and it was thrilling to work on this.

Making history, the science and technology itself was fascinating, of course, but brand new to us. We had fear that it might fail and hope that it would succeed, and then when it finally did, we had this great feeling. The next day, I wasn't quite so happy about it because I realized the terrible disruption of this awful weapon. But war is horrible, and this was a part of it. And although some of the scientists questioned whether or not the bomb should have been dropped, even right-prompt graduates, some of them even said

they had been told it would not be used, that it would be used as a threat only. I never heard that strategy. The strategy I heard was, 'If we don't get it, the Germans will.' And so, we should work hard on it.

So, I was comfortable with President Truman's decision to drop the bomb, even though the horror it created, but that's war.

**Q:** So, you had this euphoria of the accomplishment, and then a letdown after it. How long did you stay at Oak Ridge and keep on working after the bomb?

**JB:** I was one of the last two DuPont to leave Oak Ridge. The bomb was in August, and we left the first of November. I spent most of my time training. Monsanto had taken over from DuPont, and I was training the Monsanto people to take over, and the DuPont people to go. That's what I heard in other interviews, that things shut down very, very quickly. After the bomb was dropped. I was anxious to get on to a post-war job, you know.

**Q:** And where did you go with that post-war job?

**JB:** Back to Ilium. Yes. Okay. But that was kind of a story, too, because we were transferring people out, you know, and I was one of the last to go, and the employee relations people arranged interviews for me at four DuPont locations and they were not attractive jobs. I was, I came home from a four-day trip absolutely discouraged. I was afraid I was going to leave DuPont because the jobs they were offering me I didn't want; I couldn't do. And I had a phone call the next morning from a man named Russell Van Ness who had known me earlier in my work in the engineering department, and he said he had been out of town when I was in Wilmington. But he had a job I thought I might be interested in. And I said, Russ, is this a good job and can I do it? He said, it's a very good job and you can do it. I said, fine, I'll take it. Where is it? He said, Jack, it's in Ilium. So, we went back to Ilium and had an absolutely wonderful, wonderful time the next few years back in our little village of Ilium.

**Q:** You're a man who is willing to buy the pig in the poke, to take a chance based on the trust that you have.

**JB:** Well, I knew Russ Van Ness. I knew him, and he wouldn't kid me.

**Q:** Let me ask you about the boss that I had at Oak Ridge who went out to Hanford. Have you ever had contact with him since?

**JB:** No, I lost contact pretty much with Bill.

**Q:** Are there many of the people from that era? Other than through this organization and this conference, are there many that have held together or had much contact?

**JB:** I think mostly we went our own ways. I really do, after the war. Well, yes, but now Harold Ostall went to Hanford, and then eventually he came back to Wilmington, and

we came to Wilmington. So, we renewed our friendship. What do you put it? The blues, Otis. Oh, yes, we maintain contact with them.

**Q:** But I guess by virtue of the fact that you can name them, it says how few there were.

**JB:** Yes, exactly.

**Q:** We're through with the major part of the interview. What I'd like to do is offer you individually a chance to make any questions closing comment that you would like this time; we will go ladies first. Any closing comment, any memory that you want to make sure that is captured – something that you want to say for history.

**DB:** Well, one thing that comes to my mind when Jack was saying that the destruction from the bomb was overwhelming and wondered whether or not it really should have been dropped or at least some people thought that; it saved a lot of American lives and probably a lot of Japanese lives because the fighting didn't continue. And I don't know how many people have said to Jack, 'You saved my life.' I was scheduled to go right after that, and I didn't have to.

**Q:** Yeah, I'm sure that that's true. There's no question. Thank you. Jack, closing comment.

**JB:** Well, I think it was just a very eventful two-and-a-half-year period on a world scale and in our private lives, and I thank you for the opportunity of putting it on a piece of tape. Well, thank you, sir.