

CATHERINE F. SCOTT

An Interview Conducted by

William Aspray

IEEE History Center

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and

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Interview: Catherine F. Scoot
Interviewer: William Aspray
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Aspray: This is an interview on the 12th of June 1991 with Catherine F. Scott. The interviewer is William Aspray. This is part of the Rad Lab Oral History Project being done in Boston, Massachusetts. Could we begin by having you describe briefly your background before you came to the Laboratory?

Scott: I had a master's degree in education, and I had taught in high school.

Aspray: Where was your degree from?

Scott: I graduated from The Teachers College of the City of Boston; the College, however, is no longer in existence. The University of Massachusetts had adopted us, and I am now a member of the Alumni Association of the University.

Aspray: I see. So you had a master's in education.

Scott: Yes. I taught at Northborough High School for two years and for a year at Barnstable High School in Hyannis. In February 1942, the tires were stripped from my car. It was impossible to buy tires during the War. I had four old tires and many flat tires on my weekly trips back and forth from Hyannis to Boston. At the end of that school year, I decided that I should try to find work closer to home in Boston. One of my classmates was working at MIT, so I decided to check that out that possibility. One day I went to MIT and spoke to someone in Personnel. This person said, "Go over to the Radiation Lab. They're hiring." So I

did. I was interviewed by Jane Gillmour, Personnel Director of Women. She was pleased with my educational background and experience, but she wanted assurance that I would not go back to teaching at the end of the summer. I told her I wouldn't. However, it was August, when, with the urging and help from some of the people in the division, I finally wrote my letter of resignation from the high school.

In my first position, I was secretary to Dr. Kenneth T. Bainbridge. Dr. Bainbridge was head of Division 8. He was also the Group 82 leader; Dr. I.A. Getting was the Group 81 leader. Dr. Bainbridge kept his files in a notebook, like a research notebook--filed chronologically. He carried these notebooks around with him when he went to meetings. One time when he was away on a trip, without consulting with him in advance, I took the notebooks apart and made a subject and alphabetic file, complete with an outline. When he returned from his trip and found what I had done, he was understandably not overjoyed. However, when he became familiar with the system, he admitted it wasn't a bad idea. The notebooks had been getting more numerous and heavier by the week.

Sometimes before taking off on a trip, he went into the Lab (especially on a Sunday when it was quiet) and dictated "gobs" of material on the Ediphone (the dictation/transcription machine popular around the Lab at the time) to be transcribed while he was away. One problem was that I couldn't always understand what he was saying. He was a smoker in those days; and when he took a puff and exhaled, he'd turn his head away from the microphone of the machine. The exhaling sound combined with the turning away from the microphone, frequently made it difficult to make out what he was saying. Then

I'd call in the experts, Dr. John Hall and Mike Karelitz, staff members, to listen to the tape. I thought since they were scientists and far more familiar with the material than I, that they might be able to make the sounds turn into words better than I could. Sometimes they could; other times they could not.

One day, shortly after I had received my clearance for classified material, Dr. Bainbridge, Dr. Pollard, and several other staff members were preparing the specs for a joint project with the Bureau of Ships. The representative from the Bureau of Ships wanted to take a copy of the typewritten specs back to Washington that evening. I had a whole shorthand notebook filled with shorthand notes.

Considering the time that was left in that day, I knew that I couldn't possibly transcribe all those notes before flight time. Dr. Bainbridge suggested that I ask one of the other secretaries to help with transcribing the notes. I was confident of my notes--I had good penmanship and having taught shorthand, my notes were very accurate and legible. I asked Mary Sawyer if she would transcribe some of my notes. At first she was horrified at the idea. She said, "I can't even read my own notes; I can't imagine reading anybody else's." I said, "Look at these. See if you can read them." She started reading the notes and said, "Oh, I can read these. They are just like the shorthand plates in the shorthand book." So, I tore out about half the pages in the notebook and handed them to Mary. She did a beautiful job of transcribing them. We got the job done and on time for the evening flight to Washington.

In the spring of '41, the Lab put on an operetta called Give Us Snow for Uncle Joe. It was written by our own A. Roberts. The lead tune was "Oh Give Us Snow for Uncle Joe and Just Exactly 10 Below." The theme, of course, was that snow

and very cold weather would keep the Germans from being successful in their attack on Russia. In the spring of '43, Mary Dolbeare (Dr. Getting's secretary) and I checked with the people in the Division to see if they would like to have a Pops Night. The answer was, "Yes, yes." I picked up about 110 tickets from Symphony Hall. When I turned in the money for the sold tickets and attempted to return a few unsold tickets, the ticket salesperson told me to hang on to the unsold tickets just in case someone else wanted to go. The afternoon of the performance a Mr. Scott, a new member in the Division, asked me if I had any tickets left. I said, "Yes, How many do you want?" He said, "One." I said, "Oh, aren't you going to bring your wife?" He said, "I can't very well. I don't have one." About a year later, he didn't have that problem any more. We were married.

Our other big social event was a Christmas party. It was an impromptu event-- late in the afternoon of Christmas Eve. Mary Dolbeare and Group 81 were the organizers of this one. Dr. Bainbridge had been away most of the day. When he returned, he was surprised. His first comment was, "What's going on here?!" When he saw what was going on, he decided to join in.

Aspray: Tell me about the records that were produced in the course of your daily work.

What kinds of things came out of Bainbridge's office?

Scott: Everything that was done in the office was either TOP SECRET, SECRET, or CONFIDENTIAL. We stamped everything a dozen times and kept everything covered up and under lock and key. The document file was kept in a safe. The documents were about the various projects: the SZBL, SCR 582, SCR 584 and others.

Aspray: Can you separate them into types? Because when a historian wants to go back and there aren't people to talk to, they'd like to know the kinds of records. Were there, you know, purchasing records? Or periodic reports? Or progress reports? Or any of those kinds of things.

Scott: The document file contained the diagrams, plans, specs, etc. for each of the projects in the Division. Copies of requisitions were kept in locked files; the originals were sent to Procurement. Requisitions were considered classified materials. Purchase orders for office supplies and nonsensitive materials were filed in the office files.

In the summer of '43, it became known that Dr. Bainbridge was leaving the Lab, but no one would say where he was going. Finally, it was whispered to me. He was going to Los Alamos. At that point, the Division was restructured, and I moved over to the Director's Office. Dr. Glen Giddings was in charge of the Visitors Office responsible for the clearance and reception of authorized visitors to the Laboratory and for making arrangements for Laboratory members to visit manufacturers of radar equipment.

Aspray: How many visitors would come to the Lab each month? Can you give me a rough guess? Fifty, 500?

Scott: Maybe 30 or 40 a day. Maybe more, 50 or 60 a day.

Aspray: And who were most of these people? There were some contractors, no doubt.

Scott: Right.

Aspray: There were some military people?

Scott: There were a lot of military people. There was a Navy, a Signal Corps, and an Air Force office in the Laboratory. They cleared their own people in addition to the Lab's clearance. They basically told our office who of their respective people should be cleared. What was your other question?

Aspray: What other kinds of people came to the Lab?

Scott: There were a few people from the universities, though not too much was going on at the universities at that time. Most of the university people in the field of science were at the Radiation Lab. There were visitors from other laboratories-- for example, the Underwater Sound Laboratory at Harvard. There were visitors from the manufacturers, [ranging] from the little plastics firm in Stamford, Connecticut, that manufactured the slip rings for the Mark 56 to large manufacturing firms all over the country. One morning, a group arrived from Van Nuys, California, without clearances. So, I picked up the phone and called their company in Van Nuys, California. It was 9 a.m. in Cambridge but only 6 a.m. in Van Nuys. I got the janitor! I never made that mistake again. We did get them cleared by one of the military offices.

One group of visitors, VIP's from England, included a Lord. Dr. Giddings was in charge of squiring them around the Laboratory, out to Bedford (later named Lincoln Lab) and to lunch. They were British scientists. The Lord (I wish I could remember his name) was a vegetarian. So there was much ado about finding out what he would eat for lunch. It was French toast. He even sent the recipe for preparing it, which we sent on to the restaurant in Lexington where they were having lunch. British scientists visited the Laboratory frequently.

After August of '45, I moved on to the publications group. The mission: publish the results. Dr. Carol G. Montgomery was editor-in-chief of the Radiation Laboratory Series published by McGraw-Hill. He, his wife, Dorothy D. Montgomery, and I were the editorial staff for Volume 11, titled Technique of Microwave Measurements, of the Radiation Laboratory Series. C.G. and D.D. were responsible for editing the technical content, and I was responsible for style, grammar and punctuation, and format. There were 14 authors contributing to this volume, and it was no small task being sure that there was consistency of style, format, etc. throughout the volume.

Aspray: Okay. Tell me about the daily work style. Was it formal or informal? Were hours rigid? Were lines of authority rigid or flexible?

Scott: Especially in the early days, it was quite informal. The dress was casual; people were friendly. People, especially the scientists, worked a lot of overtime. If there was a job to do, you stayed and finished it.

Aspray: Was that expected of the secretarial staff?

Scott: I wouldn't say that it was expected, but we were all in this war effort together, and if there was something that had to be finished, we stayed and finished it. Later, a time clock was installed.

Aspray: Do you know why that was installed?

Scott: I really don't know for a fact. But I can guess that we had gotten so big that it was necessary to have a means of keeping track of who was and who wasn't there. This also provided a means of paying people for overtime and docking them for

tardiness and absences. Obviously, staff members did not punch a time clock.

Aspray: What was the relation of secretarial staff to the technical staff of the Lab? Was it a good working relationship?

Scott: Everybody worked together.

Aspray: How did it compare with jobs you might have had after the war?

Scott: Well, basically I went back to teaching. I taught in a community college for 28 years, and I was department chairperson for a number of those years.

Aspray: I see.

Scott: It was different in the sense that I was in charge when I was teaching. Obviously, there was a dean and a president, but the faculty organized itself into committees and ran the academic program. After I retired, I worked for a while for a magazine for mental health workers. Again, I wasn't in charge; however, I had a lot of freedom to be creative, and I did some neat things. The reduced responsibility was welcome.

Aspray: Right.

Scott: At the Lab, we all worked together. In the early days, there were many more men than women, and generally the women were younger. Since many of the scientists came from university faculties, there was a collegiate atmosphere. The older men were gentlemanly and fatherly. They were great role models for the younger men. In this respect, I particularly remember Dr. Andy Longacre. He came from Exeter Academy. He was "Mr. Chips" in person.

Aspray: I imagine there was a good social life for the women there.

Scott: There certainly was.

Aspray: Yes. What about things like dress codes? Was it formal, informal?

Scott: In the forties, women dressed a lot more formally than they do now. However, in the labs and in the shops, the dress was casual. In the Director's office, we wore suits and dresses. I don't remember anyone wearing shorts or pants, but sweaters and sneakers were common. The men in the labs wore casual clothiers. People often said that the Laboratory was "as comfortable as an old shoe."

Aspray: To what degree did Bainbridge have contacts with military and industrial people?

Scott: A great deal. There were always lots of "brass" coming through. I was there about a year when Dr. Bainbridge left for Los Alamos, and I moved to the Director's office.

Aspray: I see. Did he travel a lot?

Scott: Yes, he did. He would be gone for four or five days at a time.

Aspray: Was there ever any problem with having enough supplies or money or staff to do the jobs in your operation?

Scott: No. There was no problem with a lack of money or staff. The only problem was a scarcity of some items. If a wanted item was available, there was no problem getting it.

Aspray: They could get it.

Scott: Yes. That's my perception.

Aspray: Were there a number of people working for Bainbridge, working in his group?

Scott: There were two groups: Group 81 headed by Dr. I.A. Getting and Group 82 headed by Dr. Bainbridge. There must have been 60 or 70 people, maybe more, in the two groups that comprised Division 8--Fire Control and Army Ground Forces--in mid-1942 to mid-1943.

Aspray: The people that worked for Bainbridge, did they have to write progress reports?

Scott: They met in groups, both formally and informally; notes were made of decisions reached.

Aspray: And for these regular meetings, were there minutes taken?

Scott: I believe notes and sometimes minutes were taken by one or more of the participants in the meeting. I don't remember personally attending the meetings or taking notes.

Aspray: You didn't take any?

Scott: No. The material was very technical. I believe the minutes or notes had to be taken by someone who knew the technical significance of the material. I frequently typed the minutes or notes taken by the staff person or persons.

Aspray: What about the flow upward from Bainbridge, up into the next level?

Scott: Dr. Bainbridge was a member of the Steering Committee. That Committee met weekly. The Director, Associate Directors, and the heads of the various divisions

were members. The Steering Committee ran the Laboratory. This Committee in combination with the Coordinating Committee, which served to coordinate the exchange of technical information among the groups, served as the channel for the upward flow of information from the groups and divisions to the Director and his staff. The minutes for both of these committees were transcribed in the Director's office. In addition, there were weekly staff seminars on Tuesday nights. This was a vehicle for keeping the "troops" informed and for allowing for further exchange of information between staff and directors.

There is a little anecdote about Dr. Sam Goudsmit that I would like to tell. As the war was winding down in Europe, the scientists here decided that they would like to know what, if anything, was going on in Germany in the microwave area.

They knew, if anything at all was going on, that Heisenberg would have to be involved. This mission, I believe, was under the aegis of the OSRD. They, plus the military, set out to find Heisenberg. They finally found him in a little laboratory tucked away somewhere out of the way. Dr. Goudsmit was to meet with him. Their friendship dated back to Sam's early days in Germany. As Sam told the story, the military went in ahead of him. Sam thought the military was looking at him a little suspiciously, and he found out why when he got to Heisenberg. There on Heisenberg's desk was a picture of Heisenberg and Sam with their arms linked.

Aspray: That's funny.

Scott: Yes. Do you have any more questions?

Aspray: I don't think so. Thank you.

Scott: You're welcome.