# **Bates College**

# **SCARAB**

Edmund S. Muskie Oral History Collection

Muskie Archives and Special Collections Library

6-29-2001

# Smith, Stanton B. oral history interview

Nicholas Christie

Follow this and additional works at: https://scarab.bates.edu/muskie\_oh

## **Recommended Citation**

Christie, Nicholas, "Smith, Stanton B. oral history interview" (2001). *Edmund S. Muskie Oral History Collection*. 367.

https://scarab.bates.edu/muskie\_oh/367

This Oral History is brought to you for free and open access by the Muskie Archives and Special Collections Library at SCARAB. It has been accepted for inclusion in Edmund S. Muskie Oral History Collection by an authorized administrator of SCARAB. For more information, please contact batesscarab@bates.edu.

# **Interview with Stanton B. Smith by Nicholas Christie**

Summary Sheet and Transcript

#### Interviewee

Smith, Stanton B.

#### Interviewer

Christie, Nicholas

#### Date

June 29, 2001

#### Place

Topsham, Maine

## **ID Number**

MOH 289

#### **Use Restrictions**

© Bates College. This transcript is provided for individual **Research Purposes Only**; for all other uses, including publication, reproduction and quotation beyond fair use, permission must be obtained in writing from: The Edmund S. Muskie Archives and Special Collections Library, Bates College, 70 Campus Avenue, Lewiston, Maine 04240-6018.

## **Biographical Note**

Stanton Smith was born March 10, 1920 in Lewiston, Maine. His father, Paul Rexford Smith was a local dentist and Bates College graduate, class of 1915. His mother, Marjorie (Shaw) Smith was a graduate of Simmons College and taught Home Economics for several years. Stanton graduated from Bates, in the class of 1941, with a major in Chemistry. He was an avid trumpeter in the Bates Bobcats. In 1941, while working at Kodak, Smith had an opportunity to work on the Manhattan Project, which he pursued. He went on after the war to get a Ph.D. from the University of Rochester in 1948. He worked in the carbon chemicals field and has extensive dealings with environmental legislation and its direct impact on the chemical industry. He grew up in the same neighborhood as Frank Coffin.

## **Scope and Content Note**

Interview includes discussions of: educational and family background; Androscoggin River; Bates Bobcats; Bates College; Manhattan Project; Pittsburgh Coke and Chemical; activated carbon; Walter Lawrance and the environment; solvent recovery; Sri Lanka; Frank Coffin as a child; Brooks Quimby; Manchester, New Hampshire incident; and William Loeb.

#### **Indexed Names**

Bedard, Robert

Bickford, Edwin E.

Buccigross, Anita Alice (Hamel)

Clinton, Bill, 1946-

Coffin, Frank Morey

Coffin, Ruth Morey

Donovan, John C.

Jordan, Dorothy W. (Smith)

Lawrance, Walter Albert

Lebel, Lucien

Loeb, William

Mabee, Carleton

Muskie, Edmund S., 1914-1996

Poulin, Carroll

Quimby, Brooks

Robinson, Grosvenor May

Roosevelt, Franklin D. (Franklin Delano), 1882-1945

Sawyer, William Hayes

Scolnik, Louis

Smith, Marjorie (Shaw)

Smith, Paul R.

Smith, Stanton B.

Smyth, Frederick

Thomas, William Benjamin

Winslow, Edward

Wright, Edwin Miner

# **Transcript**

**Nick Christie:** This is an interview with Stanton B. Smith on June 29th, 2001 at his home in Topsham, Maine. The interviewer is Nick Christie. Mr. Smith, could you please state and spell your full name for the record?

**Stanton Smith:** Stanton B. Smith, S-T-A-N-T-O-N, B for Burgess, B-U-R-G-E-S-S, Smith, S-M-I-T-H.

**NC:** And where and when were you born?

SS: I was born March 10th, 1920 in Lewiston in what was then the CMG Hospital.

**NC:** And how long did you live in Lewiston?

SS: I lived in Lewiston until I graduated from Bates, when I took a job in Rochester, New

York. My father was a dentist in Lewiston; he was a Bates graduate class of 1915.

**NC:** Can you say your parents' names?

**SS:** Pardon?

**NC:** You parents' names?

SS: Oh, Dr. Paul R. Smith, Paul Rexford Smith, P-A-U-L, R-E-X-F-O-R-D, S-M-I-T-H, and my mother's name was, unmarried name was Marjorie, M-A-R-J-O-R-I-E, Shaw, S-H-A-W. She was from Massachusetts. My dad was born and brought up in Belfast, Maine, and my parents met in Belfast High School where my mother had moved with her family.

**NC:** So she moved to Maine at a young age.

SS: Yes.

**NC:** And what did your mother do?

**SS:** My mother went to Simmons College and graduated also in 1915 I believe, and she taught school for several years during, until the end of WWI, and she taught home economics. That's when my dad was in dental school and in the Navy for a short time. He went to Harvard Medical School.

**NC:** Now what part of Lewiston did you grow up in?

**SS:** Well, I grew up practically on the Bates campus, I lived on Wood Street, first in one of the Morey homes which have since been purchased by the college and some of them razed, and I lived in the second house of that group next to Frank Morey Coffin who I believe you're interested in. And so, he was one year older than I, and Coffin, we went through all the Lewiston schools more or less together but one class apart. And then when I was in high school, my parents bought a house across the street, on the other side of Wood Street, and that is now known as Wood Street House.

**NC:** Very close to campus.

**SS:** My dad built a large addition on the back of the house for my sister and I that were of course used when I was in college.

**NC:** What's your sister's name?

**SS:** Dorothy Winslow Smith, but her married name is Jordan, but she was divorced from Howard Jordan after their children were grown, and she graduated from Bates I believe in 1944 and now resides in Brooklin, Maine. It's up near Blue Hill.

**NC:** So for elementary and junior high school, where did you, you were in the public system?

**SS:** Public system, yes. Started at Wallace School, then went to Main Street School, then to Frye School, and then to Jordan School, and then to the new high school, we were the first class that went all four years to the Lewiston High School that stands right next to the Armory.

**NC:** Which is now the middle school.

**SS:** Yeah, now it's the middle school. Class of '37 I graduated from high school.

**NC:** What are your impressions of the education you received at Lewiston High School?

**SS:** Well, I thought it was good. I didn't see any problem with it. I always did very well in school, and it was never a great chore. I think I was third in my high school class. And I never really considered going to school anywhere else than Bates afterward because I wanted to be a chemist and chemistry was one of their higher rated subjects. The teacher I had the most contact with was Dr. Thomas, because . . . . suddenly the name escapes me.

**NC:** Was this at Bates?

**SS:** At Bates College. Dr. [Walter] Lawrance, (*unintelligible word*), I can't think of his first name, Dr. Lawrance was head of the department and he taught some of the more advanced subjects. And there was Dr. Mabee who was a retired missionary, and he taught some of the more general courses. For a while I assisted in the laboratory for some of the newer students, you know, when I was a, and then I did honors work in chemistry; graduated in 1941.

**NC:** Tell me more about Dr. Lawrance, what was your -?

**SS:** Well, Walter Lawrance is his name. Well, he was a very energetic man with a loud voice, and very friendly and got involved in a lot of activities relating to the Androscoggin River. And he was the head of a commission or something that mostly after I was in Bates he continued to make tests up and down the river and recommendations about improving the quality of the water. And a massive clean up project was started and gradually the paper mills upstream were at least cajoled into building treatment plants and (*unintelligible word*).

And now the river's entirely different than it was. There were no fish in the river, it was a brown color, in the summer it stank to high heaven with hydrogen sulfide gas, and any houses that were painted with lead paint along the river turned black with the formation of lead sulfide in the lead paint. And so that's been all changed for the better.

**NC:** Now when you were' talking, go ahead.

**SS:** That was largely through Dr. Lawrance's efforts on the local level anyway.

**NC:** In what years was he doing this work?

**SS:** Well, I suppose from, at least through the sixties, maybe, I don't know exactly when he

retired, but I remember going to see him one time when I was back for reunion and he gave us a presentation of what had been done.

**NC:** Now, you grew up right next to the campus.

SS: Right, so I went up to the plays, you know. My parents were interested in what was going on at Bates, and to the musical activities. And my big involvement there was in the music rather than some of the other things. I was a member of some committees and so forth and I went on the Outing Club, but I never was an officer in any of those organizations. But I played in the Bobcat Dance Band even before I got to Bates because they needed people that could read music and they didn't have always enough enrolled, and I had, you know, contact with the Bates people and they knew I could play so I played I think in the year of 1937, the year I graduated from high school with the Bobcats. And then I of course played with them after that and, but through one year, and then the people who were, now I guess they didn't form the Bobcats but they were the, were most active and talented people, the drummer, the sax player and the trombone player, and they all graduated in the class of '48 and so after that I was in charge of the Bobcats. And we found enough people in the school or in the neighborhood that we could hire to play for the Saturday night dances. I did that all through my career at Bates. And I also took over the marching band. I don't know whether that was in my, I think it was probably my sophomore year, and I led that through, we had rehearsals and one year we even gave a concert at the Merrill Gym.

**NC:** What instrument did you play?

**SS:** The trumpet.

NC: Trumpet.

**SS:** The trumpet, yeah.

**NC:** Did the musical influence start with your family, or?

**SS:** Pardon?

**NC:** Did you get your musical influence from your family?

SS: Well, to some extent. My mother was a, played piano well but not ever professionally or anything. My dad had no instrumental music training. He could sing but he didn't do it very often. My sister was, see I took trumpet lessons from a man that played in the Auburn theater. They had vaudeville at that time when I was in grade school and up into high school, and his name was Lucien Lebel, and he had a lot of people he, in Lewiston, that some did very well and went on to professional playing. But anyway, I also played in the Bates orchestra, which was pretty small, and we played in the chapel for special programs and for the graduation music. I never sang in the choir because I really didn't have time. I sang in the church choir, though, in Lewiston, and I used to do the male vocals in the dance band, too. So I kept that up over the years and after I left Bates I played in some bands in Rochester, New York. And I went to Oak

Ridge, Tennessee to be part of the Manhattan Project that was sent there by Kodak, that was my first employer, and when I was in Oak Ridge we had a band that played Saturday nights at the dances that were attended by all the G.I.s and other people that were working there. And we had our first child there. That's getting ahead of the story, but anyway.

**NC:** Let me go back.

**SS:** Yeah, go back because I'm getting off on tangents.

**NC:** Now, when you were growing up, first of all, what were your parents' ethnic backgrounds?

SS: Well, my dad's parents had a farm in rural Belfast about three miles out, and they, he raised cows and had a butter and egg business, and he used to go out there in the summer for short periods of time. And my grandfather kept doing that until he was quite elderly, and as I say we visited pretty often. My dad, you see, had gone to high school in Belfast and he had an older sister, Aunt Lou, Louella Smith, she married a dentist who lives in Lewiston, Dr. Bickford, Ed Bickford, and so they were influential in getting my dad to go to dental school, and then of course helped him set up a practice in Lewiston. So, my mother's folks though were quite well-to-do. I never knew my grandfather on the maternal side because he died just before I was born, a few months, but he was a plant superintendent for a shoe factory in Belfast, Hassard Shoe Company, Walter C. Shaw, and of course they, he had a good job. And my dad went with Marjorie and they were in high school, he always felt he was sort of a poor boy reaching up. And he was always, sort of felt that he wasn't quite up to her level, but. In fact, my mother even drove an automobile in Belfast at a very early age, when she was still in high school, and that was unusual in 19-, well, that would be, if she graduated from high school in about 1911, so.

**NC:** Are either of your parents French-American?

**SS:** No, no they're both of English descent. In fact my mother's side goes back to the Mayflower. I haven't been able to trace it back, but my sister's middle name is Winslow after Gov. Winslow.

**NC:** So when you were growing up in Lewiston, and during your time at Bates, were you aware of the French-American community?

**SS:** Oh yes, yeah. I have a lot of French friends because I played in some bands, high school kids, we played music, you know, swing was just making a name for itself in the thirties, and we had many groups that would play, get maybe two or three bucks a night and play in some of the Oddfellows Hall or the Auburn Hall and those places. And many of the other players were French. In fact the one in charge was named Bedard, he's still there in Lewiston and has a violin shop there, Robert Bedard, B-E-D-A-R-D. And we also, Carroll's Music Store there, Carroll Poulin is the founder of that and he used to play sax in the band. And then I used them in the Bobcats later, when I'd get short of certain musicians.

**NC:** You'd bring them in.

**SS:** Yeah, right, bring these townies. But I never lived on campus, see, I always lived in, I was so close there was not much point.

**NC:** How do you think Bates was viewed back then by the town?

SS: Hmm?

**NC:** How do you think Bates was viewed by the town?

SS: Was viewed? Well, I think they thought maybe it was a little bit plushy, you know, a little above the school general scholastic level of the town. But it had been there a long, long time, those buildings were old. Hathorne Hall was built in eighteen fifty something, or sixty, or, anyway it was a good relationship between Bates. But, you know, what we now call Lake Andrews was just sort of a marshy place when I was a kid. They were no buildings further back than where Pettengill is now (unintelligible phrase). But we could go out there and skate in the wintertime. There was enough, there was a sort of a primitive dam down there, but mostly they just let the water run through, but in the winter time they'd dam it up and have it a skating rink. And all the school kids would come up there in the evening and weekends. But Bates didn't like that too well, they finally drained it and wouldn't let any of the townspeople skate there. So that of course didn't bring any good will toward Bates. But they had skating rinks over behind the Armory that were public and we just skated over there. Another reason I knew a lot of French people, I, during high school I started playing with the National Guard band at Lewiston, the Armory. And first I did it just as a student in high school, but I kept up with it and I joined the National Guard I guess when I was a sophomore in college, so I kept going there once a week for rehearsals. And in the summer time we'd go on encampments either to Augusta or upper New York state, and of course all those, there were more French people than there were English background. So I'm pretty accustomed to being around the French. And we always had a good relationship.

**NC:** How do you think that the French, Franco American community of Lewiston fit into the general overall city of Lewiston?

SS: Well I think they had a respect for Bates. A lot of the French-speaking students ended up coming to Bates, many of my classmates. One who was the valedictorian, no, she wasn't valedictorian, she was Anita Hamel, her mother didn't speak English but she was in the top rating students taking college courses in Lewiston. And so she was in my class and I knew her very well. I went once over to her house, there was some project, probably the yearbook for Lewiston High, and it was strange, you know, to have a mother there that couldn't speak English. But then she went to Bates College and she did very well, graduated I don't know with honors, but anyway I think she got honors. She just died this last year. Of course there were a number of other French people from Lewiston that went, and some Jewish, too. Lou Scolnik was one of my friends in school, but he was a couple of classes younger than I, but he ended up by graduating from Bates and being a judge. He's, I guess he's retired as a judge, but he played in the Bobcats. Lou Scolnik, he lives up on Mountain Avenue. I tried to get him to play this last reunion but he said he was too rusty; he didn't want to do it.

**NC:** You still play trumpet?

**SS:** Oh yeah, I got the band together, you know, for this reunion for the class of '41. I couldn't get any of the original Bobcats except myself and the widow of the, another Bobcat leader that had followed me, Howard Jordan. I don't know if you ever heard of him, but I just came across his picture out in the, we would, we did get a group together for 1991, and that's Howard. He married my sister.

NC: This is an announcement of a reunion '91, connections postcard from the alumni office.

SS: That was my fiftieth reunion, but it so happened that my wife had to have an operation, and we were living in Atlanta, so I couldn't make it then. She was operated on that very day of the reunion. But this fellow had a, after he graduated from Bates and came back to Maine to live, he lived in Castine, he was teaching marine law, the law of the sea there, and is married to my sister. They brought up a family together of three children, and then they broke up, my sister had a nervous breakdown and they were separated, and then finally after the divorce he married a music teacher up in Camden, and so then started a band and they have a, what they call the Bright Moments Jazz Band and it was very good. And so there were three, three people from that group that I got to play with (*unintelligible phrase*) for the reunion. And then I got a, their drummer was sort of laid up with a bad leg or something, so I got another drummer from here in West Bath. But it worked out pretty well.

NC: Now, you mentioned that once you graduated from Bates -

SS: Huh?

NC: Once you graduated from Bates -

**SS:** Nineteen forty-one.

**NC:** Nineteen forty-one, and then you went?

SS: I went to, I was, I had several interviews for a job in chemistry and I decided to take the one with Eastern Kodak Company in the research department in Rochester, New York. And there I did microanalytical chemistry, determining the ratio of different elements in organic compounds that were being made for investigation for use in color film. They'd just come out with the Kodacolor a few years back and they were trying to improve that process. And I worked there until, well, I went there in '41 right after I graduated, and I was there when Pearl Harbor in December, and then of course the draft started signing up people and I was deferred for a while. I had an opportunity to get into the Manhattan Project, you know, the atomic bomb project. They wanted, the doctor who was the chief physician at Eastman Kodak was named medical director for the whole Oak Ridge set up, and they made electromagnetic separation process. And so the Tennessee Eastman plant, which was located in Tennessee, built a complex in Oak Ridge, and I was sent down there to be an industrial hygienist. And at first they sent me out to California because the cyclotron up there on the hill, they called it, at Berkeley University

California, Professor Walter Lawrence had built this what they call a cyclotron, it was separating heavy elements by projec- making a beam that goes into a powerful magnetic field, and then as it comes around the heavy things stay out and the light things, so that you can collect isotopes at the target, and that was the pilot plant for the process at Oak Ridge. But the plant wasn't ready when I signed up and we were slated to go down there in '44, and we finally, we went, we were, my wife and I were permitted to have an "A house", the smallest house that they had, because she was pregnant at the time. And we wouldn't have, we would have had to live in the dormitory, or at least an apartment, but being pregnant then we were able to get in there. But the house wasn't ready in the fall of '44 so, no the fall of '43 it was then, and we went and lived with some other people that were, had room for a house. And then when our house was ready we went in, and then she had the child down there at the, it was a military hospital, you know, where doctors were sent back from the front and rotated through there. But it worked out fine. Have a daughter born there. So I was doing chemistry of a sort, and being in charge of the technicians in the medical laboratory, as part of the medical department.

**NC:** How long did you stay there?

SS: I stayed there until '46, and it was only a couple more years, but in the meantime first VE Day came, and that was a big celebration, and then finally the VJ Day and the thing was finally over, and we were to be moved back to Rochester if we wanted to go there. And, but Eastman Kodak was committed to take me back but they didn't have anything that I really wanted there, and they gave us an opportunity to go to the University of Rochester, I was able to get an assistantship there. So that's what we did, we went to the University of Rochester and got an apartment up there. And you could get a Ph.D. pretty quick in those days. Anyway, I was, I managed to get a scholarship from the Chemical Corps down, you know, people in Edgewood, Maryland where the big Center for Chemical Warfare Service is located, and with that fellowship I didn't have to take time to work with students, and so I was able to accelerate my program, and I was able to graduate with a Ph.D. in physical chemistry in '48.

**NC:** Now, at this point in your career, what were your plans for the future?

**SS:** Well, I just, I felt I would probably be in industry. I never thought seriously about, you know, being a professor. I guess I could have been, but I never liked to lecture. And so anyway, I went to, I took a work, see, I did work for the Chemical Corps on a project that involved working with this activated carbon that is used in gas masks, and tried to determine how the absorption took place. And so I wrote a thesis about diffusion of certain chemicals in through this porous structure, this solvent, and so that gave me sort of an in with the companies that made this material. And so I took a job with the Pittsburgh Coke and Chemical Company.

**NC:** What were you doing there?

**SS:** Well, I was supervisor of research for this chemical company, for the carbon, activated carbon plant, just that aspect of it. And we pioneered the use of activated carbon in purification of dextrose, syrup, corn syrup and so forth. Because we were trying to replace some older, more antiquated methods, and we were able to do that because the, one of the, the director of research for the whole company there was also a graduate of University of Rochester. So he was

instrumental in getting me to go there.

**NC:** And how long did you work at this -?

SS: Well, I stayed there eleven years. Then I decided I might, in the meantime I'd broadened my interests, and I was in charge of the analytical department as well as the activated carbon manufacturing. And I had an opportunity to go to the consulting firm in Cambridge, Mass., oh, what's the name, Arthur D. Little, Incorporated. So I moved the family there, and by that time we had a family of three: Two boys were born in Pittsburgh. Actually Mt. Lebanon is the suburb, one of the better suburbs of Pittsburgh. And then I, as I say, I moved to Massachusetts, to Winchester, Mass., and I worked there for about three years. And I found I didn't like consulting quite as much as I thought I would. I was in charge of the analytical chemistry department where we did a lot of tests and spectroscopy and various instrumental methods like chromatography, but there was always so much pressure to charge this stuff off to the clients, you know. I didn't like the ethical side of it too much. And if you didn't charge your time off, pretty soon you may be looking for work somewhere else, you know. So there was a lot of pressure to get results. Sometimes it was easy, sometimes it wasn't. Anyway, I finally had an offer from another activated carbon producer, and it was down in Charleston, South Carolina. And I took that job, and we moved to Charleston, which is a miserable climate, though it's beautiful there in the spring and late fall, but the summer is almost unbearable for anybody that comes from Maine.

**NC:** What was the name of that company?

**SS:** That was, at the time it was called West Virginia Pulp and Paper Company, which was later changed to Westvaco Corporation, W-E-S-T-V-A-C-O Corporation.

**NC:** Pulp and paper?

**SS:** Pulp and paper, yeah. See, the carbon that they made was a by-product of the pulping process, and it was a very unique material. See, you get a, when you treat paper, I mean treat the wood, pulp, with caustic solution and heat it up very hot, and the fibers are torn apart and they, the ligament portion of the wood, the brown part, goes into solution. And then they can pull the fibers out and wash them, and they make paper from the fibers. Well, then you've got all this black liquor they call it, left over.

**NC:** Black liquor?

**SS:** Black liquor, yeah, it's very dark brown color, and that's where all the chemicals are. See, they got to recover the chemicals so they can put it back with more wood chips. So at that time they took this liquor and they evaporated it until it became real gummy like, and then they put it into a rotary kiln, where tremendous heat was applied to it, and it would become what they called a black ash. It come to crumbly black chunks, though of course it was red hot when it came out of this kiln. They'd run it into water and punch it, and then they'd wash the chemicals out by a (*unintelligible word*) washing system, and you got left with this black residue. Well, that was really activated carbon already, it just had to be cleaned up. So that's, that process was

unique, and at that time they had the largest activated carbon plant in the world down in Virginia, right on the edge, almost in West Virginia. Well, see, I went to Charleston, but I'd only been there in their research department for a matter of months when they wanted me to go up and take over the activated carbon plant up in Cummington, which is -

**NC:** Now when you say activated carbon plant, processing plant, was it a paper plant, or was it a plant that processed that black ash?

**SS:** It was a plant that, well, there was a huge paper mill there, and they made a variety of products. But the chemical division had just the, took this black ash. After they washed the chemicals out, the chemicals went back to the paper. But the residue we took and we washed it with acid, and we heat treated it and made it more active by various methods and then ground it up and sold it for purifying water... and gases, too. And, as I say, it was a very lucrative business. We took that carbon, and it had to be marketed, you know, in various, not used only in water but in purifying sugar and even drugs, like penicillin and (*unintelligible word*) and some of those other things. So, I was in charge of that group that went out into industry and did the technical service.

**NC:** You mentioned much earlier in the interview, Professor Lawrence.

SS: Lawrence, yeah, that was Walter, Walter Lawrence.

**NC:** And his environmental work. You also now got a chance to see on the other side the plants, and how the environment was understood. How aware, or how much involvement did you have with that side of the business?

**SS:** Well, I got to visit many water purification plants at various cities, and also the sugar refineries, even sewage plants that were using carbon to purify the waste before it goes into the river. But it, even though it was relatively cheap, at one time you could buy carbon, that carbon, for about seven cents a pound. But that was when it was practically a waste product. And as time went on it had to raise the price, because you couldn't make it that cheap any more. And we had to, the other thing was that the first experience with activated carbon, they made it from coal, and it was a hard, granular particle. The plant in, the paper plant made just the powdered type, so they wanted to get into making granule. So I helped them set up the process for make granular carbon from coal (*unintelligible phrase*) that business, so in a sense they were then in competition with the plant I'd already been at.

**NC:** You'd come from. I'm going to flip this tape over here.

End of Side A Side B

**NC:** This is side B of the interview with Stanton Smith. We were talking about the paper processing mills.

SS: Right. Well, you asked me about my association with the environmental aspects. One

thing we did was make a solvent recovery carbon. At any company that does coating with organic solvents, or painting, they come, when they dry these things the vapors come off, and they have to do something with that vapor, it can't just all go off in the atmosphere. So they have recovery systems, generally known as solvent-recovery. And the principal way of doing that is to have a big tank with quite a thick layer of granular activated carbon. And it's not just one tank, they have two or more so that when the air is going through, it goes down through this bed, all the solvent is absorbed and the pure air comes out (*unintelligible phrase*). Then pretty soon that bed becomes saturated, so then they send it to the other bed that has already been cleaned up. And they take that first one that's full of solvent and they put real hot steam through it, and the steam will release the vapors. But now it's in the atmosphere as steam, so if they fill the condenser the water will condense, and then it'll leave a liquid layer of the solvent. And that can be filtered off and put back into the process. So there's -

**NC:** Relatively safe.

SS: Safe, right. So you can have a file on those things, which is pretty bad. You have to have a lot of safety facilities. But there are many, many of those solvent recovery systems. In some cases it may be a very diluted stream and it may not even pay to regenerate it, just take out noxious gases, odors or something like that. And we also made carbon that was used in air cleaners for, you know, air conditioning systems, especially in airports where you get a lot diesel fumes. And they've had panels of carbon arranged in different ways so there's not much resistance to flow, but it's only a thin layer. And after they've been there for a certain length of time, they have to be taken out and regenerated. They generally would send those back to the manufacturer and they would heat treat them and regen-, put them back, so that they're recycled. So that's another way of using the carbon.

**NC:** Did you get a chance to see how politically environmental action affected your environment?

SS: Yeah, because in the water field, for instance, they kept coming with these water purification acts that really put the screws to the water plants. They'd have to put in better filtration, they would add, activate... See, many of the plants just had filters with sand, and the sand would take out the, just the silty materials that, fine particles, mud and then they would chlorinate to kill any bacteria. But they needed to take out things that became toxic. They also wanted to get rid of color and any odor or taste. So what was done there was to put a layer of this carbon on top of the sand, and that would stay there. If you backwashed the, the way they clean the sand off is to run a small amount of water up through the bed again and loosen it up, and that, the waste water goes off and they have to get rid of that some way, but there's not a very large amount. And then they turn it back on and let the water go down through it. But then the carbon would gradually become inactive. It didn't help to take out much, but it would gradually, after some months it might have to be regenerated. So I went around to plants where they'd built a furnace, and they took that granular carbon, put it through the furnace. And then they would, if you heat it to a certain temperature in the right atmosphere, then just cool it down, then they could put it back into the stream. So thermal regeneration was something I had a lot to do with, setting up the furnaces in various plants. And the research department developed special kinds of furnaces to do this.

**NC:** Sounds like you enjoyed it.

Yeah, it was good. Finally, though, I was in Covington, Virginia for fourteen, well, I was with that company fourteen years, one year in Charleston and thirteen up in. And then they wanted to send me, a political shake up, you know, different people coming into power on, they, they wanted me to go back to research. Well, you know, it was sort of a demotion because they had some guy they wanted to put in there. So I went down to Charleston, but I never moved there. I left the family in Virginia. And then I looked around for a job and found they wanted somebody at Georgia Tech to do contract research there, a client that wanted to know how to make carbon from waste materials, waste wood, waste, any organic material, bark and that sort of thing. So I took a job down there and then moved the family down later, and that's where I stayed until '81. And then they lost the contract. They had a good process and they were trying to sell it, but it didn't have great, the time wasn't right for it, I guess. The environmental pressure wasn't that great that the paper companies needed to put this thing in force, so the paper company that was supporting our work finally pulled out, even though they had a demonstration plant in Georgia and it worked well and everything. But the funds ran dry, and I worked there for a while longer doing odd things, trying to drum up business in other areas. But it didn't work out, so I finally resigned. And that was in '81, so I've been retired a long time.

**NC:** Oh, you've been retired since '81?

SS: Yeah. But then I did my own consulting, I was able to rustle up quite a bit of work doing consulting work, and I did that for about, until '86, no, '85. And then I was contacted by the International Executive Service Corps. I don't know if you ever heard of them, it's IESC. It's supported partly by the U.S. government through the AID program, Aid to Developing Countries, and also it's supported by industry and personal contributions. But they think people are needed whose experience would be valuable to Third World countries. And the first one they had was in Sri Lanka. That sounded interesting to me because that was where they make coconut shell carbon, they wanted someone to go in the, what they call the "coconut triangle" down there. You know where Sri Lanka is? Yeah. So they sent me and my wife over there for three months in '85, and I worked with a, this plant was built way out in the boon docks, it was fairly modern. It was run by the English people, an outfit from London, but it was manned by mostly native folks that had good education. And they put us up in the best hotel, close to the coast there, and then I had a, was assigned a car and driver who took me in to the plant every day. And weekends they'd let us use the driver to go on trips, and we, it was really very nice. Some of these pictures are trips to, that one, and fishing on the Sri Lanka shore, and these are the tea pickers coming up the hill where the Samoan tea came from. And that one on the lower is the elephant, that's the elephant orphanage, where they have a whole herd of elephants that, it's used as a, well, when they find young elephants which are abandoned, or their parents, sometimes the older elephants are killed off for one reason or another, and so they take the little ones and put it with the herd and they adopt them. And that was really something to see. They have, they're right near a big stream and they all go down and swim in the water. And I took some snaps up there. So, and what I was doing was trying to modernize their testing program, and use some of the techniques that we'd developed. Ways of evaluating the carbon, determine the pore size distribution, which is important to know what type of carbon you want for a certain

application. But, you know, you're never quite there long enough to see all this materialize, but they kept on working after I left. And then they sent some people over to the states that I met with which, it looked like I'd helped them out quite a bit.

**NC:** That's great. Now I want to go back to Lewiston for a bit and ask you about the Coffin family. I was wondering if you could tell me, you said that Frank was one year behind you?

**SS:** No, ahead of me.

**NC:** One year ahead of you. What do you remember first of all about Frank's family?

**SS:** Well, his mother was a very strong woman, she was a Bates graduate. But his parents were divorced just about the time when I moved to Wood Street. That was when I was, oh, it was about 1924 or '5, something like that. And so his dad would come over and visit him and so forth, but mostly he was with his mother. And I can remember being taken down to their cottage they had down at Harpswell. And his mother had an old Reo, and I remember we had a breakdown on the way or something. We were just kids, couldn't do much about it.

But anyway, and then one time when his father was there he took us both over to the shoe factory over in Auburn. His father was in charge of the cafeteria over there. But he was, as I, was always, you know, a class ahead of me in high school, and I think he was a valedictorian for his class, because he was very bright, as you know. And I, we used to think he was sort of a, he was always a good student and did what he was supposed to do, you know, and some of us around the street were not quite as good as he was.

**NC:** (*Unintelligible phrase*).

SS: We'd do a little mischief once in a while, play around with cherry bombs and do a little chemistry, and make stink bombs and gunpowder and stuff, stuff that they'd never let us do it any more if they knew about it. And anyway, we, he had an old, behind his house there was a sort of a low place there where they had a garden, and on the bank he had an old piano box. We made it into a little camp, the boys. I can remember doing that with him. And then, then we used to, in the winter we'd build snow houses out there. I remember one time we were trying to get him to go up on the top of the snow house, and we'd cut a place and we wanted him to fall down in it. We never succeeded in that.

**NC:** Now you mentioned Mrs. Coffin, the mother.

**SS:** Yeah, she always went to reunions. She never worked or anything that I know of, but she was civically active, and they were members of the Baptist Church.

**NC:** Do you remember any specific anecdotes concerning his mom?

**SS:** No, not really, I just, she was highly regarded. But she kept pretty close tabs on him. And I don't remember him doing any dating or anything. I don't know, we sort of grew apart when, see I lived in the house right next door. And one thing I remember, my dad, you know, was,

being a dentist, he did medical training. And one time Frank, I guess he was about four or five years old, he had a bad attack of what they called the croup, where they cough and cough and stop breathing. And she, his mother called my dad and he went over and got him to breathe normally and do something, I don't know, but it was some nip and tuck I guess. And she, anyway, I remember that about early childhood.

My dad had a lot of friends at Bates, the faculty. And we'd go on camping trips with Will Sawyer, who was a biology professor, he went fishing with him a lot. And there was another man named Alan, who worked in the maintenance department at Bates, and he used to go on those trips with us, fishing. And one time we went up to the Bates lodge on Sabattus Mountain, it's a little rise in the ground near Sabattus Lake, and they had, Bates had, I don't know if they still have it at the Outing Club, but they had this cabin and we went up.

NC: Oh, yes.

**SS:** And we went up and stayed overnight there. And I remember one of the men went out during the night and pretended he was a bear and scared us. I was scared silly. I don't know how badly scared we were, but. Let's see, I was in the Boy Scouts, but I don't remember Frank ever being in the Boy Scouts.

**NC:** Was he a quiet kid?

**SS:** Yeah, he was pretty quiet. And he was, as I say, he was studious and he never, I don't think he ever took any music lessons or anything.

**NC:** But he certainly wasn't mischievous.

SS: Hmm?

**NC:** He wasn't mischievous.

SS: No, he wasn't mischievous. I can remember once getting in his, I suppose he was with us at the time, his grandfather had that big house closer to Bates. It's now, I don't know whether they call it the Morey house or not, but it used to own, be owned by his grandfather, who was a, had been mayor of Lewiston several times I guess, Clifford Morey. See, that's Frank's middle name, Morey, Frank Morey Coffin. And Mr. Morey was really influential and owned the houses that we lived in, and we paid rent to him. But he had a big barn, and I remember going out in that barn and rummaging around and finding a big heavy doctor's book. And we were leafing through it and we saw pictures of the babies being born and all sorts of things. (*Unintelligible phrase*). But then I was sort of the fountain of information about.

**NC:** Yeah, great, now that was with Frank?

**SS:** I think Frank may have been in on it, but I don't, because I wouldn't have been in that barn if he hadn't been with us. It must have been some doctor in the family that preceded him.

**NC:** Now, you said that you eventually grew apart so you didn't know him that well in high school, or?

**SS:** Well, I, you know, I knew him well but we never did much of anything together. He seemed to be in a different crowd.

**NC:** Did you get a feeling that he -?

**SS:** And I was involved much in music, you see, and he wasn't, so. We went to different churches, too.

**NC:** What church did you go to?

SS: Well, it was originally the Pine Street Congregational Church down on the park, a beautiful big building. But the congregation dwindled and dwindled and dwindled. We finally had to unite with another church, and it became, and then that was that one down at the foot of College Street, you know, that sits in the triangle; we moved to that church. And it was Universalist and Congregational common, I don't know, they just called it United Church I guess. They sold that big old Pine Street Church, and it was torn down, and they built an A&P store there. Now I don't think even that store is there any more. It was right near the DeWitt Hotel.

**NC:** Did you get a feeling that Frank was politically minded as of high school?

**SS:** Yeah, they were always Democrats and we were always Republicans. Yeah, I think she, his mother was, you know, an active Democrat. My dad was, he just, I never remember him having anything good to say about the Democrats.

**NC:** Right. Was he an active Republican?

**SS:** Well, no, he never got into any politics. He was in the politics of dentistry. He got to be the president of the Maine Dental Society, and even a turn as president of the New England Dental Society. And he was put on the board, one of the directors of one of the banks.

**NC:** In town?

SS: Yeah.

**NC:** In town you mean, in town (*unintelligible phrase*)?

**SS:** In town, yeah, but I forget which bank it was. Key Bank or, but anyway, there's a certificate here somewhere that shows who.

**NC:** Now, when you were at Bates, did you feel like there was a political atmosphere on campus?

**SS:** Not particularly. Because I, not being a campus resident I didn't get in on a lot of the stuff, see. I never touched a drop of beer or anything until I got out of school and left home.

**NC:** Was there a lot of drinking on campus back then?

**SS:** No, there wasn't much, but the guys went into town and drank beer, you know. And they, I'm sure they had some in the dorms. But I never went up to see them in the dorms. Most of my friends were outside until, you know, I got into Bates. Then I had these guys that played in the band with me. I never got involved in the campus politics. Though I liked the girls there. And I, see, I married a Bates girl, I met her in my sophomore year when she came, she was a year behind me.

**NC:** So you married her when you are a sophomore?

**SS:** No, no, I didn't, I met her when I was a sophomore and we went together until I graduated in '41. And she was an English major, but she didn't do too well in her major, and I think it was, a lot of it was due to that professor Wright that she, was her advisor and so forth. And I don't know, something happened, but she didn't want to go back for her senior year. And so I, that's one thing about Bates that I didn't particularly like. I never knew just what happened but -

**NC:** Oh, it wasn't a public discussion.

**SS:** No, no, I never really quizzed her about it. I thought maybe she could go and finish in one of these other cities that we lived in, she could have gone and taken the courses. But she never wanted to do that.

**NC:** She was done with school.

**SS:** Yeah, she never went, she was, came from Hollis, a small town in Maine. And she was, I think, one of the top students when she graduated from high school. But college is a different environment, you know.

NC: Socially.

**SS:** She didn't have any trouble getting into Bates.

**NC:** Did you know Brooks Quimby?

SS: Yeah, I knew him. And I used to, I didn't know him well, I never took a course from him because I didn't take public speaking. There was a guy called Prof. Rob, Professor Robinson, who taught public speaking, and every freshman had to take that course. And he'd get you up and show you how to project and, the little elements of public speaking. It was a good course. And they had, you know, the plays were all in Hathorn Hall and, before they built the Schaeffer Theater, had the little theater in Hathorn. And I used to, even before coming to Bates we used to go to the plays. And at graduation they used to have Greek plays that they put on outdoors in front of the Coram Library, in front of the columns there. And I remember going up to watch

those. I used to like to watch the reunion when I was in high school, because they always had a band come. I noticed in the archives there there was a picture of this old Brigade Band that played around Lewiston, a bunch of old guys in black suits. And if I remember correctly, I think I, they needed a trumpet player one time, it was about when I was a senior, and I helped them by playing in that parade. And I played with them some other times. The Brigade Band was a dying organization, it was the only commercial musical band in Lewiston.

**NC:** How was Frank Coffin viewed by the student populace at Bates?

**SS:** Well they, oh, I think he was very highly regarded. I mean he was, he's the smartest guy and he, you know, he graduated *summa cum laude*. He was an excellent public speaker. I graduated *cum laude*, but I didn't set any records or anything. Because I did some honors work in chemistry, which didn't really amount to a great deal. We tried some organic reactions and made some products, but I was never there long enough to really prove that I had what I was trying to make, you know.

**NC:** Right, but did you?

**SS:** We made a compound and tried to recrystallize it, but I never could get it purified enough in the time I was there. And, you know, you come up to that final day when you got to graduate -

**NC:** You got to hand it in, yup.

**SS:** You write a thesis and tell what you did, but you can't prove. It apparently was thought to be good enough that I got my *cum laude*, but I didn't try to publish anything. I think some students have done work that got published later.

**NC:** Did you know John Donovan?

**SS:** John Donovan, yeah, I can sort of remember him, but he wasn't a chemist I don't think. I don't know, I guess he was from Lewiston though, wasn't he? He must have been in Frank's class, was he?

**NC:** I think so.

**SS:** Class of '40? I don't know. The name is familiar and I can sort of picture a tall, thin fellow, but I don't really, I think, because he, did he go to Lewiston High?

**NC:** I think so.

SS: Yeah.

**NC:** I don't know much about him.

**SS:** I think he was in athletics in high school, probably at Bates, too. See, I never had any ability as an athlete. Though I used to play tennis, and I played on the Bates courts when they

had just that one behind the Merrill Gym; and in Physical Ed. I played volleyball, but I never went out for any sport. Not even in high school, because I was sort of small and puny. I didn't measure up to the jocks. So I wasn't a big figure on campus with the girls or anything.

**NC:** Now, did you, you remained pretty Republican for your entire life?

**SS:** No, I didn't. I voted Republican up until the last few years. I began not to, well, I had a lot of respect for Frank, FDR. I can't remember for sure whether I voted for his reelection. I may have because I was out from under my parental guidance and. But basically I was on the side of established business and all, you know, the stock market and so forth. I didn't, and then when Clinton came in, although I didn't always care for his personal style I did feel he was on the right track, and voted for his reelection.

**NC:** Did you get a feeling for how the Republican and Democratic parties in Maine interacted?

SS: I never had any, see I wasn't there in Maine after I graduated. I came back in the summer to my dad's cottage, but that was only for a couple of weeks every year. And I didn't come back here until, of course I've been retired for a number of years but I felt I should be in a retirement community. And my wife had Alzheimer's, and that, it showed up around, well, '94 or so, and I stayed there in Atlanta, we liked it very much there, had a nice home and a lot of friends and a good church affiliation. And I played in two bands, two concert bands, and sometimes in some dance bands. And even up, I sang barbershop music in the chorus at the big one, the Atlanta Pete Street chorus for nine years. But, and sang in the church choir and all these things musical. But they thought we ought to get back to Maine to be nearer our children. See, my three children, there's only one that lives in Maine. But my daughter lives in New Jersey, she's the oldest one, she's an M.D. And my son lives in New York on Long Island, and he has a Ph.D. from Columbia University in atomic physics. And he's been working in the field of MRI ever since he got his doctorate. And so, but -

**NC:** What does your second son do in Maine?

**SS:** Well he, the youngest son, lives here in Maine, and he's a finish carpenter. He has a contracting company, but he doesn't act as a contractor any more. But he hires out to various construction firms. He worked on this school over here in Topsham for a whole year when they were building that little school. And he, at the same time he started a business of his own in blacksmithing, he's a farrier. He took courses in horse shoeing down in Virginia, and he's, now he's getting into a lot of ornamental ironwork, and makes roses out of metal. I'll show you one of the things he does for the demonstration, he's got one, a paper, he makes hooks and (*walking away - pause in taping*).

**SS:** (*Unintelligible phrase*) a couple of things.

**NC:** Oh, wow.

**SS:** A couple of things that (*unintelligible phrase*). He makes -

**NC:** A horse head on top, and then this is a letter opener?

**SS:** A letter opener, yeah.

NC: Wow.

**SS:** Now he's willing to make knives, as a fine steel -

**NC:** It's beautiful. And the coloration on the blade.

**SS:** Yeah, he heats it and then he rubs it with a bronze brush that puts that golden finish on it when it's hot.

NC: So did you, did you follow Muskie's career very much, or?

**SS:** Well I, only at a distance. I knew he was, you know, in politics, and read with interest about his running for office. And I knew Frank was his right hand man. And I felt badly when he bowed out of the picture, and that, just because he sort of lost control in that New Hampshire, where they picked on his wife about something apparently. If it had been later on it probably wouldn't have made such a big difference, but at that time they had a different concept of the presidency. I don't know, there was a lot of some dirty work there somewhere that he couldn't quite take the heat about. And he, if he could have come back with a strong rebuttal, and could have taken some licks at whoever it was who started that.

**NC:** Yeah, William Loeb, of *Manchester Union Leader*.

**SS:** But he chose not to do that, or, but anyway, because he certainly was highly regarded in the post that he had. What was he in Washington, he was a senator, yeah, he was highly regarded as a senator. And I think then he, didn't he have some appointed position after that, or-

**NC:** In '80 and '81 he was secretary of state with Jimmy Carter.

**SS:** Yeah, right, that was it.

**NC:** Well I guess I just want to ask -

**SS:** I never met him. Yeah, I guess, (*unintelligible phrase*), if you're interested, they prepared this little booklet about me for my eightieth birthday, which shows the family and a little Model T that I owned when I was a student.

**NC:** Oh, that's great.

**SS:** I have a few of those left. They had a big birthday party for me down here in the lodge.

**NC:** Can we, can the archives have one of these?

**SS:** Yeah, I've got more of them.

**NC:** That would be great. Well, I guess I'd want to ask if there's anything else that you'd like to add to the archives, to the interview?

SS: Well, about Bates: well, I felt that I was well prepared for what, you know, I did. I never felt that there were any big holes in my education, though I know now courses in chemistry include a lot more than what I got at Bates. And I never found it terribly difficult, it was very interesting and I did well at the interviews. I could have had a job at Dupont if I wanted it, at one of their plants. But I decided to go to Kodak. There was a man, Fred Smyth, spelled with a 'Y', who worked for Kodak, and he was instrumental in getting people to consider Eastern Kodak and come to Rochester, see, that made a good welcome. And I notice there's a fellowship I think, or a big gift that Fred Smyth gave to Bates. Did you know about the scholarship that's set up in my dad's name? Let me get that booklet. There was a, one of his cousins, who was an M.D., his name was Lowell Mason, Lowell S. Mason. He never married but he stayed on and worked in Bangor. And he apparently was very successful financially because he, and when he died he had an estate of over a million dollars, and he left it to Bates. But it was left in such a way that it would, the income from it should go down through several people in his family, and then, and my dad was the last one. And when dad died, it automatically went to Bates.

NC: Oh, okay.

**SS:** I think I can just lay my hand on that book that shows -

(Pause in taping.)

**SS:** Eighteen-ninety-six.

**NC:** We're looking through the endowed funds at Bates College manual from, what year did this come out? May of 1998. And it's on page forty at the bottom right, (*unintelligible phrase*).

**SS:** You can see how that's set up, it's preference to students from Bangor, Maine and residents of Penobscot county. And I guess there's a total of twenty thousand a year.

NC: Wow, quite a fund. Comparatively to -

**SS:** Yeah, my granddaughter went to Bates, one of them. She was an art major, and a minor in geology. And the picture's right there of her.

**NC:** What year did she graduate?

SS: She's about to get married. This is the picture of her now, and this is the fellow she's going to marry down at, Labor Day, down at Sebasco. But she was, she's a big, tall girl, very personable, and she was on the rowing team at Bates. She was active in the Outing Club and likes to do things, hiking. And they climbed Mt. Katahdin and so forth. She come back, she

borrows some equipment from the Outing Club for some of these hikes.

End of Interview moh289.int