

NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT

EDITED ORAL HISTORY TRANSCRIPT

SHANNON W. LUCID
INTERVIEWED BY JENNIFER ROSS-NAZZAL
HOUSTON, TEXAS – MARCH 9, 2021

ROSS-NAZZAL: Today is March 9th, 2021. This interview with Shannon Lucid is being conducted in Houston, Texas, for the JSC Oral History Project. The interviewer is Jennifer Ross-Nazzal. Thank you again for allowing me to come over and spend some time with you today in your backyard.

LUCID: Oh, you're very welcome, and it's such a wonderful day.

ROSS-NAZZAL: I had read an article that talked about your experiences as a child, and how you had been around the world twice before the age of five. I wonder if you would talk about why you were abroad for those years. What were your parents doing at that point?

LUCID: Most people start off and ask, "Well, why were you born in China?" My answer is because my parents were there. That's a flippant answer, but my mother [Myrtle Huizenga Wells] basically grew up in China. She had been back in the States going through nursing school at Blodgett Hospital in Grand Rapids, Michigan. After she finished nursing school, she went back to China because her family was there. She was going to work with my grandfather [Dr. Lee S. Huizenga], who was a doctor. His expertise was leprosy and tuberculosis. She went to a year's language school. It was in Peking, which is now Beijing. Then she went and started working in the hospital with my grandfather.

My father [J. Oscar Wells] grew up in West Texas and went to college at Texas Tech in Lubbock, and then he went to China as a missionary. It was very interesting because my father went over with John [M.] Birch. Have you ever heard of the John Birch Society?

ROSS-NAZZAL: Yes.

LUCID: Now, John Birch didn't have anything to do with the John Birch Society. [Robert W.] Welch took the Birch name as the name of the John Birch society, because John Birch had presumably been the first American killed in August 1945 by communists in China. My father once said that the Birch society wanted him to work with them, and he said no way. There was no way.

But anyway, they went to China together. A book [*John Birch: A Life* by Terry Lautz] was written about John Birch's life and I read it because I was interested just to see if my father was mentioned, and lo and behold, he was. I'll show you. There was a picture there I'd never seen before of my father.

My father is the shorter one. That's just when they got off the boat. There they were, two young men. They were in Shanghai. The foreigners that were there were invited to a Christmas party where my father met my mother. On Valentine's Day he said they were going to get married, so my mother said okay, and they were married in June.

I was born in Saint John's Hospital in Shanghai, and I was the only Caucasian baby in the hospital. What was really strange is that when I went to college, I met a Chinese girl who was there, a freshman like me. We were the same age. We had the same birthday. She was born at

Saint John's too. Then I said, "Oh, maybe they mixed us up at birth." She didn't quite get the joke.

When my mother and father were riding in a rickshaw to the hospital for me to be born, they were stopped by robbers. My mother quickly put her wedding ring in her mouth because she didn't want to end up at the hospital without her ring on and have people think she wasn't married.

ROSS-NAZZAL: That's funny.

LUCID: I was born. Six weeks after I was born, we were put in a Japanese concentration camp. We stayed there for a year, and then we were exchanged. My aunt [Ann], who was a doctor, was also in the camp, so were my grandmother and my grandfather [Matilda and Lee Huizenga] and my other aunts [Aunt Faithie and Aunt Euny and my young uncle, Phil].

Before my mother got married, she was walking into the hospital, and there was a little baby on the doorstep. There wasn't anything wrong with him. He wasn't sick or anything, so she took the baby to her home where she was living with her parents just so he wouldn't get sick. He's now my uncle Phil. He was three or four years old at the beginning of the internment.

My mother and my father and my aunt [Dr. Ann Huizenga], we were exchanged when I was a year old. All of the rest of them were left in China; they were still in the concentration camp to the end of the war. This was the Chapei camp in Shanghai. My grandfather died while he was in the camp. The others were released in a prisoner exchange at the end of the war. They were there between 1943 and 1945.

We went on a Japanese boat the *Teia Mura* and then we got exchanged to the Swiss ship, the *Gripsholm*. I think it was someplace in India. My mother always felt so bad about the Japanese going back on the Japanese boat, which was not the best, and leaving the marvelous *Gripsholm* for the prisoner exchange.

When we were on the Japanese boat, they had the men and the women separated so that my mother had me at night and then my father had me out on the deck during the day. According to my mother I just had one diaper.

I was just trying to learn how to walk. My father would let me try on the deck. The Japanese crew were there, and I was extremely blond, so I was just one of their favorites. I was probably the only favorite. They were eating a baked potato, so they gave it to me. I was there eating it, and then my mother came and found me and she was so upset. She said, "Oscar, don't you ever watch what this child eats?"

We were exchanged to the *Gripsholm*, stopped in Johannesburg, and that's where I got my first pair of shoes, and then we went to Rio de Janeiro. They, the ship's crew, were trying to escape and use safe routes. The boat had a huge Red Cross on it so it would be recognized as a prisoner exchange boat.

We ended up in New York City. When we landed in New York City, there was this picture in the New York paper because it was a big PR [public relations] event, these prisoners of war coming back. There was my father and my mother, and in those days they were tall for their time period. They were both right around 90 pounds, and there I am. I am this huge hulking baby. It's just hilarious.

What I always thought was interesting—my father was always very good about keeping people informed. He'd always write a letter. When I was in college, he'd write me a letter every week. He would say, "Dear Shannon, don't forget we love you. Love, Father."

I mean, it was not exactly full of information. But he was always good about writing. So, he had telegraphed his mother that he'd gotten married, but he never got around to saying who he married. There she, my paternal grandmother, was in Lubbock, Texas, wondering who my father had married.

We came back to the States. My father got a master's degree at Calvin College [Grand Rapids, Michigan] because I had a rich uncle or some kind of kin. He funded my father's degree. My sister was born in Michigan, and we came back to Texas. My brother was born in Texas. Soon after he was born, it was the end of the war, so we went back to China.

A few years ago, I was listening to a history of China. I was driving to Alaska, and I was listening to this audiotope. They were talking about the time in the late '40s, '50s, and all the turmoil. The thought that ran through my head was, "What on Earth were my parents thinking, taking three preschoolers back to China?" The only logical thing I can think of is that those were the days before the Internet. People weren't as cognizant of what was going on in the world. Anyway, we went back to China. Oh, my goodness, I just loved it. We had such a good time. I mean, I did.

ROSS-NAZZAL: Where were you living at that point in China?

LUCID: We were living in Nanking, mainly. My parents went to a little bit of language school, and my father would always take me wherever he was going. As we would go down the street,

because, like I said, I was extremely blond headed, all the Chinese people, they'd come up and they'd pull on my hair, and they'd always say, "*Zhen de jia de, zhen de jia de.*" "Is it real or is it false?" Of course, any time I've told that to a Chinese person, they haven't understood what I said. Most probably the memory of what was being said is not quite correct.

So, then I would cry to my father, and I'd say, "Father, why can't I be like everybody else in the world? Why don't I have brown eyes and black hair?" He said, "You just need to be thankful for what you are. Everybody can't be the same."

We were living there, and that's where I started kindergarten, except I didn't start kindergarten at first. I just wanted to know how to read. That's all I wanted to do, to know how to read. I was just really pestering my parents no end. Finally, my mother said, "Oscar, can't you teach this child how to read?" Father sat down with the King James Version of the Bible, and he said, "Come here, I'll teach you how to read." We sat down, and after about 10 minutes I still hadn't gotten the hang of it. Father said, "Shannon, you're going to have to go to school to learn how to read." He took me down the street, and he enrolled me in a Chinese first grade, so I was sitting in this first-grade classroom. Everybody was talking out loud and repeating whatever the teacher said. I was going right along with it.

I remember hearing this because my father came to get me and the teacher must have spoken English, and she said, "Does Shannon know Chinese?" Father said, "No, no, she just wants to learn how to read." The teacher said, "Well, we're learning how to read in Chinese." Father said, "That doesn't make any difference. She doesn't care, just so she can read." The teacher said, "Well, I think it would be best if she went to kindergarten first, and then next year, if she picks up a little Chinese, then she can come back." So that was the first time I was kicked out of first grade.

I went to kindergarten. I have a memory of another blond-headed little boy there. I think there were two Caucasians in the kindergarten. The rest of them were all Chinese, and it was all in Chinese. My mother wouldn't let me wear pants like the Chinese wore because the Chinese wore pants that were slit, and so when you needed to defecate you could just squat anywhere and it was all taken care of. But my mother wouldn't let me do that, and I just didn't think that was fair.

Then we went to Guling for the summer, because the doctor said my sister wouldn't survive in the humidity down in Shanghai during the summer. She had been sick a lot. So, we went up to Guling for the summer. My father would travel around a lot to preach. Chiang Kai-shek had a lot of his troops stationed in the vicinity. I would go with my father. I was going to show you a picture, because I just found this picture the other day. I knew I had this picture, because I remembered it from when I was a child, but I couldn't find it.

ROSS-NAZZAL: We'll have to see if we can figure out how to put these on with your transcript.

LUCID: See if you can pick me out. [Shows image.]

ROSS-NAZZAL: I think I found you. That's a great picture. You don't look very happy though.

LUCID: I was behaving myself because as long as I behaved myself my father would take me anywhere we went.

ROSS-NAZZAL: That's a great picture.

LUCID: I knew that as long as I behaved myself my father would take me wherever he was going. One time we were on a boat, and it was just totally crowded. There were just unbelievable mobs of people. I just remember how crowded everything was. Father was always very focused on what he was doing. We hadn't gotten around to eating, so I passed out in the heat. But then it was okay, I came to. We came back home, and while my mother had been home with my brother and sister, she had been playing a hand pump organ in the little cottage we were staying in, and the ceiling had fallen down, so she was crying when we got home because she felt so bad because it had been such a horrible day.

Father told her I'd passed out because he had just forgotten to have breakfast or lunch or whatever it was. I can still remember mother saying, "But Oscar, you have to feed the child if she's with you." Being in Guling was an absolutely wonderful, wonderful time.

One day we went to look at a boarding school, because I guess my parents were thinking of sending me away to school since that's what most parents did. I remember going there. That was the first time I remember seeing fog, and they had swings and I swung on the swings. What I remember, and I don't know how I picked this up, the school was British-run. I didn't know at what age, but 10 or 11 or 12, you took a test that would determine whether you got to go to college or not. Oh, my goodness, I was so upset because I figured that I was smart enough to go to college, even if I didn't pass any test. But my mother was dead set against sending any of us to boarding school, because she had done that and it was not a highlight of her life.

The communists came. We were toward the last of the people that left China voluntarily, so then we came back to the States. Now we had a wonderful time on the boat trip going back. Oh, my goodness, I had such a good time. Because my brother and sister were sick, my mother

had to take care of them a lot, so I had free run of the ship. One time I was out, and I was in the kitchen. There was a fire in the kitchen, so I was helping the people put the fire out. I had a towel, and we were hitting it.

In the meantime, there was a lifeboat drill, so whenever they had the lifeboat drills you had to be there with every member of your family. I wasn't there, so the person in charge got so upset at my mother and just really really yelled at her because my mother didn't know where I was. My mother said, "Shannon, where were you?" I said, "Mother, mother, I put the fire out on the ship. So, I was really busy."

We came back, and we moved to Lubbock, Texas. So that was China.

ROSS-NAZZAL: Were you around many other Americans or British folks, or were you really living with a lot of Chinese?

LUCID: Basically, with Chinese. Now in language school there were a few other British and Americans there because I remember Christmas there and they had some stockings, in I guess where we ate, in the dining hall. They'd give them out to the kids. Some kids got a doll or something. I got an orange. Then they were talking about Santa Claus, and I thought, "That is so stupid. Who would ever think that somebody could go to every child around the world in one night and look at all these kids that didn't get anything." I just couldn't imagine anybody thinking that.

When we were in Guling there were a few Americans there because it was summer, and a lot of people went there for the summer. But when we were in Nanking, I was in Chinese school and with the Chinese kids, we were basically just with the Chinese there.

When we were in Guling there were a couple of little kids about my age. I think their parents worked there, maybe. I don't know. We played with them all the time. Now they didn't speak English and we didn't speak Chinese, but they were pretty smart, because they knew just what I wanted them to do, so they always did it. We had a good time.

ROSS-NAZZAL: Now I know why you like to go back to China. You obviously have fond memories.

LUCID: Oh yes. It always feels like you're going back home in a way, because I think when you're young you get imprinted in certain ways.

ROSS-NAZZAL: You moved back to Lubbock with your family. Why did your parents decide to move back to West Texas?

LUCID: Because we came back from China and obviously my parents had zero money. They didn't have any resources.

My grandparents lived in Lubbock at that time. They had lived in Wellington, but they sold the farm. Then they were living in Lubbock. It was an old farmhouse that they lived in, and they had a few cows and a cotton field and chickens and a huge garden. There was a very small little house just down the dirt road, and it had a front room and a kitchen and a bedroom, and there was a bathroom. That was it. That's where we were living, and I would go down to my grandmother's house all the time. My grandmother was such an absolutely wonderful person to be with. She was unbelievable.

Then somehow, and I don't remember how, I learned how to read. My mother used to read books to us a lot. She'd always read every night before we'd go to bed. I still remember she was reading *Hans Brinker* to us, and I couldn't stand the thought of not knowing how it finished. Mother was going a little slow, so one afternoon I snuck in there and I read the book. I felt so guilty because mother was enjoying reading it to us, so I never let her know. That's the first real book that I remember reading.

Then it was time to go to school. My mother said, "You have to go to school." I said I didn't want to go to school. There was no way. What on Earth would I go to school for? My mother said, "Well, they have lots of books in school, so you'll be able to get books." Now books were a real problem, because there just weren't any around, and it was really difficult to find anything to read.

ROSS-NAZZAL: There was no library in Lubbock?

LUCID: If there was, how would we get there? Did we have a car? No. My grandfather had one. We called it the Green Dragon. My father was always out of town because he was traveling and preaching, so my mother was stuck there with the three of us. So we had no transportation, but my grandfather had this Green Dragon. I remember driving along down the dirt roads, and the steering wheel would come off, and we'd go off into the ditch.

My mother said, "There'll be lots of books in school." So, I went to school. She said, "And you can pick out the chicken feed sacks that you want to have your dress made out of." When you bought the chicken feed, it came in cotton sacks, so you found two or three of them

that would match, and you'd make a dress. My mother made me a dress, but she sort of missed on the size because it fit my sister. It didn't fit me.

I went to school. I can still remember there I was in the first grade, the first day or two. I would raise my hand, and the teacher would call on me, because I was very well-behaved. I always followed the rules, but it never seemed to make people really appreciate you. I'd raise my hand and I'd be waving it, and she said, "Wells, what do you want?" I said, "Where are the books? Where are the books? My mother promised me books." She said, "We're not ready for books." I said, "But I can read. Can I just have the books?" Every day I would ask her this.

Then I heard her out in the hall, and she was talking to the principal. She said to the principal, "You've got to get that Wells kid out of my class. I can't take it anymore." The principal called me down to her office, and she had this little sheet of paper, and she said to circle different words that she called out. She said, "Oh, you know the word grandfather?" I said, "Of course." She had a book, she had me read some to her, and she said, "Okay, I'll put you in the second grade." Then I went to the second grade, so that was how I got kicked out of the first grade the second time.

I knew how to read, but I didn't know anything else. I didn't know how to write; I didn't know how to do any math. You had to fake a lot. I never learned how to sound words out.

ROSS-NAZZAL: Phonics, yes.

LUCID: They had these pictures they were coloring, and you're supposed to color sounds. I thought, "What is this? This is crazy!" We had the reading circle, so we would read. I remember the teacher wanted you to keep up and always know your place, and I just couldn't

stand to listen to some of the other kids read because they were just so slow. We were never going to get to the end of the book. When it was my turn, I just read really fast and lost the teacher, so she couldn't stop me. She didn't know where I was, because that was her big thing, you always had to know your place. She couldn't stop me, so then we could get done with the book and move on.

I walked to school every day, and I thought that it was a long way. The house we used to live in, it's still there in Lubbock. Every time I go through Lubbock, I go look at it. Of course, they built up all around it, and they tore down the house my grandparents lived in. I walked to school every day, and of course it was very windy and sandy. I never could figure it out. See, girls were required to wear dresses to school. You didn't wear trousers. But when it was really cold you could wear trousers under your dress. They were trousers, so they buttoned up here [demonstrates], then you had your dress over them. I thought, "How silly is this? How are you supposed to go to the bathroom?" Obviously, you just waited till you went home.

We had a good time living there. Sometimes my grandfather, if he was going to go pick cotton, he'd let me go pick cotton with him. He had his big cotton bag that he'd pull along behind him. My grandmother made one that was just my size. I still remember, I'd fill up my cotton bag, and my grandfather would take it and he'd put it on the scales. I never could figure out why I only got 50 cents for all the cotton that I pulled.

I had some chickens. I raised some chickens there. It was just really nice, but then we moved to Oklahoma.

ROSS-NAZZAL: Why did you move to Oklahoma instead of staying?

LUCID: My father took a church in Oklahoma City because my mother wanted him to stay home and not travel around and preach. I can still remember. I asked my mother one day. I said, “When are we going to move? Are we just going to sit here forever?” Mother said, “Oh, it’s so wonderful that we have someplace to stay and not move.” I said, “There’s a whole world out there we could go live in; we don’t want to just sit here forever.” That’s how we ended up in Oklahoma.

ROSS-NAZZAL: You already got bit by that traveling bug, I guess.

LUCID: I still went with my father a lot. He would go out to the reservation some, and I’d go out with him. I did get to go, but it wasn’t like living in other places.

ROSS-NAZZAL: You brought up Oklahoma, and when you think of Oklahoma you always think about the Sooners. You think about westward migration and all of these pioneers going across the state. I wonder did that have any impact on you, because I know you wanted to be an explorer of some sort when you were a kid. Do you think that had any impact, moving to a state like that, instead of moving say to New York?

LUCID: Oh yes, because that was very much a part of my experience. I always thought we were middle-class when I was growing up, and I did not realize that we were poor till I got to college. I can still remember—it was a real revelation to me—there I was in college, and somebody said that so-and-so’s father made \$10,000 a year. I was just bowled over; I could not imagine anybody making that much money. It rapidly dawned on me that we were not middle-class.

Growing up I'd always thought we were middle-class; that's how I would have described what we were.

Sometimes my husband Mike and I would have arguments about whether he was the poorest or I was the poorest as a child. But like I told him, my advantage was I didn't know that we were not well-off. I didn't know that we were poor. I thought we were middle-class. He knew that they were very poor, and so it made a difference.

As a child we didn't go into other people's houses to play; we always played outside. We always played out in the street. We played pioneers most of the time, and we made big, covered wagons out of boxes and put them on a wagon, and off we would go. That was most probably what we played the most.

ROSS-NAZZAL: That's interesting.

LUCID: Yes.

ROSS-NAZZAL: Why did you want to be an explorer? Had you read a book on the topic?

LUCID: I think it was because way back when we lived in Guling my mother had told me that when it was daytime in Guling it was nighttime with my grandmother in Texas, and when she was up then we were in bed. That just absolutely fascinated me. I just couldn't believe that.

One day, because I decided I just needed to find out if it really was dark on the other side of the world and the sun didn't shine there when it shone in China, I asked my mother who was very harried that day, I asked, "Mother, can I walk around the world?" Distractedly she

answered, “Yes.” I started out, and I walked and walked. Pretty soon it was nighttime, so I curled up on a rock and went to sleep, thinking, well, I’ll just have to wait till morning to arrive in Texas.

My mother and father found me. Oh my goodness, they were so upset. They said, “What are you thinking?” I said, “I’m walking around the world. You said it was okay.” They said that now there was another rule; I was not allowed to walk around the world by myself.

ROSS-NAZZAL: There was always this what’s on the other side that you wanted to go to. That idea interested you, seeing what was there that other people hadn’t seen or experienced.

LUCID: Oh yes. I still remember when we were in Guling there was a path. We went up, and we could go up the mountains. I thought that we were the first people going up the side of this mountain. I was so excited. After a couple hours, lo and behold, here comes a person going the opposite direction. I was just shattered to think that somebody had already been to the top where we were going, that we weren’t the first people going up there.

ROSS-NAZZAL: I think I read that you were worried when you grew up that there wasn’t going to be anything left to explore.

LUCID: Yes. Because my goodness, the world was changing. What would be left for me to do? There wouldn’t be anything left to do by the time I grew up.

ROSS-NAZZAL: Did you have any heroes growing up, anybody that you looked up to as a child?

LUCID: Not really. Except I can still remember we had this orange history book that we had in the fifth grade. I read the whole book because like I said it was hard finding books. I'd sit in class and read the book, rather than do whatever we were supposed to be doing. I remember reading about Lewis and Clark and Sacagawea. Oh my goodness, I can still remember, I can still see the page where Sacagawea had her baby. She jumped right up and went on taking Lewis and Clark straight out to the Pacific Ocean. I thought wow, that's the way to be. Life didn't have to end just because you had a baby or just because you were a female. That was very inspiring. Most probably the incident was not depicted quite right in the book. Or maybe I misinterpreted it.

ROSS-NAZZAL: But that's interesting. Most of the women you knew at that point were mothers, stay-at-home moms, I guess.

LUCID: Oh yes. I always felt sort of bad, because my mother was a nurse, and I didn't understand why she didn't continue nursing. But this was the '50s, and a good mother stayed home with her children. Oh my goodness, there was no way I wanted to stay home. There were female teachers, but mostly women were to stay home and take care of the children and that was it.

ROSS-NAZZAL: Did you tell anybody about this idea that you had? Did you tell your parents or your friends, "Hey, there's another option for women besides being a mother"?

LUCID: My parents were always very supportive. You say what you wanted to do, then everybody would always say, “Oh, you can’t do that because you’re a girl.” That’s all I ever heard. Now my parents never said that. The only time they ever said it, one time, I must have been about 14 maybe, in that age range, junior high school. I talked to a friend of mind—she was a little younger than me—so I told her, I said, “We can just get on the bus, and we could go out to California.” I had it all planned; it was a nice trip. My parents put their feet down. They said no, no way, you couldn’t do that.

But no, my parents never said that you couldn’t do anything. They were always very encouraging as to whatever harebrained scheme I came up with. School was the worst. You couldn’t ever do anything because you were a girl.

ROSS-NAZZAL: Obviously you proved them wrong all these years later.

LUCID: I was very very fortunate that things changed. It looked really bleak. When I was young, I just couldn’t understand why I wasn’t born a boy. Boys were able to do something in the world. They had opportunities. Being a girl was just useless. I didn’t see any point in it. There wasn’t anything positive about being a girl.

ROSS-NAZZAL: I think we had e-mailed about this several months ago. I read an article about the name Shannon, and how Shannon was a boys’ name really. Now we associate it with women. But that created some havoc for you.

LUCID: Oh, no, that was a very huge blessing, because Shannon was assumed to be a male name. Shannon was my grandmother's maiden name. My mother had always really liked the name, so that's why I was named Shannon. When I would write off for things or ask for information, if it came back addressed to Mr. Shannon Wells, it was always very positive. This was even true when I got out of college, and I was applying for jobs. When I sent in applications and they came back addressed to Mr. Shannon Wells, they were always very positive. But they always asked for a picture to be sent in, so you had to send in a picture. As soon as your picture was sent in then there was no job available.

I can still remember this one job. It was addressed to Mr. Shannon Wells. I fit the job just perfectly. They were so enthused about it, and they wanted me to come for an interview. Then they asked for a picture. I sent the picture in. They sent a letter by Express Mail saying there were no jobs whatsoever available. So it was rather obvious.

ROSS-NAZZAL: Oh, that is kind of bleak.

LUCID: It was a very great advantage to have the name Shannon.

ROSS-NAZZAL: I read that you decided to write a theme essay on how to be a space scientist in eighth grade.

LUCID: Yes. I never really understood a lot of the assignments. We were supposed to write an essay on what we were going to do when we grew up, a vocation, some kind of job. You were supposed to say the kind of jobs that you could do and how much money you could make. You

were supposed to do a little bit of research. But I wasn't interested in doing any kind of research, and I wasn't interested in finding out what a secretary could do. I was very interested in rockets, and I knew a lot about that, so I wrote mine on being a rocket scientist. I said, "You don't need to worry about it, because if our country really is having a shortage of people in science and technology then they'll even let women come into the field."

ROSS-NAZZAL: What was your teacher's reaction to that? Was it positive?

LUCID: I have no idea. Most teachers' reactions were never positive with anything I did.

ROSS-NAZZAL: Do you think that you were interested in studying space science because of your cousin who was doing those rocket sled tests?

LUCID: Oh, not really. Now John Paul Stapp was my second cousin. He was my father's first cousin and my grandmother, she came from a lot of kids in the family. Her sister married someone, and they were missionaries in Brazil, the Stapps, and so that's where John Paul grew up. I first heard of John Paul, I can still remember sitting in the kitchen, and my grandmother mentioned him because he was the black sheep of the family; he'd gotten divorced. They were talking about the fact that he'd gotten divorced. Just in passing, she mentioned that he was the fastest man on Earth and that he was on the cover of *Look* magazine. So I went and looked it up.

ROSS-NAZZAL: I wondered about him. I know you had made mention of him in the past, and I wondered if he had some influence.

LUCID: Yes, there was a book recently about him, a biography.

ROSS-NAZZAL: Oh, that's right, you had mentioned that.

LUCID: Yes, and it was just real interesting, I learned a lot.

ROSS-NAZZAL: You have an interesting family history. Tell me about your interest in aviation. How did that develop when you were a kid?

LUCID: I decided I was going to be a pilot. We were living in Nanking, and my father went to Guling first to find us someplace to live, so then my mother and my brother and my sister and I flew. It was in a DC-3, and I assume it was one that had been in the war. We were on the DC-3 and we were flying, and it was the most amazing thing I'd ever seen in all my life. I just absolutely loved it. I remember looking out the window as we were coming in to land. I could see this gravel strip out there way down beneath us, and I could see a teeny weeny little Chinese person at the end. He had a red scarf around his neck. I thought, "Oh my goodness, the pilot is going to set us down there." I just couldn't think of anything more stupendous than somebody being able to take an airplane and land it on an airstrip like that. So right then I decided that I was going to be a pilot when I grew up, and the next time I was in an airplane I was taking my first lesson.

ROSS-NAZZAL: How did you manage to swing lessons? You said you didn't know that you were poor, but you were. So how did you manage to get lessons? I know they're expensive.

LUCID: When I was in college, I worked. I worked in the dining hall, and I always got jobs as a babysitter. You went to the employment office. I cleaned house for this lady. Oh my goodness, she told me what she wanted me to do, so I'd do that, and every week I showed up she'd have me do more things. I was watching the kids and doing all the ironing and cleaning the house. Then I told her I was too busy, I couldn't come anymore.

I took summer school at OU [University of Oklahoma] in the summer, and when I was enrolling I noticed they had an aviation class, so I asked the person that was in charge. I said, "Does this cost extra to do this?" She says, "Oh yes, it's \$400 to take this course."

ROSS-NAZZAL: Wow. It's pretty pricey.

LUCID: I thought oh, okay. I just saved my money up. My sophomore year in college, when I was working in the dining hall, I was working one night busing tables with this guy. He was a math major, I can't remember his name, but I remember he was a math major. We got to talking, and he mentioned something, that he was getting paid \$1.25 an hour, and I said, "What?" Because I was getting paid 50 cents an hour. I was just floored.

The next day I went in to the lady that was in charge of student employment, and I said, "Why is so-and-so getting this, and I'm just getting this?" She looked at me, and I can still remember her face. She looked at me like she was thinking, "What planet are you living on?" She said, "Because he has to go to college. He's going to have a family someday; he has to

support the family, so he needs the money. You're just here because you want to get married." I said, "Excuse me. I'm here because I'm going to be a chemist." I walked out, and I thought that's it. I'm transferring to OU. There's no point in going to a school that was espousing Christian ideals, if this was the way you were going to be treated. So I transferred.

My father was so glad. He said, "I didn't know how we were going to swing tuition for another year."

ROSS-NAZZAL: Tell me again what was the name of that school?

LUCID: Wheaton College, it was in [Wheaton] Illinois.

ROSS-NAZZAL: Wheaton College. Private liberal arts school?

LUCID: Yes.

ROSS-NAZZAL: What attracted you to that school?

LUCID: I wanted to go to a really good school, one that you had to apply to to get into.

ROSS-NAZZAL: I take it OU was open enrollment.

LUCID: Yes.

ROSS-NAZZAL: A state school.

LUCID: My parents and I, we compromised because Wheaton College was the best Christian liberal arts college that there was, and they didn't take just anybody. You had to be a good student. You wonder, "Well, how did you get in?" Because they wanted somebody from every state, and I was from Oklahoma. It was interesting. I wrote off for information, and it came back and they required an SAT [scholastic aptitude test] score. I thought hmm, I wonder what that is.

I wrote off to find out what it was. I found out that you could take the SAT test in Classen High School down in Oklahoma City. I drove down there on a Saturday and took the SAT test, and the reading, the English was easy but then the math, I thought, "Hmm, this is interesting." We didn't have courses like that in high school. I did very very well on the verbal, and just abysmal on the math. But they needed someone from Oklahoma; they couldn't be fussy. So, I got in.

ROSS-NAZZAL: Why chemistry? Why did you decide chemistry was the major for you? Was there something in particular?

LUCID: I can remember the exact instant I decided to be a chemist. I knew I was going to go into science, because I wanted to find out how the world worked. One day, and I don't know how I found this out, whether I read it or somebody said it, that water was made of oxygen and hydrogen. I knew that hydrogen and oxygen were gases. To me it just seemed to be the most marvelous thing in the world that you could have gases that turned to a liquid. To think that

some human being figured that out was just beyond my comprehension. Then someone said, “Well, that’s what chemists do,” and I thought, “Okay, chemistry is the world for me.”

Later on, I realized that that was a good choice, because biology was just too much memorizing in the classes. Physics, now that required too much math. I just wasn’t a math person, because I’d turned off at math when I was in the fourth grade. I still remember the instant that happened. We were sitting there, and the teacher was telling us how to do subtraction. She said, “Now you always have to have the big number on top.” I said, “Why?” She said, “Because then you can’t have anything less than zero.” I said, “That’s silly. Thermometers are below zero all the time. You have minus 10 degrees, so why can’t you?” We argued a little bit, and she said that I was just totally wrong. I thought, “Okay, that’s the last math I’m going to do.” I never did any more math until college. I did have algebra. I really liked algebra. When I got to college and I took calculus, I thought, “Wow, this isn’t too bad.”

ROSS-NAZZAL: Really? You just jumped into calculus not having much math? That’s amazing.

LUCID: I took college algebra. I had to take college algebra.

ROSS-NAZZAL: You said you wanted to do research. What were you hoping to do research in as a chemist?

LUCID: I really enjoyed reading anything I could find with science, anything to do with anything. It’s hard to realize how difficult it was to find things back then. One of the best things my mother ever did—there was a traveling salesman, we were still living in Lubbock, that came

around selling magazines. He had all these magazines. My mother said yes, and she bought them. My father was so upset because we couldn't afford it. He told my mother she couldn't say yes to all these salesmen that come around. I still remember. Then my mother said, "Well, Oscar, can you just pay it off? Just pay it off." Father said, "No, you're going to pay the person every week when they come to collect their pennies." It was minuscule.

We got *Saturday Evening Post*, we got *Reader's Digest*, we got, I think, *Guideposts*. There were five or six magazines that we got, because my mother bought from the salesman. It was so wonderful, because they all showed up, and you could read them, and you found out so many things about the world. And the *National Geographic*. I always thought that was one of the best things my mother ever did. Although she cried every time the guy came to the door, because she didn't like interacting with him.

ROSS-NAZZAL: How did your mom get the money? Did she sell eggs or milk?

LUCID: Oh, no, she got it from father.

ROSS-NAZZAL: Oh, okay, just curious.

LUCID: He just wouldn't pay it all off at once.

ROSS-NAZZAL: Were you also reading *Life* magazine at that point? Was that one of the magazines you received?

LUCID: Yes.

ROSS-NAZZAL: I had read something about you had written a letter once you saw the Mercury Seven on the cover.

LUCID: Oh, that was *Time*.

ROSS-NAZZAL: That was *Time*.

LUCID: That was later. That was when I was in high school.

ROSS-NAZZAL: I wanted to go back and ask a couple of other things. I read that you sold your bicycle to buy a telescope.

LUCID: Yes. It was a telescope kit.

ROSS-NAZZAL: What did your folks think when you told them that you decided to sell your bike?

LUCID: I had bought my own bicycle so it was mine to sell. I had picked blackberries and sold them to get my bicycle. I found somebody that would buy it from me, and then I could get my telescope. It came as a kit. Put it together.

ROSS-NAZZAL: What interested you about astronomy? You said you were interested in science.

LUCID: Oh my goodness, everything. I think part of it, I stumbled across some science fiction books when I was in grade school or later, and they just really opened up the world, because I was worried that everything would be explored by the time I grew up. But I figured oh my goodness, here was this whole universe out there, and surely no one will go everywhere by that time. I wanted to learn everything there was to know about the universe.

I remember Mars was going to make the closest approach to the Earth, so that got a lot of play. People were going to be watching. Someone said that they had seen channels, canals on Mars and so that was in the news. I think IGY [International Geophysical Year] was coming up, and that was getting a lot of play in the news.

ROSS-NAZZAL: What are your memories of Sputnik? So many people have just vivid memories from that time period.

LUCID: Oh, I remember exactly the day that it happened, and I can remember standing outside the high school. Thinking the world had changed totally, and that nothing would ever be the same again. It was really a good deal because right then it caused all this hysteria about the U.S. being behind Russia in science. The NSF [National Science Foundation] started different programs for kids. They had some things in the summer at the universities that you could apply to go to. I got accepted at OSU [Oklahoma State University, Stillwater], and I spent six weeks there working in the lab. I just had an absolutely wonderful, wonderful time. That was a direct result of Sputnik.

They had a computer course that you could go down to OU and take. Now this was the great big mainframe computer where you used punch cards. They had two courses, one on statistics and one on computers. I'd drive down to Norman on Saturday. I took these classes. Oh, they were just great. I just had such a wonderful time.

I found a lot of things to go to when I was a junior and senior in high school. Now I had perfect attendance because I wasn't sick. But I had all these excused absences because they had different things at the colleges to encourage people to study science and technology. It was just so great to not have to go to school, and you could go to all these different things.

Science fairs were a big thing then. There was a big push on the science fairs. I was bound and determined that I was going to go to the National Science Fair. Was it the ninth grade? I did a project on regeneration of earthworms, and I got accepted into the Oklahoma Junior Academy of Science. Oh, that was so great. I got to go there and present my paper. Oh, I had a wonderful time that day.

Then I did a project on frogs and got to state, and the next year I did a study of cancer-inhibitive substance and then I got to the National Science Fair. It was so absolutely wonderful, the whole thing. I was at the National Science Fair; it was in Indianapolis, Indiana. I was there with my project, and I was so proud of my project. People come by and they talk to you, the judges, because they have a lot of different questions. This one guy came back and says, "Yes, we liked your project." They were going to take somebody to Antarctica for a few weeks in the summer. "But then we found out you were a girl, and we only take boys." Then the Navy came by, and they said, "Oh yes, you had a good project. But then we found out Shannon was a girl and not a boy." You were going to get to go out on a boat out in California. I said, "Why can't I go? I could go on the boat." They said, "Uh-uh, we can't have females on our boats." I said,

“Well, why? Why?” They said, “Well, because all the stairs are open and if you walk up the stairs the guys can look up your skirt.” I said, “Can’t I wear some pants, then I could go?” No no no, girls couldn’t.

I had wanted to win and not just get to the National Science Fair, but I figured if I was going to go I might as well win.

ROSS-NAZZAL: You might as well take it all.

LUCID: They had the awards ceremony, and it was a supper or banquet type thing. We were sitting there. That’s when I found out that the boys and girls were judged separately.

ROSS-NAZZAL: I was wondering about that.

LUCID: Oh, my goodness. I got second place, but it was in the female category. It was in the girl category, not in the boy category. I was just shattered. What good does a second place do you if you’re not good enough to be judged together? It was really sort of shattering to find out.

ROSS-NAZZAL: I can imagine that. Really that’s a huge slight.

LUCID: Every other science fair there was no difference between boys and girls. I didn’t even know that they had separated the two. That was very shattering.

ROSS-NAZZAL: Did you mention that to your father? What did your dad say? Since he mentioned to you before, “Just be happy with what you have.” Did you mention to him your feelings on that?

LUCID: No. That wouldn’t have been helpful.

ROSS-NAZZAL: Did they go with you to a lot of these events?

LUCID: Oh, no; oh, no.

ROSS-NAZZAL: Did you just hop on a bus and go?

LUCID: Parents just weren’t involved like they are nowadays. But when I went to the regional science fair, that was before state, it was Central State College [Edmond, Oklahoma] then, but now of course it’s university. I drove myself there. We had a car by that time, so I was driving, and I can still remember because I was going on a dirt road. I passed a car, that was the first time I ever passed a car. But at that science fair, one of the prizes, they gave a paperback book. It was the history of civilization. That was the first paperback book that I’d ever owned, because paperbacks were dirty. I had that paperback, and I had it in school. I was reading it, and I can still remember the boys were hitting each other with their elbows and saying, “Look at the book Shannon is reading. She’s reading dirty books.” Taught me not to bring it to school.

I just couldn’t imagine how life would change for the kids when they’d have all this access to all these books. Now it is just so easy.

ROSS-NAZZAL: Yes, it's quite amazing now, isn't it?

LUCID: It's just absolutely amazing, when finding things to read was so difficult during my childhood. It was so hard. I can still remember—it was the fourth grade. The classes were big; there were like 40 kids in the class. Of course I was a Wells, so I was always back at the back, which was a very great advantage. Whew, I was so glad I never was an A or a B last name. W was perfect.

The teacher would call roll, and she kept calling. Every day she would say, "Sharon Wells." That wasn't my name, so obviously I didn't answer. Finally, one day she asked the kids. She said, "Anybody know who this Sharon Wells is?" Some kid says, "Oh, you mean Shannon. She's sitting back there on the floor." Because the books were in the back, I was reading the books. I wasn't disobeying, because she hadn't called my name.

ROSS-NAZZAL: Besides science books, were you interested in science fiction or Laura Ingalls Wilder?

LUCID: Oh yes, I read everything I could find. Everything, I wasn't fussy. You couldn't be fussy. Just if it had words that I could read. My father had some books. One book I really liked. I'm not saying I understood, but it was a philosophy book. I think it was an introductory course to philosophy. Of course I didn't understand it, but I just loved reading about the concepts, how do you really know you exist, and all sorts of things. I'd go out and I'd tell the kids. "How do you know you really exist? How do you know that?" Oh, sometimes they'd end up crying, and

they'd go in. Their mothers would say, "Well, you don't have to play with Shannon if you don't want to."

Then I learned the word epidermis, and I said, "Oh, your epidermis is showing today." They would go in crying. When I found out that it takes 8 minutes for the sunlight to get here, and so then I would ask them, I said, "How do we know the sun hasn't already blown up?" That's not the way to win friends. I just loved reading anything that I could find.

ROSS-NAZZAL: Sounds like it. I wanted to ask you about following the early space program and the selection of the first group of astronauts, the formation of NASA.

LUCID: It was really a downer because these were all guys. You didn't feel like you had a place. There was no place for you. When I was getting ready to graduate, NASA had put out some advertisements that they were trying to recruit the best people to come work for them. Of course I applied, but they weren't taking any females.

What was really interesting, I was working one night in Mission Control with Bill [William D.] Reeves. He was the flight director. He's from Arkansas, but he had gone to OU. Turns out we were at OU at the same time.

ROSS-NAZZAL: Oh, were you?

LUCID: But he hadn't gotten kicked out of the first grade, so he didn't graduate till '64. I graduated in '63 since I'd gotten kicked out so many times of the first grade. But he got accepted in that program. We had both applied; he got accepted.

ROSS-NAZZAL: Was there a specific name for that program? Do you remember?

LUCID: No. I don't even know if it was a program, or if they just sent out flyers and you saw them. They were just encouraging people to apply. I'd written off for information.

ROSS-NAZZAL: It worked out in your favor, I think.

LUCID: In the long run it really did. It worked out much better because I might have been stuck in a building with no bathroom.

ROSS-NAZZAL: Yes, in a building with no windows. That's very true. You had written that letter to *Time* magazine. I wonder do you want to put that on the recording about the cover of the first Mercury Seven astronauts.

LUCID: Oh yes. They were on the cover, and I wrote to *Time* magazine. I said, "Why do we just have men and when will women be part of the space program?" That's when I found out that *Time* actually answered the letters because I actually got a little answer back saying, "Maybe times will change." Some innocuous reply, but it was just so off-putting just to see those guys there.

ROSS-NAZZAL: Did you think about writing a letter to NASA and asking them at that point?

LUCID: No.

ROSS-NAZZAL: No, just *Time*.

LUCID: *Time* magazine was it. That's where all the publicity was.

ROSS-NAZZAL: There were a group of women who had participated in some of the tests that they had gone through. Jerrie [Geraldyn M.] Cobb was from Oklahoma, and she was really pushing for women to be part of that. How closely were you following her story?

LUCID: Oh yes. I saw everything that was written. I followed everything that could be found in print. You wonder now how did I know some of this stuff without the Internet? It was amazing, that you could find out things. I spent a lot of time in libraries looking at all the periodicals, and we had paper newspapers, and there were articles. I followed and couldn't believe the way they were being treated. There was a big spread in *Life* magazine.

It shows the difference in age. What really shocked me, after we were working, after we were here at NASA, we were going on a trip, the Thirty-Five New Guys, and so we were in the Gulfstream, or the G-II. We were flying out somewhere to tour one of the Centers. We were sitting on the plane, this was right soon after we'd gotten there. There were several females on the plane. They had just found out about the Mercury 13 program and that women had applied to be part of it and had been rejected. I didn't join their conversation but I thought, "What, you had never heard of that? You didn't know anything about them?" Of course I didn't say anything. It just struck me that we were in different generations.

ROSS-NAZZAL: Yes. You definitely had a lot more life experience.

LUCID: The person was a fair amount younger than I was. I just couldn't believe that they didn't know that. On the same trip then somebody in that group had said they never read *Carrying the Fire*, Mike Collins's book. They mentioned that they thought that'd be a good book to read. I thought, "What? How could you be here if you hadn't read that book?"

ROSS-NAZZAL: Not everyone had been thinking about the space program that long.

LUCID: But that was a recent book. That was beyond my comprehension.

ROSS-NAZZAL: I can see it, knowing what I know about some of the other folks that were in your class. I think this might be a good place to end, but I want to ask you this one question, because I've asked several of the other women this. The women's movement was going on. As you pointed out, you were a little bit older. But what did you think of feminism and this movement to bring more equality for the sexes, given your experiences? You experienced a lot of bias.

LUCID: Oh, my goodness. I wanted equality. All I wanted was just to have a chance. Now when I graduated from college in the summer, and I was taking inorganic chemistry that summer, I went up to my professor two weeks before I was going to graduate, and I said, "How do I go about getting a job? I'm going to graduate in a couple weeks. So how do I get a

chemistry job?” He just looked at me and he said, “What? You’re planning on working?” I said, “Well, yes, that’s why I majored in chemistry.” He looked at me and he said, “You’ll never get a job.”

He knew I wasn’t a slacker, but he was right. When I got out of college the first job I had was changing diapers in the old folks’ home. When I had to quit NASA, I came home, and I told the girls, I said, “Well, life is coming full circle, because now here I am back,” because I was taking care of Mike and changing diapers. They both said, “Wow, so glad we never worked in a nursing home, so we wouldn’t end up coming full circle.”

ROSS-NAZZAL: Do you consider yourself a feminist? Is that a title that you would support?

LUCID: What do you mean by feminist? I believe totally in equal pay for equal work.

ROSS-NAZZAL: That’s what I associate it with. It’s become a very negative term.

LUCID: I really thought that it wasn’t that women were better, and they should get more. It’s just that we should all have equal opportunity, equal access.

That’s why when we did PRs, I never would go where it was just for girls. I told them. I said, “Look, I’ve got a boy. If we’re against discrimination, how can we be talking only to girls?”

I was always thinking that boys and girls should have equal opportunities. Legislation was being passed that you couldn’t discriminate. Another friend of mine, we were desperate to find jobs. We were postdocs, and we were so desperate to find jobs. Then lo and behold, we

heard somebody was hired into the labs. We said, “What happened?” We went down to the personnel office and said, “You’re required to advertise jobs. Where was this job advertised?” because they just gave jobs to who they wanted. They said, “Oh, we advertised. It was in the Sunday paper.” It was in the houses for sale. They had met the requirements. “You should have looked there, and then you would have seen it.”

ROSS-NAZZAL: Oh no. Is this when you were working for Kerr-McGee?

LUCID: No. I was at OMRF [Oklahoma Medical Research Foundation] then.

ROSS-NAZZAL: I think this might be a good place for us to stop. We can pick up with OMRF next time.

LUCID: Okay.

[End of interview]