

**Oral History Interview of
Donald Haragan**

**Interviewed by: David Marshall
August 17, 2011
Lubbock, Texas**

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Transcript Overview:

This interview features Donald Haragan, professor of geosciences and atmospheric science and former President of Texas Tech, who discusses his early life, education, and his career as a teacher and administrator.

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David Marshall (DM):

The date is August 17, 2011; this is David Marshall interviewing Don Haragan at his office at Texas Tech Lubbock Texas. If we could just start by using your full name, and date, and place of birth.

Donald Haragan (DH):

Well, my full name is Donald Robert Haragan and sort of professionally, I've gone by Donald R., the middle initial--but really, to most folks I'm just Donald, and that's what I prefer. I was born and raised in Houston, Texas, and I was born in 1936. My parents actually came from Arkansas, only a few years before that. They were married in Little Rock, and at the time it was-- jobs came very hard. Neither of my parents had a university education; they were simply high school graduates, and when they got married in Little Rock they were actually living with my grandparents. So, jobs were hard to come by, and my dad—I guess it was around 1933 or 34'—was offered a job with Avid Laboratories as a salesman and the territory that he was offered was in Houston, Texas. So they ever imagined they were going to leave Arkansas, I don't think—but they left Arkansas and moved to Houston and it turned out to be a fantastic opportunity for my dad—he was a fantastic salesman, and he did an excellent job with Avid Laboratories all of his life. He died early—he died at age 65, but until the time he retired, he was one of the top salesmen for Avid Laboratories—in the country. I don't know--he had a trophy case there at home that was unbelievable for all the—the awards that he had got. I think a big disappointment to my dad was the fact that he was never made a managed sales manager. And the reason was there were people who had college degrees and he didn't. And I think he really resented that. He never expressed that. And when you look back, it might have even been a good thing, because it would of really taken him really out of direct sales, and that's what he did best. I mean, he was a—he was a people person and people truly liked him, liked to deal with him, and so he—he did quite well. My mother played the piano—I guess she's probably the reason for my initial interest in music—that's why I've had interest in music all my life. I played the piano, I sung in barbershop quartets, I've sung in church choirs, I just—music is just one of my things. And my mother, for the most part she worked as a secretary during the early years. I was born in 1936, and that was actually—they were actually married, I think, in 1926, so it was ten years before they had any children. And I was born in 1936, and my mother was working at the time, and I sort of lived with an African-American house keeper that we had, and she was—she was just part of the family too. And it broke everybody's heart when she moved to California, and then my mother quit working at that time and my dad was doing reasonably well. And we actually built a house in 1939—my dad built a house in West University Place—in western Houston. And at the same time that was sort of the end of Houston. West University Place was the western edge. It's still—I mean it's a fallacy in itself. It's West University Place, Texas, although the post office is Houston, Texas. But they still have their own police force, firemen, and things. Anyways, -- I don't think my dad ever thought he was going to make it. I remember—going through all the papers when he died, and he built that house for—I think it was seventy-six hundred dollars It

had a two-story brick structure, and it's still standing today. It's been added onto and my daughter just wrote me an email a couple of days ago. She was doing some sort of real estate research—I don't know why she was doing that at all. In fact, I don't know why she got into this because she was telling me that, that house—same house in Houston right now, is for sale—I think she said for eight-hundred and fifty thousand dollars (laughs). Anyway, once she worked at a place where they tore down a lot of houses just to get the real property, and they build new houses on the property. But my dad died in 1969, I'm getting a little ahead now, but just for staying with the history of my parents, my dad died at age 65 in 1969, and that was the same year, as a matter of fact, that I moved to Lubbock. My mother stayed in that house—big ol' house—for another several years and we moved her to a place called the Hallmark which is sort of like Carillon here; it's a health care, life health care-type facility, I guess—a beautiful place, and she made—the best move we ever made. She loved it—just loved it and she lived there for more than twenty years. She was ninety-five when she died. So she lived without my dad for quite a while. She made so many good friends there which is just—a really, really good move for her.

DM:

Let me get their names too.

DH:

The names of—

DM:

Of your parents.

DH:

My father was Donald William Haragan and he was also called Don. When I was a little kid I was called "Donnie" to separate me from my dad—and my mother's maiden name was Thompson. Mary Louise Thompson. She was always called "Mary."

DM:

And how many siblings were there? Any brothers and sisters?

DH:

Let's see, I had a—of hers or mine?

DM:

Your brothers.

DH:

My brothers. I had—I just had one brother.

DM:

Oh, okay.

DH:

Yeah.

DM:

You're the oldest?

DH:

I'm the oldest. My brother's about five years younger than I am, and he's retired and living and all.

DM:

Okay, now.

DH:

I went to school at West University Elementary school which was quite a distance from my house, but in those days, you know, sometimes we didn't even lock our house. We didn't worry about the kids being outside and playing. We had a park right across the street from my house, and when I was a little kid, we used to go play in the park every day. And my dad—when he'd get home in the evening he'd whistle for me and that meant, "Bud, get home, it's time to get home." But, you know, there was no one over there looking after us, no one afraid that someone was going to come and run off with us or something. It was just different—different times and we knew everybody in the neighborhood and everybody in the neighborhood knew us. It was just—and we moved into that neighborhood, built a house in that neighborhood at about the same time as everyone else.

DM:

Okay.

DH:

Yes. We were just sort of a neighborhood family.

DM:

Yeah. Were there any particular influences—family influences in your life at this time? Whether political, or religious, or anything that really might have affected your development—early development.

DH:

Well, you know I don't know—religion is something that has really interested me recently, although I'm not a particularly religious person—in a sense of church, "God Almighty." I think I'm a spiritual person but not necessarily a religious person. But at that time, you know, we went to Sunday school, First Christian Church. My mother was much more connected to the church than my dad. I don't think he ever went to church, and then when I was a teenager, thirteen or fourteen years old, I got into a church basketball league, which was the West University Baptist Church. All of the kids went there and I wound up playing basketball—we were a really good basketball team by the way. We won the city—

DM:

(laughs) that's a big deal.

DH:

I was probably at least a hundred pounds lighter at that time (laughs). So I played pretty good at basketball. But anyway, I didn't start going to the West University Baptist Church but my mother kept going there down to First Christian for a while. I'd go with all the kids on the team. But I've never really been that—I sang in the choir a couple of places, First Methodist Church here when Gordon was directing that chorus. But I really enjoyed singing good music—they really had a good music program there. But I had enough religious influence I guess at that time, it made me really interested, particularly in science and religion, science and spirituality, and the connection—of the two. The other strong influence was music; as I've told you, my mother played the piano, so music has always been an important thing to me.

DM:

Did you ever think about making a career of it?

DH:

Not really, no. I don't think I ever had ever wanted a career—

DM:

Just trying something out?

DH:

Yeah. My parents weren't that straight-laced. They were not really hard disciplinarians. We had a great family atmosphere—I just remember everyone getting along well; occasionally my dad would have to take off his belt and give me a few swats (laughs). Of course, I got a few swats at school as well (laughs). But it was never—well, we had a really good family atmosphere, I never had any problems in that resort.

DM:

Now, you mentioned that he had a problem with—the people who were getting promotions because they had a college degree.

DH:

Yeah.

DM:

What was your opinion towards higher education? What were you thinking? Did you have any aspirations toward higher education as a child?

DH:

I didn't. But he did for me.

DM:

Did he?

DH:

Oh yeah, oh yeah. That was one of the things that he was convinced held him back, even though I think—you know, he used to tell me all the time, "Everything happens for the best." That was one of his favorite things. When something goes wrong, everything—he was a real optimist. Everything was going to happen for the best, and I think in his case it really did. I think that he was better off, staying where he was as a salesman, because he was so good at it. And Avid Laboratory was very fortunate, because they could keep him. But there's no question that, in his mind, he saw some other people around him being promoted at the manager position, and that didn't sit with him very well. I'm not sure that anyone outside of the family recognized that. I don't think he ever said anything; it was just inside of the family, we knew that he had some disappointments.

DM:

But, his reaction to it was to make sure that—or to hope that you got a higher education?

DH:

Absolutely, absolutely. You know, I was very fortunate as a kid, because my dad was able to provide for the family and he was—he was just a really neat, neat guy. He got sick early in his life; he had some sort of infectious abdomen that no one really—could ever figure out. And he finally died of heart failure in 1969 but—it was really related—I'm pretty sure to all of the problems that he had had. I mean he was on oxygen, had this asthma that they just never could figure it out.

DM:

Did happen to die before or after you came out to Tech?

DH:

Well, that's interesting. I came out to Tech in August of 1969. He came to visit me in October of that year—he and mom drove from Houston, out here to visit with us. And—in November, I guess, just shortly after they got back home from the trip, that he—died. So—it sort of was roughly at the same time—when I moved out here.

DM:

Did your mother express opinions toward higher education when you were a child?

DH:

I think she just always assumed that that was going to be the case. We never talked about it, you know—but it was just the assumption that I was going to go to college, and most of all the kids that I associated with were going to go to college—that was just the thing to do.

DM:

So you grew up with it, you didn't make a firm decision at eighteen, or anything like that—

DH:

No, not at all. It was just sort of understood by everyone that when I graduated from high school—it was Lamar High School in Houston—that I was going to go to college. And at that time—Lamar—I guess there were maybe—I could count them on both hands for sure—probably seven or eight high schools in Houston at that time; this was in 1954, when I graduated from Lamar. We won the state championship in football that year, as a matter of fact—beat Odessa in the new Rice Stadium. I think we beat them twenty-seven to nothing. I wasn't a football player, but that was a big deal for Odessa to lose in the state championship. And practically all of that football team went to the University of Texas—I also went to the University of Texas. That was another thing, that growing up, I don't know, everybody just—we thought that, my whole high school, most of us wound up going to the University of Texas. There were a few that came to Texas Tech. One particularly that I knew well in high school, her name then was Arnece Vain,

here name now, Arnece Reynolds. She was a cheerleader here at Texas Tech at the time. She came here, one of our football players, Lynn Elliot, came to Texas Tech, but I just didn't know many people who came to Texas Tech. The University of Texas was the—we had a few groups who went off to Texas A&M.

DM:

What about the University of Houston? Or Rice?

DH:

My mother wanted me to go to Rice. She really wanted me to go to Rice. I'm not sure that I could have gone to Rice then—maybe. I was not an outstanding student, except in science and math, because those things really interested me and I could get excited about that but—I didn't—I've always did pretty well in languages, too; I never had much trouble with that. But when it came to studying English, history, and physics—if it didn't interest me, I didn't spend any time on it. So when I graduated I think I was in the—lower probably in the lower part of the second quarter of my class, and at that time I'm not sure there were any entrance requirements at the University of Texas. I don't remember—we didn't take any tests at that time. The SAT—

DM:

No SAT?

DH:

Never. No SAT—we didn't take any tests. I just applied to UT—that's the only school I applied to, and got in.

DM:

And no indication of—percentile of class? Admission by percentile of class?

DH:

No, I don't think there were—I don't think at that time, really—I can't tell you for sure—but I don't remember there being any selection—maybe there was—maybe there were some people that were turned down; everyone I knew that wanted to go to The University of Texas, did. But if we could back up a little bit—when I went to West University Elementary School—that's where I went. That was a wonderful experience for me. I could still name every teacher that I had at West University Elementary School—I can't do that for later on. But, you know, when you spend a year with—and there were some teachers that I can't—I don't know what influence they might have had, but there's no question that a couple of these teachers, particularly, really had a strong influence on me.

DM:

And can you give a couple of examples? Preferably with names, and you might not know their first names.

DH:

My fourth grade teacher was Peggy Pegoda, P-E-G-O-D-A and—and, you know, I was kind of a class clown, I guess in a lot of ways, I still am a clown, but I just—right off, I became one of the teachers pet's so-called, but she really liked me and I became her—she was big on gardening. And I became among the people—we had a group of kids in the fourth grade that helped her with her garden. It was the first time really that—I guess I really felt that I had a job. You know, and my job was to take care of things, and if I didn't take care of what she asked me to do, it was going to be my fault. So you know maybe that was sort of the first feeling I had for real responsibility. Knowing somebody expected something of me—and I better do it. Aside from normal things like at home, when you make your bed and you do certain things that your momma says, you need to do. But here was someone in school, a teacher, that gave me some responsibility in things that I wanted to do.

DM:

So, it started with the school.

DH:

Yes. It started with the school, right outside of the classroom.

DM:

How old were you at the time?

DH:

Let's see, fourth grade. What are you?

DM:

Let's see, I guess you'd be about—

DH:

Nine?

DM:

You'd be about nine or ten years old.

DM:

This must be at war time.

DH:

Oh yeah.

DM:

Again—well, let's see, '36 or close to it. I wonder if it was—was it a Victory Garden?

DH:

Well it was 1945; it was right at the end of World War II.

DM:

Was it a Victory Garden, you think?

DH:

Well, we had a Victory Garden at home. Yeah, we grew vegetables at home. A real Victory Garden, that's what we called it—during the war, my dad was the neighborhood warrior. We used to have blackouts, trying to practice for if we ever were attacked, and everyone would have to shut off all the lights in the neighborhood, and my dad used to take me—because he was one to go around and check to be sure that everybody—all the lights were out and that whatever appropriate procedures had been taken. And I used to go with him. And that was a big deal. You know, I didn't really understand much about the war—I remember that when the war started I had a little Japanese friend; I'm not sure when this was, this must have been '42, about the time I started school, I guess; a little Japanese girl that lived about a block away, and I guess it must have been maybe in kindergarten that I met her. But when the war started with Japan, she was sent to California and put in a concentration camp. And so I never saw her. That was something that later on my parents explained to me “Whatever happened to Riko?” Well, what happened to Rico was something that at the time—of course, we thought we had to do it. It was a very sad time in history for the country.

DM:

That age, must be an impressionable age. Did you experience any fear when they talked about blackouts? Did this come across to you as an imminent attack? Or did you not think about those things?

DH:

You know, I don't remember thinking that way at all. I think it was just because I really didn't understand—six years—five or six years old—you know, I don't think anyone ever sat down with me and tried to explain to me what was really going on. So, I don't remember feeling any fear. It was just something that was happening, and my dad was a part of some—and of course later on, as I got into grade school—I became very aware of it, and my fifth grade teacher—after Pegoda in fourth grade—my fifth grade teacher was probably my favorite teacher that I ever had.

Her name was Jessica Dickinson—Ms. Jessi—she was not married, that was her first name. She's one of these teachers that even as late as college, after she had retired, she lived in Dallas and I went to her house to do [inaudible].

DM:

Yeah.

DH:

But she was probable one of the best—best teachers I really ever—she got me interested in things that I didn't care much about—and it may be even the first time I really started thinking seriously about science. And at that time we talked about geography and physical geography and earth science, and I really started getting interested in those things—and I think probably Miss Dickinson was the person who really got me started—on the academic road when you're that age—I was what, ten? Ten or eleven years old. But she made a big impression on me.

DM:

What quality did the teacher have to provide that kind of inspiration?

DH:

She cared. You know, I think more than anything else, she cared about the students—she cared about what happened to you when you weren't in the classroom. She'd call and talk to mothers and she had meetings. My mother was big on PTA stuff, and so was she, on students. She loved to meet with the parents and talk about the kids and would write notes regularly. Not just notes saying anything bad, but notes saying the good things as well.

DM:

And I suspect the child would pick up at least as quickly as anyone, maybe quicker, on that kind of personality.

DH:

And I think still today that's what the really good teachers at that level are teachers that gave hugs—teachers that really care. Of course, you get in trouble by giving hugs these days; you have to be kind of careful about that. but in those days it wasn't, I mean, she was kind of a second mother to me. She cared. So those were probably two of my favorite teachers and when I was in the fifth grade with Ms. Dickinson was when they had the tremendous explosion in Texas—oil refinery explosion that killed a lot of people. And Ms. Dickinson was also a nurse. And she disappeared—I don't remember for how long, but we had a substitute teacher for a while because she was down in Texas City to tend to them. And for whatever reason, that made a big impression on me at the time too—that she would do that. But at that time West University Elementary School was on the same campus as Pershing Junior High school on the same block.

So it was an elementary school on one end and a junior high school on the other end. And when I started seventh grade in the junior high school, I started at Pershing. By the time I got to the eighth grade they had built a new junior high school, which was way out in Bel Air. And I don't know if your familiar with Houston at all, but West University and Bel Air—they sort of butt against one another but I lived in the far—Bel Air was more to the south and west, and I lived more to the north and east at the edge of West University. So to go on, it took several miles for me to get to school. But how old are you in the seventh grade?

DM:

Twelve or thirteen.

DH:

Twelve or thirteen. I used to ride my bicycle to school; all of us did from there—rode our bicycles to school. No one worried (laughs). You know, it's just different times—you wish sometimes—in fact, I say to myself so often that I think I grew up at the best times there ever was in America, the best times.

DM:

Lived in a golden age.

DH:

I look at what happened today, and it's just amazing—no one ever thought at that time about not having a mom and a dad at home. Sure, there were some divorces but I mean, you know, it was not to the extent that—you know—today fifty percent, I guess, of marriages don't work. I don't think that people even really thought of that, you know—for better or for worse or what not—it's just people made a commitment, and they kept it. So I had never even thought about the fact that my mom and my dad might separate.

DM:

Speaking of these things, when did you meet Willie? Was this early on in school? Or?

DH:

That was much later.

DM:

We'll talk about that later then. Let me at least get the year that y'all married so that I can know when to work that in.

DH:

Well, we married in 1966.

DM:

Sixty-six?

DH:

Yeah, just three years before we came back to Lubbock. We had our first daughter in 1968. So when we moved to Lubbock we had a one-year-old.

DM:

There you go, you already had a family. (laughs)

DH:

Yeah, that was—there were a lot of bridges before we met. (laughs)

DM:

Another early influence you mentioned was music. When did you start playing the piano?

DH:

I was playing piano lessons when I was five. And my dad bought—he was so proud of this—a grand, baby grand piano. And I learned to play on a baby grand piano and my teacher, her name was Ms. Pollen. She later married and became a director. And I think I took piano lessons until baseball won over (laughs). And I was probably—I took piano lessons until I was fifteen. And at that time—you know it was like all classical music, and a Houston Music Teachers Association had these contests they sponsored. And I was always entered in the contest. I don't know that I was really that good. I guess at that time I probably was pretty good. But it was mostly memorizing classical pieces. I played a lot of Beethoven and Mozart and it was fun. It was not music that was particularly excited me. Although now Beethoven and Mozart really do excite me and probably had I not done those things they wouldn't today.

DM:

Did you experience a gap? Because I've noticed that these early influences in classical music come back around and it sometimes took a while for them to come back around.

DH:

There was a big gap. All that time I was an undergraduate I didn't have a piano and it wasn't until I got into graduate school that I actually purchased one and started playing it. But anyway that particular year I forgot when it was—maybe it was 1947; I would have been eleven years old. I was in the junior division of a Houston Music Teachers Association contest and the winner of that contest won a grand piano. I came in second (laughs) and I got a trophy.

DM:

A grand piano? Amazing!

DH:

And I even saw that certificate not long ago. I was going through some old files that my mother had given me when she died. And I found the whole certificate—second place in Houston. And I remember we were shooting for a grand piano and we got a trophy (laughs). But anyway, I later on played with a little jazz band when I was in high school. Not very seriously, and we weren't very good, but we'd go play at some of the dances and what not. I never really got real excited because I'd rather be out there dancing than I would playing in the band (laughs) and that went on for a while. And I never really got into jazz piano, so I'm not really—I loved listening to jazz and probably I'd like to play in a jazz band now, if I had anybody who had the patience to help me learn. But music is meant for us. I love classical music, I love good jazz. I'm not into some of the latest fads that the kids are into—you know hard rock, rap (laughs). No I don't rap. But I think music is still really important to me.

DM:

So, you still play?

DH:

Oh yeah, In fact I have that same piano that I told you my dad bought.

DM:

The baby grand?

DH:

It's in my house here. We moved it to Lubbock.

DM:

Oh that's wonderful.

DH:

What else? There was something else I was going to say about Purjing. I can't remember.

DM:

Did you ever come back to the interest in math and science with the interest in music? Was it kind of a Pythagorean in music?

DH:

Yeah, later, when I was doing Fourier analysis and statistical analysis just because, you know, they were pretty close. In fact, the cutting edge in physics today—they're talking about string theory. And string theory has to do with the sameness of the particle and a wave. We've always described light in terms of a wave theory or the particle theory. String theory is pulling those things together. So harmonics definitely is a relation particularly with statistics and with music. So the answer is yes, I guess that's why I got interested in some of the things I did later.

DM:

Who would have thought that, when you were doing your lessons at age five or six, that this would have some application (laughs) from your academic life later on?

DH:

Exactly, I went to Lamar High School in Houston which was on Westheimer and right at the edge of what at that time—and I guess still is—the elite neighborhood of Houston called River Oaks. They used to say that it's the—River Oaks Boulevard was the only street that had a country club at both ends. And at one end was the River Oaks Country Club and at the other end was Lamar High School. So, at that time the very wealthy kids didn't necessarily go to private school like they do today. We had a lot of them right there in Lamar.

DM:

So this was a good opportunity.

DH:

Yeah, and I met and still have a lot of good friends. We stayed both sides of the track. I lived on the other side of Lamar, West University Place, which wasn't nearly as wealthy as Unity, and of course River Oaks. But Harry Cullen—Colin Parr was one of my good friends in high school, Walter Fondren, whose grandfather started Humble Oil and Refining Company. So I had a lot of good friends who were very wealthy, but at that time, who cared? Nobody really cared, they knew that their parents were very wealthy and what not but it didn't seem to make any difference in relationships.

DM:

Good, good.

DH:

I think today, that would probably be a different situation—a lot more envy, maybe even jealousy. And in some cases probably for a good reason, I don't know. But anyway, back to then it didn't matter where you lived. We all were pretty close. So I spent three years at Lamar.

DM:

Was there an advantage due to the curriculum or the faculty at Lamar?

DH:

Lamar probably did attract some of the better teachers—I remember I had some good teachers—the ones I remember from Lamar primarily in math and science. I remember, though, I took—at that time we didn't have many physics teachers. Biology and chemistry had a lot of teachers that knew quite a bit about biology and chemistry but there weren't many physics teachers around. Now, I took physics from a fellow by the name of Kent [inaudible] and he was really a biology student. And he used to say, he figured I knew more physics than he did. But anyway, I took all the science and math that I could in high school and like I said I did pretty well in that because I really cared—I really got interested in the rest of the stuff I didn't really care much about. They had a really got music program too—a lot of the girls were in an organization called The Chordettes and they still have reunions—they have reunions every year. And I'm now a member of the Lamar Alumni Association. In fact several years ago they had named—I was named as a distinguished graduate of Lamar High School. Knowing full well that there was nothing distinguished about me (laughs) when I went to Lamar. But they were trying to build an alumni association—is what they were trying to do and I thought that was a great idea. And Lamar is really a good public school now. They do really well, in fact, my old friends and I recruited pretty hard at Lamar—tried to get the good students—they've got as many as I would like. But it's a good high school today. It's one of the high schools that had the International Baccalaureate, also and we in the honors college a couple of years ago had such a good program, and it's worldwide, and everybody does the same curriculum—write up a thesis. So we decided that we here in the honors college would accept anyone with a certificate certified from the International Baccalaureate program. Now, they didn't even have that back when I was in school.

DM:

And how many schools have that program?

DH:

Well, there are quite a few schools around the state now. I think we only have one here in Lubbock, and that's Lubbock High.

DM:

Okay.

DH:

And that's the only one in Lubbock.

DM:

Did your interest begin to become more refined during this period? Did you start looking at field sciences, atmospheric sciences?

DH:

What time are we looking at?

DM:

Graduate school or undergrad.

DH:

When I went to undergrad school I got into engineering, simply because I didn't know what I wanted to do, really. I knew that I was interested and math and science seemed easy to me and I enjoyed those things but I didn't really know what I wanted to do in college. Like I told you I was not an outstanding student in high school at all. But it was just expected that I'd go to college and my dad thought that engineering might be a good place for me. So I started out in engineering at the University of Texas—air space engineering was my choice. When—in the first couple of years, I wasn't taking engineering courses anyway. My first year and a half I was not a very good student at all. In fact, I was requested to leave the University of Texas after my third semester. I went on scholastic probation and it's primarily because I just—didn't really care. I wasn't excited about the courses that I was taking and—most of my friends at that time were—sworn into a fraternity. I never really had any interest in that and nobody could understand why I never went through rush. Most of my good friends became Kappa Sig at Texas—I did a lot with them. I had a girlfriend at the time—not the one that I married (laughs) and I just had a lot of interest outside—I didn't know really what was happening—I missed a lot of classes, in fact I failed an English class where I made an A on everything—we'd write papers—I made an A on every paper I wrote—I didn't have any problems with writing but I flunked the course because I had too many absences (laughs). So, it's safe to say I was really not a good student. So, after that third semester at the University of Texas—I went out on probation—I requested to [inaudible].

DM:

How many times in your career here, have you seen this very thing with students where they're a year and a half or maybe two of just difficult—

DH:

Oh, a lot.

DM:

--lack of direction because they're trying to figure out who they are. It's a weird age it seems.

DH:

Well, individuals mature at different times; we can't assume that age determines maturity. Age doesn't determine maturity (laughs). And in fact I still have a lot of interest—I still care about the science courses. I enjoyed some physics courses as a freshman, all engineers did. And actually my first semester I did really well. I guess because it's a new experience, I was excited about being at the university. But I got bored with a lot of the stuff that I had to take and I just—for whatever reason—didn't do whatever. But when I flunked out of the university, I got home, my dad told me, "Well, you're going to have to make up your mind with what you want to do." He said, "I've given you all of the help that I can"—and he did—I mean, he essentially paid my way to the university—he said that "I'm not going to do that now, if you want to go to school you're going to have to go to work." And I really thought. I've always had a paper route. I started doing papers when I was eleven and bought my first car with money that I made on my paper route. It wasn't that I didn't—I just always figured—you know, I never thought it about that much. My dad paid for this education and I made an idiot out of myself and disappointed him. So I did go to work. I went to work for Sherwin Williams Paint Company delivering to construction projects all in Houston. These big fifty five gallon drums of paint and let me tell you, that was work. And I decided that, that was not something that I wanted to spend my life doing. So after I laid out a semester, I went back to UT and my record after that was really a stellar student record.

DM:

A good dose of reality at the time (laughs)

DH:

And I started working—I was doing help as a student assistant at the university so my dad started helping me again but only if I can help myself too. So I learned a big lesson and a lot of us did—it was a good time to learn a lesson. So I went back to school and stayed in aerospace engineering and took an electric course in atmospheric science and meteorology. And just really got hammer and changed my major. Meteorology at that time was in the college of engineering, they offered a bachelor's in atmospheric meteorology. It was one of the more demanding degrees. It was one-hundred and fifty-three hours for the undergraduate degree. I had to take a lot of physics which I loved and a lot of math which I loved. So I really just found my place. And I graduated—well we would say a year late. But it took me five years to graduate but one-hundred and fifty-three hours takes a while—it was a one-hundred and fifty-three hour program and I went summers. So it took me five years, I got out in 1959 and my last year as an undergraduate at Texas, I was working on a research project with one of the professors in the department. And at the same time I graduated with my bachelor's degree in meteorology from the University of Texas. He left to become a professor at Texas A&M. And he invited me to come with him and offered me a research assistance position at A&M so you know—what can you say. So I went to pursue a master's degree at Texas A&M.

DM:

Well there's a time where you turned everything around right there. See your professor invited you to—(laughs)

DH: Well, you know I thought of that but—what a different atmosphere from the University of Texas in Austin to Texas A&M in College Station. And at that time this was in 1959. College Station—it's safe to say was nothing except Texas A&M (David laughs). Texas A&M today of course has between forty-five to fifty thousand students. College Station has really grown up but at that time Texas A&M had seventy-five hundred students. Tech was bigger than A&M.

DM:

And A&M was all males, wasn't it?

DH:

It was all males. And all of the undergraduates were in the core. So as graduate students of course, we didn't have to mess with the military but I—my research assistant position paid me one hundred and fifty dollars a month. I lived in a dormitory on the campus because that's what I wanted to do. And I think the room was maybe fifteen dollars a month, it was not much and we had bunk beds. And my roommate was an aggie undergrad student so he had priority over me. So I had to take the upper bunk. And the rooms were—well it was military. It was a military room, a military bed, the two rooms—you shared a bath in between and the bath was a big long strip and down at one end was the toilet and down at the other end was the shower. And there was a drain in the middle (David laughs). Anyways, it was right across the street from my office. I had an office there in the building in the oceanography and meteorology department.

DM:

We're you working in a lab? Or were you teaching?

DH:

I was really working with—no I wasn't a teacher—it was all research. But I was working on a research project with—in radar meteorology which is relatively a new thing now. We were working with—radio waves and the impact of the atmosphere and moisture in the atmosphere primarily on the propagation of the radar.

DM:

Was there federal funding for this type of project?

DH:

Yeah. It was a well-funded project. But of course, I didn't get the funding (laughs), the professors did. Yeah it paid my way through A&M. But I finished in just one calendar year and I got my master's.

DM:

Oh really? Oh.

DH:

And primarily it was because—it was nothing else to do except work and study. That's what I did. Every night I was in the office studying—in fact a bunch of grad students were—and we would maybe go get a beer at 10:30 maybe at night after we finished and go back to the dorm and go to bed. I ate in the—with all the undergraduates in Sbisa Hall which was the mass hall for the core as well as anyone else that wanted to eat there—I had to learn a new language. If you want to eat in Sbisa Hall, you have to know what to call the different foods or—it's family style—it's not fast food. (laughs) So meat is "bull neck," potatoes are "spud," salt and pepper are "sand ams," dessert is "kush." Anyways, you say, "Shoot the bull neck" and you're good—they pass the meat; you can help yourself. (laughs)

DM:

During this year, you decided you didn't want to remain in this military life?

DH:

Well, it was an interesting experience. I really enjoyed it and I learned a lot. I had some tremendous professors and—probably in any single year in time, I learned more that year than I ever had—it was a good experience. I'm glad I wasn't there as an undergraduate—I was never—a military undergraduate—I don't know that I could of remained and did that. But anyway, after graduate school it was fine and I got my master's. And I had gotten another offer to come back to the University of Texas—and the University of Chicago had just agreed to offer a joint doctoral program in astrophysics and they offered me an assistance ship to come back to UT and get into astrophysics. Well, I've never really been in—I was in atmospheric physics but as far as astronomy, it was never a hobby of mine. I had never even had a telescope or anything and I say that because you'll see in a minute—it was interesting because I came to the university to work with a fellow by the name of Gerard Lewis, a French man who was the authority in the world on mars and the atmosphere of mars and he had offered me an assistance ship to come to UT to work with them. Well, it turned out that the grant that he had—he got it back later—but the grant that he had for whatever reason and I don't know expired before I got there. So I was offered the position to work for him on this grant and when I got there, he no longer had the money for the grant. But they made a commitment to me, so they honored that commitment. And my job was to run the university preservatory. David, I'd never looked through a telescope in my life, so that

was something I was going to have to learn and learn quick because that preservatory was open to the public once a week and I had to do the shows and present the—

DM:

Interesting experience, was this right on campus? This preservatory? Or was this before the McDonald's preservatory?

DH:

Well, McDonald's preservatory was there—I don't remember whether UT—I'm not really sure, I don't remember that. This was a 10 inch refracting telescope that sat on top of the physics building. And anyway the job that I had was to run that thing and I knew absolutely nothing.

DM: Well, did you pick up on it (both laugh)?

DH:

So I got busy learning a little about the positional astronomy, and telescopes. It had nothing to do with the courses I went through in astronomical physics, stellar evolution, a lot of stuff I was an interested in, but my job was separate from that. And you know positional astronomy and other than the courses in mechanics, I had taken at Texas A&M—I just didn't know anything. So, like I said, I got busy pretty quick and after that one semester Gerard Lewis got his grant back so for the next two semesters I worked with him on that grant. Well, I'll make this short because after two more semesters in astrophysics, I sort of got the feeling that this was the first class that we'd ever had—a doctoral class in astrophysics and within conjunction, the degree was to be conferred by both the University of Texas and the University of Chicago. And we got to finding out some of the things about the University of Chicago, and the fact that it takes—to get a PhD at the University of Chicago was something like seven, eight, nine, or even ten years. And I really was kind of getting into wondering—"I'm not going to spend the rest of my life in school here." Well, at that time there was another project that came over that was back in meteorology and atmospheric physics. And they offered me a position there. I had my master's degree, I was working on a PhD in astrophysics but they offered me a full time research position. So—and they've got a doctoral research enter there in Austin, and I decided to accept that. It was really good pay and at that time I wasn't a research graduate assistant, I was a research scientist, so the pay was good and I decided maybe I don't need the PhD anyway. So I took that job and worked at that job—I guess this was in 1962, maybe close to '63. I took this job back when they were working on a huge army contract with White Sands Missile Range, looking at some data. We were just beginning to be able to sample the atmosphere higher than the balloons could get by using rockets—really, that were designed after the old V2 rockets in World War II. And at White Sands Missile Range and we were putting instruments on these rockets. And—

DM:

Was Von Braun¹ out at White Sands at this time?

DH:

No, Von Braun, of course, is the guy, the German that did the V2 rockets. He was not at White Sands, but yeah, he was sort of the father of a lot of the things that we were up to. Well, it turns out that, that project that we ran at UT got some very important data that really changed the way—our knowledge about the high atmosphere. And we really thought at that time, that when you go up in the atmosphere, it cools. And everybody just thought that it would cool until you ran out of atmosphere you know—because you were getting further away from the heat sources to really—service the earth. The earth starts with solar radiation but the atmosphere is actually heated from below. So we started getting measurements in what's called the mesosphere—above the stratosphere that temperatures started increasing rather than decreasing. And so, we were really put off with that because we knew there must be something wrong with the instrument because we knew the temperature would be decreasing (laughs). So we started looking at instrumentation—had engineers trying to see what was wrong with the instrument. And the conclusion was nothing is wrong with the instrument and we discovered, in fact because of ozone and high atmosphere that was absorbing ultraviolet radiation that the temperature was indeed increasing.

DM:

So you discovered the ozone layers.

DH:

It was an important part of science and we didn't have any idea. We just happened on like a lot of things that happened in science. But anyways, I was working on that project and then I started—they asked me if I would teach the courses as an instructor in the college of engineering and meteorology. I just had a master's degree so I worked a faculty position—so I started doing some teaching. As an undergraduate I had taken—because I was interested at that time in Russian—of course the war was a big thing—the cold war was a big thing. So Russian was a good language to take. So I had taken Spanish in high school, I decided to take Russian. So I took two years of Russian.

DM:

Let me ask you a question here too. This astrophysics program—this cooperative program between UT, was this Sputnik driven? It was about a year after Sputnik, or two years maybe.

¹ Wernher von Braun, German aerospace engineer regarded as the Father of Rocket Science, influential in the development of the Nazi rocket research and the American space program.

DH:

I don't think so. I don't think that was the case at all. I think that we had people that really wanted to develop a astrophysics program at the University of Texas, and Chicago wanted to grow their program and somehow they made—I don't really think that Sputnik had anything to do with it. The interest wasn't in early planetary stuff, they were interested more in galaxy galactic research.

DM:

And another question, this study of the atmosphere, was it well funded by the federal government because of interest in possible military application for example? Or did you know if it was federally funded?

DH:

It was funded by the army. You're talking about the White Sands project?

DM:

Yeah, right.

DH:

It was funded through army research and I think it was pure research in the sense that we were really trying to go higher in major variables in the atmosphere that we hadn't majored before. But I think the things that we discovered were sort of by accident and I really don't think—you know there might have been some military applications but I don't remember that being talked about. There was a White Sands research laboratory that was actually run by civilians and chief scientists of there. Another interesting thing that just occurred to me—that's where I was when John Kennedy was assassinated and I will never forget because they shut down that base and we were there for 24 hours and we couldn't get off that base because no one knew what was going on. So—

DM:

I didn't realize that. So things actually shut down after that assassination. Kind of like how everything shut down after 9/11.

DH:

The military certainly did because they didn't know what their mission was going to be. That was sort of something that they were going to be brought into. So yeah, all of the military bases were shut down and you couldn't get on or off the base. And so I guess they figured out what was going on but that was a real experience for me. We used to stay in El Paso when we were there and drive out to the missile range—and we went quite often. But anyway that particular day when Kennedy was assassinated, I was there at White Sands (pause).

DM:

And I'm sorry to interrupt you like that.

DH:

No, that's fine.

DM:

You were talking about when you started teaching. Was this your first teaching opportunity?

DH: Yeah, my assistantship at A&M was strictly research and this was the first time that I was teaching undergraduates and at that time we had AFIT students were Air Force Institute in Technology and it was new officers that were being trained to—I guess most of them were actually going into weather or something—so we had a lot of—in addition to the undergraduate students majoring at the time, we had a lot of air force students. So I was teaching as an instructor and taught a course or two. When I was talking about the Russian language, I took two years of Russian and that's a story all on its own, because I'd always started to have—whether it was Spanish or Russian, I could pick up the language and I speak the language without knowing what I'm saying (laughs). You understand what I'm saying? I hear people speak a language and I can sound it—not native, but I can speak it with people—and that's the way it was with Russian. Russian is an entirely new alphabet, and in two years I never became fluent in Russian, but I could read Russian and sound like someone who really was speaking almost fluently.

DM:

So your pronunciation was good.

DH:

Yes my pronunciation was very good and I had a professor—Mishek was his name. He was Czechoslovakian actually, who was teaching Russian and his family had been killed in World War II. In fact a couple of them gas chambered. He was really an emotional, emotional guy. And I remember I would go up and read before the class and he was in tears. It was just—he had in fact told stories. He had written a book entitled, *The Real Told Story*, which I still have at home. It's not a very large book and autographed it for me. But he just a very emotional guy—I loved him but I didn't learn a whole lot of Russian—you know where I could really become fluent in Russian. He was not a really outstanding teacher or maybe—I don't know what he was but I thought I really wanted to take some Russian. The reason I'm telling this story is because—I got back teaching and then I had been taking Russian and I was doing research. The research project was one that would make an excellent dissertation if I wanted to get back into a PhD. I had looked into the land, and at that time two languages were required for a PhD. But they just started allowing computer language to be one and at that time it was FORTRAN, FORTRAN was everybody's language. Now, I was good at FORTRAN, so they'd count that as one

language. I'd made A's because Mishek loved me so much in that Russian class. Made A's in two years of Russian and I wrote an appeal to see if they would count my undergraduate Russian course as my other language requirement without having to take a language test and they agreed. So here I had my language requirement, I was working on something that could become my dissertation, was teaching and I decided what the heck (laughs)—I might as well go ahead and get a PhD.

DM:

Might as well get a paper to go with it (laughs).

DH:

I had to take some more graduate courses which I did. I had as a minor for my PhD, I had already taken a year and a half of astronomical physics—astrophysics. So that was my minor for the degree and then my major was in atmospheric physics and so the PhD to me really came sort of easy. I did stuff that I would have had done almost if I wasn't working on my PhD.

DM:

Oh, that's great.

DH:

So I graduated with my PhD and along the way, my wife Willie was actually—well I met her when I first came back from A&M and that would have been in 1961—I think she might have been there then—or it might have been '62 when she was working. She was actually working on an undergraduate degree in psychology, no English—she worked in the psychology department and also had worked in the psychology department I guess. That's right, when I had first got back she was a secretary in psychology, working on her degree in English. So it might have been '63 before she actually took a job in the department where I was working. And that's where I first met her; she was actually a secretary in the department.

DM:

So it was just coincidental that she was from Houston?

DH:

Yeah—no she's not from Houston. She's from San Antonio

DM:

Oh no I'm sorry I thought she was from Houston. Where did I get that?

DH:

Yeah, she grew up in San Antonio. She was a military brat. So they actually traveled a lot—she had lived in Georgia for quite a while—she was born in San Antonio and then they moved back to San Antonio I guess when her dad retired from the army. But—she came to UT—so she was working her way through school and so that's where I met her, I guess it was 62' or 63'.

DM:

And her maiden name is?

DH:

O'Berry.

DM:

O'Berry?

DH:

Yeah that's her. She was Willie O'Berry. I got excited about her [inaudible] (laughs). And we were married in 1966, and at that time I was still working on my PhD then, and still working on the doctorate, still teaching in the department, and they had a heck of a deal then. And I don't really know about how legal it was—because they cut it off after a while but I was actually working three quarters time—at a three quarter time teaching appointment and a half time research appointment, so I was one and a quarter over time. And they could do that to pay more money to people—because they wanted to more money to you to get around the salary. There was a salary cap that I couldn't go above and I think it was probably really illegal then too but it was a loop hole and they eliminated it after a while. So we went ahead and got married in 1966. We hadn't—I think that's right—I think I was already married when Charles Whitman started shooting people from the tower in Texas. You remember that?—It was '65 or—I'm trying to remember now whether I was married then but Willie and I at least were going together then and she was working then. She had graduated and was working for the IRS. Anyway, from my office in the engineering science building—you can't see the tower anymore—but back in those days before buildings were built between the two, I could see the tower from my office. And we never really had a good view of Whitman's, himself, up there too but we could see something was going on of course.

DM:

How did you hear it?

DH:

Well we heard I guess over the radio or something—well I guess maybe we even heard shots fired.

DM:

Oh my.

DH:

We weren't that far away and you know he killed like twenty-seven people, he shot them all like twice down there in front of the building until they got somebody on him, and finally got him. But I'll never forget—we had a periscope and we didn't want to be standing out in the window because we didn't know if he would shoot our direction (David laughs). We actually had a periscope and we were down below the window and looking at the tower. And like I said, we couldn't see any detail but—when we were watching the tower.

DM:

It's odd the department would have a periscope (laughs).

DH:

Right, I don't know where that one came from. And we were actually in someone else's office when we were doing this—anyway that was a tragic day. So, in '66 when I got married, I was still working for the university and working on my degree. And I finished my degree in 1969 and started—I came here—I had just finished my degree that spring I guess where the degree was actually conferred, So I decided—I had an opportunity to stay on this research project and to stay at UT but I decided to move on. So, I read in the newspaper I guess—or maybe in some research news. I read about some research that was going on out here at Texas Tech and to be perfectly honest with you, Texas Tech was not even a place that I had ever even thought of. I mean they got into the southwest conference in 1966 in football—so the only thing I had ever really thought about Texas Tech was that they football team and played in the southwest conference. I didn't know what went on out here and I never really cared.

DM:

You had never been to Lubbock or that area?

DH:

I had been through Lubbock I guess going to Colorado or somewhere but I had never stopped in Lubbock. But anyway, I read this article about some stuff that was going on in ICASL and there was a guy, I can't think of his name now—I never met him, he left before I got here but they were doing some research in ICASL that had to do with weather modification.

DM:

Let's put it on the recording if someone might listen to this a long time from now so ICASL was it, International Center for Arid or Semiarid Land research? (laughs)

DH:

Land—ICASL—International Center for Arid and Semiarid Land studies, that's it. It's still going on. ICASL still has an office over at international studies—they're not really doing—it's one person actually that does the research but ICASL is something I think that we didn't take advantage of here at Tech like we should have. That's something that really could—arid land research is something that really could have become big here.

DM:

Right, as our water supply diminishes there's going to be much more interest in—

DH:

More than likely. You know I say all the time, water is going to be a problem long after we solve our energy problem. But anyway, gosh what was that guy's name?

DM:

He was out here?

DH:

He was out here with ICASL at the time. Anyway, they were doing some stuff that really interested me, and so I wrote a letter—they weren't looking for anything; they didn't have any faculty in atmospheric science. So I wrote a letter to the chairman of the geosciences department, who at that time was Dick Mattox, and just told him about my dissertation. In fact the data—a lot of the data I used on my dissertation was from west Texas. It was on precipitation, climatology, and cloud physics in this area, and weather modification was actually behind that research contract—working with the Bureau of Reclamation on designing weather modification projects—cloud seeding projects. So out here, the question at that time was hail suppression. A lot of the farmers had gotten together, and they actually hired a firm to come and do hail suppression. By the time I got here, there was a huge war between the farmers who had water—groundwater—and the dryland farmers, because the dryland farmers were accusing the hail suppressors, of not only suppressing hail, but suppressing rain as well, and they relied on that rain. So I didn't realize, really, when I got out here that I was getting into a hotbox of problems—I just knew that they were doing some hail suppression, and there were some people out here in Texas Tech, that were interested in that, so I wrote a letter. I told them what my dissertation was, and got a response back that said, "Sure, we'd like for you to come out and interview." Well, it turned out that I didn't have any other interviews at that time, so I just decided to come out here and interview, and it was a real shock to me, because I'd never spent any time in west Texas, and I couldn't imagine, even then—the Tech campus was a pretty sizeable campus—I had no idea campus was that—you know, I was impressed from seeing the campus.

DM:

I think people still have that.

DH:

Oh, they do—even more so now. But I came and interviewed. Grover Murray was the president of the university, and I even got to meet Grover Murray, because he was in the same department that I would have been in, in geosciences. A fellow by the name of Loren [inaudible] was the dean of arts and sciences. Loren didn't stay here long. He came from the University of Texas, and he was hired here as dean of arts and sciences, and he only stayed about two or three years, and the University of Texas offered him a dean's—I think it was dean of education—to come back to Austin and he went back to Austin. But anyway, he was the dean when I came, and I interviewed with him. A fellow by the name of Mac Kennedy—M. Kennedy—was the Vice President for Academic Affairs, and I got to meet with him. They had a really good set of meetings for me.

DM:

And this all came about not because of the position opening, but because you wrote to—"You know, you really need someone like me in your department?"

DH:

And I told that story a lot of times, and that's exactly what I say in the story. I didn't really say that in the letter, but you know, I wrote, "You need me." I was not quite that cocky. But anyway, I did, I wrote and I had this interview, and I was impressed. I didn't think I'd come here and stay very long, but at least long enough to get me involved in some of the stuff that was going on, and I was kind of excited about it. So I went back to Austin, and decided I'd wait to hear from Tech before I wrote out—sent out any other letters, looking for a position. And I didn't—this is a story I've told a jillion times, but since it's a true story, I guess I can tell it again—I didn't hear for at least a couple of weeks, I don't know if—at that time, it seemed like eons of time that I didn't hear, because I was just sure, you know, that they were going to write me back right away and say, "Yeah, come on out." Anyway, I finally did get a letter, and they offered me a faculty position, assistant professor, nine-month appointment for ten thousand, three hundred dollars. Well, at that time, that wasn't nearly as bad as it sounds today, but still, I was making that much money at UT doing, you know, when I was a graduate student. So I decided, "Well, I'll just write them back and tell them that I appreciate their interest, but I really can't accept that job." I didn't hear anything for a long time, and I hadn't—I didn't have any other offers. Well, I really hadn't even written other people, I just had nothing else on my plate at the time, so I was getting really concerned, and I really did kind of like the job out there, and I was really starting to regret that I had turned down that ten thousand, three hundred-dollar offer. So, here comes the letter, and I don't know how many weeks later, but another letter, and it said, "Okay, Dr. Haragan, you're right, we're going to up that offer to ten thousand, five hundred dollars." And as I recall, I wrote

back, this is my story, anyway, I don't know—remember what was in the letter, but I wrote back and said, "Now, that's more like it." That's the story I tell. I'm sure I didn't use those words in the letter, but long story short, I came to Texas Tech. I guess I got that offer, maybe, in April, and by August, Willie and I sold our house in Austin, and we arrived out here in August with a little one year old.

DM:

Okay, what did Willie think?

DH:

Well, Willie, really was—she was prepared for anything. And I had told her—she didn't come with me on the interview—but I told her that I really was impressed. It was a nice town, there was a lot of nothingness around it, but it was a nice town, and the university was great. We never had any problems when we got here. We came, and our furniture was being moved, and—we had come out before that, that's right, and bought a house. We must have done this maybe in June or July, when we came out and bought a house. So she had been there once before, when we came to [inaudible], so we finally made the move, and we got here, and our furniture wasn't supposed to arrive until the next day, so we were just going to sleep on the floor, but we got here and we needed something to eat, and we run out on Brownfield Highway to El Chico—it's still there—turns out that was the first year for El Chico. So I went in—and this was the first major shock—went in, and I ordered the enchiladas, I love enchiladas, and said, "bring me a Budweiser." He said "Well, I'm afraid we can't do that. You can't buy beer, it's a dry—," and I said "My God, what have I done?" He said, "Now, you can go out to the strip and but some beer and bring it in, and we'll open it for you and give you a cold glass to pour it in, but we don't serve beer." So that was the first major shock, I didn't really realize it was dry—

DM:

At that point you had to go out to the strip to buy beer, but you could bring it back and drink it at a restaurant?

DH:

Yeah, you could bring it back and drink it, but you couldn't buy it. So anyway, that was a lesson I learned early—

DM:

A little bit of culture shock.

DH:

I never really was a big beer drinker, except I loved beer with Mexican food, so that was pretty much a shock. Anyway, we moved into the house, and shortly after that classes started. I went

over to the department and—really for the first time—you know, I really can't remember now if this was when I visited to interview, or the first time I met some of these people, or whenever I got the job, but I remember walking into the office for the first time—I guess it was after I accepted the job, yeah, because she gave me a key to the office—there was a secretary by the name of Shirley Mayfield that worked for Dick Mattox, who was the chairman of the department, and she was really not the most friendly person in the world. You know, I didn't get a really great reception when I—and she said, “Well, your office is going to be down in the basement” —this is in the science building—“your office is going to be down in the basement, and I'll give you the key, then you can go have a look and move in and stuff.” And at the same time—I think that was the same time when I met Alton Wade—is that a name that's familiar to you? F. Alton Wade was one of the early Paul Whitfield Horn professors on the campus, and he had actually been on two of the Admiral Byrd expeditions to the South Pole, and done a lot of research—his name is well-known in geology circles, and his office was right there, and he came out and—in direct opposition to the sort of non-friendly face of Shirley Mayfield, he was the greatest guy in the world. And he came out and welcomed me to Texas Tech, and showed me around the department, and he warned me, he said “Now, when you get down to your office, you're going to have a little bit of a shock because it's going to be full of stuff that's being stored by another faculty member.” There was a faculty member by the name of Lon Jakob, he was a sedimentologist that worked with oil companies, and he had a bunch of these cores—well cores—that Shell Oil had given him to—for him to do research on. And my office, I'm afraid, was full of cores. There was barely enough room for a desk, the rest of it was full of these cores. But anyway, it was fortunate that Al told me about this, because had I just gone down to that office and seen it, I probably would have gone nuts. But he told me—warned me—about they'd get that cleared out and everything. He was a wonderful guy. Other than Dick Mattox, the chairman, he was the first one I met here on the faculty. So that was the start of my career at Texas Tech that first semester. I taught two classes, one of them had four students, and one of them had eight students. They'd never taught atmospheric science—

DM:

Okay, so you started right off teaching atmospheric science.

DH:

Oh yeah, I was the first—I started the atmospheric science—what came to be called the atmospheric science group.

DM:

I knew you started it, but I didn't know you started it the day you got here.

DH:

Oh yeah.

DM:

I figured you taught some of the courses that were already established, but added to that.

DH:

No, I already—I knew it the first time these courses had been taught; of them was what is now still ATMO 1300, it's just a basic atmospheric science course that—for non-science people, that just want to take some meteorology—take some weather courses. And then the other one was an engineering meteorology course, a more advanced course that required calculus that I taught, and I had four people in that class, one of whom was actually a faculty member in agriculture—Henry Wright, who also became a Horn professor, later. His big thing was fire—range fire control, and anyway, he was in that first class. So that was my start. I set up a weather station there, over in geosciences, and at that time we got all of our weather information via teletype, so I had the teletypes running, all the time, and we would tear data and save it for climatological studies, so I have a lot of file cabinets where we're saving weather data, the thing ran twenty-four hours a day, the teletype, and we would tear the data and store it.

DM:

Well, were you—was your weather station taking measurements of its own? Were you measuring wind speeds and things like this, or were you just receiving data?

DH:

All I was doing was receiving data. We weren't making any measurements at that time. And what really happened to stimulate the growth of that was I was bound and determined that I was going to build an amateur science department, essentially, within geosciences. I worked within separate department, you know, because whether you're talking about the atmosphere or solid earth, it's all the same, and I've always felt that rather than separate, we need to integrate more things, because they're so related to one another, and I still feel strong in that way. But the Lubbock tornado occurred in May of 1970, and I got there in August, so it was only a few months after I got there that we have a tornado, and that was the beginning of what at that time was called the “disaster research institute” in engineering. And what the engineers—Kishor Mehta was one of them, who was of course, a Horn professor here, and just a few years ago made a number of National Academy of Engineering—Kishor was one of the people that started that. A fellow by the name of Joe Myers was there, and then Jim McDonald, who is just recently retired, he was chairman of civil engineering, retired just a few years ago—but they started that disaster research institute—it's now the wind science and engineering—one of the leading institutions in the world, as a matter of fact, in wind science. Their interest was looking at structures and structural damage that was done by natural events, primarily weather events, tornadoes and hurricanes, and then they started looking at earthquakes and a lot of things. And it's amazing, the sort of predictions you can make. If you have an engineered structure where you know the specifications and the strength of the structure, then you can make all sorts of

statements about what type of force that it took for that structure to give way. And lo and behold, they started dispelling a lot of the myths we had in atmospheric science. We thought, for one thing, you know, people would discuss the roaring sound of a tornado, and a lot of people assumed—including the scientists—that that roaring sound was really because the winds had broken the sound barrier, and that we were in the shockwave, just like—jet, you know, and that's where that sound was coming from, because the winds were upwards of five hundred, six hundred miles an hour. We know now that that's not the case at all. The engineers showed us, you don't have to have those kinds of winds to do this damage. This could be done with two hundred mile-an-hour winds. So there was sort of a marriage, then, started—my work still was not into their storms. That was—I was still in precipitation climatology and weather modification, and that, so they told me that I could hire another meteorologist, and that's when I hired Richard Peterson, and I think Richard came here in 1972, and he really started developing a strong interface with the engineers. So this group started forming—Richard just retired. You know Richard Peterson?

DM:

No, I don't know him

DH:

He'd be a great guy for you to talk to.

DM:

Okay.

DH:

He—and I'm getting ahead of myself, now, but Richard came in—I think—'72, and he came, and he had a PhD—undergraduate degree from Cal-Tech, master's degree from the University of Chicago, and then a PhD at the University of Missouri. He was interested in severe storms and whatnot, and so he came in '72, and he was the second meteorologist that was here.

DM:

This whole program started—how soon—the tornado was May 11, 1970, and when did they kick off this—well, what became wind engineering—?

DH:

It started—I can't answer that.

DM:

Okay, but sometime soon after, maybe in the same year, or within a year?

DH:

Probably so. Kishor Mehta—Jim McDonald is still here in town. Kishor now has—he retired, and I just saw him at the airport the other day, and he's putting in a two- or three-year term with the national science foundation. He's the head of some project up there, so he's still around, too. But there's got to be information, even in the self-exploration, about when that institute actually started, but it was a short time after the tornado.

DM:

I understand that you have a story about that tornado.

DH:

Yeah I do. I was actually—there was a restaurant on Broadway—well, I'll start at the end of the story. I'm a barbershop harmony singer; I have been for many years. I sang with quartets in Austin before I ever left. I think it was a real good quartet; as a matter of fact, we won twelfth place, I think, in an international competition. So I was really excited about singing barbershop, and one of the first things I did when I got to Lubbock was affiliate with the local chapter of SPEBSQSA—The Society for the Preservation and Encouragement of Barber Shop Quartet Singing in America, Incorporated. It's almost like [inaudible] (laughs). Anyway, I met a lot of good people. That's one of the places where you come to a new place, a new town, and whatnot—I met, of course, people here on the faculty, but got to meet a lot of talented people that were interested—one of my real good friends at that time was a man named J. Ray Dickey, who started Scoggin-Dickey. [inaudible] been gone for a long time, now.

DM:

You were maybe a baritone in this group?

DH:

No, actually, I sang tenor—all falsetto. Now, I can sing baritone, I can sing three parts, I can't sing bass. I can sing lead or baritone or tenor. And anyway, that was just a real enjoyment for me—a real relief, to go out and grab three other guys and sing, you know. Some people think you're nuts, you know, or something, but that was really something about it that really turned me on. But anyway, the barbershop crew—the barbershop chorus was out on Municipal Drive, and the firemen—the local firemen at that time used to have—they may still have it—what they called a “red bean supper,” and we were the entertainment for—the barbershop chorus. So that's where I was that night, and a lot of strange things began to happen—while we were singing, people were getting up and leaving, running out—there were no cell phones, of course, at that time—and we were wondering what was going on. Well, it turned out it was the tornado that was—the forecast, we were under tornado warning. The tornado hadn't hit yet. So they closed down, I mean, the firemen had duties to do, and the police that were there, so they actually shut down the supper and it was over, so I was driving home, and I lived out—57th and Indiana—and

of course I had my wife and a little one-year-old girl at home, I didn't have any idea. So I was anxious to get home and see what was happening, weather-wise, no indication that there was a tornado at that time, but I got to the corner of Avenue Q and Broadway, and it started hailing, I mean really hard hail. There's this little cover, it was sort of—it was not a garage, but it was a place where you could pull a car into and it was—anyway I saw it, so I pulled in to that thing. It was right next to what is now Gardski's restaurant. At that time, it was called the Brookshire Inn—it was a steakhouse called the Brookshire Inn. So I pulled my car under that awning, there, and the hail was really hard, so I finally decided "I'm not just going to sit here." I went in to the Brookshire Inn. And there was a bar upstairs, so I went up, and said "I'm just going to have a beer and wait this storm out." Well, the next thing we knew, the lights went out in the Brookshire Inn, and I don't know what it was, you know at that time—we know a lot about tornadoes and thunderstorms now that we didn't know then. Had I known what we know now, I would have really been scared, because it was just—the hail stopped, and there was just sort of complete silence, the lights went out, and I just had a feeling that, you know, things just weren't right, and I got up and suggested to everyone up there that we go downstairs. And so most people did—everybody in the bar, I think, did, but there was a part of the upstairs that—where they still were serving as the restaurant. Most of the restaurant was downstairs, but a piece of the upstairs was restaurant, too, and some of those people didn't come down. But anyway, most of us went down to the bottom floor, and no sooner had we just gotten to the bottom floor when the windows were all blown out, and I mean you were conscious of the fact that there was debris and stuff hitting you, so I got under a bench down there, and waited this thing out, feeling the cold air, the downdrafts from the thunderstorm—we could feel the cold air from the downdrafts. Anyway, I really did, for a while, think it was all over, you know—by that time, everybody knew that there was a tornado. One of the funny things about it, there's not much funny—you can't find much funny in a situation like that, but when we—finally, the storm had passed, and we got from under whatever we were—tables or whatever—the door opened, and all the staff walked in, turns out there's a basement (laughs). But all the people that were working there were in the basement. So anyway, they came dragging up, and I, then, was really worried about Willie and Janet, so I decided I needed to get home and see what was wrong. So we went out in the street, and there were a lot of high lines down in the street—the street was flooded. So I started driving home down what was front yards of—all of the—from Gardski's up to University, I was driving not in the streets, but up over the curb, and I got up—it was still raining really hard—and I got up to University and turned all the windows were out in my car, my windshield was shattered, so I was hanging out the door to see where I was going, and it was raining in my face, and I went on University, and thought that I had reached 19th. And I turned to the right, going down to Indiana, and then head out to go home, but I hadn't reached 19th yet, it was that little street that goes into the alumni association—what was at that time the old resident's home. And so I had to do a uey², and come back out again. But anyway, by the time I finally got home, there was no damage—the storm hadn't affected southwest Lubbock at all. But that was quite an experience for a guy, and I

² Slang for a U-turn.

don't remember having any seconds talked about being in Lubbock, I think. To me, after it was all over, reflecting on it: "We do some research on this." (laughs) That's my bag, you know?

DM:

I wondered, was your position enhanced by this event?

DH:

Well, I had a lot of people calling me about this—I can tell you some interesting things that happened in that case. One of the things was a lot of—there were a lot of contractors and people that had never probably built—and some of them probably had never built anything, they were just here to make a buck. And they came in and started wanting to build tornado shelters for people, and just going around neighborhoods, you know, knocking on doors, "I build tornado shelters," you know. And a lot of people went for that, and at that time, it was digging a hole out in the backyard, you know, and whatnot, which is, we know now, probably one of the worst things that you can do. You need to have a tornado shelter that you can get to from within your house. Most people that are killed in the storms are killed dashing from their homes to their shelters.

DM:

Wait until the last minute, and then—

DH:

That's right. But anyway, we had a lot of that, and a lot of people got taken for a lot of money. And the other thing was there was a business man here in town that ran another business—he wasn't even in the construction business, or instrument—anyway, he started trying to market a tornado alarm. Now this tornado alarm was a barometer, and it had a buzzer on it, or a bell, something, and when the pressure got to a certain level, the buzzer would go off. Well, I did a little work on that, and it turned out that by the time the pressure got low enough to a threshold that would set off the bell, the winds outside probably would already be a hundred miles an hour. So I got interviewed by the A-J, and said that in the paper, and got a call from this particular individual, and told me he was going to sue me—and I said, "Well, go ahead." In fact, he was making all sorts of threats, you know, he was really mad. Yeah, because he had teamed up with some other person who was making these instruments, but they were worthless—absolutely worthless, and that's what I said, "They're absolutely worthless." And of course, I didn't do him any favors, but those two things were the things that were just amazing, you know, that brings out the opportunity for people to make a buck, and they try to capitalize on those things. So those are two things that I remember in particular. But it was shortly after that, I guess, that the people got started with the disaster research institute, and then they really needed a meteorologist—someone who could interface more with them. I was excited about it, and enjoyed it—really got into severe storms for a little bit, myself, but it was not really—I was more interested in some

other cloud physics background to work. So anyway, that's when we brought in Richard Peterson. He was the second meteorologist, and he interfaced directly—and I did, too—I worked with those people in engineering too, but he did it more so than I did. And that's what really started the interest, and what started the growth of the atmospheric science group. We first of all developed an undergraduate program in meteorology; I can't tell you how long that lasted. It was probably started in about '73 or '74. Texas A&M was the only other—well, UT still had a program, I think their undergraduate program was gone, and they were just doing graduate at that time, too. A&M had a big undergraduate program, and long story short, we ran that program—we had a few graduates, so I guess we ran it for four years, anyway, but it was not attracting a lot of students, and we were really interested in research here, and it was a small group, so—we had a master's degree at that time—so we decided to drop the undergraduate program and just concentrating. And we started recruiting physics majors and math majors here and at other schools to build a master's program, and then of course, that's when we got a PhD program as well.

DM:

Can you tell me a little bit about your program where you were—atmosphere manipulation, I think you called it? Or precipitation—were you involved in cloud—weather modification.

DH:

Yeah. When I first got here, I think I had mentioned earlier that there was a project going on where some of the farmers—particularly the group of farmers that had a lot of groundwater—had hired a group out of California—a fellow that I got to know pretty well, Tom Henderson was his name, and he's passed away now, but he was a professional—he was a meteorologist from a good, credentialed—I think it's an undergraduate degree in meteorology, but he had taken an interest in seeding clouds, and he had actually written some papers, so he was not just someone who was out to make a buck; he really believed in what he was doing in seeding clouds, and they hired him here to come suppress hail. The whole idea of suppressing hail—well, let me go back—most of the rain that is formed in a cloud starts out as ice, and even in very warm weather, at upper levels you get ice in a cloud, and because of different vapor pressures over water and ice droplets, the ice grows at the expense of the water—we've known that for a lot of years; it's called the Bergeron process. Clouds that don't produce any ice, that don't get high enough in the atmosphere where ice can be produced and instigate this growth generally don't produce much precipitation—so one of the methods of seeding clouds to increase precipitation is to try to artificially produce ice in the cloud. You can add a chemical called silver iodide to a cloud, and it will lower, actually, the freezing level of the water, so that water freezes at a higher temperature. So these clouds that don't get the temperature to get natural freezing, if you use silver iodide, you can cause freezing to occur at these higher temperatures, and once you produce ice in a cloud, it starts growing at the expense of the water, and you might produce precipitation in a cloud that would not have produce precipitation naturally. That's the idea behind cloud seeding

to increase rainfall. Now, in the case of hail suppression, what you want to do is to get in there and seed the cloud—you still seed the cloud with silver iodide, and you produce ice particles from the cloud, but you push so much silver iodide in the cloud that the ice particles—one ice particle never has an opportunity to grow as large, because there's more silver iodide, so you produce a lot of ice, but it's much smaller, so not only do they melt before they reach the ground to produce rain—which is what you were doing when you were trying to increase rainfall—but you make the droplets so small—the ice particles so small—that they evaporate before they reach the ground, and that's the idea of suppressing hail. So the deal that suppressing hail could reduce precipitation is real, that could happen, as a matter of fact. So the dryland farmers were incensed that hail suppression was going on, because they were convinced that the hail suppressors were also killing the precipitation, and they just could believe how the description—"Well, I looked out, and these clouds would just collapse and go away." Well, we never gave any conclusion as to whether—what was really happening here. I did initial reports, and actually published a paper that would indicate that climatology over this period might substantiate what the dryland farmers were saying. They might be reducing the water, and I talked to Tom Henderson about this, and how we might go about—because I was in favor of the project—suppressing hail, if we could do that, that'd be a good thing, but if we do it and reduce rainfall, then that's not a good thing—if there's something we could do. There was a lot of research going on at the time, but during this project—I mean it got very dirty. We had one of the radars—I say "we," I was really not a part of the project—but one of the radars that Tom Henderson was using in his project was actually shot at. And there were stories from some of the seeders that were flying the planes that they were actually shot at, but those were never—but I mean the feelings were really—and you can understand, this was a person's livelihood. So anyway, long story short, that project was shut down, and we never had enough time to really evaluate whether or not that was—they were actually suppressing rainfall, and we do think the project was successful in suppressing hail. But if it was suppressing rainfall, also, then that was not a good thing. I was involved later with a project in Big Springs—that was the longest running seeding—hail suppression would increase rainfall, and we have good evidence that the cloud seeding project, over a period of years—twenty-five years—you can't just do that in one year. You need to have a lot of data to show, and there was very little question. More precipitation was being received in the target area than in the surrounding area. The question, still, that can't be answered is whether you are robbing Peter to pay Paul. In other words, that rain that you caused to fall in area, or helped fall in one, would that have fallen naturally downwind if you had left it alone? So one of the modifications—there's still some of it going on around the world, but there's so many unanswered questions, that that's not today as big a project as it was at that time.

DM:

You hear about these projects that were conducted by C.W. Post, setting off explosions all over the Caprock—what was the purpose of that, did you ever look into it?

DH:

That was never—they were making some claims that those explosions really were impacting the clouds, and causing rain to fall. There was no really real physical mechanism that one could attach to that, but there were people who were making claims that it was working. And there was some of that going on, but that's right, in Post—C.W. Post was the sponsor of some of that.

DM:

So that was one area. What were some other areas of research that you were involved in early on?

DH:

I was actually into cloud and precipitation—the natural production of precipitation in clouds—what's the physics of condensation that goes on in the atmosphere? So that was really my initiation. And then I worked on a project for my dissertation that was actually looking at the different types of clouds. I was actually looking at west Texas, which I think I mentioned earlier, too, and that's what got me interested in coming out to Texas Tech, but my dissertation was directly related to weather modification in the sense that I had done a cloud census, first of all, and I had done a climatology of the clouds that actually occurred in the area, and those that grow, and talked about the physical mechanisms that were causing the precipitation to enter the area that I used to study. So cloud precipitation physics was what I was interested in; that sort of naturally led into well, this is natural processes that produce rain, can we artificially change those processes? And I—my conclusion to that was that “Yes, I think we can. It takes the right cloud at the right time to make it happen, and it's a costly process to make it happen, and I can't answer the question: ‘If I mess with nature here, and produce a desired result, have I messed with nature to produce an undesired result somewhere else?’”

DM:

Or how about the feasibility of the cost of seeding, you know, as opposed to the amount of rainfall you get to produce a crop?

DH:

Yeah. Well, that's an indication—it doesn't take much increase in rainfall, if you can do it at the right time, to make it a profitable thing.

DM:

Coming from east Texas to west Texas, I know that a lot of people notice differences in cloud formations. Just from a casual observation, and not having any kind of training, but for example, the—I haven't noticed this in a while, but the clouds that line up against the Caprock, the long snake of clouds—I don't even know the right terminology to use—along the Caprock—the

clouds that quickly dissipate, you sit and watch them dissipate, they're a phenomenon here that you don't see in east Texas.

DH:

Well, a lot of that has to do with the geography—clouds for along the Caprock for the same reason that clouds form—sit over mountains. If you ever drive to New Mexico, you very often will see in the distance—very early on as you're driving to Ruidoso, for instance, you'll see a cloud sitting over the mountain before you get there. What produces clouds is upwards vertical motion, and this upward vertical motion—as air moves upwards, it expands into a lower density, and any time air expands, it cools, and if it cools to the dew point, you produce liquid water. So any time you have a barrier like that, whether it be the Caprock, or it could actually be a mountain, where you've got air that's being forced upwards, it's like if there's enough moisture content in the air, it's likely to produce weather—same thing with fronts, where you've got cold air and warm air. Cold air is heavier, and more dense than warm air, so as the cold air moves in, it forces warm air to be lifted. So weather is produced when you can produce upward vertical motion. The opposite of that, of course, is any time you've got high pressure and can produce—in high pressure, you've got downward vertical motion; air is sinking in high pressure area, which is the reason we've had such a hell of a bad summer, because we've been sitting under this high pressure system, and so the same types of things affect—would produce cloud effect in east Texas it would here—where you've got the topography—where you got the mountain, where you got a Caprock, that's called orographic lifting, and that's a type of lifting that can produce the clouds here, but where you have flatter terrain, that mechanism doesn't produce clouds, you need a front, or something else to produce clouds.

DM:

So when a person comes from east Texas to west Texas, as you did—and I don't know if you noticed right away, these differences in formation, but it's the topography, often, that—

DH:

A lot of it is the topography. A lot of it is the topography.

DM:

Was this a new experience for you, then? Did you see something out here that you had not really seen before, or was it immediately explainable?

DH:

I mean, I could study it, you know; but no, it's immediately explainable—no, I never—I've seen some pretty good thunderstorms out here that I never had an opportunity to see, but you know, that—often—I lived in Austin for fifteen years, and Austin gets some pretty good storms, too.

The—but anyway, the mechanisms that produce clouds and things are everywhere, but everywhere is not the same.

DM:

Let me just throw this question out to you, too: I was driving past Cisco a few weeks ago, and there was a huge grassfire. Plumes of smoke were going *well* up into the atmosphere, and clouds were building above this. Is that a common thing, also, that you see a grassfire, and maybe its heat, or the uplift off of the fire itself will create a little weather pattern? Is that an unusual thing, or—?

DH:

It would be a pretty isolated thing, but yeah, that could occur, because heating the air is another way you can get air to rise, other than topography.

DM:

I guess I'd never noticed it before. I've seen it along the tops of mountains, of course, but just off of a large grassfire was a different thing.

DH:

Yeah, well that's not something I've seen a lot of. I don't know, but that's certainly feasible.

DM:

Well, you were very much into your research when you came out here to Texas Tech, but then you had a teaching load as well, and you said two classes that first semester—was that standard, pretty much, did you stay at two classes, or did that class load increase over time?

DH:

There were semesters when I taught—no, I don't guess so—I always had a research project going on, and back in those days, there really was a lot of pressure put on you to teach a lot. There were professors teaching not just three, some teaching four courses a semester and that doesn't give you time to do any research. But at that time, Tech—you know, it had just changed its name from Texas Technological College; a year before I got here, which, there was a big debate on that, as well. But Texas Tech they didn't do a whole lot of research. In a few areas we had pretty well-published professors that were sort of isolated, but research wasn't the big thing. It was an undergraduate—teaching them to teach courses—so I was among really, a pretty small group that always did the research, but I always had funding for my research—there may have been a semester where I taught three courses, but I can't remember. Usually, it was just a two-course load, and of course, now, that's not unusual at all for a professor that's really involved in research, they may teach only one course in a semester. A lot of professors who are heavily involved in research will teach a two-one—two courses in one semester, and one course the other

semester, and they usually have their summer entirely for research. So we're a much different school today than we were in 1969. We're truly a university with a major research and graduate component, and at that time we really weren't.

DM:

Did you personally have a preference for one over the other—teaching or research?

DH:

No, I think a university, if it's truly a university—the idea of a university is to share knowledge, but it's also to generate knowledge, and you share that knowledge that you generate. So research and teaching go hand-in-hand, and I've always believed that, and I always believe that for the most part, our best teachers are also our best researchers. Now that's not always the case, but you can't divorce the two, because if you're excited about what you're doing, and you're into research, you're excited about sharing.

DM:

Yeah, that makes sense. Now, in 1970, did the atmospheric science program become separate? Was it, or is it—?

DH:

It's never really been separate. The atmospheric science group—so-called—and they moved later—well, I was still in the group, they moved over to the twelfth floor of the business building. That's still where the atmospheric science—although, they're still part of the department of geosciences, and in my mind, it should stay that way. I mean, it's—they probably don't do as much interaction as they should, but still, it's—the Earth is one piece. We've got an atmosphere, and we've got solid earth, so the geophysicists, and the atmospheric physicists, they could work together, and to an extent, they do. So it's a shame, really, that they had to be separated. One of these days, maybe, we'll have enough room to get everybody together—

DM:

It's kind of symbolic, I guess, that atmospheric sciences are up in the what floor of the—

DH:

Yeah, and one time we had an old radar—an old PPS-9—old model three-centimeter radar that we had on top of the building when we actually were looking at a storm. One of the things that you asked me about that I have not seen before when I came out here that might have shocked me—dust storms. I have seen some dust storms that were truly—if you would have told me, tried to describe it to me, would have been unbelievable. On December 10—I don't remember the year, but it was in December—I was up on the twelfth floor of the business building over there, and that's where my office was at the time, and I couldn't see the architecture building, which is

right next—I couldn't see it. I mean, it was just unbelievable. I've seen two or three of those—we don't get those storms anymore.

DM:

Was this in the early seventies?

DH:

Yeah, in the early to mid—actually, maybe mid- to late-seventies; somewhere in the mid-seventies but I mean, I've seen those. Now we've got better control of the land surface, and we don't get the dust storms that we did back then, but boy, I've seen some real—it looked like the—you know the pictures you've seen of the drought in the thirties in Oklahoma—real dust—but I never got discouraged, because usually the next day was beautiful. (laughs)

DM:

I know, isn't that funny? I have a photograph somewhere of that that old sign they used to have on the Lubbock city limits that said, "Visit Lubbock for all reasons," you can barely read it because of the—

DH:

Is that right?

DM:

Yeah. So in 1972, you became chair of the department?

DH:

Yeah, that was—what happened, and like I was telling you earlier, you know, administration was the farthest thing from my mind. Then, in fact, before being an administrator, I used to sit over in the faculty club, like the rest of us, and criticize the administration for everything that was wrong. As a matter of fact, I was sitting at this table when I would do that. It was over in the faculty club, and there was a bunch that used to go over for coffee every morning, and—

DM:

Can you name some of them? You said so before, and I can't remember.

DH:

Yeah, T. L. Leach who was in the men's athletic department—not intercollegiate athletics. Bill Conroy, who later became dean of arts and sciences was a professor of geography—Dalton Tarwater, professor in mathematics; Bill Cane in business, his nickname was "Killer," Killer Cane, because the students gave him that nickname, and Killer was the one that told me one day, when we were—I don't even remember what the topic was, but we were talking about

something; we were criticizing the administration for doing something, he said, "Haragan, calm down a little bit. You just need to be happy that we don't get all the administration we pay for." I thought that was one of the—I quoted that statement so many times, and particularly when I was in the administration, you know, "Let's be sure that we give them their money's worth. Let's don't have anybody—" So that was it, he thought: "Yeah, just be happy that you don't get all the administration you're paying for," so I thought that was pretty good. Yeah, but we used to sit over there in the faculty club and Larry Graves, who was there, he was dean of arts and sciences at the time; yeah, he would come over almost every day, Bill Oden from political science was a regular—yeah, those were different days. Those were days when there really was a feeling of collegiality among faculty on the campus. I mean, it was really a group of scholars that came together and talked about each other's work—see, that doesn't happen anymore. The college that you have today, or the colleges that are in your specialty, which is usually a very narrow specialty, and they're probably on some other campus. So that's close association in academe, rather than the guy that's in the building next door. So the faculty club sort of died a natural death. Unfortunately, I was provost at the time, and was the one that had to finally kill it, but it was just, it died a natural death. People just didn't—faculty didn't get together like they did back in those days. At lunchtime, you'd go over to the faculty club, and there'd be people from all over the campus, who began to talk to you in the morning. So it truly was a community of scholars.

DM:

And you brought up the issue of nicknames a minute ago, too, there was "Killer,"—

DH:

My nickname was "Cloud."

DM:

You were "Cloud." What were some of the other nicknames?

DH:

Let's see, "Hard-heart," that was Charlie Wade. Charlie Wade was also in the business group, and his nickname was "Hard-heart." Let's see; I remember Bill Conroy's name, I can't—

DM:

He might not have been in this group. I understand there was a "Groovy Grover," Grover Murray was Groovy Grover?

DH:

Yeah, that's right.

DM:

Did you have much interaction with him?

DH:

I did. Yeah, Grover Murray was—he was really a good president, I think. Somebody had made the statement one time; he said “The person who was most responsible for Texas Tech moving from a college to a university was Grover Murray,” and of course, he was the one at the time when the name changed, but he did much more than that. He really was the one that started the research efforts at Texas Tech—started putting an emphasis on research, and started rewarding research. I think he was probably one of the truly—he was the president for ten years, too, and that’s unusual today for a president.

DM:

I understand that the campus improvements were also fairly common under his—

DH:

Oh yeah. Yeah, a lot of building when he was here, all of the high-rise dorms, they were built at the time when Grover Murray was here, but he was in my department. He was always a good friend; I always had a good relationship with Grover, even as an assistant professor. You know, I could talk with him, and—like any other president, you know, he was sort of aloof. The faculty really didn’t care a lot about who was in the administration—“The administration do their job and leave me alone and let me do my job,” which is not all bad, you know. An administration that’s transparent is the best kind of administration, and I mean Grover was sort of that way. He did some things people didn’t like, of course, so he made some enemies like any—anybody that has to make hard decisions is going to make some people mad. So he did make people mad—a lot of them in our own department, and in the geology department. But he had come here from LSU, where he was academic vice president, and had a good reputation as president of the AAPG—American Association of Petroleum Geologists. In fact, that was one of the criticisms of him; he brought in two other people to the university who were friends of his, who had also been presidents of AAPG; one was Frank Conselman, you remember him?

DM:

Yeah, I remember him.

DH:

Frank was head of [inaudible] for a while. And then Orlo Childs he brought in as vice president for research—the first vice president for research we ever had was Orlo Childs, brought in by Grover, and he was also a geologist, too—past president of the AAPG, so he got a lot of benefits. And probably some of it was justified; if Grover had a friend, and the friend could do a good job, and he knew he could do a good job, he trusted him, he’d bring him in.

DM:

And that's not always bad.

DH:

I think we do this business overboard, of trying to say that we collude the place, that we hire from within. If you've got somebody that's good, by God, you ought to be—try to—

DM:

Yeah, it's a known quantity.

DH:

Absolutely. Anyway, he might have done that to the extreme, I don't know. But Grover Murray was a good president. He did a lot for this institution, and I admired him. He was a good man.

DM:

I think this might be a good place to stop, because I want to start another time on your administrative work, starting with chair of department, and then we have to go from there, and there are quite a few steps in that process.

DH:

Well, too, we can talk about that, Bill Miller's death—he was the one that really got me into administration. Because he was chairman of geosciences.

DM:

Okay.

DH:

So that'd be a good place to start.

DM:

Okay, sounds good.

End of interview