

TRANSCRIPT

SCRC Series: North Carolina State University Oral Histories – MC 00449

Field Notes: Harvey Wahls

Interviewee: HARVEY WAHLS

Interviewer: Virginia Ferris

Interview Date: Tuesday, November 18, 2014

Location: Raleigh, North Carolina

Length: Approximately 110 minutes

This interview was conducted in the Multimedia Seminar Classroom of D.H. Hill Library at North Carolina State University. A native of Evanston, Illinois, Harvey Wahls is a graduate of Northwestern University, where he earned a B.S. (1954) and M.S. in Civil Engineering (1955). Following graduation Wahls became an instructor at the Worcester Polytechnic Institute in Worcester, Massachusetts, and took a leave of absence to earn his Ph.D. in Civil Engineering at Northwestern, completed in 1960. Dr. Wahls joined the faculty of the department of Civil Engineering (later Civil, Construction, and Environmental Engineering) at North Carolina State University in 1960. He conducted research and taught in the areas of soil mechanics and geotechnical engineering. Dr. Wahls retired in 1997.

Wahls discusses his early years near Chicago, Illinois, and education at Northwestern University; joining the faculty of the Civil Engineering department at North Carolina State in 1960; the influence of Ralph Fadum as a teacher and mentor; his research in soil mechanics and geotechnical engineering; department heads Charlie Bremer, Donald Dean, Paul Zia, and Downey Brill; the development of Centennial Campus; and changes in the department over time.

START OF INTERVIEW

[00:00:00]

Virginia Ferris: It is November 18, 2014. I'm Virginia Ferris here with Dr. Harvey Wahls in D. H. Hill Library at NC State in Raleigh, North Carolina. So, Dr. Wahls, thank you so much for coming to talk to us today.

Harvey Wahls: I'm very happy to do to.

VF: I wanted to start by asking a little bit about your time before you arrived at NC State, so would you mind telling us when and where were you born and a little bit about where you grew up?

HW: I was born in Evanston, Illinois in 1931 and grew up in Park Ridge, Illinois. Those are both suburbs of Chicago. Park Ridge is in the area very close to where O'Hare Field is now, right outside the Chicago city limits. I went through high school there and then entered Northwestern University to begin an education in civil engineering. That was a five-year program which included a co-op requirement in which you worked a quarter and then in school a quarter and took five years to graduate. It also provided some income for the education. I graduated in 1954 and was awarded as the outstanding engineering graduate of that year, and then continued the next year in a master's program specializing in what those days we called soil mechanics and foundation engineering, and which today is called geotechnical engineering. The term broadened a little bit.

I spent a year on that and in the summer of 1955, as I was finishing that master's program, I was offered an opportunity to go to Worcester Polytechnic Institute in Worcester, Massachusetts as an instructor. At the time I was really awaiting the draft [Laughs] so I had no real plans beyond that and learned that I would probably be drafted within six months or a year. So I saw this as an opportunity to try teaching and went out there and took that job and decided that I liked this kind of career. After one year there [00:03:10] the draft requirements changed to make engineering teaching as a deferrable career, so I was not drafted and during my second year there I decided that, if I was going to continue in this area, I would need to get a doctorate. So at that time I decided to go back to Northwestern to pursue a PhD.

There was kind of an interesting situation at Worcester. I had, in the spring of that year, been promoted from instructor to assistant professor and for reasons they asked me

to take a leave of absence rather than resign when I went back to Northwestern, so they continued to list me as an assistant professor on leave while I went to Northwestern and of course there was no commitment on my part to go back there ever. So, when I finished the doctorate at Northwestern in the spring of 1960 I began to pursue opportunities, and it was a time when there were lots of opportunities for beginning faculty positions and so I had perhaps half a dozen firm offers at that time.

My interest in North Carolina State primarily arose from the department head, Dr. Ralph Fadum, who was very well-recognized in my area of geotechnical engineering. He's the main reason that I came here, to work with him. So, as I have mentioned at times, in September of 1960 I left Northwestern, married the dean's secretary, [Laughs] and moved to North Carolina and we lived our entire married life here in Raleigh since that time.

VF: Can you tell me a little bit about what it was like coming from Illinois at that [00:06:02] time to Raleigh, what you thought of this area and the university?

HW: Well, it was a big change. Raleigh was a small town at that time, probably about ninety thousand population. Segregation was still active at that point. But it was a very friendly community and we really enjoyed Raleigh and the environment here and found it a very, very desirable place to live.

VF: Do you remember what the first class you taught was here?

HW: Yes. Before that, I should maybe mention an interesting thing. The first time I came here was in the spring of that year for an interview, and at that time the civil engineering department was housed in old Mann Hall, which now is a part of Daniels,

and our offices overlooked Page Hall and the Park Shops. I remember that one of the selling points that Dr. Fadum made to me when I was here on the interview was that a new building had been authorized and that I would have an opportunity to design my laboratory for the new building, and he actually walked me over to what is now the Court of Carolina, across from the 1911 building, and he said, "This is where our new building is going to be, and we're in the process of designing it all."

When I arrived in the fall I found that not a lot was being said about the building at that time, and subsequently learned that what had happened is during the summer the university had hired a university planner and they had decided that there would be no building construction on the Court of Carolina. So the position of a new civil engineering building, the new Mann Hall, was going to have to be relocated to another area, and that is where it is now, in the area there across from the nuclear facility. This meant that the building that was being designed in the early 1960s wouldn't fit on that space so the building had to be completely redesigned, so it was about three or four years before we [00:09:06]

actually moved into that building. So we were the first occupants of Mann Hall, and I believe by the time we actually occupied Mann Hall Dr. Fadum had moved in over as the dean at that time so he never really occupied the building.

Going back, the first courses that I taught here were undergraduate soil mechanics, which was a junior-level course, and it had perhaps fifty to sixty students in it. This was a complete change for me because at Northwestern as a student we had perhaps fifteen students in our undergraduate program so most of my undergraduate experience was in classes of ten to fifteen students, so it was a real change to move into a

larger class environment. The other thing that happened was that Dr. Fadum was teaching at the same time a graduate-level course in advanced soil mechanics, the same topic, and he said that he had a number of outside obligations, he was on a number of national committees and things, and he wanted me to sit in on his graduate course and be prepared to teach it for him when he was out of town, to cover for him. He had an extensive set of notes that he worked from. So that was my assignment, to teach the undergraduate and to back up him in the graduate course.

When I arrived in the fall and met with him he said he was going to meet the first class and then essentially outline his travel commitments for the fall semester, and he was going to be away almost completely the first month. [Laughs] He would come in on the weekends, or maybe on a Monday or something, and I think his graduate class always met on Tuesdays and Thursdays, so I would meet with him on Monday and see what he was planning to cover and then I would go in and cover his graduate course for him in addition to covering my undergraduate course. So it was a really great learning

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experience for me to go into this.

The other thing I might add is that, because of some conflicts that I'd had, I had not actually turned in my dissertation at Northwestern yet, so I was trying to finish up the final drafts of my dissertation in the fall. I remember along about mid-November or so meeting with Dr. Fadum and he was saying, "Well, I really want you to concentrate on getting this dissertation finished," and he said, "I know you've been taking my class for me and covering for me, so for the next month I'm going to take your undergraduate course and let you really concentrate on getting your dissertation finished." So we had a

very good working relationship. Then when he moved over to the dean's position I took over the leadership role in this geotechnical engineering area within the department.

VF: Did you remain in close working relationship with Dr. Fadum?

HW: I would say we didn't consult regularly. He was there when I needed him or if I had some questions on things that came up, but the rest of the time it was pretty much left to me. This was a time in the department that was really kind of a turning point toward more graduate education. At the time I arrived, the department, I think, had just gotten authorization for the PhD in the late 1950s, 1957-58 or something like that, and had not had a doctoral graduate at that time. There was a Ford Foundation grant that the college got which was being used to send some of the faculty without PhDs off to other institutions to get PhDs and then return to upgrade the quality of our faculty. It was the same time when Dr. Fadum was recruiting new faculty in the department. As I say, I came in 1960 in the geotechnical area. I think Dr. Paul Cribbins had come in the year [00:15:01]

before in transportation engineering. The year after I came in Dr. Paul Zia came, and Paul probably is the most illustrious of our faculty. He is a National Academy member now. So he was upgrading the faculty at that point to provide people with doctorates, so it was really a turnover to move toward more doctoral education in the early '60s. It was an exciting time with lots of growth in the graduate programs.

VF: Just to back up a little bit, could you tell me how you developed an interest in soil mechanics and geotechnical engineering?

HW: When I was at Northwestern I found that-. At that point it was kind of a subgroup under what we would now define as structural engineering. It was concerned

with the use of soil and rock as engineering materials, the strength and deformation as they affected building foundations and retaining walls and things like that. It looked to me as a more specialized area with lots of opportunity for growth at that time. The interesting thing was, with the soils and rocks, for the most part it was a question of evaluating the quality of the materials as they exist; whereas in the other parts of structure if you want steel or concrete you specify what kind of strength, for example, you want, and if you're going to put a building at a location you've got to test the soil and evaluate it and determine its strength and use what's there rather than specifying, "I want such and such a quality." There are soil improvement techniques that have developed over the years too to strengthen in place, but it was just primarily a specialized part of structural engineering as I saw it when I was in my—. And I took a lot of structural engineering courses in mechanics in my graduate program. Today the field has evolved more to involve more environmental issues in the ground, things like the groundwater pollutions [00:18:03]

and waste deposits and that kind of thing.

VF: Can you tell me a little bit about what you saw as the reputation of NC State before you came here? You mentioned that Dr. Fadum was an influence.

HW: Well, that was the main thing that attracted me. I knew very little about North Carolina State University at that time – or State College, at that time, was the name – and, as I say, it was probably the least known of the schools I investigated. I mean it actually came down in the end to considering between Carnegie Tech, what's now Carnegie Mellon, and NC State as the two choices. There were other schools that had stronger reputations up in the north in my area than NC State and I knew very little about

it. I do recall that at the time when I was doing this investigation, first of all I was dating the secretary who became my wife so I was in the dean's office [Laughs] a good bit of time to see her. The dean at that time at Northwestern was a civil engineer, so he was kind of keeping pace with what I was doing and he made comments, and I recall that he said that he thought NC State was probably much stronger than its reputation. It didn't have a national reputation at that point but in his experiences he considered it a pretty strong school, and I had gotten advice from him as well as from my adviser when I was making my final choices. But Ralph Fadum was really the key to the whole thing. I think if he had not been here I probably would not have pursued the opportunity here.

VF: So you were able to work more closely with him those first few years that you were here, when he was head of the department.

HW: Yes, and he encouraged me to get involved with the national committees and things of the American Society of Civil Engineers. There was a geotechnical—. Well it's changed now again, but there was a geotechnical engineering division of the American Society of Civil Engineers and he encouraged me to get involved with that, which I did. I [00:21:06]

started as a member of a committee and worked very successfully on these committees and then ended up actually going through—. And part of it—. Well I guess it was probably 1975. I'd been here fifteen years already. But actually by that time I had gotten to a position where this geotechnical engineering division of the ASCE annually had – well actually not annually but it was every two or three years – had a specialty conference, and we were able to bring one of those to NC State in 1975, I believe it was. This brought about five hundred people from twenty countries here to our campus, and I think a lot of

these activities helped to build our—. We, I think, established a reputation in the geotechnical engineering community that we were one of the prime players along with some of the more established schools, so we were able to attract graduate students and faculty, good additional faculty.

VF: I know you served as the graduate administrator?

HW: Yes, in—

VF: Can you talk about that came to be?

HW: —probably—. I think it was probably 1971 or so that I was asked to be the graduate administrator and then I took over that responsibility for the department in 1971, and I continued really doing that job until I retired in 1997. Somewhere along the line that job was designated as an associate department head and so my title somewhere along the way changed from Graduate Administrator to Associate Department Head for Graduate Programs, so I got, at that point, involved with the entire graduate operation in the department.

VF: Can you tell me a little bit about what that title entailed and what sort of changes you oversaw during that time?

HW: Well it entailed the processing of all the applications for admission. We

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developed scholarship programs. Research programs developed and we had—. Faculty were developing research grants which had positions for graduate assistants on them. The College of Engineering had some graduate fellowships that were being awarded. We had to coordinate all the admission process and financial aid procedures for the department and it became probably a half-time job at that time.

VF: Did you notice any major changes in the program over the twenty-six years that you were in that position?

HW: Well, it certainly increased in size. The department became much bigger and we had more opportunities for funding which meant we were more involved with recruiting graduate students and that became a more important part of our program. It pretty much became a twelve-month job because the graduate administrator really had to be around during the summer months to coordinate all the start-ups tied with the research growth in the department, the research contracts, and trying to coordinate with different faculty as to what kind of graduate student support they were going to need and match up student applicants with faculty, that kind of thing.

VF: So can you tell us a little bit about your own research that you were pursuing while you were teaching?

[Brief pause; transcript resumes at 00:26:39]

HW: Okay.

VF: So just tell us a little bit about your own research, what areas you were researching?

HW: I had a number of graduate students that were involved with what we call the consolidation of clay soils, which is a process, a time-dependent compression of the
[00:27:07]

soil and the process of how long it took, and this affected settlement estimates for buildings and things. So the evaluation of these time-dependent properties, deformation properties of soils, became one of the key areas. At one point we had a research contract from the federal highway people that dealt with the compaction of soils for highway sub-

grades, and we had a contract in which myself and two other faculty actually visited probably eighty percent of the state highway departments in the country. We compiled the standards and specifications that they used and reviewed all the literature and testing that had been done on this and put together kind of a state-of-the-art report on the use of compaction for highway sub-grades.

As a result of that I actually was later hired by the Transportation Research Board, which is part of the National Academy of Science, to write a state-of-the-art report for them on compaction of soil for sub-grades. They had a series of topics, all phases of transportation, it might be traffic studies and things, and the group decided they wanted one of these reports written on soil compaction properties, so I was asked to write one of those. That was a consulting job that they employed me to write for review by a panel. They subsequently asked me to do two more of those, one on the use of shallow foundations for highway bridges and another one on bridge approaches or how to eliminate the bump at the beginning of a bridge abutment construction, so I actually did three of those on there.

Another thing that I got involved with was – and this came again through my ASCE committee work – with allowable settlements of buildings, how much settlement

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can a building stand, can you accept, and of course that varies a great deal. The amount of settlement that you would allow in, say, a warehouse supply building is quite different from what you might allow in an art museum, for example. So in some of that committee work I was asked to review what was being done so I got into looking into that, and then represented the US on an international committee that was trying to establish some

guidelines on the tolerable deformations of structures. And then, probably this was back in maybe the early 1990s actually, this ASCE group had a specialty conference on foundations down at Texas A&M. They had five or six sessions and one of the sessions was on that topic and I was asked to give the keynote summary of the state of the art of allowable movements on foundations. So those are the primary areas I guess I worked with.

VF: Were you working closely with any other faculty?

HW: Here?

VF: Mm hmm.

HW: Most of these—. Well for a while on the soil compaction studies that we did Jay Langfelder and Paige Fisher were two faculty who were also involved in that. I was the lead investigator and they did parts of it. Most of the other research was being done pretty much independently by me.

VF: So after Dr. Fadum moved on to become dean, can you tell me about the other department heads that you worked with?

HW: Well, when Dr. Fadum moved over, for a short period of time there was Charlie Bremer, who was an older structural professor, who served primarily as an interim while we were searching for another one. He was a task master in his courses and [00:33:07]

he handled things very well on an interim basis but he had no interest in full-time continuing that. Then Donald Dean came in for a period of time and again oversaw some of the growth of the department. Then at the time I became – and I think I became the graduate administrator while Dr. Dean was the chairman. He left, I guess, in the 1970s or

early '80s. I don't recall exactly when he left, but at that time Paul Zia was the assistant head for undergraduate programs and Paul Zia then became the department head and I stayed on as his graduate administrator. Paul was a very thorough guy and I thoroughly enjoyed working with Paul. He's a real scholar and a really strong person. I guess he maintained kind of a very close control over what was going on.

When he decided to step down, which was in the late 1980s, 1988, '89, something like that, then Downey Brill came in from the University of Illinois, and he was then the chairman from that time until well after I retired. Downey was a quite different personality than Paul Zia. He was more outgoing. When he first came here he just would [00:36:00]

leave his office in the morning. He'd come in, in the morning, and he'd go off, and I might go in looking for him around 11:00 and his secretary would say, "I don't know where he is. He left here about 9:00 and he's somewhere in the building." He would just kind of roam the building and find a door open and he'd walk in and sit down and talk with a professor and say, "What are you doing?" more outgoing than Paul Zia was, I think, in terms of personality.

He was very successful in getting support from the dean when he came in and he made some really outstanding hires of new faculty. Several of the people he hired in the first years he was here are now distinguished professors and things. The current head, Mort Barlaz, was one of the people he first hired; Richard Kim, who I think is a distinguished professor now, and—. Well there were three or four hires and he made very good use of them. I'm trying to—. A couple of the other names are escaping me at the present time.

He was much more open with me in dealing with financial funds for graduate student support. He would tell me, "Okay, we've got x number of dollars," and we'd sit down and talk about it, and he said, "Well you decide what you want to do with it." The College of Engineering had some distinguished fellowships where the department could nominate students for these dean's fellowships and they were more highly financed than the department ones. We would submit names and then you'd have to make offers to students without knowing whether you would get the dean's fellowship or not, so there was a lot of little give and take as to how we would support students. Downey was very open about all this to say, "Well, go ahead and let's take a risk with this," or, "I've got [00:39:03]

some money that will back up one or two of those positions," and I had a little more freedom on that under him than I had under Paul. Paul Zia, I would go in and talk with him and he would not be quite as open with how much total funds he had and he would make his decision and say, "Okay, make two offers," and I never really had a feeling as to whether he was being conservative or whether he was sticking his neck out a little bit, but with Downey I knew where we were a little more.

He was very successful in getting positions from the dean for development of the department and the department really grew, well, both under Paul Zia and then Downey. We've been very fortunate to have both of them as department heads, so I think that's basically the overview of them.

VF: Did you have much contact or interaction with the deans of the School of Engineering? Did you get to know Dean Monteith?

HW: I really did not have a lot of personal contact with the deans. Mostly my work was—. I chaired the college graduate committee and, as the graduate administrator, was on the graduate committee, so most of our work was directly with the associate deans that operated with graduate study, so I didn't have a lot of direct contact with the other deans.

VF: What were your impressions, I guess, of how their different leadership styles influenced the evolution of the college?

HW: Well, of course the early part, when Dr. Fadum was over there, they had this Ford Foundation grant which really focused on large development of the graduate programs. Beyond that I don't have a lot of input on how the deans functioned. I think the school seems to have functioned well under them but I don't have a lot of comment on [00:42:07] those.

VF: So you talked a bit about the research that you were doing. Did any of that kind of extend into extension work, or did you do much extension work?

HW: I didn't do anything that was officially university extension work. Some of the consulting I did for people was outgrowths of the research that I'd done, but did not work with the extension people at all.

VF: Can you recall, when Centennial Campus was coming into fruition in the 1980s, how did that influence what was going on in the department?

HW: Well, the department of course saw that as opportunity again for facilities and, largely I guess through Paul Zia and David Johnston's input in the construction industry support, enabled the department to get the Constructed Facilities Lab built as one

of the first buildings on the Centennial Campus. The department actually moved into that facility the last semester before I retired, so a lot of the growth that's come out of that facility has come after my retirement. But that certainly was an impetus for the growth of the structural engineering aspects, and there is the geotechnical soil testing; there's part of that in the Constructed Facilities Lab. There were some test pits and things and there's a laboratory for the geotechnical work over in that facility too, which I think is being used by some of the current faculty for things. Unfortunately the rest of the department still [Laughs] is I guess going to be the last ones to move to that campus, so they're a little bit difficult with the dual campus operations.

VF: So you were teaching here for thirty-seven years. Can you point out some of the major changes that you noticed in the department, in the students, the campus, any [00:45:05] particular areas, over that time?

HW: Well of course it's just grown larger, that's for sure, and of course my role with the graduate program. We were, I think, able to attract more and stronger graduate students and certainly graduate education grew tremendously during that period. As I say, when I came here it was largely an undergraduate institution with some master's level work, and it evolved on up to a recognized graduate-level program which I think now is pretty widely recognized.

VF: It seems that there are so many interesting specializations within civil engineering that have kind of developed and come and gone. How do you see the area of soil mechanics and geotechnical engineering in the department now as compared to when you first arrived?

HW: Well it's grown, I think. There are people over there, some of them I've not met, a couple of the newer faculty. But we were able to attract some very strong faculty, I think, in the area and there are some of them that are working more closely with the environmentally-related problems now and doing things that—. In my days we did more construction-oriented kinds of things and got into landfills maybe a little bit, but now—. I think now some of them are working with the offshore thing. Mo Gabr, on the current faculty, he was one of our PhD students that came here and I guess I was the co-director of his PhD program. He left and went to West Virginia, I believe, and then actually when I retired he came back and took my position. And Shamim Rhaman has always been a real theoretician who had some difficulty finding support for some of his work but was just doing outstanding theoretical work. Roy Borden came on during my stay and Roy is [00:48:06]

just a good, broad geotechnical engineer. We've been able to get good people come in.

I think a lot of the development in the geotechnical area we got, I think Dr. Fadum and then my exposures in ASCE and the things we did off campus in the national ASCE operation gave us a lot of exposure to people. I know of at least one faculty member, who's not a geotechnical faculty member but who came here from another institution and said that when he came here the main reason was that his department head knew me and had made recommendations on that basis. So I think the roles that some of us, myself and Paul Zia, who's been very, very active nationally in the concrete, and David Johnston with the construction, the faculty that have been active in these national organizations like ASCE have given the department the exposure. You're dealing with people from other institutions and graduate students, some of their students at other institutions who

are looking for graduate education opportunities would speak highly of our program or the people they knew in our program. So I think a lot of these external activities of our faculty, certainly only me but others in the other areas, have given the department good exposure nationally which helps in the recruitment of graduate students and faculty.

VF: What is your impression then of the students, undergraduate and graduate students?

HW: Well, I think—. Of course when I first came here from Northwestern and was moving from a context of a dozen students to fifty or a hundred students it was quite a [00:51:10]

change. I always felt, and I saw, that the top part of our student class was comparable to anything anyone had anywhere. Probably at the lower end we had some people that were a little more marginal, but our best students could compete with anybody.

I can remember one of our students who ended up in a situation—. I think he started in mechanical engineering and basically flunked out as an undergraduate. [Laughs] He came back and finished his civil engineering program, and I guess he just wasn't working when he was in the mechanical department, but he came back and he graduated with maybe a 2.2 average, or something like that, but if you looked at his transcript his first two years he was like 1.0 or something and when he came back it was all 3.0 or better work. We took him in as a master's student and I remember he was trying to decide on whether he wanted to be in structures or in geotechnical, so he took some graduate courses in both at the master's level. He ended up deciding he wanted to go the geotechnical route so he ended up becoming a geotechnical major and he did very well in his master's program.

Then he wanted to go on and get a PhD and he also wanted to work with—. He had some requirements. He was interested, I think, in soil dynamics and earthquake engineering kinds of things but he wanted to stay east of the Mississippi. I went with him to a group of the top schools for PhDs where I knew faculty personally, worked with the University of Michigan, the University of Texas, Illinois, Northwestern, Purdue, and [00:54:01]

Kentucky, which did not have as strong a general reputation but I knew two faculty in that area who were very, very good. He applied for PhD programs in those and he was admitted to every one of them except Kentucky, and the Kentucky faculty talked to me and said they were so disappointed but they had a new dean who'd come in and he was trying to upgrade their graduate program, and he said, "We won't admit anybody who didn't have a 3.0 or better undergraduate record," and they just ruled him out like that. This student ended up going to the University of Michigan and getting a full fellowship to go there and has been very successful.

So I think our better students could compete with anybody. Our undergraduate, I'm thinking about at this point, could compare with anybody – graduate students as well – and I've had undergraduate students who've been very successful at other institutions.

VF: So you retired in 1997.

HW: Yes.

VF: What did you go on to do after that?

HW: Well, I did a little bit of part-time assignments for Dr. Brill for a few years. I continued some of my outside professional activities and in particular, somewhere along the line in the ASCE operations, this geotechnical engineering division, which

subsequently became what is now called the Geo-Institute of ASCE, they had an affiliation with an international group. There was an International Society for Soil Mechanics and Geotechnical Engineering and in the middle 1980s, I guess, I became what our ASCE group designated as the international secretary. They asked me to serve as the liaison between the US groups and the international organization. I continued that role, and at the time I served as a member of the board of the Geo-Institute and

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represented them as our delegate to these international conferences. They would hold conferences all over the world, every four years an international conference and then regional conferences every two years, so I continued that role of representing the US in these international organizations and pan-American organizations up until 2001 and then turned that over to someone else. But that position again gave me opportunities to meet and get to know lots of outstanding people all over the world and afford a lot of opportunities that I would not have had to get to know an awful lot of outstanding people worldwide.

VF: And have you remained involved at all in the department since you retired?

HW: As I say, shortly after I retired I did a few assignments for Dr. Brill, then did nothing. In '03 my wife became ill with cancer and we had several very difficult years and she passed away in '07, so at that time I wasn't doing much. In the fall of '07, after her death, I was asked to come back and teach a senior foundation design project course, so I went back and taught that one course and since then I have not done anything. So I've just, since that time, pretty much relaxed.

VF: I would say you've earned the right to enjoy your retirement after quite an incredible career. So I guess, just to wrap it up, what would you say is your proudest accomplishment over your career? How would you like to be remembered for your time here?

HW: Well, that's a—. [Laughs] It's a little hard to put into words, I guess. I just want to be remembered as doing a thorough job of aiding in the development of the
[01:00:06]
department, and the roles I played in the profession more broadly in the development of the geotechnical area nationally.

VF: You definitely were very instrumental in creating a nationally and internationally recognized program, and we really appreciate your taking the time to come and speak with us today.

HW: Well, I've enjoyed the opportunity.

VF: Thank you, Dr. Wahls.

[01:00:53]

END OF INTERVIEW

Transcriber: Deborah Mitchum

Date: January 27, 2015