INTERVIEW WITH WALTER S. BRADFIELD
FIRST CHAIRMAN MECHANICAL ENGINEERING

March 20, 1987

[beginning part of interview not recorded]

Bradfield: In a sense, naturally I had a big say in recruiting.

Dr. Hartzell: ..... work.

Bradfield: Well, it is, I guess, when you stop to think about it, when one stops to think about it. And the kinds of people whom I recruited were naturally people who had the same goals and who had the same type of training and background that I had, which

Dr. Hartzell: Can you mention one or two of them.

Bradfield: Well, Ted O'Brien was one, and he came in turbulence, and it turned out that he's internationally recognized person in turbulence. Rene Chabray came in also in the field of fluid mechanics, and he has turned out to be a very well recognized person, although he wound up at Columbia because he liked the city; he came from Paris which he likened to New York. And there was in the field of combustion Abe Berlab that I recruited, and people like that in the department. My activities were pretty much, I would say, confined to the Stony Brook campus so far as development of the University is concerned, I never did get involved with things outside the campus. By 1971 at Stony Brook I believe that we had the department pretty well set up and operating as it is today, so that whatever it is today we had pretty well accomplished by 1970. It was a matter of maturing and getting research out and getting recognition, refining the curriculum and

getting a graduate program pinned down, the curriculum always changes, I guess we all know it never stays the same.

Dr. Hartzell: Did you have a hand in the construction of the buildings other than the original?

Bradfield: Yeah, I would say that in the planning, yes.

Dr. Hartzell: Planning stage.

Bradfield: In the Heavy Engineering, for instance, we started off in the Humanities Building. We moved from Oyster Bay to the Humanities Building. And then we moved from the Humanities Building to the Chemistry Building. As the buildings went up, we moved closer to Engineering, and then the Engineering buildings were the third slice to be finished, and we moved from the Chemistry Building into Light Engineering.

Dr. Hartzell: Light Engineering, the red brick, the long red brick building.

Bradfield: That's right, and then finally we moved from what's now the administrative building for Engineering, or was, I suppose it still, that's where the Dean's office is. Then Light Engineering laboratories were built, the little brown building right across from the red brick building there, and then the big brown brick building, which was, and the Computer Center, went up. I had a hand in the planning of all of those Engineering buildings, except the Computer Science, and that was a real drain. I can see it going here now among the younger faculty. Just one of those things that you have to do in addition to everything else that has to be done. I'm not sure, in the first place, that it's very rewarding; in the second place I'm not sure that you ever do it right.

Dr. Hartzell: You look ahead, and maybe your vision isn't too clear as to what's coming.

Bradfield: Exactly so, because in a place like Stony Brook, for example, you don't have your faculty yet. You know from your experience as an academician that buildings should be designed for specific areas of activity, academic activity, and that includes the laboratories for research, particularly in the physical sciences, including Engineering. And we would have all this money dumped on us and would have to spend it by a particular time, and we really didn't know was going on, to be used for. So there were some mistakes made.

Dr. Hartzell: In those days money was available.

Bradfield: Yes, that's right. Money was available, people were harder to find, and it was just sort of like walking through the fog in a vaguely familiar landscape, and hoping you didn't step in a really big hole. Beside, you didn't want to do it anyway, it was aggravating. But I guess we didn't do any worse than anybody else, than any of the other engineering groups. We tried to do the best we could do, and that's all you can do, tried to stay with basic implementation and tried to purchase things that could be used or would be used by as broad a spectrum of engineering specialists as possible, like instrumentation and things like that. And then in 19, about the early sixties, the electron tube was replaced by solid state electronics, just as we got our laboratories. I was responsible for the instrumentation laboratory before Sheldon Chang came in, and we had, I had purchased some instrumentation with the University of Illinois had been using for instructional purposes, which I thought was very good, and for the short course, went to check it out in the summertime, and there was, it had some

solid state electronics and still had a fair number of vacuum tubes involved in it. And then by the next year Sheldon came in, and we talked about the instrumentation laboratory, and he said, no, no, that electron tube stuff is no good, it's got to go. And so it did. He was right, of course, he was the expert in that line. We were working, a lot of us were working in the area where we were only fringe area experts. Well, anyway, it was fun. So, Sheldon was naming individuals who did things that were important for the future development of the University as a whole. He was certainly a significant influence in that area. Aaron Finerman was a very strong influence in the planning and development.

Dr. Hartzell: I remember him coming to me and saying, do you know anything about computers? And I said, not a thing. And he said, you really ought to go up to the school at IBM. Well, it wasn't a school, it was an invitation to the heads of colleges and universities to get a small smattering, a kind of a seminar for administrators, which I did. I went up to Binghamton, then later on to their offices at Poughkeepsie.

Bradfield: Did you find it .....

Dr. Hartzell: Yes, I backed him. They were just starting the 360 series of hardware, so I backed Finerman.

Bradfield: Well, that was a terrific thing, because as a result of that effort, we got off to a flying start in that area, that was terrific, we were all proud of that. ..... thing to remember, I would never forget this, the time in the sixties when students were breaking the windows in the Computer Center and riots, we were up all night, we had 24-hour duty guarding the Engineering building. Remember that?

Dr. Hartzell: Vaguely, the late sixties, that's when John Toll was President and I was living on campus. I remember there were problems then.

Bradfield: Well, that was shocking to me, I suppose that's why I remember it. It seemed so senseless to do something like that. I lost some respect for young people as a result of those goings on. But, nevertheless, those are some of the things that I remember.

Dr. Hartzell: Okay, I think, do you remember when Harry Porter brought me down to Planting Fields and my first introduction was to a group of people sitting around a long table in the room off to one side in the Great Hall? I think you were one of those there.

Bradfield: Yeah, I remember that. That was the table at which we had a lot of our committee meetings.

Dr. Hartzell: Did you know anything about me before I was introduced to you.

Bradfield: I don't think I did. I don't remember that I did, but you know I'm not a very good person as an academician in many ways because I'm much, too much focused in my interests, unlike physicists or chemists, like Francis Bonner, for example, great musician, politically active, he would know all about you, I imagine. Tom Irvine would too probably, but I didn't know.

Dr. Hartzell: I just wondered whether I was simply imposed on you people by the central office, whether you had any voice in my selection to begin with.

Bradfield: Did you ask Tom that question?

Dr. Hartzell: No, I haven't.

Bradfield: Yeah, you ought to, because he would know, and I wouldn't.

Dr. Hartzell: I know Sujishi was there.

Bradfield: Yeah.

Dr. Hartzell: And Pond was there.

Bradfield: Yeah, Alec Pond. Well, we were, I don't know, you came there with the job, did you, I don't quite remember that? Frequently we had a job of evaluating people.

Dr. Hartzell: I'd already been appointed. This was September 1962, the year they moved out to the Stony Brook campus. Theoretically, I was Executive Dean in the Albany office on detail down to Stony Brook for a year until they could find a president. Then I would go back to Albany, and it took three years because Hamilton resigned the week after I got there as of the end of the year, he was going to leave. That left Frank Moore with the task of replacing Tom Hamilton. And it took him 18 months to find somebody, he found Sam Gould. So I stayed on, and nobody would take the Stony Brook position until they knew who their boss was going to be in Albany.

Bradfield: Well, we're glad you stayed.

Dr. Hartzell: Is that right.

Bradfield: Yeah.

Dr. Hartzell: I am too.

Bradfield: We needed you at that time, I know that. It was a terrible chaotic situation when John got himself in all that trouble. Just being leaderless is discomfiting, is what it is, particularly when you're in a situation where an organization is being created.

Dr. Hartzell: That's right, you have a responsibility but no leadership from above.

Bradfield: Exactly so, that's exactly what's missing. The darn thing is liable to go off in all directions if there isn't somebody up there to keep hold of the strings, so to speak.

Dr. Hartzell: I had been in my office, I think probably two weeks, when somebody came in, and I won't identify him, and said this place is going to go to hell unless you fire 'x' and 'y.'

Bradfield: Pretty typical stuff, I imagine.

Dr. Hartzell: I didn't realize I was stepping into a hornet's nest with people on two sides.

Bradfield: Well, you know, all of us have handled at least several of these traumatic experiences in our lives, but one of the more traumatic experiences was when I was involved as chairman of a censure committee to try, so to speak, this mathematics professor whose name is effectively erased from my mind, and our committee censured him, and then we were all sued. I was sued personally for $150,000 at that time, and that was in the sixties. And *Newsday* was all over us about that thing, oh, goodness, just terrible problems. I just couldn't understand it. I know that there were a number of us who just wanted to get in there and create a University.

Dr. Hartzell: You didn't want to be bothered.

Bradfield: That's right. Why don't you guys go away with this, with your political problems and let us get the job done type of thing, but as you say, your presence there was really needed, somebody had to be there to stabilize that pot that was boiling, and you managed to succeed where John Lee got blown off the top of the peak.

Dr. Hartzell: Well, thanks ever so much for coming over.

Bradfield: It was a great pleasure.

Dr. Hartzell: Good to see you.

Bradfield: Good to see you looking so fit and healthy.

Dr. Hartzell: You're a picture of health yourself.

Bradfield: Well, thank you. That's pretty easy to do

Dr. Hartzell: You're in your sixties?

Bradfield: Yeah, I'll be 70 next year.

Dr. Hartzell: Next year.

Bradfield: Yeah, Mimi and I play tennis regularly and I have my boating, stuff like that.

Dr. Hartzell: I play tennis and golf, and I think it keeps the body in shape. What you don't use, you lose.

Bradfield: I absolutely agree. The body likes work, just like the mind. I hesitate to retire for the latter reason, but I'm sick and tired of the university hassle-type of thing. It's gotten to the point where the hassle is getting more important to me than the, well, there's not too much challenge any more, teaching, I've done that part of it, and I don't want to bring another research lab into existence. And they are going through the same sorts of things that we went through at Stony Brook, so that's not a new experience. And I have my own projects that I would like to do myself, so that's what I'm going to do.

Dr. Hartzell: Good, well, I'm working on a book on values and valuations, which keeps me going.

Bradfield: Well, that's great. I was thinking about writing a book on designs, which I was going to entitle "Any Blockhead Can Design a Boat."

that's my book project. I'll not take any more of your time, Karl, I know you've got

Dr. Hartzell: The interview with Bradfield ended at 5:29 on the tape, using the slower of the two speeds. This is Side A.

[end of interview]