Charnley: Today is Tuesday, March 13th, the year 2001. We’re in Lansing, on the campus of Michigan State University. I’m Jeff Charnley, interviewing Vice President Ronald T. Flinn for the Michigan State University Oral History Project for the sesquicentennial that will be commemorated four years from now in the year 2005.

Mr. Flinn, you see that we have a tape recorder here. Do you give us permission to record this interview?

Flinn: Absolutely.

Charnley: I’d like to start, first, with a little bit on your personal and educational background. Where were you born and raised, and, ultimately, the question will be how did you come to Michigan State?

Flinn: My roots go back to central New York. I was born on a dairy farm in a very rural area, without running water or electricity, but it was within the shadow of Colgate University, five miles away, which gave me a very early focus on wanting to go to college, even though no one in the family had or wanted to. When I was a junior in high school, I decided that I was going to go into engineering, even though I was only fifteen, and I got out of high school when I was sixteen,
but without resources. MSU’s principle—one of the principles of having access for folks is very big with me because, this is out in time with my story, but not having financial resources, I had to find a school that I could attend that was low cost.

I had the opportunity to go to Buffalo, New York, and attend a two-year college called Erie County Technical Institute. They had a program, construction technology, which was as close to civil engineering as I could find that I could afford. This was back in the mid-fifties. I got out of high school in ’54. All the engineering schools were private and, thus, very expensive. So I started at Erie County Technical Institute.

Also, my dad was a small contractor in Buffalo, which I worked there with him while I was going to school. Erie County Tech also had a cooperative training program. So at the tender age of seventeen, I was placed into Crabiel and Crabel [phonetic], civil engineers out on Sheridan Drive, a twenty-person civil engineers, land surveyor outfit. It was love at first sight. I mean, this is what I was going to do for life, except it’s going to say Flinn and Associates over the front door.

So after completing the two-year degree, and I did have another night job, which was on the Courier Express, where I wound up being chief copyboy, which was my first supervisory experience.

Charnley: That was a newspaper in Buffalo?

Flinn: Major daily newspaper in Buffalo, which no longer exists, sadly to say. But it was some of the best experience I’ve ever had. It was a night job because it was a morning newspaper.
So when I finished my two-year degree, I went to work for the Union Carbide in Niagara Falls, a designer, and worked there until September of ’57, at which time I got married and moved to East Lansing.

Now, also during the three years I was in Buffalo, I had joined the New York National Guard Corps of Engineers and had moved up to a position of Sergeant E-5. It was a position also called for master sergeant, so I worked in battalion headquarters, which worked out nicely because I was working with majors and colonels, and that was a great insight. Also, because of not having any money, I entered military competition and wound up being in a position that turned out an alternate assignment to the Air Academy.

By the time that offer came along, I had made the decision to come to Michigan State. But that was engineering-related education, which would have been free, but by the time I got the offer, getting married and coming to Michigan State looked like more fun, and so I did it.

Arrived here in September ’57. My wife agreed to work. Her name is Norene. She agreed to work while I went to school, and life should get better. Housing was so tight when we got here, that we wound up buying a house trailer back of Coral Gables, and the person living next door was a chap by the name of Joe Cavanaugh, who was already working here on this campus. I believe he’d started working here in ’55 after he’d graduated as an electrical engineer. I told Joe I needed a part-time job.

The next day or so, when I was registering, which was over at the auditorium, he met me on the stairway, coming out of the basement where they strip the money off of you, and you went up to the pit on the first floor to try to get your classes. He met me and said, “When you get through
registering, come over to the north campus powerplant. There may be an opening for a student employee.”

I did that, met George Karras [phonetic]. George has an interesting background. He’s an engineer. I’ll come back to George in a minute. But George, after interviewing me, he asked me if I’d had any piping experience. It turned out I’d become the pipe expert at Union Carbide, wondered where I’d ever use that knowledge again, and the only question George asked me was, “Have you ever done any piping joints?” And I’d spent a year and plus doing piping jobs.

So he turned to Adam Huleneck, [phonetic], who was then the plant engineer, I believe was his title, and said, “We should hire this fellow.” And they did. So I started working here about three days before I started classes, and I’ve never left. So for three years I was working part-time, full-time in the summer, and then when I graduated, I was asked to stay on for a year or so, and that was 1960.

One of the summers, ’58, was a very bad year economically in Michigan. In those years, the State of Michigan totally was financed by a 3 percent sales tax. Car sales went into the dumper, so there was this great recession. So student employees were notified they could only work twenty hours a week. Well, I was desperate to work more than that, but I had no connections in the community.

Fortunately, on the Friday before this rule was to kick in, I was informed that if I was willing to go down into the powerplant of the north campus and help the maintenance guys, I could work forty hours a week. I jumped at the chance. Worked for a fellow by the name of Kenny Green, who retired a few years ago, tearing down a three-megawatt General Electric turbine. Really hot, dirty work. Made a lot of great good friends in the powerplant.
That experience bode well for me, because when I was interviewing for my current position, there was only one other candidate who had actually had powerplant experience. So you just never know when these experiences will come back to help you.

I’m wanting to talk about George Karras for a minute, because George was selected to go down to what is now Oakland University to start that campus, and worked very closely with Mrs. Matilda Wilson, who had donated her property so that a branch campus could be established and eventually spun off into being Oakland University. I’ve not seen George in quite a few years now, but I did talk to a colleague of his who said he seems to be in good shape, and I hope to hear from him.

Charnley: He headed the physical plant there and it was for many years?

Flinn: Yes, from virtually starting in the chicken coop. So that was a very interesting history.

Charnley: How was it that you heard about the campus even before you came?

Flinn: Professor Patten at the two-year college, at Erie County Tech, advised a friend of mine, Bob Able [phonetic]. Bob and I had decided to go out and get a four-year degree in civil engineering. He didn’t have any money either, and so we were exploring low-cost schools. There was one out in South or North Dakota, School of Mines, as I remember, and very, very low tuition.

So we talked to Professor Patten, who was our math instructor, who was a professional engineer. He’s the one who explained what a P.E. was to all of us folks, which made another goal
in life, is to become licensed to practice engineering. And Harry Patten said, “Well, guys, that might be a very school.” But, of course, he was a product of the Depression, so he said, “That may be a very fine school,” but he said, “I’d suggest that you want to go to a school where the title of the school is known more than thirty miles out of town, because your next assignment after you graduate is to get a job. But, first, you have to get an interview. And maybe if they’ve heard of the school, they’ll at least talk to you.”

Given that advice, I sent off letters to Penn State, University of Michigan, Michigan State, and Illinois. Michigan State and Illinois were willing to discuss giving us credits for our two-year degrees. The other schools wouldn’t. East Lansing is closer to Buffalo than Champaign, which we never visited.

So we came here and the reception was just really great. There was a lady over in the College of Engineering who was known as the engineers’ friend. Her name eludes me in the moment, but I’ll try to come back to it. When we were in talking at the counter in Olds Hall, she rushed out of her office and said, “You two guys have graduated from a two-year college.” She said, “I’m on a blue-ribbon panel here in Michigan. We’re establishing community colleges. I want to talk to you.” So she sat us down and said, “We’re having a real time discussing whether we should grant two-year degrees or whether the credit should be fully transferable.”

I said to her, “Obviously, we would loved to have credits that were fully transferable.” But I said, “Most of the folks that graduated with us were happy with their two-year degrees.” So I said, “If possible, it would be great if you could do both.” In fact that’s what got established. How much influence my advice had on that, I don’t know. But at least it was really neat to be asked our opinion, having had that experience. I’ll try to remember her name, but I don’t recall it now.
Charnley: We can add it later.

Flinn: She was an associate dean or assistant dean. She was known as the engineers’ friend, and that goes back to the mid-fifties.

Charnley: What was your impression of the campus when you first arrived?

Flinn: Well, I need to share another thing with you about the campus. There were a couple of guys that were on cooperative training or summer training at Union Carbide. This is how Union Carbide used to recruit people, by bringing them in for the summer, who was attending Michigan State. So they said good things about Michigan State.

It probably was a little prior to that when, at the newspaper, I was saying to one of my co-workers that I was thinking of going to Michigan State. The city editor spun around--the name of Gaskin--and he said, “Have you been there?”

And I said, “No.”

He said, “Well, I’ve got to tell you, it’s maybe the most beautiful campus in this country.”

He went on to explain how he had no children, and he and his wife, for a vacation, every year would get in the car and start driving across this country. Any campus he got close to, he stopped at and drove around it and looked at it. So he had visited hundreds. So that was a great thing to hear, that this place really was neat-looking.
Charnley: Even before you got here.

Flinn: Before I got here and before I talked to these fellows at Union Carbide. One guy knew I was taking electrical engineering. So they also spoke well of the place. So then with my visitation and the attempt to transfer credits went well, and so, as a result, then we came here.

Charnley: What was the southern limit of the campus when you came, in terms of the physical size?

Flinn: It was beyond Mount Hope, because the houses and barns were still existent on the south side of Mount Hope, as I recall, and some of those were being down.

Charnley: The golf course, Forest Acres, wasn’t there?

Flinn: Yes, Forest Acres was there, so I believe that we owned to Forest Road. Yes. The radio station was up, and we owned, I think, beyond there. I’m not sure. I know that I would say definitely to Forest Road at some point. But [John A.] Hannah was in the process of buying more land. So because of the golf course, we owned down to Forest Road and, I think, a little further south into what is now the beef cattle barn. So it’s possible that we owned to Bennett Road. That wouldn’t surprise me, even in ’57, that he had purchased it. But, like I say, some of the barns were being taken down, so we hadn’t owned them for a great long time at that point.
Charnley: How did you balance your work with your studies?

Flinn: Actually, when I was in Buffalo, I either worked two jobs, two full-time jobs, or was attending school plus working nights. When I was on cooperative training, it was two full-time jobs, because I worked for the newspaper almost all the time I was at the two-year college at Erie County Tech. That was forty hours a week.

Here the work was during the day, so I only worked during breaks between classes. So we had to have at least a two-hour period of time. The campus was smaller in those years, so we could get back to the powerplant, I believe it was ten minutes between classes. But you would try to push your classes into a half a day, so you could come in for a full half-day. But usually it was more like three-hour blocks of time.

You would get as much time in as possible, so you can see that the number of hours I worked at Michigan, we did work weekends as well, the survey crew, and then full-time in the summer. But the number of hours I put in while I was a student at Michigan State was far less than when I was in Buffalo, because I worked full-time nights. But, of course, the curriculum was more rigorous here.

My memory tells me that tuition here was $85 a term, take all the credits you can. Now, maybe it was as low as sixty-five. I had to pay an extra hundred dollars because I was out of state. Of course, that’s a very different dollar than today, but I was just absolutely amazed and delighted with how low cost the education was here at Michigan State.

Charnley: Did you get any break at that time for being an employee, too?
Flinn: No, no.

Charnley: Were there any important influential professors that you remember or regarded like that?

Flinn: Leo Alstine [phonetic], Prof. Lee, Charley Cuts [phonetic]. There was a fellow by the name of Ringo, who was a structural designer. There was a couple of other ones that I can’t recall their names right now. They were in the engineering field.

I took an elective called business letter-writing, which was a great course to take. I learned real early on at the two-year college, writing and being able to speak well were pretty important. You’ve got to be able to represent yourself. So in polishing it, because we had a lot of writing there, we had to do reports at the two-year college. I found my colleagues here at Michigan State had never had that experience of having to really write and understand how you do technical reports. Then I went on to take this business letter-writing, which was really a plus.

But there’s a lady that was in ATL, American Thought and Language, Culpepper, Marilyn Culpepper. Delightful lady. I talked to her, I think, within the last year, and I got to meet her husband, who was over in the College of Engineering only in the last twenty years. But I knew her from my student days, and she was a delightful person to have and really have qualified.

Charnley: A gracious person. I know her well as a colleague.
Flinn: Yes. She’s super. The whole place was super. I stayed here in 1960 for a year or so. That was the offer, and I was on what was called a labor payroll, which had absolutely no security. You were just grateful July 1st you were still on the payroll.

The pay was not very good. It was the worst of the three offers I had, but I didn’t have to move. We liked the community. But I was treated so well as a student employee, so that was a plus, and then it was just an honor to be asked to be on the team of John Hannah to build this megaverisity. Not everybody was asked to stay, so it was truly an honor to be asked and it was just great good fun. And I’m still here.

Charnley: In those early years in the 1960s, and you mentioned John Hannah and his vision, how did he convey that to people?

Flinn: Well, I’ll tell you an experience I had, and it’s caused me to meet all my new employees and to meet the people who were promoted, which I think is very important to do. I remember the day that John Hannah walked across a large room to introduce himself to me. This was no later than ’63. At that time, John Hannah was co-chair of the Civil Rights Commission with Father [Theodore] Hesburgh. He was also Under Secretary of Defense for this country, as well as being president of this university. He’s just a high, wide-profiled person. So that was a stellar day, which I still remember well.

He did kind of that personal thing. He was quite a stern, all-business kind of a guy, but he also took time to say something to people as he would meet with them. When he would make a speech, when he would talk to groups, his vision for this institution really came across. It also was
obvious, for those who really took a hard look, is that he didn’t have necessarily a vision that this campus would get as big as it has gotten.

It was in the sixties when there was on the picture of, I believe, *U.S. News and World Report*, and the question underneath was “Is 35,000 too big?” The campus was growing to that level. So he was quoted in that article as to the impact of having that many students, and it was obvious that this was a big question. Was this just getting too big?

So, his vision, he was very big on the international scene. He took advantage of situations. Obviously, the G.I. Bill was the driving force to allow so many people to go to college after World War II, so he opened the doors, and I’m sure he was urged by the State of Michigan to make room for these folks. In order to accomplish it, they brought in the Quonset village and they brought in all the barrack buildings which existed in this area when I arrived.

This was a big place when I arrived. I recall 17,000 students. I’ve seen it written that it was 19,000 students when I came here in ’57. But the physical size of the place, we had for our building, where the physical plant building is now located, this was covered with barrack apartments. So it was developed, if you will.

The part of the campus that wasn’t developed is what we call the science campus, which is east of Farm Lane and south of Shaw Lane. Those were the cow barns and the bull barns. That was farmland and where the Engineering Building now is was a sheep barn, I think it was. Then there was a horse barn that was being used as a laundry, which was on the south side of Shaw Lane, west of the fire station some distance. It was setting where now the north end of Wonders Hall is.

But in physical size, this campus was huge compared to what I’d seen, because I’d never been at a school where there’s more than 5,000 students before I arrived at Michigan State.
Charnley: In the sixties, what were the areas that you developed as a specialty or that you were responsible for, and how did that change over time?

Flinn: The area that I focused on were two areas. Although I was trained as a civil engineer and had taken some advanced classes in structural design, there wasn’t much structures to do, so one had to be willing to do HVAC, heating, ventilating, and air-conditioning. We didn’t have much air-conditioning then, but some were starting, because we were shifting into becoming a research institution. But we built Bessey Hall in ’63 without air-conditioning the offices. It was the first building where classrooms were air-conditioned. So MSU was slow in adding air conditioning, because Hannah considered it was quite costly.

About ’63 it was being realized that it had to happen. So the Chemistry Building was air-conditioned and Biochemistry. So we started in that vein. I was willing to do HVAC design. I first worked with a fellow by the name of Reeny Houser [phonetic]. He was a student initially, and then he went to Eastern Michigan years later, about ’63, I suppose.

Then I did utility design and a big focus on steam tunnels. In fact, I designed the first steam tunnels that were built since the thirties. This was in ’63. The first steam tunnel was in the Shaw Lane plant to what was then the new Engineering Building. We proved that we could do walk-through tunnels as cheaply as direct buried, which you had to do things very inexpensively in those days.

[M.] Peter McPherson likes to do things inexpensively as well, so I do not find his focus foreign at all, because under Hannah the watchword was save every dollar possible for an
expanding campus. So that was a motto. “Save every dollar possible for an expanding campus.”

So that’s part of the Hannah image and our marching orders.

Charnley: Do more with less.

Flinn: Yes. Certainly get a lot done with what you’ve got. And we did.

The question, it wasn’t clear that we’d get a cyclotron. Henry Blosser as able to do that. But, obviously, Blosser was recruited here with that in mind. So when you talk about Hannah’s image of where we were going, he was an opportunist. He took advantage of the G.I. Bill, a lot of the students coming here, because he really turned this from a small residential campus to a mega international university.

Charnley: Did you continue at all with the National Guard work, or no?

Flinn: No. It turned out that the commitment was for eight years. When I arrived in Michigan, it was like, “Well, all right, you were discharged from three years in New York National Guards. Your commitment with the Reserves is for eight years. You should be in an active reserve unit.”

I said, “Well, I was in the Corps of Engineers.”

They said, “Well, there’s one in Detroit.”

I said, “Well, I don’t have a car.”

They said, “All right. We’ll put you on inactive reserve.” Five years later, I got a full discharge from the military. So I got through relatively easy.
In the fifties, it was understood that you would be in the military for two years. That was almost universal unless you got married and especially if you had kids. I didn’t want to do that that quickly, so I was always at risk.

But you’ve got to remember, the Sputnik went up in ’57 when I arrived here. Then if you were taking engineering, they wanted you to complete that degree because they wanted your skill possibly in defense. So it was interesting times. I didn’t want to have the military experience, and I really liked the military, but I didn’t want to delay getting a college degree. My goal was to get a four-year degree as quickly as possible. I had the resources. I could have graduated in ’58, rather than 1960, with my four-year degree.

Charnley: Your initial contribution was through the steam tunnel development?

Flinn: Yes, that was a big one because two international organizations had me come and speak and present our story of walk-through steam tunnels at Michigan State. Back then they were called the International District Heating Association, and also the International APPA organization, which was Association of Physical Plant Administrators for colleges and universities. Those presentations were made 1970, around 1970.

Charnley: How did some of the myths about the steam tunnels develop here, that the students had, and that sort of thing? That’s part of the history of the university that people talk about.

Flinn: Yes. I’ve been accused of creating dungeons and dragons.
Charnley: It’s part of your design.

Flinn: Yes. They said that emanated from here, and I’m not sure that’s fully true, but somebody maybe was pulling my leg.

With having walk-through steam tunnels, for the most part the students discovered they could pop a manhole cover open and get into the tunnel, and then they had good fun traveling around. As a consequence, we had to employ a lockdown device so that we eliminated that from happening.

The interesting thing is that part of the dungeons and dragons business related to Michigan State. An article I read pointed out to an area under Olds Hall. In fact, it wasn’t a tunnel. It’s like it was part of an unexcavated portion or partially excavated portion of the basement. So, somehow that was related as being a steam tunnel. There are steam pipes in there, but it’s not part of the tunnel system. So I think there was a lot of stretching of the story to say that the steam tunnels, and most of mine were on the south campus, caused that story to be generated.

But during those late sixties, the students liked to do tunneling. They would call it, “We’re going to go tunneling.” So the police, of course, got involved in this. And there was some hazard of having people roaming around the tunnels. So we put these lockdown devices, which eliminated that.

Charnley: What are the other aspects of the physical plant you dealt with in maybe, let’s say, the late sixties, early seventies? Did you get involved in construction?
Flinn: The late sixties, John Hannah’s brother-in-law, starting in about ’63, ’64, something like that, John Hannah’s brother-in-law, Vince Vandenburg [phonetic], offered to come and be the construction superintendent because of the vast number of projects that were taking place. So he was on board certainly by ’65 and became a mentor of mine, which turned out to be quite great for a young fellow.

Vince Vandenburg had actually put in the bridges for George Patton in World War II. So this is a guy that could get up in the morning and get something done. He had had his own construction—

[Begin Tape 1, Side 2]

Flinn: So when Hannah was under fire in the sixties, some people, even though they were here, don’t remember that Hannah actually had to retire before he was fired. As he was getting under heavy fire, it was really, of course, distressing to Vince Vandenburg, so he was thinking about just quitting and leaving. About the same time, he was diagnosed with terminal cancer, sadly to say, and was removed from the scene, if you will, or had left.

I was asked to take over the construction inspection as well. By that time, I was in charge of the engineering office. I became in charge of the engineering office like in ’66. So here it is like ’69, ’70. I think it was ’69 when I was asked also to take over the construction program. So I did. In 1970 there was quite a slowdown in activity. So there was some reconsolidation of design.
About that time, Bob Sefort [phonetic] left physical plant, he was here a year or two, and became the university architect under Jack Breslin. That’s about 1970. So he and worked very closely together in the ensuing years. So he was virtually a one-man office. He was the university architect, and we had all the engineers over here in what was called Engineering Services. Then I took on the construction inspection responsibility as well.

Sometime later, I was asked also to be responsible for our business office, which was good experience to have. I obtained a degree in business management by distance learning, which today everybody would say, “Well, you used a computer.” But this was back when you did it by correspondence. Great education, very tough to do, which gives me a real understanding when we talk about people in their own homes are going to sit there and get a degree on the computer. I’ve got to tell you, it’s tough to pull yourself away from the family and lock the door and do all that. It might be easier on the computer than the way I had to do it, but knowledge is knowledge.

I almost went and got a law degree, but that would have required at least driving to Flint at the U of M branch campus. I decided that having a good foundation in business was more important than having a law degree. There was something attractive about having a law degree, but since Peter has a law degree, I guess maybe I should have gotten a law degree, but nonetheless. But that, of course, was a smart thing to do, as it turned out, because a physical plant is really a collection of businesses.

So I was asked to be responsible for the business office. It needed to be organized. John Lewis was there at one time, and he left to take over University Services. Then later on, I was asked to be responsible for Automotive Services at one point. Then with another person leaving the campus, I was asked to leave engineering and be responsible for maintenance and custodial.
So I’d had these various experiences. I’d worked for Ted Simon, who I don’t know if you’ve interviewed or not, but if you have the chance, you should do that. So I’d had either acting responsibilities over most of the units within the physical plant when Ted decided to retire in ’84.

Now, 1980, I was successful in being offered the top physical plant job at the University of Illinois. It was important that I could confirm that I was a candidate for a big league job. I turned that job down. They don’t open up all that often, so it’s not something to discard lightly, but I turned that job down because my son had just been picked as starting quarterback in high school. It was a tough decision, but.

Charnley: Were you in East Lansing then?

Flinn: We were in Holt. We live in Holt. Big school district, and he was starting quarterback. I still remember who was starting quarterback when I was in high school. I’m not sure I remember who was principal. Being starting quarterback in high school is an enormous job. I think every young man would love to have that assignment, although my son said that he could understand if we had to move, which was very big of him. I didn’t.

It did turn out all for the good, because this is the job I prefer to have. But I had no latch on the job. In fact for a number of months after I won this job, Roger Wilkinson told me I really didn’t really appreciate what I pulled off, because since they wanted some difference and I’d been here twenty-five years, I was probably viewed as maybe part of the problem rather than the solution if there was a problem. It’s a style of management that people like or don’t like.
Like Hannah had to leave. I know a person who went and talked to all the trustees about this, who’s a consulting architect. They said, “If we were General Motors, we were corporate, we’d never get rid of John Hannah.” But the university is a very different animal, and it’s a social animal. There are philosophies, and John Hannah’s style is just archaic. It was “Time’s up.”

So these things happen, and so some people were nice enough to say they viewed my approach was different. I think there was a lot of misconceptions of the way physical plant operated prior to my being in this office, but, nonetheless, I moved into the office, I believe it was, July 1st, 1984.

Charnley: What was your title at that time?

Flinn: Assistant Vice President, the same as it now. Assistant Vice President of Physical Plant.

Charnley: Were there any changes that you made relatively soon?

Flinn: The one thing the committee asked me, I remember this because there was a committee that had two or three deans on it for identifying candidates. One of the classic questions is, “What are you going to do in the first sixty days to make a difference?” I said, “I’m going to go visit with all the deans, one on one.” That really impressed the committee.

Ted Simon, although he early on my first years here, he knew everybody, I think he knew all the deans, but I think that there was a perception that we were aloof. So I made a point to talk and meet with them, welcome the deans to campus and explain what we do, if they got any kind of
concern, they could pick up the phone and call me. It's now called customer service. To me, it's just the appropriate protocol thing to do. There needs to be relationships.

I stayed here because of how much fun this place was because we knew each other. Then it grew like topsy. Even though it was a big place, we kind of knew each other. Then it just grew like topsy in the sixties, and we became unionized and a lot of the different workforces got unionized. We became strangers. We were all very busy, and so if you don't work at staying in contact, you can become isolated. If people don't know who you are, it's just the relationship isn't as good as I think I should be.

So I’ve made a point—and I still do this--when a new dean is appointed, I ask for an appointment and go over and talk to them, introduce them to their physical plant. So it pays really good dividends. So that was a different approach, possibly. I’ve taken a position that we need to be very collegial and cooperative with various units.

As an example, for forty-some years, I can testify, there’s been talk about Grounds should be part of Physical Plant. Hannah separated it in ’46, I believe it was ’46, as best I can tell, for a couple of reasons. One, the beauty of the campus was something he wanted to stay close to, so he had the Grounds Department report to a fellow named Harold Lotner [phonetic], who in turn reported to John Hannah. Harold Lotner was a site planner, head of site planning.

But also, in those days, you had to manage a workforce to justify a high salary. So Lotner required $10,000 to come back to campus. He got $10,000 in the late forties, but that was a significant salary in those days. So he had the Grounds Department as a group of people to manage and was the site planner. I knew Harold very, very well. I attended the staff meetings as the liaison with the physical planner. In those days, it was called Buildings and Utilities. When Hannah
separated the buildings and grounds and took grounds out, what was left was called then Buildings and Utilities. So that was the title for quite a period of time until sometime in the mid-sixties when it became Physical Plant.

See, that was another great experience to have, because I was involved in the master planning that was taking place. Harold would come back from a meeting with Hannah and tell us what’s going to happen next. Harold Danke [phonetic] was in charge of space planning, and he was deciding what the next new building should be.

The construction during the sixties was unbelievable. We had the cyclotron. I have pictures of the Cyclotron, the Chemistry Building, and the Biochemistry Building under construction, all at the same time, in one spot. I mean it was just—and the Vet Clinic followed very shortly thereafter, or maybe it was also under construction at that point. Wilson Road was being chopped in right through farmland. That part of the campus, Shaw Lane ended at the circle in front of Owen Hall. So that was the end of the road. So, Shaw got extended. Wilson Road got created. Certainly use of farmland. So most of what we know as south campus was built in the sixties.

Charnley: And all the dorms and everything that came in, too?

Flinn: Yes, a huge number of the dorms. Brody Hall was built in the mid-fifties. Case Hall was the first new building. I believe that was in ’63, and that was out here on south campus. All the other residence halls, Shaw was in place in ’48, I believe. Case Hall in ’63. And then everything, Wilson, Wonders, McDonel, Akers, Fee, all of those were built in the sixties. Holden Hall was the last one.
Charnley: Was there any point where the building slowed down? Did it reflect the economy like, let’s say, in 1958 or take a downturn?

Flinn: Yes. In ’58, the construction was very slow in ’58. 1960, the only building that was built was a little building called Bioresearch, which we just removed to build a new science building. In fact, it was so slow I was thinking about leaving. We weren’t doing much. When Kennedy became President, things really took off.

Of course there was a huge need for expanded university space for the baby boomers. So it was just an enormous construction period. Enormous. I remember one meeting when Ted Simon came back after meeting with a few people, including Hannah, and that we had just taken bids and contracted the construction of Wonders Hall. Ted came back and says, “Dr. Hannah says, ‘We need another one.’”

I said, “Okay. The year after Wonders Hall, we’ll have another one up.”

He says, “No. I need it at the same time.” So we took the Wonders Hall drawings, changed the title block, reissued them for another set of bids, and that’s McDonel Hall.

Charnley: Cookie-cutter?

Flinn: Yes, yes. Just like that, boom, boom. That site, up to that point, had not been really studied, as far as putting a residence hall on it. I mean, that’s how we were doing things. It was that fast.
Every week there was another “Well, this is what we might do,” and within a few weeks, it would be decided upon, and away we’d go.

We had to build—the powerplant was new. The powerplant, now the Simon Powerplant, sets on the old dump. This was the campus dump. The cops used to go out there and target-practice by shooting the rats. That’s a fact. In the late fifties.

So that became a site. That was a huge, huge debate in the legislature in Michigan of whether the university should continue to generate electricity. Fortunately, the decision was made to do that. The Shaw Lane site was too small for an expansion, so the new plant was built south of the railroad tracks, which caused me to have to get permission from the Grand Trunk [phonetic] to get permission a steam tunnel underneath the tracks. That’s a whole story onto itself.

Ted Jacobs was the chief engineer. I still remember him. He wouldn’t let me jack it through. I had to use what’s called liner plates. After it was all done, he said to me, “If I was to do it again, Flinn, I’d let you jack it,” which is nice to hear from a much senior engineer, that I had the right idea.

Just some wonderful experiences here of helping to build this place. But, you know, it has such a wonderful mission. I’m certainly a standing stark testimony to anybody that comes here to partake of this will be better off, maybe not in dollars, but you have lots of choices. You have lots of options. In life, that really becomes so key that you have options to exercise. I can go anyplace, virtually, in this world as an engineer, practicing engineer, or as an executive engineer, with the skills and knowledge that Michigan State has given me. I can go anyplace. I don’t have to stay here.
I’m hoping to make this place, although I haven’t had occasion to have a youngster of mine, I have three children, to graduate from Michigan State, I now have eight grandchildren which I can focus on. I’m hoping to make this place as good as possible for them when they come.

Charnley: Can somebody steer them this way?

Flinn: We work on them real hard.

   Somebody did it for me, said there was room here, it was affordable, which is all part of access, and a very quality education. It’s been such a great experience, and it continues to be. It’s just really interesting the parameters of build like crazy during the sixties, adding a powerplant, which is somewhat unusual for a university. It was the right thing to do. We could continue to do cogeneration.

   Then we got into the energy crisis in the seventies. We were a mecca for people to come to, because of the low amount of energy we use on this campus because of cogeneration.

Charnley: Could you explain that?

Flinn: When you produce the steam that goes out to the campus to heat the buildings, it passes through a steam turbine, and the spinning of the turbine spins the generator that generates electricity. So we’re self-sufficient in electricity and central steam. We are primarily coal-fired, but each of our boilers can fire with natural gas. So the main campus, we also supply our own water from deep wells in the farm district. So we are the Board of Water and Light, if you will.
When you think of what we have here as a collection, just in the physical plant, to serve this very large community, we’re the equivalent to the twenty-third largest city in Michigan, just in the numbers of people. But here we have the Board of Water and Light, if you will. The Engineering and Architectural Office is a full-blown consulting firm. Doesn’t have my name over the door, but I was allowed to put all that together. It’s just like a Harley-Ellis firm or the Smith Group. Now, they’re much larger, but here they are full-time professional engineers and architects with one client called Michigan State University. We use a lot of these other consultants because it’s just a small group of people.

We shift to the maintenance department, what’s called Maintenance Services, and those are contractors. In fact we are contractors over at the housing group because they hire us. We’re funded to take care of the general fund buildings. But we have plumbers and electricians and all of that with a central control panel, which the energy conservation efforts on the campus, which are quite significant and becoming of high interest now with sustainability issues, was put in place as a result of the energy crisis of the seventies, which also prompted us to cable the campus, which was turned in to be telecommunications.

Charnley: But you were cabling before.

Flinn: Yes, the signals were to do energy control, first, in the residence halls. They could afford to do it. We added our academic buildings. Coaxial cable, we pulled three. Only needed one, but we knew television was coming, and so that was the way to do that. So you take two steps or three steps and you take one step that way.
So they had this energy control, but they also had the people who maintained the HVAC systems. So we have all the trades, carpenters, electricians, an extremely skilled group of people. Then Custodial Services is the same as having a contract cleaner, a company of Service Master is a big one in this country. But MSU has its own Service Master, if you will.

Transportation is the AVIS we have over there. Now we moved our busing operation to Kata [phonetic], but we had a fairly significant busing operation for a great many years. Also, I call it the AVIS, which is the car rental operation, leased cars, and then the Mobil gas station, we have a full-blown service station over here. That’s Automotive Services.

Telecom started out, originally, as being just a switchboard. We now have telephone installers, we have cable splicers, and so we now have quite an industry there called Telecommunications. Then power and water we talked about earlier. So as you look at the org chart, we have the Engineering and Architectural Services. These are all separate business, if you will.

Then we were asked to take on recycling and waste management when Mark Murray was here as vice president. So I’ve assigned that to Bob Ellerhorst [phonetic], which surprised almost everybody. But Bob has been successful in recycling fly ash. The biggest amount of recycling in quantity and dollar savings to the university was the result of his efforts of getting a cement plant to take fly ash as part of its an enhancer for cement. Then he’s into shipping some fly ash to Ohio, where it’s become a soil enhancer. It’s being mixed with cow poo, I believe. It might be even waste out of a sewage plant. I think it is. I think there’s some of that in there. We’ve funded one of professors to do some research here to try get the rules changed in Michigan so it would be permissible here. We certainly have the fly ash, we have the cow poo, we could even get other stuff
in East Lansing. If it works in Ohio, why can’t it work in Michigan? And we’re doing more recycling in the buildings. Of course, our campus community, and especially the students, want us to do more recycling and it’s the right thing to do. So all of these things continue to make this just lots of fun.

Charnley: It sounds like that self-sufficiency with the power plant and the electricity and that sort of thing, seems like a model reminiscent of a self-sufficient family farm almost.

Flinn: There are some similarities to that. What’s interesting is that the latest problem in California that everybody’s read about, one of the things not too many people have noted is that the governor, one of his steps, is to put cogeneration on all the campuses, because the number of BTUs that we require at Michigan State is substantially less than if you’re buying the electricity and also got a heating plant like you’d normally have a furnace in your house. But what most people want to do is just to calculate the BTU value of the kilowatts coming from the electric line. You really need to go back to that powerplant that’s generating it and say, “How many BTUs are being consumed?” Because the central generating plant’s usually on a lake or a cooling tower to reject the heat. We use that heat.

In Europe, they wouldn’t think of building a plant that wasn’t cogeneration, because energy is so expensive. In this country, even though we had it in place, the model in the fifties and sixties and seventies in this country, even after the energy crisis, was to continue to do plants that did not use the heat. So they are only about 35 percent efficient, where we’re more like 65 percent efficient.
This is a hard story to tell to people, because people don’t understand it. Everybody now wants fuel cells, which are going to produce water and CO2 as byproducts or waste products, which would be wonderful. But an article I just read points out that a fuel cell still today costs about $1,200 per kilowatt of capability, and a central power plant similar to ours would be 400 to 500. So the economics are to continue to do central plant.

It was interesting because we did study whether we should have a nuclear plant when we built this plant. We were too small for that to even be a viable way to go. But I just read the *Kiplinger Letter* that now nuke plants are being viewed with favor. This country is starting to wake up to the fact that you have to have generating facilities if you’re going to keep using more and more electricity, which the American society, and, quite frankly, worldwide, everybody wants to have more and more electricity to run all kinds of things.

Charnley: You mentioned unions, that many were involved with. What was your experience either as part of a union or how were you involved in negotiations? That’s an important part of the story the last fifty years.

Flinn: I’ve got to go back to the *Courier Express* in Buffalo. After thirty days, city editor says to me, “Are you going to sign this card?”

I said, “Well, I’m not too crazy about unions.”

He says, “If you don’t sign this card, you’re terminated tomorrow.”

I said, “Why in the world would you, as a manager, want me to join a union?”
He said, “Son, we all belong.” So I wound up being a card-carrying member of the AFL-CIO editorial writers of this country. That’s the same card that Walter Cronkite still carries today. Most people don’t remember when Walter Cronkite, in fact, went out on strike, but he did. He refused to cross the picket line. So that’s my frame of reference to a lot of folks who get grumpy about having to be represented by a union as the most credible man, which he was known as in those days, he was the most credible person in this country, and obviously a consummate professional. If he could be a union member, I think I can bring myself to be a union member if I have to. I’d prefer not to, but that’s always been my--I did see the union do a couple of neat things when I was at the newspaper that caused me to say that, well, unions aren’t all bad.

So, as a result, when I came here, I was amazed there weren’t unions, and then I was informed of the Hutchinson Act, which prohibited unions from striking. Again, this was in the late fifties, early sixties. The law was changed when Kennedy allowed the federal employees to become unionized. So the Hutchinson Act was repealed, and not surprising to me, the blue-collar groups on this campus rushed to become unionized. And, as they say, the rest is history.

So we now have virtually up to my level everybody is unionized. There’s a whole long story of the administrative professionals getting into that mode as well. My biggest experience was actually service on what was called the APA Association Board. I and Lowell Levy [phonetic] were co-authors of the bylaws for the AP Association, Administrative Professional, with the express purpose to keep it from becoming union, rather it be an association. We were successful for a great many years in that regard.

But, finally, the leadership changed and it wound up being a union and then it was taken the Merck. Merck said, “No, you can’t have supervisors and employees in the same union,” so now
there’s the APAs and the APSAs. Administrative Professional Supervisors and then the APAs is still called the APA Association. They haven’t merged, but they’ve certainly got a strong connection with MEA, Michigan Education Association, but that was their choice. So the CTs got unionized, but the first ones that got unionized was like our maintenance group and the custodians. Over at Housing there was the cooks. Then the powerplant folks, they wanted to go with the Operating Engineers. Even though the university resisted, they won in court the right, so they belong to the Operating Engineers. Our police department folks are FOB. So you can see there’s a great amount of unionization that took place.

So when I was on the AP board, we would meet and confer, as we put it, with Jack Breslin about the conditions, salary, and working benefits. I was at one point chair of the Salary and Benefits Commission. So that was really a terrific experience to have.

Nowadays, my having been a union member, and having in fact at the two-year college one of our classes was labor relations, and part of the class was to go to labor court and watch was going on. I never had that at Michigan State. Even though it took me two years longer to get my four-year degree, some of the things that I was taught and saw and experienced at that two-year college are cooperative training-- I could spend the rest of the morning talking about the key things, the tools that they gave me that were enormously beneficial in my early years in my career. Some of that still continues today.

Charnley: So that preparation really helped you here.
Flinn: Absolutely. Absolutely. Like the labor relations thing, I still remember the things I saw in labor court. And quite frankly, there are a lot of people who had never experience working with or being part of a union who are making some key decisions on this campus. I was just a kid, okay, so I wasn’t listened to. But there are some of those decisions that weren’t the best, okay, but that’s history now.

So it’s a choice of the employees to become unionized, and if they so do, there’s a book, which is called the contract, and both parties have to adhere to it. They have the right to grieve, and I understand all of that. We as management have the responsibility to make this place run. I don’t mind telling them it’s going to be with them or without them. I’d rather have them be with them, but they’ve got to remember what we’re all about and it’s bigger than me or them. It’s this university, and we’ve got to do what’s best for it. We all have our roles. But for the most part, there’s very good relations.

Sam Baker, I’ve got to tell you. I don’t know if you’re interviewing Sam Baker, who’s head of labor relations. Sam Baker is the best I’ve ever seen. He works for Keith Grody [phonetic], who’s also extremely good at his assignment. But Sam Baker, like I say, is the best I’ve ever seen, a real straight shooter, caring but appropriately hard-nosed when it’s necessary to be that way.

Charnley: I wondered if you had had experience in dealing with the board members, or were there some board members over the years that were particularly concerned about physical plant issues?

[Begin Tape 2, Side 1]
Charnley: This is tape two of the interview with Ron Flinn.

When the last tape ended, we were talking about board members and their work and support for physical plant.

Flinn: In the Hannah years, the only person that dealt with the board was John Hannah. I’m sure the secretary to the board did as well, but primarily John Hannah dealt with the board, so it was understood that unless a board member called us, that’s the way it was going to be. In subsequent years, it was much more open as far as our talking with board members.

Melanie Reinhold was the trustee that toured the buildings and looked at issues of deferred maintenance and, in fact, I’m still remind her when I occasionally see her and she’s quite pleased that I remember. She says, “You’re about the only one that remembers,” that she pushed to have the infrastructure fee put in place on tuition, which gives us revenues to address this issue. It’s certainly not adequate, and we’d expected it to grow, and there are reasons that that didn’t happen. But, nonetheless, she carried that torch for us.

I, in the last few years, under Peter McPherson’s tenure, have had more contact with the trustees in doing presentations at board meetings and especially as a result of Fred Poston becoming Vice President of Business and Finance. But when Roger Wilkinson was here, I was always at the board meetings in a support role, so I knew them. Some of them I know more closely now than before.

But it’s, again, I think appropriate that I had a call from a trustee the other day on an issue of concern, but I think it’s important that the administration and the ad building and the president’s office, the secretary of the board, and the official officers of the university are the ones who have
the primary contact with the board. The model of Hannah wasn’t all wrong. I do think that from a protocol point of view, certainly if I have a contact from a trustee, I inform Fred Poston of that because he needs to know.

They do a wonderful job in their role as trustees, but at times they can be asking a question I may not have all the information at hand, so I have to make sure that what the message that gets to them that Peter and Fred and Lu Anna [K. Simon] are comfortable with.

Charnley: Have there been any major--I mean during construction, things unintended or major difficulties? I’m thinking maybe of the Cyclotron. I was a student here when that caught on fire. Were there any things like that that are unanticipated or that highlight the last few years?

Flinn: Well, the last few years, one of the most major things we had was the Ag Hall fire, which took place on New Year’s Eve, as you recall. That was a catastrophe that caused very rapid response, which happened, and we got things back into shape fairly soon. Of course, as you know, that was a terrorist act.

We burned the top off the cooling tower quite a number of years ago, which was a deep challenge, but we had it back operating in less than a week, which was a problem.

Charnley: What time of year was that?

Flinn: Just in the fall, when the students were to arrive in two weeks. There was a question of whether we’d even pull it off. And we pulled it off. That’s another story onto itself.
Those are the two that come the quickest to mind. Those are both fires.

Now, of course, we’ve had a major flood in, I believe it was, ’75. Interesting, few people, I’m sure, realized that this year, just a couple three weeks ago, when we had quite a runoff, at eight feet. Flood stage is described at seven feet at the Farm Lane Bridge. Six foot is the banks are full. By the auditorium, you could see the water is right up to the top of the banks. Seven foot is called flood. At eight feet, we have to be placing sandbags over at the Circle IM Building. There’s an entrance to the basement that’s a pit that we have to start to sandbag.

The peak it crested, the river crested at 7.93 feet. We had filled sandbags and had them on the truck. Grounds had filled sandbags for us, and we were getting ready to move them in place when it didn’t make it to eight feet. It was that close.

But we have all these plans of action of such things. Grounds has their snow removal there for a major snowstorm. So there’s a few disaster responses. What do we do to cope with such things. Snowstorms and floods are natural occurrences that fortunately don’t happen every year. It’s been a great many years since we’ve had a significant flood. In fact what we just experienced was maybe in fifteen years the highest water level.

Again, we had quite a snowstorm this year, but it’s been quite a few years since we’ve had that. Sometimes we’ll get some wind damage. But the campus, I suppose, as you look at the whole big picture, that in the last few years that the biggest events that caused turmoil were some of the student rioting, if you will, which is unfortunate. But I think, again, under Peter’s leadership that that’s getting contained. The right things are happening. He’s really willing to take on some of these challenges right up front, and some of them must be very unpleasant.
Our facilities are well built. We did have a ceiling fall in Morrill Hall a number of years ago. I think it was the late eighties. Fortunately, just boom, but it was a graphic display that we have some old facilities on our hands, and you can’t take it for granted that something won’t happen like that. But we’ve inspected the rest of the buildings, and we feel quite comfortable that we’re not going to have a reoccurrence of that type. In fact, there was one additional piece of ceiling in that Morrill Hall that we took down just to avoid anything like that happening again in that building. That building was built in 1900. I mean it’s 101 years old.

So for the most part, other than an occasional fire, and they’ve been accidental up to the Ag Hall fire and then the one that took place in Anthony, which again was a terrorism attack on our office. You may recall a faculty member working with mink, and it was firebombed, and they also released mink out on the farm.

Charnley: The fires were related, right, in terms of possibly the same groups, right?

Flinn: No, they were different. The Anthony Hall one was the animal rights people protesting that we’re doing research with animals like mink. The one in Ag Hall is supposedly by the people who are against genetic foods. They’re anti-genetic foods. So misguided individuals, obviously, that do things like this, but they do it.

Charnley: Where do you see the direction of the university in terms of physical plant in the next, let’s say, twenty years?
Flinn: I was asked to be a co-chair of the 2020 Vision Master Planning Phase Component Two, which we’re well into. It’s interesting to see. In fact, there’s a meeting this afternoon and another one tomorrow with our consultants out of Boston, Sisaki Associates [phonetic], to further along the various concepts and to refine the drawings. So that’s looking out in time twenty years. It’s not envisioned that we’re going to have enormous construction, but we’re going to have continued growth. But the size of the campus is going to remain about the same, same number of students.

There’ll be surprises. I point out to the group that the AHDL, which is under construction, Animal Health Diagnostic Lab, to try to solve the TB problem with our dairy herds in this state, who could have envisioned that four years ago. Boom, it just popped up.

The law school, Peter McPherson, that’s another long story about how that started. But he brought this private school, which still remains officially as a private school within Michigan State. Who would have envisioned that happening? It happened.

There are other projects that we’ve had in the capital outlay requests for decades and they finally came to fruition. I’m now pointing out the Plant and Soil Science Building, the powerplant additions, and some of those things. The Plant and Soil Science Building replaced old Hort, and it was on the list of projects in the sixties. It got built in the eighties.

Charnley: And the Wharton Center?

Flinn: The Wharton Center [for Performing Arts] was a replacement for the auditorium, but until the Whartons were willing to lead the charge for a fund-raising effort, how in the world would we get an opera house? But we have it, and one of the best. As Mrs. [Dolores] Wharton said, “It’s
probably too much to ask for a Cadillac, but I certainly want a Buick,” and that was the philosophy of that facility.

That was originally designed with a third theater, which the state of Michigan wouldn’t fund. We redesigned it, the crown jewel of this campus. When you stop and think what we have here, I mean truly, the kind of productions that are brought to the Wharton Center, the quality of them, how well we do in sports. One thing about being with Michigan State University, you can go anywhere in this world and say, “I’m with Michigan State University,” and they know what you’re about. They know you do good things.

The national spotlight and the international spotlight is on this campus almost weekly for something, whether it’s a hockey team or the basketball team or some bit of new research that’s been discovered or we have another student who’s won some honors. It’s just story after story after story.

I’ve had the good fortune of being in some volunteer groups. I was the international president of this APPA group we spoke of. Ted Simon was as well. We were on some spot, and my wife related this to me. The spouses were having a meeting, you know, just gathered together talking about stuff. This one gal, she said, was talking about her school doing such and such. She says, “Well, we do that at Michigan State.”

This gal looked at her and said, “You do everything at Michigan State.” We’re so big, you know, it’s really hard. We’re here every day and we do other things, the things that we do. But it’s hard. I have the advantage of going to New York once a year to visit relatives. One of my brother-in-laws is just absolutely a sports nut. So, of course, he likes to go up to Syracuse and watch
Syracuse. But he really, really is a fan of Michigan State. He’s been here a few times, and that’s where I get this, “Boy, this is a big place and a great place.”

Charnley: Sounds like a good place to end our interview. I want to thank you on behalf of the project for your time.

Flinn: You’re welcome. This is a busman’s holiday to talk about this place.

Charnley: Thank you very much.

Flinn: You’re welcome.

[End of interview]
Index

2020 Vision Master Planning Phase Component Two, 37

Able, Bob, 5
Akers Hall, 23
Alstine, Leo, 10
Animal Health Diagnostic Lab, 38
Anthony Hall, 37

Baker, Sam, 33
Bessey Hall, 13
Blosser, Henry, 14
Breslin, Jack, 18, 31
Brody Hall, 23

Case Hall, 23
Cavanaugh, Joe, 3
cogeneration, 25, 28, 29
Courier Express, 2
Culpepper, Marilyn, 10
Cuts, Charley, 10
Cyclotron, 22

Danke, Harold, 22
Ellerhorst, Bob, 28
Erie County Technical Institute, 2

Fee Hall, 23
Green, Kenny, 4
Grody, Keith, 33

Hannah, John A., 8, 11, 13, 14, 17, 20, 21, 22, 23, 33, 34
Hesburgh, Theodore, 11
Holden Hall, 23
Houser, Reeny, 13
Huleneck, Alex, 4

Jacobs, Ted, 24

Karras, George, 4, 5
Lee, Prof., 10
Levy, Lowell, 31
Lewis, John, 18
Lotner, Harold, 21

McDonel Hall, 23, 24
McPherson, M. Peter, 13, 34, 36, 38
Michigan State University
  Ag Hall Fire, 35
  Automotive Services, 27
  Board of Trustees, 33, 34
  Campus construction in 1960s, 22
  Campus in 1957, 8, 12
  Campus in 1960s, 22
  Cooling tower fire, 35
  Custodial Services, 27
  Energy crisis in 1970s, 25
  Engineering and Architectural Services, 27
  Major flood in 1975, 35
  Steam tunnel development, 13, 16
  Telecommunications, 26, 27
  Terrorism on campus, 37
  Tuition in 1957, 9
  Unionization, 30, 31, 32
Morrill Hall, 36
Murray, Mark, 28

Plant and Soil Science Building, 38
Poston, Fred, 34

Reinhold, Melanie, 33

Salary and Benefits Commission, 31
Sefort, Bob, 18
Shaw Hall, 23
Simon Powerplant, 24
Simon, Lou Anna K., 34
Simon, Ted, 19, 21, 23, 39
Sisaki Associates, 37

*U.S. News and World Report*, 12
Union Carbide, 3
Unionization, 30, 31, 32
Vandenburg, Vince, 17

Wharton Center for Performing Arts, 38
Wharton, Dolores, 38
Wilkinson, Roger, 19
Wilkinson, Roy, 34
Wonders Hall, 23