AN INTERVIEW WITH LOUIS BURMEISTER

Interviewer: Jewell Willhite

Oral History Project

Endacott Society

University of Kansas
LOUIS BURMEISTER

B.S., Mechanical Engineering, Kansas State Agricultural College, 1957
M.S., Mechanical Engineering, Kansas State University, 1959
Ph.D., Mechanical Engineering, Purdue University, 1966

Service at the University of Kansas

First came to the University of Kansas in 1965
Assistant Professor, Mechanical Engineering, 1965-1969
Associate Professor, Mechanical Engineering, 1969-1975
Acting chair 1972-1973
Professor, Mechanical Engineering 1975-2008
Associate chair 1979-1984
Vice chair Thermal Fluid Division 1984-1985
AN INTERVIEW WITH LOUIS BURMEISTER

Interviewer: Jewell Willhite

Q: I am speaking with Louis Burmeister, who retired in 2008 as professor of mechanical engineering at the University of Kansas. We're in Lawrence, Kansas, on October 9, 2009. Where were you born and in what year?

A: I was born in Great Bend, Kansas, in 1935.

Q: What were your parents’ names?

A: My father Henry Louis Burmeister. My mother was Olinda Elise Maria Besthorn.

Q: What were their educational backgrounds?

A: My father had a bachelor of arts from Bethany College in Lindsborg. My mother had a grade school education.

Q: Did you have brothers and sisters?

A: I have a brother and a sister.

Q: Did you grow up in the town where you were born?

A: I was a farm boy, so I didn’t grow up in any town. But I was reared in the Holyrood vicinity, between Holyrood and Claflin.

Q: And that is in Kansas.

A: Central Kansas between Ellsworth and Great Bend.

Q: Where did you go to elementary school?

A: Vinegar Hill, a rural, one-room, country school.

Q: About how many students did it have?

A: In round numbers, 10.

Q: It went to the eighth grade, I suppose.
A: Oh, yes. I was the only one in my class for seven of the eight years.

Q: Looking back on it, what do you think of that kind of education? Do you think it was pretty good?

A: It can be a superior education, actually. It is tutorial in many of its aspects. Of course, there is only one teacher who has to attend to all eight grade levels. That can be good. If you wish to work at your own pace, there is plenty of opportunity. There was a library, which was small by modern standards. It amounted to a cupboard, really. But even now I think it was well stocked with titles. I read about Carthaginians, Romans, etc. And of course there was always the encyclopedia. There were other stories too. We practiced penmanship, Miss Kittle’s method, which is not done any more, I understand. The script is little taught any more. I find that people cannot read script any more either. As a professor, I found that if I did not print as I lectured that it could not be read by too large a fraction of the class.

Q: I didn’t know that.

A: Of course, that also says something about my handwriting. But it also says something about them.

Q: They are taught on computers at such an early age.

A: They are used to the printed word, if there is any reading to be done at all.

Q: Do you have any memories of the World War II years? Did any of your family serve in the war?

A: Yes. When I was a boy in the Vinegar Hill grade school, which was near the Cheyenne Bottoms, that was a gunnery range for aircraft. When driving by the edge—there was a highway—you’d see a B-25 circling overhead.
of 50-caliber guns. Then in Salina, which is about 40 miles away, there was a bombing range. So in the daytime you’d hear the bombs go off. Then when I was in high school, which was probably 10 years later, I was helping put up hay on the bombing range. I had to stack bales on the truck. It was a flatbed truck, so the bales weren’t tied down in any way. It was a craft, really, to stack the bales so that they would interlock, so that when the truck wheel went down into a bomb crater, the load wouldn’t tip over. You would have them stacked up pretty high and you would have the bale hooks. Have you ever seen one?

Q: No.

A: You’d have a handle, and you’d hold onto that. Then the hook was attached to the bales. The guy on top would have two bale hooks and you hoped that you were going to hold the bales on because if they didn’t stay on, you were going to go over with them, which never happened, but there was always the fear. We would always urge the driver to be thoughtful. And he always was.

Q: Do you remember when the war ended? Was there any sort of celebration?

A: Oh, yes. A P-51 Mustang came out and circled our school about three times at low altitude. That was one of the hottest planes in the war. Very exciting.

Q: When you graduated from Vinegar Hill, where did you go to high school?

A: I went to the local high school, Holyrood Rural High School. I’m not sure why it was called rural. It was on the very edge of town, the town of Holyrood. But I guess most of the community was rural in terms of the population. So maybe that was why it had rural in the official title. The high school no longer exists. The grade school is long gone.

Q: I suppose it consolidated with something else.
A:  With regard to the grade school, the population vanished. There was a great exodus from the farm. There just weren’t enough students to justify maintaining the school any more. There were country grade schools roughly every seven miles, or something like that. It was common. And the high school, same story. I’d say probably around 1960 it vanished, consolidating with neighboring communities.

Q:  About how many did you have in your graduating class?

A:  In high school?

Q:  Yes.

A:  I think there were 19.

Q:  That was a fairly small school then.

A:  Well, it was average for the time and the area.

Q:  Were you involved in extracurricular activities?

A:  In high school?

Q:  Yes.

A:  Yes, well I tried to be. I was editor for the school newspaper. I don’t know how long that was, a semester or a year. It was part of the English class, as I recall, an excellent experience. And music, chorus, band. I was in the marching band.

Q:  What did you play?

A:  I played the trumpet. I enjoyed that very much. Some sports, basketball, baseball and track.

Q:  Most people have to take part in a lot of things in a school of that size.

A:  Yes, I would recommend the experience to anyone. It’s easy to blend in because you are needed for the team, no matter what your level of expertise might be.
Q: Did you have influential teachers growing up?
A: Oh, yes. They were all good. In grade school—they are probably no longer alive to hear their names said—but it is worth mentioning their names, Miss Gilliam, Miss Ball, Miss Everly. In the Second World War, there weren’t qualified teachers being produced in the normal sense, so Miss Ball taught during some of the war years. She had two years of teacher’s preparation education. Then Mrs. Degner, Mrs. Irene Degner, she was awfully good for the grade school. Then in high school there was Jerry Deemer for science, Richared Getty for social studies, government, that sort of thing. Floyd Nyquist taught history. Mrs. Nyquist taught English. Mrs. Dreilling taught commerce, typing, that sort of thing. I never thought I would enjoy typing, but I thought I needed to have keyboard skills. It was interesting in its way.

Q: Did you have honors in high school?
A: Oh, some, I imagine. As I recall, I was salutatorian for the class. I guess that is an honor. I thought of it as a chore.

Q: Why?
A: Well, I had to make a speech and stand up.

Q: Oh, did the salutatorian have to make a speech too?
A: Oh, yes. There aren’t many people. You have to sing for your supper, you know. It seemed to me I was working pretty hard for a dubious honor. Yes, there were class plays. It was something of an honor, we thought among ourselves, to be cast in some of the different parts. Then there were musical solos. I don’t recall many honors. I did win some medals at state music.

Q: The music contests.
A: Music contests. You were rated one, two, or three, etc.

Q: Yes, I was in those too.

A: It is always good to get something tangible. The honor was for my parents, I now understand. I thought I was working pretty hard for all that. I remember occasionally my parents would say something approving. That was probably the honor. My grandmother would say something nice.

Q: Did she live in the area?

A: Oh yes, everybody lived there. My grandfather would look pleasant. That was worth while.

Q: I suppose your jobs in the summer involved working on the farm.

A: Usually, but not exclusively. There were opportunities for labor. Yes, farm work mostly. But, for example, there was a modern, concrete grain elevator put up. My brother and I worked on that some.

Q: You mean in the building of it?

A: In the construction of it. Putting up a tall, concrete silo means somebody has to mix the concrete. That means that there is a gang of laborers pushing wheelbarrows that they fill from the big sand pile over to where the mixer is. Those laborers are usually high school kids for minimum wage. My brother — he was older than I — got to work up on top. Pretty scary, but it was easier, I thought. He didn’t agree. He said, “You just have to wheel dry sand. I have to handle wet cement.”

Q: When did you graduate from high school?

A: That would have been ’52, I guess.

Q: Was it always assumed that you would go on to college?
A: Well, my parents assumed it. I didn’t think about it, until my brother went off to college. I thought, “Well, maybe I’m next.”

Q: Did you go to college right away in the fall after you graduated?
A: Yes.

Q: Where did you go?
A: Kansas State. KSAC.

Q: How did you happen to choose that school?
A: My brother went there and it had an engineering school. Engineering is one of the rungs on the economic ladder. Farm boys may not know a lot, but they know about machines. So it’s natural to go where machines will be discussed.

Q: Did you live in a dorm when you were in college?
A: No, I never did. I lived in a boarding, rooming combination. Hill’s Heights is where I started out. Then Mrs. Hill sold the operation to Mrs. Ola Jean Smith, whose husband had died and her children were grown. She was a farm woman from the Great Bend area, somewhere in there. She was casting about for something to do, as I recall her saying. Well, she had raised some boys and she thought this rooming, boarding house thing would work. We liked her. She was good. So I was there for four years. Then that house became La Citadel, an independent, organized house. I always thought that was a contradiction. The university—it wasn’t the university then, it became a university later—thought these living groups ought to have some sort of loose organization. So they weren’t just little private enterprises. They operated with the blessing of the university.

Q: This was while you were in school.
A: Yes.
Q: Was your major then mechanical engineering?

A: No, not right off. I started in agricultural engineering. I guess for a farm boy that makes sense. Then I noticed that whenever it was time to actually study a core subject that that would be offered by some other department, mechanical engineering often or engineering mechanics. So I thought, well, why not go to the mother lode. I then shifted my major to mechanical engineering.

Q: Did you have influential teachers as an undergraduate?

A: Yes. Some are influential because they are examples, sometimes bad examples. But you need to know what not to do just as much as you need to know what to do. But the good ones deserve to be mentioned by name. Ralph Griffith Nevins was probably the influential one. He became eventually the head of the department. It’s a land grant school. They are organized differently. So their departments are headed by heads. Another one was Phillip Kirmser in applied mechanics.

Q: Did you have jobs while you were in college?

A: Oh, yes. The first year or two there were summer jobs. I worked on my father’s farm for a couple years. I got summer jobs after that in an engineering major. I worked one summer, I recall, at the Fisher-Governor plant in Marshalltown, Iowa. Later I had a summer position at the Naval Research Laboratory in Washington, D.C. I had a summer job at Oak Ridge, Tennessee.

Q: Was that while you were getting your advanced degrees?

A: The last one was while I was getting a master’s degree.

Q: When did you receive your bachelor’s degree?

A: That would be in ’57.
Q: Then did you go directly on for your master’s?
A: Yes. I got that in ’59.

Q: At the same school?
A: Yes. And I was a graduate teaching assistant, the usual drill. I taught labs almost entirely and paper grading.

Q: Did you find out you liked teaching at that time, or was this just something you had to do?
A: Well, it’s a good question to ask. The head of the department, Helander—at the time I was graduating—said he had some graduate teaching positions open and he’d like me to think about that. Well, the Korean War was going on. I didn’t feel like a warrior, so I considered alternatives. I never considered myself a scholar especially, but I liked school and I was pretty good at it, I thought. The professors seemed to agree. So I thought, “Well, let’s do that.” I needed some financial assistance and that is what was offered, so I did it. Yes, I enjoyed it. I didn’t enjoy all of it.

Q: Did you write a thesis for your master’s?
A: Oh, yes. You couldn’t get a master’s without it. That was difficult in some respects because word processing hadn’t been thought of yet. Even just the simple act of duplicating something was a daunting task. It was typed and you had to hire a typist. It took a professional typist if you had equations. It was very slow. You had to double space, of course. And there was a good reason for that because you needed that spacing so that there would be legibility. And you could only make three carbons at most, and the last one was very faint. So that was the extent of it. But you could give a copy to each of your committee members. There were only four people.
Q: What was your topic?
A: It was a heat transfer topic. The general topic was to determine the rate of heat transfer from a heated surface to a perpendicularly impinging air jet, which was pulsing. So it was a combination of measurement and analytical models.

Q: When did you receive your master’s?
A: ’59.

Q: Then what did you do?
A: Well, I scampered off to the Sandia Corporation in Albuquerque, New Mexico.

Q: What were you doing there?
A: I’m not allowed to tell you.

Q: Okay.
A: But in a general way it was advanced systems studies, which means a lot of things. One thing I can tell you is about that time, as we put it, the boom went out of the bomb business. The Sandia Corporation was established to serve as the engineering support group for the designers and theoreticians at what is now Los Alamos Scientific Laboratory. That was because Albuquerque was a transportation center, a rail hub and had airplane facilities and there was a military base there. So the entire thing can be put behind wires with guards, etc. Well, they quit testing. A big part of the activity was testing. So if you quit doing that, then the question is what are you going to do? The thought was, “Maybe we can get into the nuclear reactor business.” The line of thought was, in a very loose way, “Let’s make a mobile reactor, or portable, however you want to describe it.” There were some ideas. We had a group that designed the reactor.

Q: How long were you with that group?
A: Three years.

Q: Then what did you do?

A: Well, it became apparent to me that the sort of thing I liked to do was done better by someone with a doctoral education rather than a master’s level education. So I decided that’s what I needed to do for myself. There’s a decent university in Albuquerque, the University of New Mexico. I could have done what other people did and worked and gone to school simultaneously. But I thought that was not the best way to go at it. So I went Purdue University in West Lafayette, Indiana. I became a Boiler Maker.

Q: Did you have influential teachers at Purdue?

A: Oh, yes. Some of them were better at showing me what not to do. I had one math instructor…. But I knew she was trying. But on the positive side, my advisor, Robert Schoenhals was very good. One thing you try to do in a doctoral program is remedy deficiencies one has. So he taught me. I took a course that really opened my eyes. Then James Beverly Jones in fluid mechanics was awfully good. Then Robert Korr in feedback automatic controls, he was good.

He died in a plane crash in Indianapolis, one of the safest airports around in terms of its unimpeded approaches. It was so safe that apparently pilots got careless. The Kansas City airport at that time required you to come in low and slow and then dive down right after you got past downtown, almost like a carrier landing on that airstrip. It was so dangerous that nothing bad ever happened. There was one plane that overshot the runway but that was all. Anyway, Bob Korr died from that.

Q: What was your dissertation about?
A: Well, it was film boiling, the effect of pressure pulsations on film boiling. The thought was that if you have a very hot surface immersed in liquid the liquid will of course go over to the vapor state in a film right next to the heated surface. Then that vapor film will rise under the influence of gravity. So you have a bounder layer there. If you can destabilize the bounder layer, you can break up that insulating film and speed the rate of boiling, which has advantages in heat treatment and many other things too. At that time heat transfer was a fairly new area. It arose in my professional lifetime. It was really motivated by problems in getting reentry vehicles to live through their reentry process and providing cooling to nuclear reactors. And there are many other applications as well. Those were two of the burning issues, because a nuclear reactor is just a heat source. If you are just going to make steam, that’s a good way to look at it. The main thought is, don’t let it melt.

Q: When did you receive your doctoral degree?


Q: Were you married at this time?

A: I was married in 1959.

Q: What is your wife’s name?

A: Rosalyn Elise.

Q: I know you have two daughters. What are their names?

A: The elder is Elise Ellen Burmeister and the younger is Amanda Rosalyn Burmeister. They are both married. The elder daughter took her husband’s name, although she uses Burmeister professionally because that’s the way she was known before marriage. It’s just more convenient. The younger daughter kept her maiden name. I’ve done some
family history studies looking at the European record. Back in Europe the German tradition was for the wife to keep her name and the children took the father’s name, which is a real help for the genealogist because you can tell what the wife’s family line is. In the modern American tradition the wife takes the husband’s last name. It’s very difficult to find out where she came from, although it is a lot easier in a social setting because you will then only have to remember one name.

Q: What was Rosalyn’s educational background?
A: She has a bachelor’s degree from K-State in sociology. She took a course for graduate credit from KU.

Q: What did you do after you got your Ph.D.?
A: Well, I sought a job, of course. That was at a time when the aerospace industry had entered a major recession. So the question was whether my employment would be in academia or industry. Well, it turned out to be academia.

Q: Did you come directly to KU after you finished your Ph.D.?
A: Yes. I was a graduate teaching assistant at Purdue. That’s where I, as you put it, learned to like teaching, or realized that I did like it and had a little bit of a knack for it. So I thought I’d like more of that. I could have gone back to industry and enjoyed it, of course. But the KU opportunity opened up and I thought I would enjoy it, and there were some other reasons too.

Q: What year did you first come to KU?
A: In the fall of 1965.

Q: In mechanical engineering.
A: You want to know what courses I taught and what my activities were?
Q: Yes. You were in a different building then, weren’t you?
A: The school of engineering had just occupied their present site in Learned Hall. And mechanical engineering was left in the old engineering shops. Chemical engineering was in… I can’t think of the name of the hall.
Q: It was in Lindley for a while.
A: The school of architecture is in what building?
Q: I’m not sure.
A: I can’t think of the name, but Lindley, the big limestone building with a kind of a 1930s entrance to it…yes, that’s right, a fairly nice space. But the old engineering shops were a mess, just bad. The university eventually realized they needed to tear them down. They couldn’t be made useful for any purpose other than shops.
Q: So then where did you move?
A: We moved into Fowler Hall, which is now occupied by silversmiths, etc. At that time the chairman of the department of MME, mining and metallurgical engineering, had gone on sabbatical to Peru, Ken Rose. While he was gone—there were some politics—but anyway MME and mechanical merged and so we occupied then the space in Fowler Hall. That was really nice, the best office I’ve ever had. The view was spectacular over the Wakarusa Valley. That was nice. It was all, in terms of space, downhill from there. But I must say that the chalk boards in the old engineering shops were just magnificent. They were slate. When you wrote on them it had a feeling of substance. It might not have been worth much to read, but it felt good. It was easy to erase. These modern chalk boards are a tepid drink compared to that.
Q: What do you remember about the late sixties and early seventies? You were here during all that turmoil.

A: Oh, yes. The time of trouble. Well, some things should be forgotten.

Q: Did it affect your students, or you or your family?

A: Yes. The students, you know, if you gave a failing grade to one of them they would say, “You are sending me to Vietnam.” It led to bad feelings. I was in charge of the ASME student section as the advisor. We were to be the host for the MOAK (Missouri, Oklahoma, Arkansas, Kansas) student ASME sections, where we had a student papers competition. They would all come in and spent about two days. Everything was set up ready to go, or just about ready to go. Then somebody torched the Union. And there was rioting and shots were fired in anger. Houses were set ablaze and fire engines would respond and bullets were fired into the fire engine. Tiger Dowdell was shot and killed. There was a great uproar.

One of the law professors, Lawrence Velvell, stood on the steps of the administration and declaimed about one matter or another. He said he had freedom to speak as a private person. His application for promotion was denied by the regents. Yes, there were upsets. Then Chancellor Chalmers declared that the faculty would police some buildings. So teams of faculty and students were detailed to keep watch inside the buildings. My group that I was in charge of was in the engineering shops building at the time. One of them in the middle of the night decided he got hungry. We had food in the building because I had foreseen all that. But he wanted something different. So he strolled down to the vending machines down in the School of Business in Summerfield. Of course, he got picked up by the National Guard, who was patrolling on the campus
with loaded weapons. He was taken to a detention center. I got a call asking if I could vouch for this fellow who claimed such and such. So I sprung him. So, yes, it affected me. And we, my wife and child, would sit in our home and watch across the street where an attorney in town whose first name was Lance would form their brigade of protestors to go and do something. And the streets would be vacant by governmental order, dark, except for an occasional patrol car.

Q: What courses did you teach while you were here?
A: Well, I taught a lot of them. I taught 13 different undergraduate courses and 13 different graduate courses.

Q: That’s quite a lot.
A: They were basically in the thermal fluid energy area.

Q: Did you originate any courses?
A: Oh, yes, a number of them. I wouldn’t claim that I originated it, but I took over the mechanical engineering measurements laboratory and redid that. I redid the thermal systems course, the heat transfer course, thermal systems design I and II, mechanical engineering analysis, an applied math course, a solar energy course, energy management, convective heat and mass transfer, conductive and radiative heat transfer, optimization boundary elements reliability, system design analysis.

Q: Have you had administrative responsibilities?
A: Some. I was acting chairman for a year and associate chairman for a while. I was director of an energy analysis and diagnostic center. That was a program funded by the U. S. Department of Energy where we’d do energy audits for manufacturing firms in the area.
Q: You’ve been faculty advisor to some students groups?
A: Yes

Q: ASME?
A: Primarily, but others as well. I was an advisor to Sigma Tau honorary society. They merged with Tau Beta Pi.

Q: Have you had sabbaticals?
A: Yes. Let’s see, how many? I took two sabbaticals. I was awarded three but one I did not wind up taking.

Q: Did you go somewhere?
A: No, that was the one I did not take. I was trying to arrange that and it didn’t work. No, I stayed in town and wrote books.

Q: So you have written some books then.
A: Yes.

Q: How many? What titles?
A: It depends on how you count. I think there were four books and of course three of them had solutions manuals. So that would add three more. I thought the solution manuals were a lot of work. I had to get the solutions right. It’s not hard to do a solution. Anybody can do that. But to do it right, that’s different. You can’t be right 90 percent of the time. You have to be right all the time. So maybe with that there are seven books.

Q: I suppose you were on university committees.
A: Oh, yes, 20 or 30.

Q: Any you particularly remember?
A: Yes. One I thought was really worth while, one of the very few. I do believe in faculty governance, but, boy, it’s time consuming. It turns out to be mainly advisory. But anyway, the Financial Aid to Students committee. If you look at the first letters, FASC, we referred to us as the fascists. We were in charge of money, actually.

Q: Was that for your department?

A: No, for the university. This was one of those surprising, growing, experiences. Not to say that I wanted to grow in that direction, but it turned out that the people who govern national athletics said that the athletic department—I guess you could call them a department. They aren’t really, they are a corporation—they claimed some tie to academia. They couldn’t just kick a guy off a so-called scholarship, which is a misnomer. It’s financial aid, not a scholarship. They had to go through the academic body for that purpose. And there wasn’t any, except faintly the Financial Aid to Students Committee. So we would BE hearing these appeals from the students who, for example, would say, “Yes, it’s true that I no longer performed well on the football field, but this was because my parents were getting a divorce. And as you know, football demands concentration, and I could not concentrate. But I don’t think that is any more than sort of a disability. And I should be allowed to keep my financial aid.” Or another guy would say, “I have a physical disability that I incurred in the pursuit of football activities. I dislocated my thumb not once but twice. The surgeons told me if I did it again, it would be a permanent, chronic problem. But,” he said, “even so, the team was so short-handed that when they came to me and asked me to play, I agreed and I did play. But I quit playing right after that. But I think that I should continue to receive the financial aid.”
And the fact that he was a mechanical engineer was also brought out. I won’t tell you how the vote went.

Q: That’s okay.

A: Now, I didn’t sign up for that. But there I was. One serves as one can, of course.

Q: Yes. Have you had honors here?

A: Oh, some. Let’s see. I got an ASEE NASA summer fellowship to Stanford-Ames program in 1967. I guess that’s an honor. Not everybody who applied got in, but most people did. Standard Oil of Indiana Foundation Distinguished Teaching Award in 1969. I mentioned the sabbatical leaves. They are somewhat of an honor. I received the ASME Outstanding Paper Reviewer award, a Bellows Scholar School of Engineering and the Omar Kyam award from the Scientia Iranica International Journal of Science and Technology. I served them on their advisory editorial board for many years. It’s a nice looking plaque.

Q: Do you remember outstanding former students who have gone on to greater things?

A: There are a number. There are many, actually. Most of my Ph.D. students I would call outstanding. There was Bill Tompkins. He was the first Doctor of Engineering produced by mechanical engineering. Then let’s see, James Turner. He was outstanding. Mohammad Ahmadian from Iran, excellent. Richard Hardin, whose father was a professor in the English department—his children were engineers. Richard Hardin is now at the University of Iowa. Then on the undergraduate level there were so many. Golly, I hesitate to name any because there were so many who were really good. I still intermittently receive a communication from one or two of them. They were very good people. It was really a privilege to be among them.
Q: I assume you belong to professional organizations.
A: ASME is a professional organization. I was also a member of AIAA, American Institute of Aeronautics and Astronautics. Are you aware of what that stands for? The American Institute of Almost Anything.

Q: I had not heard that. Have you held office in any of them?
A: Yes, I was in ASME on the Aerospace Heat Transfer committee for the Heat Transfer Division and chaired a large number of technical sessions. I was associate technical editor for the ASME Journal of Heat Transfer for three years.

Q: Have you been involved in community activities?
A: Yes, some. I’ve worked with the Douglas County Science Fair quite a few years. I was the chairman of that for awhile.

Q: Did you judge these projects?
A: I’ve been a judge for probably 20 to 30 years, the Douglas County Science Fair and the International Science Fair when it was held in Kansas City one year.

Q: Is that hard to do?
A: Yes, it’s hard to do anything well. But then, as I said, I was chairman of the Douglas County Fair for three years. That involves organizing it and getting funding, arranging for judges, doing the politicking at city hall to get space in the Community Building for awhile. Then we politicked with the Douglas County Commission to get it out to the fairgrounds, where it now is. I haven’t been chairman for years now, of course. I was a neighborhood collector for the Arthritis Foundation, the American Lung Association, The American Diabetes Association, March of Dimes, Multiple Sclerosis. I’ve been a
National Science Foundation proposal reviewer and done paper reviews for about a dozen different journals. And, of course, in church affairs I’ve been on several boards.

Q: What church are you involved with?
A: At one time it was Plymouth Congregational Church downtown. I was a deacon for a while and on committees, then at the St. Paul Evangelical and Reformed Church in Eudora. I was on a number of their boards and president of the congregation for a while. I guess that was about a four-year stretch, and I did some other things for the church conference. And in the Sunset Hills Neighborhood Association I was a participant, in the sense of sitting in the audience while other people organized it.

Q: What do you plan to do in retirement?
A: Well, that’s a good question to ask. There are several things. One of the things I’ve done is to compile information on the family history. I thought it was my turn to do that. I’m just about the only one of my generation who can do it conveniently because of my proximity to the university and to the Mormon Church and the city library. I can get documents on microfilm loaned to me. For example, I can get European church records through the Mormon Church way back to the 1600s. The only thing I have to do is read them. All I have to do is learn to read the old German script. I don’t know if you’ve ever done that.

Q: No.
A: The so-called Gothic or Suetterlin script.

Q: How far have you traced your family back?
A: The farthest I can get the record to go in a straight line is 1697, I think.

Q: That’s a long ways.
Well, yes. It’s not a record by any means. But the trail tends to peter out about that time. It wasn’t too much before then that the common folk really started to have their affairs recorded. Even when they were recorded, it’s a matter of legibility. I refer to it as mostly scribbling. Even if you read that stuff, it’s hard to make out what the word is, let along whether you understand the word. So it’s not just a matter of opening a book and reading it and copying it. I’ve had to call on one of the young professors, James Brown in the German department, who has made a special study of the old script. You know, I was talking to a German teacher whose research project was to transcribe notes that are stored at Bethel College in Newton. They had an old German who went out to the Hopi Indians, missionary type work. And he had diaries. But he wrote in the old German script. And what she did was she’d photocopy that and send it back to her father in Germany, who could still read that stuff, and then he would put it into modern German. Then she would write that over into English. I asked her how it was that her father could read that. She said, “Because he’s old.”

In the First World War the Germans were trying to become a single people, which they weren’t really. One way they did it was to get them to write all the same way. Prior to that time they wrote in the old script. But the German officers would not let the troops write home unless they wrote in the modern script. So now, as a result, even the Germans can’t read the old script, unless they make a special study of it. So that’s one of the things I am doing. And that takes a little time, as I’m trying to get you to understand.

Then I want to pursue one of the technical topics, which is an investigation of the flat plate heat exchanger, spiral flat plate heat exchanger. And for that purpose I will try to use the Maple program, which is a specialized program to provide analytical, symbolic
solutions to differential equations, as opposed to numerical solutions. My connection with the university makes that possible. But my hard drive crashed.

Q: Oh!

A: That’s what I said, “Oh.” So I lost the link and that’s got to be reestablished.

Q: That’s bad.

A: But I’m busy with family information.

Q: Do you have grandchildren?

A: Oh, yes. Bright, shiny little pennies they are.

Q: How many?

A: Two girls and a boy. One, the boy, is three years old.

Q: To kind of finish up here, what is your assessment of KU, your department, past, present, hopes for the future, that kind of thing?

A: I no longer have to live with these people, so I guess I can just tell you the truth. I wish them well, certainly. I would say the university is still developing, trying to figure out how to do that. The big change, in my view, has been the belated recognition of the importance of graduate education and the funding of it, for my department in particular and the School of Engineering somewhat. The university has always been aware but hasn’t done much about it, except for the recent….The big challenge is to think of something that the administration can understand and therefore is willing to back. The life, the health care applications seems to be that. So my department, Mechanical Engineering, has gone into that in a big way, biomechanics, and other departments as well. Well, I don’t see that as all good, but it is a good direction in which to go. I do hope the university will make itself different from the other institutions in the state.
Q: Is there anything else you’d like to add?

A: Well, the university has been a good place for me for 43 years. That’s not to say that every minute of the 43 years was good. But nevertheless, you can’t tell the good if you haven’t had the bad. So I hope others will have a good experience as well and I think many will. So I say, “Figure it out for yourself. And I know you can.”

Q: Okay, thank you very much.

A: Surely.