

Davidson Dispatch

November 1989

Volume 1, No. 1

Agricultural Engineering Department • Davidson Hall • Iowa State University • Ames, Iowa 50011

Head lines

By James R. Gilley
AE Dept. Head

This newsletter is my first opportunity to communicate with the alumni of the Iowa State University Agricultural Engineering Department since I first joined the department Nov. 1, 1988. Much has happened on campus that has affected the department during my first year, and I am able to give you only a brief summary.

About one year ago, my family and I decided to leave the University of Nebraska so I could accept the position as Head of the Agricultural Engineering Department at ISU.

It was an honor for me to have been chosen as the fifth department head at Iowa State. I hope to live up to the exceedingly high standards set by those fine gentlemen who preceded me: Dr. J. B. Davidson (1905-1946, except for 1915-1919), Hobart Beresford (1946-1962), Dr. C. W. Bockhop (1962-1980), and Dr. Howard Johnson (1980-1988).

As I shared with students and guests at an annual banquet last winter, the department went to Nebraska to select its department head to build the first program in Agricultural Engineering in the United States. Rest assured that the latest person from Nebraska remains firmly committed to build on the solid foundation that exists at ISU. It has been an exciting year, full of highs and, yes, even some lows, as I have

Report: Cut Ag Mech

The agricultural mechanization program would be eliminated if University officials were to follow the advice of a subcommittee's report.

The Academic Program Review Subcommittee of the Long-Range Strategic Planning Committee suggested that "the undergraduate major in agricultural mechanization be eliminated, with appropriate coursework retained for support of other areas." The subcommittee also said that it thought the major was more appropriate for area colleges than for Iowa State University.

Despite the negative report, the department plans to fight to keep the program, said Jim Gilley, department head. Included in the strategy are a new name, new structure and an evaluation of the major.

The department wants to rename the major, Gilley said, because the current name does not convey to clientele groups and the academic community the extent of the curriculum and training students receive. Agricultural Systems Technol-

ogy has the most support, although other names are being explored.

The name will reflect the restructuring the department is effecting. The courses would be changed to move toward greater use of technology. In keeping with that plan, courses would be added in computer-aided graphics, hydraulic power systems, instrumentation, grain process operations, water quality and the like.

The new direction the agricultural mechanization program is taking will help differentiate the major from courses that are taught in the department to support other majors in the College of Agriculture.

The department has sent its recommendations to the provost and the president. A more thorough analysis will be submitted to them by March 1, 1990.

Comments, observations and suggestions on Ag Mech Programs are welcome

learned the ropes of department administration and the challenges raised by the many reviews that have taken place throughout the University.

I should like to share with you a few of the things that have happened in the department during the past year and to highlight some of the items we have planned for

next year. I am deeply impressed by the sincere interest in the department shown by each of the alumni and friends that I have met this year. The strong current of enthusiasm about the department and its future is indeed exciting. We now need to multiply that interest

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AE department hopes to begin building improvements in fall

Davidson Hall badly needs renovation, says Department Head Jim Gilley.

The building puts the department in a poor competitive position as compared with many surrounding states, he says. Schools in other states have devoted money to renovating their buildings or constructing new ones.

The University agrees that Agricultural Engineering needs a new home, rather than just a facelift for the old building. Planning funds were included in capital improvement plans from Iowa State University for 1989. However, the Regents did not include the request on its agenda for the last legislative session or in its budget request for next year.

While planning money and the new building request are included in the long-range building plans for ISU, the Board of Regents, the Legislature, and the people of Iowa must be convinced of the needs of the Agricultural Engineering Department and all the types of programs the department can offer the state, Gilley said. During

the next few months, the department will initiate a more visible campaign to document the building request.

Even under favorable conditions, Gilley said, it will be some time before a new building can be completed. Until that time, planning has begun to upgrade portions of Davidson Hall.

Included in the plans are a much-needed classroom and three upgraded research and teaching laboratories in the west wing. Also under exploration are modifications to the first floor and second floor offices and hallways.

These changes will not alleviate the long-term need for a new building but will put the department in a better position to attract more undergraduate and graduate students and to recruit new faculty. Our faculty simply require better research laboratories to compete for research funding and to provide high-quality lab space for teaching.

Gilley says he hopes the improvements will begin later this fall.

Faculty Travels

Several faculty were able to visit other countries as part of their research or extension responsibilities.

Dwaine Bundy presented a paper on wood structure design in Sweden. He also consulted with industry in Egypt. **Don Erbach** visited Argentina on an exchange program. He also attended a European Agricultural Engineering meeting in England.

James Gilley consulted on NATO programs in Portugal, and consulted on irrigation design and practices in Belgium. **Ramesh Kanwar** presented a paper at the International Commission on Irrigation and Drainage in Yugoslavia.

Stewart Melvin attended the Agricultural Engineering meeting in England.

News, faculty recognition

Ag.E. Professor Awarded Palladium Medal

Jim Baker was awarded the Joan Hodges Queneau Palladium Medal by the American Association of Engineering Societies and the National Audubon Society. The medal is given to an individual whose engineering accomplishments reflect interest in the Audubon Conservation objectives.

Engineers of the Year

Stephen Marley was awarded the Iowa Section Engineer of the Year recognition, Spring 1989.

Charles Hurburgh was recognized as Young Engineer of the Year for both Iowa and Mid-Central Sections of ASAE.

Carl Bern, Kevin Kesler, Duane Mangold, and Dan McFarland received a Blue

Ribbon Award from ASAE for development of the slide set "Ag Engineering at Iowa State."

Willard Anderson, Wes Buchele, and Howard Johnson retired from the ISU faculty during the 1988-89 academic year.

Tom Glanville was elected President of the Iowa Groundwater Association during the 1988-89 year.

HINDSIGHT

by H. P. Johnson

Some sage said "Hindsight is better than foresight." I agree in part, but in looking back 50 years, my view is admittedly obscure on some points, however embellished. I retired a year ago at 65 after being at Iowa State much of the time since 1946. There is life after appointments; and ISU will go on.

Some things have changed considerably. In the late '40s, classes and laboratories were scheduled Saturday morning. Now, late Friday night classes are hard to fill. In Dean Helser's time, you could be ousted from school for "drunk and disorderly conduct." From '46 to '50, many undergraduate men were veterans. Wool khaki slacks were common. Enrollment peaked in about '50 at 12,000 and dropped to about 9,000 in 1954. It increased to 26,000 in 1987 and is now slowly dropping again. The average grade point was less in the late '40s. We've evolved from slide rules to calculators to computers to personal computers. Calculus is much the same, but numerical analysis and finite element analysis have evolved.

Dutch Elm Disease killed all campus elms; maples are growing in their places. Dormitory space has tripled, and half or more of the campus buildings are new. Tuition since '50 has increased about eight times, salaries for professors about seven times, while the Consumer Price Index for services has increased eight times.

After the agricultural recession and entry of President Eaton, a new era is at hand at ISU. Almost every dean has been replaced since 1986. In-house and external committees or consultants are reviewing programs, including regents' and governor's committees, the latter reporting by January. By November, the fate of several departments or programs is to be decided. While little discussion of changes appears in the Iowa Stater, much controversy is present locally; some appears in the Des Moines Register. At present, Agricultural Engineering is not at risk, although several engineering departments are being combined. Do you remember T and AM? Who doesn't? Plans are set to incorporate the department into others. Operating dollars, quality of programs and growth in science are at the hub of controversies. The State of Iowa now furnishes about 37 percent of the dollars spent at ISU.

Salaries for faculty are much better, thanks to state support (4 percent), increased tuition (5 percent) and shrinking faculty numbers (1 percent) to allow for 10 percent raises each of the last three years. We are now competitive with schools east

of us. Research operating funds are largely obtained from external sources. High-quality faculty with U.S. backgrounds are not plentiful. Last year, more than half the PhDs awarded in the United States were to foreign nationals. Few capable BS degree engineers can be convinced to set aside three to five years of salary to complete the PhD degree. Many go to industry when they do.

Some things haven't changed. The enthusiasm and energy of youth surges through the campus each fall. The joys and disappointments associated with courses, jobs and friends remain. The young people we get are marvelous -- intelligent, conscientious and with good moral qualities. And yes, there are a few stinkers -- the two percenters.

Davidson Hall is the same, with some modifications. We have a high construction priority, but biotechnology and animal science have managed to intrude.

And I have changed. Some years ago I thought the women students were getting younger every year. Now I think their mothers are getting younger every year!



Alumni news and response

From overseas:

Ingvar G.B. Jansson, MS '55, from Staffanstorp, Sweden, has been working at the Swedish University of Agricultural Science. He retired Dec. 31, 1988.

Ali Safabakhsh, BSAE 1985, is a project engineer designing farm machines for the Jahade Sazondegi Isfahon in Isfahon, Iran.

Hans Duts, MS '50 is employed by the Transport Canada Airports Authority Group. He is Senior Advisor for Engineering and Economics and is in Ottawa, Canada.

1930-1960

Harold DeBuhr, BSAE '51, reports that he is in the consulting business after a career with Deere and Co.;

George Grieve, BSAE '36, is Chairman and Founder of the Grieve Corp. He initiated the business in July 1949 and has developed an engineering and manufacturing business specializing in industrial ovens and furnaces at Round Lake, Ill.; **Floyd Herum**, BSAE '53, MS '54, is professor Emeritus since October 1987 after retiring from Ohio State University; **Dale Hull**, BSAE '39, MS '40, is chairman of D.O. Hull Associates, engineering consultants, in Ames. He also farms. He retired from the I.S.U. AE faculty; **Don Jedele**, BSAE '49, MS '54, is Professor Emeritus at the University of Illinois. He retired in July 1988. **Curtis Johnson**, MS '55, is Professor Emeritus (1979), Food and Agricultural

Engineering Department, University of Massachusetts, Amherst, Mass.; **Floyd Marsh**, BSAE '37, is a retired District Engineer, Bureau of Land Management. Active in several local groups, he lives in Prescott Valley, Ariz.; **Myers Rossiter**, BSAE '50, is a farm owner and operator near Winfield. He has received the Master Pork Producer (1974) and the Master Farmer Award (1983); **Donald Schwendemann**, BSAE '41, reports from Rochester Hills, Mich. After careers with General Motors and Reef Baker Corp. where he was President and Chief Executive Officer, he now is President of Detroit Chapter Round Table International, and is semi-retired; **Paul Shutt**, BSAE '50, is a retired brake engineer who was worked for Bendix Inc., South Bend, Ind. He now consults on accident cases; **Lee Sowers**, BSAE '50, is project manager and general contractor, Donald Drake Co., Portland, Ore.; **Walter Stefan**, BSAE '48, is Director of Logistics and Engineering, the Boeing Co., Seattle, Wash. He has been active in the Aerospace Industries Association and is on the Management Council, Boeing Aerospace Operations; **Glenn Schwab**, PhD '51, consulting engineer and professor emeritus, Ohio State University, was a contributor to the Drainage Handbook on Drainage of Irrigated Soils in India. He lives in Powell, Ohio.

1960-1980

Tom Falk, BSAE '78, is at Reynoldsburg, Ohio, and recently started as service representative of Kubota Tractor Corp. in its tele-service department. He officiated at the

World Junior Track and Field Meet, in Ontario; **William Fox**, PhD '62, was appointed Dean, Mississippi State College of Agriculture and Home Economics. He has been Head of the Department of Agricultural and Biological Engineering; **Ronald Furry**, PhD '65, is a professor of Agricultural and Biological Engineering, Cornell University, Ithaca, N.Y. He is Chair of the Cornell Credit Union. **Edwin Goering**, BSAE '64, is Safety Director, Oregon Metalurgical Corp., Albany, Ore.; **Ron Hermanson**, BSAE '58, PhD '67, Professor at Washington State, was on faculty leave at ISU AgE Department to review research on groundwater quality; **James Hodgson**, BSAE '68, is Vice President of purchasing and part owner, Big Timber Inc., Vinton, which produces hardwood for furniture. He is a school board member and he and his wife raise Percheron horses; **Mark Huss**, BSAE '77, formerly Chief Engineer, G.A. Rolfs Co., Boone, is now Manager, Engineering Services, College of Agriculture, ISU; **George Kriz**, BSAE '60, MS '62 is at North Carolina State, Raleigh, N.C. Dr. Kriz is Associate Director of Research, Agricultural Experiment Station; **Darwin Kuhlert**, BSAE '77, is Farm Sales Supervisor, Land O' Lakes Inc., Fort Dodge. He received a BA in Business Administration from Buena Vista College; **Arlyn Nelsen**, BSAE '77, is plant superintendent for Funk Seeds International, Bell Plaine. **Dick Nelson**, BSAE '69, is Plant Engineering Manager, White New Idea Farm Equipment Co., Charles City. He is a member of the Board of Dir-

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Alumni news

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ectors, Chamber of Commerce and the Charles City Rotary; **Lee E. Shultz**, BS '67, is now President, HON Co., Muscatine, Iowa. He was President of Lozier Corp. in Omaha, Neb., a manufacturer of store fixtures; **Edward Spiess**, BS '63, President and Owner of Dexton Enterprises, Rock Island, Ill., was one of 21 agricultural engineers who traveled to Russia with a People to People tour. Dr. **C.M. Hansen** headed the group. **Larry Walthart**, BSAE '76, is Member Service Director, Iowa Lakes Electric Cooperative, Esterville, Iowa. **Robert Wemer**, BSAE '76, is a livestock grain farmer near Montezuma, Iowa. He is on the Board of Directors, Cedar Valley Farm Business Association and is an extension advisor. **Shane Schuler**, BSAE '87, employed as a mechanical engineer with ALCOA, Davenport, Iowa, now works in the foil mill after

Alumni Day Visitors

The department had a reception for ISU alumni of the class of 1939 in Davidson Hall on June 2. Those attending were: **John E. Brelsford**, Ephrata, Pa.;

Norris Swanson, Lincoln, Neb.; **William Carter** graduated in the class of '29. **Bill Harriott**, who received a PACE award from the College of Engineering, also was present. We appreciate your interest and support.

a term in the ingot plant. **Karen Mancl**, PhD '82, is Assistant Professor, Agricultural Engineering, Ohio State University. Her second child, Michael, was born June 9, 1988. **William Angus**, BSAE '82, is test engineer, engine structures and dynamics, Caterpillar Inc. in Peoria, Ill. **Jim Noonan**, BSAE '85, is a design engineer with Little Grant Crane, Des Moines, Iowa.

Scott Cook, BSAE '86, is a design engineer with Caterpillar Inc., Aurora, Ill. He works with the power train section. **Alan McConeghey**, BSAE '83, is estimator and project manager, Mc Aninch Corp., Des Moines, Iowa.

George Hollins, BSAE '81, is Assistant City Engineer, City of West Des Moines, Iowa. **Steven Kimes**, BSAE '77, MS 1979, formerly Vice President of Younglove Construction Co., Sioux City, Iowa, is now employed as Engineering Manager, Louis Dreyfus Corp., Olathe, Kan.

In Memoriam

John Moore, BSAE '48, died Feb. 13, Queens, N.Y.; **John L. March**, BSAE '36, died Feb. 13, Mason City, Iowa; **Kenneth Petrie**, BSAE '49, died March 16, Royal Oak, Mich.; **Ralph Secor**, BSAE '30, died Jan. 5, Aberdeen, Wash.

Headlines

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throughout the rest of the state.

We are developing position announcements to begin recruiting replacements for Dr. Wes Buchele and Professor Willard Anderson, both of whom retired in July after distinguished careers at ISU.

The faculty has undertaken a self-examination of the programs and has initiated a strategic planning process to provide a proactive plan for development of the department. Five key issues identified at a faculty retreat held in May 1989 include:

Recruitment, Areas of Excellence, Curriculum Review and Revision, Public Relations, and Productivity. In the next months, we will develop plans to move forward in these areas. We will share the results of this effort with you in future newsletters.

Our undergraduate enrollments for this fall are approximately 60 students in Ag Engineering with 13 freshmen, and 33 students in Ag Mech with six freshmen. Enrollments in each curriculum are about equal to those of last year. Our graduate student body remains strong with approximately 45 students equally divided between MS and PhD programs. Job

placement and starting salaries are excellent in both colleges and are competitive with other majors. The opportunities for our graduates are great. We will be expanding our recruiting efforts this year.

The first year has offered many opportunities. I expect an equally exciting year this year. Clearly, for us to meet the expectations of the faculty, staff and alumni, we need your support. I look forward to working with each of you in the future.

When you are in Ames, please stop by and say hello. The welcome mat is always out and the coffee is free.

Alumni recognition

Several alumni have received recognition for their work and service. We probably will miss a few; we have information for the following ISU graduates. Congratulations to each of you.

Jan Van Schilfgaarde, BS '49, PhD '54, was elected to the National Academy of Engineers, one of the highest engineering recognitions in the United States.

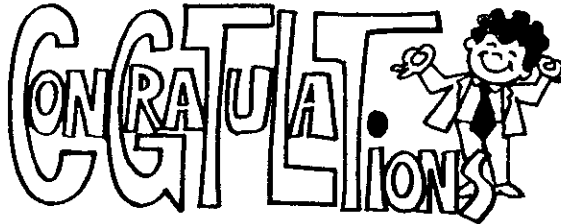
Bill Harriott received the Professional Achievement Citation from the College of Engineering, ISU, Spring 1989.

Robert Tweedy, BS '52, received the Cyrus Hall McCormick Jerome Case Medal from ASAE, June, 1989. This is one of the two high recognitions given by

ASAE. **Dr. Wes Buchele**, PhD '54, received the award in 1988.

Dr. Roger Yoerger, BS '49, PhD '57, received the Massey-Ferguson Medal from ASAE, June 1989.

Robert Dahlberg, BSAE '56, was a keynote speaker at the 1989 summer meeting of ASAE. He is Director of Production for the North American Seed Division of Pioneer Hi-Bred International.



The following graduates were awarded the recognition of Fellow, ASAE, in June 1988. **Dr. C. Thomas Haan**, PhD, '67, Oklahoma State Univ.; **Dr. David Palmer**, PhD, '64, Harza Engineering; **Dr. Gerald Rehkugler**, PhD '66, Cornell University; **Robert Skromme**, BS '51, Consultant.

Andrew Beaver, BSAE '86, was awarded the National Oceanic and Atmospheric Administration Special Achievement Award medal. He is a commissioned officer aboard the NOAA ship HECK and apparently spends some time in underwater exploration.

Recognition of students

Many awards were presented to student groups at 1989 annual summer meetings.

The ISU **Agricultural Mechanization Club** received third place in the FIEI competition. **Vic Bekkum** and **Duane Mangold** were club advisors.

The ISU **Agricultural Engineering Student Branch** won second place in the FIEI engineering competition. **Carl Bern** and **Mort Boyd** were club advisors. **Steve Roth** was Chairman of Yearbook Activities.

Dave Meester received a second place award for his

student paper "Analysis and Modification of a Plot Combine Pneumatic Conveyor." The student paper competition was initiated to recognize Dr. K.K. Barnes, graduate of the ISU Department of Agricultural Engineering.

Several 1988 awards are being announced now because the '88 newsletter went to press before awards were announced.

In 1988, the ISU **Ag E Student Branch** was awarded the first place FIEI trophy for clubs of fewer than 35 members. Also, **Tom Kellen** received first place for his student paper but was not able to attend and compete at the national meeting. **Carl Bern** has been coaching

the student paper entrants for many years and has a remarkable record. ISU students have ranked in the top three nationally for years.

Ann Liebenow and **Rick Sporrer**, Ag.E. seniors, received ASAE Student Honor awards in 1989. **Ryan Bakker**, Ag Mech senior, also received a Student Honor award.

Carol Lehtola, Ag.E. graduate student, was elected secretary of the ISU Graduate Student Senate for the 1989-90 year.

Liansuo Xie received the Paul Taiganides Award for the outstanding graduate student in Ag Engineering. His specialties are mechanics, math, and computer-aided design.

Annual Steak Fry

The third annual steak fry for scholarships was Oct. 6. Two \$500 scholarships were funded. Recipients were **Kenneth Hoefling**, Ag E junior and **Ryan Bakker**, Ag Mech junior. The steak fry was sponsored by the Iowa Section and the Agricultural Engineering faculty.

Wessman Memorial Scholarships

Five scholarships of \$1000

each were awarded for the first time in fall 1988 to freshmen and transfer students. Funds for the scholarships were derived from the Wessman estate gift for the department which established the scholarship endowment and aided in equipment purchases.

Scholarships Supported by Other Alumni

Other scholarships awarded students are supported by or in memory of **Hobart Beres-**

ford, J.B. Davidson, L.G. Keeney, and Leon Charity. Other scholarships are won in competition in the Colleges of Engineering and Agriculture.

Janice L. Leslie
Editor

Barb Kalsem
Assistant Editor

Where you live:

Name _____ Year graduated _____

Home address _____ Degree received _____

City _____ State _____ Zip _____

What you do:

Business title/profession _____ Phone _____

Company/institution _____

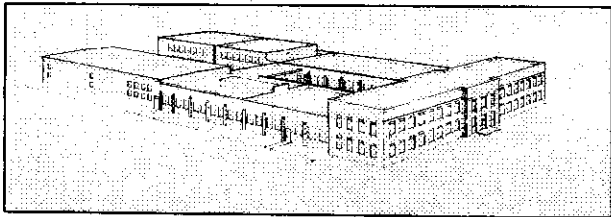
Division/address _____

City _____ State _____ Zip _____

News about you: (community service, board memberships, professional honors, career activities, family information)

Return to: James R. Gilley
Agricultural Engineering Department
Iowa State University
Ames, Iowa 50011

Thank You!



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