Spring 2023

Cluster - Spring 1997

Prairie View A&M University

Prairie View A&M University

CLUSTER

"Partners in Progress"

SPRING 1997

PVAMU
INDUSTRY
UNIVERSITY
PARTNERS IN PROGRESS
EXCELLENCE IN EDUCATION

Texas Instruments

"1996 Cluster Company of the Year"

From the cover:

TEXAS INSTRUMENTS

"1996 Cluster Company of the Year"

AN EYE TO THE FUTURE: TI's Historically Black Colleges and Universities and other Minority Institutions (HBCU/MI) program steering team members meet in a TI conference room using TI's state-of the-art Digital Light Processing technology. Randy Whitaker, team member and Prairie View A&M alumnus; Ed Esposito, team member; Marvin Cowens, chairman of the team; Nathan Dodge, team member; and Zephra Freeman, team member and Prairie View A&M alumnus have a clear vision to the future .

Features

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Dr. Charles Hines
President of Prairie View A&M University

President's Message

Excellence in education as a result of partnering with industry and government is not the wave of the future but the reality of today. Institutions of higher learning are in the midst of radical change that challenges us more than ever to remain focused and to strengthen its primary mission of education, research and service. We must develop new partnerships and maintain existing relationships with the business and government communities that will help us bridge the educational experience with the workplace.

We must espouse a commitment to produce students who have been exposed to the highest quality of education encompassing the most innovative teaching methods imaginable. These efforts are part of our overall commitment to be a pacesetter in providing quality education that is relevant, meaningful and targeted to tomorrow's workforce.

Your continued support through your involvement and commitment to Prairie View A&M University is essential. We invite you to partner with us in making an institution that remains on the cutting edge in education and can be truly recognized as an "institution of the first class" serving the needs of Texas, the nation, and the world community.

Charles A. Hines, Ph.D.
President

Industry Co-Chair's Desk

C. Ray McClain
Senior Manager, DSS
McDonnell Douglas Aerospace Systems, Co.

On behalf of the Cluster members from business, industry, and government, welcome to the Spring Meeting of the Prairie View A&M University Business/Industry Cluster. This meeting must emphasize teamwork. A dictionary's definition for the word teamwork..... is a cooperative and coordinated effort or action on the part of a number of people working together to achieve a common goal. As an example, in sports we occasionally hear the saying, "They have no star players, but they rarely lose a game because of their great teamwork".

As most of us are aware, the Cluster team is composed of the Executive Committee, the Student Development Committee, and the Faculty Development Committee. Each committee is led by a representative from industry and a representative from the university.

The committee chairs can relate to the sports saying from the perspective, there are no star players, however, if they are to succeed in achieving goals and objectives, they must work together as a team. By participating as a team, goals are achieved and objectives are met.

I encourage all Cluster members to be active in either the Executive, Student or Faculty Development Committee. The success of these committees are dependent on the work of each committee member. Each member has a responsibility to serve the committee in order to achieve common goals.

Remember, the Prairie View A&M University Cluster has no star players and for nearly thirty years, it has never lost a game.

We invite all companies who recruit at the University to consider membership in the Cluster Program. We are sure you too can make a difference.

University Co-Chair's Desk

Carolyne Bradley-Oliver
Director of Institutional Development and External Affairs

As government, industry, and educational institutions prepare for the new millennium, the one thing that is constant is change. There is a significant paradigm shift in the way we do business within our respective organizations and with each other. No longer can we continue to do business as usual and expect a different result. We must find better ways to partner with each other in a manner that will bring positive results for all involved. I am committed to the notion that Cluster is the kind of organization that allows Prairie View A&M University to maintain a barometer on the real world so that our programs and educational offerings are pointed and focused to produce the skills that are relevant and required in the workforce.

Prairie View is a University with a strong heritage, a history of excellence, and a future with potential. It is striving to build future leaders, workers, and researchers - by preparing them with relevant skills that address the needs of a rapidly changing marketplace. You can help us get there. Your partnership represents an investment today for tomorrow's workforce. Join us in our quest to forge ahead with purpose, preparedness, and power.

PRAIRIE VIEW A&M UNIVERSITY CLUSTER EXECUTIVE COMMITTEE

Industry Co-Chair:
Mr. C. Ray McClain
Senior Manager, DSS
McDonnell Douglas Aerospace Systems Company

University Co-Chair:
Mrs. Carolyne Bradley-Oliver
Director, Institutional Development
Prairie View A&M University

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Ms. Vivian Renfro-Barnes-Austin Center
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Mr. Rick Gamez

TELLABS
Ms. Julie Cunningham

TEXAS INSTRUMENTS
Dr. Marvin Cowens

**Denotes New Members*

"State of the Art" Electronics at PVAMU CENTER for Applied Radiation Research (CARR)

by Bryan B. Barrows III

Prairie View A&M University has an important asset in the maintenance of the $750,000 Center for Applied Radiation Research (CARR). The CARR program provides "state of the art" instrumentation for research in electronics. Students from PVAMU have access to materials which allow them to inspect microscopic images of individual atoms and to test "set-up" which analyzes complicated integrated circuits.

Located in the Gilcrest Engineering Building at PVAMU, CARR has two new additions to the microelectronics cleanroom. The first of which is a versatile probe station coupled with sophisticated measurement device performance, including their capacitance-voltage and current-voltage characteristics. The second instrument, a Deep Level Transient Spectromente (Biorad Model 8000), explores the defects in semiconductor materials which may limit their performance in applications. Both instruments are "industrial grade", which will allow students to work with equipment that they may encounter again in a future job in the microelectronics industry.

As part of the cleanroom development at the CARR center, electrical engineering graduate student, Johnny Devereaux, and research specialist Ray Dwivedi, have tested a diffusion furnace and oxidation furnace which will alloy fabrication of simple electronic devices (such as p-n junctions). Another instrument in use is a scanning probe microscope (SPM), Digital Instruments Nanoscope IIa, currently available within the cleanroom facility. The versatile instrument images the surface of materials down to atomic scale, giving scientists and engineers unique opportunities for fundamental and applied research. The SPM was purchased in conjunction with an X-Ray Diffractometer (XRD) (Siemens GADDS) that analyzed the structure of materials. Both devices were purchased through an Office of Naval Research and Advanced Research Projects Agency grant leveraged through National Aeronautics and Space Administration sponsored research at PVAMU.

Research for students at the CARR extends beyond the PVAMU campus to Texas A&M University. CARR maintains and operates an electronic tester (Hewlett-Packard Model 82000) at the TAMU Cyclotron. This instrument analyzes the performance of complicated circuits, such as computer memories and central processors. CARR researchers use the tester to monitor integrated circuits while they are evaluated for radiation tolerance at the TAMU particle accelerator. The tester is "industrial quality" and allows students to perform at the cutting edge of research.

Also, the NASA/PVAMU CARR faculty, and students attended the first NASA University Research Centers Technical Conference held in Albuquerque, New Mexico, February 16-19. Three students and three faculty members gave presentations on current research. In addition, PVAMU hosted a tutorial at the conference entitled, "Concerning Radiation Tolerance Requirement in Future Generations of Commercial Integrated Circuit Technology and Space Avionics".

"BLACK ENGINEERS OF THE YEAR" PVAMU Scores Big!

by Bryan B. Barrows III

One can spend a lifetime working and never be recognized for the degree of excellence that one brings to a chosen profession. However, three graduates from Prairie View A&M University will never have that problem. The Council of Engineering Deans of the Historically Black Colleges and Universities (HBCUs) and US Black Engineer and Information Technology magazine have named three PVAMU alumni as "Black Engineers of the Year" for 1997.

W.T. Greer

Motorola

W. T. Greer, a bachelor of science in electrical engineering graduate from PVAMU, was named as one of this year's top 30 African Americans in science and technology in the United States. Greer is the recipient of the Professional Achievement Award for Industry at the Black Engineer of the Year Awards Conference.

Greer, Vice President and Director of Advanced Technologies for the Logic and Analog Technologies Group (LATG) for Motorola Semiconductor Products Sector, has over 30 years of engineering and management experience in the electronics industry. He is currently responsible for the development of new semiconductor technology, determining market size and product feasibility. He was appointed Vice President in 1991 from his previous position as Director of LATG's Military Products Operation.

A resident of Phoenix, AZ., Greer's community involvement includes serving on the Board of Directors for the Industrial Network Corporation, the Phoenix Botanical Garden, and the City of Phoenix Civil Service. Greer is also a member of the President's Board of Visitors at PVAMU and a member of the Arizona State University College of Extended Education Dean's Council.

Zephra Freeman

Texas Instruments

Zephra Freeman, a 1984 graduate with a bachelors degree in mechanical engineering from PVAMU, was named a "Black Engineer of the Year" in the categories of small business development" and "professional achievement in industry". Freeman was hired in 1984, after graduating from PVAMU, to work

at Texas Instruments, Inc., developing a program to assist small disadvantaged minority businesses in securing contracts with large corporations and managing a team of engineers striving to achieve worldwide development of products and applications using TI's Digital Micromirror Device. Currently he is new business development manager for TI's Digital Imaging Business.

TI chairman of the board, Jim Adams, said, "We are pleased that this employee is being recognized for his talents and contributions to the fields of science, technology and engineering. TI is a stronger company because of the work we have done to promote diversity, and we realize we must use all our available talent and to develop minority leaders and engineers in greater numbers and for higher levels of responsibility." TI SC staffing director, James Mitchell says, "While we are proud of our progress, we realize that we have a long way to go to accomplish our diversity objectives at all levels reflective of the available workforce."

Texas Instruments, Inc. (headquartered in Dallas) is one of the world's foremost high-technology companies, with sales or manufacturing operations in more than thirty countries worldwide.

TEXAS INSTRUMENTS

Herb McGrew

3M Corporation

Herb McGrew, a 1973 bachelor of science in mechanical engineering graduate of PVAMU , says, "You have to have a high level of confidence in yourself and in your abilities." Maybe that is why McGrew was chosen a "1997 Black Engineer of the Year", representing 3M Corporation. Herb McGrew is 3M's director of Manufacturing and Engineering for the United Kingdom and Ireland, managing a total of 2,200 employees coordinating manufacturing production within 3M's business centers throughout all of Europe. 3M vice president of the Tape Division, Henry Menzies, said of McGrew, "He's a professional, caring, intelligent manager, a good team player. He focuses on key issues, seeks consensus and is tenacious in his pursuit of objectives."

Vice president for Engineering, Quality and Manufacturing Services, Chuck Kiester commented, "I look for engineers who are not only outstanding engineering practitioners, but who want to expand their interests beyond engineering, who are seeking an understanding and appreciation of broader business issues. Kiester said, Herb (McGrew) is a great example!"

Kiester believes that McGrew has a solid supervisory management and engineering background to continue to build on. Believing that McGrew had prepared adequately for destiny, Kiester says McGrew just needed the next step up the ladder. That step came when, "...we needed a plant manager in New Jersey and it provided a challenging assignment, giving Herb more visibility and exposure throughout 3M." Proving himself there, McGrew ultimately was elevated to his current assignment in the United Kingdom.

Perhaps Herb McGrew defines his success best when he says to young people, "You have to have a continuous thirst to learn. If you ever decide to quit learning, you might as well throw in the towel."

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Prairie View College of Business Wins EDS Case Competition

by Brian H. Barrows III

The PVAMU College of Business 1996 EDS Case Challenge Team returned as victorious pioneers from EDS Corporate Headquarters in Plano, Texas the site of the North American Intercollegiate Business Case Competition held October 23-27. The team representing the College of Business was the first team to compete in a case competition of any kind, staging a preliminary round win and becoming one of six teams considered finalists.

The EDS Case Challenge which is an annual intracontinental undergraduate business case competition invites interdisciplinary teams from EDS targeted universities to solve a business case and present solutions to a group of EDS corporate representatives which includes high-level executives who serve as judges. Scholarships are awarded to members of the finalist and first-placed teams.

As a newly targeted university, PVAMU was invited in September 1996 to compete by either fielding a team or sending two faculty observers. The College of Business chose to field a team and compete with thirty-eight other universities: Brigham Young, Carnegie Mellon, Central State University, Florida A&M University, Howard University, GMI Engineering and Management Institute, Instituto Technologico Autonomo De Mesico, Instituto Technologico de Estudios Superiores de Monterrey, Ohio

State University, the University of Texas at Austin and Wayne State University.

In the preliminary round, Dr. Barbara A.P. Jones, dean of the College of Business, Leigh Borland, EDS campus relations representative for PVAMU and, Mary L. Wilson, Faculty sponsor watched the PVAMU team become the Division B winner. The other Division B teams—selected at random—were the University of Texas at Austin, Marquette University, Florida A&M University, George Mason and Instituto Technologico Autonomo de Mexico.

Parks named USDA Advisor

Dr. Alfred L. Parks

U.S. Secretary of Agriculture, Dan Glichman, has appointed cooperative Agricultural Research Center Director, Dr. Alfred L. Parks to the USDA Grain Advisory Committee. Deputy Secretary for Agriculture, Richard Rominger, made the announcement in Washington, D. C. The Grain Advisory Committee provides recommendations to the USDA's Grain Inspectors; Packers and Stockyard Administration on technical matters concerning grain inspection standards. Dr. Parks will represent Texas as he serves a three year term. The group will meet twice annually.

Hines Gives Briefing on ACCESS

Dr. Charles A. Hines, president of Prairie View A&M University (PVAMU), presented the initial results on the Academy for Collegiate Excellence and Student Success 1996 in a briefing to State Representative Steve Ogden during a recent visit to Prairie View A&M University. Dr. Hines commended Representative Ogden and Representative Garnet Coleman for having the legislative vision to support the implementation and funding of the ACCESS program. In the words of Dr. Hines, "The Academy for Collegiate Excellence and Student Success opens pathways to excellence in ducational achievement and ersonal growth ... ACCESS is an pportunity bridge between high chool and college. ACCESS is ocused on providing intensive cademic enhancement to highly motivated students who do not have "a great paper trail. While these students demonstrate a great desire to receive a college education, their high school GPAs or standardized test scores suggest they are "at risk" to persist to college graduation."

PVAMU officials indicated that the ACCESS pilot program has produced impressive statistics which show the viability and effectiveness of the concept. Students selected for the program attend a seven-week academic, residential summer component which provides instruction in math, reading, composition, critical thinking study skills and movement dynamics. The curriculum is constructivistic and skills based, utilizing heterogeneous grouping in an active learning environment. Critical thinking and problem-solving skills are integrated across the curriculum. Outside the classroom, students engage in a variety of activities in the areas of leadership training, personal and social development and cultural enrichment. Students who continue on to PVAMU in the fall take part in the freshman component which reinforces the summer academic program and provides support services to students in non-cognitive areas.

> *"I want PVAMU to represent the idea written in the Texas Constitution...to be, in fact, a 'university of the first class'. I am proud of ACCESS and its accomplishments and PVAMU's pioneering efforts to improve the quality of performance exhibited by students in the Lone Star State."*

Statistics indicate that 40% of Texas high school graduates are underprepared for college level work and Texas trails the national average of college graduates per capita by 23%. However, the cost of remediating these students has risen sharply and legislators are concerned about these escalating costs. The ACCESS program offers a possible solution to both the human and fiscal concerns surrounding this problem. The intense, concentrated program enhances student academic performance and assists him/her to pass out of remediation more quickly and thereby reduces the cost to the state. The freshman component stresses retention strategies that will ultimately lead to student persistent and an increase in graduation rates. The program hopes to eventually implement an Educator Training Institute for teachers who work with underprepared students. The Institute would provide training in effective learning strategies and offer educators some 'hands-on' experience with these strategies in their own schools in the form of a practicum project.

Following the briefing, Representative Ogden stated, "I want PVAMU to represent the idea written in the Texas Constitution...to be, in fact, a 'university of the first class'. I am proud of ACCESS and its accomplishments and PVAMU's pioneering efforts to improve the quality of performance exhibited by students in the Lone Star State."

Texas Instruments Recipient of "The 1996 Cluster Company of the Year Award"

by Bryan B. Barrows III and Anne Hendry

Mike Lockerd, Vice President of Texas Instruments Incorporated accepts the 1996 Cluster Company of the Year Award from Dr. Charles A Hines, President of Prairie View A&M University at an awards luncheon held recently on the campus.

> *"We don't view our support as a contribution, but as an investment in the future."*

Prairie View A&M University presented its 1996 Cluster Company award to Dallas-based Texas Instruments Incorporated (TI) for its support of the university through funding for equipment, faculty enrichment, internships, and in-kind services.

Mike Lockerd, TI's corporate vice president for university relations accepted the award on behalf of the company during the annual awards ceremony held recently at Prairie View.

"We actively seek to establish partnerships with historically black colleges and universities throughout the country and we are delighted to have become a part of Prairie View's Cluster Program", Lockerd said. Traditionally both racial minorities and women have been underrepresented in engineering and technical fields which form a large portion of TI's workforce. TI has a strong record in equal opportunity employment and is committed to increasing the diversity of the workforce in the next century.

"We are sincerely pleased to be a partner in higher education with Prairie View A&M University and to provide assistance that enabled the university to fulfill some critical needs," Lockerd said. "We don't view our support as a contribution, but as an investment in the future."

Known around the world for their pre-eminent place in science and technology, America's colleges and universities have long relied on partnerships with the private sector to develop high-potential areas of research and to provide challenging fields of study for their most promising graduates. An outstanding example is Texas Instruments close and personal relationship with Prairie View A&M.

As a technology-based company, Texas Instruments is particularly concerned about promoting educational excellence in science, engineering and math — with a special focus on providing opportunities for women and minorities, who have been underrepresented in technical fields in the past.

For more than three decades, TI has built direct relationships with dozens of America's colleges and universities—providing both grants and research contracts to fund the development of leading-edge technology. TI also participates in a number of collaborative efforts to promote excellence in higher education, teaming up with other high-

technology companies for research that benefits the entire industry and society.

From 1990 to 1995,TI invested $8.5 million in direct grants for research, more than $15 million through industry consortia such as the Semiconductor Research Consortium and another $1 million through university affiliate programs. Direct research grants were made to university programs at 74 U.S. institutions in 35 states, as well as at 19 other international universities.

TI is especially supportive of historically black colleges and universities (HBCUs), and has developed long-term relationships with targeted institutions, such as Prairie View A&M, to allow TI and those schools to explore academic areas of mutual interest.

Because of TI's strong support of educational programs at all levels and because the company recognized a need to increase the diversity of the work force into the next century, a group of TI employees decided to form a team to develop stronger relationships with the HBCUs and other minority institutions. As a result, the Historically Black Colleges and Universities and other Minority Institutions (HBCU/MI) Program steering team was formed in 1995 to offer support and programs to encourage more minorities to consider working for TI.

The thrust behind the HBCU/MI team was to help upgrade college math, science and technology related departments, and bring them up to speed with the latest information and equipment for technical areas so that students would have a competitive advantage. TI contributes equipment and provides training to both the students and the faculty, and when those students are hired by TI, they are comfortable with the equipment and they have mastered new skills. In turn, TI benefits as the company does not have to spend as much time training these new-hires because they have already been trained using TI products in school. In addition, the team supports faculty research programs that have a direct or indirect impact on TI.

In its initial effort, the team decided to focus on three universities including Prairie View A&M. TI contributed more then $120,000 to Prairie View during 1996 to establish a TI laboratory that supports the computer science, mathematics, physics and electrical engineering departments. In addition, the company provided software, logic boards, faculty training and research grants.

In addition to this program, the TI Foundation matches gifts of its U.S. employees to colleges and

(continued page 14)

Historically Black Colleges and Universities and other Minority Institutions (HBCU/MI) program steering team members work to develop long-term relationships with targeted institutions, including Prairie View A&M, to allow TI and those schools to explore academic areas of mutual interest. Nathan Dodge, team member; Randy Whitaker team member and Prairie View A&M alumnus: Zephra Freeman, team member and Prairie View A&M alumnus; Ed Esposito, team member; and Marvin Cowens, chairman of the team are proud of TI's Digital Light Processing technology.

(continued from page 13)

universities of their choice. The program annually matches individual contributions of up to $1,000 to more than 1,000 U. S. colleges and universities.

Recently, the company took its commitment to basic research to an entirely new level with an innovative competition—The DSP Solutions Challenge. Offering a $100,000 grand prize, the DSP Challenge gives students at any college of engineering the opportunity to develop new uses for the digital signal processor (DSP), a special type of semiconductor device pioneered by TI. The competition has drawn more than 700 participants from 230 universities in the U.S. and around the world. Prairie View A&M students are eligible to participate in the annual event.

TI provides work-study co-op programs, internships and summer development programs in its plant-site communities. Each year, more than 500 junior college, undergraduate and graduate students from 95 educational institutions use these programs to gain work experience and needed financial support. Many Prairie View A&M students take advantage of TI's co-op internship programs.

In addition, TI participates in a number of collaborative industry efforts to offer internships to top engineering students at leading universities. For many years, these prestigious "intercept" programs have given promising undergraduates the opportunity to work in a business setting—gaining valuable research experience as they work toward undergraduate and graduate degrees.

To encourage the continued excellence of America's most distinguished electrical engineering programs, TI established the Texas Instruments Elite Lab Program. Through this program, 10 premier universities receive both product development tools and access to TI's own research personnel to support their research activities.

Support for higher education has long been the cornerstone of TI's efforts to promote educational excellence—through research grants and in-kind services. TI's involvement with university programs takes many forms, and has led to productive, ongoing partnerships with dozens of universities across the U.S. and around the world.

Marvin Cowens, chairman of TI's HBCU/MI Program steering team, said, "TI is convinced educational excellence is a national imperative. It's a critical building block for America's economic vitality, and for the quality of life in the communities where we live and work. Strong schools, such as Prairie View A&M, are also essential for today's businesses, which must be able to draw on the resources of a well-trained workforce in order to remain competitive in the global economy."

"For America to meet the challenges of a dynamic future, citizens must be prepared to keep learning throughout their lives. That's why, from it's earliest days, TI has vigorously supported a wide range of short-term and long-term initiatives designed to promote effective education—before, during and after the traditional school years," he said.

TI's involvement in education is designed to affect not only the communities where the programs are launched, but to create opportunities for fundamental change by developing programs which can be replicated elsewhere. The company is actively involved in gaining a wide audience for its model programs—both in the public forum, and among the associations and corporations working to achieve change throughout the education system. TI's leadership in these efforts to promote educational change will continue because the best way to ensure a bright future for America in the 21st century and beyond is through educational excellence for the future work force. And TI plans to continue its commitment to outstanding schools like Prairie View A&M.

TEXAS INSTRUMENTS

Tellabs and Hewlett-Packard Establish Communication Systems Lab at PVAMU

by Bryan B. Barrows III

Dr. Charles A. Hines, President, Prairie View A&M University, Mr. Michael J. Brick, Tellabs CEO, Dr. Milton Bryant, Interim Dean, College of Engineering & Architecture

Friday, February 7, was a special time for Prairie View A&M University as Hewlett-Packard, Tellabs, and Best Tronics participated in the dedication of a new communications systems lab on the campus. Tellabs and Hewlett-Packard have donated $500,000 in equipment and services in order to establish this new technology laboratory for PVAMU. One of nine engineering-oriented Historically Black Colleges and Universities (HBCUs) in the United States, PVAMU will employ the equipment and instrumentation in its senior-level course, "Communications Lab". The new course provides updated, practical knowledge and experiments to enhance both a theoretical and technical background in the broad field of communications systems, which students learn from the theoretical course "Communication Theory".

Signaling the need for enhanced corporate involvement in enhancing the skills and abilities of students, PVAMU president, Dr. Charles A. Hines, comments, "We are pleased that Tellabs, Hewlett-Packard and Best Tronics are working in partnership with the University in restructuring education that results in excellence of quality to enable all of its students to meet world class standards. Such efforts help PVAMU in becoming more relevant to the needs of society in making a difference in the lives of the traditionally bypassed and underrepresented students."

Dr. Sheng-Guo Wang, visiting professor of electrical engineering at PVAMU, has worked closely with a Tellab director, managers, engineers, and technicians in order to create the lab. He says, "The dedication of the new communications systems lab will be a great asset for Prairie View A&M University and we thank Tellabs and Hewlett-Packard and Best Tronics for making it possible for our students to grow by its influence."

The communications theory class has approximately ninety students per year and the faculty envisions the lab assisting in a three-fold process: 1) the class will provide students with the ability to find and solve problems and gain increased knowledge; 2) this knowledge can be applied to real systems in the lab; and 3) the knowledge and experience combined can eventually be applied to real job experiences.

Tellabs CEO, Michael J. Birck, says, "Engineering is one of the most rewarding occupations a student can choose, because engineers create value to society. As we approach the end of the century and the millennium, the telecommunications industry provides unprecedented opportunity for engineers and technically trained people to make a difference."
Telecommunications will arguably be the premier global industry for at least the first part of the 21st century, providing opportunities for rewarding careers to those with a technical education. Tellabs is very happy to partner with Hewlett-Packard and Prairie View A&M University in improving opportunities for PVAMU students to learn about telecommunications as they learn about engineering.

Both Tellabs and Hewlett-Packard have taken an interest in PVAMU. In fact, they both have active recruitment programs hoping to hire the "best and brightest" of PVAMU.

Incidentally, Hewlett-Packard and Tellabs are both members of the PVAMU Industry Cluster supporting the university.

Tellabs designs, manufactures, markets and services voice and data transport and network access

tellabs

(continued on page 16)

President's Board of Visitors Meets

The first meeting of the President's Board of Visitors was held February 5 and 6, at Prairie View A&M University. The purpose of the Board is to assist the institution in developing a process for business, industry and government in partnering with the University in restructuring education which results in excellence of quality for all of its students in meeting world class standards. Senior level executives and plant managers assume leadership roles through the Board of Visitors in creating viable processes for Prairie View A&M University student success.

A reception was held February 5, at the residence of Dr. Charles A. Hines, president of PVAMU, welcoming the group to campus. The following day, February 6, the Board of Visitors met in conference at the Presidential suite.

The senior level executives discussed processes and gave input regarding strategic planning, global marketing, fundraising, and alliances and partnerships. A second meeting of the group, to elaborate and finalize these areas, is tentatively scheduled for May 15, 1977.

Corporate representatives at the meeting were W. T. Greer, Motorola Corporation; Ray Powers, Hallmark Cards; A.C. Hester, General Motors; Barbara Tompkins-Brown, DuPont Chemical Company; Wilma Delaney, Dow Chemical USA; Jackie Wilson, AT&T; Richard Wiggins, Texas Instruments, Inc. and Mike Lockerd, a retired executive of Texas Instruments.

Board members not available for this meeting include Mr. Horace Lindsey, GTE Corporation and Mr. Steve Bonkowski of Northrop Grumman Corporation.

(continued from page 15)

systems. The company's products are used worldwide by the providers of communications services. Tellabs, Inc., stock is listed on the Nasdaq Stock Market (TLAB).

Hewlett-Packard Company designs, manufactures and services products and systems for measurement, computation and communications, The company's products and services are used in industry, business, engineering, science, medicine, and education in more than one hundred twenty countries around the world.

Motorola Gives New Logic and Digital Design Lab

by Bryan B. Barrows III

> *"This is a great institution and we are pleased to be a part of helping the students of Prairie View A&M University."*

"We are approaching the 21st Century and we have a responsibility to expand ourselves.", stated Dr. Milton Bryant, interim dean of the College of Engineering and Architecture, as he was joined by a host of dignitaries to accept the contribution of a new "logic and digital design laboratory" donated by the Motorola Corporation. Equally elated was Dr. John Attia, interim department head of the Electrical Engineering Department, as he said, "This lab will be very useful for our students and we gratefully accept this donation from Motorola."

Representing President Charles A. Hines, Dr. E. Johanne Thomas-Smith, provost and vice president of instruction said, "Good people championing great causes! Our thanks to Mr. Greer and Mr. Goldman for making this lab possible!" She further said, "PV is better today because of you! Out students deserve a lab that is on the cutting edge of technology."

The new lab will allow students to have valuable "state of the art" equipment on which to test applications which might otherwise be relegated to classroom and textbook activities only.

In awarding the lab, Murray Goldman, executive vice president and assistant general manager of the Semiconductor Product Sector of Motorola, Inc., commented, "W. T. Greer was a major force in the donation of this new lab. Greer's commitment to supporting PVAMU and higher education in general is exemplary and we thank him for his dedication to this enterprise." Goldman also said, "This is a great institution and we are pleased to be a part of helping the students of Prairie View A&M University."

An Engineering graduate of PVAMU and a major force in the donation of the new lab, W. T. Greer said, "We have a lot to be proud of here today and students... remember...spend your time wisely! I decided the day I graduated from here that I had to try to give something worthwhile back to PVAMU, and you students...should try to do the same." "This lab will allow you to do the latest in research in the field and we, at Motorola are proud to provide it for you.", said Greer.

In explaining his resolve to do something noteworthy for PVAMU, Greer said, "I remember quite frequently that when I was a senior here at PVAMU, I interviewed with thirteen different companies and had a final total of twelve job offers. Therein lies the success of programs such as this at Prairie View A&M University.

MOTOROLA

World Food Distribution Center Shines Bright!

Expanded Opportunities For Students

Agricultural economists say that food production and distribution will be the major task of the world economy as it forges ahead beyond the year 2000. Accordingly, the World Food Distribution Training Center, at Prairie View A&M University, is making great strides toward producing the workforce expected to meet food distribution demands for the future.

Dr. Wallace Migura, director of the World Food Distribution Training Center at PVAMU, believes that, "We produce more than enough food to meet world food needs, but between the producer and the consumer....adequate amounts of food do not always reach the consumer. Therefore, the needs of global marketing require a trained workforce to assist in moving food and fiber products to the eventual consumer." "According to surveys by the USDA and the National American Wholesale Grocers Association, minorities are underrepresented within those areas.", commented Dr. Migura.

A shortage of trained professionals, especially minorities, exists in the food transportation, logistics and trade sectors within both the private and public sectors. International trade is a key component of the US food sector which now employs more than 5 million workers in processing, distribution and marketing. Racial and ethnic minorities comprised slightly over 8 percent of the baccalaureate enrollment for students in agricultural business and management in 1991, contrasted with twenty percent of the US population and 43 percent of the population in the Houston metroplex.

In order to meet expanding opportunities for minorities and non-minorities within the food distribution profession, PVAMU is the lead institution in an initiative which cooperates synergistically in partnership with member schools of the Texas A&M University System. Texas A&M International University Laredo, Texas A&M University-Kingsville and Texas A&M University-College Station participate in a program with PVAMU to fill a need for trained and knowledgeable professionals to work in the food and fiber production on a global scale involving distribution, transportation and trade. The televised satellite instructional program began with the U.S. Department of Agriculture, which has provided partial support, especially through the Agricultural Marketing Service, the Economic Research Service, the Food and Consumer Service, the Consolidated Farm Service Agency and the Foreign Agricultural Service. The Texas Department of Agriculture also provides student-placement activities and guidance to the WFDTC. Representatives of the National American Wholesale Grocers Association and International Foodservice Distributors Association add to an advisory board which provides assistance to the center director.

Texas Department of Agriculture Commissioner, Rick Perry, says, "As the Commissioner of Agriculture, I see daily the challenges and opportunities that the food distribution industry offers young people. Thus, I'm honored to be participating in a program to identify and assist young people in pursuing these career opportunities."

Students who have at least sixty semester hours of college credit in their university's Agricultural Economics, Agribusiness or Business degree program, have a minimum grade point average of at least 2.5/4.0 or faculty recommendations will be considered for placement in the program. Scholarship opportunities are also available.

Once a student has been chosen for the World Food Distribution Training Center's program, he/she will be responsible for taking such courses as Agricultural Marketing Channels; Principles of Transportation; Food Logistics/Management; International Trade and Agribusiness; Corporate Finance; Seminar in World Food Distribution and an Internship in Transportation/Logistics.

As with any profession, the real proof of overall effectiveness is in the marketability of skills which individuals learn within the program. John Peters, logistics manager for the Kroger Distribution Center feels that aspiring professionals in the field have a bright future.

PV-GE Relationship Continues

General Electric Corporation, one of the newest members of Cluster and an avid supporter of the University, has invaded the scene again at Prairie View A&M. Annually, GE provides leadership training for student leaders in the disciplines of engineering, computer science, business, communications and the Benjamin Banneker Honors College. This year's event was held at the Doubletree at Post Oak Hotel in Houston, Texas. Over 60 students from the University spent two grueling days being challenged by the 15 member GE team to enhance their leadership skills and to prepare for the world of work through effective interviewing sessions, corporate etiquette and ethics. Not only were students challenged at this Leadership Conference, but administrators from the Office of Student Affairs had the opportunity to be introduced to a bureaucratic problem-solving technique called Process Mapping.

During the Student Leadership Conference, Dr. Milton Bryant, Interim Dean of the College of Engineering and Architecture, along with Dr. Barbara A.P. Jones, Dean of the College of Business, Dr. Jewel Prestage, Dean of the Benjamin Banneker Honors College, and the student chapter of the National Society of Black Engineers were all awarded checks from the GE Corporation totaling $20,000.00. Dr. Jim Williams, General Manager of the Engineering Material Technology Laboratory was the presenter of this contribution.

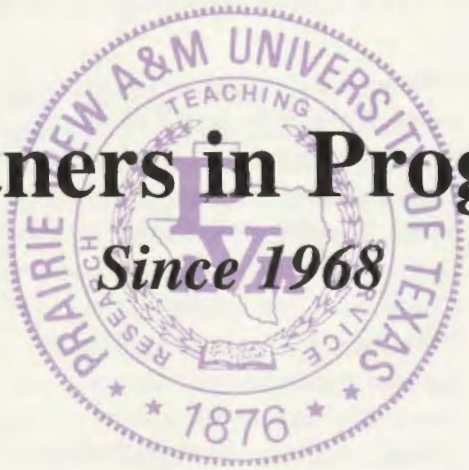
Detroit Edison Gives $10,000 to PVAMU

W.M. Corey Fuller, Milton D. Hill, Jr., Carolyne Bradley-Oliver, Stephen Stafford

While a number of companies are cutting back on their contributions to charitable causes, Detroit Edison, one of the newest members of Cluster, has stepped up to the table with a $10,000 donation to the College of Engineering and Architecture at Prairie View A&M University. The $10,000 will be dedicated to scholarships at PVAMU within the disciplines of mechanical and electrical engineering.

Contributions such as the one made by Detroit Edison do much to provide for the recruitment and advancement of prospective and current students who will likely make up the professional engineering workforce for years to come.

Detroit Edison



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MCDONNELL DOUGLAS

NASA and PVAMU say to HBCUs: Join the New Frontier in Telecommunications!

by Bryan B. Barrows III

The message came through loud and clear December 5 and 6, at a "Vision 2000...Toward Educational Excellence Through Technology" Conference held at the Wyndham Greenspoint Hotel and the Prairie View A&M University Northwest Graduate Center at the Compaq Computer Corporation. The message was to minority institutions...come on in...the water is fine! The Minority University-Space Interdisciplinary Network (MU-SPIN), PVAMU/NASA Southwest Regional Network Resources and Training Site (NRTS) and the Compaq Computer Corporation joined forces to present a glimpse of the 21st Century to Historically Black Colleges and Universities from around the state.

Presiding officer, Dr. John R. Williams of PVAMU, said, "I welcome you to this conference sponsored by the Minority University-Space Interdisciplinary Network. It is important that we form more effective partnerships among ourselves, with business and government if we are to be full participants in the communications technology revolution that is occurring before our eyes." He further stated, "NASA is reaching out to HBCUs to become more involved in it's research and development efforts." One approach involves use of seven Network Resources and Training Sites (NRTS) strategically placed around the country. The training sites provide regional leadership in the development of technology infrastructure on the campuses of HBCUs and other institutions of which serve large minority populations. The NRTS site at PVAMU provides leadership to its partners in such areas as installation and/or upgrade of internet resources, computer hardware, staff training, maintenance and support of campus network resources.

State Representative Sylvester Turner, Dr. John Williams and Dr. Willie Trotty.

Dr. Williams presented James Harrington from the NASA Goddard Space Flight Center (Greenbelt, Maryland) who serves as director of the MU-SPIN Program. Harrington gave a brief overview of the goals and the strategic plan of MU-SPIN. Williams also presented consultant, Dr. Ely Dorsey, professor of information systems within the School of Business at Howard University who spoke about socio-technological change. Dorsey noted that initiatives such as MU-SPIN can offer brilliant research and technology but that human systems often tend to stand in the way of their effectiveness. Therefore, he believes that HBCUs must be committed to the concept of change (when it is necessary).

The dinner speaker on Thursday evening was State Representative Sylvester Turner who expressed the necessity for HBCUs to become active players in the technology development efforts of this state.

The session was hosted by the Higher Education Marketing Division of Compaq Computer Corporation. The session included a tour of the production facilities and an overview of emerging technological developments in higher education from a leader in educational technology.

PVAMU Welcomes New Cluster Members

Prairie View A&M University welcomes the following corporations as new members of the university cluster.

Mr. Byron Williams
Staff Engineer
Exxon Company USA
New Orleans, Louisiana

Ms. Fatrice Tempton
Technical Section Supervisor
Exxon Company USA
Baytown, Texas

Mr. Earl Pinkett
Manager, CFM56
General Electric Aircraft Engines Company
Cincinnati, Ohio

Mr. Paul Diamond
Deputy Director of Engineering
Hughes Missile Systems & Company
Tucson, Arizona

Mr. Milton D. Hill, Jr.
Human Resources Consultant
Detroit Edison Company
Detroit, Michigan

Photo not available

Ms. Margaret Paulin
College Relations Administrator
Northrop-Grumman Corporation
Pico Rivera, California
(Ms. Paulin is the replacement for Ms. Kimberly Marnin.)

PRAIRIE VIEW A&M UNIVERSITY

Prairie View, Texas

APPLICATION FOR UNIVERSITY CLUSTER MEMBERSHIP

For a membership status with the Prairie View A&M University Cluster, complete the following application and forward it to:

The Office for Institutional Development
P.O. Box 4129, Prairie View A&M University, Prairie View, Texas 77446-4129

"Partners in Progress"

Name: _____

Title: _____

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____
(Area Code)

Chief Operating Officer: _____ Title: _____

What are your current interests in Prairie View A&M University?

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Other Comments:

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Annual membership fee of $1000.00 ( ) Enclosed ( ) To be Invoiced

Signature: _____

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