

PURDUE & AeroGRAM Astro



A newsletter for alumni & friends of the School of Aeronautics & Astronautics • Spring 1999

AAE STRATEGIC PLAN

Thanks to the collaborative efforts of the School's faculty members and the Industrial Advisory Council, a new strategic plan positions the School well for the third millennium. Faculty members working on the Strategic Plan Committee include: Stephen Heister, Kathleen Howell, Steven Schneider, and C.T. Sun. Professor Terrence Weisshaar chaired the committee. Former Head of the School John Sullivan also had a leading role in the planning process.

Supporting the School's mission of preparing men and women to be leaders in Aerospace Engineering, the plan has four areas of focus:

- ◆ Undergraduate Education
- ◆ Graduate Education
- ◆ Astronautics Program
- ◆ Research and Laboratory Initiatives

"Accomplishing our initiatives in these four areas of concentration will increase the number and quality of our undergraduate and graduate students, provide research funding to support our students' education, and expand our collaborative educational and research arrangements with our constituents, both at a national

and international level," stated Tom Farris, Professor and Head of AAE.

Our undergraduate initiatives include increasing the number of industries who offer cooperative education programs and summer internships. Currently, the School has cooperative education program arrangements with 13 companies. They are: Aerospace Corporation, Allison Gas Turbine, Ball Aerospace, Delta Airlines, General Electric, Hughes Space and Communications, Boeing St. Louis, NASA-Ames-Dryden, NASA-Goddard, NASA-Johnson Space Center, NASA-Langley Research Center, Structural Dynamics Research Center, and Wright Patterson. Establishing and maintaining fruitful partnerships with our friends in industry and in the government is a must if we are to accomplish these objectives.

Another goal for the undergraduate program is to focus on the recruitment of top students to the School.

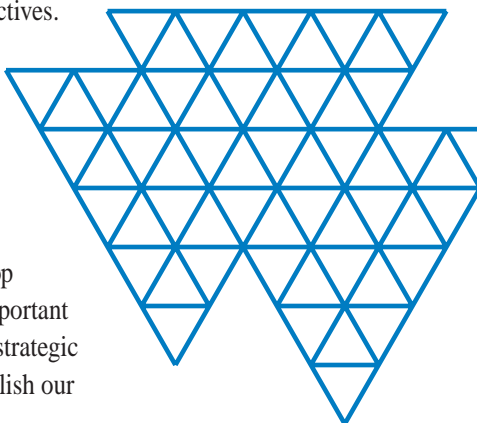
"The recruitment of excellent students—the top 10%—continues to be important to us. This is part of our strategic effort because to accomplish our

mission, we need exceptional students in the classrooms and in the laboratories. Top students are sought out by industry and, make good researchers, and university professors," stated Farris.

A reconstruction of the AAE web pages was done last summer to include information that is relevant to prospective high school students. Course syllabi, sample homework assignments, grading policies and references, career information, and information about aerospace corporations is now available on the AAE website—aae.www.ecn.purdue.edu.

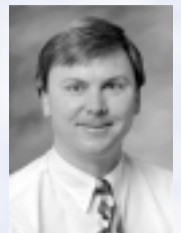
Additionally, similar information is available on our website for those seeking graduate work. Eventually the full text of all of our masters and doctoral thesis and research papers will be available at the click of a mouse.

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AAE Briefing

In writing my first column for AeroGRAM, it hardly seems



possible that six months has passed since becoming Head. The faculty and staff have been quite busy in our efforts to implement the strategic plan featured in this issue of AeroGRAM. We are encouraged by the School's undergraduate enrollment increase to 195 in the fall of 1998, which is up from 155 the previous year. It appears that the enrollment increase is driven by exciting, commercial opportunities in space.

It is also exciting to note that much of the enrollment increase is due to the 'internationalization' of Purdue as fully 16% of our undergraduate students hail from other countries including Australia, Turkey, Japan, China, India, Pakistan and Singapore. Interaction with these students is sparking interest in time abroad on the part of our US students and we are embarking on efforts

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AAE Briefing ♦ *continued*

to establish exchange programs that will enable our students to study for a semester or year in other countries.

Additionally, I am also pleased to report that the School's externally funded research expenditures reached an all-time high of \$3.38 million last year.

In the past several months, many of our faculty have had the opportunity to spend sabbaticals and leaves in industry including Steven Collicott at Lockheed Martin, Bill Crossley at Aerospace Corporation, Steve Heister at TRW, Kathleen Howell at JPL, Tasos Lyrantzis at Boeing and Mario Rotea at United Technologies. They are sharing their experience and lessons learned with students and other faculty as part of our efforts to maintain the Purdue tradition of providing education relevant to industrial needs. Of course John Rusek joining the faculty after having spent 11 years in government and 11 years in industry augments these efforts.

One recurring theme is industry's need for systems particularly space systems, engineers. Professors Heister and Rotea will address this issue by starting a new undergraduate course entitled *Satellite Systems*. Additionally, we have initiated a search for a new faculty member in Space Systems, please note the ad that appears on page 3.

Perhaps the greatest joy of being a member of the faculty of the Purdue University

School of Aeronautics & Astronautics is watching our graduates grow into successful careers, becoming leaders of the aerospace world. The faculty are always looking for ways to acknowledge and celebrate these successes. Led by my two predecessors, Skip Grandt and John Sullivan, the faculty sought and were granted approval by Dean Schwartz and President Beering to institute the Outstanding Aerospace Engineer (OEA) award. The OEA designation will be given to alumni of the School who have particularly distinguished themselves in their chosen career. (See page 5.)

OEA's will be chosen each year by the School's faculty and invited back to campus as a group to tour the School and campus, learn about the School's activities and, most importantly, share their experiences with faculty and students. The highlight of the visit will be a banquet during which the OEA awards are presented. We anticipate with much excitement the inaugural OEA event preceding the annual President's Council weekend this fall. I am certain that this will indeed be a special occasion for our School.

Many thanks,



Tom Farris
Professor and Head

AAE Strategic Plan ♦ *continued from cover*

A prospective student anywhere in the world is now able to find detailed information about our programs because of the renovation.

To be competitive in attracting the top students to our School, AAE must offer courses that set us apart from our peer institutions. A review of the curriculum is being done to determine our strengths and weaknesses and how we differ from other providers. The proposed ABET (Accreditation Board of Engineering and Technology) 2000 process provides schools more flexibility to develop effective programs and to define outcome-based measures of effectiveness, which provides us with an opportunity to serve our students and to continue as education leaders.

"Our goal, stated Farris, is to provide a systems level approach to problem solving. We plan to build on our success and to develop an integrated curriculum that emphasizes education in the engineering sciences with training in engineering practice."

Measures of quality in our program need to stand up to the needs of our students, industries, and governmental laboratories. Benchmarking with peer institutions to determine how other academic programs accomplish their missions is also planned. By contacting business schools within the United States, who share common educational goals with engineering schools, the School can assess how their curriculum accommodates teamwork, writing and presentation skills, problem formulations and solving, planning, and application of theory into practice.

Additionally, faculty members plan to survey alumni as well as employers to ascertain the effectiveness of both their teaching as well as the impact our alumni have on the work environment. Surveying various aerospace employers to ascertain their experience with our graduates' knowledge and skills is also planned.

Internationally, the School attracts students from a number of countries including China, Korea, Japan, the Middle East, France, Australia, and Argentina. However, we would like to formalize relationships and establish an exchange system with aeronautical and astronautical institutions from around the world. We want to expose our students to the international community and offer them the opportunity to study abroad for a semester. We plan on beginning first with the universities in Europe and Japan with which our faculty currently has relations. We will identify and contact other universities and research institutions, which meet the needs of our School.

In the area of Astronautics, strengthening and broadening our program is motivated by the substantial changes that the industry is undergoing as it searches for new missions and new ways of doing business. Traditionally, governmental agencies have taken the lead in developing advanced technology for future space missions. As specific commercial and

non-space applications expand, new markets for these sometime high-risk technologies are opening up and pushing technology transfer programs. Development teams are changing, becoming increasingly composed of government, university, and industrial personnel with responsibility for the spacecraft systems and mission operations. New techniques for collecting and processing, as well as other data management issues, will have significant impact.

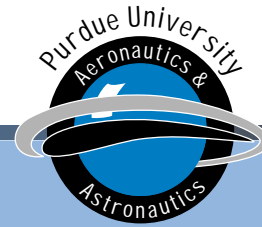
The industry is on the verge of a revolution that will expand, perhaps tenfold, the number of commercial satellites in Earth orbit over the next decade. This presents a unique opportunity to analyze our Astronautics Program and make strategic changes.

The faculty is assessing our curriculum, labs, faculty breadth and contributions, access to new technology, and involvement in the space-based communications to determine how we are leading or responding to changes now taking place in Astronautics.

A result of this review process has led to the establishment of a new faculty position. We are seeking a faculty member that has expertise in space systems. Specifically, areas of expertise related to space systems such as electric propulsion, tracking and navigation, attitude determination and control, adaptive structures, rarefied gas dynamics, space environment and space systems design. A faculty search committee has been convened to review space systems candidates.

In other initiatives, the faculty is discussing the development of a one-year, masters program. This would meet both student and industry need, allowing more flexibility in releasing engineers from a year of work to earn an advanced degree, and then return to their job. The faculty is directed to develop a curriculum that is both scientifically and rigorously grounded in theory, but also relates to and reflects industry practice.


The AAE strategic plan is one which has been designed by the faculty and the IAC to strengthen the undergraduate and graduate curriculum, deepen the scope of the Astronautics Program, develop relationships with key industry representatives, research the possibility of establishing a one-year master's program, and create an international component to our students academic experience. With these initiatives and commitment to excellence, our faculty and staff look forward to the 21st century with enthusiasm and optimism as we continue to make a critical difference in the aerospace industry. 




Space Systems Faculty Position

The School of Aeronautics and Astronautics is seeking a tenure track assistant professor with demonstrated accomplishments in space systems to fill a recently approved Astronautics faculty position. Outstanding candidates at the associate or full professor level will also be considered. Currently, faculties at the School are in the disciplines of Aerodynamics, Dynamics and Control, Propulsion, and Structures and Materials and are active in research and teaching of Astronautics. Specific areas include orbit analysis and mission planning, attitude control, chemical propulsion, smart materials, low gravity fluids and hypersonics.

Applicants for the position are sought in areas related to space systems such as electric propulsion, tracking and navigation, attitude determination and control, adaptive structures, rarefied gas dynamics, space environment and space systems design. This new faculty member will be a part of the Dynamics and Control Committee and will play an important role in the further development and broadening of the Astronautics Program.

This new position is a result of the School's strategic planning process and goal of broadening the Astronautics Program curriculum. 

Hastings Visit

Dr. Daniel Hastings, the Chief Scientist of the U.S.A.F., visited the School in the fall and gave a presentation titled, *Where is the Air Force Going in Space?* In his role as Chief Scientist, he provides independent, objective, and review of Air Force technological capabilities to the Air Force senior leadership. He is the chief scientific advisor to the Air Force Chief of Staff, General Mike Ryan. 



Dr. Hastings talks with students during his visit.

Faculty UPDATE

Faculty Roster

Professors

M. J. Corless
 J. F. Doyle
 T. N. Farris, *Head*
 A. E. Frazho
 A. F. Grandt
 K. C. Howell
 J. M. Longuski
 J. P. Sullivan
 C. T. Sun
 T. A. Weisshaar
 M. H. Williams, *Associate Head*

Associate Professors

D. Andrisani
 G. A. Blaisdell
 S. H. Collicott
 H. D. Espinosa
 S. D. Heister
 A. S. Lyrintzis
 M. A. Rotea
 S. P. Schneider

Assistant Professors

W. A. Crossley
 J. J. Rusek

Weisshaar Receives USAF Award

Professor Terrence A. Weisshaar was awarded the *Decoration for Exceptional Civilian Service* from the United States Air Force for his membership on the USAF Scientific Advisory Board.

Professor Weisshaar served on the board for four years, and ended his term in September 1998.

Secretary of the Air Force F. Whitten Peters commented that Professor Weisshaar and his colleagues on the Board were commissioned “to conduct studies into emerging technologies for New World Vistas in Air Force Science and technology, unmanned air vehicles, expeditionary force operations, global navigation,



General Gregory “Speedy” Martin, USAF Chief for Acquisition, gives Professor Terrence Weisshaar a pin that designates him as an alumnus of the Air Force Scientific Board.

investment in space, and support to the warfighter.” Several landmark studies resulted from Professor Weisshaar and his colleagues efforts, which include: New World Vistas, Unmanned Air Vehicles Technology and Combat Operations, Air Force Expeditionary Forces, and Space Roadmap for the 21st Century Aerospace Forces.

“In addition, stated Secretary Peters, your quality reviews, both as a member and as a Chair of the Materials panel, of the Air Force

science and technology investment portfolio aided immeasurably in identifying key investments needed to lead to revolutionary breakthroughs in the 21st century.

“Your efforts, Peters said, have defined the future technology path for the Air Force. Your unique perspectives and outstanding accomplishments reflect the highest credit upon yourself and the United States Air Force.”

Congratulations, Professor Weisshaar! 🌐



Crossley Receives Gustafson Award

Professor William A. Crossley is this year’s recipient of the W.A. Gustafson Teaching Award. The award was established during the 1997-98 school year to honor the nearly 40 years of teaching of retired Associate Head and Professor “Gus” Gustafson.

The award, administered through the School of Aeronautics and Astronautics, is given to honor exceptional teaching. All undergraduate AAE junior and senior students are eligible to cast ballots.

Congratulations Professor Crossley! 🌐

Gus Receives Highest Hoosier Honor



Professor Emeritus Gustafson was awarded the Sagamore of the Wabash Award by Indiana Governor Frank O'Bannon on August 24, 1998. The award is the highest honor that the Governor of Indiana bestows. The term "Sagamore" was used by the American Indian Tribes of the northeastern United States to describe a lesser chief or a great man among the tribe to whom the true Chief would look for wisdom and advice.

Representing the Governor, Dean of Engineering Richard Schwartz and Head of the School Tom Farris, presented the award to Gus in front of faculty, students, and staff. His wife Sally was also present. Former student and astronaut John Blaha, MS '66, nominated Gus for the award.

In his nomination letter, Blaha stated, "Professor Gustafson has been involved in the academic preparation of many of my fellow astronaut alumni. Not only was he my Major Professor, but he also served in that role for Major General Roy Bridges, who now serves as Director for the NASA Kennedy Space Center, and Colonel Gary Payton, who is the Deputy Associate Administrator for Aeronautics and Space Transportation Technology, which is the division at NASA responsible for the reusable launch vehicle program. Additionally, Professor Gustafson was on the graduate committee of Mark Lewis Polansky, who is the most recent Purdue School of Aeronautics and Astronautics alumnus to be selected as an astronaut."

While they were students at the School, Gus taught other Purdue Astronauts that include Mark Brown, Director of Aerospace Operations for General Research Corporation; Richard Covey, Boeing Deputy Program Director for Space Operations; Greg Harbaugh, Manager of the EVA Project Office at NASA; Loren Shriver, Deputy Director of the Kennedy Space Center; and Dr. Janice Voss.

"Through his teaching of fluid mechanics, aerodynamics, spacecraft design, satellite aerodynamics and planetary entry, Gus has helped to shape the curriculum, culture, and expectations of not only the alumni but faculty as well," stated Blaha.

Congratulations Gus! 



Outstanding Aerospace Engineer

The faculty of the School of Aeronautics and Astronautics has established the Outstanding Aerospace Engineer Award (OAE).


The first recipients of the OAE will be honored in October during an awards banquet in West Lafayette.

"With the establishment of the Outstanding Aerospace Engineer Award, we will be able to recognize professional contributions of graduates from the School and identify individuals with distinguished careers who can serve as role models for the current students at the School," stated Professor Tom Farris, Head of the School. "The OAE will also highlight those alumni who clearly have benefited from their aerospace engineering education and hopefully encourage alumni to become more involved in the School and the University."

Candidates for the OAE award must hold an undergraduate or graduate degree from AAE or from the former School of Engineering

Science. Nominees should have a minimum of ten years of professional experience following receipt of the AAE degree.

Additionally, candidates must have a demonstrated excellence in industry, academia, governmental service, or other endeavors, which reflect the value of an aerospace engineering degree. A sustained record of leadership, creative endeavor, or other accomplishments may demonstrate this excellence. The nominees' experiences need not be restricted to aerospace engineering; however, there must be clear indication of the positive role that the nominee's aerospace engineering education played in preparation for his/her success.

All alumni are invited to attend the OAE awards banquet. For more information, contact Nan Ross in the Alumni Relations Office at (765) 494-9124 or e-mail: ross@ecn.purdue.edu. 



ON BOARD

An Expression in Thankfulness

Over the years I have been privileged to assist many of you in your philanthropic giving to the School and the University. It truly is a pleasure to witness your generosity and support of the School and its mission. What is also refreshing to see are *friends* of the School giving their financial support. Henry Rosso, one of the most distinguished fund raising professionals in America, said:

“Thoughtful philanthropists see themselves as responsible stewards of life’s gifts to them.

What they have they hold in trust, in their belief, and they accept the responsibility to share their treasures effectively through their philanthropy.

Giving is an expression of thankfulness for the blessings that they have received during their lifetime.”

It is certainly our hope that your experiences at the School and Purdue are ones that you treasure and value. One of my fondest memories from Purdue is my work as a graduate assistant at the Purdue Alumni Association. It was much fun greeting all the alumni who visited West Lafayette for the football games and Gala Weekend. It was great being a part of the Purdue family and seeing the campus take on new life with the return of old friends.

It wasn’t until I entered the fund raising profession seven years ago that I realized how much others helped me with my undergraduate and graduate education. It took me by complete surprise that the tuition I paid was only partial of what it actually cost to educate me. Now I am told that in-state students actually pay approximately 30% of what it costs to educate them.

But where does the rest come from?

Actually, it comes from several places including the State (20%), corporations, income from endowments, auxiliary enterprises (such as the Purdue Research Park) and alumni and friends of the University. So, my education, which I thought I paid for by working during the school year and in the summer months, was financed in a large part by generous individuals and corporations that I had never met.

This has not changed.

Alumni and friends and other generous contributors still offset the cost of our students’ education through their financial support. Every student who attends the University owes a great deal of thanks to those anonymous—if you will—donors who give back because of the generosity expressed to them when they attended Purdue.

Through the work of both our faculty and Industrial Advisory Council, there are many initiatives (see page 1) that are planned for the School. These initiatives will help the School continue to provide excellence in aerospace education. The value they bring to the overall education of our students will be critical to the future of the School and its graduates.

There will be plenty of opportunities made available to you, our alumni and friends, to support these value-based programs.

Throughout the year, as our annual fund raising requests come to you, we ask that you give serious consideration to these requests. We really do need your continued financial support to advance our School initiatives. When considering a gift to the School, several options are available.

◆ **Annual gifts**, which are made in response to direct mail or phone solicitations, are critical to the day to day operation of the School. Updating computer hardware and software, renovating laboratories, supporting student and faculty projects are a few of the areas that are impacted by annual gifts.

◆ **Major gifts** generally are those gifts that are considered once-in-a-lifetime gifts that impact the School for years to come. Examples of major gifts include endowing a scholarship or professorship or providing the start-up money for a new laboratory or program. In the last three years, donors such as Boeing and Intel contributed major support for the new design/build/test laboratory. Mr. and Mrs. Lloyd Hackman endowed the Elmer F. Bruhn Undergraduate Research Assistantship in 1997. An anonymous donor gave \$50,000 that was used to endow an unrestricted fund.

Students have benefited from endowed scholarships that generous donors established years ago. These scholarships include the William Koerner Scholarships, Russell Oscar Cedars Memorial Scholarships, Purdue Forever Club Fellowships (established by Colonel C.C. McAllister and Mr. and Mrs. Robert H. Elrod), and the Herbert F. Rogers Scholarship (established in 1981 by Distinguished Engineering alumnus Dr. Herbert F. Rogers). Additionally, there are need-based scholarships, administered through the Division of Financial Aid such as the Space Shuttle Memorial Scholarship and the Robert and Totsye Winslow Scholarship, from which our students have benefited.

◆ **Planned gifts** are those gifts which are considered part of your estate planning such as Wills, Charitable Remainder Trusts, and Charitable Remainder Unitrusts.

The School and University are always open to discussing with you what specific area you would like to support and how best to support it based on your particular interests and the School’s needs.

As always, we are so grateful for you remembering your School in your charitable giving program.

Warm Regards,

Nan Claire Ross, Director,
Communications & Development

CLASS NOTES

Listed below in our *Class Notes* section are updates about your fellow alumni and friends. If space permits, we will try our best to publish almost any short update you send to us. (However, we will not include engagements and divorces and possibly other miscellaneous tidbits.) To submit information for the Summer 1999 edition of *AeroGRAM*, please complete a *Class Notes* information update form, located on page 10.

Dr. Charlene Edinboro, who completed her BS and MS in 1975 and 1976 respectively from our School, attended the UC Davis veterinary program and earned her degree in 1990. Combining both of her degrees after graduation, she was a relief practitioner in the veterinary profession, while at the same time continued to work as a systems engineer for Scitor Corporation in California.

Currently, Dr. Edinboro is the Kenneth Scott Fellow in Animal Welfare at the Purdue Vet School and is interested in domestic and exotic feline medicine and utilizing engineering and computer applications in veterinary medical education and research.



1950's

Robert "Duke" Kiesel, BS AT '51 – Retired in 1988 as the Vice President, Group Publisher Technical Publishing Company. Robert was with the company for 28 years. Robert and his wife Peggy Ann of 42 years have six children, and eight grandchildren.

1960's

Dr. Richard B. Rivir, BS '60 – Propulsion Directorate of the Air Force Research Laboratory, was one of four people receiving Honorable Mention from the USAF Basic Research Award Committee for his work on Turbine Design Methods. The USAF Basic Research Award is the most prestigious research award given to outstanding researchers.

Ralph Conley, BS '65 – Rumors of my retirement are incorrect. I recently lost a contract job with the Army due to the closing of a base and am now unemployed. Retirement is about a decade away. I am currently looking for a new job and want to express my sincere appreciation to certain AAE alumni for their continuing friendship and support.

1980's

Leon E. McKinney, Jr., BS '81, MS '82 – Owner of McKinney Associates, a consulting company specializing in aerospace and defense, systems engineering and analysis, environmental and regulatory affairs, and information technology.

Rolf Hamke, BS '84, MS '87 – Rolf, his wife, and their one year old son Maximilian are living in Plano, TX. Rolf is presently employed as an Engineer for Beale Aerospace in Dallas.

Mark D. Semsmeier, BS '85 – Senior Engineer and Team Leader for Aeropropulsion Structural Analysis & Evaluation for Sverdrup Technology, Inc. at Arnold AFB, TN. Congratulations on a new daughter, Reagan Wiley, born September 2, 1998.

Brian Anderson, BS '85 – Received his Ph.D in Systems Engineer from the University of Alabama in August 1998. Currently a Major in the US Air Force, he is a student at the Air Force's Command and Staff College in Montgomery Alabama.

Jim Miller, BS '86 – Presently working with Teledesic in Seattle, WA. Mr. Miller is the User Equipment Alliance Manager and is responsible for assembling and orchestrating the team of industrial partners to build the terrestrial infrastructure for the Teledesic System.

Dr. Scott R. Morris, BS '89, MS '90, Ph.D '94 – Engineering Specialist at Lockheed Martin Tactical Aircraft Systems in Ft. Worth, Texas.

1990's

Lt. Phillip Hall, BS '92 – Designated as an aviator in the National Oceanic and Atmospheric Administration Commissioned Corps and has been assigned to the Twin Otter aircraft.

Brett M Hoffstadt, BS '93 – Working with Boeing-Philadelphia as a Technical Specialist in the Aerodynamics group. Mr. Hoffstadt is responsible for calculating the performance of the V-22 tiltrotor.

Tamaira E. Ross, BS '96, MS '98 – Working as a Senior Engineer at Boeing in Seattle.

Scott E. Webb, BS '98 – Employed with AlliedSignal in New Jersey.

Two memorial funds have been established to honor the memory of two young alumni who passed away in the fall of 1998.

The Michael J. Burke Fall Space Day Memorial Fund was established by his family and friends to honor the life of Mike and his contributions to Fall Space Day. Michael, who earned his bachelor's degree from Notre Dame University and his master's degree in 1993 from the School of Aeronautics and Astronautics, was working on a doctoral degree, which involved development of a methodology to produce optimal low thrust trajectories in three-body regimes.

Marc Weaver, from Littleton, Colorado, earned his bachelor's in 1994 and his master's in 1995 from the School. He began work at Lockheed Martin Corporation as an Engineer in January 1996. He was in the Flight Controls Software and Validation Group, which works on the Titan Launch

AAE Alumni Remembered



Michael J. Burke




Marc C. Weaver

Since the Summer 1998 issue of *AeroGram*, the following alumni of the School of Aeronautics and Astronautics have been reported as deceased. The faculty and staff of the School extend our sympathy to all family members and friends.

Mr. Michael J. Burke (MS '93)
 Mr. Daniel R. Eichenberger (BS '46)
 Mr. Carl E. Elliott (BS '49)
 Mr. David A. Host (BS '71)
 Mr. Clifton E. Jones (BS '49)
 Mr. Joseph M. Killen (MS '70)
 Mr. Jack M. Lewis (BS '49)
 Dr. L Jackson Lipp (BS '58)
 Mr. Alexander M. McDermott (BS '48, MS '50)
 Mr. Juro Sagata (BS '48)
 Mr. H. Rex Shama (BS '47)
 Mr. James R. Shaw Sr. (BS '48)
 Mr. Myron E. Todd (BS '63)
 Mr. Paul F. Tryon (BS '56)
 Mr. Thomas L. Weakley (BS '55)
 Mr. Marc C. Weaver (BS '94, MS '95)

Vehicle Program. A memorial fund in his memory has been established at the School. Specifics of where the donations will be used will be determined at a later date by the family.

If you want to make a donation in memory of either Mike or Marc, please send your donations to Purdue Foundation, 1801 Purdue Memorial Union, West Lafayette, IN 47907-9988. Please indicate where you want your money directed. Checks should be made pay-able to the Purdue Foundation. 

Alumna Values Education

With her first donation to the School since graduating in May 1998, master's degree recipient Tamaira Ross now is one of the youngest members of the top giving club of the University—the President's Council. Tamaira, who also holds a bachelor's degree from the School, donated \$500 in November. As an employee of Boeing, Tamaira has her gift matched by the company, making a total gift to the School of \$1,000. It's rare for a new graduate to donate at this level within the first five years of graduation.

"My Purdue education has helped me to develop both personally and professionally. Specifically, the Aero & Astro School was extremely supportive during the time I spent doing my Master's degree," stated Ross. "I feel that by donating to the School, I may help other students have the same positive experience."

"The value of a Purdue education for every graduate depends on sustaining the quality of the institution. In addition Purdue's stature in the aerospace field is dependent not only on past history, but also on continuing that tradition of excellence. I feel that by donating to the School, I can contribute to that effort," Ross commented.



Tamaira said that her membership in both the President's Council and the Dean's Club,

"will provide a way for me to stay connected to Purdue even though I'm currently 2,500 miles away in Seattle. I think that it will be a positive experience to meet fellow alumni who support Purdue and to learn from their experiences."

Both of Tamaira's parents, Gene and Beverly Ross, have Purdue degrees. Gene from Electrical and Computer Engineering and Krannert, and Beverly from Pharmacy. Ross said, "My parents and I definitely have a special connection through our common Purdue education. We all have different degrees and are separated by some years, but there is the common thread of positive Purdue experiences now, and when we were in school."

Ross said that while growing up in this Purdue household, her parents told her about their Purdue experiences and she decided she wanted to have the same type of experiences. "I looked at many other schools, but I decided that Purdue was for me, not only for one degree, but for two. We're definitely a Boilermaker family," said Ross. 🌊

Gala Week 1999

Please join us for the annual Gala Weekend "Breakfast with the Professors" on Saturday, April 24th, in Grissom Hall 390, 8:30 a.m. to 10 a.m.

Congratulations to the classes of 1949 and 1974, who are celebrating the 50th and 25th anniversaries of their college graduations!

For more information about Gala Week, call (765) 494-9124 or e-mail: aae-alumni@ecn.purdue.edu.

Other Activities

April 23, 1:30 p.m. - 2:30 p.m.

1999 Distinguished Engineering Alumni Convocation, Fowler Hall, Stewart Center.

May 16

AAE New Alumni Reception, Immediately following 9:30 a.m. graduation ceremonies, Grissom Hall, 390

EAA Lifetime Award



Alumnus Bob Bateman, BS '46, HDR '92, was awarded the Engineering Alumni

Association's President's Lifetime Award on September 18, 1998.

"Bob has been a tremendous support not only to the School of Aeronautics and Astronautics but also has been a key volunteer and advocate for the University and its initiatives. He was an important part of the Vision 21 capital campaign and served on the campaign cabinet," stated Professor John Sullivan, who when Head of the School of AAE, nominated Bateman for the award.

During the Vision 21 campaign, Bateman was a major advocate for the School and helped the Schools of Engineering secure

more than \$5 million in gifts from the aerospace industry. He funded the Robert E. Bateman Scholarship for engineering students and assisted in the funding of the prestigious Elmer F. Bruhn Teaching Award in the School of Aeronautics and Astronautics.

Additional honors Dr. Bateman has received include the Distinguished Engineering Alumnus Award in 1974, an honorary doctorate degree in 1992, and the President's Council Distinguished Service Award in 1993.

Bateman received the EAA President's Lifetime Award for his dedication over the years to the School of Aeronautics and Astronautics, Purdue engineering, and for his spirit of volunteerism.

Congratulations Dr. Bateman! 🌊

Space Day Success

by Lillie Fisher

Where could you go to ride the Vomit Comet, be the CAPCOM for a shuttle mission, experiment with Bernoulli's Principle, launch your own rocket, and shake hands with a real NASA astronaut? All in the same day! Well, if you asked the more than two hundred grade school students who attended the third annual Fall Space Day, they would tell you all this happened at Purdue University, thanks to the Students for the Exploration and Development of Space (SEDS), American Institute of Aeronautics and Astronautics, and the School of Aeronautics and Astronautics.


Fall Space Day, for select Indiana school children, grades three through eight, was held November 13, with Purdue graduate and NASA astronaut Mark Brown as the guest speaker. The purpose of the day was to encourage children's interest in space exploration as well as stimulate their interest in the fields of math and science.

The event offered interactive, hands-on experiments designed to help children discover their own interests and abilities. In the Rocketry and Propulsion session, they learned that "The key to exploring space is actually getting up there!" Brown told the eager participants that men and women in many different fields and with many different abilities will be needed for future space travel, and the kids of today will be the tomorrow's explorers of space.

Astronaut Brown had high praise for the Purdue students who planned and conducted the event, "The message the students transmitted was not only the importance of math and science in whatever career the grade school children might pursue, but also a very clear pride in our University. I was very proud to be a part of this event because of the way it touched these young people and also because of the way they represented Purdue."

Brown, who was an astronaut from 1983 until his retirement from the program in 1993, is now director of space operations with General Research Corporation International, Inc. in Fairborn, Ohio.

Fall Space Day chairman Sherri Spreadbury was assisted in her efforts by Cassandra Forthofer, Carie Kostak, Greg Roth, and Casey Kirchner. Specials thank to alumna Cindy Mahler, Fall Space Day foundress, and to all the volunteers, AAE staff and faculty whose help was critical to the day's success.

Fall Space Day was sponsored by AlliedSignal, Inc., NASA Indiana Space Grant Consortium, United Technologies Corporation, the School of Aeronautics and Astronautics, and the family and friends of Michael J. Burke. 



CONGRATULATIONS!

The following students earned awards:

AAE 251 Thiokol Space Award Winners:

Janet Buennagel, Kristin Panzenhagen, Andrew Peters, Nicholas Saadah, and Mike VanMeter

Johnson Space Center Co-op Flag Award:

Jeffrey Burianek,

Johnson Space Center Co-op Special Achievement Award:

Casey Kirchner

Purdue Forever Graduate Fellowship:

Doug Adams, Brian Barden, and Anne Gick



Thiokol Space Awards—AAE Junior Andrew Peters accepts an award from Thiokol representative Scott Stein, a member of the School's Industrial Advisory Council, and David Larsen. Other members of the AAE 251 winning team include Janet Buennagel, Kristin Panzenhagen, Nick Saadah, and Mike VanMeter.

Class Notes Information Update Form

Your friends and former classmates want to know what is happening in your life! Please jot down personal news that you want to appear in the next edition of **AeroGRAM** and forward it to: School of Aeronautics and Astronautics; 1282 Grissom Hall; West Lafayette; IN 47907-1282; or send us e-mail at: <http://www.aae-alumni@ecn.purdue.edu>.

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