

## CLASS NOTES

### 1950s

**Hassan Ahmad Hassan**, MS '53, PhD '56, was elected as an AIAA Fellow for 2006.

**Daniel Dudas**, MS '57, is president and owner of Technical Management, Inc. in McLean, Virginia. His company provides system engineering for aerospace firms. It employs 45 senior systems engineers from all major disciplines. Dudas received an MBA from Harvard in 1964.

### 1960s

**Robert Liebeck**, '61, MS '62, PhD '68, received the Aircraft Design Award for 2005 from AIAA. He also received the Spirit of St. Louis medal from the American Society of Mechanical Engineers. The medal, established in 1929, has been awarded to other luminaries such as Will Rogers, John Northrop, Sir Freddie Laker, Charles Draper, John Houbolt, and Sheila Widnall. Liebeck is manager of the Blended-Wing-Body program for Boeing Phantom Works in Huntington Beach, California.

**James Hudson**, '63, retired from Lockheed Martin Aeronautics/Fort Worth in June 2002 after more than 39 years in airframe design. He worked on the F-111, YF-16, F-16, YF-22, F-22, F-35 and other aircraft programs and in advanced composites R&D.

**Daniel Letson**, '66, recently returned from Baikonur, Kazakhstan, where he was the mission director for a September 9 Proton launch of the Anik F1R spacecraft for Telesat Canada. Letson is program director of the International Launch Services division at Lockheed Martin. He has been with Lockheed Martin for over 27 years, and spent a lot of time with the development and testing of the Peacekeeper ICBM. He spent the last 10 years working in Plesetsk and Baikonur.

### 1970s

**Jim Moravec**, '73, has worked at Pratt & Whitney for 32 years. He was program director for the company's PW4000-94 engine, which powers the jumbo jets of Boeing 747s, 767s, and MD11s, and Airbus A300s and A310s. He is currently program director for the Engine Alliance GP7000 engine (a joint venture between General Electric and Pratt & Whitney). This engine, which will power the Airbus A380 jumbo jet, is currently undergoing testing for FAR 33 certification.

**David Hoerr**, '76, MS '78, is an aerospace consultant and lecturer in Engineering Mechanics & Astronautics at the University of Wisconsin at Madison. He writes exten-

## George Zanotti Builds AE's First Wind Tunnel

**George Zanotti**, '48, at 83 years old, is president and sole owner of Financial Objectives Group, an investment advising firm in Bloomingdale, Illinois. But many may not know that he built the Department of Aerospace Engineering's first full-return wind tunnel. The two-story structure was 30 feet long and 15 feet high. When he received AE's announcement of its 60th anniversary celebration earlier this year, Zanotti took the opportunity to reminisce about his time as one of the department's first group of students. Events were set in motion when, in 1944, he decided that he wanted to go to college. At the time, he was working as a tool and fixture designer in a Chicago defense plant that manufactured dynamotors for armored tanks.

Once in Urbana, Zanotti approached the university placement office for help with finding a job while he was studying. It advised him that since he was studying aeronautical engineering and the department was brand new, perhaps the department could find him a job. "As it happened, Prof. Stillwell, upon learning of my design experiences, asked me if I had

**Alumni** who returned to campus to celebrate Aerospace Engineering's 60th anniversary included: **Laura Bogusch** ('95), **Eric Brachhause** ('66), **Mike Bragg** ('76, MS '77), **James Clauson** ('62), **Victoria Coverstone** ('85, MS '86, PhD '92), **Steve Drum** ('56), **Steve D'Urso** (MS '89), **Nicholas Evans** ('99), **Edward Ford** ('62), **Ashok Gopalathnam** (PhD '99), **Robert Grennan** ('69), **Eugene Hill** ('57), **Stephen Hoffman** ('78, MS '80, PhD '84), **William Horak** ('72), **Larry Howell** ('66, MS '68, PhD '71), **William Huyler** ('67), **Daniel Jensen** ('88), **Gail Jonkouski** ('80), **Robert Liebeck** ('61, MS '62, PhD '68), **Jerry Lundry** ('58, MS '59), **Gregory Mayer** ('87), **Michael Lembeck** ('80, MS '81, PhD '91), **Phillip McLaughlin** ('61), **Michael Miller** ('76), **George Muellner** ('67), **Steve Nagel** ('69), **Richard Ollila** ('60), **Ryan Oltman** ('98, MS '02), **Allen Ormsbee** ('46), **Todd Peters** ('97), **Mark Pruitt** ('76), **David Riley** ('77), **Harry Sauerwein** ('59), **Michael Selig** ('84), **Lee Sentman** ('58), **Shirish Shimpi** (MS '74, PhD '80), **Joe Smolik** ('67), **Robert Spitzer** ('61, MS '62), **Curtis Vail** ('62, MS '64, PhD '69), **Carl Weinert** ('47), **James Xerikos** ('53, MS '56, PhD '59), and **Rudolph Yurkovich** ('76, MS '68).



ever designed a wind tunnel." He had no such experience, but was hired on the spot nevertheless. "Next to Prof. Stillwell, I became the (department's) first employee.

"All we had at the time was a double office in Room 101 of the Transportation Building and the old Locomotive

Laboratory, where the planned wind tunnel was to be built. ...Prof. Stillwell went about his departmental duties while I developed all the design and working drawings." The plans were completed after a year and building the \$5,000 structure required another 2½ years. "The basic design structure was straightforward, made up of plywood. ...The detailed design and construction challenge was in the metal corner vanes and the contraction cone."

As the wind tunnel was nearing completion, the next objective was the 50 horsepower electric motor, drive shaft, and fan prop. "The department had received a surplus rotating dual prop fighter plane (X P41) with two Allison engines mounted mid-body. We improvised the drive shafts from the plane to fit between the tunnel's external power supply and the internal fan propeller wind source. The two Allison engines were used later to power a supersonic wind tunnel.

"It was a memorable day when the first wind tunnel runs indicated a clean laminar flow through the test-section. ...Later, I marked the occasion by signing my name on the inside wall of the contraction cone."

**Allen Ormsbee**, AE professor emeritus and a student contemporary of Zanotti's ('46), remembers that "George was ...an important contributor to the progress of the department in its early days. While Prof. Stillwell was the chief engineer on the construction of the wind tunnel, George was the guy who got it done. He produced the shop drawings and specifications that defined the tunnel and oversaw the work of the mechanics who built it."

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sively on space program policy matters and is co-author of a novel about space business and exploration.

**Ted Klapka**, '78, was elected to the board of directors of The Patuxent Partnership Inc. He is senior manager, Navy Liaison, at L-3 Integrated Systems, Lexington Park, Maryland. The partnership of member organizations dedicates itself to the development of the technology community in southern Maryland. It recently teamed with The Center for the Study of Diplomacy of Saint Mary's College, Maryland, to find immediate solutions to today's challenges in Iraq, Afghanistan, and other locales.

**Martin Brenner**, '79, works in the Aerostructures Branch at NASA Dryden Flight Research Center, Edwards, California. He received a master's degree in systems science from the University of California, San Diego in 1985. In 1990, he received a master's in applied mechanics from the California Institute of Technology. Brenner writes that he often meets with fellow alumnus **David Riley** ('77) for hikes and canyoneering in Utah. The sport often entails rappels of several hundred feet through rugged and sometimes water-logged canyons.

## 1980s

**Michael Lembeck**, '80, MS '81, PhD '91, has been appointed director of operations for Northrop Grumman's Integrated Systems sector field office in Houston. He will support the development of Northrop's space exploration systems envisioned under NASA's Constellation Systems architecture.



*Michael Lembeck.*

He previously directed the Requirements Division of NASA's Exploration Systems Mission Directorate in Washington, D.C. He will also serve a three-year term representing Northrop Grumman on the board of the Bay Area Houston Economic Partnership, a nonprofit organization that helps guide the economic development of the greater Houston area. In 2005, Lembeck received NASA's Exceptional Engineering Achievement Award.

**Martin Papanek**, '80, works in the Chicago Aircraft Certification Office for the Federal Aviation Administration (FAA). He is attached to the Systems and Flight Test Branch, which is primarily responsible for supporting continued operation of existing aircraft that have FAA certifications. Before joining the FAA, Papanek worked for Boeing in Seattle; McDonnell Douglas Helicopters in Mesa, Arizona; Rockwell Collins in Cedar Rapids, Iowa; and EAD Aerospace in Buffalo Grove, Illinois.

He writes that several AE alumni also work with him at FAA: **Angie Kostopolous** ('89) in the airframe

branch; **Brenda Ocker-Wozniak** ('93) in systems and flight test; and **Ty Krollicki** ('67), **Melissa Bradley** ('03), **Tomaso DiPaolo** ('88), and **Kyri Zaroyiannis** ('86), all in propulsion.

**Bernard Paul**, MS '80, works for Boeing. He has patents on the wing strakes of the B777 and a computational method for designing wing-fuselage fairings. He has been involved with wind tunnel testing in England for the 787 for the last two years.

**Rob Seaberg**, '80, was able to identify three of the four faces in "Dressed for Success" in our 2004 newsletter. He writes that from left to right, the students' names are **Stephen Smith**, **Michael Lembeck**, and **Rollin Klingberg** (all from the class of '80). The fourth person to the extreme right has yet to be identified. Seaberg has just retired from the U.S. Air Force after 24 years and is now flying for Southwest Airlines.

**Paul Dees**, '81, MS '83, was on a team that won a Boeing Special Invention Award for 2005. He and his team mates were recognized for jet airplane configuration for commercial jet transport. The annual award recognizes employees for top inventions during the year.

**Lee Archambault**, '82, MS '84, a lieutenant colonel in the U.S. Air Force, will be one of two pilots commanding the STS-117 to the International Space Station. The mission is planned for launch in 2006 to continue assembly of the orbiting laboratory. This will be Archambault's first mission as an astronaut. He was selected by NASA in 1998 as an astronaut candidate.

**Geoffrey Cherry**, '87, is a group vice president at the YMCA of Metropolitan Chicago. He will be responsible for five Y centers in Chicago's North Side. Previously, Cherry served as senior director of strategic planning and finance for the YMCA of Metropolitan Chicago. Before joining the YMCA, he spent two years in the Chicago office of ABN AMRO as a trust technology officer. He was also employed by the Case Corporation where, as a senior technical specialist, he was awarded a patent for his work on components of new Case products. Cherry also spent five years as a flight test engineer and product developer at Bell Textron Corporation in Fort Worth, Texas. He holds a master's of business administration/finance degree from Washington University's John M. Olin School of Business.

**Michael Groble**, '88, MS '90, works for Motorola. He returned to campus in November on a recruiting visit. He works on software in Motorola's systems and engineering research lab. Before joining Motorola, Groble worked for Lockheed Martin.

**Paul Higgins, Sr.**, '89, retired from the U.S. Air Force in 1994 and began working for the structures division of the U.S. Navy in 1996. He received a master's in aeronautical engineering in 1993 from West Coast University.

## George Zanotti, *continued from page 17*

Zanotti recalled one interesting incident from those first years. "We (had) accepted a surplus P47 Thunderbolt fighter plane that was flown in by an Army pilot. He advised Stillwell that it was officially not to be flown. Of course, as soon as the Army pilot left, Stillwell ...just jumped in the cockpit and proceeded to start the engine. He spent at least an hour just taxiing around the airport until the front left wheel ran off the runway and got stuck in the mud. We spent the rest of the day jockeying the plane out of the mud."

Over the years, Zanotti has tackled many other assignments. He taught at the University of Illinois branch at Navy Pier after graduation. He started his own manufacturing plant in 1955, making ultra-high precision steel and carbide parts for the tooling industries. In 1960, he designed, manufactured, and holds the patent for a variable weighted baseball bat. He earned his master's degree in industrial engineering from Northwestern University in 1964. He became a registered investment adviser in 1982 and earned his certified financial planner designation in 1983. He started his financial planning company in 1984 and is still engaged daily in the business.

*Postscript: According to Mike Bragg, AE's department head, the wind tunnel that Zanotti built was replaced a few years ago with a new one. —Alison Fong Weingartner*

**Erik Johnson**, '88, MS '93, PhD '97, was promoted to associate professor with tenure in April 2005. He is attached to the Department of Civil Engineering at the University of California-Los Angeles.

Johnson's current work focuses on the control of structural vibration, primarily earthquake and wind effects, on civil structures; structural health monitoring and damage detection; and tools for design of computer experiments. In August, he married Kristine Corwin, a grade-school teacher. Johnson received AE's Outstanding Recent Alumnus Award in 2003.



*Erik Johnson married Kristine Corwin in August 2005.*

**Robert Bruce Powers**, MS '99, attended the International Space Development conference in Washington, D.C. in May. "The highlight of the conference, second only to the keynote address by Burt Rutan, was a gala black tie event at the National Air and Space Museum Steven F. Udvar-Hazy Center out near Dulles Airport west of D.C." Other alumni in attendance included **Cherissa Fischer** ('98) of Lockheed Martin, and **Kennda Lynch** (General Engineering) and **Shalin Mody** ('01) of the Johnson Space Center. Powers is attached to the Command, Control, and Communications Directorate of the U.S. Joint Forces Command at Norfolk, Virginia.



*Several alumni attended the International Space Development Conference in Washington, D.C., in May. Pictured are (L to R) Bruce Powers, Cherissa Fischer, Kennda Lynch, and Shalin Mody.*

**Gabe Rogers**, '95, MS '97, and his wife, Lizz, welcomed their second child, Gillian Marie, on October 10, 2004. Rogers works on the New Horizons program at Johns Hopkins University Applied Physics Lab. New Horizons is NASA's first mission to Pluto. The spacecraft will arrive at Pluto as early as 2015.



*Gabe and Lizz Rogers took their children to the local pumpkin patch for Halloween.*

## 1990s

**Eugene (Geno) Wagner**, '90, was promoted to lieutenant colonel in the U.S. Air Force. He is on a three-year exchange tour with the Royal Air Force in Amesbury, England, where he serves as a test pilot. "Most of the flying involves systems upgrades to existing aircraft, such as radar and defensive systems testing. My free time is spent vacationing around Europe with my family, where we can usually be found in Orange and Blue!" He writes that he can walk from his house to Stonehenge.

**David Quinn**, '90, works in the Aeromechanics Division of the U.S. Army's Aviation Engineering Directorate at Redstone Arsenal, Alabama. He was attached to Boeing for 15 years; he spent time at Boeing as a cooperative engineering student.

**Jean (Orseske) Bridge**, '91, works as a senior R&D engineer at Caterpillar in Peoria, Illinois. She received an MBA in 2001 from Millikin University. She married Joe Bridge in 1996. They have a baby, Jared, who was born March 2, 2005.

**Dan Cziczo**, '92, was presented with a Presidential Early Career Award for Scientists and Engineers (PECASE) in June 2005 for his work with the National Oceanic and Atmospheric Administration and the University of Colorado regarding climate change and aerosol/cloud interactions. Cziczo is a faculty member of the Institute for Atmospheric and Climate Science at the Swiss Federal Institute of Technology in Zurich, Switzerland. He earned a master's degree (1997) and a doctorate (1999) in geophysical sciences from the University of Chicago.

**Craig Mueller**, '93, practices intellectual property law in Denver, Colorado, for the firm of Sheridan Ross. After leaving Illinois, he attended Georgia Tech and received a master's in aerospace engineering in 1994. He was employed at Lockheed Martin Astronautics in Denver for six and a half years. He graduated from the University of Denver with a JD degree in 2003.

**Kyle Wetzel**, MS '93, is the principal investigator working with researchers in the Composites Laboratory of Wichita State University's National Institute for Aviation Research. The lab manufactures and tests 10-foot blade prototypes for wind turbines. Wetzel and the institute have collaborated for the past four years on numerous projects that involve the design and manufacturing of wind turbine blades. Funding for the project comes from the U.S. Department of Energy. Wetzel is president and CEO of Wetzel Engineering Inc., a wind power and aerospace consulting firm based in Lawrence, Kansas.

**Tom Erkenswick**, '94, attended a Soyuz launch at the Baikonur Cosmodrome, Kazakhstan, on October

1, 2005. He works at NASA Johnson Space Center in Houston.

**Michael Tanzillo**, '98, MS '00, is a senior member of the technical staff at The Aerospace Corporation in El Segundo, California. The corporation is a federally funded research and development center that supports the Air Force and National Reconnaissance Office. Tanzillo works in the Flight Controls section of the Guidance Analysis Department.

**Ashok Gopalarathnam**, PhD '99, has been promoted to associate professor at the Department of Mechanical and Aerospace Engineering at North Carolina State University. He writes: "I enjoyed the visit to the 60th anniversary celebration. It was a great way to get back in touch with the faculty and staff. In particular, I enjoyed the luncheon talk on the history of the campus—I had no idea of how the university evolved until then." Gopalarathnam received AE's Strehlow Award for outstanding graduate research in 1998.

**Bunke Jensen**, '99, a Navy lieutenant, recently returned from a routine scheduled deployment while assigned to the aircraft carrier USS *Harry S. Truman*, which sails out of Norfolk, Virginia. Jensen served with the Truman Carrier Strike Group.

**Julia Laystrom**, '99, MS '04, is employed at CUAerospace working on chemical lasers. She volunteered at both X PRIZE launches of SpaceShipOne in the Mojave and at the award ceremony at the St. Louis Science Center. She writes that she and **Brian Woodard** ('02, MS '04) were lucky enough to get a tour of the SpaceShipOne hangar.

**Samuel Schweighart**, '99, is employed by Draper Lab, a private, nonprofit research and development lab located in Cambridge, Massachusetts. Schweighart earned a doctorate in aero/astro engineering from the Massachusetts Institute of Technology. At Draper, he will be working in the guidance and navigation department for space-based systems.

## 2000s

**Steve Jaeger**, '00, MS '03, and Amy Bell were married June 25 in Urbana. He is a pastoral intern at Twin City Bible Church and is attending Urbana Theological Seminary.

**Kelly (McAllister) Broms**, '01, moved with her family to Glen Carbon, Illinois, which is close to her husband's new job in St. Louis. They are expecting their third child in February 2006.

**Aaron Martin**, '01, and Jennifer Nightingale were married in December 2004. Martin is an engineer at Lockheed Martin Aeronautics in Palmdale, California.

**Kazuihiro Horie**, PhD '02, was promoted to deputy program manager for the development of Japanese

## IN MEMORIAM

**Harold Barthel**, a retired associate professor at AE, died on August 3, 2005 in Urbana. He was 79. Barthel was born on September 17, 1925, in Milledgeville, Illinois. He graduated from the University of Illinois in 1943 and was a professor at Illinois for 38 years. He served in the Navy during World War II. Barthel is survived by his daughter, Diane Reitz of Tolono; five brothers, four sisters, and a grandchild.

Barthel was a member of Wesley United Methodist Church in Urbana and played in a faculty bowling league. Memorials may be made to the church, 1203 W. Green Street, Urbana.

**John Bianchetta** ('47) died on August 23, 2005.

**Thomas L. Cost** (MS '62) of Huntsville, Alabama, died on July 7, 2005. He was born on December 24, 1937. Cost came to the University of Illinois to study for a master's degree in aeronautical and astronautical engineering after he graduated from the University of Alabama in 1960 with his bachelor's in aerospace engineering. He received his PhD in aeronautical and mechanical engineering from the University of Alabama in 1969. Cost taught at the university's Tuscaloosa campus from 1969 to 1985, and after that at the university's Huntsville campus.

He was a member of the American Institute of Aeronautics and Astronautics, First Baptist Church, Kiwanis, American Rabbit Breeders' Association, and the American Ballroom Dance Association. He received the Department of Aerospace Engineering's

**Jim Knohl**, '01, MS '03, works for Boeing at the Kennedy Space Center, Florida. Boeing supports United Space Alliance in turning around the orbiters for the Space Shuttle. Knohl's division specializes in the orbiter's propulsion lines that feed propellants from the external tank to the Shuttle's main engines. He is also a flight attendant for Zero-G, a company that offers weightless flights under Martian, Lunar, and zero-gravity conditions for space tourists.



*Jim Knohl works for Boeing at the Kennedy Space Center.*