

## IN MEMORIAM /

The Boeing Company offers condolences to the families and friends of the following employees.

- Robert Ballantyne**, expeditor; service date April 19, 1965; died Oct. 31
- Bruce Burley**, test and evaluation engineering manager; service date Oct. 20, 1993; died Nov. 16
- Michael Chambers**, locksmith; service date Feb. 14, 1979; died Nov. 4
- Dennis Chadduck**, sheet metal assembler; service date Feb. 11, 1986; died Oct. 29
- Debra Christenson**, quality systems specialist; service date Feb. 17, 1989; died Oct. 29
- John Doka**, software engineer; service date July 6, 1988; died Nov. 10
- Gary Emard**, project management specialist; service date Nov. 8
- Gary Evans**, design & analysis engineer; service date March 15, 1999; died Nov. 6
- Barry Fagan**, software engineer; service date June 1, 1997; died Oct. 19
- James Gallagher**, systems design & integration specialist; service date Sept. 10, 1979; died Oct. 24
- Julie Hayes**, software engineer; service date Sept. 27, 2004; died Nov. 20
- Stanley Hodge**, mechanic; service date July 27, 1981; died Nov. 16
- Alfred Johnson**, manufacturing helper; service date Sept. 28, 1977; died Nov. 2
- David Kinzebach**, procurement analyst; service date Aug. 24, 1979; died Oct. 21
- Thomas Koerner**, transportation analyst; service date June 28, 1984; died Nov. 19
- Jana Lackie**, Human Resources manager; service date Feb. 25, 1985; died Oct. 20
- Gary Lammers**, systems engineer; service date April 22, 2002; died Nov. 24
- Matt McBee**, employee development specialist; service date Nov. 26, 1984; died Oct. 22
- Thomas Oliver**, information technology; service date Aug. 27, 1990; died Nov. 11
- Donna Putnam**, product data management specialist; service date June 5, 1985; died Nov. 18
- James Raighn**, aircraft structures mechanic; service date Feb. 25, 1982; died Nov. 14
- Richard Riley**, project management specialist; service date July 19, 2001; died Nov. 19
- Willard Simons**, materials management analyst; service date Dec. 8, 1964; died Nov. 8
- Dean Sorensen**, integral fuel cell sealer; service date Aug. 22, 1996; died Nov. 18
- Edward Spanutius**, procurement analyst; service date May 29, 1988; died Nov. 17
- Steven Thomas**, process engineer; service date Sept. 16, 1998; died Oct. 19
- Vernon Thompson**, maintenance/mechanical machinist; service date April 22, 1968; died Oct. 19
- Stephen Van Dillen**, procurement analyst; service date April 19, 1990; died Oct. 26
- Wayne Vanlandingham**, Environment, Health & Safety manager; service date April 9, 1990; died Oct. 28
- Donald Willis**, machined parts finisher; service date Oct. 28, 1997; died Oct. 17
- David Zumbro**, systems engineer; service date Jan. 3, 2003; died Oct. 17



# Congrat

Every year, Boeing employees are recognized by professional societies and institutions for their contributions to engineering and science. Here's a list of the Boeing people recognized in 2008 for their technical excellence.

## AMERICAN HELICOPTER SOCIETY

**2008 Howard Hughes Award:** The Network Centric Operations Technology Development Team, which included Boeing

## AMERICAN PHYSICAL SOCIETY

**Fellow:** Jeffrey H. Hunt

## AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS

**Associate Fellows:** Kevin G. Bowcutt, Robert Terry Britt, Scott Carson, Michael Denton, David E. Morgan, Tom A. Mulder, Douglas G. Schwaab, Winston E. Scott, Robert W. Stoker, Steve Trejo, Hanching Grant Wang, David A. Whelan

**2008 AIAA Aerospace Design Engineering Award:** Alan Wiechman

**Fellows:** John H. McMasters (posthumously), Kenneth Sanger, Susan X. Ying

## Air Transportation Systems and Operations Best Paper:

Rob Mead, joint author with Richard Coppenbarger, NASA Ames Research Center, and Douglas Sweet, Sensis Corp.

## AMERICAN SOCIETY FOR QUALITY

**Fellow:** Peter L. Andres

**International Team Competition Gold Award:** C-17 Universal Splice Machine Team

## ASIAN AMERICAN ENGINEER OF THE YEAR

**Asian Engineers of the Year:** Paul D. Nuyen, Snehal R. Patel, David R. Shieh

## BLACK ENGINEER OF THE YEAR AWARDS, CAREER COMMUNICATIONS

**Supplier Diversity Programs:** Oliver (Bo) Leslie

## Outstanding Technical Contribution in Industry Award:

Jonathon Saint Clair

**Modern Day Technology Leaders:** Toni Brown, Danny Howard, Darnita Martin, James Ramsey, Charles Stout

# ulations!

## CAREER COMMUNICATIONS

**Top Supporter of the Historically Black Colleges and Universities Engineering Programs:** Boeing

**2008 list of "Most Important Hispanics in Technology":** John Tracy, Jim Cisneros

## FLIGHT SAFETY FOUNDATION

**Aviation Week & Space Technology Distinguished Service 2008:** Dave Carbaugh

## HISPANIC ENGINEER NATIONAL ACHIEVEMENT AWARDS CONFERENCE

**Role Model of the Week:** Maria Cardwell

**Most Promising Engineer:** Noramay Cadena

**Luminary Awards:** Luis Leon, José Amoedo

## HUMAN FACTORS AND ERGONOMIC SOCIETY

**2008 Jerome H. Ely Human Factors Article Award:** Randall J. Mumaw

## INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

**Fellow:** Kevin Wise

**2007 Professional Achievement Award:** Robert K. Menzel

**2007 Outstanding Large Company Award (for outstanding support of the IEEE and its members):** Boeing

**Presidents Special Citation (for commitment to promoting diversity in the technical work force, in partnership with IEEE):** Boeing

## INSTITUTE OF INDUSTRIAL ENGINEERS

**Ergo Excellence Award for Cost Savings:** Boeing, for its 767 Overhead Video Monitor Lift

**Ergo Excellence Award for Innovation:** Boeing Interiors Responsibility Center, for its Versatile Bin Holding Carriage

## INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

**von Karman Award for International Cooperation in Aeronautics:** Boeing 787 Dreamliner Program

**Maurice Roy Award:** Curt Graeber

## INTERNATIONAL COUNCIL ON SYSTEMS ENGINEERING

**Fellow:** Ron Carson

## INTERNATIONAL RESEARCH INSTITUTE

**Maurice Holland Award:** Ray Cosner (co-author)

## NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

**Fellow:** Robert G. Becnel

## ORGANIZATION OF CHINESE AMERICANS

**Corporate Achievement Awards:** Vivek Lall

## ROYAL AERONAUTICAL SOCIETY

**Fellows:** John C. Dalton, Todd Zarfos

## SAE INTERNATIONAL

**Fellow:** John C. Dalton

## SOCIETY OF EXPERIMENTAL TEST PILOTS

**Fellows:** Dennis O'Donoghue, Doug Benjamin, John Cashman (retired)

## SOCIETY OF HISPANIC PROFESSIONAL ENGINEERS

**Hispanic in Technology Award:** Julio A. Navarro

## SOCIETY OF WOMEN ENGINEERS

**Distinguished Service Award:** Terri Morse

**Distinguished New Engineer Award:** Hayley R. McGuire

## WOMEN ENGINEER MAGAZINE

**Top Employer of Women Engineers:** Boeing (No. 1 on list)

## WOMEN IN AVIATION INTERNATIONAL

**United Airlines Command Leadership Resource Training**

**Scholarship:** Crystal Harris

**Association for Women in Aviation Maintenance Flight**

**Safety International Principles of Troubleshooting Training**

**Scholarship and Pratt & Whitney Maintenance Training**

**Scholarship:** Rhonda Lyons

**United Airlines Maintenance Training and Command Leadership Resource Training Scholarships:** Jennifer Hunt

## WOMEN OF COLOR IN TECHNOLOGY

**Research Leadership Award:** Quynhgio Le

**Managerial Leadership Award:** Dianne Chong

**Pioneer Award:** Rosaura Corral-Perez

**Special Recognition:** Rhonda Lyons

**Technology All Stars:** Angelica Davancens, Jade Hudson, Shoba Krishnan, Chung-Chiu Liu, Matiel Payton, Christine Wang, Janee Wang, Seraphine Wang

**Technology Rising Stars:** Noramay Cadena, Iris Chavez, Melissa McQueen, Bukola O. Olagbaju, Fernmarie Rodriguez, Jennifer Wenthe

## 105 Boeing inventors receive 2008 Special Invention Award

To commemorate the company's top innovators and inventions, Boeing Intellectual Property Management conducts an annual Special Invention Awards program. This year, Boeing recognized 105 inventors who worked on 38 inventions.

Here's a list of this year's Special Invention Awards winners by region.

### MIDWEST REGION

**Method, Computer Program Product, and Apparatus for Managing Decision Support Related Event Information:**

William E. Krechel, Kenneth G. Owens, Brian N. Slack

**Seal Removal Aid:** Michael M. Newton

**Flight Replay System and Method:** Todd C. Hampson, Margaret M. Tsai

**Methods and Systems for Task Assessment Management:** Gregory P. Bowman, Aaron F. Markowitz

**Air Launch System Interface:** James V. Leonard, Bob K. Menzel, James A. Simms

**Variable Area Flow Duct Employing Secondary Flows & Fluidic Mixer with Controllable Mixing:** Mori Mani, Matthew J. Wright, Chad M. Winkler

**Processing Architecture for Automatic Image Registration:** L. Andrew Oldroyd

**Capacitive Plate Dielectrometer Method and System for Measuring Dielectric Properties:** Christopher Y. Choi

**Robust Control Effector Allocation:** Joseph S. Brinker, Ryan D. Diecker, Eugene Lavretsky

**Rotary Aircraft Download Alleviation Apparatus and Methods:** Robert C. Heminway

**Evaluation of Optical Distortion in a Transparency:** Michael S. Dixon\*, Philip L. Freeman, Michael P. Gleason, Robert Pless\*, William D. Smart\*, Matthew M. Thomas (\* co-inventors employed by Washington University in St. Louis and recognized for their outstanding contribution)

### NORTHWEST REGION

**Fiber Optic Transceiver Module Having Built-In Test Capability and Associated Method:** Eric Y. Chan, Dennis G. Koshinz

**Laser Exterior Marking System and Portable Laser Projector and Enclosure:** Lindsey M. Caton, William J. Dill, Kenneth E. Irwin III, Paul Jennerjohn, David A. Lindley, Pamela J. Manzer, Reynold R. Panergo, Paul G. Solecki, James C. Van Avery

**Autonomous Vehicle Rapid Development Test-bed Systems and Methods/Closed-Loop Feedback Control Using Motion Capture Systems:** Khaled Abdel-Motagaly, Brett M. Bethk\*\*, Stefan R. Bieniawski, Gregory J. Clark, Charles A. Eri-gnac, Jonathan P. How\*\*, Gary R. Mansouri, Paul Murray, Paul E. R. Pigg, Ronald C. Provine, Emad W. Saad, James J. Troy, Mario J. Valenti\*\*, John L. Vian (\*\* co-inventors employed by Massachu-



sets Institute of Technology and recognized for their outstanding contribution)

**Radio Frequency Signature Augmentation System:** George A. Eastman, Kosal Svy

**Shaper Router and Method:** Roger E. Ahrnkiel, Bradley A. Pense

**Multi-Axis Trim Processing:** Jia Luo

**Aerospace Vehicle Fairing Systems and Associated Methods:** Nicolaas Voogt

**Maintenance Interval Determination and Optimization Tool and Method:** Roberto E. Altschul, Kenneth D. Bouvier, Brian C. Fredgren, Friedrich-Wilhelm Scholz, Shuguang Song

**Combined Mortise and Tenon Joint Feature:** Richard C. Burnham, Scott D. Button, Paul S. Dewar, Ralph D. Druckman, Chai Y. Indharasophang, James S. Griffing, Marc A. Spane

**Methods and Systems for Modeling Processes in Airlines and Other Industries, and for Simulating and Valuing the Effects of Various Products and Services on Those**

**Processes:** Gerry R. Cutler, Kenneth J. Goosen, James O. Halvorson, Michael E. Irrgang, Michael W. Maple, Michael B. McLaughlin, Peter L. Smith, Philip L. Trautman

**Laminate Material Testing Methods and Systems:** Barry A. Fetzer, Jeffrey R. Kollgaard, Jeffrey G. Thompson, Clyde T. Uyehara

**Annular Acoustic Panel:** Geoffrey E. Harrison

**Flow Restrictors for Aircraft Inlet Acoustic Treatments, and Associated Systems and Methods:** Ronald F. Olsen

**Method and Apparatus for Composite Part Data Extraction:** Phill J. Fisher, Jamie A. Kessel, Paul J. Shirron, Donald M. Mullins

**Load Reducing Stores Launch Tube:** Matt H. Travis

**Integrated Aeroelasticity Measurement System:** Darin W. Brekke, Dan J. Clingman, Hank O. Hinnant Jr.

## SOUTHWEST REGION

**Object Detection System and Method Incorporating Background Clutter Removal:** Thomas P. Weismuller, David L. Caballero

**In-flight Control System Stability Margin Assessment:** Thomas F. Brozenec, Richard Y. Chiang


**Visualization of Ad Hoc Network Nodes:** David B. Manser

**System and Method for Inducing a Pyrotechnic Type Shock Event and Pyrotechnic Shock Simulation System and Method:** Chhour M. Thong, C.C. Lee

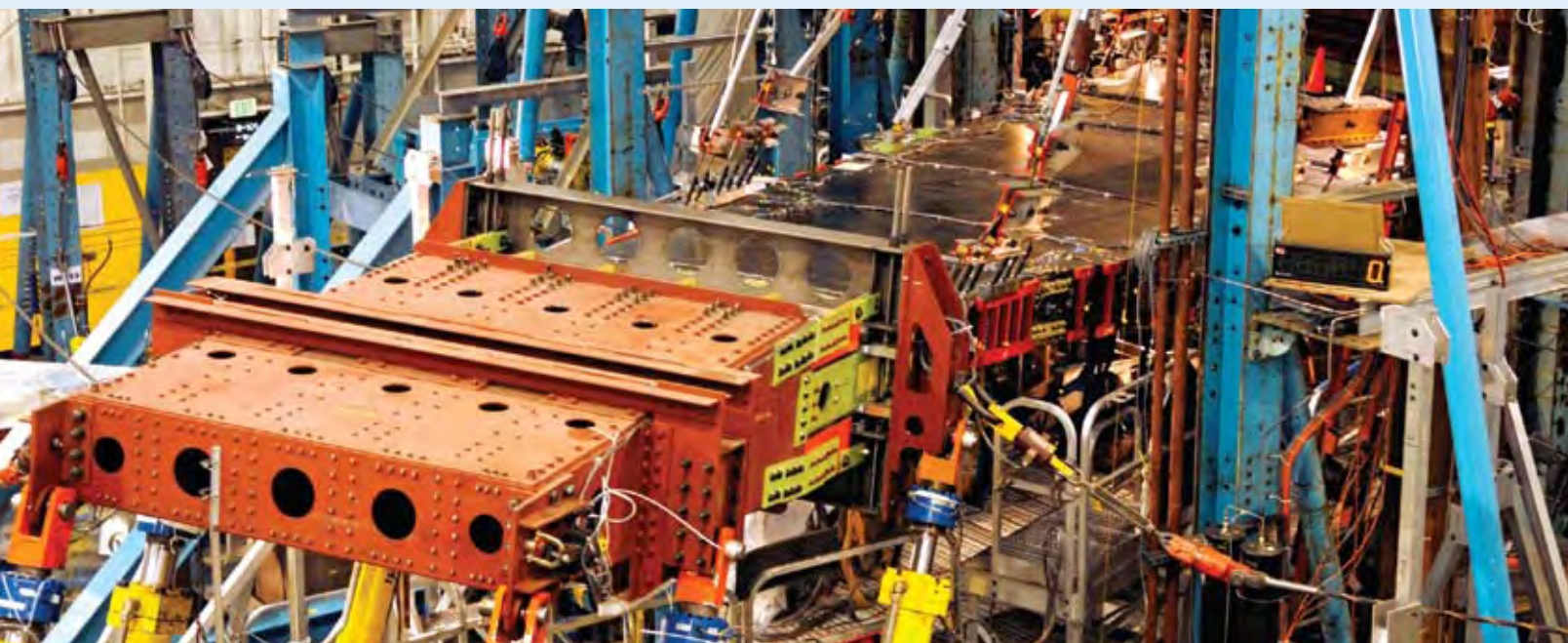
**Efficient Software Interface for Automated Test Equipment:** Hien D. Dam, William W. Moy, Kemper J. Eick

**Window Average Statistics Model for Pointing Stability Jitter Analysis:** Richard Y. Chiang

**Spacecraft Low Tumble Linear Release System:** Richard W. Aston, Michael J. Langmack, Torger J. Totusek



Martha Ries, standing in the Museum of Flight in Seattle, holds a Special Invention Award plaque. Some 105 inventors who worked on 38 inventions were recognized in this year's Special Inventions Awards program. The program is run by Boeing Intellectual Property Management, which Ries leads. MARIAN LOCKHART/BOEING



## 787 wing box passes test

Boeing completed destructive testing last month on a full-scale composite wing box of the 787 Dreamliner, the first Boeing all-composite wing box ever built. To meet certification requirements, the wings must withstand loads up to 150 percent of the highest aerodynamic load the jet could ever be expected to encounter. MONICA WEHRI/BOEING

## BOEING SHANGHAI AVIATION SERVICES RECEIVES FAA CERTIFICATION

Boeing Shanghai Aviation Services Co., Ltd. (Boeing Shanghai) recently received its U.S. Federal Aviation Administration Repair Station Certification. The certification allows Boeing Shanghai to conduct operations under Part 145 of FAA regulations.

Initially, Boeing Shanghai is conducting heavy maintenance on Next-Generation 737 airplanes. There are more than 235 Next-Generation 737 airplanes flying in the East Asia region, with more than 260 on order. The facility also performs nondestructive testing and other maintenance services.

Future plans call for expansion into twin-aisle airplanes, beginning with the Boeing 767-300. The company, a joint venture between Boeing, Shanghai Airport Authorities and Shanghai Airlines, eventually will enter the passenger-to-freighter conversion business.

## WORLDWIDE AIR FREIGHT TRAFFIC SET TO TRIPLE THROUGH 2027

Boeing expects world air cargo growth to expand 5.8 percent annually over the next two decades, with worldwide air freight traffic tripling through 2027, according to the newly released Boeing World Air Cargo Forecast 2008/2009.

Air cargo traffic will grow over the long term despite current near-term market weakness and worldwide economic uncertainty. "Our research tells us that long-term economic growth, freighter fleet renewal and moderating jet fuel prices will stimulate air cargo traffic growth," said Randy Tinseth, vice president, Marketing for Commercial Airplanes. "These positive prospects will prevail despite the industry's concerns about current economic challenges."

Boeing predicts the world freighter fleet will increase to 3,890 airplanes from 1,950 during the 20-year period. Large freighters such as the Boeing 747 and 777 ultimately will represent 35 percent of the fleet, compared to 26 percent today, while providing 74 percent of total capacity. More than 75 percent of the 3,360 freighters joining the fleet—2,500 airplanes—will come from passenger-to-freighter modifications, while 860 will be new-production freighters.

To see the report, visit [www.boeing.com/commercial/cargo](http://www.boeing.com/commercial/cargo).

## CREATIVE SERVICES VIDEOGRAPHERS RECEIVE NATIONAL AWARDS

Shared Services Group's Creative Services team was recognized in 2008 by two national organizations—The Telly Awards and The Communicator Awards—for excellence in video production.

In St. Louis, Tim Reinhart garnered two bronze Tellys, as well as an Award of Excellence and four Awards of Distinction from the Communicator Awards. Meanwhile, Bob Carrick captured a bronze Telly, a Communicator Award of Excellence and three Communicator Awards of Distinction.

In El Segundo, Calif., Alex Veloz took home a Silver Telly award, while Paul Fiamengo, John Painter and Steve Dexter each won a Bronze Telly. Each of these videographers also received Communicator Awards of Distinction.

Creative Services provides design, layout, photography, writing and editing support to *Boeing Frontiers*.

## COMMUTING PROGRAM OFFERS TAX RELIEF, HELPS CUT TRAFFIC

Boeing now offers a pre-tax program for U.S.-based employees using eligible public transportation and vanpools. Through the program, employees can purchase eligible commuting credentials via payroll deduction. Boeing supplier WageWorks administers the purchases for employees registered for the pre-tax purchase program.

For more information, visit the Enterprise Commute site on the Boeing intranet at <http://commuting.web.boeing.com/Enterprise>.

## FCS PLACES 8TH ON TIME MAGAZINE'S 2008 LIST OF 50 TOP INVENTIONS

The Future Combat Systems' Active Protection System (APS) earned a spot in *Time* magazine's Best Inventions of 2008. The Nov. 10 issue listed the APS in eighth place in the annual list of 50 top inventions.

The APS detects and destroys incoming rocket-propelled grenades and other short range threats, protecting Soldiers and their equipment. It was developed for FCS by Raytheon as part of the BAE Systems' Hit Avoidance System which will be employed on FCS Manned Ground Vehicles. The *Time* article likened the APS to "Star Wars for soldiers." This past summer the APS successfully detected, tracked and defeated rocket-propelled grenade threats during a series of design verification tests in Huntsville, Ala.

"APS is one of several active and passive protection measures in the Hit Avoidance System," said Joe May, program manager, MGVS Hit Avoidance System. "Its development has been a true team effort by the U.S. Army, BAE, Raytheon and the Boeing/SAIC Lead Systems Integrator team."

## 35 BOEING HR PROFESSIONALS EARN 2008 EXCELLENCE AWARDS

Thirty-five Boeing Human Resources professionals received the company's 2008 HR Excellence Awards in late October.

"These awards call out the best among us—individuals and teams who set high expectations for themselves and others, inspire us by finding a way and deliver results that benefit the business," said Rick Stephens, senior vice president, HR and Administration.

The awards were presented in three categories recognizing leadership, service and functional excellence. More than 90 nominations were received for the newly revamped awards program.

**Leadership Excellence Awards:** This award recognizes the highest level of engagement within HR, based on their teams' exemplary employee survey scores.

- Joelle Denney, supporting Commercial Airplanes Sales and Marketing, Renton, Wash.
- Fran Plushner, supporting Contingent Labor Programs in Shared Services Group, Long Beach, Calif.
- Pat Ritz, from Boeing Employee Relations, supporting the eastern region, St. Louis
- Lorrie Smith, supporting Rotorcraft Systems in Integrated Defense Systems, Philadelphia

**Functional Excellence Awards:** This award recognizes the importance of functional excellence.

- Learning, Training and Development Virtual Classroom Team: Tom Adair, Tara Bluhm, Tyree Buchanan, John Farra, Janis Hilt, Roy Howell, Michael Hurley, Steven Jenks, James Johnson, Gregory Lusk, Kimberly Nordrum, Scheryl Schmidt, Robert Shultz, Jack Welsh
- Boeing Employee Survey Team: Jill Antonen, Maritza Avila, Jim Glickert, JoAnn Houlihan, Rick Siem, Frank Zemek
- Michael Richey, Learning, Training and Development Technical and Professional Development, Everett, Wash.

**Service Excellence Awards:** This award recognizes outstanding client service.

- Salary Management Team: Sandy Graf, Paula Kelly, Debra Pumala-Curry, Becky Romero, Jane Sykes
- Sandy Rufkahr, Phantom Works Human Resources, St. Louis
- Terry Wolf, Global Benefits, St. Louis
- Elaina LaVigne, Commercial Airplanes Fabrication Division Human Resources, Auburn, Wash.
- Julie Myers, IDS Space Exploration Division Human Resources, Pasadena, Texas
- Pamela Zednick, Disability Management, Everett, Wash.

