September 2014

# Nine Honored as Top Award Goes to Pierre-Louis

September 18, 2014

Orbiter

Each year, The Aerospace Corporation collectively pauses for one day to commemorate the accomplishments of some of its most exceptional employees. These are men and women who have demonstrated excellence exceeding expectations in areas spanning science, technology, engineering, analysis, systems engineering, program and business management, and administration.

On Thursday afternoon, Sept. 18, nine employees — comprising one individual and three team winners — were presented with the corporation's highest honors at the 35th annual President's and Trustees' Distinguished Achievement Awards ceremony.

Addressing a near-capacity audience in the El Segundo Titan meeting center, Dr.



Wanda Austin, president and CEO, spoke of her pride in the "immense accomplishments of employees who have exceeded expectations and delivered innovative and mission-critical services to our country."

Austin explained that 17 nomination packages had been reviewed, which consisted of five individual nominations and 12 team nominations. The nominations included representation from all six major organizational groups.

The Honorable Robert Walker, board of trustees member and chair of the awards subcommittee, participating in his final PTA awards ceremony prior to his retirement from the board later this year, presented the 2014 Trustees' Distinguished Achievement Award to Enold Pierre-Louis, senior project leader, Environments, Test, and Assessment Department, Engineering and Technology Group (ETG). Pierre-Louis was awarded the company's highest honor "for developing an integrated technique combining stress and probabilistic analyses to resolve numerous launch-critical issues." He received a stylized crystal eagle's-wings trophy and a \$25,000 prize. The crowd gave him a standing ovation following an acceptance speech in which he thanked numerous coworkers and his family members.

The first team to be honored with a President's Achievement Award comprised Dr. Steven Beck, distinguished scientist, Electronics and Photonics Laboratory; Henry Montes, senior technical staff, Photonics Technology Department; and Michael Williams, technical staff, Photonics Technology Department. They were cited for "sustained contributions to SBIRS and other sensors by development and deployment of laser beacons."

The team of Dr. Russel Benson, systems director, GEOINT Development Office, National Systems Group; Alison Kremer, project engineer, International Space Systems, Systems Planning, Engineering, and Quality (SPEQ); and Dr. Ashley Williams, senior technical staff, Control Analysis Department, ETG, won a President's Achievement Award "for application of innovative controls analysis to diagnose and mitigate issues on a critical national program."

The final President's Achievement Award went to the team of James Gin, systems director, Aerospace Western Test Range Systems Engineering, Space Systems Group, and Chafic Hammoud, systems director, Targets and Interceptor, SPEQ, "for exceptional leadership in mitigating critical path risks to the first Ballistic Missile Defense System operational flight test."

All President's Achievement Award winners received a trophy and a \$7,500 prize.

After the ceremony, award recipients were congratulated by colleagues and friends at a reception in front of A1.

Watch a video of the ceremony below.

# Pierre-Louis Honored for Developing Technique to Resolve Flight-Critical Issues

September 23, 2014

The Hon. Robert Walker, chair of the awards subcommittee of The Aerospace Corporation board of trustees, presented the 2014 Trustees' Distinguished Achievement Award to Enold Pierre-Louis, senior project leader, Environments, Test, and Assessment Department, Engineering and Technology Group, at the 35th President's and Trustees' Distinguished Achievement awards ceremony on Sept. 18.

Pierre-Louis was honored "for developing an integrated technique combining stress and probabilistic analyses to resolve numerous launch-critical issues." He received a stylized crystal eagle's-wings statue and an award of \$25,000.

Pierre-Louis helped resolve numerous flight-critical issues on national security space programs by performing analyses using an integrated, multidisciplinary technique that he developed. Electronic



The Hon. Robert Walker, left, presented the Trustees' Distinguished Achievement Award to Enold Pierre-Louis. (Photo: Elisa Haber)

devices and subassemblies in spacecraft and launch vehicles contain internal components susceptible to mechanical fatigue, which can lead to loss of critical functionality, diminished mission life, and even loss of mission.

Pierre-Louis' integrated state-of-the-art fatigue analysis approach combines finite element stress modeling and probabilistic methods (two very different technical disciplines) to accurately assess the likelihood that flight hardware will experience functional anomalies during ground processing, launch, and space operations.

His contributions have had a significant impact on how the community assesses these components today. On several occasions, his work led to tremendous cost savings by providing the technical analyses that allowed for continued processing of spacecraft to launch. The innovative analyses pioneered by Pierre-Louis have been widely used on many successful investigations to prevent launch delays and provide rationale for effective design enhancements.

# Darrell Reynard New Facilities Division General Manager

September 24, 2014



Darrell Reynard

Darrell Reynard has been hired as the general manager of the Facilities Division, Operations and Support Group. Reynard joined Aerospace effective Aug. 4.

Reynard is responsible for planning, organizing, and directing Facilities Division operations, including companywide facilities leasing, maintenance of all Aerospace facilities, and optimizing space occupancy. He is also leading the General Services functions.

He recently retired from the U.S. Navy and has more than 20 years of leadership in operations, administration, construction, and facilities management. His most recent previous assignment was at the Naval Facilities Engineering and Expeditionary Warfare Center. Reynard has gained a wealth and wide variety of experiences during his career in the Navy. He managed very large organizations, dealt with difficult space allocation issues, and managed large construction projects.

Reynard has a bachelor of science in chemical engineering from the University of Oklahoma and a master's degree in civil/environmental engineering from Texas A&M University. He is also a registered professional engineer in Virginia and a Certified Facilities Manager.

# CEO's Report: New Executives, Board Member

by Lindsay Chaney September 16, 2014

In her final CEO's Report to Employees for the 2014 fiscal year, Dr. Wanda Austin announced major corporate executive changes, a new board of trustees member, and recapped significant events of the past quarter, including a record-fast handover of the latest GPS satellite.

Austin announced that Catherine Steele, currently vice president of Strategic Space Operations, based in Colorado Springs, has been promoted to senior vice president of National Systems Group (NSG). She will move to Chantilly, effective Jan. 1, 2015, to ensure a smooth transition with Dr. Manuel "Mal" De Ponte, who will retire on April 1 next year.

Replacing Steele as vice president of Strategic Space Operations is Glenn Davis, general manager of the Imagery Programs Division in NSG. He will move to Colorado Springs by Nov. 1.



Dr. Wanda Austin gives her final CEO's Report to Employees for fiscal year 2014. (Photo: Eric Hamburg)

And effective Oct. 4, Bernard Chau, vice president of National Intelligence Operations (NIO), will move from Chantilly to the Crystal City office in order to be closer to more national intelligence customers and to better align the NIO business with civil and commercial efforts. Chau and the NIO organization will report to Executive Vice President Dr. Dave Gorney.

The new member of the Aerospace board of trustees is the Hon. Charles Blanchard, a partner in the law firm of Arnold and Porter in Washington, D.C., where he works with clients in the contracting and national security communities. Prior to joining the firm, Blanchard served as general counsel and chief ethics officer for the U.S. Air Force. He also worked in other government agencies and was a two-term member of the Arizona State Senate.



Dr. Rami Razouk offers congratulations to Catherine Steele as her promotion to senior vice president of National Systems Group is announced. (Photo: Eric Hamburg)

In the area of launch support, Austin noted that Aerospace supported two successful launches over a span of just four days in July and August. On July 28, the AFSPC-4 mission was launched on a Delta IV from Cape Canaveral. The mission consists of two primary Geosynchronous Space Situational Awareness Program (GSSAP) spacecraft and a secondary payload known as the Automated Navigation and Guidance Experiment for Local Space (ANGELS).

Four days later, on the evening of Aug. 1, an Atlas V from Cape Canaveral launched the GPS IIF-7 satellite to orbit. Handover to the operators at AFSPC occurred on Aug. 8, only seven days after the launch — a new record in the GPS IIF program.

"Our ability to support two successful launches with only four days between them is outstanding," Austin said. "It's evidence of our remarkable commitment to mission success."

Looking ahead, Austin reported that during the next 12

months, there are 11 scheduled launches for which Aerospace will either have mission assurance responsibilities or will be

#### monitoring.

Austin reported that Aerospace is supporting the Space and Missile Systems Center as it combines the Infrared Space Systems Directorate with the Defense Weather Systems Directorate. The new entity will be called the Remote Sensing Systems Directorate or RS. Aerospace has been monitoring program technical issues during the transition, preserving the technical expertise in the two mission areas, and exploring synergistic opportunities.

In the Civil and Commercial Operations area, the company brings its broad systems engineering expertise to bear on hard problems faced by customers. The Jet Propulsion Laboratory (JPL) has signed a \$1.5 million contract with Aerospace to develop a CubeSat bus for a solar array and antenna mission. JPL will develop the payload instrument and Aerospace will be responsible for payload integration, test, and mission operations. In other CCO work during the past quarter, Aerospace delivered a near-Earth object deflection tool to JPL, and gave a final report on a payload's safety requirements to the Japan Aerospace Exploration Agency (JAXA).

Turning to the topic of corporate strategy, Austin said the 2015 Strategic Plan brochure has been published and will be sent to all employees in October. The plan was fine-tuned based on recommendations from the board of trustees and the mid-year July strategy meeting of the Aerospace Strategic Management Committee. The board has endorsed three general steps for the corporation's future: 1) invest internally; 2) continue to expand; and 3) explore new opportunities.

Austin said senior leader teams have focused on developing new markets and strategies to make the corporation more resilient in the future through a broad and robust business base and through improved efficiencies for cost control. These could be summarized as providing a broader set of value to a broader set of customers.

In a move affecting the Operations and Support Group, Austin announced a major reorganization of The Aerospace Institute (TAI), which she said reflected recent changes in information technology and corporate organization.

The Library and Information Research Center, also known as the Lauritsen Library, will move to Enterprise Information Systems. The Leadership and Business Skills Development Office activities will become part of the Organizational Effectiveness group within Human Resources. The Aerospace Press will move to Corporate Communications and Public Affairs and TAI will continue as the company's training organization.

Austin acknowledged TAI's current executive director, Marilee Wheaton, noting that "The Institute has flourished under her leadership, and we thank her for all that she has done to create a learning culture here at Aerospace."

Two questions were submitted before the CEO's Report. The questions and answers, edited somewhat for space and conciseness, follow.

Question: Could you please elaborate on the negotiation process that ultimately led to the government agreeing to restore the vacation hours and personal holiday time taken by employees during the October 2013 shutdown?

Answer: Soon after the October 2013 shutdown, Aerospace engaged SMC in discussions regarding ways to amend the FFRDC contract to restore employee vacation and personal holiday time and also pay those who went on no-pay status during the shutdown. SMC leadership was supportive of this effort based on the long-term nature of the Aerospace-SMC relationship and the importance of Aerospace support to government programs. Representatives from Contracts, Finance, and Legal worked out the details of the agreement, which was finalized in August.

Question: How does this reimbursement affect our cost-per-STE?

Answer: The cost of the restoration of vacation and no-pay hours is less than 1% on a per-STE basis, and can be accommodated within our overall cost target and contractual limitations. This cost will impact FY14 only.

See video of complete CEO's Report to Employees below.

[Video Removed]

# Analysis Technique Wins President's Achievement Award

September 30, 2014

The team of Dr. Russel Benson, systems director, GEOINT Development Office, National Systems Group; Alison Kremer, project engineer, International Space Systems, Systems Planning, Engineering, and Quality; and Dr. Ashley Williams, senior

technical staff, Control Analysis Department, Engineering and Technology Group, was awarded a President's Achievement Award "for application of innovative controls analysis to diagnose and mitigate issues on a critical national program."

The team developed an innovative analysis technique to identify the root cause of, and provide mitigation for, anomalous gimbal behavior that threatened the operational capabilities of a national security space vehicle.

The contractor's acceptance of the team's theory as the true root cause illustrates the technical value added by the team and the team's strongly forged relationship with the contractor engineers. The team contributed further by stepping in at a critical time to provide analysis when the contractor's tools were not available. When additional issues arose after further testing, the team provided analyses that were used to support time-critical customer decisions that directly impacted operations.

This delicate combination of hard-nosed objectivity and a cooperative approach allowed the team to influence the process to achieve the correct and successful result with no schedule impact or political ramifications.



Left to right, Dr. Wanda Austin with Dr. Russel Benson, Alison Kremer, and Dr. Ashley Williams. (Photo: Eric Hamburg)

# Team Wins President's Award for Laser Beacon Development

September 25, 2014

The team of Dr. Steven M. Beck, distinguished scientist, Electronics and Photonics Laboratory; Henry Montes, senior technical Staff, Photonics Technology Department; and Michael A. Williams, technical staff, Photonics Technology Department, all of the Engineering and Technology Group, was awarded a President's Achievement Award "for sustained contributions to SBIRS and other sensors by development and deployment of laser beacons."

The President's Achievement Award recognizes an outstanding singular act, a piece of work, or a lengthy sustained effort with positive impact to the company.

The team developed and helped deploy a number of mobile laser beacon systems critical to the early orbit testing of all U.S. overhead persistent infrared (OPIR) sensors launched and in orbit. The team designed, developed and operated a series



Dr. Steven M. Beck, left, with Dr. Wanda Austin, Michael A. Williams, and Henry Montes. (Photo: Eric Hamburg)

of three mobile laser beacon platforms, including laser systems, pointing systems, software, and hardware, which were instrumental in the early orbit and ground truth testing of SBIRS HEO 1 and 2, GEO 1 and 2, and two classified sensors. The team's last deployment overseas lasted more than three months.

As a result of previous successes in designing and deploying these laser beacon systems, the Defense Support Program program office recently requested that the team design and install a permanent laser beacon facility at Edwards Air Force

Base. Designing the facility from scratch, the team created the first remotely operated laser beacon source in the world.

"As a result of the ... team's efforts, beacon support to the OPIR sensors is now well-known and highly respected in the technical community, among government and contractor alike," said Dr. Wanda Austin, president and CEO, during the official award presentation on Sept. 18. "The work being recognized today has exceeded all expectation, rising above and beyond the limits of specified job responsibilities in order to achieve excellence."

# Not Much Dancing, But Cell Phone Flash Mob Produces Useful Data

by Lindsay Chaney September 26, 2014

It was billed as a "cell phone flash mob" and resulted in a sight perhaps never before seen on the Paulikas Mall.

Forty Aerospace employees and friends stood in a group, then on the command "Flash mob, make your phone call," began talking on their cell phones. Minutes later the group moved five steps to the left and made another phone call, then 10 steps to the right to make a final call.

The 15-minute exercise, organized by engineers in the Communications and Cyber Division, was to "determine the aggregate power radiated by a group of cell phone devices in a real-life scenario," according to Julio Castro, one of the drill's organizers. The movement to the left and right was to account for differences in how phone cell signals bounced off buildings and other objects, depending on the location of the phone.



Han Lin, on the roof of A3, checks data generated by the cell phone flash mob in background. (Photo: Heather Golden)

Equipment on the roof of A3 measured the power given off by the cell phones.



Cell phone flash mob in the south Paulikas Mall. (Photo: Heather Golden)

The purpose of the exercise was to provide data to help validate mathematical models of possible cell-phone interference with satellite uplinks. The Federal Communications Commission in November will auction off part of the spectrum currently used for ground-to-satellite communications, with the result that government agencies will have to share the spectrum with 4G cell phone networks. Aerospace is working with government customers to study the radio-frequency environment and the effects on shared-spectrum usage.

Castro said the flash mob exercise appeared to generate some good data, which will now be analyzed.

# Aerospace Marks Hispanic Heritage Month

by Heather Golden September 22, 2014

Aerospace celebrated Hispanic Heritage Month 2014 with a lunch hosted by the Aerospace Latino Members Association, along with the L.A. Air Force Base Hispanic Heritage Group, Wednesday, Sept. 17, in El Segundo. The national month-long observation lasts from Sept. 15 to Oct. 15.

Attendees enjoyed a traditional Hispanic menu of enchiladas, beans, and rice, while they heard from guest speaker Stuart Ashman, president and CEO of the Museum of Latin American Art, about the impact the Latino community has had on American culture. Guests also left the event with a special gift from MOLAA — a free two-person pass to visit the museum.

Ashman began his presentation by pointing out the double meaning in ALMA's name. While ALMA may be an acronym for Aerospace Latino Members Association, the word "alma" in Spanish also translates to "soul" in English. He said it was a telling translation.



Stuart Ashman, president and CEO of the Museum of Latin American Art, spoke about the impact of the Latino community on American culture. (Photo: Elisa Haber)

"Latinos form the core of this country - music, dancing, food. But, we contribute much more than that."

Ashman listed famous and influential Latinos in the arts, sciences, and politics. His list included inventors, astronauts, scientists, writers, visual artists, musicians, movie stars, and politicians – all of whom have their names recorded in the annals of history or who are currently leaders in their fields.

"Latino culture is everywhere, and that is a good thing because all of us together are going to enrich the tapestry that is America," he said.

In her opening remarks, ALMA president DeeDee Madrid likened Aerospace's focus on diversity to a family seated around the dinner table. There, one would find a variety of ages and identities.

"Inclusion is where everyone around the table is welcome to participate and be part of the conversion, where they feel comfortable participating in the conversation," she said. "Aerospace has diverse ideas and backgrounds. There is a firm belief that we each bring value to this great company we have."

"People are still ask the question, 'Why are we talking about diversity?,' " said Dr. Wanda Austin, Aerospace president and CEO. "We are fortunate to live in a part of the world where we embrace those differences and get the benefit from it. Think about what you would lose out on if you didn't have diversity. I think that is an important message. It is important to be inclusive. That's the kind of environment we try to create here. Everyone needs to be part of the conversation."

# Awards and Recognitions, August/September 2014

by Matthew Kivel September 09, 2014

Aerospace employees frequently earn recognition for their professional accomplishments. This Orbiter feature acknowledges those honors and awards, including the publication of books. To nominate someone for consideration in this section, send details of the award in a timely fashion to orbiter@aero.org, or contact Matt Kivel at matthew.k.kivel @aero.org. Include a photo related to the award, if available.

## The Aerospace Corporation

The Aerospace Corporation picked up two honorable mention nods at PR Daily's 2014 Nonprofit PR Awards. The Corporate Communications and Public Affairs

Division's "Space Debris Tweet Up" event was recognized in the "Best Use of Social Media" category, and its "Celebrating Engineers at Aerospace" article – which was written by Lindsay Chaney and Laura Johnson – was recognized in the "Best Article" category.

In addition, Aerospace collected two honorable mention awards at this year's PR Daily Video Awards, one for the CorpComm video team's urgent care short "Urgency or Emergency" and the other for the team's "VTC and Audio Conferencing Etiquette."

PR Daily, owned by Lawrence Ragan Communications, Inc., is "a daily news site that delivers news, advice, and opinions on the public relations, marketing, social media, and media worlds."

### Adam Tahir and John Nakai



John Nakai

The Society of Allied Weight Engineers (SAWE) presented Adam Tahir, member of the technical staff, Mechanical Systems Department, and John Nakai, senior engineering specialist, Mechanical Systems Department, with the L.R. "Mike" Hackney Award for their paper "Inertia Uncertainty Coordinate Transformation."

The Hackney Award is given annually, recognizing the best paper presented at the SAWE International Conference on Mass Properties Engineering. Papers are judged for "technical content, originality, usefulness, value, clarity, style, and form." The awardees are selected by the SAWE Technical Committee.



Adam Tahir

#### "Inertia Uncertainty Coordinate Transformation" details a new,

more accurate method for performing coordinate transformations of uncertainties of mass properties variables which are vector quantities (specifically inertia tensor uncertainties) between space and launch vehicles and their subsystem components. Tahir and Nakai received the award at the conclusion of the 2014 SAWE conference on May 21 in Long Beach, Calif.

# The Aerospace Corporation (Chantilly Campus)

The Aerospace Corporation received the Merit Award for commercial design excellence in the 2014 Fairfax County Exceptional Design Awards Program for the total design of its Chantilly Campus. Seven additional projects were recognized for the award.

Starting in 1985, The Fairfax County Exceptional Design Awards have "recognized achievement in the total design of a building and its site." The awards also "aim to raise awareness of outstanding planning and design projects among design professionals and the general public."

The award will be presented on Sept. 23 during the morning meeting of the Fairfax County Board of Supervisors in Fairfax, Va.

#### Dr. Albert Merrill

The Satellite Interference Reduction Group awarded Dr. Albert Merrill, senior engineering specialist, Communication Architectures Department, with a lifetime achievement award at its annual workshop in Singapore. The workshop was held at Raffles Hotel from June 19 – 20, bringing together engineers from around the world to discuss tactics and strategies for mitigating satellite interference.

Merrill, who has since retired, was recognized for his significant contributions at Satellite Interference Reduction Group events and for exhibiting "lifetime dedication to reducing satellite interference."

The Satellite Interference Reduction Group is "the global industry organization, whose mission is to combat and mitigate radio frequency interference for an interference-free Satellite Frequency Spectrum."

# Pao Receives 2014 Liang Award

by Kimberly Locke September 05, 2014

The legacy left by the late Dr. Alexander Liang, former Aerospace employee, continued as the 2014 Dr. Alexander C. Liang Award was presented Sept. 4 to Cary Pao, senior project leader, 3rd Generation Infrared Surveillance, Development Planning and Projects, Systems Planning, Engineering, and Quality.

The award has been presented annually since 1979 by the Aerospace Asian Pacific American Association (AAPAA) and was originally named the Aerospace Asian Pacific American of the Year Award. The award was renamed in 2010 in honor of Liang, who was the general manager of the Vehicle Systems Division, Engineering and Technology Group (ETG), and a supporter and champion for Asian and Pacific Islanders working at Aerospace.

Amy Peter, AAPAA president, welcomed attendees and provided a brief history about the award. She then introduced Dr.



Cary Pao, right, is presented with the Dr. Alexander C. Liang Award by Dr. Dave Gorney, executive vice president. (Photo: Elisa Haber)

Dave Gorney, executive vice president, who called the award ceremony an opportunity "to celebrate diversity while paying tribute to an Aerospace employee who has personally made contributions to mission success and to the community at large."

He said that this award, in combination with the efforts by all eight Aerospace affinity groups, is evidence of the corporation's commitment to promote diversity and inclusion in the workplace. "In the past, these differences created adversity but now we leverage those differences in a positive manner," said Gorney.

Referring to the space business as "an unforgiving one" where there is only one chance to get it right when it comes to a launch, Gorney said that Aerospace chooses to embrace the diversity of people, ideas, talents, and experiences in order to create and discover solutions to its greatest challenges.

He then elaborated on the value that a team with differing backgrounds, cultures, and philosophies brings to finding the best solutions to an issue.

Frank Fong, the 2012 Excellence in Diversity Award recipient and an AAPAA member, introduced guest speaker Congressman

Mike Honda, 17<sup>th</sup> Congressional District.

Honda thanked event organizers for inviting him and asked the audience to look at the mission control photos of the late 1960s and compare them to similar images of today. He echoed Gorney's view of the value of diversity in the workplace as a strength and not something adversarial.

"You see the same focus but you see things you didn't see 45 years ago," said Honda. "You see women. You see people of color... You see that mission control and the aerospace industry now reflect the diversity of our country."



Congressman Mike Honda serves as keynote speaker at this year's Dr. Alexander C. Liang Award ceremony held in El Segundo. (Photo: Elisa Haber)

community volunteer activities, and leadership and initiative.

He reflected on Liang's many contributions to Aerospace during his 38-year career at the corporation as well as his contributions to the community in general. He encouraged attendees to focus on ways to do more in their communities just as Liang did. Honda said that Liang is remembered as a "passionate man with a wonderful sense of humor and a willingness to support others and help them succeed."

Honda also took the opportunity to stress the importance of education, and in particular, education in the sciences. "Science, technology, engineering, and math, or STEM education, from preschool to graduate studies, is vital for our nation's economic success," he said. "STEM careers provide higher wages and salaries, meaningful work, and a chance to impact the future."

Kalyani Rengarajan, award committee co-chair and senior engineering specialist, Software Systems Analysis Department, Computers and Software Division, ETG, explained the criteria for the award, which are based on career and professional achievements, company and

She also acknowledged the award selection committee and then announced Pao as this year's award recipient.

In summarizing why Pao was selected for the award, Rengarajan spoke of Pao's service as mission manager on the Defense Meteorological Satellite Program (DMSP) Flight 17 launched on the Delta IV and his current role as the Aerospace program manager for the Space and Missile Systems Center (SMC) Hosted Payload Solutions Contract.

Pao's additional professional achievements include working the Evolved Expendable Launch Vehicle Secondary Payload Adapter Standard Launch Service to streamline secondary payload integration for the Space Test Program; managing the successful DMSP Flight 17 launch and successfully de-orbiting the Delta IV upper stage into the Pacific Ocean to mitigate orbital debris; and serving as principal architect and lead developer of SMC's first Commercial Hosted Payload Contract to fly government payloads on commercial satellites in 2013.

Pao's community service includes re-homing abandoned parrots, volunteering as president of the Mira Costa High School Band Boosters, serving on his church council, and volunteering as an adult leader with the Boy Scouts of America.

In accepting the award, Pao recounted his personal and professional journey, which included immigrating to the United States from China at the age of eight. He attended Virginia Tech where he earned a bachelor's degree in aerospace engineering and joined the Air Force ROTC Program. While in the ROTC, Pao was offered the opportunity to attend pilot training and eagerly accepted this offer. He later trained student pilots in the T-38 aircraft.

In 1976, Pao volunteered for duty at Los Angeles Air Force Station to join the Space and Missile Systems Organization in order to pursue a career in aerospace engineering. He was assigned to the Inertial Upper Stage Program Office, which was part of the Space Transportation System program (more commonly known as the space shuttle program). This experience, he said, afforded him the opportunity to work on space systems with the "best of the best." He left the U.S. Air Force as a captain.

He later became acquainted with Liang while at a meeting of the Commercial Space Transportation Advisory Committee during a launch-forecast briefing to the Federal Aviation Administration's Office of Commercial Space Transportation. It was Liang, he said, who helped sponsor him for employment at Aerospace in 2001.

"Alex continues to serve as role model for all of us to pay it forward and mentor others to achieve their potential," said Pao.

# September 2014 Obituaries

by Carolyn Weyant September 01, 2014

Sincere sympathy is extended to the families of:

Donald Behrens, member of the technical staff, hired Jan. 30, 1967, retired Aug. 1, 1988, died Aug. 3. Carol Brinker, office of the technical staff, hired Sept. 7, 1971, retired March 1, 2002, died July 22. James Burke, member of the technical staff, hired May 29, 1967, retired Feb. 1, 1988, died May 19. Barbara Ching, principal director, hired April 8, 1963, retired April 1, 2002, died Aug. 14. Galloway Foster, member of the technical staff, hired May 25, 1982, retired June 1, 1993, died Aug. 6. Howard Holtz, engineering specialist, hired May 14, 1962, retired June 1, 2012, died Aug. 15. William Labeda, project engineering, hired July 18, 1966, retired June 1, 1992, died Aug. 19. Alan Leveille, senior engineering specialist, hired Jan. 9, 1978, retired March 1, 1998, died Aug. 12. Clarence Purdy, office of the technical staff, hired July 26, 1965, retired July1, 1982, died July 5. Mary Trayne, office of the technical staff, hired June 20, 1983, retired March 1, 1989, died April 21. Henry Weiss, systems director, hired Nov. 29, 1979, retired Oct. 1, 1989, died Aug. 10.

To notify Aerospace of a death and have it included in the Orbiter, please contact Cynthia Johnson in Human Resources at 310-336-5806.

# September 2014 Notes

by Carolyn Weyant September 01, 2014

Notes of appreciation to fellow employees and Aerospace for thoughtfulness and sympathy have been received from:

Denise Betts, for the recent passing of her grandmother, May Johnson.

To submit a note of appreciation to Aerospace, please contact Valerie Jackson in Human Resources at 310-336-0891.

# September 2014 Anniversaries

by Carolyn Weyant September 01, 2014

45 YEARS

Engineering and Technology Group: Gary Stupian

40 YEARS

Engineering and Technology Group: William Ailor

Operations and Support Group: Victoria Coskrey Ndefo

#### 35 YEARS

Space Systems Group: Donald Boucher, Suzanne Brooks 30 YEARS Engineering and Technology Group: Michael Rolenz Space Systems Group: Donald Town 25 YEARS Engineering and Technology Group: Frank Kantrowitz, Christopher Silva Operations and Support Group: Maria Garcia, Frances Gillis, John Nikitas, David Sylvain Space Systems Group: Ranwa Haddad, Wendy Kinsey 20 YEARS National Systems Group: Robert Klaus Space Systems Group: Patricia Strong Systems Planning, Engineering, and Quality: Hope Turney **15 YEARS** Engineering and Technology Group: Albert Lin, Carlos Turano National Systems Group: Michael Kidd, James Phelps, Thomas Shaw Operations and Support Group: Sherry Lei Space Systems Group: Leslie Belsma, Kimberly Chung Systems Planning, Engineering, and Quality: Brian Millburn 10 YEARS Engineering and Technology Group: Cynthia Jordan, Steven Moss, Xingui Zhao, Daniel Zink National Systems Group: John Miller Operations and Support Group: Shirley Tanaka Space Systems Group: Hernan Ojeda Systems Planning, Engineering, and Quality: Connie Myers 5 YEARS Engineering and Technology Group: Jung-Sik Moon National Systems Group: James Volkmer Space Systems Group: Randall Hicks Systems Planning, Engineering, and Quality: David Dubuque