Orbiter
April 2015

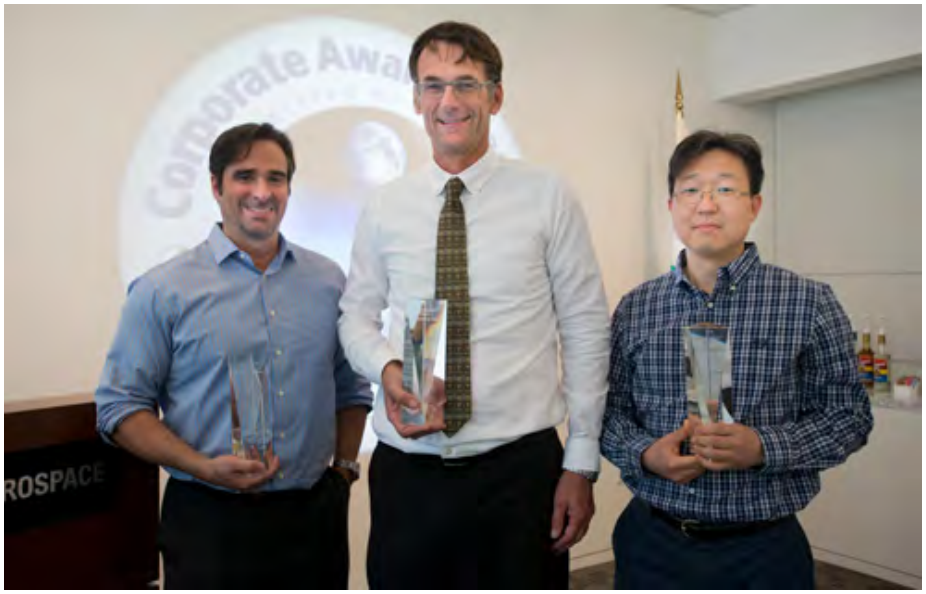
Trio Wins 2015 Innovation Award

April 29, 2015

Winners of the inaugural Innovation Award received their trophies during a small lunchtime ceremony in the company's El Segundo executive dining room on Tuesday, April 28.

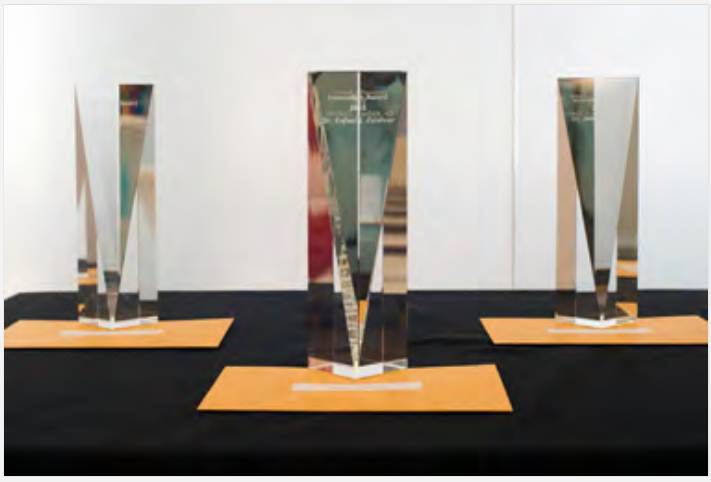
Senior Vice President Wayne Goodman presented the awards to the Plasma Treatment team, which developed a patented technique that uses plasma to prepare a composite surface for bonding. The process produces reliable bonds that reduce the weight and improve the performance of satellite composite structures.

Members of the team are Dr. Rafael Zaldivar, department director, Materials Science Department; Dr. James Nokes, principal director, Space Materials Laboratory; and Dr. Hyun Kim, research scientist, Tribology, Surface Science, and Engineering Department.



2015 Innovation Award winners, left to right: Dr. Rafael Zaldivar, Dr. James Nokes, and Dr. Hyun Kim. (Photo: Eric Hamburg)

The new Corporate Award, which carries a monetary stipend of $15,000 for a team, in addition to a handsome trophy for each team member, recognizes an individual or team who "discovered, fashioned, or developed a new or novel creation that has a noteworthy impact on the company, our customers, or society at large."



The Innovation Award trophies. (Photo: Eric Hamburg)

See video of the award presentation below.

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Countdown to Launch: An Epilogue

by Laura Johnson
April 24, 2015

The GPS IIF-9 satellite is now a working member of the GPS constellation. (Image: U.S. Air Force)

On April 20, the GPS IIF-9 satellite was officially set healthy and operational. It launched March 25 on a Delta IV rocket, but the story didn't end there.

"As important as a successful launch is, the mission is not complete until the satellite has been checked out and determined to be performing nominally, and then set healthy as part of our operational constellation," said Rita Lollock, general manager of the Navigation Division. "This mission, both launch and on orbit checkout, went very smoothly."

After the satellite was placed in its required orbit by the launch vehicle, an on-orbit checkout was performed to verify that the satellite survived the launch environment and that its mission performance was as expected.

Aerospace supported these efforts, with shifts of people coming in round the clock to monitor the satellite tests and maneuvers at whatever time of day or night they needed to take place.

Once the Space and Missile Systems Center was convinced the satellite was ready, a transfer of spacecraft control authority took place on April 3, and the satellite came under the jurisdiction of the 2nd Operations Squadron within the 50th Space Wing at Schriever Air Force Base in Colorado Springs, which is the squadron that will operate the satellite.

The 50th Space Wing, with support from Aerospace, performed the remaining tests of the secondary payload (U.S. Nudet Detection System) and the final maneuvers to place the satellite in its assigned slot, and on April 20, approximately one month after launch, the satellite was set to healthy status and made available to GPS users everywhere. GPS IIF-9 takes its place among the other GPS satellites in orbit, and its signal can now be tapped for a myriad of military and civilian uses.

Iris Jordan Receives Fourth Annual OPRA Award Honors

by Gail Kellner
April 23, 2015

As the first Aerospace employee assigned to the Huntsville, Ala., office back in 2007, Iris Jordan immediately set the stage for opening the office, ensuring that Aerospace employees were fully functional upon either transferring to the office or joining the corporation from the Huntsville area.

Jordan, administrative specialist, Mission Assessment, Missile Defense and Space Sensor Division, was presented the fourth annual Office Professional Recognition Award (OPRA) for her efforts on Wednesday, April 22, during the annual Office Professional Advisory Team (OPAT) breakfast.

In addition to her outstanding efforts with the Huntsville office, the award also acknowledges and recognizes Jordan's accomplishments as an OPAT leader.

OPRA is a corporate award, and therefore recognizes an extremely high level of achievement. It acknowledges excellence exceeding expectations by an office support employee and carries a monetary prize of $5,000.

"Iris helped lay the technical and logistical foundation for the facility. From the very beginning, she worked with division administration, corporate facilities, and local building management so that the new office was configured to meet Aerospace needs," said Rand Fisher, senior vice president, Systems Planning, Engineering, and Quality, who introduced Jordan and

presented her with the OPRA award.

“She has the unique distinction of supporting not one, but two Aerospace locations, he added. “On a weekly basis she provides additional support to Aerospace Space Launch Operations at the United Launch Alliance plant in Decatur, Ala. Her remarkable ability to serve both Northern Alabama offices aids the corporation in controlling costs and maintaining synergy between facilities.”

Senior Vice President Rand Fisher presented the OPRA award to Iris Jordan at a ceremony in El Segundo on April 23. (Photo: Eric Hamburg)

Fisher also noted that she helped to organize and execute the Huntsville grand Opening as well as the aerospace 50th Anniversary celebration in Huntsville.

In her off-work hours, Jordan has contributed to the Aerospace community and beyond, organizing a family support structure for Aerospace spouses, arranging numerous social events for employees, and supporting local charities.

Jordan said that she was deeply honored to receive the award, and she brought her best friend of 15 years from Huntsville to celebrate the morning event with her.

“I want to thank Graham Arnold, my manager, for nominating me and for his guidance and support of my career development, for allowing me the time to pursue my degree, to learn new things, stretch my wings, and to embrace leading OPAT for the past two years.”

Jordan thanked many, many individuals at Aerospace for helping her along the way, but she emphasized “I live my life to be a great example to my two daughters.”

Hardt Appointed Principal Director

April 21, 2015

Brian Hardt

Brian Hardt has been appointed principal director, Space Based Sensing Division, Space Program Operations (SPO), Space Systems Group.

In his new role, Hardt is responsible for the management of the Engineering and Integration group, and will be a technical advisor for the Space-Based Infrared System chief engineer and System Engineering and Integration Division within the Remote Sensing Directorate.

Hardt joined Aerospace in 1989 as a member of the technical staff in the Spacecraft Thermal Department of the Engineering and Technology Group. His most recent previous position was associate principal director for the Advance Projects and Special Projects groups in the Space Superiority Systems Directorate, SPO.

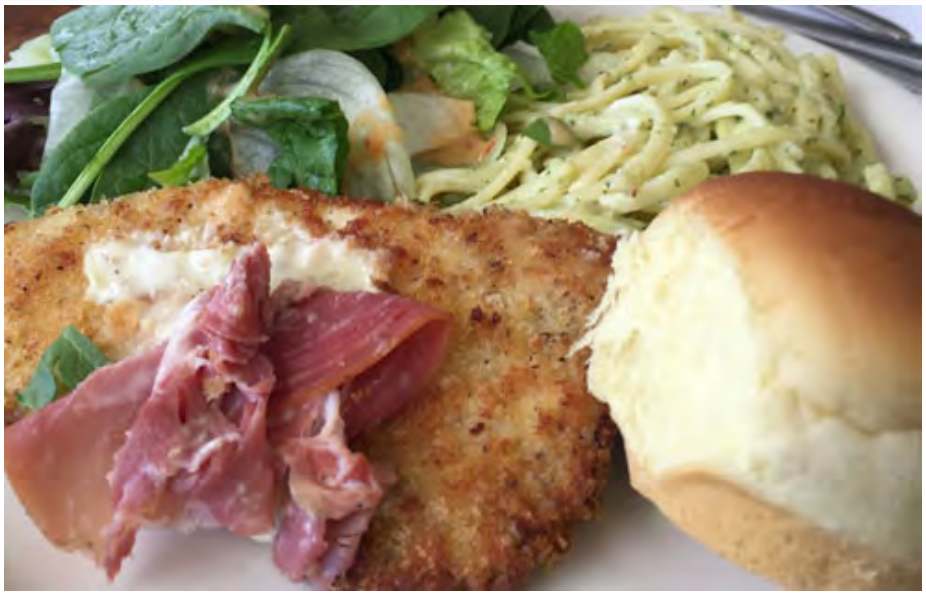
Among his achievements is a 2007 President’s Achievement Award for his leadership in “determining the root cause of and providing a solution for a life-limiting star sensor anomaly impacting numerous programs.”

Hardt has bachelor of science and master of science degrees in mechanical engineering from the University of Illinois at Urbana-Champaign.

New Operator Takes On El Segundo Cafeterias

by Bryan K Tsunoda
April 22, 2015

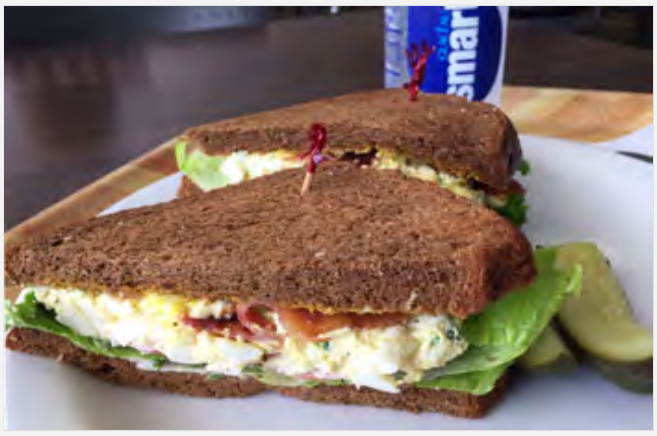
[Editor's Note: The Orbiter asked local food blogger Bryan Tsunoda, who is also a director in the Corporate Communications and Public Affairs Division, to write about the new food service in the Aerospace El Segundo cafeterias. His report, which coincides with grand opening ribbon-cutting ceremonies, follows.]



"Chicken Bellagio" is a featured dish in the California Dining Services lineup. (Photo: Bryan Tsunoda)

Long before the Corporate Announcement was posted, I heard that we were getting a new food services vendor. Like many of you, I've worked at Aerospace for a number of years and I'll be honest, I wasn't optimistic.

Facilities announced that the new vendor, California Dining Services (CDS), would conduct a "soft-open" on March. 2. I was surprised to hear the phrase, "soft-open" because it's typically used for restaurants that want to open without fanfare. This allows the staff to have on-the-job practice before a grand opening is announced.



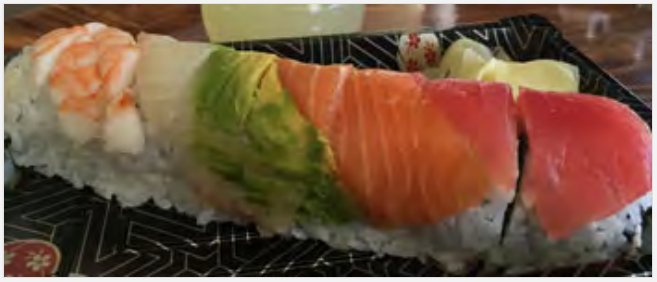
Egg salad sandwich with bacon was served with squaw bread. (Photo: Bryan Tsunoda)

I visited the A3 cafeteria during their first week of operation. Walking into the serving area, I immediately detected some changes: itemized signs with prices were hung over each serving station; the color of the walls seemed different, and the lighting was definitely brighter. I was beginning to feel more optimistic that it would be different this time around.

I appreciated seeing the detailed grill menu; I always thought that it was a secret and you had to be "plugged-in" in order to know what they offered besides burgers, grilled cheese sandwiches and french fries (e.g., how In-N-Out offers its "Animal Style" fries). I used to reside in building A3 and felt clueless about the grill during their breakfast hours.

Made-to-order salads have returned to the cafeteria as part of CDS' daily "exhibition dishes." Recently, I selected the "Oasis Salad." Grilled chicken breast, crisp iceberg lettuce, and toasted pecans were tossed with a balsamic dressing. The first thing I noticed was that the chicken was fresh, tender and full of flavor. I liked the fact that all of the ingredients were bite-size, which made it that much easier to eat.

Any skepticism about their quality vanished the day that I had their "Chicken Bellagio." Breaded chicken breast topped with thin slices of prosciutto was accompanied with a serving of thin spaghetti with a parmesan and pesto cream sauce. A mixed green salad and a dinner roll rounded out the offering. The chicken was perfectly cooked and the pesto cream sauce tasted like they used fresh basil.



Sushi is one of the international dishes served regularly. (Photo: Bryan Tsunoda)

The key to a good sandwich is using fresh quality bread. Let's face it, bread is the first thing you taste as you bite into a sandwich. Because your olfactory sense contributes to your taste experience, having bread that smells good and is fresh makes that sandwich even better. I think their bread tastes better than the average mass-produced store-bought brands and learned

that CDS obtains their bread from a bakery in Mira Loma.

Egg salad with bacon was the featured sandwich that day. I happen to really like egg salad on squaw bread. The honey and molasses in squaw bread gives it a slightly sweet flavor. The taste and consistency of egg salad, crisp iceberg lettuce, bacon, and the scent of the bread made for a very enjoyable sandwich.

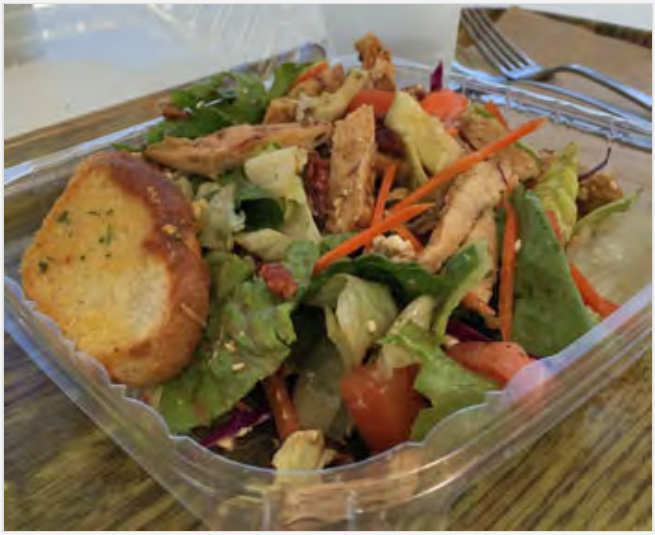
International is one of the daily serving stations and Asian dishes such as sushi, ramen, kimbaps (Korean sushi based on futomaki), and bento boxes are often featured. The sushi is much fresher than the packaged sushi that I've experienced at the South Bay Asian markets because the rice isn't hard. I was pleasantly surprised at the nice variety of items in the bento box: bulgogi beef (marinated grilled beef), kimchi (fermented vegetables), takuan (Japanese pickled radish), sliced sweet potatoes, mung salad (marinated bean sprouts), and steamed white rice.

Recently, I glanced at the weekly cafeteria menu online and I was aghast to see that I had missed eating osso buco. CDS served braised lamb shanks with mushroom risotto and sautéed veggies for only $7.25. I did a double check on the price because I've paid between $15 and $20 for lamb osso buco.

The last time I dined in the D8 cafeteria the décor was orange and brown. The lighting was dim and I had to make a cold turkey sandwich for myself. A couple of weeks ago I visited the D8 cafeteria and was delighted to see the transformation: black and white tile, brighter lighting and best of all, made-to-order food!

That day in D8, I ordered the grill special, the Santa Fe Burger. Combined with onion rings, it was priced at $6.75. While all of the ingredients (including the wheat bun) were fresh and tasty, it was lacking in "Santa Fe" flavor.

In addition to the cafeterias in A3 and D8, the A1 first-floor pantry has re-opened. Starbucks coffee, hot oatmeal, pastries, and a variety of chilled beverages are available from 6:30 a.m. – 10:30 a.m. Those that are in lunchtime meetings in A1 can appreciate having prepared items for lunch from 10:30 a.m. – 1:30 p.m.

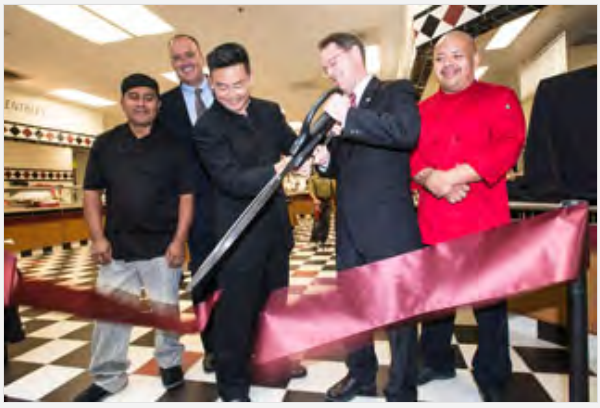


The Oasis Salad includes grilled chicken breast and toasted pecans tossed with a balsamic dressing. (Photo: Bryan Tsunoda)

I had a brief opportunity to speak with the executive chef of CDS, Jose Martinez, and learned that he likes to provide a lot of variety: chicken, beef, pork and lamb. In the brief time I've observed the menu, I'd have to agree.

Has the food improved? I think the quality and the taste of the food have both improved, but since taste is so subjective, you can be the judge.

Ray Johnson, center, vice president of Space Launch Operations, cuts the A3 cafeteria red ribbon with CDS Executive Chef Jose Martinez, left, and John Choi, regional manager of CDS. (Photo: Eric Hamburg)



John Choi, regional manager of CDS, left, and Eric Hall, general manager, Vehicle Systems Division, wield the super-sized scissors at the D8 ribbon-cutting ceremony on April 22. Looking on, left to right, are Jose Martinez, CDS executive chef; Todd Nygren, general manager, Systems Engineering Division; and Raul Elviro, D8 supervisor. (Photo: Eric Hamburg)

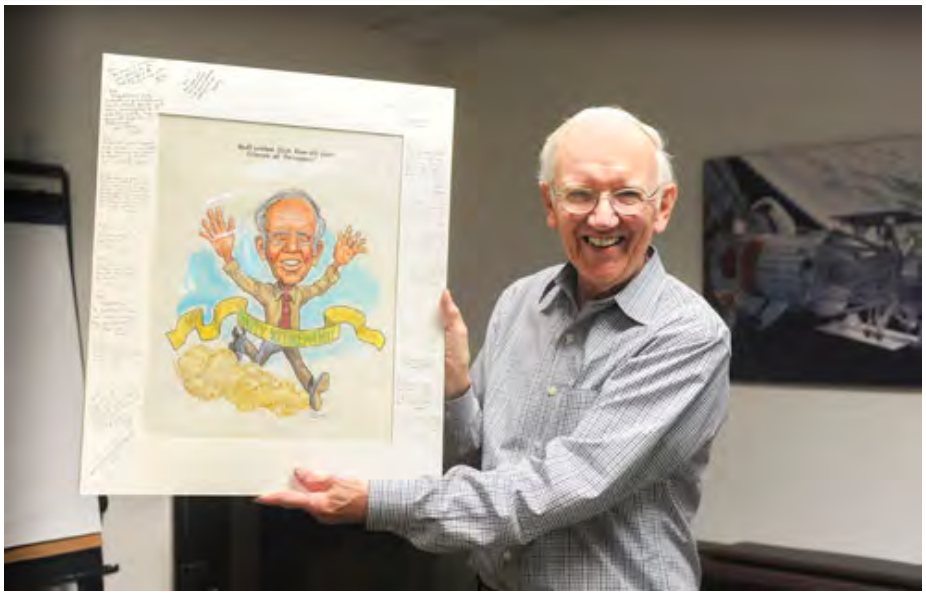
Richard Baker Closes Out 48-year Aerospace Career

by Kimberly Locke
April 21, 2015

It was 1966 when Dr. Richard Baker, senior engineering specialist, Fluid Mechanics Department, Vehicle Systems Division, Engineering and Technology Group, joined Aerospace as a member of the technical staff (MTS).

That long and productive career at Aerospace will end when Baker retires April 30, but his contributions to national security and other programs will live on.

At his retirement party, held April 16, Baker was joined by family, friends, and colleagues who wished him well on the next phase of his life. Dr. Carl Gran, principal director, Vehicle Performance Subdivision, welcomed attendees and praised the soon-to-be retired Baker for mentoring colleagues during his career. He also acknowledged Baker for his contributions to national security saying, “you’ve helped make this a safer place to live” and referred to Baker as a “genuinely nice guy.”

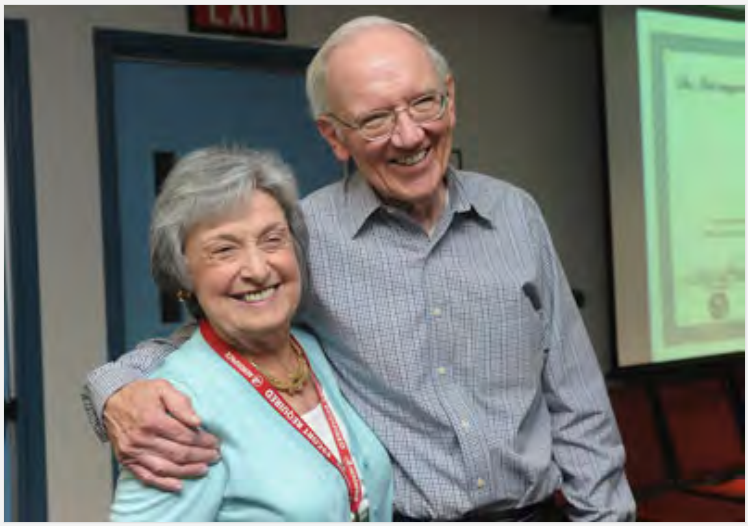


Richard Baker holds a caricature retirement card signed by his colleagues. (Photo: Elisa Haber)

Dr. Ejike Ndefo, director, Fluid Mechanics Department, Vehicle Performance Subdivision, echoed Gran’s comments about Baker’s role in supporting national security and complimented Baker for his technical versatility. “Dick was always able to flex depending on what projects he was asked to support,” said Ejike.

Baker spent the first six years of his career working out of the corporation’s San Bernardino offices until they closed in 1972.

At the time, the space race was at full throttle and there were many opportunities to seek employment elsewhere. So just what kept Baker at Aerospace both then and for many more years to come? “I have to say it was a variety of reasons,” said Baker. “One of them was, and still is, the stability of the corporation,” he said. While other companies were experiencing the ebb and flow of funding for various space and defense programs, Baker says Aerospace was keeping a steady business pace.



Richard Baker with his wife, Joanne, at the April 16 retirement celebration. (Photo: Elisa Haber)

Another key factor influencing his decision to stay was the opportunity to work on technically challenging programs and projects with others who were technically competent, he said. Add to the desirables list a work environment encompassing many inter- and intra-divisional teams, and the decision to stay for 48 years made good sense to Baker. He credits much of his early years at Aerospace as being some of the most exciting because the space business was in high gear.

Baker earned his bachelor’s, master’s, and doctorate in chemical engineering. He has spent his career specializing in reentry physics and space launch vehicle issues, while supporting what is known today as the Vehicle Systems Division. He has been involved with many launch vehicle programs including the Atlas V, Delta II, III, and IV, and the Titan IV.

Baker recalls one of the most challenging assignments was when he was asked to work on modeling the thermal response of small meteoroids, one centimeter in diameter, when entering the Earth’s atmosphere. More specifically, he was asked to determine if they survive long enough to damage orbiting spacecraft. Entry speeds of hypersonic reentry vehicles, for which Aerospace designs thermal protection systems, are a maximum of approximately 27,000 feet per

second or Mach 27.

“The Leonid meteoroids we studied were different and therein was the challenge,” said Baker. “They enter the Earth’s atmosphere at Mach 230. And yes, they survive long enough to do considerable damage.”

Baker is a recognized expert in the modeling of very high temperature and nonequilibrium thermochemical characteristics of space vehicle thermal protection systems. He has worked on satellite hardening technology and laser countermeasures for the Defense Meteorological Satellite Program, the Defense Support Program, the Global Positioning System, and many hypersonic reentry vehicle programs.

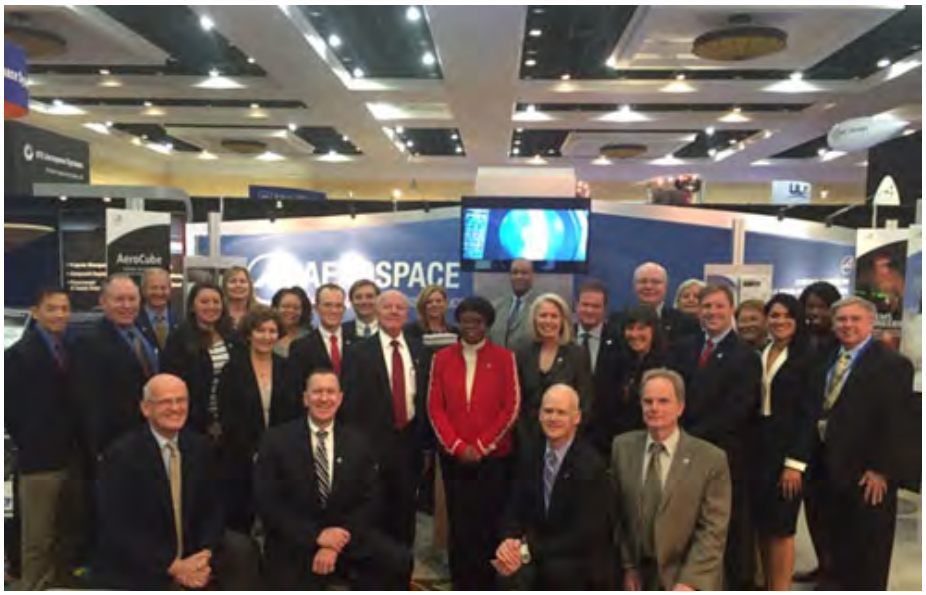
Baker is the recipient of several Aerospace Group Achievement Awards and has published and presented more than 45 professional papers. He said he has enjoyed working with many highly talented MTS in his and other departments throughout the corporation as well as his industry counterparts from both the civil and commercial arenas.

His retirement plans include traveling and continuing his involvement with his church. Baker is quick to add that he’s an avid amateur astronomer and that is a hobby he will continue to enjoy into retirement.

Space Symposium Opens in Colorado

April 14, 2015

The 31st annual Space Symposium officially opened Monday, April 13, in Colorado Springs. As usual, Aerospace was well-represented by a leadership contingent that will meet with government, military, and industry decision-makers.



The Aerospace contingent in front of the company's exhibit booth at Space Symposium. (Photo: Aerospace)

For many Aerospace executives, this is their first Space Symposium or the first one they are attending in a new corporate role.

The Aerospace attendees met at the company’s exhibit booth on Monday evening, where Dr. Wanda Austin made some opening comments welcoming everyone and emphasizing the importance of the space industry for everyone.

The Aerospace booth this year features a model of an AeroCube small satellite. Two Aerospace engineers, Dr. Joseph Gangestad and Dr. Richard Welle, were scheduled to make presentations dealing with small satellites. Their talks and other activities from the Space Symposium will be noted in updates to this article later in the week.

WEDNESDAY UPDATE:

On Monday, April 13, Dr. Richard Welle presented his paper “CubeSat Scale Laser Communication” during Space Symposium’s technical session. Welle discussed an innovative pathfinder that addresses a key bottleneck to achieving serious mission capability. The downlink data rate for CubeSats is typically in the 100s of Kbps. Aerospace will perform 5 Mbps (threshold) to 200 Mbps (objective) in August 2015. Key innovations include the use of fiber-optic laser techniques and body-steered pointing.

On Tuesday, April 14, Dr. Joseph Gangestad presented his paper titled “Rideshare-Initiated Constellations: Future CubeSat Architectures with the Current Launch Manifest.” At a system level, Aerospace assessed the performance of satellite constellations that are built up one at a time by hitching rides as secondary payloads. Gangestad discussed how upcoming rideshare opportunities can be used together to compete favorably with traditional constellations and how Aerospace’s unique set of analysis tools positions Aerospace to be a leader for customers trying to decide how to best use rideshares for their mission.

On Tuesday, April 14, Gen. John Hyten, commander, Air Force Space Command, gave a talk on the theme “Action Today to Ensure Strength for Tomorrow.” He outlined priorities and challenges, which included as priorities: winning today’s fight, preparing for tomorrow’s fight, and taking care of airmen and their families. He identified challenges as: assured access to

space, ground architecture to enable everything, and possible sequestration.

On Tuesday, April 14, a panel with the title “Prospects and Issues from the Launch Community” included Gwynne Shotwell of SpaceX and Tory Bruno, CEO of United Launch Alliance. Among topics discussed were the launch industrial base in the United States and Europe, new technology in the launch business, including recovery and reuse of launch vehicle first stages, and requirements for new launch service providers.

THURSDAY UPDATE:

On Thursday, April 16, Secretary of the Air Force Deborah Lee James gave a talk in which she warned that space could become a potential battleground, and that the days of space as a peaceful sanctuary may be coming to an end. The secretary emphasized that space is important to our way of life and to national security. The civilian sector relies on GPS, for example, in everything from cell phones to ATMs. National security communications and observation satellites are in common use. But the space environment is changing with threats from debris as well as hostile nations armed with anti-satellite weapons.

On Wednesday, April 15, international panels covered the state of the space business in specific countries. Highlights from three panels:

Germany – Panelists talked about Germany’s range of space capabilities and the state of current and future cooperation with other countries, particularly the amounts paid for given percentage use of other nations’ space assets.

United Arab Emirates – Panelists noted that the country has declared 2015 a “Year of Innovation.” Engineers working on CubeSat technologies. Virtually all space work supported by the government.

United Kingdom – Panelists talked about UK initiatives that involved space community, such as improved climate models.

Chantilly Fitness Center Now Open

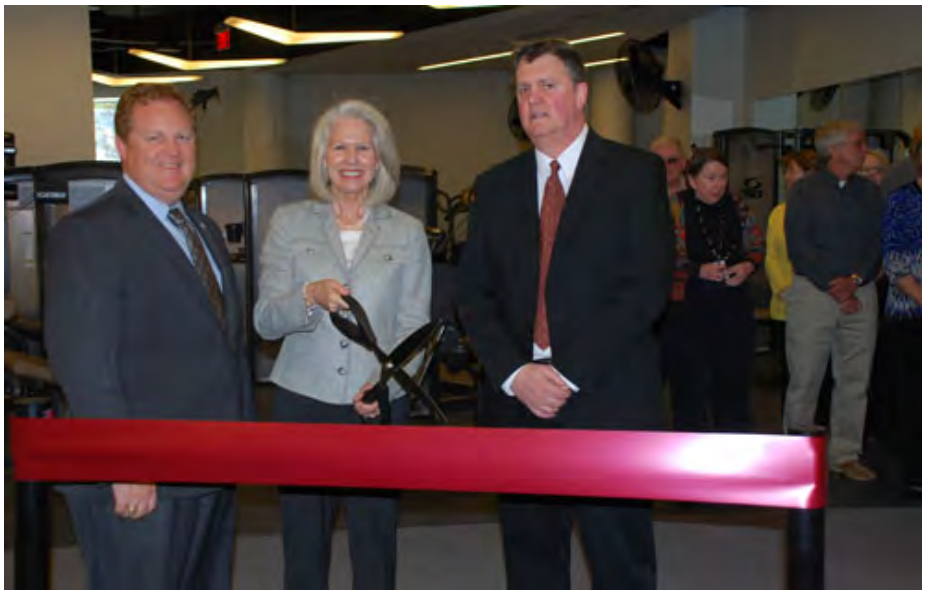
April 09, 2015

Chantilly employees have been enjoying a new fitness center this week. The center, equipped with several types of state-of-the-art exercise equipment, officially opened at noon on Monday, April 6, following a 10 a.m. ribbon-cutting ceremony.

Equipment includes both cardio and weight machines. Cardio equipment is equipped with individual television screens. The center also has a fitness studio for future yoga, aerobics, and dance classes led by volunteer instructors.

Aerospace employees, as well as contractors and government employees with Aerospace badges, have access to the gym 24 hours a day, seven days a week. Anyone using the gym must sign a waiver in order for their badge to work at the gym entrance. By Monday afternoon, more than 300 employees had signed waivers and the number continues to grow.

Said one Chantilly employee, “When we’re not working on satellites, we’re working on ourselves.”



Cathy Steele, senior vice president, National Systems Group, ready to cut a red ribbon to open the new fitness facility at the Aerospace Chantilly Campus with Facilities General Manager Darrell Reynard, left, and Mike Horn, Washington area facilities director. (Photo: Melissa Parsons)

The new fitness center in Chantilly boasts the newest exercise equipment. (Photo: Melissa Parsons)

Breaking Up This Instrument is Hard to Do

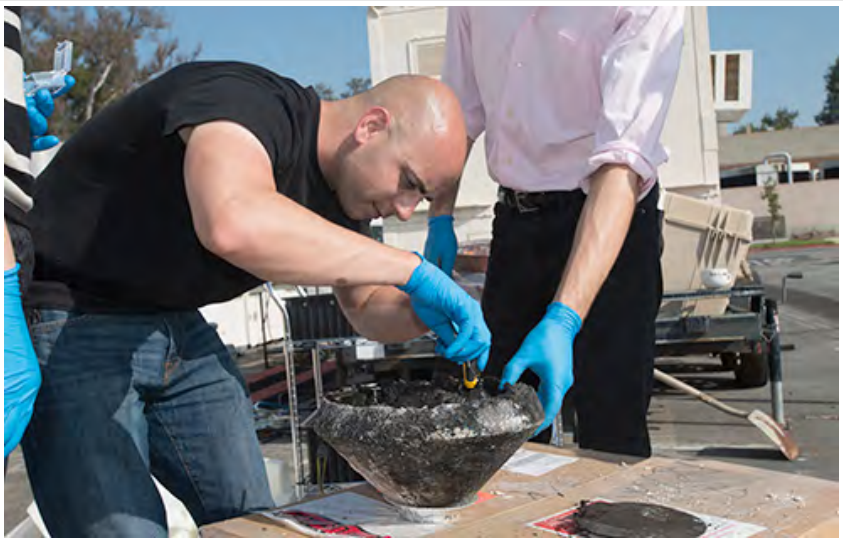
by Heather Golden
April 01, 2015

The first wireless Reentry Breakup Recorder built by Aerospace, which failed to reach the International Space Station last fall due to the explosion of the Antares launch vehicle, came home to El Segundo this week.

REBR-W's return by NASA gave the team that built it a chance to look inside and assess damage and possibly salvage any data from the electronics payload.

While the explosion was anything but a positive, the team looked to the destroyed REBR-W's return as a unique opportunity to examine the equipment under conditions that otherwise would not be available.

"This is the first time we get to pull one of these apart after," said Geoff Maul, of Vehicle Development and Operations, while carefully prying open the REBR-W's heat shield. "It's certainly seen better days. A lot of it is missing."



Geoff Maul removes the burnt electronics payload from the REBR-W on Monday, March 30. (Photo: Eric Hamburg)

The REBR-W was charred black inside and out, with globs of twisted, melted metal protruding. A large chunk of the heat shield was missing, presumably melted away, and a layer of ash covered the inner heat shield.

After a first glance, Maul predicted fuel had gotten into the payload through the now-crispy heat shield, and a revealed blackened interior confirmed his guess.

The electronics payload was visibly damaged beyond use.

"When we saw the visible gap in the heat shield, we knew there was probably also severe damage on the inside," said Mike Weaver, section manager in the Fluid Mechanics Department and project manager for REBR-W. "This is essentially a complete loss. On the positive side, it looks like the structure inside was not really damaged, but there is severe thermal damage.

"What we can gather from this is that the damage we see is … not from impact," he said. "Our design is still robust and can withstand an explosion. What it cannot withstand is sitting on the ground, surrounded by burning rocket fuel."

Following the Antares explosion, Aerospace responded to a request from NASA and replaced the destroyed REBR-W, meeting an incredible two-week deadline. Read the entire story here.

Austin Joins Obama for Advisory Meeting

April 09, 2015

Aerospace President and CEO Dr. Wanda Austin recently met with President Barack Obama at the White House during a meeting of the President's Council of Advisors on Science and Technology (PCAST).

PCAST, to which Austin was appointed earlier this year, is an advisory group of the nation's leading scientists and engineers who advise the president and the Executive Office of the President in areas where public policy can be affected by the application or understanding of science, technology, and their innovative practices.

This video follows the president during a week of activities. His discussion of PCAST begins at 1:23 in the video. Austin is onscreen starting at 1:56.

Awards and Recognitions, April 2015

by Matthew Kivel
April 07, 2015

Aerospace employees frequently earn recognition for their professional accomplishments. This Orbiter feature will acknowledge 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.

Dr. Wanda Austin and Dr. Wayne Goodman

President and CEO Dr. Wanda Austin has been selected as a 2015 American Institute of Aeronautics and Astronautics Honorary Fellow. Honorary Fellow is the highest distinction conferred by AIAA, recognizing "preeminent individuals who have had long and highly contributory careers in aerospace and who embody the highest possible standards in aeronautics and astronautics." Dr. Wayne Goodman, senior vice president, Operations and Support Group, has been selected as a 2015 AIAA Fellow. The AIAA confers the distinction of Fellow upon "individuals in recognition of their notable and valuable contributions to the arts, sciences or technology of aeronautics and astronautics." The induction ceremony for the new Fellows and Honorary Fellows will take place at the AIAA Aerospace Spotlight Awards Gala on May 6 at the Ronald Reagan Building and International Trade Center in Washington, D.C.

Michael O'Brine

Michael O'Brine, systems director in the Navigation Division, has won the inaugural GPS Heritage Award for his outstanding and sustained contributions to the success of GPS. The award was presented during the GPS Heritage Celebration banquet in Colorado Springs on Feb. 20. O'Brine, who joined The Aerospace Corporation in 1988 at Schriever Air Force Base, has been involved with GPS since the late 1970s, when he served in the GPS System Engineering Directorate at the Los Angeles AFB. "It has been a great privilege for me to work with many very accomplished and dedicated people on GPS over the years," said O'Brine. "This is truly a team effort, and I'm proud to be associated with the extraordinary … team [that] keeps GPS going."

Dr. Thomas Kashangaki, Sandra Michele Johnson, Dr. Danielle Wood, and Dr. Leslie King

Dr. Thomas Kashangaki, systems director, Earth and Space Sciences, Science and Robotic Missions Directorate, has been honored as a Science Spectrum Trailblazer in the 2014 Black Engineer of the Year Awards program. The award is granted on

behalf of the Council of Engineering Deans of the Historically Black Colleges and Universities, Lockheed Martin Corporation, and the magazine US Black Engineer & Information Technology. Science Spectrum Trailblazers are “minority men and women actively creating new paths for others in science, technology, research, and development.” Kashangaki joined Aerospace in 2010 as a senior project engineer in the NASA Programs Division. He was promoted to senior project leader in the Program Development Directorate in 2012, and to his current systems director post in 2014. He was awarded the 32nd annual Robert H. Herndon Black Image Award in 2014. Also winning a Science Spectrum Trailblazer award this year was Sandra Michele Johnson, senior engineering specialist in the Software Systems Acquisition Department. In her current role, Johnson provides software cost estimates for the Aerospace Concept Design Center and other customers. Johnson joined Aerospace in 1989 as a member of the technical staff (MTS) in Colorado. She transferred to El Segundo in 1995 to take a position in the Space-Based Infrared Systems (SBIRS) Low program office, then transferred to the Engineering and Technology Group (ETG) in 2004. Dr. Danielle Wood and Dr. Leslie King were honored with the Modern-Day Technology Leader award, given to “bright women and men who are shaping the future of engineering, science, and technology.” Wood, an MTS in the Space Architecture Department in ETG, joined Aerospace in June 2013. A major activity for Wood has been coordinating the Space Architecture Team of the Concept Design Center for several studies that support a long-term architecture analysis for the National Oceanographic and Atmospheric Administration. King is a project leader in the Alternative Launch Vehicle Systems Engineering and Integration Department. His work involves assessment of the SpaceX Falcon family of launch vehicles. He came to Aerospace in 2001 as an MTS and performed internal and external thermal analysis and modeling for the Atlas V and Delta IV launch vehicle fleet.

April 2015 Obituaries

by Carolyn Weyant
April 01, 2015

Sincere sympathy is extended to the families of:

Orval Bradford, project engineer, hired July 9, 1985, retired Sept. 1, 1995, died Feb. 27.
Samuel Breshears, member of the technical staff, hired Aug. 3, 1966, retired Nov. 1, 1991, died March 7.
Joseph Brickman, member of the administrative staff, hired July 24, 1978, retired Dec. 1, 1990, died March 9.
Gerard Hendriks, member of the technical staff, hired Jan. 9, 1967, retired March 1, 1995, died Feb. 8.
James Hurt, project engineer, hired Jan. 28, 1965, retired April 1, 1988, died March 24.
Walter Lehman, member of the technical staff, hired Oct. 11, 1977, retired Oct. 1, 1996, died Feb. 6.
Barbara Long, member of the administrative staff, hired Dec. 14, 1964, retired May 1, 2003, died Feb. 24.
Sheryl Mone, office support, hired Feb. 4, 1974, retired Sept. 1, 2003, died Feb. 6.
Barbara Scharfman, secretary/admin, hired Aug. 5, 1985, retired March 1, 2007, died March 3.
Dominic Scrooc, member of the technical staff, hired Feb. 19, 1963, retired Oct. 1, 1993, died Feb. 22.
Iris Uyemura, senior data tech specialist, hired March 23, 1981, retired June 1, 2000, died March 5.

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

April 2015 Notes

by Carolyn Weyant
April 01, 2015

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

Karl Jacobs, on the recent passing of his father, Robert Jacobs.
Laura Taul, on the recent passing of her father, Raymond Molina.

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

April 2015 Anniversaries

by Carolyn Weyant
April 01, 2015

5 YEARS

Engineering and Technology Group: Caroline Gee, Brenda Kannard, Scott Minium, Bettye Shepard, Thomas Walsh

National Systems Group: Margaret States

Operations and Support Group: David Gonzalez-Orozco, Nina Isaia

Space Systems Group: Mark Baumann, Bonnie Hattersley, Sylvia Kohn-Rich, Michael Stratton, Ivan Thorsos

10 YEARS

Engineering and Technology Group: David Haschart, John Roberts

National Systems Group: James Bockman, Zoltan Farago

Space Systems Group: Alberto Arredondo

15 YEARS

Engineering and Technology Group: Michael Lee, Alan Quan

National Systems Group: William Fedor, Douglas McNulty

Operations and Support Group: Harry Olek, Laura Verouden

Space Systems Group: Michael Combs, Walter Makovoz, Lajos Peresztegy, Ralph St. John

Systems Planning, Engineering, and Quality: Keith Blanks, Terrence Ladau

20 YEARS

Engineering and Technology Group: Samuel Lim

National Systems Group: George Matassov

Space Systems Group: Vinod Kapoor

25 YEARS

Engineering and Technology Group: Alexander Burdick, Carl Ibscher

Operations and Support Group: Louise Chavis

30 YEARS

Engineering and Technology Group: Kirstie Bellman

Space Systems Group: Steven Leontis, Peter Soller

35 YEARS

Civil and Commercial Operations: Dolores Madrid-Anzack

Engineering and Technology Group: Geoffrey Smit

Operations and Support Group: Jean Ghianuly, Ivory Porter

Systems Planning, Engineering, and Quality: Graham Arnold