Orbiter

Welcome, New President and CEO Steve Isakowitz

September 30, 2016

As of Saturday morning, Oct. 1, after 61 days as president of The Aerospace Corporation, Steve Isakowitz adds CEO to his job description.

During his time as president, his schedule has been a whirlwind of activities —meeting with customers and employees, visiting Aerospace offices outside of El Segundo, and generally learning the culture of a unique company.

Among Steve's first actions as president and CEO will be leading an Aerospace Strategic Management Committee (ASMC) offsite meeting during the first week of October to discuss company strategy for FY17 and beyond. He will present results from this meeting to all employees at a CEO All-Hands meeting on Oct. 13.



As the new fiscal year begins, Steve is looking forward to meeting more employees and leading the company into the future, building on its legacy of mission success.

Austin Passes Leadership Torch to Isakowitz

by **Gail Kellner** September 13, 2016

Aerospace employees and many distinguished guests gathered on Tuesday, Sept. 13, to witness a special occasion at the corporation — the official transfer of leadership responsibility between Aerospace CEO Dr. Wanda Austin, and the corporation's president, Steve Isakowitz.

The CEO Transition Convocation gave those in attendance in Titan IVA and IVB, and those in regional offices, the opportunity to bid Austin farewell and pay homage to her contributions as president and CEO for the past eight years. It was also the corporation's first formal introduction to Isakowitz, who will assume his position as president and CEO on Oct. 1.

Dr. David Gorney, executive vice president and host of the ceremony, noted that there have only been six presidents in the history of the corporation, who have all left an impressive legacy of accomplishments that we are still building upon today.



Dr. Wanda Austin, left, witnesses Ambassador Barbara Barrett, chairman of the Aerospace board of trustees, as she passes the Aerospace flag, symbol of corporate leadership, to President Steve Isakowitz. (Photo: Elisa Haber)



He acknowledged a large group of special guests in attendance and introduced Lt. Gen. Samuel Greaves, Commander, Space and Missile Systems Center.

Greaves expressed his sincere thanks to Austin, discussed many of her accomplishments, and said that her tenure was simply outstanding, all the while remarking that he does not use the word "outstanding" very often.

He emphasized that leadership is action — not a position. He also discussed the important relationship the Space and Missile Systems Center has with Aerospace and the broader national space community.

Ambassador Barbara Barrett, chairman of the Aerospace board of trustees, discussed the challenges of finding a new CEO as accomplished and dedicated as Austin.

"Steve Isakowitz has the right set of skills and experience — in government and industry — to lead Aerospace in a rapidly changing environment of constrained customer resources, challenging threats, and exciting new space technologies," she said.



Dr. Wanda Austin with husband, Wade, during convocation ceremony. (Photo: Elisa Haber)

Barrett thanked Austin for her more than three decades of service to Aerospace and the nation. "In an industry known for the phrase 'failure is not an option,' Dr. Wanda Austin has repeatedly excelled where less visionary leaders would have fallen short," she said.

She presented Austin with a gift — a donation of \$12,500 to the Aerospace STEM Endowment Fund, which directly supports underprivileged students as they work to pursue academic and career paths in math and science. She explained that Austin wanted to donate her traditional outgoing CEO gift to the STEM Endowment fund, and the managers and general managers were inspired to donate this additional sum. This gift will make it possible to award an additional Dr. Wanda M. Austin STEM Scholarship to a deserving student in 2017.

Austin took the stage to detail some professional highlights she has experienced during her eight years as president and CEO, emphasizing that each achievement has been a result of great teamwork.

"I'd like to thank all of you who have served this company with such distinction for so many years," she said. "The work that we have done together — as a team — has enabled us to reach new heights as a company and to provide exemplary support to our customers — all for the benefit of this great nation.

She honored two people who have been critical to her success at the corporation. First, Larcine Gantner, her executive assistant, who she termed "unflappable." The second individual was Gorney who she defined as analytical, creative, hard-charging, and amiable – a rare combination, according to Austin. Both Gantner and Gorney are retiring this year after 38 and 37 years, respectively.

Austin said that she looks forward to continuing to learn and explore and to enjoy her family. "It will be a big change for me and I can assure you that The Aerospace Corporation will never be far from my mind," she said. "This company has shaped who I am today, and I will always feel profoundly connected to all of you here at Aerospace."

To symbolize the passing of the rights and responsibilities of the office of the president and CEO, a new flag was created and flown over the El Segundo corporate headquarters. At the ceremony, the flag — folded and presented in a custom case — was passed from Austin to Barrett, who then handed it to Isakowitz.

Isakowitz took the stage and accepted the rights and responsibilities entrusted to him by Barrett and the Aerospace board of trustees.

"This remarkable company does so much for our nation, and to be a part of its great mission, and serve alongside each and every one of you, is certainly the highlight of my professional career," he said

He shared that when he first graduated from Massachusetts Institute of Technology, Aerospace was his first job offer. Although he passed on that offer, he said he feels that he now has the experience and perspective to contribute in ways that he never could have 30 years ago.



"Over the past couple of months I have met with many of you and I have seen, and heard, the wealth of innovative ideas, technical expertise, and enthusiasm you bring to our mission."

He introduced his wife and his mother, a Holocaust survivor from World War II, who were both in attendance. He said that his parents taught him the "values of hard work, freedom, and tolerance — and to never take this great nation for granted."

He also announced that he has selected Dr. Wayne Goodman as Aerospace's next executive vice president. He said that Goodman has served as a teacher and a guide and has made it possible for him to gain a deeper understanding of the inner workings of the corporation.

Isakowitz concluded his remarks with a very heartfelt and passionate reference to his upcoming first day on campus Oct. 1.

"I will be fueled by the remarkable example they [his parents] have set, and their guidance; I will be inspired by all that Dr. Austin has accomplished and the tremendous legacy she has left for me to build upon; I will be motivated by the commitment we have to serve all of our customers and the citizens of this great country; and I will absolutely, unequivocally, be committed to working alongside you, to learning from you, and to ensuring the success of this company, its employees, and its customers for many years to come."

Can Your Car Hear Me Now?

by **Laura Johnson** September 19, 2016

The development of autonomous cars is rolling along, and one of the issues to tackle is how these cars detect and identify obstacles in their surroundings. Aerospace's Kyle Logue is proposing audio sensors as a potential low-cost method to help address this problem.

"Audio mics are an untapped sensor in the autonomous vehicle market," he said. "A concise processing solution would allow high-accuracy positioning of unknown signals for object avoidance, collision warning, blind spot detection, and a general purpose sensor for autonomous driving."

Other methods of detection are available,



Kyle Logue takes the audio sensors for a spin while Jason Zheng records data. (Photo: Heather Golden)

such as radar and lidar, but they can be expensive or they have limitations. Audio sensors are significantly cheaper, and have the potential to fill some of the gaps left by other sensing methods.

Logue has performed several field tests to collect data for his idea. He started by putting static microphones at set intervals to collect sound and calibrate his localization algorithms.

Then he taped eight microphones to his car and drove it around in circles in Aerospace's parking lot while emitting sound from a speaker at a known location (see video of test below).

The equipment Logue used is commercially available and inexpensive. The trick is in processing the data, and Logue is developing algorithms that will turn that data into usable information.

"The primary obstacle to such a system would be the signal filtering stage given that roads are very noisy environments and that sensors themselves would be exposed to significant interferers like engine, exhaust, and road noise," he said.

Regardless, Logue anticipates that audio sensors could be used to detect other cars, pavement types, tunnels, and more. The sensors can detect actual sound emitted from a source, like a car horn, or the way the sound bounces off a surface, such as a wall.



He also thinks the sensors could pick up on internal noises from the vehicle itself. "This would enable early fault detection for things like timing belts, wheel wear, axle bearings, and other identifiable signatures," he said.

Another potential use is to record the audio data, which could then be used to analyze an accident for insurance purposes.

The possibilities are definitely intriguing, and Logue is working to make them a reality.

"The addition of multiple low cost audio sensors for localization of other vehicles, situational awareness, fault diagnosis of common problems, and recordings for crash reconstruction would be a cheap and valuable addition to any future vehicle," he said.



Before putting the sensors on an actual car, Logue and Zheng collected some preliminary data with a stationary setup. (Photo: Kyle Logue)

Board of Trustees Approves Merit Budget at Austin's Final Meeting

by **Matthew Kivel** September 12, 2016

In her final quarterly report to the Aerospace board of trustees as CEO, Dr. Wanda Austin recapped significant events of the past three months and reflected upon the company's accomplishments during her tenure. In addition, during the three-day meeting which was held in Colorado Springs, the board of trustees approved a budget for capital expenditures as well as a budget for a merit increase in fiscal year 2017.

The merit increase will be a combination of lump-sum payments and/or salary increases and will be effective in February 2017. The merit budget for nonsupervisory MTS must be negotiated with the Aerospace Professional Staff Association.

During her briefing, Austin discussed the transition activities of incoming Aerospace President and CEO Steve Isakowitz, who will assume the post effective Oct. 1. Since Aug. 1, Isakowitz has served as Aerospace president and has been meeting with customers, the board of trustees, Aerospace senior management, and employees at several locations.

Austin also reported that Heather Laychak joined the executive council as vice president and chief human resources officer on July 11.

In the area of launch support, Austin noted that Aerospace supported four successful launches in the recently completed quarter.

On June 11, a national security mission was launched on a Delta IV Heavy from Cape Canaveral. This was the first launch to use the "staggered engine start" procedure at Cape Canaveral.

On June 24, the Mobile User Objective System 5, or MUOS-5, was launched on an Atlas V from Cape Canaveral. The launch went well, but the spacecraft experienced a propulsion system anomaly and did not attain its intended orbit. Even though Aerospace does not provide satellite mission assurance for the MUOS program, the corporation is supporting the anomaly investigation and working to determine whether the anomaly will impact future national security space missions.



A second national security mission was launched successfully on July 28 from Cape Canaveral aboard an Atlas V. Then on August 19, two Geosynchronous Space Situational Awareness Program satellites— as part of the AFSPC-6 mission— were launched aboard a Delta IV medium launch vehicle.

Looking ahead, Austin reported that during the next six months, there are four scheduled launches for which Aerospace will either have mission assurance responsibilities or will be monitoring.

Austin reported that Aerospace is currently supporting four rocket propulsion system efforts from four different providers— SpaceX for Raptor engine development, Orbital-ATK for solid motor core vehicle and strap-on development, Aerojet-Rocketdyne for AR-1 development, Blue Origin for development of the BE-4 engine that will be used on the United Launch Alliance Vulcan launch vehicle.

In intelligence community work, Aerospace's NEXUS — a state-of-the-art demonstration, innovation, and collaboration environment developed for intelligence community customers — is now in its initial stages of operation.

In Vaeros news, Aerospace delivered its final assessment of the capabilities of NASA's Goddard Space Flight Center (GSFC) to the organization's leadership personnel in order to assist GSFC with the development of its strategic plan. This review was requested by the Center Director at GSFC, Chris Scolese.

In Enterprise Information Systems news, Aerospace has implemented a single SCI-Classified network, putting El Segundo, Colorado Springs, and Chantilly all on one network.

After reviewing the news from the past quarter, Austin discussed a selection of key Aerospace accomplishments that occurred during her time as president and CEO. The highlights included:

A perfect record of launch success (56 out of 56) for Aerospace-certified launches;

The construction of numerous new facilities and buildings, including the Chantilly campus and the building A1 headquarters in El Segundo, the A6 lab pod, the Propulsion Research Facility, the Huntsville office, the Crystal City Office, the bridge to the Space and Missile Center, and the Mount Wilson Aerospace Facility for Integrated Optical Tests;

The successful mitigation of tumultuous economic circumstances stemming from sequestration, the great recession, and the government shutdown of 2013;

The restructuring and rebranding of Aerospace's civil and commercial business organization as Vaeros; and A focus on leadership and mentoring to develop the next generation of STEM professionals.

Austin will retire as CEO of The Aerospace Corporation effective Oct. 1, after a very successful 37-year career at the corporation. A CEO convocation ceremony will be held on Tuesday, Sept. 13, at 9:30 a.m. PT at the Aerospace El Segundo campus in A1 Titan IVA and IVB. The convocation will also be made available via webcast, VTC, and audio bridge. All employees are invited to attend.

Three Honored with President's and Trustees' Distinguished Achievement Awards

by **Wendy O'Dea** September 14, 2016

Three individuals received The Aerospace Corporation's highest honors on Wednesday, Sept. 14, when they were awarded the 2016 President's and Trustees' Distinguished Achievement Awards. The annual awards recognize an individual or team for their commitment to excellence, demonstrated by the highest level of achievement in the areas of science, technology, engineering, analysis, systems engineering, program and business management, or administration.



Award winners, left to right, Pete Phillips, Akhil Gujral, and David Caldwell. (Photo illustration: Stuart Araki)



The Trustees' Distinguished Achievement Award was awarded to Akhil Gujral, while David J. Caldwell and Peter W. Phillips each received the President's Achievement Award.

Dr. Wanda Austin hosted the ceremony, her last one as president and CEO. After Justin McNeil, Jr. sang an inspiring rendition of the national anthem, Austin addressed the crowd in Titan IVA and IVB referencing the old saying: "Success usually comes to those who are too busy to be looking for it."

"I can't think of words that are more fitting for today's award recipients than these," Austin said. "Today's honorees understand the importance of our mission, the tremendous expectations of our customers, and that the end result of their work is far more significant than any individual award or citation they might receive. They do not seek the spotlight, simply because they are too busy devoting their time to developing innovative technical solutions in service of our nation."

Award winners receive a stylized crystal eagle-wing statuette – which was displayed alongside the podium – and their names will be added to the corporate display in the A1 lobby. Each individual president's award winner received \$12,500 and the trustees' award winner received \$25,000.

Trustees' Distinguished Achievement Award: Akhil Gujral

Retired Air Force Gen. William Shelton, chair of the awards subcommittee of the board of trustees, presented the Trustees' Distinguished Achievement Award to Gujral, principal director for Space Systems Group's Alternative Launch Vehicles, for "exemplary leadership and exceptional technical assessment during the Falcon 9 launch system certification."

Gujral has led a comprehensive cross-organizational effort since 2010 that resulted in the May 2015 Air Force certification of the Falcon 9 launch vehicle. As the primary architect of the certification plan, he provided the customer with strategic guidance and detailed technical input while building trusted relationships within the highest levels of the Space and Missile Systems Center and SpaceX. In the process, he expanded the Aerospace team from three STEs to 100, assembling a full program office from the ground up.

As a result of the work of Gujral and his team, the Falcon 9 launch system is now certified to compete for national security space missions, setting the stage for introduction of a new launch system for the first time in 20 years. Additionally, the first competitive launch award in more than a decade was awarded to the Falcon 9 this year.

In his comments Gujral thanked the Alternative Launch Vehicles team. "The key is to empower the right folks, stay flexible, stay objective and allow people to be innovative," he said. He also thanked some of the other key players as well as his family, who were in attendance.

President's Achievement Award: David J. Caldwell

Caldwell, senior engineering specialist for the Engineering and Technology Group's Electronics Engineering Subdivision, was recognized for his "outstanding technical leadership, enabling the return to intercept and fielding of the Exoatmospheric Kill Vehicle." His contributions influenced a return to the test and fielding of the Ground-Based Midcourse Interceptor (GBI) on behalf of a national security client.

In 2010, there were two flight test failures of the GBI missile deterrent system. In 2013, an additional flight test, which employed an Exoatmospheric Kill Vehicle (EKV), also failed. As a result, production of the interceptor was halted and a failure investigation was launched. Caldwell served as the Aerospace representative on the failure review board and his work was instrumental in devising unique technical tools to process limited, critical data. His subsequent analyses were key to the client's decision to pursue additional design mitigations, despite test success.

After Caldwell's recommendations were adopted—and less than a year after the 2013 failure—the EKV successfully intercepted its target as part of a new flight test. The program is now on schedule to meet a congressional commitment to field 44 interceptors by the end of 2017.

"When I took on this project, I knew it was going to be particularly challenging," Caldwell recalled. "But I was confident because I've always had great people behind me." He also shared his personal motto of "Don't sell out and don't oversell" and said the key to success was perseverance and staying true to our processes.

President's Achievement Award: Peter W. Phillips

Phillips, Vaeros Systems Director for NASA and other civil space programs, received his award for "outstanding leadership in program execution on several high-priority NASA programs."

According to NASA, Phillips was the "go-to person" when several of their most prestigious programs, including Suomi National Polar-orbiting Partnership (the precursor to JPSS-1 and -2), Landsat 8, and GOES-R, had serious technical and schedule



issues during assembly, test, launch, and operations. Phillips' efforts enabled these critical national programs to recover mission performance and launch schedule. He designed recovery plans and led diverse government and contractor teams that implemented his plans, resulting in restoration of mission technical performance and overall launch schedule.

Phillips' contributions were recognized with several prestigious NASA awards: the 2012 NASA Distinguished Public Service Medal—the highest award NASA can give to a non-civil servant, the 2015 Robert Goddard Exceptional Achievement for Customer Service Award, and the 2014 GOES-R Program Esprit de Corps Award.

"The proudest part of my career has been to help move these missions forward," Phillips said. "I try to remember that the reason we do this is to make a better world for the next generation." That generation includes Phillips' four children, who he thanked along with his wife, a multitude of Aerospace team members, clients, and contractors.

Following the ceremony, a reception was held in front of building A1.

Isakowitz on Tour in Chantilly and Crystal City

September 01, 2016

Aerospace President Steve Isakowitz received a whirlwind introduction to the company's East Coast operations on Tuesday and Wednesday as he visited senior customers at the Pentagon, held a listening tour focus group with Chantilly employees, and attended an all-hands meeting in Crystal City, among many other activities.

In addition to Isakowitz, West Coast-based senior leaders who participated in the East Coast tour included Dr. Wanda Austin, Dr. Wayne Goodman, and Heather Laychak, new vice president and chief human resources officer.

The Crystal City all-hands on Wednesday, comprising Vaeros and Systems Planning, Engineering, and Quality employees, was a farewell to Austin and welcome to Isakowitz.



"There are new challenges in our future," Austin told the group. "Get ready to adjust to change." Isakowitz commented that "it's pretty amazing all the things we do here."

Aerospace President Steve Isakowitz meets employees in Chantilly. (Photo: Kelly Hart)



CEO Dr. Wanda Austin discusses leadership. (Photo: Kelly Hart)

The day before in Chantilly, Austin presided over a leadership discussion centered around the contents of her book released earlier this year, *Making Space: Strategic Leadership for a Complex World*.

When asked what was her hardest lesson from her time as CEO, Austin replied that it was "to accept the fact that you can take a horse to water, but can't make it drink. When a customer makes a decision that we don't believe is the optimal decision, you have to hold your head high and accept the choice that's been made."

At a meet-and-greet event with Chantilly employees later in the day, Isakowitz was asked why he decided to come to Aerospace. He replied it was an easy decision.

"This is the most interesting of times in the space business," he said. "Our customers in all three sectors of space — civil, commercial, and national security — are looking for efficiencies and different ways of looking at the problem. I can't think of

another organization that has its fingers in the solutions as much as Aerospace."



Tyson Interviews Austin for "Star Talk"

September 14, 2016

Astrophysicist and popular science personality Neil deGrasse Tyson visited the Aerospace El Segundo campus on Tuesday, Sept. 13, to interview Aerospace CEO Dr. Wanda Austin for his "Star Talk" podcast. The interview also may be used for a future program to air on the National Geographic Channel.

Tyson makes regular appearances on major news programs and popular shows (for example, "The Daily Show" and "The Late Show with Stephen Colbert") and hosted the 2014 series "Cosmos: A Spacetime Odyssey."

Austin discussed her role at Aerospace, Aerospace's mission, her life experiences, and STEM influences. Both she and Tyson are graduates of the Bronx High School of Science and they spoke about the school's nurturing academic environment and its impact on each of them at critical points during their lives.



Neil deGrasse Tyson interviews Dr. Wanda Austin. (Photo: Elisa Haber)

The conversation was wide-ranging and thoroughly entertaining, pairing Tyson's trademark humor and curiosity with Dr. Austin's thoughtful insights and personal anecdotes.

The podcast does not have a scheduled air date, but the episode is expected to debut sometime in 2017. Tyson's "Star Talk" is the first and only popular commercial radio program devoted to space.

Flight Path Museum Opens Space Exploration Gallery

by **Kimberly Locke** September 22, 2016

The Space Exploration Gallery, the newest exhibit at the Flight Path Museum and Learning Center and cosponsored by Aerospace, has officially opened following a ribbon-cutting ceremony held Thursday, Sept. 22.

The museum, which is located adjacent to Los Angeles International Airport, hosted the event. Dr. Malina Hills, vice president, Space Program Operations, addressed attendees during the program. Hills shared her thoughts about the gallery and the role it will play in exposing visitors, and especially students, to space. "It will undoubtedly lead, at least some of them, to take an interest in science, math, engineering, astronomy, or any other academic field that relates to space," Hills said.

The museum's mission includes encouraging youth to pursue education and careers in aviation and aerospace-related fields, a natural fit for the Aerospace-sponsored gallery.

"It is my hope that at least a small portion of that new generation of scientists and engineers will have been inspired by something they read, saw, or experienced right here at Flight Path," said Hills.

At the gallery's entrance, titled "The Journey Begins," visitors are greeted with the Konstantin Tsiolkovsky quotation, "Earth is the cradle of humanity; but one cannot live in a cradle forever." As visitors enter, a series of colorful, wall-mounted graphics on the east side of the room are displayed, featuring the story of early visionaries who, during the past 4,000 years, have contributed to humankind's knowledge and understanding of modern space exploration. Biographic plaques of the early pioneers of Earth-based space exploration provide historical context for the displays and exhibits that follow.



Moving on to the south wall of the gallery, titled "The Journey Continues," onlookers are treated to the history and major events of humankind's modern space exploration efforts. A series of plaques with text and images, beginning in the 1950s and moving to the present, describe the major space flight and space exploration achievements of each decade. A video monitor featuring historic footage of many of the events described in the gallery enhances the experience.

The west wall of the gallery is still in development and will ultimately feature information about the technologies the aerospace industry has developed and employs to launch and operate various space systems.

The gallery also includes display cases featuring an assortment of space vehicle and satellite models, as well as spacerelated memorabilia. The centerpiece of the displays is the space flight suit worn and donated by space shuttle astronaut and



Dr. Malina Hills and retired Aerospace engineer Steven Soukup at opening of the Space Exploration Gallery of the Flight Path Museum and Learning Center on Thursday, Sept. 22. (Photo: Elisa Haber)

retired U.S. Air Force Gen. Kevin Chilton. Chilton is also a former Aerospace trustee. The museum is hoping to add items from the public and other aerospace industry members in the months and years ahead.

The gallery's concept is the brainchild of Aerospace retired engineer Steven Soukup, who is a retired U.S. Air Force colonel and also serves on the museum's board of directors. Soukup thanked Aerospace and members of the corporation's Corporate Communications and Public Affairs Division for their contributions to the gallery's design, graphics, and editorial content. A reception immediately followed the opening.

Flight Path Museum and Learning Center, a nonprofit corporation, was founded in 1995 and is open to the public at no cost. It is located at 6661 Imperial Hwy., Los Angeles.

Editor's Note, Sept. 23: It is the general policy of the Orbiter to refrain from naming members of the Corporate Communications and Public Affairs Division in posted articles to avoid the appearance of producing self-serving content. However, a significant number of Aerospace employees have inquired as to why certain members of Corporate Communications, who worked on the Flight Path Museum exhibit for more than a year, were not named in the story. For the record, CorpComm personnel Shane Glaseman and Jason Perez created text and art for the gallery exhibit and Flint Myers worked with the museum on the modular display. Corporate archivist Bonnie Smith conducted early research for the project. Other Aerospace employees attending the gallery opening included: Sabrina Steele, Kimberly Locke, Elisa Haber and Bill Ailor.

Media coverage of the opening can be viewed at the following links:

http://www.wdrb.com/story/33159750/flight-path-museum-unveils-new-space-exploration-gallery

http://www.dailybreeze.com/lifestyle/20160922/space-history-comes-to-life-at-flight-path-museum-near-lax

2016 September Obituaries

by **Elaine Young** September 16, 2016

Sincere sympathy is extended to the families of:

William Alarid, member of technical staff, hired Dec. 23, 1965, retired Dec. 1, 1997, died Aug. 28, 2016.
Victor Cortez, technical support staff, hired Nov. 12, 1973, retired June 1, 2012, died Aug. 8, 2016.
Brett Coulter, technical staff, hired March 6, 1989, retired July 26, 2003, died Aug. 23, 2015.
Wayne Dennis, member of technical staff, hired Feb. 20, 1961, retired Dec. 1, 1985, died Jan. 30, 2016.



Robert Gladson, member of technical staff, hired Dec. 1, 1961, retired Nov. 1, 1991, died Aug. 19, 2016.
John Krisilas, member of technical staff, hired July 28, 1961, retired Jan. 1, 1990, died Aug. 12, 2016.
George Loftin, member of technical staff, hired June 21, 1977, retired June 16, 1989, died Aug. 23, 2016.
Robert Nordli, member of technical staff, hired Nov. 6, 1977, retired Feb. 1, 1988, died Feb. 2, 2016.
Robert Redpath, member of technical staff, hired May 20, 1980, retired Sept. 1, 1987, died June 20, 2016.
Kenneth Steffan, member of technical staff, hired Aug. 23, 1960, retired June 30, 1994, died Aug. 30, 2016.
Philip Talley, member of technical staff, hired Nov. 7, 1970, retired April 1, 1993, died April 1, 2016.

September 2016 Anniversaries

by **Elaine Young** September 16, 2016

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Engineering and Technology Group

James Matsumoto, Lynn Friesen

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Operations and Support Group

D Nelson Jr

35

Engineering and Technology Group

Vera Bledsoe

National Systems Group

Dennis Persinger

Space Systems Group

David Schmitt

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National Systems Group

John O'Donnell, Mary Nichols

Operations and Support Group

Celia Canaan, Darlene Daniels, Ernie Calderon

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Engineering and Technology Group

Eric Hall II, Mark Mueller, Reynaldo Urbano, Samuel Osofsky

Enterprise Information Services

Cesar Rodriguez

National Systems Group

Marcus Shaw

Space Systems Group



Glenn Law, Hans Mossberg, Lester Torres, Willie Bell Jr

Vaeros

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National Systems Group

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Space Systems Group

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Engineering and Technology Group

Martin Ciofalo, Tien Luong

Enterprise Information Services

Dena Taylor

National Systems Group

Pamela Yanosky

Operations and Support Group

Mary Melton, Paul Murphy

Space Systems Group

Alan Sullins, Erina Murakami, Mark Coodey

Systems Planning, Engineering, & Quality

Yelena Savranskaya, Alan Adams

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Engineering and Technology Group

Clyde Moseberry, David Chang, Elisabeth Nguyen, Eltefaat Shokri, Miroslav Sir,

Rick Oleszczuk, Sandra Breda, Timothy Guild,

Enterprise Information Services

Lin Mei Wong

National Systems Group

David Duvall, Gail Haddock, William Greenwell

Operations and Support Group

Belinda Rivera

Space Systems Group

Arthur Dhallin, Blake Bartosh, Daniel Burkett II, Greg Kobayashi,

Ioan Caridas, Kenneth Price, Patrick Collins,



Systems Planning, Engineering, & Quality

John Dietzler

Vaeros

Bernard Vecerek, Bruce Collins, Lisa Hague

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Engineering and Technology Group

John Tran, Richard Lee

Enterprise Information Services

Suresh Singh, Timothy Schroeder

National Systems Group

Timothy Litschgi

Operations and Support Group

Mui Klein

Space Systems Group

Brian Coultrip, Douglas Cummings

Vaeros

Taylor Mize

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310-336-5000

www.aerospace.org

Orbiter Staff: orbiter@aero.org Editor: Lindsay Chaney, 310-336-0961, <u>lindsay.d.chaney@aero.org</u> Assistant Editor: Laura Johnson, 310-336-1179, <u>laura.m.johnson@aero.org</u>