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Military Veterans Look Back

Posted Nov. 29, 2012 · Feature



Photo courtesy Mitch Mitchell

The Aerospace Corporation and the Aerospace Military Veterans affinity group set aside the month of November to acknowledge the company's military veterans for their service to our country and to Aerospace. Click on any photo below to begin the slideshow; click again to return to this page. Enjoy the interview highlights video below, and check back next week, when a link to a more complete set of interviews will be available.

Aerospace Vice President, Program Assessments Howard "Mitch" Mitchell in 2003, when he was an Air Force major general, next to a drone aircraft in Jacobabad, Pakistan.

[Show as slideshow]



Leadership Series: Activity Outside El Segundo

Posted Nov. 29, 2012 · Article

Cathy Steele, vice president, Strategic Space Operations, discusses Aerospace support to the Air Force at locations throughout the West.

Transcript

Sabrina Steele: Thanks for taking time to join us in the latest of our leadership webcast series. I'm Sabrina Steele, principal director of Corporate Communications here at The Aerospace Corporation. Today we have with us Cathy Steele; she's the vice president for Strategic Space Operations. She's here to talk to us about the value and success that she's seen as we support our customers in other Aerospace locations. Hello, Cathy. Thanks so much for joining us today.

Cathy Steele: Hello, Sabrina, thank you for having me.

Sabrina: You came in from Colorado last night.

Cathy: Late last night on a direct flight.

Sabrina: Welcome to beautiful, sunny Southern California.

Cathy: It's a bit warmer here, which is nice.

Sabrina: It's nice. Well, I thought first we'd talk about your career here at Aerospace because, in your career path, we can see you've worked in lots of other Aerospace locations, so I thought that was a good place to start.

Cathy: Sure. I've been with Aerospace a little bit over 21 years. And I started out as a level one here in El Segundo, and I progressed throughout my career moving around the company. After I was in El Segundo, I relocated up to Sunnyvale, and then after that I relocated back to Chantilly and then Rosslyn, and I've been in Colorado Springs since 2008.

Sabrina: So in 2008, that's when you took the helm of Strategic Space Operations...

Cathy: That's correct.

Sabrina: Can you tell us a little bit about your business that you lead there and also your customers and just kind of the things that your team does?

Cathy: Sure. Colorado Springs Aerospace has been there since 1989. We were originally positioned there to support Air Force Space Command, and their primary role is to organize, train, and equip for the Air Force's Space Operations. And Aerospace brought the first FFRDC presence in that community. I've been there for four years, and that job has expanded quite a bit. Right now, under my organization, we have eight different customer bases, and I've got four additional regional offices in addition to Colorado Springs.

Sabrina: So you've got Colorado Springs; what are some of the other locations and the kinds of customers that you support there?

Cathy: OK, well, in Colorado Springs we primarily support Air Force Space Command at Peterson AFB. In Albuquerque we've got a number of customers in different locations; at Kirtland AFB we have the Operationally Responsive Space [ORS] Office. We also have Air Force Research Lab, AFRL. We also have the Space Test Program [STP] which is through SMC's Space Development and Test Directorate [SMC/SDTD]. We also have Air Force Nuclear Weapons Center [AFNWC]; that's a new area for Aerospace since 2008. And we also support the PEO for Strategic Space, and that is the acquisition and contracting arm of Nuclear Operations for the Air Force.

Sabrina: So is that all out of Albuquerque?

Cathy: Well, most of it is out of Albuquerque. We do have two other regional offices in addition to that. Our STP [Space Test Program Support] is also in Houston at Johnson Space Center which primarily focuses on the International Space Station. In addition, our work on the nuclear operations side is up at Hill AFB in Ogden, UT. And there's one more site that I have in Northern California, up in Santa Maria at Vandenberg AFB. I have resources supporting the joint forces combat commander; that is JFCC under USSTRATCOM, for Space; JFCC Space, which is the Joint Space Operations Center known as the JSpOC.

Sabrina: Right, OK, the JSpOC. So when I think of Vandenberg, I think of launch ...

Cathy: Yes, we also have Aerospace in the launch facilities. Aerospace — even though they're co-located on base — they don't interact a lot, but we do have a nice Aerospace footprint up there and facilities, and it's good to know in Colorado Springs that it's not only my organization; it also has

SBIRS up in Denver, we've got GPS, MILSATCOM, and ETG and other representation as well.

Sabrina: Oh, wow. So you mentioned nuclear operations and how it was a new area for us since 2008. Can you tell us a little bit about how that came about and the kind of support, because I don't typically think of Aerospace as supporting nuclear operations.

Cathy: That's true. In fact, it was a surprise to us as well. Over the last six years, the Air Force has been looking to strengthen its presence and its accountability in nuclear operations; there were several incidences that prompted this. In 2006, there was a discovery of a nuclear fuse that was delivered to Taiwan mislabeled as helicopter parts.

Sabrina: Oh, I remember that.

Cathy: And in 2007 there was the flyover of six *live* nuclear missiles from Minot AFB in North Dakota to Barksdale in Louisiana, and General Kehler at Air Force Space Command at the time had responsibility for that, so he called Aerospace in 2008 and asked for our mission assurance support to help reinforce the Air Force's stewardship of their nuclear resources. So that has been a tremendous growth area. In fact, it's a great success story for Aerospace; we've been taking a lot of space expertise on guidance, propulsion, navigation systems, batteries and such, and we've been taking what we've learned supporting our space customers and we've been applying it to the new nuclear enterprise. It's been a great success.

Sabrina: Oh, good. And the customer is happy?

Cathy: The customer is extremely happy; we went from 1.3 STE in 2008 to over 22 STE in FY13, so it's a tremendous growth rate for us.

Sabrina: Oh, good. I had another question. You mentioned Albuquerque — and you had a lot of customers that sounded like your team in Albuquerque was supporting. That reminded me of the Albuquerque technical review, also known as the Tech Review, and that's an annual event where you have corporate officers and general managers from across the country come to your Albuquerque office. Can you tell us a little bit about how that happened, what you do there...

Cathy: Sure. [The Albuquerque Technical review] is a great opportunity for our folks that support Albuquerque, and this year we also included the folks in Houston as well. We've been doing it for about five years. All the corporate level 5s and level 6s come and spend a day and a half in Albuquerque. It's an opportunity, at the working level, to share the technical work, the outstanding work they do for all the customers, and share it with our level 5s and 6s. And I have Level 1s, level 2s, and level 3s brief, but in addition to my group, there's other representation in the company there as well. ETG is there, the Institute is there, there's NSG, there's ETG as well as PSL: all of our organizations and they all also support the Albuquerque Tech Review and give presentations on the work that they do. It really recognizes the strength and expertise that we have in these regional offices. Albuquerque's unique because it has such a diverse customer base, and it is an opportunity to connect the company. One of the value added things we found is having everybody in the room at the same time connects things together; we discover linkages, we share a lot of information, there are a lot of action items that come out of the Albuquerque Tech Review.

Sabrina: I think I've gotten a few of those...

Cathy: Me as well!

Next year we are actually changing it up a bit; we are going to have a Colorado Tech Review, and that'll be at the end of July in 2013, and then we'll go back to Albuquerque in 2014 again.

Sabrina: Wow, so, Cathy, with your regional perspective, your experience both career-wise and the business that you lead, what kinds of things would you like to share with employees here at Aerospace on how they can support your business and other businesses that are functioning and thriving away from El Segundo?

Cathy: Well, what would be very helpful is for people to communicate with us and also to initiate discussions. We have a lot of expertise not only in Colorado Springs. [We have expertise in] Space Control, Space Protection, we have small sat experience, nuclear ops, mission assurance... There's a lot of value added in exchanging information and finding out what folks do.

It would also be nice if folks would intentionally think about some of this expertise and how it can be leveraged in other parts of the company. We do a lot of reach back in my organization. We have a lot of customers that require specialized support; we really thrive on the East Coast and West Coast reach back that they provide to really give value added to the customer.

Sabrina: Good, and what is your team doing, you know, Dr. Dave Gorney and the leadership team have been talking about recasting the value of Aerospace and moving up in the front part of the systems engineering. I think I've heard some success stories from your team in this regard.

Cathy: I think there are several in my organization. One of them is the nuclear operations [story], of course. Where we've done a great job of recasting our space support to the front end of the nuclear mission assurance, lessons learned, and also some of the modernization efforts that are very much early on. In addition to that, we're at the front end of Air Force Space Command. We help them do requirements, concepts, analysis of alternatives — we really do have ourselves in that front-end piece which I think is a great strength for Aerospace. So I think we've been at the front-end of recasting for quite a while now.

Sabrina: Well, good. Cathy, I want to thank you for taking the time to talk to us and give us the regional perspective from some of the other Aerospace locations and talk about some of the things that help you succeed there, and some of the successes you're having with your customer.

Cathy: Thank you so much for having me; I appreciate it.

Sabrina: You're welcome; it was a delight. I want to thank each and every one of you for taking time to join us in the latest of our webcast series. Up next we'll have Randy Kendall, who's going to talk to us about Civil and Commercial Operations.

Austin Speaks at Kennedy Legacy Event

Posted Nov. 21, 2012 · Article · By Matt Kivel

Aerospace CEO Dr. Wanda Austin recently joined with legal, political, and industry leaders in a panel discussion examining the importance of diversity in the American workforce as part of a program commemorating the 50th anniversary of John F. Kennedy's presidency.

The event at the Museum of Tolerance in Los Angeles on Thursday, Nov. 15, was the second in a series called JFK50: Justice for All, sponsored by the John F. Kennedy Library Foundation and hosted by global law firm Bingham McCutchen. Caroline Kennedy, president of the JFK Library Foundation and Jay Zimmerman, chairman of Bingham, served as hosts for the evening.

As the lights dimmed in the Museum of Tolerance's Peltz Theater, Los Angeles Mayor Antonio Villaraigosa settled onto the stage and delivered a broad introductory speech emphasizing the significance of diversity in Los Angeles. "L.A. draws the adventurous and the ambitious from all four corners of the earth" said Villaraigosa. "They come to L.A. because of our diversity, not in spite of it. They want to experience the dynamism and the creativity that takes place when so many different communities collaborate and cooperate."

Villaraigosa's opening remarks were followed by a brief video, which compiled film clips from Robert Drew's "Crisis: Behind a Presidential Commitment"—a groundbreaking 1963 documentary, which captured footage of President Kennedy working in the White House to desegregate the University of Alabama. Harrowing images of attack dogs, abusive police officers and the vitriolic speeches of Alabama Gov. George Wallace flickered across the screen—strikingly depicting the overwhelming severity of race relations in the U.S. in the 1960s.

After the film concluded, Caroline Kennedy spoke about her father's presidential legacy and his significance as a catalyst for social change and progressive ideals. "Civil rights remains the unfinished business of this country," said Kennedy. "We've made great progress since my father's time ... but we still have so much more to do." Kennedy went on to emphasize the still-prominent issues of racial and gender inequality in America.

The panel discussion segment was moderated by journalist Eleanor Clift, who opened with a brief speech and a series of introductory biographies for each of the panelists. In addition to Austin, the panel consisted of: Kamala Devi Harris, attorney general of California; Thurgood Marshall Jr., Bingham McCutchen partner; Hilda Solis, U.S. secretary of labor; William H. Swanson, chairman and CEO of Raytheon Company; and Villaraigosa.

Though billed as a discussion, the activity functioned more as a series of focused speeches, with each panelist expounding upon the current state of diversity, public education, and equality in American society. Austin, when asked about diversity in the scientific community, spoke about the importance of cultivating an interest in math and science among young students of all backgrounds. She emphasized the rapidly increasing demand for technically proficient workers in the U.S. and the need for employers to nurture the hopes and aspirations of all potential candidates. "It is about looking for the best," said Austin. "I believe that the best exist in all shapes, sizes, colors and religions."

Marshall strongly affirmed that the legal struggles regarding equality of the '40s and '50s still continue to this day. He, like many of the panelists, classified the diversity issue as one of the utmost economic importance — diversity being an essential ingredient for America's continued global competitiveness. Solis championed the concept of taking small steps in bridging the education gap between cultures by focusing primarily on midlevel degree and certificate programs. "In order to draw a larger population you really need to encourage more people to get certificates," said Solis. "Everyone wants to push people to go to four-year universities, but many of our kids are not eligible, qualified or prepared." Solis stressed realistic improvements in education over an overly ambitious agenda that might lose sight of the very real demand for moderately credentialed individuals.

The program was capped with two short presentations by Roosevelt High School students Anthem Sanchez and Kevin Fuentes. As part of a Museum of Tolerance program, Sanchez and Fuentes developed specific, community-enhancing projects, which they briefly outlined for the audience. Afterward, the audience filtered into the museum's main lobby for cocktails, hors d'oeuvres, and a number of lively discussions.

Holiday Food and Gift Drive Kicks Off in El Segundo

Posted Nov. 21, 2012 · Feature

Aerospace CEO Dr. Wanda Austin, Senior Vice President Mike Drennan, and Senior Vice President Rami Razouk stopped by the A3 cafeteria on Tuesday, Nov. 20, to check out the Angel Tree, which went up on Monday as the 2012 Holiday Food and Gift Drive in El Segundo and Pasadena got started.

Contributions of nonperishable food, toys, gift cards, and other



Elisa Haber

From left, Dr. Rami Razouk, Mike Drennan, and Dr. Wanda Austin check out the Angel Tree in the A3 cafeteria in El Segundo.

items will be collected Nov. 19 to Dec. 20. Angel Trees bearing gift tags will be located in the A1 credit union, A5 lobby, A6 lobby, A8 lobby, A3 and D8 cafeterias, D10 lobby, lobby areas of LAAFB Buildings 270, 271, and 272, and the Pasadena office. Contributions will benefit a variety of local charities. Collection bins are located throughout the Aerospace offices in El Segundo.

Volunteers are needed for sorting and packing on Thursday, Dec. 20, from 11 a.m. to 1 p.m. in the D5 Warehouse. Pizza and drinks will be provided.

For more information or to volunteer, visit the 2012 Holiday Food and Gift Drive official website [here](#).

SAMPEX Mission Returns to Earth



Image courtesy of NASA

An artist's rendition of the Solar, Anomalous, and Magnetospheric Particle Explorer or SAMPEX.

Posted Nov. 16, 2012 · Feature

A NASA satellite — the Solar, Anomalous, and Magnetospheric Particle Explorer or SAMPEX — plunged toward Earth on Nov. 13, burning up completely in the atmosphere and closing the book on one of the most productive space weather observation platforms of all time.

SAMPEX launched from Vandenberg AFB on July 3, 1992. Its mission was to study the zoo of particles and cosmic rays surrounding Earth. Its original mission life was expected to be three years, but it survived much longer.

Aerospace was involved with SAMPEX until the very end of its life.

When SAMPEX launched, the sun was just finishing the peak of its 11-year solar cycle and beginning to move toward solar minimum. Scientists were eager to watch what happened in near-Earth space in those first few years, as eruptions on the sun shot out energy and solar material and eventually tapered down into a period of quiet.

In its two decades, SAMPEX provided one of the main sources of data on how the radiation environment around Earth changed over time, waxing and waning in response to incoming particles from the sun and galaxy. SAMPEX confirmed earlier theories that cosmic rays streaming in from outer space were being trapped in Earth's own magnetic environment, the magnetosphere, and it helped pinpoint the location where they gathered in a belt around Earth.

Another area of research has been to tease out the composition of various particle populations, from high-speed and high-energy particles from the sun known as solar energetic particles, to the host of electrons in Earth's middle atmosphere. Also, SAMPEX has been one of our best eyes on the radiation belts – two giant donuts of radiation surrounding Earth that can affect satellites in orbit during their occasional bouts of swelling.

SAMPEX's science mission officially ended in June 2004. But new data continued to become available to the science and space communities thanks to The Aerospace Corporation, which downloaded data from the satellite until the very end. Bowie State University in Bowie, Md., operated the spacecraft as an educational tool for its students.

The work of SAMPEX will now be expanded upon by the [Radiation Belt Storm Probes mission](#), which launched last August. The two-satellite mission contains five instruments built by Aerospace aboard each satellite.

Veterans Salute Keynoter Recalls Korean War Action



Elisa Haber

Retired Navy Capt. Harry Peck enthralled the audience with his tales of his life during the Korean War.

Posted Nov. 14, 2012 · Feature · By Matt Kivel

The Aerospace Military Veterans in conjunction with the Aerospace American-Indian and Alaskan-Native Council hosted a "Salute to Veterans" event in Titan IVA and IVB on Tuesday, Nov. 12, in El Segundo.

Prior to the program, the audience of about 150 was treated to a buffet-style lunch. Lt. Robert Doyle sang a stirring rendition of the National Anthem, after which Chaplain Gary Lewis led the audience in a brief invocation.

Aerospace's Kimberly Locke delivered a concise speech, which emphasized the depth and scope of the contributions made by Native American soldiers during the Korean War. She briefly outlined the careers of a few particularly impressive Native American soldiers, detailing their various military and business accomplishments. After Locke's speech concluded, Vietnam veteran Bill Deacon introduced the keynote speaker, retired U.S. Navy Capt. Harry Peck.



Peck spoke warmly of his time in the Korean war, engaging the audience with vivid accounts of his adventures as a combat pilot, often

flying missions during hazardous weather conditions.

A selection of Peck's career memorabilia including photos, books, and models was displayed to the right of the stage. After the event concluded, many of the audience members stayed to examine the various artifacts.



Here, John Glenn Remains the Hometown Hero

Posted Nov. 8, 2012 · Feature · By Steven Strom

The term "space tourism," as it is generally used today, means traveling to the edge of space in a commercial launch vehicle, designed specifically to lift tourists into space at a suborbital level (after paying a price for a seat that is far beyond the means of the overwhelming majority of most Americans). But since the dawn of the Space Age, there has always been another kind of space tourism for millions of Americans, particularly during the 1960s-1980s, as parents packed up their kids and drove the family car to visit space-related sites.

Sometimes it was a simple day trip; in my own case, as well as for thousands of other Texas schoolchildren, my family made the



Steven Strom

A new cruise terminal on Grand Turk features a full-size model of John Glenn's space capsule.

obligatory pilgrimage to Houston's Manned Spacecraft Center (now the Johnson Space Center), where you could peer into a window and see the famed Mission Control Center, which is now listed on the National Register of Historic Sites, see scale models of various rockets used in the space program, and hope against hope that an astronaut would show up and sign autographs (a recurring rumor, although I never saw one).

Other families made space tourism the focal point of their summer vacation, driving across state or even cross-country to see Cape Canaveral or other NASA sites first-hand. The luckiest of all were those who were able to time their trips in conjunction with a space launch; from the earliest Mercury and Gemini flights, all the way to the final shuttle launch, millions of people crowded the coast near Cape Canaveral to witness a launch. On the West Coast, Vandenberg Air Force Base was off limits to most people, but since the 1960s many Californians have been fortunate enough, often simply by accident, to catch the awesome site of a rocket arcing across the sky following its launch from Vandenberg. And to this day, millions of Americans still visit Cape Canaveral; the Marshall Space Flight Center in Huntsville, Ala.; the Goddard Space Flight Center in Greenbelt, Md.; the Smithsonian National Air and Space Museum in Washington, D.C.; the Stephen F. Udvar-Hazy Center in Chantilly, Va.; and other space-related tourist sites around the country.

My mind was taken back to the excitement of those times during a trip I made in August to the Turks and Caicos Islands, British West Indies, some 570 miles southeast of Florida, where I was lucky enough to see an entire country still celebrating the 50th anniversary of the splashdown of John Glenn's spacecraft Friendship 7 in the brilliantly clear turquoise waters off Grand Turk Island. The British West Indies comprise all of the remaining British overseas territories (formerly known as Crown colonies until 1981) in the West Indies that are still not independent and form part of the United Kingdom: the Turks and Caicos, Bermuda, Anguilla, the British Virgin Islands, Montserrat, and the Cayman Islands.

Glenn's capsule returned to Earth on Feb. 20, 1962, following the successful conclusion of his three-orbit spaceflight, the first orbital flight made by an American astronaut. Although, Glenn's brief sojourn on Grand Turk Island is little known by Americans today, it is a point of extreme national pride in the Turks and Caicos. I had the doubly unique experience of visiting some space-history sites that I barely knew existed, coupled with speaking to locals who were very proud of the achievements of the American space program and their own contribution to that program, however small in hindsight. All I had to do was mention Glenn's name, and even the youngest schoolchild would puff up with pride and say, "Oh, yes! Mr. Glenn's capsule came down in our waters."



To get to Grand Turk Island by air, you must first land at the international airport on the island of Providenciales and then take a smaller plane to connect to Grand Turk. I flew on Caicos Express Airlines and both coming and going I had to sit in the copilot's seat, since I was too tall and large to cram into the tightly arranged back seats. At the time of Glenn's flight, the U. S. Air Force operated an auxiliary base on Grand Turk, which was declared operationally ready as a missile testing and tracking station in 1955 and was closed down as an American facility in February 1984. The base comprised part of the Eastern Test Range. With so many advances in space/satellite technology since the base had opened, it was no longer needed. Today, some portions of the air base serve as the island's civilian international airport. Despite the fact that the base was decommissioned nearly 30 years ago, I was told by my guide that I was not allowed to take photographs of any of the airport's structures. When I asked the reason, she replied, "For reasons of national security." I did not press the matter, since two very large

policemen had seen me take out my camera and were already headed in my direction.

I had arranged on Providenciales to have a driver meet me in Grand Turk, whom, I was told, knew "everything about Mr. Glenn's flight." Mrs. Patsy Taylor served as my guide, and she was indeed extremely knowledgeable, not just about Glenn's flight, but about almost all of the tiny 12-square-mile island's history, where she had lived all her life. When Taylor found out that I was particularly interested in Glenn's flight, she was so excited that she brought along her nephew, Derek Been, who is studying for his master's degree in England and was also an historian.

As you leave the airport, heading out John Glenn Drive, the first thing you see, located in a small park, is a full-size model of the Friendship 7 capsule, with an accompanying historical marker. At the time of Glenn's flight, there was a Project Mercury tracking station on the base, as well as a specially equipped hospital set up to care for and monitor any Mercury astronauts who splashed down close enough to Grand Turk to be airlifted to the island. Glenn arrived in Grand Turk about 9:30 p.m. the night of Feb. 20; his Friendship 7 capsule was airlifted to the base the next day in preparation for its eventual shipment to Patrick Air Force Base in Florida. Later that day on Feb. 21, three more astronauts arrived in Grand Turk: Alan Shepard, Gus Grissom, and Wally Schirra. They participated in Glenn's debriefing.



At about 4:30 a.m. on the morning of Feb. 23, Vice President Lyndon Johnson arrived in Grand Turk to escort Glenn back to the United States. Hundreds of local people were pressed against the base's fences and main gate, hoping to catch a glimpse of Glenn, but they had been told that they would not be admitted onto the base. Johnson made the decision to allow them admittance, and he and Glenn pressed hundreds of hands that morning before their plane departed for Cape Canaveral – my guide's husband was one of those young schoolchildren. Mr. Taylor told me that some of the children screamed out, "I have touched the hands of space!" after they shook hands with Glenn.

Although Glenn's time on Grand Turk was brief, he is still loved by the locals, who remember that he took time to shake hands with some of them, particularly many schoolchildren. They also are fond of recounting that Glenn was so enamored by the beautiful waters off Grand Turk

that he took time during his brief stay to go diving in their waters. A national ceremony of commemoration was held on Feb. 20, 2012, to honor the 50th anniversary of John Glenn's flight, but more activities have been held and will continue during the remainder of the year. Special songs and musical pieces were composed and performed and dances were created in honor of the occasion. One of the national projects involved the issuance of special 50th-anniversary commemorative stamps; postage stamps from the Turks and Caicos are prized by stamp collectors, and a national design competition was held in which schoolchildren of all ages submitted their designs for the new stamps, which were ultimately winnowed down to a few winners by a panel of judges.



The Turks and Caicos National Museum in the capital city of Cockburn Town, the only town of any note on the island of Grand Turk, has an entire room devoted to Glenn's flight. The museum had a special commemorative pin issued in honor of the anniversary. One of the last places that Taylor took me was the new, 14-acre Grand Turk Cruise Center. For many years, Grand Turk was out of reach of large cruise ships, because there were no facilities for handling disembarking passengers. Carnival Cruise Lines built the current facilities. Already, each fall, winter, and spring, the primary tourist season, nearly 500,000 cruise ship passengers visit Grand Turk, an island that only has some 4,000 residents. One of the first things disembarking passengers see is a very large display about the history of John Glenn's flight, which includes another model of his capsule and a life-sized replica of Glenn wearing his Mercury astronaut suit. Several of the people who owned nearby stores that cater to the tourists told me that in the tourist season, long lines of people form who want their picture taken with "John Glenn."

At the end of the day, having spent about eight hours on Grand Turk, I returned to Providenciales, happy to have seen so many unexpected sites related to John Glenn's flight and amazed that the inhabitants of the Turks and Caicos were still so proud of their role in our space program. Just listening to the excited tales told by some of the local people reminded me of just how inspiring our crewed space program was to so much of the world and how much any such venture will mean to so many people again should we ever undertake additional trips to the moon or first-time visits to asteroids or to Mars.

Three VPs Set to Lead in Era of Change

Posted Nov. 8, 2012 · Article · By Melissa Parsons

Three new corporate officers were appointed during the past fiscal year, a time of financial uncertainty for the defense industry, The Aerospace Corporation, and indeed, the entire country. The new officers —Ellen Beatty, Sherrie Zacharius, and Randy Kendall — are poised to formulate new and innovative ways to do more without more while assuring mission success and meeting current and future needs of the company's customers.



In her position as vice president, chief financial officer, and treasurer of The Aerospace Corporation, these types of challenges are at the forefront of Ellen Beatty's typical day. When asked how she plans on tackling these challenges as the leader of her organization, Beatty said, "we are an experienced staff and we understand how to maintain financial flexibility in times of challenging customer budgets," and also emphasized that "we must continue to deliver sound financial management and dedicate the right resources to help our customers achieve mission success."

Sherrie Zacharius, vice president of Technology and Laboratory Operations, has a similar outlook in that her leadership mission is to "support the effective and timely development and operation of space systems through scientific research and application of advanced technology."



Civil and Commercial Operations has a unique role in linking these technical and financial elements of the corporation. While applying Aerospace's technical capabilities in the broader public interest, the group also contributes to the financial health and flexibility of the company by increasing cash flow and absorbing overhead, resulting in lower costs for all customers. As the VP of Civil and Commercial, Randy Kendall is excited about this role, stating, "The great thing about this kind of work is that, in addition to helping solve important



problems in national security, transportation, energy and health, it makes Aerospace a stronger corporation.”

Leading these three organizations requires a lot of hard work, dedication, and many hours spent in the office, lab, meetings, and oftentimes travel away from home and families. Yet each has also found balance in their personal lives through various activities and interests such as crocheting afghans, playing tennis, running track, researching genealogy, world travel, and of course their families.

Each of the three vice presidents agrees that work-life balance, technological acumen, and every one of the people that make up the Aerospace team are the key to developing the roadmap for a successful future.

Live Longer and Healthier: Aerospace Champions Wellness



Elisa Haber

Carrie Anne Blevins, organizational lead for Blue Zones, leads Aerospace employees in warmup exercises before the October Wellness Walk in El Segundo.

Lessons for Living Longer from the People Who've Lived the Longest.” He teamed up with National Geographic and studied five areas where people reach the age of 100 at much higher rates than anywhere else. Citizens of Sardinia Italy; Okinawa, Japan; Nicoya, Costa Rica; Ikaria, Greece; and Loma Linda, Calif., have maintained their healthy lifestyles for generations.

Apparently, genetics are not the end all. According to Buettner, it really boils down to two factors: your lifestyle and your environment.

Buettner and a team of medical researchers, anthropologists, demographers, and epidemiologists searched for evidence-based research that was present in all five locations. They found nine important principles common to residents of all five areas. They estimate that the average person's life expectancy could increase by 10-12 years by adopting a Blue Zones lifestyle.

1. **Move Naturally** — The world's oldest living people in these communities don't join gyms. They live in environments that constantly nudge them into moving without thinking about it. They grow gardens and don't have mechanical conveniences for house and yard work.
2. **Purpose** — Why do you wake up in the morning? Knowing your sense of purpose is worth up to seven years of extra life expectancy.
3. **Down Shift** — Even people in the Blue Zones experience stress, but they create routines to shed stress. Some of them pray, some take naps, and some do a happy hour.
4. **80 Percent Rule** — They stop eating when their stomachs are 80 percent full. They eat their smallest meal in the late afternoon or early evening and they do not eat for the rest of the day.
5. **Plant Slant** — Beans, including fava, black, soy and lentils, are the cornerstone of most of their diets. Meat, mostly pork, is eaten on average

Posted Nov. 7, 2012 · Feature · By Gail Kellner

It is indeed a fact that we aren't getting any younger, but what if we could live healthy, active lifestyles well into our 90s just by harnessing some powerful, yet simple, principles that are at our fingertips just for the asking?

Aerospace recently became a Designated Blue Zones Worksite, which allows employees to tap into some of the interesting research that the Blue Zones Project has amassed.

The worksite designation was achieved after the Benefits team launched a reinvigorated WellnessWorks campaign in 2011 that included regular walking programs, weight management programs, onsite fitness activities, financial planning, designing benefits to promote illness prevention, the creation of a wellness committee, and providing access to the Blue Zones website to employees.

So, what is a Blue Zone, and what can we learn from it?

A Blue Zone is a community where common elements of lifestyle, diet, and outlook have led to an amazing quality and quantity of life, according to Dan Buettner, author of “The Blue Zones:

only five times per month. Serving sizes are three to four ounces (about the size of deck of playing cards).

6. Wine at Five — Most people in the Blue Zones drink alcohol moderately and regularly. (The exception is Loma Linda, heavily represented by Seventh Day Adventists who don't drink, but who make up for it with other healthy lifestyle practices.) All other things being equal, moderate drinkers outlive non-drinkers. The trick is to drink 1-2 glasses per day (preferably full-bodied red wine) with friends or with food.

7. Belong — All but five of the 263 centenarians interviewed belonged to some faith-based community. Denomination didn't matter. Researchers determined that attending faith-based services weekly will add four to 14 years to your life.

8. Loved Ones First — Successful centenarians in the Blue Zones put their families first. By taking care of aging parents or grandparents, it actually lowers disease and mortality rates of the children in the home. They also commit to a life partner, and invest in their children, which can add up to three years of life expectancy.

9. Right Tribe — Centenarians were born into social circles (friends committed to one another for life) that supported healthy behaviors. Research shows that smoking, obesity, happiness, and even loneliness, are contagious.

If you would like to receive an estimate on your biological age, overall life expectancy, or years that you are gaining/losing because of your habits, visit <http://apps.bluezones.com/vitality>.

Aerospace Military Veterans Month

Posted Nov. 6, 2012 · Article

November is Aerospace Military Veterans (AMV) Month. This video introduces employees to AMV's mission, vision, and goals. Click below to start the video.

The Final Mile for Atlantis



Bill Uttenweiler

Crowds gather around space shuttle Atlantis as it pauses enroute to its new home at the Kennedy Space Center Visitor Complex.

Posted Nov. 5, 2012 · Feature

Space shuttle Atlantis traveled its last 10 miles on Friday, Nov. 2, as it made its way from the Kennedy Space Center's Vehicle Assembly Building to the KSC Visitor Complex. There it will be on permanent display beginning next year in a new museum exhibit.

Along the way, Atlantis stopped at Exploration Park, an office complex, where dignitaries made a few speeches and the public had the chance to view the shuttle close up.

Atlantis made its first trip into space in October, 1985. Its *final flight* lifted off on July 8, 2011. By the time it retired after STS-135, the *last flight of the shuttle program*, it had completed 33 missions.

Its new home will be a 90,000-square-foot exhibit hall now under construction. The last wall of the hall will be put up after Atlantis is safely in place.

Awards and Recognitions

Posted Nov. 2, 2012 · Feature

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. Include a photo related to the award, if available.



Phillips Receives Highest NASA Honor



Peter Phillips recently received the NASA Distinguished Public Service Medal, the agency's highest honor for a non-government employee.

Award recipients “must demonstrate a level of excellence that has made a profound or indelible impact on NASA mission success, and therefore, the contribution is so extraordinary that other forms of recognition by NASA would be inadequate,” according to the NASA website.

Phillips' citation reads “For outstanding leadership of the joint mission system integration and mission operation readiness team for the Suomi National Polar-orbiting Partnership (NPP) Mission.”

The NPP weather-satellite mission, which carries advanced sensors and observation equipment, was launched in October, 2011, onboard a Delta II rocket. The satellite was named in honor of the late Verner Suomi, a scientist at the University of Wisconsin-Madison, who is often called “the father of satellite meteorology.”

Phillips is a systems director, based at the Goddard Space Flight Center.

Air Force Association Honors AEHF Rescue Team

Andrew Dawdy represented Aerospace at the recent Air Force Association Air and Space Conference and Technology Exposition in Washington, D.C., where the Advanced Extremely High Frequency Satellite Rescue Team received the David C. Schilling award for “the most outstanding contribution in the field of flight.”



The AFA award was presented on Sept. 17, three days before Dawdy and other Aerospace members of the AEHF rescue team won a 2012 [President's Achievement Award](#) for the same feat — designing, developing, vetting, and executing an innovative, optimized mission plan for the AEHF-1 satellite after its main bi-propellant propulsion system failed shortly after launch in August, 2010, leaving the spacecraft in an unusable low-Earth orbit.

Over 14 months, the team — consisting of Aerospace, Air Force, and contractor personnel — executed a sophisticated campaign of approximately 500 discrete apogee and perigee burns using the satellite's hydrazine thrusters and Hall Current thrusters. The revised orbit-raising plan safely delivered AEHF-1 to its intended orbit on Oct. 24, 2011, while maintaining its required 14 years of mission life.

Kovach Receives ION Kepler Award

Karl Kovach has received the Institute of Navigation's (ION) Johannes Kepler award, the organization's highest honor.

Kovach, a senior project leader in the Navigation Division of Space Program Operations, was cited for his “sustained and significant contributions to the development of satellite navigation,” in particular his “contributions to the



development of the Navstar Global Positioning System satellites, operations, signals, receivers, and standards.”

Kovach began his involvement with GPS as an Air Force lieutenant in 1978, and over his Air Force career developed requirements and specifications for the first generation of military GPS receivers. He was involved in standardizing interfaces among diverse GPS platforms, and conducted flight tests of Phase I and Phase II military GPS receivers. He eventually led the transition of GPS operations from Vandenberg AFB to its present location at Schriever Air Force Base in Colorado Springs.

Since joining The Aerospace Corporation in 2007, Kovach has focused on the integrity of the current operational system, while working to improve integrity in the new modernized space and control segments and to finish modernization efforts for GPS navigation signals.

The Kepler award was presented Sept. 21 at ION's annual Satellite Division meeting.

Leadership Series: The CIO Report

Posted Nov. 1, 2012 · Article

In this Leadership Series video, Chief Information Officer Willie Krenz discusses Enterprise Information Services (EIS) plans and priorities for fiscal year 2013.

For more information from the CIO, check out his latest blog post: [More devices every day!](#)

TRANSCRIPT

Laura: Hi, I'm Laura Johnson from Corporate Communications, and I'd like to welcome you to today's webcast. With me is Dr. Willie Krenz, chief information officer at The Aerospace Corporation, to discuss EIS' plans and priorities for fiscal year '13. Willie, thanks for joining us.

Willie: How you doing today, Laura?

Laura: I'm good. How about you?

Willie: Eh, hanging.

Laura: So, to start off with, what are your main plans and priorities for fiscal year '13?

Willie: So, let me kind of walk you back a little bit. In FY12 we were trying to, of course, keep the company running as best we can, but we also had a major initiative to move our current data center, so we completed that in about the August timeframe. Got everything moved from the old C1 infrastructure to our new, hosted site across the street from us, here in El Segundo. So now we are operating from a modern, robust data center, and we're pretty happy about getting that done. That took a huge effort on the part of all of our staff and some of the ETG staff as well, and so now we have a robust system. We did that, I think, with minimal disruption to the rest of the company, but the reason I bring that up is that it was such a focused effort for our organization that we had some things that kind of had to slip into this fiscal year. So we have a process whereby we talk to a variety of managers around the corporation to figure out what it is that we should do next, what is the future vision of our IT system. We have a group called the "customer council" which consists of level 5 and above managers from around the company, and they tell us what their business units need. So in the course of talking to them, we kind of came up with three main areas that we had to focus on this year: the first is to work on the new Chantilly campus, second was to work on improving upon classified IT services, and third was the big umbrella that we've been calling "Go Big," which is basically trying to make large improvements on how the corporation does its business, with the primary goal of making our staff be great at their jobs.

Laura: So, let's look a little more closely at some of those, particularly the Chantilly campus. I think most people would see that as a Facilities project, and it's kind of far out that people are actually going to move in. Why is EIS involved and why now?

Willie: Yeah, it's a good question and one that we get a lot, so we kind of walk back from the deadline. So about two years from now we have to occupy the new campus in November of 2014. We walk back from that, we actually have to be in there with our people, in there occupying the space, because our lease on Greens 1 and Penrose are up in November of '14. So you walk back from that; we need to have the new campus accredited before we can actually take occupancy. And before the campus can be accredited, you have to have some basic functionality in there:

communications, phones, networks, things like that, so that the accrediting agency can look at how you're really going to operate in that new campus. So that when you walk all that stuff back, it means that this fiscal year EIS has to make sure that we get the coms in place, that we get some basic networking in place, that we get some functionality in our data center in place, that we get the connections back to Greens 3 in place, so there's a lot of things that have to happen this year and early FY14 for us to meet the accreditation deadline, so that all the rest of the dominos can fall into place. So we actually have a pretty big role once the construction is largely completed, which will happen pretty soon.

Laura: Now, of course, one thing that you are going to have to take into consideration in Chantilly, and, in fact, across the company, is classified IT services. Is EIS making any improvements in that area?

Willie: Yeah, we responded to a team that was put together by corporate leadership about six months ago—a team led by Rick Donnelly. And they came up with some requirements for what a classified IT system should include, and they looked at both SCI and secret level classified information, classified services. So we've decided to tackle first the SCI level services because there's some urgency in doing that for a few reasons, and there's also a little bit better ability to respond to the needs of the users.

So the urgency in doing SCI level classified IT services is, first of all, we're moving into the new campus, so it's a great time for people to modernize the way we do business and to change their conops. There's also some urgency because the government is changing some of their policies about how much of Aerospace's information can be hosted on government systems, and how much support the government wants to give to Aerospace working into SCI issues. So they're trying to boot people off as much as they can and force companies onto their own infrastructure, so we need to beef up our own classified IT infrastructure so that we can conduct a lot of our business on our own infrastructure. And then, there are some other just kind of basic conops and contractual reasons why now is a good time to do that.

We are trying to come up with classified IT services that mimic, to the greatest extent possible, the services that we have on the unclassified site. We want to make the user experience as similar as we possibly can. There are times when we're not going to be able to do that, but we recognize that people don't want to be learning five different interfaces as they swap their jobs around. So we have a response in place to the requirements that have been given to us; Rick Donnelly is actually leading a steering team of customers in that field to help guide us as to whether we're hitting the right spots or not. And one of the first things we have to do is to try to consolidate some of the disparate networks that currently exist, because otherwise we have to do implementation of services in a few different locations, and it just costs us too much. So it's the thing we are working on right now: to try get approval to operate some of those networks as a consolidated entity. Once we do that, then we start to transport some of our services from the unclassified to the classified side, and in some cases we might roll the classified services out first on the classified side and then do the same thing on the unclassified. But our basic goal is to present the classified IT services as close to parallel to the unclassified as we possibly can.

Laura: Well, I'm sure employees will appreciate the improvements.

Willie: I hope so, yeah.

Laura: Last but not least, you mentioned Go Big. We've heard a lot about that. What's the current status?

Willie: So there are a lot of things going on in Go Big, and this is an interesting week to talk about Go Big because we have a lot of things happening. You know, Microsoft is pushing Windows 8 out this week; I assume the iPad mini will be coming out soon; Google has announced a bunch of new capabilities that they're doing. So the whole world is going more mobile; trying to change the way that they do business. I was at Microsoft last week for a CIO summit, and they have a kind of interesting new philosophy with Windows 8: they are trying to give people a unified experience across telephones, tablets, and desktops. And my little experience with Windows 8, it's not out quite yet, but it works pretty well on the telephone, it works pretty well on the tablet, not so sure about desktops, but you see that they think it's such an important wave of the future that they're trying to present this consistent experience, which I think is a laudable goal. So we're kind of taking the same approach: that mobility is going to be increasingly important, so we have plans in place to have a much more mobile-aware workforce and a much more mobile-friendly set of capabilities. So a lot of our applications we're trying to re-do in mobile form. We have a demo next week: a first attempt to do a mobile interface to eTime, which has been one of the requests that people have made for a long time. So we see mobility as a huge thing for us in the future. Again, whether that's on an iPhone, or an Android, or a Blackberry, or a Windows phone, or an iPad, we're trying to make a consistent user experience to the greatest extent we can. So mobility is a big one.

We think that there is a lot of interest in search. You know, people are always trying to find information. And to the greatest extent we can, we want to make that as simple and familiar as we possibly can, so we continue to make improvements in search and continue to make improvements—not just the info, you know, the Inside Aerospace search, but also from Aerolink and some other things like that. So [we're] making good, steady progress. Again, as I tell people, if you haven't tried search lately, then you haven't tried search, because it has really gotten better in the last year.

We also believe that some of our policies need to be improved on how we share information. So, one of the things that came out of one of the most recent Aerospace leadership team efforts, was a group of level 4s. [They] volunteered... mostly volunteered... to say, "what can we do with improving our sharing policy?" We all recognize that sharing is a good thing, that collaboration is a good thing, yet we don't seem to be able to pull that off; we don't really have the conops in place to do good sharing. So they are doing a pilot within their organizations of setting up some metrics of sharing. You know, what is really the best way to share, how do we measure how well you're doing at that, how do we measure how well your information is being referenced by others. We're looking at an organizational pilot to see if there is some policy, or some conops, or some culture changes that we can implement.

And then, finally, one of the things that I think is really important is that people want that personal work space. They don't want to have to go to Notes to do email, and the ESS portal to enter their timecard, and Concur to do travel. They want some kind of a unified experience to make it as simple as they possibly can. So we're looking at a variety of ways of doing that. Not the least of which, I know you are aware, is looking at Google Apps as kind of the central place where we can collaborate, work on documents, do email, calendar, things like that.

We have a couple of pilots in place right now; one in our own group to wring out the processes — can you operate your whole organization on a

Google Apps kind of approach. We're also working with a group in Civil and Commercial; their counterpart is on Google Apps, and so we're trying to get their experiences and find out how we can mesh our own internal needs with the customer needs, and how do we collaborate between them. So a lot of stuff going on in Go Big. I've been talking to a variety of folks about, you know, just give us your good ideas, what is it that we're doing that's just completely insane, and what can we do to fix that? There are a lot of ideas coming out of the woodwork. So we're making, I think, good progress on that.

Laura: Well, it sounds like EIS has a number of big projects going on this year. Is there anything else that you'd like to tell employees?

Willie: Well, the number one thing we do is keep the place running, and we have to continually focus on the fact that we have to provide excellent IT service. And, again, our goal is to help people be great at their jobs; and so we have to keep email running, we have to make sure your payroll gets done on time, that your paycheck shows up on time, and all those sorts of things that may seem mundane. But really three-quarters of our efforts is keeping the place running and making sure that we do that as efficiently and effectively as we can. So we are always looking at cost-saving opportunities. We're trying to do some work this year with the idea that you can only manage what you measure. We can measure what we spend, but [what] we don't measure very well is the cost of a particular service. And if we can do a better job of that, I think we can help management and people around the company make some good decisions about is this service worth the cost that we're putting into right now, and, if not, let's put our efforts somewhere else. So really, keeping the place running as cost effectively and reliably as we can is job number one. And always will be for our organization, so we don't lose sight of that fact.

Laura: Now what about the survey that came out recently from EIS? Do you have any results from that?

Willie: So first off it wasn't from EIS; it was from the IT forum, which is a group run by Ted Muelhaupt. So we want to make sure that we get input, not from our organization, but from the users, and Ted is kind of the facilitator of that whole thing. He put out a survey a couple of months ago. We actually had 2,000 people respond to the survey, which I think is great feedback. So the good news is that we got a great response; the bad news is that it's a lot of data. Ted and his team are still going through that data, so as we analyze that data and get a sense of what it is the people in the company are happy with and unhappy with, it can really inform where we spend our money and where we do our focus. So, as always, we love feedback; all data is good, so complaints are fine. We ask people to continue to call the Help Desk when anything doesn't work; it's a good way for us to get data. But you will be hearing more about the survey hopefully in the next month or two and some of the fundamental results from it, so I'm looking forward to talking about that when we get it.

Laura: Well, thanks, Willie, for taking the time to fill us in on EIS's plans and priorities for fiscal year '13, and thanks to each of you for joining us for the latest of our leadership webcast series.

November Obituaries

Posted Nov. 1, 2012 · In Memoriam

Sincere sympathy is extended to the families of:

- **Cornelius Coronado**, project engineer, hired Sept. 4, 1962, retired Nov. 1, 1991, died Oct. 2.
- **Sharon Eskridge**, secretary admin, hired Nov. 23, 1981, retired Oct. 1, 2002, died Oct. 24.
- **Marilyn Ferrante**, senior secretary, hired June 12, 1961, retired Jan. 1, 1998, died Oct. 10.
- **Robert Garrett**, senior research assistant, hired June 5, 1989, retired Sept. 1, 2011, died Sept. 30.
- **Glenda Jackson**, executive secretary, hired April 2, 1973, died Oct. 23.
- **Frederick Keller**, general manager, hired Dec. 14, 1961, retired Jan. 1, 1991, died Aug. 30.
- **Robert Lott**, senior designer, res., hired Sept. 24, 1962, retired Aug. 1, 1985, died Oct. 27.
- **Robert Nasburg**, member of the technical staff, hired Aug. 9, 2001, retired March 1, 2012, died Oct. 9.
- **Dennis Richard**, member of the technical staff, hired Nov. 8, 1965, retired March 1, 1992, died Oct. 6.
- **Ronald Siersbeck**, member of the technical staff, hired Aug. 17, 1970, retired Sept. 1, 1993, died Oct. 10.
- **William Smith**, project engineer, hired Aug. 31, 1976, retired Jan. 1, 1991, died Sept. 7.
- **Wayne Stuckey**, distinguished engineer/scientist, hired March 14, 1966, retired Aug. 1, 2004, died Oct. 2.
- **Walter Sturm**, member of the administrative staff, hired Aug. 24, 1964, retired Nov. 1, 1991, died Oct. 4.

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

November Notes

Posted Nov. 1, 2012 · In Appreciation

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

- **Sonia Aitken**, for the recent passing of her father, Luis Li.

- **Bob Soranno**, for the recent passing of his father, Vitto Soranno.
- **Bryan Tsunoda**, for the recent passing of his mother-in-law, Pat Rollings.

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

November Anniversaries

Posted Nov. 1, 2012 · Anniversaries

40 YEARS

Engineering and Technology Group: Evelyn Jimenez

35 YEARS

Engineering and Technology Group: Ilene Newman

National Systems Group: Thomas Gurlitz

Operations and Support Group: Judith Moore

Space Systems Group: Allen Lee

30 YEARS

Engineering and Technology Group: Oliver Blackshire

Systems Planning, Engineering, and Quality: Mildred Cooper

25 YEARS

Engineering and Technology Group: Philip Dafesh, Christopher Dunbar, Thomas Gallini

Operations and Support Group: Andrea Brangran

Space Systems Group: Paul Brennan, Lawrence Buennagel, Paulette Porter, Michael Riccio

20 YEARS

Civil and Commercial Operations: Hilmer Swenson

Engineering and Technology Group: Kenneth Bentz, Christopher Clark, Richard Dolphus, Sue Fung, Charles Spiekermann

National Systems Group: Glenn Davis, Philip Fawcett, Bernardo Higuera, Richard Lebaron

Space Systems Group: David Bergin, Al Geiger, Brent Morgan, Thomas Powell, Steven Saks

Systems Planning, Engineering, and Quality: Jean Michael

15 YEARS

Engineering and Technology Group: Richard Palutzke, Jason Stout

National Systems Group: Scott McLaughlin

Operations and Support Group: Vivian Cole

10 YEARS

Engineering and Technology Group: Samuel Cantrell, Torrey Radcliffe, David Thompson

Operations and Support Group: Michael Amos, Chrystal Rodriguez, Robert Schalbe

Space Systems Group: Robert Beaver, Charles Cornell

Systems Planning, Engineering, and Quality: Morton Farber, Alvin Gilbert, Susan Grenz, Terence Lee

5 YEARS

Civil and Commercial Operations: Mary Hopkins

Engineering and Technology Group: Chris Cheng, Jeff Juranek, Alex Marquez, Darren Semmen, Joshua Train

National Systems Group: Andrew Kostic

Operations and Support Group: Erica Logitu, Alicia Ruiz-Martinez

Space Systems Group: Daniel Balderston, Harold Jesse, Monteiro Nelson

Systems Planning, Engineering, and Quality: Don Swetz

End of Archive
