

## How Aerospace Keeps the Industry Moving in One Direction

November 30, 2023

Collaborating across the enterprise is an emphasis in Aerospace's strategic approach. Focusing across the mission lifecycle and driving end-toend integration is what enables Aerospace to lead from the front as space becomes more complex and interconnected. It's why Aerospace is increasingly relied upon by government customers.

One way Aerospace strives for Enterprise Mission Success is



through the Space Collaboration Council (SCC), which fosters shared understanding of the major issues that affect the space enterprise while facilitating collaboration and partnerships to advance solutions.

Through the council, Aerospace can leverage its expertise and unique role as the nation's trusted partner for space to forge connections across government, commercial and international space – bringing leaders together to discuss ways to streamline solutions, break down stovepipes and pave new approaches in solving the hard problems.

"Aerospace's role as an FFRDC gives us a level of credibility and trust. It always comes back to credibility and trust," said Robert Kalinowsky, Senior Project Engineer in the Corporate Chief Engineers Office (CCEO). "We have the technical expertise, and we have a lot of very smart people working deeply within our government programs. We have a lot of technical depth in every space technology that you can imagine. When you

combine the two factors, it enables us to be in a more trusted position than you would find anywhere else in the industry."

#### Weaving Interconnectivity

Operated by Aerospace's CCEO, the SCC is comprised of senior-level leaders within the mission assurance community – executives and technical directors from commercial space and government organizations who focus on mission assurance issues to ensure systems get to orbit successfully. The SCC brings together members of the Joint Mission Assurance Council (JMAC) for U.S. government space agencies and the Space Quality Improvement Council (SQIC) for commercial prime contractors. All three groups convene throughout the year to collaborate and address emerging challenges that impact the industry.

"What's critical about this collaboration is that everyone gets together," said Lori Gordon, Systems Director in CCEO. "Through our work with the SCC, we are able to reach consensus across industry and move together in the same direction."



The most recent SCC meeting that was held at NASA's Goddard Space Flight Center was attended by leaders from dozens of government stakeholders and industry partners coming together under Aerospace's leadership.

"Space is literally for everyone in business at this point, and we all take advantage of space applications in our day-to-day lives," said Kalinowsky. "We have to think of space as more complex and more complicated than we have before. It's important to create more open-mindedness through forums like the SCC and it's very important to get these agencies, companies and these big primes thinking differently about the ecosystem that they're operating in."

## New A Pod Telescope Expands Space Domain Awareness Capabilities

November 29, 2023

Aerospace has installed a new telescope on the roof of Aerospace's El Segundo laboratory facilities. The new A Pod telescope is both improving and complementing the capabilities of its previously commissioned AeroTel telescope. Serving as both a laboratory and testbed for sensors developed for Space Domain Awareness and scientific inquiry, the 1-meter



AeroTel telescope studies a variety of objects from low Earth orbit (LEO) to deep space, providing information on resident space objects and delivering ground-truth data for calibration of space assets.

"We found that the demand on the AeroTel was preventing us from being really responsive to some of our customers' requests, so we wanted another telescope that could take some of that load and do tracking in a responsive sort of way," said Jeff Kommers, Director of Remote Sensing at Aerospace.

Housed in a new telescope dome on A Pod, the 17-inch L500 telescope compensates for AeroTel's relatively narrow field of view and corrects inaccuracy in the position predicted from the public two-line element set. The new telescope complements AeroTel expanding the ability to detect, track, identify and characterize space objects and the space environment, and increasing Aerospace's ability to meet increased customer demand for these capabilities.

Aerospace's Remote Sensing Department has installed new control hardware and software and has used them to demonstrate satellite tracking from LEO to cislunar orbit. Operational since June, the new telescope has tracked the Chandra X-ray Observatory and an SL-12 rocket body and was recently able to track Aerospace's own Slingshot 1 satellite. Furthermore, the new telescope is showing potential for other areas of research.

"The A Pod telescope can be used to test tracking algorithms, and to characterize the behavior of satellites," said Larissa Nofi, Remote Sensing Scientist at Aerospace. "We can also use it in combination with the AeroTel 1-meter and 12-inch telescopes and use various sensors to collect data to demonstrate data fusion techniques."

# Virtual Tour: Explore the Aerospace Demonstration and Visualization Center

November 22, 2023

With space becoming more diverse, congested, and contested, and needs changing from near Earth orbit to low Earth orbit and cislunar space, The Aerospace Corporation is executing an integrated approach to support U.S. leadership in space traffic management and coordination.



Aerospace combines world-class expertise in conjunction analysis, collision assessments, and debris mitigation with technology at the bleeding edge of space traffic research and innovation.

Aerospace's Demonstration and Visualization Center enables federal, civil, commercial, and international space customers to better understand the evolving space domain with greater speed and agility. This unclassified high-performance computing laboratory—located at Aerospace's Arlington, Virginia, campus just outside Washington, D.C.—provides access to innovative capabilities driving transformation in space traffic coordination, artificial intelligence and machine learning, debris modeling, and other advances in digital engineering for the modern space enterprise.

The lab's high-performance computing environment allows users to deploy and test digital architectures and tools to scale, at a fraction of the time and cost over having to develop custom solutions from scratch. This <u>virtual tour of the Aerospace Demonstration and Visualization Center's</u> operational, equipment, and collaboration spaces also includes short demos of some of Aerospace's software tools and prototypes, which are accessible in this lab.

## Lead On: Jay Santee on Changing the World Through Leadership at AMV Fireside Chat

November 20, 2023

Aerospace's unique culture supports and encourages leadership at all levels and in every role, providing each employee with the opportunity to make an impact.

In celebration of National Veterans and Military Families Month, Aerospace Military Veterans (AMV) recently hosted a fireside chat with Jay Santee, Vice President of Defense Architectures and Integration in the Defense Systems Group (DSG).

During the chat, Santee reflected on how his experiences in the military shaped his approach at Aerospace to lead from the front.



Since joining Aerospace in 2017, DSG Vice President Jay Santee has provided valuable leadership in shaping how the corporation supports and strengthens the nation's defense architecture for space and beyond.

Santee, who is retiring in December, joined Aerospace in October 2017 after having served 33 years in the United States Air Force and retiring as a major general in 2014. Santee's leadership, experience and expertise has guided Aerospace's work in advancing the nation's space warfighting systems, bolstering resiliency and agility during the space domain's most dynamic period. He has also boldly served as AMV's

Executive Sponsor for many years, successfully advocating for Veteran's Day as a company holiday and increasing benefits for Aerospace members serving in the reserve and guard.

Hosted by Chuck Allen, AMV's Colorado Springs Regional Vice President, the fireside chat provided employees the opportunity to hear Santee explore the concepts and principles of his leadership style, and how it continued to evolve through his distinguished career. He also spoke about the importance of embracing diversity with tolerance and acceptance, finding a common ground to build towards shared success.

"If you're going to lead, you have to be positive. No one follows a doubter. The first thing is you have to know is where you're going, and you have to be certain you can get there. You have to be positive and lay that out," said Santee. "Surround yourself with the very best people you can. If you can, find people who are much smarter than you; find people who are much better leaders. And then your job is to make sure that they know what you expect of them, that they have been trained and given any extra skills they need to do that job that you expect of them. And then get out of their way and your job becomes ensuring they get what they have earned."

### A Champion of Change

During the chat, Santee spoke of lessons learned throughout his career, including the importance of being tactful when introducing new ideas and leading others, stating that all change comes from conflict. He cited the importance of not attacking others for their perspectives and ideas, as arguing with others is not the type of conflict that leads to positive change. Santee spoke about being patient and being able to respond to criticism or push back on new ideas, elaborating that it was not until he started working at Aerospace that he realized the importance of slowly introducing an idea to others in order to effectively effect change.

"You have to implant these ideas that they had to ruminate on long enough that they could change their mind as to what was happening," said Santee. "That's the way to make positive change happen and there's really no way to go fast. You just have to let that happen in people's lives when you're doing something that fundamentally changes their beliefs."

#### A Legacy of Leadership

Throughout his career at Aerospace, Santee has led the corporation's support to the U.S. Space Command, the Space Warfare Analysis Center, the Space Security and Defense Program, Project West Wing, Space Systems Command's Space Systems Integration Office and the Department of the Air Force Rapid Capabilities Office among others. This wide breadth of leadership experience has influenced the way Santee approaches guiding others.

He said that making an effort to truly understand someone, their background and perspective, goes a long way in building strength, unity and cohesion.

"This idea of learning from each other should go beyond just the diversity of the hard problem we're solving," said Santee. "But trying to understand the full picture of the American narrative from all different backgrounds and races and religions and creeds. They're all American, and so trying to understand that broader perspective makes you more tolerant and able to understand and exhibit what we talk about in our respectful workplace, doing unto others as they want you to do unto them."

Santee also emphasized that leadership does not have to be traditional to be impactful, adding that leadership can manifest in a number of ways and everyone at every level has the power to lead.

"Everybody has times when they step up and lead by influence, which is true leadership," said Santee. "I like to point this out a lot, because I think it's important inside our company. The most important leader in the room is the first to follow. That first follower determines whether the person with the new idea, who is trying to influence others to do something they weren't going to do otherwise, has support. Once you get one, you can build two and three and four. So, I just say to all of you, you're all leaders. You're all leading on in some way, shape, or form at different points in your life, at different issues that you confront. Be a leader. Either the leader who's out in front with the idea or be the leader who leads on by being that key first follower. We can change the world and we need to change the world, and leadership is how you do it."

The Aerospace Military Veterans (AMV) is an Aerospace Employee Resource Group (ERG). Membership and participation in all ERGs are open to all employees.

### November 2023 Obituaries

November 01, 2023

Sincere sympathy is extended to the families of:

- Frank Arnold, member of technical staff, hired June 3, 1980, retired July 1, 1994, died Aug. 11, 2023
- James Carey, member of technical staff, hired May 20, 1968, retired Jan. 1, 2004, died Aug. 19, 2023
- William De Savino, member of technical staff, hired April 3, 1961, retired July 1, 1991, died Sept. 23, 2023
- Leo Fitzsimmons, member of administrative staff, hired Sept. 26, 1960, retired Dec. 1, 1994, died Aug. 1, 2023
- Carlos Garrocq, member of technical staff, hired Feb. 1, 1977, retired Oct. 1, 1996, died Sept. 10, 2023
- Craig Grow, member of administrative staff, hired July 18, 1960 retired Nov. 1, 1993, died Sept. 10, 2023
- Albert Haygood, member of administrative staff, hired July 29, 1991, retired April 1, 1997, died Aug. 8, 2023
- Jack Henz, member of technical staff, hired Sept. 23, 1965, retired Oct. 1, 1990, died Oct. 8, 2023
- Linda Holden-Georgia, office of technical support, hired July 19, 1982, retired died Sept. 2, 2023
- Stanley Larson, office of technical support, hired April 18, 1965, retired Aug. 1, 1986, died Oct. 4, 2023
- Setsuo Masuda, member of technical staff, hired Oct. 16, 1978, retired Feb. 1, 2007, died Nov. 12, 2023
- Harris Mayer, member of technical staff, hired Oct. 8, 1968, retired June 1, 1983, died Sept. 17, 2023
- Milton Newman, office of technical support, hired March 29, 1974 retired Nov. 1, 1991, died Sept. 8, 2023
- Mamie Shelton, office of technical support, hired March 28, 1971, retired Sept. 1, 1996, died Aug. 29, 2023
- Joan Willis, member of administrative staff, hired Jan. 14, 1971, retired Oct. 1, 2001, died Sept. 23, 2023
- Marc Zaharchuk, member of technical staff, hired Oct. 17, 1988, retired Sept. 1, 2016, died March 24, 2023

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