

AeroCube 12 Deploys From ISS

July 16, 2018

Aerospace's latest AeroCubes deployed July 15 from the International Space Station (ISS) with the goal of demonstrating new star-tracking imaging sensors and testing advanced solar cells and a variety of nanotechnology payloads.

[Click here](#) for full story.



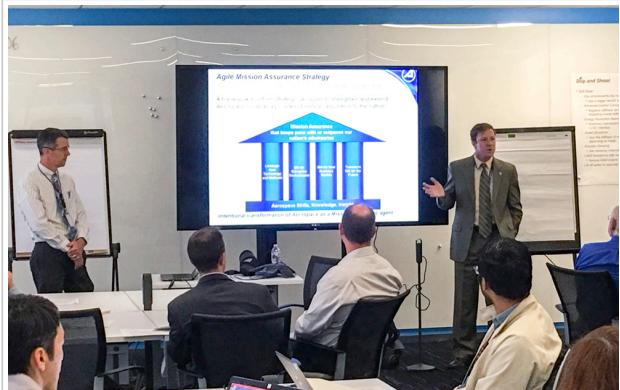
One of the AeroCube 12 satellites. (Photo: Karl Jacobs)

Ship and Launch in 30 Days or Less

July 27, 2018

A team of launch vehicle and satellite experts are putting their heads together to improve launch timelines, with the ultimate goal of enabling a "ship and shoot" scenario, in which a satellite can be launched within 30 days on any of several certified launch vehicles.

[Read more](#)



Randy Kendall, vice president of Launch Program Operations, discusses mission assurance strategy with launch and satellite experts. (Photo: Chris Stevens)

Mars One Hopeful Speaks at TecTalk

by Nick Hirano

July 12, 2018

Out of 200,000 applicants worldwide, Dr. Adriana Marais is one of 100 finalists chosen for the Mars One project, which aims to send humans to the red planet in the next decade. Marais spoke at a recent TecTalk event about why she wants to make a permanent move to Mars.

[Read the story](#)



Dr. Adriana Marais address a packed room at the El Segundo TecTalk (Photo: Erik Henderson)

Press Release: Aerospace Achieves Major Milestone With CUMULOS

July 03, 2018

EL SEGUNDO, Calif., July 3, 2018 – The Aerospace Corporation announced that it achieved first light on an infrared sensor suite named CubeSat Multispectral Observing System (CUMULOS), which was flown as a secondary payload on the Integrated Solar Array and Reflectarray Antenna (ISARA) CubeSat—a mission managed by NASA's Jet Propulsion Lab (JPL), operated by Aerospace, and sponsored by NASA's Small Spacecraft Technology Program. The CUMULOS is the first infrared sensor flown as part of the corporation's AeroCube program, which allows infrared weather imagery to be studied by the small satellite.

"This is the first infrared imaging sensor payload that we've launched on a CubeSat and its successful turn-on and operation is a major milestone for us," said Dee Pack, principal investigator for the CUMULOS mission and director of Aerospace's Remote Sensing Department. "We appreciate Caltech's Jet Propulsion Laboratory and NASA's Small Spacecraft Technology Program for extending us the opportunity to fly CUMULOS as a secondary payload onboard the ISARA mission."

CUMULOS was able to fly as a secondary payload on ISARA due to the space-saving reflectarray. Made of three compact cameras with lenses an inch or less in diameter, CUMULOS has a visible wavelength camera, a short-wavelength infrared camera, and a long-wavelength infrared, microbolometer camera.

Designed for weather and Earth environmental monitoring, the CUMULOS cameras can measure surface temperature, detect environmental hotspots, take cloud cover pictures, and provide nighttime lights imaging.

Aerospace will continue on-orbit checkout for the CUMULOS mission during July 2018 and then commence science mission operations. Its success will lead to the possibility of executing weather forecasting and other Earth observation missions with small satellites in the future.

Press Release: Aerospace Examines the U.S. Regulation of Space Commerce

July 27, 2018

EL SEGUNDO, Calif., July 25, 2018 – The Aerospace Corporation's Center for Space Policy and Strategy (CSPS) released a new issue brief today that analyzes the U.S. administration's plans to significantly enlarge the space portfolio of the U.S. Department of Commerce (DOC). The plan calls for DOC to expand its range of responsibilities beyond regulatory reform to encompass space traffic management and to promote the nation's commercial space sector.

CSPS's new issue brief, *Remaking U.S. Regulation of Space Commerce*, focuses on the administration's plan to build on what had been a small DOC office to carry out an ambitious space commerce strategy and facilitate an array of emerging private-sector space activities. The author, James Vedda, Ph.D., a policy expert with CSPS, provides insight on the plan and reveals that much of it represents renewal of strategic goals that has been in place for more than a decade.

Vedda explains that what's old is new again. "Although the level of attention is new, the DOC has been involved in commercial space activities through its Office of Space Commerce (OSC) since the late 1980s."

The issue brief also highlights that the basic requirements have been in place at least since the OSC issued its strategic plan in 2007.

"Today's focus on regulatory reform is nothing new, nor is the desire to increase government use of commercial systems, to grow the export market, or to maintain world leadership in space commerce," said Vedda. "But for much of its time in existence, OSC has operated with only a handful of staff, limiting its ability to achieve its ambitious strategic objectives."

The administration's space commerce reorganization, as envisioned so far, keeps the U.S. Department of Transportation in charge of licensing and regulation of commercial launch and reentry, and the Federal Communications Commission retains its responsibility for regulating electromagnetic spectrum use. Everything else in the commercial development of space—a very broad and growing field—would be handled by a "one-stop shop" at the DOC.

Although the 2007 OSC strategic plan provides a baseline for the expanded organization, Vedda explains that there is much that needs to be added as the agency examines its strategic priorities in light of the National Space Council's current direction.

"The high priority of regulatory reform is already represented in the plan, but another high-visibility concern on the administration's agenda—space traffic management—is not," said Vedda. "Nor are a host of other topics that will become DOC's responsibility in the years ahead."

About the Center for Space Policy and Strategy

The Center for Space Policy and Strategy is dedicated to shaping the future by providing nonpartisan research and strategic analysis to decisionmakers. The Center is part of The Aerospace Corporation, a nonprofit that provides objective advice to the government on complex space enterprise and systems engineering problems. To read the latest publications related to space policy matters, visit www.aerospace.org/policy.

Jason Ly and Kate Lee Named Liang Award Recipients

by Nick Hirano

July 27, 2018

Dr. Jason Ly and Kate Lee were honored as this year's Dr. Alexander C. Liang Asian Pacific American Achievement Award recipients during a ceremony presented by the Aerospace Asian Pacific American Association (AAPAA) Thursday.

The annual award recognizes employees who demonstrate the same characteristics as the event's namesake, who is remembered as a great mentor, teacher and friend. A 30-year tradition, the award was renamed in 2010 in honor of the late Liang, who was general manager of the Vehicle Systems Division, Engineering and Technology Group, and a champion for Asian Pacific Americans working at the corporation. The awards committee selects one recipient from members of the technical staff and one non-MTS recipient each year.

After introductions from AAPAA president James Liau and Dr. Malina Hills, senior vice president, Space Systems Group, retired Air Force Maj. Gen. Susan Mashiko delivered the keynote speech to an audience of friends, family, and colleagues of the 2018 winners, including Liang's wife, Betty.

Mashiko, who served as deputy director of the National Reconnaissance Office, shared her experiences advocating for a more inclusive workplace.



Liang award recipients Dr. Jason Ly and Kate Lee with Betty Liang, center.
(Photo: Elisa Haber)



Retired Air Force Maj. Gen. Susan Mashiko was the event's keynote speaker. (Photo: Elisa Haber)

"Diversity is not ubiquitous, and diversity is not easy," Mashiko said, and praised AAPAA for promoting "exposure, education, and mentoring."

After Mashiko's keynote, the recipients accepted their awards.

Ly is a systems director of the Space-Based Infrared System (SBIRS) Space Vehicle Department in the Space-Based Sensing Division. Ly, an Aerospace President's Award winner, was recognized for his professional accomplishments, but also for his wide-ranging community involvement; he served as president of AAPAA in 2017 and actively volunteers at his church.

During a riveting speech, Ly described his family's journey from China to Vietnam to the U.S. after the Vietnam War as part of the refugee group better known as the boat people. Through his work in the SBIRS program, Ly seeks to contribute to the defense of "peace and freedom on Earth" so that future generations will never have to experience the violence he fled.

Lee is an IT Planning and Analysis staff member in Business Systems and User Support within Enterprise Information Systems (EIS). Lee was selected for her work as a developer on multiple corporate initiatives, as well as for her active role in Aerospace

mentoring programs and employee resource groups. Like Ly, she contributes to the greater community through service in many positions at her church.

Lee, who served as the vice president of AAPAA in 2017, praised “the spirit of community, graciousness, and charity” in Aerospace’s employee organizations and her colleagues for helping her grow professionally and personally.

“The workplace is just a company,” she said. “But with the right company, it’s really a family.”

D8 Event Mixes College Spirit and Collaboration

July 05, 2018

About 100 employees in D8 participated in College Spirit Day on Wednesday, June 27 — an afternoon of coffee and collaboration in the cafeteria/lounge area of the newly renovated laboratory building. Employees were asked to wear gear from their alma maters or their college colors.

Corporate officers Steve Isakowitz and Randy Kendall joined in the festivities, with Isakowitz sporting an MIT tee and Kendall showing off the colors of the University of Michigan, home of the largest football stadium in the world.

More engagement events are planned for D8 and in other areas of the company.



D8 employees turned out for a social and collaboration event on Wednesday, June 27. (Photo: Walt Sturrock)

Total Immersion in Aerospace Culture

July 24, 2018

With hiring at Aerospace expected to hit record levels over the next two years, the need has never been greater to quickly bring new employees up to speed on the changing business climate of the company, as well as its culture, history, and values.

To address this need, the company has kicked off a new two-day immersion program for new employees. The first session was held July 17 and 18 in El Segundo. The immersion program is planned to be held every quarter for employees hired within the previous three months. The inaugural July program was for new hires from April, May, and June. The next session will be in October for new hires from July through September.

The two-day immersion program included talks from corporate officers, presentations from program offices, a review of corporate values and strategic imperatives, tours of the Physical Sciences Laboratories and the STARS mission control center, and a “Jeopardy”-style game show.

Program participants in general provided positive feedback, with those from non-El Segundo locations noting they felt more a part of the company due to attending the event, and others commenting that participation by the senior leaders made them feel like company leaders are accessible.



Participants in the immersion program devise questions to ask a panel of corporate executives. (Photo: Erik Henderson)

Bi-Coastal Festivities Celebrate Interns

by Heather Golden
July 31, 2018

Aerospace campuses across the country celebrated the company's summer interns July 26 during the second annual National Intern Day, a nationwide event created and hosted by an early careers networking organization called WayUp.

The organization also holds a competition to find the top 100 interns and intern programs in the country. Aerospace is in the running for the top intern program. [Click here](#) to read the complete story.



Intern Marilyn Diaz missed the red target in her first attempt to dunk Vice President Randy Kendall, but hit the button with her hand when she came up to retrieve the ball, to the surprise of Kendall. (Photo: Erik Henderson)

It's Cool to Work at Aerospace

by Wendy O'Dea
July 18, 2018

Do you think working at The Aerospace Corporation is out of this world? If so, you're not alone and we're about to shout it for all to hear—or at least within earshot of potential job seekers.

At the beginning of August Aerospace will officially launch a new external recruitment campaign as part of our growth initiative to increase awareness about Aerospace and share just how cool it is to work here.

As CEO Steve Isakowitz noted at the June All Hands meeting, given that the company is on pace to bring a total of 500 new employees this year, "we really need to up our game with regards to recruitment to make sure we are bringing in the best and the brightest."

Isakowitz shared the [new recruitment video](#), which features real Aerospace employees, and the campaign's slogan: "Right Place. Right Path. Right Purpose."

In addition to the video, there are also updated banners and booth graphics for conferences, career fairs, and university events, and a new career page on Aerospace's new external website. The slogan and visuals will also be pushed out through Aerospace's social media channels.

Internally, Facilities is gradually updating a number of public spaces in our buildings to highlight the recruitment campaign and create spaces that encourage interaction and collaboration.

Meet Aerospace's "Aero-Dynamic" Employees

As eager as we are to share our story with job seekers, we certainly don't want our own employees to be left out of all the excitement. That's why we've created a new internal website called "Aero-Dynamics!" that introduces you to some of our superhero (nee "dynamic") team members like "The Multipactor Woman!" and "Dr. Koncept!" Click on over and meet them.

The site also includes a gallery featuring graphics from the new external campaign and a section that shares how you can help us recruit, including taking advantage of the Aerospace Referral Bonus. Who couldn't use an extra \$2,500* these days?

www.aerospace.org



Caley Albert is one of many Aerospace employees featured in the new recruitment campaign.



Most importantly, the “Share Your Stories” section allows you to submit your own Aerospace stories and introduce us to some of your standout coworkers. Perhaps we can feature them (you!) in future campaigns.

More to Come

Keep your eyes peeled for new information, ideas, and employee introductions that will be posted to the Aero-Dynamics! website in the coming months. After all, all the cool kids will be doing it.

**Must meet eligibility requirements outlined on the Referral Bonus webpage.*

Awards and Recognitions, July 2018

by Gail Kellner
July 03, 2018

Aerospace employees frequently earn recognition for their professional accomplishments. This Orbiter feature acknowledges those honors and awards, including the publication of books. To nominate someone for consideration in this section, send details of the award in a timely fashion to orbiter@aero.org, or contact Gail Kellner at gail.d.kellner@aero.org.

Dr. James Martin

Dr. James Martin, principal engineer, System of Systems Engineering Office, was selected as a recipient of a 28th Annual International Symposium Best Paper Award by the International Council on Systems Engineering (INCOSE).

His paper is entitled, “What Do We Mean By ‘System’? – System Beliefs and Worldviews in the INCOSE Community,” and it will be formally announced at the International Symposium in Washington, D.C., next week.



Martin was a co-author on this paper with Hillary Sillitto; Regina Griego; James Martin; Dov Dori; Patrick Godfrey; Dorothy McKinney; Daniel Krob; Eileen Arnold; and Scott Jackson.

July 2018 Obituaries

by Jessie Ding
July 01, 2018

Sincere sympathy is extended to the families of:

Edward Braun, member of technical staff, hired Feb. 19, 1962, retired Mar. 1, 1989, died May 17, 2018
E. Nason Field Jr., member of administrative staff, hired Jan. 29, 1962, retired July 1, 1997, died May 13, 2018
Edward R. Fleming, member of technical staff, hired Feb. 5, 1961, retired May 1, 1991, died June 26, 2018
Young S. Kim, member of technical staff, hired Sep. 30, 1985, retired Feb. 1, 1994, died June 3, 2018
Donald Lacer, member of technical staff, hired May 25, 1967, retired Jan. 1, 1992, died June 1, 2018
Parameswar Mahadevan, member of technical staff, hired July 9, 1974, retired Oct. 1, 1993, died June 15, 2018
Ejike Ndefo, member of technical staff, hired Jan. 21, 1974, retired Sep. 1, 2015, died May 29, 2018
Jeanne A. Pace, office of technical staff, hired May 30, 1972, retired Feb. 1, 2008, died May 30, 2018
Alan D. Rowland, member of technical staff, hired Nov. 15, 2010, retired Aug. 1, 2016, died June 16, 2018
Herbert Yim, member of technical staff, hired Apr. 25, 1966, retired Apr. 1, 1990, died Apr. 27, 2018

To notify Aerospace of a death and have it included in the Orbiter, please contact People Operations at (310) 336-5107

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