

All Hands Report Highlights Complexity in Space and Year-End Successes

by Gail Kellner
September 21, 2018

Steve Isakowitz and Dr. Wayne Goodman hosted their quarterly all hands meeting and fiscal year-end report to employees on Thursday, Sept. 20, emphasizing that space is more complex than ever, and Aerospace is poised to meet the challenges ahead.

Isakowitz, president and CEO, began his presentation with a "Voice of the Customer" video that showed national leaders presenting space as contested, nations threatening our dominance and capability, and the need to take more risks, and do everything better and faster than ever.

Isakowitz reaffirmed that Aerospace is prepared and is playing a vital role in helping the national security space community achieve its new goals.

He referred to the DOD 1601 report released Aug. 8 that recommends establishing a Space Force and other changes in the space command structure, and said that it is no coincidence that much of the language that Aerospace used in its Project Thor report to Deputy Secretary of Defense Patrick Shanahan was echoed in the 1601 report.

The four primary components of Project Thor are: Continuous Production Agility, to enable a rapid production and launch cadence; integration and management of the various space architectural elements as an enterprise; use of prototyping to rapidly develop new technologies and leverage partnerships with government agencies, industry, and allies; and streamlining government decision-making processes to increase speed.

Leadership

Goodman, executive vice president, stressed that Aerospace must get ahead of future challenges by beginning with leadership. He showed video highlights from the first, two-day Leadership 20/20 Conference that took place in August.

The conference included 150 senior leaders who came together at Aerospace's El Segundo campus to discuss the current environment, customer challenges, how to proactively address those challenges, and how to become enterprise leaders.

Isakowitz announced that retired Air Force Maj. Gen. Marty Whelan will become senior vice president of Defense Systems Group (DSG). He succeeds Ed Bolton, who will retire in March.

Whelan spent 33 years in the Air Force and most recently was director of Space Programs at Northrop Grumman.

Fiscal Year Accomplishments

Isakowitz and Goodman introduced a new format to the fiscal year-end report by inviting a group of eight senior leaders to the stage to highlight accomplishments under each of the strategic imperatives.



For the first time, a group of eight senior leaders of the company participated in the quarterly all hands meeting. (Photo: Elisa Haber)

Shaping the Future: Dr. Debra Emmons, general manager, Communication Technologies and Engineering Division, presented that Aerospace provided critical support to four successful national security space launches, and Aerospace played a role in the advancement of satellites that are integral to our nation's defense.

Jean Michael, principal director, Space Enterprise Directorate, said that Aerospace is leading the way in providing engineering leadership and strategic guidance to lead the nation to address space as a warfighting domain, including Project Thor recommendations.



Marty Whelan will become the new senior vice president for Defense Systems Group. (Photo: Elisa Haber)

Innovation: Todd Nygren, general manager, Corporate Chief Engineers Office, discussed how Aerospace is generating innovation. One example he cited is the prototype Rogue One, a CubeSat for missile warning. An example of CPA is Launch-U, a modular platform for launching small satellites. Among Aerospace's cutting-edge technologies is BLISS, our Blind Interference Signal Suppression mitigation algorithm.

Cedric Mann, principal director, Office of the Director of National Intelligence, shared that Aerospace successfully launched five CubeSats, including the two-satellite Optical Communications and Sensor Demonstration (OCS-D) mission that demonstrated high-speed optical (laser) communications and close proximity operations; our agile mission assurance achievement of working with industry to standardize parts of the A2100 satellite bus; and that Team Platypus used artificial intelligence to win the Army Rapid Capabilities Office Blind Signal Classification Challenge.

Growth: Dr. Torrey Radcliffe, principal director, Civil Systems Technology, reported how the corporation continued to expand its work with NASA; and how Aerospace drove growth in our value in

work with the Space Security and Defense Program, and the Survivability Assurance Office.

Dr. Jeff Emdee, general manager, Space Based Sensing Division, discussed a high-visibility failure analysis for the Missile Defense Agency (MDA); the corporation helping in additional failure assessments and offering corrective actions; and a doubling of STE support for the Ground Based Strategic Deterrent Program.

Velocity: Dr. Eric Dashofy, principal director of development, Enterprise Information Services, shared 2018 hiring successes, which included faster hiring times, a record number of hires, more diverse hiring, and 300 intern hires. He also reported on the redesigned corporate website, which is optimized for viewing on mobile devices.

Dr. Susan Herbulock, general manager, Enterprise Ground and Launch Division, reported on the importance of maintaining focus on the One Aerospace Initiative and the success in executing the significant mid-year STE increase.

Hero Award and CEO 007 Recipients

Isakowitz announced Thomas Brand as the recipient of the CEO 007 pin for his extraordinary performance as the chair of the Flight Test Missile-29 Failure Review Board for the MDA.

Many Hero Award pins were presented throughout the quarter, but the following were highlighted:

- Rich Lamb and Rich Schoonmaker for their critical leadership in developing the Range of the Future decision briefing. (Shaping the Future)
- Hamid Haque for leadership and contributions to accelerate acquisition of the Next Generation Overhead Persistent InfraRed systems. (Shaping the Future)
- Team Platypus for winning the Army Rapid Capabilities Office Blind Signal Classification Challenge. Team members were: Esteban Valles, Kyle Logue, Donna Branchevsky, Sebastian Olsen, Alexander Utter, Darren Semmen, Eugene Grayver, and Andres Vila. (Innovation)
- Carl Palko for his work in meeting the tremendous increase in the Ground Based Strategic Deterrent STE and making a substantial impact on the critical national priority program. (Growth)
- Rico Espindola for leading multiple successful launch and early orbit readiness, operations execution, and transitions. (Velocity)

Isakowitz closed the meeting by sharing an Aerospace logo graphic composed of photos of all 4,000 Aerospace employees, and thanked everyone for their hard work and contributions.

Aerospace Team Wins Army AI Competition

by Eric Cheevers
August 30, 2018

An Aerospace Corporation team of eight engineers has won the Army Rapid Capabilities Office (RCO) Blind Signal Classification Challenge, in which contestants were asked to find innovative approaches to conducting analysis of previously unknown (hence 'blind') radio frequency signals using artificial intelligence (AI) and machine learning.

The group, whose members call themselves "Team Platypus," consists of Esteban Valles, Kyle Logue, Donna Branchevsky, Sebastian Olsen, Alexander Utter, Darren Semmen, Eugene Grayver and Andres Vila. They won the first-place prize of \$100,000, beating out 48 other competitors, by correctly detecting and classifying the greatest number of radio frequency signals using AI technologies. Methods used for the competition could expedite and improve ways of identifying signals within the electromagnetic spectrum, resulting in technological advancements that will assist electronic warfare officers on the battlefield.



Team Platypus members, left to right, standing: Donna Branchevsky, Alexander Utter, Esteban Valles, Darren Semmen, and Sebastian Olsen. Seated: Eugene Grayver, Andres Vila, and Kyle Logue. (Photo: Elisa Haber.)

"In its challenge, the Army RCO released a training set with synthesized data that the teams used to build their algorithms," said Vila, team lead. "Our goal was to combine the team's deep history and expertise in advanced satellite communications with our practical knowledge of the latest in machine learning and deep neural networks to provide a best-in-class solution."

[Click here](#) to read full story.

In the News: Media Coverage of Aerospace

August 30, 2018

A team of eight Aerospace engineers won the \$100,000 grand prize in the Army's "Blind Signal Classification Challenge" by correctly detecting and classifying the greatest number of radio frequency signals using a combination of signal processing and artificial intelligence algorithms. iLab's Bradley Hirasuna and team lead Andres Vila discuss the challenge and next steps.

[Read the SpaceNews article here.](#)

[Read the Breaking Defense article here.](#)

Fox13 Salt Lake City in Utah featured the Optical Communications and Sensor Demonstration (OCSD) mission and Aerospace's work with Launch-U on their coverage of Small Satellite Conference at Utah State University August 2018. Aerospace's Darren Rowen and Carrie O'Quinn were interviewed. Read the story and watch the video [here](#).

In the News: Mick Gleason Pens POLITICO Op-Ed

September 17, 2018

In a new [POLITICO op-ed](#), [Mick Gleason](#), a senior project engineer/CSPS space policy analyst, and Travis Cottom, an independent space consultant, discuss why standards and best practices for satellites and other spacecraft matter so much.

www.aerospace.org



Delta II Flies Into History

by **Lindsay Chaney**
September 17, 2018

The end of an era arrived Saturday morning with an Earth-shaking roar and a brilliant flash of light as the world's last Delta II rocket rose into the morning sky above Vandenberg Air Force Base.

It was the 155th flight of the Delta II and the 100th consecutive successful launch, a record unmatched by any other launch vehicle in history.

The main payload on this final mission was NASA's Ice, Cloud, and Land Elevation Satellite-2, or ICESat-2, which will use laser pulses to measure the elevation of ice sheets, glaciers, sea ice, and forest vegetation. A secondary payload was several CubeSats, including a project from UCLA to monitor space weather that was built with technical assistance from Aerospace.

The Delta II first launched on Feb. 14, 1989 from Cape Canaveral, carrying the initial GPS Block II satellite. In the years since then, Delta IIs have launched NASA probes to Mars, Mercury, the moon, and asteroids, as well as 48 Global Positioning System navigation satellites through 2009 and commercial satellites for companies including Iridium and Globalstar.

Aerospace was involved over the years with various aspects of Delta II development and integration with GPS satellites. Numerous Aerospace employees had a connection with the Delta II, including Executive Vice President Dr. Wayne Goodman, who conducted structural analyses on the Delta II solid rocket motors and their ablative nozzles as his first assignment after joining Aerospace in 1987.

[Click here for full story.](#)



Delta II streaks down the coast, visible from the Aerospace El Segundo headquarters. (Photo: Heather Golden)

ALMA Hosts Heritage Month Luncheon

September 25, 2018

The Aerospace Latino Members Association hosted a lunch-time event on Tuesday, Sept. 25, to mark Hispanic Heritage Month. A Mexican-themed lunch was followed by rounds of loteria, a popular Mexican bingo-style game.

The national heritage observation started in 1968 as Hispanic Heritage Week under President Lyndon Johnson and was expanded by President Ronald Reagan in 1988 to cover a 30-day period starting on Sept. 15 and ending on Oct. 15. The day of Sept. 15 is significant because it is the anniversary of independence for Latin American countries Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. In addition, Mexico and Chile celebrate their independence days on Sept. 16 and Sept. 18, respectively.



Attendees at the ALMA-sponsored Hispanic cultural luncheon played lively rounds of loteria. (Photo: Elisa Haber)

September 2018 Obituaries

by **Jessie Ding**

September 01, 2018

Sincere sympathy is extended to the families of:

- **Mary Le Doux**, office of technical staff, hired Aug. 22, 1960, retired Nov. 1, 1979, died July 23, 2018
- **Donald A. Durran**, member of technical staff, hired Sep. 6, 1960, retired Nov. 1, 1991, died July 8, 2018
- **Wallace Engle**, office of technical staff, hired June 18, 1962, retired Jan. 1, 1998, died Aug. 16, 2018
- **Sherwin Lewis**, member of technical staff, hired Jan. 23, 1962, retired Mar. 1, 1990, died July 7, 2018
- **William F. Roberts**, member of technical staff, hired Sep. 25, 1961, retired Mar. 1, 1987, died Aug. 11, 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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