

Aerospace CEO Isakowitz on the ‘Golden Age of Innovation’ for Space

January 28, 2020

At a panel discussion on the future of space commercialization at the Los Angeles Economic Development Council (LAEDC), The Aerospace Corporation President and CEO Steve Isakowitz explained how massive changes in the space sector in recent years have created new and exciting opportunities for the economy.

As the cost to access space continues to go down, and the amount of capital flowing in continues to go up, new possibilities are coming closer to reality every day.

“Whether it’s national security or it’s the civil sector, both of them realize that the game-changing element is the commercial sector,” Isakowitz told the audience. “It’s going to require a level of partnership that’s never been seen before.”

He pointed out that \$21.8 billion of investment capital has poured into space venture startups since 2000, propelling the sector forward in some exciting and unexpected ways. Across the space sector, new challenges and threats continue to emerge. These can range from mitigating the dangers of space debris in orbit, to preventing attacks on vulnerable assets from adversaries.

“We are living in a dynamic time in space that is rapidly shaping the future of our national security and economic prospects,” he said.

Isakowitz said that we must be able to meet and outpace these threats to ensure a safer and brighter future for space. The recent establishment of Space Force is a prime example of this.

“With all these things taking place, with space becoming congested, contested, and much more competitive, it drove Congress about three years ago to say we need to change the paradigm,” Isakowitz said of Space Force. “So now we have this new service, that over the next year and half is going to define exactly what it looks like.”

He added that Aerospace will continue to stand ready to provide US space programs with its expertise and capabilities. The future of space will require a more modernized approach, including faster procurement, more agile system architecture, and more collaboration with startups and industry.

A few examples of Aerospace’s involvement in leading this evolution include Air Force Pitch Day, [Space Ventures Coalition](#), and an upcoming event with TechCrunch later in 2020.

“We are truly, I believe, in a golden age of innovation in the space sector,” he said.



Aerospace President and CEO Steve Isakowitz speaks at a Los Angeles Economic Development Council event.

Aerospace Scientists Show Off Their Artistic Side

January 20, 2020

Scientists spend their days researching, solving complicated equations, and running laboratory experiments. And yet, sometimes science can venture into a more artistic realm.

Scientists actually capture all kinds of imagery, and a group of scientists here at The Aerospace Corporation decided to compete in a departmental contest to see who could supply the most interesting image.

While traditional photo contests might feature beautiful landscapes or artistic close-ups, this contest ranged into the more esoteric, and even the microscopic.

The friendly competition drew 42 entries, with team members, Aerospace executives and even a professional photographer casting their votes for the winners.

[Click here](#) to view a collection of the images and enjoy the art of the geek.



A counter-rotating turbine, fabricated in photostructurable glass ceramic material using a novel Aerospace laser machining technique.

Albuquerque Growth Continues with 100th Employee, New NNSA Contract

by **Conor Shine**
January 16, 2020

The Aerospace Corporation's Albuquerque campus continues to ascend to new heights, reaching a major hiring milestone and securing a contract that will support nuclear deterrence work for years to come.

The Albuquerque office recently welcomed its 100th employee, prompting a celebration featuring Circle A-adorned cupcakes that drew dozens of team members to mark the occasion. The office's staff currently numbers 103, an increase of more than 30 compared to 2018, with plans to add as many as 20 more employees by the end of this year.

"It's like seeing the 100-mile marker on a highway. It's a signpost showing your progress on where you're going to be. It's another step in the road," said Mark Jelonek, general manager of the Advanced Development and Planning Division. "Albuquerque has been growing because of the increased interest both in the modernization of the nuclear deterrent and also the work that's going on in space experimentation, rapid prototyping and rapid acquisition."

The overall growth comes at a time when Aerospace is strengthening its relationship with the National Nuclear Security Administration, with the announcement this week of a contract valued at \$79 million, the company's first direct contract with the agency.

Under the five-year cost-plus-fixed-fee award Aerospace will continue its longstanding work providing systems engineering and integration support, as well as independent technical and programmatic analysis for the NNSA's Office of Defense Programs and Office of Defense Nuclear Nonproliferation.

"This direct contract strengthens the federally funded research and development center relationship with NNSA by leveraging the company's technical capabilities across the nuclear enterprise that draws upon our 60 years of supporting National Security Space," said Edward Swallow, senior vice president of the Civil Systems Group.

Aerospace has a long history with the country's nuclear program, supporting the development of advanced nuclear missile technologies and missile defense programs through its initial 1960 contract with the Air Force Ballistic Missile Division.

Aerospace's current work includes independent reviews, assessments of life-extension programs and surveillance to the nuclear weapons stockpile, as well as warhead integration for the ground-based strategic deterrent.

Growth in Albuquerque

The company's presence in New Mexico dates to the early 1980s, when a handful of engineers began supporting satellite research programs.

Since then, the office has grown to support a number of critical programs, including the Air Force Research Laboratory, the DOD's Operationally Responsive Space Office and the Air Force Nuclear Weapons Center, for which Aerospace provides end-to-end expertise in launch and on-orbit mission success.

"The thing with Albuquerque, because it's out of the way, people don't know the magnitude of the technical work going on there and what they don't understand is just how fun of a place it is to work. We get to work on things that nobody else in the country is doing," Jelonek said.

In August, Aerospace inaugurated expanded facilities in Albuquerque. The office includes staff from across the company, including Civil Systems Group, Defense Systems Group, Engineering and Technology Group, National Systems Group, Space Systems Group



Aerospace-themed cupcakes were served at an event marking the 100th employee joining the Albuquerque office.



Members of the Aerospace Albuquerque office gather at a January event.

and Office of the Chief Velocity Officer.

Ted Muelhaupt, ETG Principal Director for the Southwest Regional Office, said the growth speaks to the quality of the work done by Albuquerque employees.

“Our product is literally our people,” he said. “By reaching the 100 metric, it shows we are valued by our customers — they just keep asking for more people.”

The Space Rapid Capabilities Office has been a key recent growth area, with the number of Aerospace technical staff supporting the office tripling over the last two years and further growth projected in 2020.

“I am most proud that throughout this rapid growth, the Albuquerque Aerospace office has maintained the culture of excellence, technical competence, and spirit of collaboration that we so highly value,” said Lisa Berenberg, Systems Director for the Space Rapid Capabilities Office.

5 Key Trends Shaping a Future with Space Force

January 06, 2020

The creation of a U.S. Space Force is a historic milestone that reflects the growing importance of the space enterprise to national security.

Confronting the evolving threat to critical on-orbit assets will require innovative approaches and continued leadership to build a more resilient and agile space architecture.

And while the passage of the 2020 National Defense Authorization Act lays out many high-level priorities and leadership structures, the details of how the newest branch of the military takes shape and ultimately advance U.S. interests in space will be borne out over the coming months and years.

Decision makers will have to navigate a rapidly changing landscape, as potential adversaries develop anti-satellite weapons and the growing commercial market unlocks new possibilities for space.

As this new era of space unfolds, leading experts from The Aerospace Corporation’s Project Thor and [Center for Space Policy and Strategy](#) are providing research and analysis on the key drivers and trends that will shape the development of the U.S. Space Force and the broader space enterprise. [Click here](#) to read excerpts from five recent policy papers that touch on these critical issues.



January 2020 Obituaries

January 01, 2020

Sincere sympathy is extended to the families of:

David Briner, member of technical staff, hired July 2, 1964, retired April 1, 1989, died Dec. 21, 2019
Lester Forrest, member of technical support, hired May 30, 1961, retired Sept. 1, 1987, died Nov. 21, 2019
Jane Kirby, member of administrative staff, hired July 10, 2006, retired Oct. 1, 2017, died Nov. 7, 2019
Charlotte Prince, office of technical support, hired July 23, 1984, retired Feb. 1, 2005, died Dec. 17, 2019
Carroll Smith, member of technical staff, hired July 16, 1962, retired June 1, 1994, died Nov. 27, 2019
Wayne Stafford, member of technical staff, hired June 22, 1964, retired May 1, 1987, died Dec. 2, 2019
Keith Underwood, member of technical staff, hired July 13, 1981, retired Feb. 1, 1994, died Oct. 10, 2019
Ralph Wells, member of administrative staff, hired July 20, 1964, retired May 1, 1989, died Dec. 12, 2019

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

*These articles are reprinted from The Orbiter, a publication of The Aerospace Corporation 2310 E. El Segundo Blvd., El Segundo, CA 90245-4691 310-336-5000
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