

SHARED PURPOSE

SECOND ANNUAL REPORT APRIL 2024



BOOSTING **IMPACT THROUGH COLLABORATION**

The United States and its international partners continue to push the boundaries of space innovation - from low Earth orbit to interstellar spaceflight, from hardware to Al-driven software and everything in between. At the heart of this expansive innovation is our industry's workforce, the people whose ingenuity and creativity drive our nation to the apex of global space leadership. Maintaining our U.S. leadership position in the competitive arena of space necessitates confronting the critical and growing shortage of technical and other key skills within the space industry.

To eliminate this talent gap, a strategic and comprehensive approach is required, one that covers every aspect of workforce development from igniting a passion for space in K-12 education to providing higher

education students with hands-on, experiential internships, and from widening access to jobs to hiring and keeping the world's most capable, career-ready space professionals. As space leadership is synonymous with global leadership, this approach is key to preserving our nation's technological lead and securing our strategic advantage.

That is why Space Workforce 2030 (SWF2030) was established. As a first-of-its-kind endeavor, it delivered a call-to-action across our industry to come together for a shared purpose: to INSPIRE, PREPARE and EMPLOY a space workforce that can support the dynamic and diverse needs of space missions for generations to come.

As a committed advocate since its inception, I am deeply honored to take the helm as the inaugural Executive Director of SWF2030. My lifelong dedication to national security, space technology innovation and purpose-driven impact has instilled in me the belief that a world-class workforce lies at the core of all innovation and competitive advantage. This responsibility is not just a position to me—it's a calling.





























































The landmark partnership between Space Foundation and The Aerospace Corporation combined with the commitment and dedication of our partner companies, played a pivotal part in my decision to assume this leadership role. This integration of Space Foundation's educational prowess, Aerospace's cutting-edge research and technological advancements, and our partners' deep





industry insights form a triad of unprecedented and unparalleled strength. Together, we create the force necessary to eliminate the talent gap and prepare the world's strongest space workforce yet — this is the promise of Space Workforce 2030.

We're excited to highlight our collective advancements and best practices of 2023 including the triumphs of our National Space Intern program and our initiatives to establish National Space Day as an enduring source of nationwide inspiration! While our progress is commendable, there is still much to accomplish. Our journey demands us to be collaborative, persistent, and unwavering in our efforts.

As we advance our strategy for 2024, we aim to expand our coalition by welcoming more partner companies and, for the first time, government and nonprofit affiliates. We're also broadening our reach by inspiring those from a diversity of backgrounds and experiences to discover and pursue opportunities in our industry. Lastly, we are actively partnering with and championing other synergetic initiatives, including an upcoming multi-partner space-STEM awareness initiative with the Department of Education and the National Space Council's Find Your Place In Space Week, among others.

Leading SWF2030 fills me with enthusiasm, as we work to meet the space industry's needs today and tomorrow, together. Join us in advancing the most exhilarating sector at this pivotal moment in history.

> Melanie Stricklan **Executive Director**



TAKING ACTION AT EVERY LEVEL

Space Workforce 2030 is driven by the knowledge that closing the education-to-employment talent gap in our industry is vital to sustaining our nation's space leadership. Whether it's through the programs and partnerships led by our Centers of Excellence to **INSPIRE**, **PREPARE** and **EMPLOY**, or across the breadth of activities led by our member companies on their campuses and communities, we are harnessing the collective action of the space industry to take this challenge head-on.

Igniting K-12 STEM Interest in Space

The **INSPIRE** team is celebrating **National Space Day** on May 3 with an inaugural nationwide event providing 4th and 5th graders across the country with a unique opportunity to learn from science educators and space influencers to inspire their curiosity for space. This annual event will expand every year to welcome more students of any age to get inspired by space.

WHAT OUR MEMBER COMPANIES ARE DOING

Similarly, members such as **Blue Origin** and **L3Harris Technologies** hosted tours for students and educators to engage with STEM and space science. Throughout the year, companies such as **Aerospace** and **Astranis** invited STEM students to come onto campus for tours and meet with employees to learn more about the amazing work they do for space.



Forging Pathways for Future Space Careers

Our industry understands better than anyone that a bold journey begins with a successful launch. Led by the **PREPARE** team, the **National Space Intern (NSI)** program provides early career professionals the support and infrastructure needed to transition into the workforce. Now in its second year, the program is growing quickly and continues to enhance its impact.

WHAT OUR MEMBER COMPANIES ARE DOING

Companies such as **Slingshot Aerospace** have built mentorship programs with day-to-day support for interns. **United Launch Alliance** offered interns the opportunity to build and launch a rocket and present their projects and accomplishments to company executives. Meanwhile, **Northrop Grumman** hosted a Space Park tour and lunch event for all NSI interns.

Empowering Our Workforce to Thrive

We are an industry of problem solvers, and understand the best ideas are forged through collaboration. The **EMPLOY** team gathers insights on best practices and creates action that bolsters efforts across recruitment, retention and representation.

The **EMPLOY** team focuses on strengthening these best practices and supports SWF2030 companies in implementing programs and activities that drive results, such as our sharing across our Business/Employee Resource Groups.

You can learn more about this year's top best practices on pages 8-9.



SWF2030: JANUARY 2024 SPACE WORKFORCE DATA RESULTS

As part of SWF2030's commitment to ensuring our workforce meets the accelerating needs of the nation's space industry, we will continue to publicly share our progress and hold ourselves accountable toward increasing the number of women and employees from underrepresented groups in our talent base

As our industry evolves with company mergers and restructures, we've updated our reporting to ensure accurate and consistent year-over-year data, standardizing baseline metrics and highlighting percentage changes for clarity.

2022-2023 RESULTS:

- Meaningful improvements for both women and People of Color (PoC)* in our technical staff.
- Meaningful increases for PoC interns and intern hires.
- More progress to be made in the technical leadership and women intern categories.

The results of this year's data show our encouraging progress. It also reminds us that there is more work to be done. We firmly believe this transparency creates a unique view of industry demographics, informing strategies for sustained growth and inclusivity.

*A person of color is someone who falls into one or more of the racial and ethnic categories American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander.

Technical Staff



WOMEN

19.4%

18.5%



PEOPLE OF COLOR (POC)

34.1%

32.7%



Intern

WOMEN

30.4% 30.5% **PEOPLE OF COLOR (POC)**

48.6%

46.7%





Technical Leadership



WOMEN

13.5%

13.4%

*Difference is not statistically significant

PEOPLE OF COLOR (POC)

25.3%



25.1%

*Difference is not statistically significant.

Intern Conversions

WOMEN

30.2%

34.7%



PEOPLE OF COLOR (POC)

46.4%



42.7%

EXPANDING NEW POSSIBILITIES

The space industry is about moving forward. At every one of our companies, you will find people pursuing bold ideas and new innovations that reshape what we think is possible. By harnessing the best and most effective approaches, we accelerate how success can be achieved. Through SWF2030, we collaboratively share ideas and best practices that help us build a more vibrant and robust space workforce for the future.

This year, we received more than 30 best practices contributed from our member companies, including ABL Space Systems, Airbus U.S. Space & Defense, Inc., Astra, Astranis, Ball Aerospace & Technologies Corporation, BlackSky, Blue Origin, HawkEye 360, Jet Propulsion Laboratory (JPL), L3Harris Technologies, Lockheed Martin Space, Northrop Grumman, Planet, Redwire Space, Relativity Space, Slingshot Aerospace, Space Exploration Technologies, Spire Global, Stellar Solutions, The Aerospace Corporation, The Boeing Company, United Launch Alliance, Virgin Galactic, and Voyager Space.

Collectively, we selected the best of the best practices on Recruitment, Retention and Representation efforts to highlight.

BEST PRACTICE: RECRUITMENT

HIRING MANAGERS' ESSENTIALS TRAINING FOCUSES ON DIVERSITY OF BACKGROUND

L3HARRIS TECHNOLOGIES

Success in space requires the best and brightest talent working together to create novel solutions and innovative pathways forward. It's essential that our organizations are equipped and empowered to broaden the pool of qualified candidates who have the necessary skills, experiences and backgrounds to make a difference.

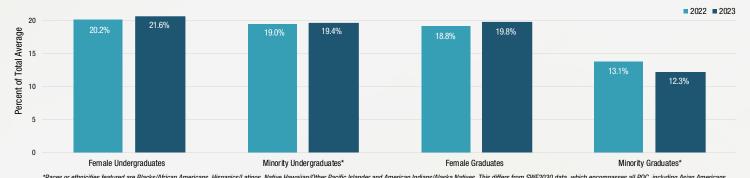
At **L3Harris Technologies**, hiring managers receive training and resources that help them learn about compliance and effective techniques in the selection process, while also focus on strengthening their understanding for the importance of diverse and equitable hiring practices.



Photo: L3Harris Technologies

FEMALE/MINORITY AEROSPACE ENROLLMENT DATA FROM ADCA (AVERAGE PERCENT OF ALL SCHOOLS)

SWF2030 is collaborating with partners like the Aerospace Department Chairs Association on a number of programs, including transparently sharing aggregate enrollment data across university aerospace departments.



BEST PRACTICE: RETENTION

ESTABLISH AND SUPPORT INCLUSION COMMUNITIES **LOCKHEED MARTIN SPACE**

Fostering an inclusive environment to bring out the best in every employee ensures the nation's space industry thrives. Opportunities for growth, learning and connection contribute to strong teams, organizations and communities.

Lockheed Martin Space finds that supporting Inclusion Communities – such as business resource groups and employee networks, which are open to all - fosters a stronger sense of connection throughout their workforce and is key to talent retention efforts.



Photo: Lockheed Martin Space

BEST PRACTICE: REPRESENTATION

INCLUSIVE CUSTOMER EXPERIENCE **VIRGIN GALACTIC**

Space inspires imagination. It invokes humanity's greatest aspirations to challenge the status quo and explore new possibilities. Bringing together diverse perspectives and unique experiences is fundamental to fostering a more inclusive space community where everyone can make an impact.

For its space tourism experiences, Virgin Galactic invited diverse customers from various backgrounds, including race, ethnicity, nationality, abilities, gender and sexual orientation, and garnered valuable feedback that will inform how they continue to open access to space to all.



Photo: Virgin Galactic



K-12 STEM student outreach in 2023 was over our goal of 5 million (7.8M), including 58,000 students from Title 1 schools.

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WHERE WE'VE BEEN



Innovate@UCLA's Summer Solstice 2023

Event: SWF2030 leaders participated at the Innovate@UCLA's Summer Solstice 2023 event as speakers on the Positive Impacts Panel to discuss "Diversity, Equity and Inclusion in the Space Industry."

NSI Kickoff Event: SWF2030 hosted a kickoff event for the inaugural class of the National Space Intern program. The kickoff was the first of a series of national and local opportunities for interns to learn, network and engage across the space industry.

NSI Leadership Panel: NSI interns and other attendees gained insights from leaders across SWF2030 companies during a panel that explored how their organizations foster a diverse and inclusive environment.



INCOSE International Symposium: SWF2030

led a panel at the INCOSE International Symposium that featured perspectives from government, industry and academia on advancing diversity, equity and inclusion.



White House STEM Sessions with National Space Council: SWF2030 leaders joined attendees from the National Space Council, space and STEM nonprofits, and a variety of creative agencies to share ideas on a national campaign to inspire K-12 students to pursue a career in space and STEM.

Professional Development Resume Workshop:

SWF2030 hosted a Professional Development Resume Workshop.



International Space Station R&D Conference: SWF2030 highlighted as part of a panel on supporting space-related STEM education initiatives to inspire, prepare and employ the next generation of the space workforce.

2024 NSI Program: Registration for the NSI program opened for its second year. The program

continues to grow quickly and builds on the unique experiences provided to participants.



TechCrunch Disrupt 2023:

SWF2030 led the "So, You Want to Work in Space?" breakout session for an audience of commercial start-ups, venture capital. government partners and more.

Establishment of Employee Resource Groups and Business Resource Groups LinkedIn Group: SWF2030 established the SWF2030 BRG/ERG LinkedIn Group to provide a space for the BRG/ERG leaders of SWF2030 signatory companies to share insights and experiences, ask for guidance, discuss best practices and build valuable connections.

NSI Virtual Networking Event: SWF2030 hosted a virtual networking event that connected member companies with nearly 600 students interested in working in the space industry.

JUN 2023

JUL 2023

AUG 2023

SEP 2023

NOV 2023

MAY 2024

APR 2024

MAR 2024

FEB 2024

JAN 2024

National Space Day on May 3:

SWF2030 hosts nationwide event featuring a number of space educators and influencers to inspire the next generation of scientists, engineers, and innovators.



SWF2030 Annual Report at 39th Space Symposium: SWF2030 shared aggregate data and best practices for its second year. Leaders were also engaged in keynote speeches, panel discussions and other sessions.



Total Solar Eclipse Event with NASA at IMS: Presented by Purdue University, SWF2030 joined one of the

nation's most prominent viewing events for the once-in-a-generation phenomenon at Indianapolis Motor Speedway.



Aerospace/Space Foundation Partnership: SWF2030 announces strategic partnership with Space Foundation under leadership of Melanie Stricklan as inaugural **Executive Director.**

National Space Day Event Initiated:

Planning for the inaugural nationwide broadcast event gets underway.

Screening of Hidden Figures at **Houston Community College:**

SWF 2030 joined NASA for a movie screening and panel at Houston Community College to inspire the next generation of the space workforce.

Annual Survey Launched: Kicked off the SWF2030 annual workforce survey program for the 2023-24 year to gather industry data, insights and feedback from the member community.

IN THE NEWS

SPACENEWS

Open Letter: Our pledge to diversify the space industry workforce continues

Forbes

The Secret To Great Leadership? Develop Your Aspiring Leaders



Space Workforce Group Baselines Industry Diversity Stats

The Gazette

Top aerospace organizations become more diverse, but 'work to be done'



The space industry puts a booster on its diversity-hiring efforts



Young adults entering the space work field



Growing the Space Engineering Ranks



How comms helps bring diverse talent to the space industry



Manifest Space: A Constellation of Talent









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