

National Space Club & Foundation 515 2<sup>ND</sup> Street, NE Washington, DC 20002 (P) 202-547-0060 www.spaceclub.org

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## NATIONAL SPACE CLUB & FOUNDATION ANNOUNCES 2025 AWARD RECIPIENTS

Washington, DC - The National Space Club & Foundation is pleased to announce its Annual Award Recipients. The Awardees are selected by panels of experts from across the aerospace and defense industry, government, and academia, and are a testament to the inspiring work of individuals across the United States. The Awards will be presented at the 68th Annual Robert H. Goddard Memorial Dinner taking place at the Washington Hilton Hotel on Friday, March 21, 2025.

## 2025 Award Recipients

<u>General Lester Lyles</u> will receive the Club's preeminent award, the **Dr.** Robert H. Goddard Memorial Trophy in recognition of his exceptional contributions to the space community and decades of visionary leadership in aerospace and national security.

During his 35-year U.S. Air Force career, General Lyles held pivotal roles, including Commander of the Space & Missile Systems Center, Director of the Ballistic Missile Defense Organization, and Vice Chief of Staff of the Air Force. His Leadership was instrumental in advancing the military's space capabilities and transforming the Air Force's approach to aerospace defense. As Commander of Air Force Materiel Command, he led innovations in research, development, and acquisition, transforming aerospace defense.

Following his military service, General Lyles became a key figure in national space policy and defense strategy. He served on the President's U.S. Space Policy Commission, the Defense Science Board, and the NASA Advisory Council, helping shape long-term goals. He contributed to NASA's Human Space Flight program with the 2009 Augustine Committee and chaired the

National Research Council's Roles and Rationale Study of the U.S. Civil Space Programs.

He also served on the Defense Science Board, President's Intelligence Advisory Board, and chaired the NASA Advisory Council (2016–2021), guiding key agency decisions. His expertise extended to the State Department's International Security Advisory Board and the National Space Council's Users' Advisory Group.

General Lyles' achievements have earned him numerous honors, including the Defense Distinguished Service Medal, Legion of Merit, and the National Space Club's Astronautics Engineer of the Year award. He received the NAACP's Roy Wilkins Renown Service Award and was honored as Black Engineer of the Year for Lifetime Achievement. In 2022, he became a Fellow of the American Institute of Aeronautics and Astronautics.

Beyond his career, General Lyles is committed to advancing aerospace innovation and education. He chairs the boards of KBR and the Universities Space Research Association (USRA) and supports organizations such as the Smithsonian National Air and Space Museum.

**Sohum Gautam**, a high school senior at Downingtown STEM Academy, Downingtown, PA, is the recipient of the **Goddard Memorial Dinner's Keynote Scholarship.** Mr. Gautam's drive and passion for space exploration are evident in his many projects and accomplishments, including co-founding a high school rocketry organization called Polaris that received recognition from NASA for over 12 successful high-powered rocket launches. As a NASA SEES intern, he worked on projects including analyzing exoplanet data, and at ANSYS AGI, he controlled satellite movement to monitor wildfires. He also delivered a TedX Talk on the future of deep space exploration and Mars colonization, highlighting how AI can drive our goals.

Demonstrating his desire to innovate, he engineered an AI-integrated FPV drone that led to recognition as a Coca-Cola Scholars semifinalist, as well as conceptualized the RAMION thruster, an air-breathing rocket engine combining ramjet and ion propulsion technologies for sustainable deepspace exploration. In addition, Sohum has been deeply involved in researching AI's integration with robotic systems at the UPenn xLab and Carnegie Mellon Safe AI Lab.

Growing up as his father's copilot on Cessna flights, Sohum developed a love for flying. At 16, he obtained his student license, with the goal of becoming a private pilot by the time he completes high school.

Sohum plans to study aerospace engineering and computer science in college, aiming to explore how software can integrate with space systems. He aspires to start an aerospace company and contribute to the mission of sending humans to Mars, making humanity a multiplanetary species.

The SpaceX Team is the recipient of the Nelson P. Jackson Aerospace Award in recognition of the first "catch" of a returning space booster. Starship's fifth flight test lifted off on October 13, 2024. Following a successful liftoff, ascent, stage separation, boostback burn, and coast, the Super Heavy booster returned to the launch site and performed its landing burn where it was caught mid-air by mechanical arms of the launch and catch tower at Starbase in Texas. The successful flight test and unprecedented "catch" brings SpaceX one step closer to realizing its goal of rapidly flying a fully reusable launch system. Starship and Super Heavy are designed to be fully reusable and are the most powerful launch vehicles ever flown, built to carry both crew and cargo to Earth orbit, the Moon, Mars, and beyond. Once operational, Starship aims to significantly reduce the cost of accessing space and make it possible for life to become multiplanetary.

<u>Dr. Christopher Slocum</u>, Physical Scientist, Center for Satellite Applications and Research (STAR)/NOAA/NESDIS is the recipient of the NOAA David Johnson Award for his dedicated leadership in development and transition of operational tropical cyclone applications, creation of publicly available artificial intelligence (AI)-ready datasets and promotion of open science AI training materials. Dr. Slocum's operational tropical cyclone applications incorporate unique combinations of global geostationary imagery and GOES Lightning Mapper observations, and numerical model output to provide forecast guidance for the most challenging of tropical cyclone forecasts—rapid intensification and tropical cyclone formation.

Dr. Slocum was instrumental in accelerating the Nation's AI efforts through his management of and contributions to the AI-ready Tropical Cyclone Precipitation, Infrared, Microwave, and Environmental Dataset (TC PRIMED, 1987 to 2023). The TC PRIMED dataset provides much needed curated AI-ready data that enables development of future satellite-based tropical cyclone algorithms. Dr. Slocum extended his AI legacy by providing

associated TC PRIMED training materials in the NOAA Center for Artificial Intelligence's Learning Journey Library.

Major William Elder, Director of Operations, 3rd Test and Evaluation Squadron, United States Space Force, is the recipient of the **General Bernard Schriever Award**. Major Elder exemplified visionary leadership as he spearheaded the efforts of a 149-member unit conducting orbital warfare test and evaluation, advancing combat-ready space systems. He led the groundbreaking \$60M VICTUS NOX mission, achieving on-orbit readiness in just 37 hours, while orchestrating 154 sorties and 212 test points across 14 organizations in less than 30 days—an achievement praised as a transformative milestone for U.S. space capabilities.

As a pioneer of the USSF Integrated Test Force, Major Elder streamlined operations, reducing manpower by 37% and ensuring \$5.1B in capabilities were combat-ready. He drove innovation by integrating operational testing into early acquisition, aligning \$100M+ in investments, and advancing the modeling, simulation, and testing of sensitive systems. Through mentorship, he certified 106 OW Test Pilots, forged partnerships with 83 organizations, and defined \$301M in infrastructure investments, solidifying U.S. space dominance. His efforts embody excellence and connection in service to the nation.

<u>Dr. Soren Madsen</u>, Chief Engineer Planetary Science Directorate, Jet Propulsion Laboratory, will receive the **Norman L. Baker Astronautics Engineer Award** for outstanding contributions on multiple planetary exploration missions and for his technical leadership of the Europa Clipper MOSFET tiger team.

Mr. Madsen has a multi-decade track record of supporting numerous NASA missions including a critical 2024 role on the Europa Clipper Program. Europa Clipper is NASA's latest and largest flagship mission to the outer Solar System and was launched in early October 2024. The successful launch was the culmination of over ten years of development and more than two decades of planning by the Planetary science community. Soren's key contribution to Europa Clipper was his leadership of JPL's effort to understand and mitigate the last minute threat associated with unexpected radiation vulnerability in mission critical MOSFET parts. More than 1000 of these parts were built into Clipper's spacecraft and instrument electronics and could have failed catastrophically in the extreme Jovian radiation

environment. This vulnerability was identified with less than six months to go before the 2024 planetary launch opportunity and could have resulted in the need to delay the launch by a year or more. Soren led the team that investigated the root cause of the problem, conducted circuit level vulnerability assessments of more than 100 different circuit types, completed additional part level radiation testing, and established operational workarounds to reduce the vulnerability. Multiple organizations participated in this effort including Johns Hopkins University Applied Physics Laboratory and NASA's Goddard Space Flight Center. Soren organized and managed the overall effort, but his commitment to conducting a disciplined risk assessment was critical to convincing NASA stakeholders to launch the \$5B mission.

<u>Julie Kramer White</u>, Director of Engineering, NASA Johnson Space Center, will receive the **Eagle Manned Mission Award** for her impact on the future of NASA's engineering efforts, essential for NASA to evolve and lead the growing space economy.

As Director of Engineering at NASA Johnson Space Center, Ms. Kramer White leads the organization responsible for the design and development of NASA's human spaceflight programs. Over the course of her career, she has led the engineering for the International Space Station, Orion, and Commercial Crew Program. For each program, she has proactively infused critical skills, engaged cross-Center expertise, and applied lessons learned from previous programs to ensure efficient, risk-balanced, technically sound approaches. On Orion, she adjudicated differences of opinion among Centers on high-visibility technical issues, ultimately meeting program milestones and executing a flawless Orion mission as part of Artemis I. Orion's successful mission restored public confidence in NASA to lead and execute difficult missions.

<u>Gina Sunseri</u>, Producer, ABC News, will receive the <u>Press Award</u> for her exceptional coverage of the aerospace industry for more than two decades and counting, bringing space exploration stories to life for millions worldwide. Gina possesses a unique ability to tell the story of complicated space missions in a format that is easy to understand to a broad audience. Her extensive body of work includes hundreds of articles and broadcast news segments covering NASA, international partners, and commercial missions. Known for her unbiased reporting, her coverage of space has earned her

three Emmys, the Murrow, and Peabody awards, cementing her reputation as a leading voice in space reporting.

Karl Eager, Director, Geospatial Intelligence Research and Technology will receive the **Dr. Joseph V. Charyk Award.** Mr. Eager leads the Geospatial Intelligence Systems Acquisition Directorate's Research and Technology Office in the execution of a \$4 billion technology budget for myriad radar and electro-optical programs. He has developed and delivered critical electro-optical telescope assemblies, electronically steered arrays, phased array-fed reflectors, satellite protection technologies, automated target recognition algorithms, onboard storage and processing solutions, cryocoolers, and attitude control components in support of countless Intelligence Community and Department of Defense programs. His visionary concept for an entire payload build, known as Frizzle, culminated with a 2024 launch and an onorbit demonstration of a novel optics technology, greatly reducing technical risks for future optical systems. His distinctive accomplishments have revolutionized National Security Space and ensured delivery of critical warfighting capabilities.

<u>Kevin Simmons</u>, Founder and Educator for the Aerospace and Innovation Academy, Palm Beach Gardens, FL is the recipient of the **Christa McAuliffe Space Educator Award**.

Simmons is recognized for his extraordinary contributions to aerospace education and workforce development through innovative aerospace programs. As a career space educator, he guided pre-college students in designing and launching numerous spacecraft including three CubeSats, making space exploration more accessible for all students.

Simmons mentored more than 110 student presentations at conferences globally and led the first middle school team selected by NASA's CubeSat Launch Initiative program. To emphasize real-world problem solving and collaboration, Simmons created BLUECUBE Aerospace and co-created the SmallSat Education Conference, the Aerospace and Innovation Academy, and the "Let's Go To Space: BLUE-SKY Learning" podcast.

His efforts have inspired hundreds of students to pursue STEM careers, fostering a more inclusive STEM workforce. A dedicated aerospace advocate, Mr. Simmons actively advances STEM education and policy

through leadership roles with organizations such as the American Institute of Aeronautics and Astronautics and the National Space Society.

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The 68<sup>th</sup> Annual Robert H. Goddard Memorial Dinner on Friday, March 21, 2025 at the Washington Hilton has reached full capacity with all tickets currently sold out. Individuals and organizations interested in attending are encouraged to join the <u>waitlist</u> to secure their spot in line if any tickets become available. For specific questions, please contact the Space Club at <u>info@spaceclub.org</u> or by calling 202-547-0060.

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The National Space Club and Foundation is a 501(c)(3) non-profit organization devoted to fostering excellence in space activity through interaction between industry and government, and through a continuing program of educational support. Youth Education is a premier focus of the Club, providing over \$160,000 in scholarships and internships each year. Awards are offered to recognize outstanding accomplishments in spaceflight, engineering, science, management, and education.

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