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FOR IMMEDIATE RELEASE

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NATIONAL SPACE CLUB & FOUNDATION ANNOUNCES 2022 AWARD RECIPIENTS

Washington, DC - The National Space Club & Foundation is pleased to announce its Annual Award Recipients. The Awards 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 65th Annual Robert H. Goddard Memorial Dinner taking place at the Washington Hilton Hotel on Friday, March 18, 2022.

2022 Award Recipients

NASA's Ingenuity Mars Helicopter Team will receive the Club's preeminent award, the Dr. Robert H. Goddard Memorial Trophy. NASA's Ingenuity Mars Helicopter team is recognized for an exciting new phase of space and planetary exploration. Ingenuity demonstrated powered, controlled flight on another world for the first time after hitching a ride to Mars on the Perseverance rover. Once Perseverance reached a suitable "airfield" location, it released Ingenuity onto the planet surface so it could perform a series of test flights over a 30-Martian-day experimental window. The helicopter completed its technology demonstration after three successful flights. During its first flight, on April 19, 2021, Ingenuity took off, climbed to about 10 feet above the ground, hovered briefly, completed a turn, and then landed. It was a major milestone: the very first powered, controlled flight in the extremely thin atmosphere of Mars and in fact, the first such flight in any world beyond Earth.

Since then, the helicopter successfully performed additional experimental flights of incrementally farther distances and greater altitudes. With its tech demo complete, Ingenuity transitioned to a new operations demonstration phase to explore how future rovers and aerial explorers can work together. On December 5, 2021, Ingenuity had logged over 30 total flight minutes. Ingenuity has contributed valuable aerial scouting imagery of rocky outcrops and other geologic features of interest to the Perseverance rover's science team.

Members of the Ingenuity Mars Helicopter Team include: **Dave Lavery**, NASA Program Executive; **MiMi Aung**, Project Manager; **Bob Balaram**, Chief Engineer; **Teddy Tzanetos**, Operations Lead; **Havard Grip**, GN&C Lead and Chief Pilot; **Jaakko Karas**, Operations Chief Engineer; **Tim Canham**, Software Lead; **Farah Alibay**, Rover-Helicopter Surface Operations Lead; **Karen Lee**, Flight Systems Engineer; and **Josh Ravich**, Mechanical Lead.

<u>Parker Arntsen-Beaudin</u>, a member of the Lac Courte Oreilles Band of Ojibwe and a high school senior at Northern Waters Environmental School (NWES) in Hayward, Wisconsin, is the recipient of the **Goddard Memorial Dinner's Keynote Scholarship**. Ms. Arntsen-Beaudin is also enrolled as a science major at Lac Courte Oreilles Ojibwe College, where she holds a Team Lead position for the college's First Nations Launch team, a NASA annual competition offering Tribal Colleges

and Universities the opportunity to demonstrate engineering and design skills in high-power rocketry. Passionate about the arts, Ms. Arntsen-Beaudin has won several art competitions and serves as President of her school's art club. Additionally, she serves as coordinator for the Friends of the Eau Claire Lakes Area's Lake Ecology Education Program, an award-winning environmental education program for middle school students.

This fall, Ms. Arntsen-Beaudin plans to attend the University of Wisconsin-Madison with aspirations of pursuing a doctorate in environmental science. Her life aspiration is to be an environmental researcher and advocate for environmental conservation and she hopes to inspire other Native Americans, women, and members of the LGBTQ+ community to pursue careers in STEM.

The Center for Near-Earth Object Studies Team is the recipient of the Nelson P. Jackson Aerospace Award for the most outstanding contribution to the missile, aircraft, or space field. Sentry-II, NASA's new asteroid monitoring system, managed by JPL's Center for Near-Earth Object Studies Team, went live on the 7th of December 2021. The system improves the team's capabilities to assess the impact risk of asteroids that can come close to Earth.

Sentry-II will use sophisticated impact monitoring software to automatically calculate impact risk in collaboration with powerful survey telescope sensors that continually scan the night sky.

This year could be called the year of the asteroid as a number of probes will be doing close encounter fly-bys, landings, and orbit change attempts. *Sentry-II* is recognized as an important foundation to this effort, and for adding to our planetary defense capabilities.

<u>Dr. Dalia Kirschbaum</u> is the recipient of the **NOAA David Johnson Award.** Dr. Kirschbaum serves as the Chief of Hydrological Sciences at NASA Goddard Space Flight Center. She is recognized for pioneering the use of satellite precipitation and remote sensing data for landslide hazard assessment. By developing the only global landslide now-casting tool and an innovative landslide mapping approach, her work provides rapid situational awareness, particularly in remote and developing parts of the world where it is most needed. Dr. Kirschbaum is leading international efforts to encourage open sharing of landslide data and to enhance access to satellite imagery and technologies for landslide mapping.

Lt. Col. Kathleen Sullivan, Materiel Leader, Enhanced Space Capabilities Program, Air Force Rapid Capabilities Office (AFRCO), is the winner of the General Bernard Schriever Award. Lt. Col. Sullivan is recognized for leading development of two of the nation's most critical capabilities for the U.S. Space Force. She delivered a one-billion dollar architecture that satisfies top items on the U.S. Space Command Integrated Priorities List the results of which laid the groundwork for a twenty-five billion dollar space enterprise. Additionally, Lt. Col. Sullivan drove a groundbreaking initiative through the Department of Defense and National Security Council to help introduce the first major space policy of its kind in twelve years.

<u>Michael Ryschkewitsch</u>, Space Exploration Section Head at Johns Hopkins Applied Physics Laboratory, will receive the newly-coined **Norman L. Baker Astronautics Engineer Award.** Mr. Ryschkewitsch is being recognized for a distinguished career of contributions to the space program. Through a series of roles at NASA that started at the Goddard Space Flight Center and ended with him serving as the Agency Chief Engineer, Mr. Ryschkewitsch has demonstrated an unparalleled commitment to engineering excellence and mission success. He has maintained that commitment while leading APL's Space Exploration Sector through a series of successful missions including Parker Solar Probe and the recent Double Asteroid Redirect Test (DART) mission.

Mr. Steven Sullivan from NASA, along with Mr. Stuart Keech and Mr. Balachandar Ramamurthy from SpaceX will receive the Eagle Manned Mission Award for their immeasurable contributions to the return of human spaceflight to the International Space Station from U.S. soil. Their technical knowledge and team leadership throughout the design, development, testing, and successful mission execution for Crew Dragon opened a new era in human spaceflight. All three awardees held critical roles on the Dragon main parachute and ascent abort systems, the Falcon 9 automated flight termination system, and the Composite Overwrapped Pressure Vessel redesign following a major launch vehicle failure. The resolution of these issues was critical to the success of the first crewed flight.

<u>Christian Davenport</u>, Reporter, Producer, and Author from The Washington Post will receive the <u>Press Award</u>. Mr. Davenport is recognized for elevating space to a national level conversation and reaching a diverse audience. While he is best known for his reporting on NASA and the space industry at the Washington Post, Mr. Davenport is also an author and Emmy award-winning producer and co-host of several documentary series. His work with the Washington Post, and the Discovery and Science Channels, reaches audiences beyond the space community. Mr. Davenport is committed to excellence, which is showcased by his willingness to build relationships at every level of the space industry with balance in his coverage.

Dr. Eleanor Silverman and Mr. Brett Scott from the National Reconnaissance Office, and Colonel Erich Hernandez-Baquero from the U.S. Air Force, will receive the Dr. Joseph V. Charyk Award. Dr. Silverman, Mr. Scott and Col. Hernandez-Baquero are recognized for their extensive contributions to the Intelligence Community and Department of Defense. They led over 800 personnel, acquiring intelligence satellite and ground systems, that multiplied our nation's overhead imaging capacity by a hundredfold. This ushered in near-real time automated intelligence tasking, collection, and exploitation on a global scale, as well as closed nearly 50 percent of the current nation's imagery intelligence gaps. Their distinctive accomplishments reshaped the landscape of national security space ensuring delivery of critical future warfighting capabilities.

<u>Frederick Herrmann</u>, Educator and the Director of the Astronautics & Space Program at Makua Lani Christian Academy in Kailua-Kona, Hawaii, will receive the **Space Educator Award**. He is recognized for his creativity and dedication as a career space educator who engages, inspires, and educates students about the space frontier. Mr. Herrmann, a prime example of a phenomenal space educator, provides research opportunities and career guidance to create the next generation of space professionals.

Nicolina Buccilli, a high school junior at the International Academy of Macomb in Clinton Township, Michigan, is the winner of the **Olin E. Teague Scholarship**. Ms. Buccilli is being recognized for her research project which analyzed the effects of changing aspect ratios on critical angle of attack on airfoils. Ms. Buccilli is a National Honors Society President, a Merit Scholarship commended student, and a solo pilot who flies Cessna 172s. She has earned leadership roles, won several awards and endorsements related to flight and aerospace education, including from the U.S. Space and Rocket Center's Aviation Challenge Camp and the U.S. Coast Guard Auxiliary, to name a few. Ms. Buccilli plans to pursue an aerospace engineering degree as well as a career as a test pilot in the U.S. Coast Guard.

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Individuals and organizations interested in attending the 65th Annual Robert H. Goddard Memorial Dinner on Friday, March 18, 2022 at the Washington Hilton, may find more information on our website www.spaceclub.org. For specific questions, please contact the Space Club at info@spaceclub.org or by calling 202-547-0060.

The National Space Club and Foundation will meet or exceed all required Federal and District of Columbia protocols. Although DC recently changed its policies with respect to proof of vaccination, we were not able to change our approach so soon to the dinner. Therefore, only individuals fully-vaccinated against COVID-19 or those with a valid religious or medical accommodation will be permitted entry to the Goddard Memorial Dinner. Prior to entry, all attendees will be asked to show a proof of vaccination, or have requested a religious or medical accommodation in advance. Consistent with the updated DC policy, masks are encouraged, but not required.

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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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