GRAA NEWSLETTER

P.O. Box 1184, Greenbelt, MD 20768-1184

***February* 2025 https://GoddardRetirees.org 41st Year of Publication**

UPCOMING LUNCHEONS: We meet at 11:15 AM on the 2nd Tuesday of each month at the American Legion Post #136 at 6900 Greenbelt Road. **Reservations are required;** please contact graalunch@gmail.com (preferred) or call (410)-709-8889 **before Thursday, February 6th.**

February 11		**Dr. Melissa Trainer**, Deputy PI/Dragonfly mission NASA Goddard **"Dragonfly: Flights of Exploration on an Exotic Ocean World"**
March 11		**Dr. Mehdi Benna,** Principal Investigator University of Maryland, Baltimore County/NASA Goddard **"Lunar Environment Monitoring Station for Artemis III (LEMS-A3)"**

COMMENTS FROM TONY COMBERIATE AND CARL STAHLE

Our January speaker was Dr. Christa Peters-Lidard, Director of Goddard's Science and Exploration Directorate (Code 600). Christa's presentation entitled, "What's Next for Science at Goddard?" gave us an inside view of the science behind Goddard's current missions and what's in store for the future. The science priorities are set by the Decadal Surveys which are organized by the National Academy of Sciences. Code 600's mission is to combine world-class, multi-disciplinary science research, cutting-edge engineering, and focused technology development to advance human knowledge of the universe. Besides the traditional areas of Astrophysics, Heliophysics, Earth Science, and Planetary and Lunar Science, additional strategic focus areas are Communication and Navigation, Crosscutting Technologies, and Suborbital Platform and Range Services. The Goddard 2040 Vision emphasizes multidisciplinary space science, habitable worlds, serving as a hub for earth science, and space weather. Expanding collaborations and partnerships will be key. As examples, Christa cited recent agreements with Columbia University for collaborations across all science areas and with the Laboratory for Atmospheric and Space Physics (LASP) at the University of Colorado/Boulder for smallsat missions.

Christa described the science in future missions. She emphasized Roman Space Telescope, Goddard's primary mission, which is being integrated in Goddard's SSDIC facility in Building 29 (GRAA members can see the Roman spacecraft: just show your retiree's badge at the gate.) Roman's science mission will focus on Gravitational Wave Counterparts, Mapping Dark Matter, Planetary System Diversity, Resolved stellar populations, Mapping Dark Matter, the Evolution of

the Universe, and How Galaxies Assemble. The high data volume of Roman will rival that of Earth Science missions and change the way astronomers view data. Roman is a precursor for Goddard's next Astrophysics flagship mission, the Habitable World Observatory (HWO). HWO science focuses on cosmic ecosystems, evolution of elements across cosmic time, searching for earth-like planets and bio signature detection, and nearby quality observations of the solar system. A Technology Development Project Office for HWO was established at Goddard last August

Other upcoming missions include the Laser Interferometer Space Antenna (LISA), a 2030's European Space Agency mission, for which Goddard is providing several telescopes, lasers and ground support. Goddard's Plankton, Aerosol, Cloud, ocean Ecosystem (PACE) mission, which launched last year, is revolutionizing oceanography by providing global ocean color and biogeochemistry and ecology data, and measuring the carbon cycle, aerosols and clouds. Dr. Jeremy Werdell, Project Scientist for PACE, will talk about the science results from PACE at our GRAA luncheon in April. Landsat Next, expected to launch in late 2030/early 2031, will provide a quantum leap in measurement capabilities with improved temporal, spatial, and spectral resolutions. NASA's Earth System Observatory is a set of Earth-focused missions designed to provide key information to guide efforts related to climate change, disaster mitigation, fighting forest fires, and improving real-time agricultural processes. With the Earth System Observatory, each satellite will be uniquely designed to complement the others, working in tandem to create a 3D, holistic view of Earth, from bedrock to atmosphere. In Earth Science, the commercial sector has many space measurement capabilities, so Goddard is partnering and working to be an integrator for all the measurements and analysis, i.e. the hub for earth science.

Christa mentioned that the Parker Solar Probe had a very successful closest approach to the sun last month. The Polarimeter to Unify the Corona and Heliosphere (PUNCH) will launch in April and the Interstellar Mapping and Acceleration Probe (IMAP) mission will study the heliosphere, the Sun's magnetic bubble. The DAVINCI mission has a tentative launch date of 2030. OSIRIS-REx will release data regarding the building blocks of life at the end of January. An asteroid sample from OSIRIX-Rex is at Goddard for analysis. The Dragonfly mission will launch in 2028 and arrive at Saturn's moon Titan in 2034 where its rotorcraft will fly to dozens of promising locations looking for prebiotic chemical processes. Dr. Melissa Trainer, Deputy PI, will talk at our February luncheon about the Dragonfly mission. Christa also described the connection that Goddard has to lunar science and space weather in the Artemis program. Dr. Mehdi Benna will talk at our March luncheon for his lunar environment monitoring station. Dr. Noah Petro and Dr. Barbara Cohen from Goddard are project scientists in the Artemis program.

Christa invited the audience to participate in Code 600's New Year's Poster Party on January 28. This is an excellent opportunity to view recent posters, mingle with colleagues over refreshments, and learn something new in an interdisciplinary environment.

During the question and discussion time, members asked about funding for the missions that Christa described. She estimated about 2/3 of the missions were funded. She remarked that

the budget status is very challenging as the Science Mission Directorate's current budget is $2B less (~ $7B compared to ~$9B) that it planned to have as of a couple of years ago. Christa stressed how we all need to be advocates in our communities to do the science in these missions.

GRAA is on Social Media

With the encouragement of Dr. Makenzie Lystrup, Goddard's Center Director, GRAA has extended its reach to social media. We are now on LinkedIn which is the world's largest professional network. Members can visit linkedin.com and search for NASA Goddard Retirees and Alumni Association. You are welcome to be a follower of this group.

WELCOME TO NEW MEMBERS:

GRAA is delighted to welcome the following new members who have joined GRAA in the past quarter:

Dan Blackwood, David Boon, Joe Burt, Pietro Campanella, Chuck Clagett, Nona Cheeks, Nick Chrissotimos, Thomas Clement, Bill Cook, Robert Dedalis, Michael Delmont, Lamar Dougherty, Diana Elben, Rebecca Elliott, Karen Flynn, Ed Griego, Tom Gitlin, Jo Howard, Elizabeth Jarrell, Brook Lakew, Rob Lilly, Jim Loughlin, Kequan Luu, Tom McCarthy, Timothy McClanahan, Jan McGarry, Paul Newman, Jacqualine Peterson, Juan Roman, Dennis Reuter, Beverly Settles, Janice Smith, Curt Suprock, Donna Swann, Harry Taylor, Harley Thronson, Jeff Volosin, Mary Walker, Carrie White, Ron Zellar

DIRECTORIES AND NEWSLETTERS: Send your email address to goddardretirees@gmail.com. to get our monthly Newsletters**,** which include synopses of the talks, special community announcements, and obituaries. Past Newsletters and links to videos of the talks are on our website https://goddardretirees.org. Multi-month abstracts of Newsletters are mailed to the retirees with only residential addresses in our files. We depend on retirees to furnish their home addresses to be listed in the biennial GRAA Membership Directories; only available as mailed hardcopies to members. These mailings are supported by donations to GRAA, P. O. Box 1184, Greenbelt, MD 20768-1184.

TREASURER'S REPORT: Treasurer Jackie Gasch received donations from: Richard Costa, Howard Pedolsky, L. Anderson, Eugene Humphrey and Steven Smith in memory of Franz Lengenfelder.

FROM THE GODDARD ARCHIVES: On February 3,1965 Delta launched Orbiting Solar Observatory B2 with eight scientific instruments. The B2 spacecraft had been refurbished after a catastrophic fire on April 4, 1964 which was fatal to three persons and damaged the spacecraft when the 3rd stage solid rocket was ignited by static electricity in the spin balance facility at KSC.

REMEMBERING OUR FORMER COLLEAGUES:

Deborah Ann Boucher, 75, died on December 27, 2024. She was born on December 25, 1949 in Brunswick, MD. She graduated from Laurel High School in 1967 and worked in Washington, DC for International Associates and then Goddard.

Wilbur Coles Burroughs, 92, died on January 8, 2025. He was born on January 29, 1932. During his lifetime, Wilbur served in the US Coast Guard (USCG) and then worked on various space programs at NASA.

Gustave J. Comeyne, Jr., 82, died on January 12, 2025. Gus was born on July 26, 1942, in Woonsocket, Rhode Island. Gus was an engineer in Goddard's optical laboratory and helped calibrate the Orbital Astronomical Observatory (OAO) spacecraft instruments and star trackers. After working for NOAA from 1972 – 1980, he returned to Goddard as the AVHRR and HIRS Instrument Manager POES. Later, he became the GOES Systems manager, and eventually was the Chief of the Systems Review Office until 2001.

Larry G. Hull, 82, died on December 27, 2024. Larry joined Goddard in 1966, where he served many roles from supporting the Apollo Missions, programming and planning database support, running discrete event simulations and conferences, to leading research into satellite support scheduling. He provided numerous training classes in accessible web sites at GSFC and for other NASA centers, including JSC. His disability employee activity, including the training, was recognized with the NASA Exceptional Service Medal when he retired from NASA after 38 years of service.

Walter LaFleur, 91, died on December 7, 2024. Walt was born on July 22, 1933, in New Mexico. He was recruited by NASA to work at the Bermuda Tracking Station, where he became the Station Director. He later moved to Goddard with the responsibility for the management of NASA's worldwide space tracking and communication networks and operation of the Data Tracking Relay Satellites. In preparation for the last Apollo flights, he traveled to tracking stations around the world to confirm "mission readiness". In recognition of his efforts, he received numerous awards including the NASA Exceptional Service Medal and an Outstanding Leadership Medal. He married Mary Johenning in 1972 and they lived in Laurel, MD until his retirement in 1993.

John G. Maruschak, 83, of Laurel, Maryland died on December 4, 2024. He was born on September 1, 1941, and grew up in Harper Woods, Michigan, a suburb of Detroit. John graduated from the University of Detroit with a degree in electrical engineering. He was a Co-op student at Goddard, which led to his remarkable lifelong career with NASA until he retired in 1999. John was part of the team that designed instrumentation for the COBE satellite which measured the background radiation that confirmed the Big Bang theory.

Wanda McDermond, 95, of Ellicott City, Maryland, died on October 16, 2024. She was born on January 16, 1929 in Riverton, West Virginia, where she lived until completing high school. She subsequently moved to Washington, D.C. and then Bowie, MD. Wanda worked as a secretary for NASA, where she supported the Geostationary Operational Satellite program, until her retirement.

Patricia Lee McGrath, 78, died on December 29, 2024. Pat was born on October 26, 1946, in Washington DC. Pat had a long and distinguished career at NASA, GSA, & Army Corps of Engineers achieving the rank of GS-15. Pat was held in high esteem by all her colleagues, which included four-star generals, and earned an honor to speak before Congress.

Carol Elizabeth Therese Pope O'Neill, 80, died January 21, 2025, in Columbia, MD, following a short but difficult illness. Carol was born March 8, 1944, in Washington D.C. She met her husband, Peter Edward O'Neill, Jr. at Goddard, where she worked as a secretary.

Nelson Henry Potter, 99, died on December 30, 2024. Nelson was born on November 10, 1925. Nelson served in the 82nd Airborne Division during World War II and began working in the Power Branch at Goddard in 1962. He worked in the Space Power Technology Branch in the 1970s and the Instrumentation Branch in the Laboratory for High Energy Astrophysics Laboratory in the 1980s

Kenneth L. Rosette, 92, died on December 6, 2025. He was born on September 15, 1932. Ken spent most of his professional life working with the U.S. Government, starting at the Navy Yard in Washington, DC and moving in 1960 to the newly formed Goddard Space Flight Center in Greenbelt, MD. After retiring from NASA in 1988, Ken worked in private industry supporting NASA's space exploration missions until retiring for good in 1996. Highlighting a long and impactful career is his work on many firsts for NASA, including the first on-orbit repair of a spacecraft with the Solar Maximum Mission and the historic repair of the Hubble Space Telescope.

John Gregory Stacy, 73, died on January 1, 2025, in Baton Rouge, Louisiana. Greg was born on November 26, 1951, in Bethesda, Maryland. He graduated from the University of Notre Dame in 1974 with a degree in Physics. Greg received his doctorate in Physics and Astronomy in 1985 from the University of Maryland, College Park, while conducting research in high-energy astrophysics at Goddard. He held a research associateship at the Center for Astrophysics in Cambridge, Massachusetts before joining the Compton Gamma Ray Observatory Science Port Center and was assigned to the CGRO/COMPTEL instrument team at the University of New Hampshire in 1990.

Here is follow-up information on **Donald Arthur Seidenspinner,** who died on November 19, 2024. A celebration of Don's life will be held in April 2025 in Maryland. For more information about the date and location, please contact gailswilliams17@verizon.net in early March 2025.