## GRAA NEWSLETTER

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

Holiday issue - Dec 2022 /Jan 2023 <a href="http://GoddardRetirees.org">http://GoddardRetirees.org</a> 39th Year of Publication

<u>UPCOMING LUNCHEONS</u>: We meet at 11:15 AM on the 2<sup>nd</sup> Tuesday of each month at the American Legion Post #136 at 6900 Greenbelt Road. <u>Reservations are required;</u> please contact <u>graalunch@gmail.com</u> (preferred) or call (240) 720-7833 **before** <u>Thursday</u>, <u>January 5th</u>.

January 10	Michael Chesnes, Manager of Select Federal Services at the Goddard Library will describe the "Library Information Services". The Library has changed in the digital age. Here is your chance to hear what resources are available to retirees.
February 14	Mark Lupisella, Exploration Integration Manager in the Exploration and Space Communications Division, will present "How Goddard is Contributing to Artemis".

## **COMMENTS FROM TONY COMBERIATE AND ARLIN KRUEGER**

Our November luncheon speakers were **Dave Pierce**, the Director of Goddard's Wallops Flight Facility, along with his Deputy, **Bob Jameson**, who gave us an update on all of the many activities at Wallops, titled, "**Wallops Flight Facility: A Unique NASA and National Asset**".

Wallops was enacted by Congress on June 27, 1945 (they launched seven rockets that day) and have since launched over 16,000 rockets. As a national asset, Wallops supports NASA Heliophysics, Astrophysics, and Earth Science, plus planetary missions and space technology, human exploration, and aeronautics. It has been supporting DOD missions since before NASA was formed and now hosts commercial missions as well. The Facility includes 285 civil servants, 865 NASA contractors, and also 600 tenant personnel from NOAA, FAA, the Virginia Space Port, Northrop Grumman, Rocket Lab, the Coast Guard, and the Navy. Wallops has an annual budget of ~\$335 million plus \$30-50 million per year in reimbursable work and has an economic impact of approximately \$1.4 billion on the surrounding area. With Wallops' broad scope, Dave Pierce and Bob Jameson work together to manage the suborbital work and the orbital launch facilities.

Suborbital activities include NASA's Balloon Program Office (including the Columbia scientific balloon facility in Palestine, Texas); the Sounding Rockets Program Office (including rocket launch ranges in Australia, Alaska, Norway, Kwajalein Atoll, and, in the near future, Peru); the Aircraft Office; small satellites, and STEM student projects for rockets and small satellites.

Orbital activities include ongoing Northrop Grumman's Taurus ISS resupply missions and the Rocket Lab's new launch facility as part of the Mid-Atlantic Regional Spaceport (MARS). The first US launch of Rocket Lab's Electron rocket will take place in early 2023. This launch will include the first flight of the new NASA Autonomous Flight Termination Unit (NAFTU) developed to replace the Range Safety Officer's role of in-flight safety decision-making. Rocket Lab also is building a Delta-II class launch vehicle, called Neutron, at a new facility just outside the Wallops Island gate with plans to land the first stage on a barge for return and reuse. The reopened Bermuda Ground station now tracks the Antares and Artemis missions.

Wallops' 5-year strategic plan includes 100-day-duration balloon flights, developing SmallSats, advancing hands-on engineering capabilities, and updating their facilities and processes. The orbital launch cadence is projected to triple over the next decade, with launch rates of over 45-50 per year in the future.

Dave and Bob are most proud of their impact on inspiring the next generation of scientific explorers. College students have the opportunity to design, build, and launch payloads on balloons, rockets, and aircraft. Last spring, Wallops hosted 3,500 8th graders at a Junior Achievement (JA-Inspire) event in Salisbury, MD to help them decide if a STEM career is in their future and to build a stronger national science capability. Dave mentioned that tours for Goddard retirees (and even their grandchildren) are now possible by coordinating with the Goddard and Wallops Visitor Centers.

<u>SPECIAL NOTE:</u> Thank you for your donations! GRAA depends on donations to print and mail Newsletters and the Directory. Send donations to <u>GRAA, P. O. Box 1184, Greenbelt, MD 20768-1184.</u> If you also send your email address to goddardretirees@gmail.com we will send electronic copies to save postal costs. Past Newsletters and videos of recent luncheon talks are available at our website <a href="http://goddardretirees.org">http://goddardretirees.org</a>.

TREASURER'S REPORT: Jackie Gasch received tax-deductible donations from the following contributions in November and December: Ralph Mollerick, Betty Phelps, Mary Mowatt in memory of Alberta Moran, Joseph Tinsley, Kent Cockerham in memory of C. Arcilisi, Janet Jew, Carroll Dudley in memory of Danny Dalton, Dorothy Burkholder, Joseph Valenti in memory of Al Catsnzareti and Dale Sollers, Eugene C Humphrey, Doris Martin in memory of Alberta Moran, Karle G. Peters, Bill Townsend, Wilma Chigas, David Zillig in memory of George Kronmiller, Jr., Paricia Mackey, L. Henry Anderson, and John Millman.

## FROM THE GODDARD ARCHIVES:

Fifty years ago, on December 11, 1972: Delta launched Nimbus V, a demonstration mission for six new infrared and microwave spectrometers and radiometers for meteorological satellite applications, providing data for 10-plus years.

Thirty years ago, on January 13, 1993: Shuttle Endeavor/STS 54 launched TDRS-F, the last of six original tracking and data relay satellites.

## REMEMBERING OUR FORMER COLLEAGUES:

**Anthony (Tony) D. Rossi** 96, of Queenstown, MD passed away on December 15, 2022. After serving in the U.S. Army, Tony worked for Westinghouse and NASA, where he helped build and deploy the first weather satellites, before joining The Consumer Product Safety Commission. He was also a long-time volunteer at the NASA Federal Credit Union.

**August H. Wessels, Jr. (Gus),** 92, of Leesburg, Virginia passed away on Wednesday, November 9, 2022. Gus was born in Louisville, Kentucky on November 1, 1930. In 1960, he began a career with Goddard in procurement and project management for six decades. For part of that time, he worked as a private contractor to NASA under the Windway Atmospheric Research Project.

**Doris Marie Federline**, 92, of Lusby, Maryland, passed away quietly on November 30, 2022. Doris was born on February 13, 1930, in Washington, D.C., and retired from Goddard in 1988.

**Betty Ann Dumas**, 90, of Cambridge MD, formerly of Salisbury, died November 1, 2022, at Chesapeake Woods in Cambridge. She was born on June 23, 1932 in Washington, DC and retired from Goddard in 1995.

**John D. Gaffey Jr.**, 78, passed away on November 29, 2022. Jack was born in Washington, DC on June 27, 1944. In 1984, he worked as a research associate at the Naval Research Laboratory, then at the University of Maryland, and finally, at Goddard, authoring 89 publications.

**Clara Jean (Jeanie) Hughes, 75** of Clarksville, Maryland passed away on November 24th. She grew up in College Park, Maryland, and attended the University of Maryland where she graduated with a degree in Mathematics. Upon graduation, she was employed by Goddard, retiring after 29 years of service as a Systems Administrator.

**Audrey Mae Fisher Young**, 75, died on November 19, 2022 at her residence in Parksley, Virginia. She worked for over 38 years as a secretary for NASA (Code 569). She was a member of the Wallops Black History Club and supported organizing its Annual Scholarship Banquet.

James R. Ledwell, 74, passed away on November 29th. He earned a Bachelor of Science degree in Physics at Boston College, a Master of Science in Physics at the University of Massachusetts, Amherst, and a Ph.D. in Applied Physics at Harvard University. His early scientific career was spent at the Goddard Institute for Space Sciences and the Lamont-Doherty Earth Observatory, both part of Columbia University in New York. In 1990 he moved to Falmouth and joined the Woods Hole Oceanographic Institution. There he perfected the art of tracer-release

experiments to measure ocean mixing rates in a large variety of settings. Working tirelessly on over 40 research cruises, often as the Chief Scientist, he deepened the field's understanding of ocean mixing processes, publishing 50 peer-reviewed publications in his distinguished career. He was recognized for his pioneering achievements by being awarded a Scripps Senior Scientist position.

Judith N. Brunner, 74, passed away on July 24, 2022. After graduating in June 1970 from Ohio State University with a B.S. in Computer Science, Judith was commissioned as an Ensign in the U.S. Navy. As one of the first women to be assigned to flight training, she became the second female Naval Aviator. Captain Bruner was the first woman to pilot a Navy aircraft into a hurricane, followed by worldwide oceanographic research missions. She served actively for 10 years in the Navy, then joined NASA Goddard in 1981, working as a Senior Systems Analyst on the Hubble Space Telescope mission, while earning her M.S. Degree from George Washington University. In 1997, she served on the Director's staff and finished her Goddard career as Director of the Safety and Mission Assurance Directorate.

**Reginald D. Eason**, 63, passed away on November 24, 2022. He began working as an Aerospace Engineer at Goddard 35 years ago and was still working as an Engineer/Mission Manager in the Explorers and Heliophysics Program Office at Goddard.