GRAA NEWSLETTER

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

January 2026 **https://GoddardRetirees.org** **42nd Year of Publication**

UPCOMING LUNCHEONS: We will meet at 11:15 AM on January 13th 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, **January 8th**.

January 13	 **Dr. Daniel Glavin,** Project Scientist for OSIRIS-REx NASA Goddard ***"NASA's OSIRIS-REx Mission: Laboratory Results from Pristine Samples of Asteroid Bennu"***
February 10	  **Dr. Brad Cenko,** Principal Investigator for Swift Mission **Dr. Russell Carpenter,** Deputy Project Manager/Technical, Space Science Mission Operations NASA Goddard ***"The Swiftly Mission: SWIFT Lift in a Year"***
March 10	**Dr. Keith Gendreau**, Principal Investigator for NICER Mission NASA Goddard ***"The Neutron Star Interior Composition Explorer (NICER)"***

TREASURER'S REPORT: Jackie Gasch received donations from: Jim Fisher, Robert DeFazio, Steven Smith in memory of Franz Lengenfelder, and Joe Rothenberg in memory of Ann Merwarth.

WELCOME TO NEW MEMBERS:

We are delighted to welcome the following new members:

Carla Cohen
Paul Geithner
Michelle Gordon

Shadid Habib
Michelle Hamilton
Diedre Healey
Darryl Lakins
Tin Lee
Dave Leisawitz
Harry Shaw
Mark Stephen
Susan Wright
Thomas Wrublewski

WHAT'S UP WITH OUR MEMBERS:

Your colleagues and friends would enjoy hearing about your life experiences after Goddard before they see your name in our "Remembering Our Former Colleagues" section. News of interest to our members could be professional, volunteer activities, awards and recognition, a personal achievement, or an unusual adventure or hobby. Please feel welcome to send a concise message (<100 words) and a photo to Tony Comberiate (abcomberiate@verizon.net) and Carl Stahle (carl.m.stahle@gmail.com) who reserve the right to edit for content and length.

FROM THE GODDARD ARCHIVES: 50 years ago on January 15, 1976, Titan III E - Centaur launched Helios - B. It set a speed record travelling 252,792 km/hr relative to the Sun. This was a joint US/German mission which provided data for 9 years

COMMENTS FROM TONY COMBERIATE AND CARL STAHLE

Our November speaker was Dr. Alexandra Pontefract, an Astrobiologist & Assistant Project Scientist for Dragonfly at the Johns Hopkins Applied Physics Lab. Her presentation, "Exploration of Titan with Dragonfly" described the Dragonfly spacecraft's astrobiology mission to Titan, the largest moon of Saturn, to assess its microbial habitability and analyze its prebiotic chemistry at various locations. Built at APL, Dragonfly, a New Frontiers spacecraft, is a ~450kg robotic rotorcraft mission to the surface of Titan. It is planned to be launched in July 2028 and arrive in 2034. It will be the first aircraft on Titan and is intended to make the first powered and fully controlled atmospheric flight on any natural satellite, with the intention of studying prebiotic chemistry and habitability. It will perform vertical takeoffs and landings to move between exploration sites.

Titan is a compelling astrobiology target because its surface has a complex carbon-rich chemistry, where both liquid water and liquid hydrocarbons can occur on its surface, like the conditions present on the Earth around 4.0 billion years ago, making it a high-priority target for origin of life studies. Titan's atmosphere produces complex organics such as proteins and amino acids. Titan has a hydro cycle where methane plays the role that water plays on Earth. It has a rocky core, an interior water ocean, and an ice crust. Titan is most like the early Earth and can

help our understanding of Earth. Specific science measurements will study chemical components and the process that produce compounds, the Methane Cycle (identifying methane reservoirs and transport rates), the Organic Cycle, liquid reservoirs, and chemical biosignatures.

Titan's atmosphere is 4 times denser than Earth's and its gravity is 1/7 of Earth's. Dragonfly, over its 3-year mission, will take samples that are tens to hundreds of kilometers apart, which will enhance its analysis. Its science focuses on the chemical inventory and the opportunities for materials to interact. Its instruments include DragonCam, a camera suite for sample and scene imaging; DarGMet, a Geophysics and Meteorology Package for seismic monitoring and weather monitoring; DraGNS, a gamma ray neutron spectrometer to study element composition; DrACO, a drill for acquisition of complex organic samples; and DraMS, a mass spectrometer for molecular composition. Goddard is building DraMS and will manage its sampling system. DraMS' design is based on the highly successful Sample Analysis at Mars (SAM) aboard NASA's Curiosity rover. Goddard will also build a portion of DraGNS. Goddard engineers are building the Ocellus lidar system that is part of the rotorcraft's flight-stabilization and navigation system that will enable the rotorcraft to fly and land on Titan.

The initial landing site provides access to a variety of materials in different geological settings and over its mission Dragonfly will travel tens of kilometers to over 30 sites, allowing for sampling of diverse regions and geological contexts.

Alex ended her talk with a quote from Carl Sagan, "On Titan, the molecules that have been raining down like manna from heaven for the last 4 billion years might still be there largely unaltered, deep-frozen, awaiting the chemists from Earth."

Our original speaker, Dr. Melissa Trainer, could not give the presentation due to government shutdown restrictions, but was able to attend and answer several questions from our audience. Melissa serves as the Deputy PI for the Dragonfly mission.

PRICE INCREASE: Since GRAA moved the monthly lunches from the Goddard Recreation Center to the American Legion in February 2014, we have been able to continue to charge $10.00 for each GRAA member having lunch. Working with the American Legion and realizing that times change and prices go up, beginning with the January 2026 GRAA luncheon, it will now cost each member $12.00 to have lunch at the GRAA monthly luncheon. Please bring $1 dollar bills!

Goddard's Roman Space Telescope is fully integrated, and the observatory will undergo final environmental testing before being shipped to KSC next summer for a Fall 2026 launch.

The Roman Observatory ***View of Roman's Telescope***

ACTIVITIES FOR MEMBERS:

A volunteering opportunity: The Goddard Visitors Center has a need for someone to cover the Front Desk of the Visitor Center on Friday mornings from 10am to 1pm. They would greet visitors as they arrive, answer the phone, and hand out and then check scavenger hunts. Please contact Amanda Harvey at 301-286-9041 or amanda.c.harvey@nasa.gov.

GRAA is on Social Media

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.

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 a mailed hardcopies to members. These mailings are supported by donations to GRAA, P. O. Box 1184, Greenbelt, MD 20768-1184.

REMEMBERING OUR FORMER COLLEAGUES:

Marjorie C. Barnard, 82, of Titusville, FL passed away peacefully at her home on November 27, 2025. She was born on February 27, 1943. Marjorie was a financial analyst at Goddard. Her sharp mind, steady dedication, and meticulous work left a lasting impression on all who had the privilege of working alongside her. She is survived by her sister, Patricia Mackey.

Gudmund "Goodie" Maynard Broin, 89, died on October 24, 2025. He was born on November 9, 1935. An Air Force veteran, Goodie worked for Bendix Field Engineering for eight years. After closing the NASA satellite tracking station in Grand Forks, ND, he moved to Goddard and eventually retired from the FAA in 1994.

O. Robert Hess, 86, died on July 11, 2025. He was born July 3, 1939. He worked at Kennedy Space Center on space programs including Gemini and the Apollo Lunar Landing. He then transferred to Goddard.

Semion Kizhner, 85, died on November 22, 2025. He was born on September 3, 1940, in western Ukraine. Having lived through the horrors of the Holocaust, he went on to not only rebuild his life but to excel as a distinguished rocket engineer and computer scientist. He became known at Goddard for solving complex problems, supervising teams preparing space shuttle payloads and mentoring engineers and graduate students, helping many to finish doctoral dissertations.

Robert E. Martin, 90, died on October 10, 2025. He was born on October 19, 1934. He worked for Bendix Field Engineering Corporation before joining GSFC's Compatibility Test Section in the Networks Directorate in 1970. He was an expert in designing and building communications hardware and was instrumental in assuring the Network Launch support for the 1st Shuttle mission. Bob retired in 1997.

Phillip D. Merwarth, 84, died on October 22, 2025. Phil was born on January 10, 1941. He had a distinguished career at Goddard, where he worked for over 30 years. Phil programmed the first mainframe computers for NASA and contributed to space missions, including multiple Apollo launches with science programs and the launch of the Hubble Space Telescope. In addition to his technical skills, Phil managed a team of developers at NASA. The software Phil and his team developed supported spacecraft design, operations, and the ground systems for many successful missions.

Harvey Ostrow, 93, died October 31, 2025. Harvey was the Earth Sensors Section head in the Applications Experiment Branch in the 1960's, the Advanced Sensor Development Section Head in the early 1970s, and the Sensor Development Branch Head in the late 1970s. He worked in the Sensor Concept & Development Branch from 1985 until retiring in the early1990s.

Arlene F. Peterson, 79, died on April 13, 2025. She worked 3 decades in both the Engineering Directorate and Flight Projects Directorate.

Jamala Peyton, 49, died on October 29, 2025. She was born January 31, 1976, to John Edward Jones, Jr and Noris Maria Quiroz-Jones in Washington, D.C. Following in the footsteps of her late father who worked as a LANDSAT Operator at the NASA Goddard Complex, Jamala served as a Contract Administrator.

Kenneth W. Stark, 92, died on November 28, 2025. He was a member of the group who came to Goddard in 1959 from Army Signal Corps with an early Explorer weather satellite. Ken was a prolific inventor with multiple patents.

Arthur Lee Wade, 72, died on November 11, 2025. He was born on February 26, 1953, in Mobile, Alabama. He retired from the US Army and worked at Goddard in the Disposal Management Section in the Property Management Branch.

Clelia Anne Walker, 73, died in 2024. She was born on December 30, 1951. She graduated from the University of Iowa in Iowa City, where she worked for several years, until joining the Federal Government in 1984 in the Office of Personal Management. She later worked at Goddard where she was a contracting officer until her retirement in 2018.