

A FLIGHT PROJECTS DIRECTORATE PUBLICATION 2022 FALL ISSUE

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Congratulations as Artemis I Launches!

Artemis I will test essential systems for future crewed missions to the lunar region.

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FLIGHT PROJECTS DIRECTORATE | Volume 30 • Number 2

ENABLING EXPLORATION AND EARTH + SPACE SCIENCE BY TRANSFORMING CONCEPTS AND QUESTIONS INTO REALITY



Cover Image: Congratulations to the James Webb Space Telescope (JWST) team who successfully completed telescope commissioning and have begun releasing awe-inspiring science images to the world! On the cover is shown the "Pillars of Creation," set off in a kaleidoscope of color in JWST's near-infrared-light view. The pillars look like arches and spires rising out of a desert landscape, but are filled with semi-transparent gas and dust, and ever changing. This is a region where young stars are forming – or have barely burst from their dusty cocoons as they continue to form.

CREDITS: NASA, ESA, CSA, STSCI; JOSEPH DEPASQUALE (STSCI), ANTON M. KOEKEMOER (STSCI), ALYSSA PAGAN (STSCI)

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PUBLISHED BY THE FLIGHT PROJECTS DIRECTORATE

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Code 400

WE'RE ON THE WEB!

http://fpd.gsfc.nasa.gov

SUPERVISING EDITOR

Donna Swann

Have a story idea, news item or letter for The Critical Path?

Let us know about it. Include your **name**, **phone number** and send it to:



paula.l.wood@nasa.gov



Code 460 Ext. 6-9125

The deadline for the next issue is **March 17, 2023**



Message from the DIRECTOR

It has been an astounding six months in the Flight Projects Directorate (FPD). In a short period, we have implemented several new initiatives. witnessed our projects make significant progress in their development lifecycles (many of which continue to overcome substantial challenges), and provided opportunities for connection and support for our team members.

We welcomed Matt Ritsko as our Deputy Director of Planning and Business Management. His support and leadership have been critical in enabling our leadership team to fully oversee our portfolio to accomplish future objectives. After a period of flux over the last few years, we know the months ahead will continue to require us to adapt. Together, we will navigate changes in:

1) leadership, with the retirement and onboarding of a new Center Director at Goddard and Associate Administrator at NASA Headquarters in the Science Mission Directorate: 2) Agency-wide strategies: and 3) our new hybrid operating environment. With all three management positions now firmly in place, our FPD leadership team is united and we are certain that this foundation will provide stability and strong support to the Directorate for the foreseeable future.

This year our main initiatives focused on project execution; our talent acquisition pipeline and related employee development strategies; understanding impacts from reduced/eliminated institutional budgets; and mitigating continued economic/inflation and supply chain risks. Although our focus areas above are extensive, we are already building, implementing, and improving our approaches in small ways each and every day. We have streamlined project reporting as seen with Monthly Status Review changes, the new



Flight Projects Portfolio Dialogue, and Leadership Strategic Quarterly meetings. We are dedicated to empowering our Division leaders as they provide oversight and engage in Directorate-wide initiatives and encouraging open dialogue across the Center. We launched our new **ENGAGE** site and coaching and mentorship programs. Our Directorate teams are also working to implement onboarding initiatives, portfolio management tools, and project assessments in support of these initiatives.

As a leadership team, it is an absolute priority for Cathy, Matt, and me to invest in and support our workforce. Part of that is by making connections with our team members. Hopefully, you were able to participate in at least one of the "Let Your Voice Be Heard" listening sessions. We have been working closely with our Flight Projects Diversity and Inclusion (D&I) Committee to coordinate and host a number of initiatives now and in the future to serve as a resource and voice for our team members. The D&I Committee held sessions for each Division and general sessions in the summer and fall. All feedback was briefed to us in FPD and Division leadership in a way that preserved anonymity. We greatly appreciate you letting us know your thoughts and concerns. We want

you to know that we heard you. We are already incorporating your feedback into our daily work for all areas within our authority to address. The D&I Committee launched Quick Response Teams to gather resources and provide information to address as many of the inputs as possible (which can be found on a new response site). This team will continue to serve as a resource to all of you and their engagement with our team members will help shape our path going forward.

The last thing I would like to highlight is the reason we are all here-our missions. We have watched and supported our projects as they accomplish really amazing work. Our Hubble team is studying commercial reboost options. Our Exploration and Space Communications Projects Division (Code 450) is providing diligent support to the Artemis program and adapting to shifting launch dates. We established the new Space Weather Next Program (Code 490) and they are off and running to develop the next generation of space weather projects. Our other NOAA partner programs (Codes 410 and 470) continue to make progress towards key decisions for their programs and projects. We also witnessed the successful launch of the Joint Polar Satellite System (JPSS)-2! In addition, we are supporting the ever-expanding Explorers portfolio, both within



Congratulations Dennis!

The Flight Projects Directorate joins all Goddard Space Flight Center employees in wishing Center Director Dennis Andrucyk congratulations on his upcoming retirement and thanks him for his leadership and guidance.

the Explorers and Heliophysics Projects Division (Code 460) and the new Earth System Explorers program (Code 420), and our expanding planetary portfolio within Code 430. Although we cannot go through the challenges, successes, and efforts of each of our Divisions and their projects, we want to recognize how hard you are working every day towards mission success. We greatly appreciate your commitment and dedication in all you do every day to ensure NASA's success. For me personally, this year has been extremely rewarding despite the many challenges along the way. It is with that in mind that I look forward to our continued success in the coming year and all of the possibilities that it promises to bring!

Cynthia Simmons

Director, Flight Projects cynthia.w.simmons@nasa.gov







Congratulations Anne!

Flight Projects Directorate employees offer their congratulations and thanks to Goddard Space Flight Center Deputy Director Anne Kinney and send best wishes for her upcoming retirement

JPSS and GOES-R Unveil New **Outdoor Sculpture and Exhibit**



Located on the outer edge of the Rocket Garden at the NASA Goddard Visitor Center, the new exhibit Orbits Interweave by the Joint Polar Satellite System (JPSS) program and the Geostationary Operational Environmental Satellite - R (GOES-R) Series program features an abstract kinetic sculpture highlighted by three polished stainless steel spheres. Reflecting the world back to anyone looking at them, the spheres move gently in response to the wind and can be loosely interpreted to represent the Sun, Earth, and the satellites. The surrounding exhibit explains how weather satellites improve forecasting, improving the public's quality of life, as well as their role in expanding scientific knowledge.

"The Orbits Interweave sculpture is a fantastic addition to the Goddard Visitor **Center's Rocket Garden and is unique** among the outdoor exhibits; it is an ever-changing focal point that draws visitors across the grounds, and grabs attention while also informing and engaging the public about the JPSS and **GOES-R** missions. This sculpture is the largest outdoor installation the Visitor Center has had in over 20 years."

- Cate Maynard, Visitor Center Director

Starting in 2020, the JPSS Communications Team led the development of the sculpture and exhibit, from concept through construction, in collaboration with the GOES-R Series Program and the Goddard Visitor Center. They designed the sculpture working with a multi-disciplinary design and fabrication firm. The team worked closely with the Visitor Center and GSFC facilities staff on all aspects of the construction, which is captured in a time-lapse video.

The team accomplished this project during the COVID telework period, breaking ground on the exhibit in June 2021 and completing construction in January 2022. When the Visitor Center reopened in May 2022, the team held a ribbon-cutting ceremony with Goddard Center Director Dennis Andrucyk, JPSS Program Director Tim Walsh, GOES-R Program Director Pam Sullivan, and employees from both programs. The event recognized the NOAA-NASA collaboration, celebrated the



CREDIT: ELIZABETH WILKE

successful GOES-T launch in March, and generated excitement for the upcoming JPSS-2 launch.

Goddard Visitor Center staff and the JPSS Communications team are using the exhibit to engage the public in STEM with a tailored math and engineering activity that uses the sculpture.



On May 19, JPSS Program Director Tim Walsh, retired former JPSS Director Greg Mandt, and GOES-R Director Pam Sullivan joined Goddard Space Flight Center Director Dennis Andrucyk in welcoming JPSS and GOES-R employees to the exhibit in a joint-program gathering.

Community and visitor response to the sculpture has been positive. It is an attractive and thought-provoking exhibit that illustrates how JPSS and GOES-R are built on collaboration, whether it's the collaboration between the National Oceanic and Atmospheric Administration (NOAA) and NASA that builds and operates these satellites, or the collaboration with organizations worldwide to optimize use of the data.

Michelle Birdsall / Code 470 JPSS Strategic Communications and STEM Engagement Lead

JPSS Program and GOES-R Program employees in front of the new kinetic sculpture that shares the story of their mission with the public. CREDIT: ELIZABETH WILKE AND JOSH BRADY

LATEST FROM NASA'S NANCY GRACE ROMAN SPACE TELESCOPE



The Nancy Grace Roman Space Telescope is a NASA survey mission designed to explore essential guestions in the areas of dark energy, exoplanets, and infrared astrophysics. The telescope primary mirror is 2.4 meters in diameter (7.9 feet), the same size as the Hubble Space Telescope's primary mirror. Roman will have a primary instrument, the Wide Field Instrument (WFI), and a technology demonstration instrument, the Coronagraph.

As a survey mission. Roman will map 2,000 degrees of the night sky over 5 years, tracking stars, galaxies, and dark matter to explore the formation and evolution of large cosmic structures, like galaxies and galaxy clusters. Roman's telescope is designed to provide excellent optical performance over a wide field of view which, together with its 18 state-of-the-art detectors, will provide a field of view 100 times larger than Hubble. The combination of this wide field of view, nimble attitude control system, and location at the Sun-Earth Lagrange point ("L2") make Roman 1,000 times more efficient than Hubble in performing this core survey science.

The past year included multiple significant mission milestones related to Roman's rocket, hardware. and public engagement:

- In July 2022, NASA announced that **Roman** will launch on a SpaceX Falcon Heavy rocket from NASA's Kennedy Space Center. Roman is scheduled to launch no later than May 2027.
- In September 2021, the Roman team successfully passed their mission Critical **Design Review**, signaling the completion of all design and developmental engineering work.



This photo shows 18 of Roman's detectors mounted in an engineering test unit of the mission's focal plane array. The focal plane array will be incorporated into Roman's Wide Field Instrument - a 300-megapixel camera that will capture enormous images of the cosmos. CREDIT: NASA/CHRIS GUNN

 All 24 of the Roman detectors were flight certified in June 2021. Each detector has 16 million tiny pixels, providing the mission with exquisite image resolution. While 18 detectors will be incorporated into Roman's camera. another six will be reserved as flight-gualified spares.



A technician holds one of Roman's detectors. CREDIT: NASA/CHRIS GUNN



 The Roman team released a Roman interactive diagram online, highlighting all telescope systems, showing where they are located within Roman, where they're being built, and their latest completion status. The interactive model will be updated in real-time to reflect the latest progress of all systems.

- Roman released the "Roman Space Observer" video game to inform and inspire the public about the amazing cosmic objects in our universe, and what Roman may be able to see in a fun and engaging way.
- Flight subassemblies are completed and delivered to NASA's Goddard Space Flight Center every day! These will be systematically tested and integrated across the Center, and will be integrated into the Roman observatory within the Space Systems Development and Integration Facility (SSDIF).



The Nancy Grace Roman Space Telescope is managed at NASA's Goddard Space Flight Center in Greenbelt, Maryland, with participation by NASA's Jet Propulsion Laboratory and Caltech/ IPAC in Southern California, the Space Telescope Science Institute in Baltimore, and a science team comprising scientists from various research institutions.

The primary industrial partners are Ball Aerospace and Technologies Corporation in Boulder, Colorado; L3Harris Technologies in Melbourne, Florida; and Teledyne Imaging Sensors in Camarillo, California.

Peter Sooy / Code 448 Roman Space Telescope Outreach Lead

JPSS-2 Final Preparations **Before Launch**

On August 19, the National Oceanic and Atmospheric Administration (NOAA) Joint Polar Satellite System-2 (JPSS-2) satellite arrived by transport truck at the Vandenberg Space Force Base, where it will spend its final weeks on Earth before its planned November launch.

JPSS-2 arrived at Vandenberg from the Northrop Grumman facility in Gilbert, Arizona, where its four instruments were integrated into the spacecraft. The satellite also went through its final critical testing there. This included thermal vacuum testing, solar array installation and deployment, and its pre-ship review.

Meanwhile, flight hardware for the launch rocket has also arrived at Vandenberg for processing ahead of launch. The boattail and interstage adapter for the Atlas V rocket arrived on July 28 and the payload fairings arrived on August 8.

Teams of engineers are now putting the satellite through its final testing and preparations at the base's Astrotech Space Operations Facility. This includes performance testing, instrument cleaning, electrical testing and final inspections. Protective covers and non-flight hardware will be removed and batteries will be charged. The satellite will be fueled, mounted onto launch vehicle payload attachments and then encapsulated inside the fairing.

"Fueling is one of the last things that we'll do, because you don't want to work around a fueled spacecraft," said JPSS Flight Project Manager, André Dress.

The satellite will then be mounted above NASA's Low-Earth Orbit Flight Test of an Inflatable Decelerator (LOFTID.) LOFTID is a technology demonstration that will test the ability to land in thinner atmospheres, such as Mars.



On August 11, 2022, teams at the VSFB Astrotech facility in California used a crane to raise to vertical one of the ULA Atlas V payload fairing halves for the JPSS-2 satellite mission. The payload fairing protects the spacecraft during launch and flight through the atmosphere. CREDIT: USSF 30TH SPACE WING/JULIO PAZ

In late October, JPSS-2 and LOFTID were rolled out to the launch pad and hoisted onto the launch vehicle, a United Launch Alliance Atlas V 401 rocket.

A team of mechanical technicians, electrical technicians, engineering leads, and guality assurance personnel will all travel to Vandenberg to support these operations at the launch site, said Damone Scott, the integration and test manager for JPSS-2.

Once launched, the JPSS-2 satellite, like its predecessors Suomi-NPP and NOAA-20, will orbit the Earth from the north pole to south pole, feeding critical data to global weather forecast models. Because of its wide geographic swath, it will observe every spot on Earth at least twice a day.





VALDEZ

It will capture images and take measurements that help us plan for severe weather, such as hurricanes, floods and winter storms. It will measure our ocean and atmosphere, map and monitor wildfires and volcanoes. It will give us information on things that fill the air we breathe-like dust, pollution and smokeand provide important climate data on ozone and atmospheric temperature.

Jenny Marder / Code 470 **Senior Science Writer** Joint Polar Satellite System

See a timelapse video of the fairing being hand-painted here.



The JPSS-2 satellite arrived at the Vandenberg Space Force Base Astrotech processing facility in Lompoc, CA on August 19, 2022. CREDIT: USSF 30TH SPACE WING/ALEX.

Meet the Women of **Space Comm and Nav:** Women's Equality Day

On August 26, 2022, Goddard's Communications and Navigation Community celebrated Women's Equality Day, highlighting four women propelling NASA forward through visionary work. In 1973, the U.S. Congress declared August 26 as Women's Equality Day to commemorate the certification of the 19th Amendment to the Constitution, which took place in 1920 and granted women the right to vote.

The Communications and Navigation Community spotlighted these women's contributions to the agency and acknowledged the tenacity and passion of all women at NASA. The path toward equality has been long, but NASA and Goddard remain steadfast in their commitment to the continued journey.



As the Launch Vehicles and Robotics Network Director within the Near Space Network and the Human Space Flight Mission Manager for the upcoming Artemis I mission, Rosa Avalos-Warren provides continuous communications services to ensure mission success.

Launching this fall, Artemis I will be the first uncrewed flight test of the Space Launch System rocket and the Orion

Rosa Avalos-Warren

Launch Vehicles and Robotics Network Director. NSN

spacecraft. During launch, Avalos-Warren will provide on-console support, ensuring the mission is communicating critical data to Earth. Throughout her 13-year career with NASA, Avalos-Warren has led over 30 human spaceflight, robotics, and launch vehicle missions. Whether leading her team toward its goal or on-console, she is humbled to represent women, Latinas, and Peruvians in the workplace.

"NASA supports diversity and being one of the many women that work here is such an honor, especially in my leadership role. I am proud of my team and how equally important our voices are to others."

Outside of her network role, Avalos-Warren takes part in outreach activities with both national and international students. She enjoys helping future explorers and the Artemis generation achieve their wildest dreams -a cherry on top of the work that she does with NASA. Avalos-Warren believes that working hard, searching for opportunities, and reaching out to potential mentors will lead the wom en of NASA to success.

"My favorite part about working for NASA is that there is never a dull moment," said Avalos-Warren. "It's rewarding to work with missions that are helping uncover the unknown and the discoveries that will benefit humanity."



"My advice to women new to the workplace is don't limit yourself. There have been times when I wanted to change who I was to fit in, but I stayed strong and true to myself and believed that I could accomplish anything. Be mindful and help others - we need to continue building our network of women to achieve our goals."

started her 20-year career projects division, before Now, Ortiz-Collazo is the

Ortiz-Collazo supports the project by conducting day-to-day operations, configuration and risk management, and resource management. Launching in early 2023, ILLUMA-T will use laser communications and provide enhanced data rates to the astronauts aboard the International Space Station. Ortiz-Collazo is an essential part of the team making this possible

"When I started my career as a Hispanic woman in a male-driven



Nylsevalis Ortiz-Collazo ILLUMA-T Deputy Project Manager-Resources

Nylsevalis "Nylse" Ortiz-Collazo with NASA as an intern for the Explorers and Heliophysics joining the agency full-time. deputy program manager for resources for the **Integrated** Laser Communications Relay Demonstration (LCRD) Low Earth Orbit User Modem and Amplifier Terminal (ILLUMA-T). workplace, I modeled myself after people who were just like me," said Ortiz-Collazo. "Being able to accomplish what I have as a non-technical person in a technical field allows me to be that role model for others now."

As a child. Ortiz-Collazo loved dancing, planets, aliens, and learning more about space, leading to her aspiration to become an astronaut. With years of hard work and drive, she found herself in the place she always wanted to be - NASA. Although her background is in business, Ortiz-Collazo often is at the forefront of technical meetings, providing insight and project management to the ILLUMA-T team. She loves being a woman in technical conversations and knowing her voice matters. She enjoys talking about what she does with others and knowing that NASA inspires people every day.

Continued on page 14



Korine Powers

Education and Outreach Coordinator, ESC

Korine Powers, an education and outreach coordinator for Exploration and Space Communications (ESC), started her career with NASA as an intern in the summer of 2020. For two summers, she spent her internship developing professional and educational offerings for the **Space Communications and Navigation (SCaN)** Internship Project (SIP).

In January 2022, she began working for NASA full-time in education and outreach. In her current role, Powers helps manage Goddard's SIP cohort, develops outreach events and activities for upcoming SCaN missions, and increases excitement about NASA and SIP with educators and learners of all ages.

"I am fortunate enough to work in a team where I see tons of women like me. But I think being a woman in the workplace also means wanting women and people of marginalized races and genders who aren't like me to be a part of teams that look like them, too. We should campaign for other identities to climb the ladder with us."

Powers is ecstatic that she can share what the Communications and Navigation Community is doing with younger generations in ways that excite their curiosity and imagination, and that she is a part of bringing brilliant minds from high school to graduate school into the NASA workforce. In Powers' eyes, seeing SIP interns become full-time members of the NASA family is exhilarating. "For women new to the workplace: say what you want and what you need directly, and make sure you are compensated for your time — even fun work is work. Find role models who remind you that you belong in your industry and remember, you will someday be that role model for someone else," said Powers. "Your voice matters, even on day one."



Besc Ag

Starting off her NASA career in procurement, Camille Thurston now serves as the ESC agreements manager and the Near Space Network provider integration manager. NASA's Near Space Network is a single, endto-end network that coordinates communications and navigation services for missions in space. Additionally, the network connects users with government or commercial service providers. Thurston helps onboard new providers to the Near Space Network, bringing commercial industry and NASA together.

Challenges caused by the pandemic led to women leaving the workforce, and Thurston believes that this should be a learning opportunity to ensure workplace structure, policies, and culture are adjusted to support the needs of all employees.

"With more and more women comprising the workforce in positions traditionally held by men, it has created a number of workplace policies that better serve families of all types. This includes flexible work schedules, work-life integration policies, and the increased need for diversity and inclusion efforts — all positive changes that allow people to fully participate in an organization as well as in their families."

Thurston works with a diverse group of intelligent and talented people and learns from them every day. She enjoys being a part of an agency that serves humanity through its work — going above and beyond, doing the impossible, and exploring new frontiers for the betterment of humankind.

"Just this morning, I was in a meeting with ten other people, and I was the only woman present. Know that in those situations, you offer a unique and important perspective that is valued by others and should be leveraged. Use your voice and speak up!"

As we work toward equality for all women, representation and empowerment is crucial. Whether it's young girls seeing women in impactful roles at NASA or women in the workplace seeing colleagues like them, representation can encourage people to reach for their goals. Not only are these women role models for others, but they are also accomplishing important work that drives NASA forward.

> Kendall Murphy / Code 450 Writer, Exploration and Space Communications

WHAT'S UP WITH OUR Flight Projects Development Program

COHORT 4



FPDP - Cohort 4 - Graduates. CREDIT: NASA

Cohort 4's participants graduated from the program on June 6. Congratulations to (left to right):

Corina Koca, Payload Manager/Geospace Dynamics Constellation (GDC)

Kristen Brown, Deputy Project Manager/ Heliophysics Environmental and Radiation Measurement Experiment Suite (HERMES)

Adam Matuszeski, Deputy Project Manager-Technical/Mars Sample Return – Capture/ Containment and Return System (CCRS)

Freda Kagere, Financial Manager/Geostationary Carbon Observatory (GeoCarb)

Chetan Sayal, Project Manager/Integrated LCRD Low-Earth Orbit User Modem and Amplifier Terminal (ILLUMA-T) **Andrea Poulin,** Deputy Flight Segment Manager/ Mars Sample Return – Capture/Containment and Return System (CCRS)

Joe Hickman, Deputy Project Manager for Resources/Landsat Next

Melanie Crespo Ramos, Financial Manager/ Geostationary Extended Observations (GeoXO)

Milton Davis, Space Vehicle Manager/On-orbit Servicing, Assembly, and Manufacturing 1 (OSAM-1) and Spacecraft Manager/Deep Atmosphere Venus Investigation of Noble gases, Chemistry, and Imaging (DAVINCI)

COHORT 5

Since their orientation in April, the Flight Projects Development Program (FPDP) Cohort 5 participants transitioned into their first assignments, are juggling their core training requirements, and worked with their triad/quad teams to prepare for the fall workshop at the Kennedy Space Center (KSC).

The FPDP fall workshop was held October 18-20 at KSC. In addition to FPDP participants, attendees included partners from the Engineering Technology Directorate and employees from across all NASA centers. Workshop attendees had an exciting tour of KSC and were busy with two full days of exceptional speakers and presentations, as well as networking opportunities. Cohort 5 also presented their assignment findings and led breakout sessions throughout the workshop.



(Clockwise from top left) Cohort 5 touring the Kennedy Space Center – attendees were able to tour the Vehicle Assembly Building and view Artemis I prior to its November launch; Konrad networking with Bob Cabana, NASA's Associate Administrator, who spoke to attendees about NASA Leadership and Dealing with Project Management Challenges; Cohort 5 with Bob Cabana and Donna Swann, FPDP's Program Manager; workshop attendees from Goddard Space Flight Center; Cohort 5 on the tour of KSC. CREDIT: NASA







FPDP - Cohort 5 - Participants. CREDIT: NASA

Cohort 5 participants (left to right):

Neerav Shah, Deputy Observatory Manager/ Geostationary Operational Environmental Satellites-R Series (GOES-R)

Ellen Shea, Financial Manager/ Joint Polar Satellite System (JPSS) Flight

Carla Newman, Senior Resources Analyst/HelioSwarm

Chris Strickland, Deputy Project Manager/Space Weather Follow On (SWFO) Ground Segment **Stephanie Vidal,** Deputy Instrument Project Manager/ Modular Spectrometer for Atmosphere and Ionosphere Characterization (MoSAIC)

Konrad Bergandy, Payload Manager/ Heliophysics Environmental and Radiation Measurement Experiment Suite (HERMES)

Nikki Rawlings, Financial Manager/Atmosphere Observing System (AOS) Inclined





LENGTH OF SERVICE PERSPECTIVES FROM THE DIRECTORATE

NASA, Goddard, and the Flight Projects Directorate pride themselves on the dedication of our exceptional workforce. Please join us in congratulating the 34 civil servant employees who reached career milestones over the past year. These team members have devoted substantial portions of their career to the Federal Government and their perseverance and commitment enables NASA's mission.

Nita Aanderud Pszcolka DAVINCI Project Support Manager, 40 YEARS

Reflecting, what has been the best part of working at NASA/GSFC/FPD?

I've had and continue to have the honor of working with the most highly talented engineers, scientists, managers, and admins in the business. It truly amazes me every day what we do at NASA, specifically in Flight Projects. Working in Flight Projects has been the most rewarding and fun.

Cynthia Fryer, 40 YEARS

Cathy Peddie Explorers Associate Deputy, 35 YEARS

Reflecting, what has been the best part of working at NASA/GSFC/FPD?

The best part of working at NASA/GSFC/FPD has been the honor and privilege of meeting and working with so many wonderful, awesome, great people all these years. What an awesome journey this has been!! :-)

- Josephine Brasted, 35 YEARS
- Susan Breon, 35 YEARS
- Mark Brumfield, **35 YEARS**
- James Carpenter, **35 YEARS**
- David Littmann, 35 YEARS

Jill McGuire Associate Director of Code 480, 30 YEARS



Reflecting, what has been the best part of working at NASA/GSFC/FPD?

The best part of working at NASA/GSFC/FPD is seeing the results of the work we do change the textbooks that our children learn from. It is so rewarding knowing that our extra efforts make a difference in the real world.

 Carla Cohen, 20 YEARS	— .
 Jason Hair, 25 YEARS	F
 Ronald Hooker, 30 YEARS	<u> </u>
 Peyush Jain, 20 YEARS	— E
Joseph Jones, 20 YEARS	<u> </u>
Roman Kilgore, 20 YEARS	I
Todd King, 25 YEARS	F



Miquel Moe CAPE Deputy Instrument Project Manager, 15 YEARS
If you had a nugget of advice to share, what would it be?
Think twice, speak once.

_	Jacob Burke, 15 YEARS	 Μ
	John Gygax, 15 YEARS	 Ri
	Daniel Hein, 15 YEARS	 Je
	Donita Marshall 15 YEARS	



Charles Bacon CCRS Flight Segment Manager, 5 YEARS

If you had a nugget of advice to share, what would it be?

When preparing for some time off, set goals for yourself to complete before you leave and identify the things that can wait until you return. If you complete your list of goals before you leave, you'll feel more relaxed and better enjoy your time off.

Konrad Bergandy, **5 YEARS**

James Morrissey, **25 YEARS** Parameswaran Nair, **20 YEARS** James Simpson, **30 YEARS** Edwin Stevens, **30 YEARS** Jacqueline Townsend, **30 YEARS** Michele Towle, **20 YEARS** Richard Tseng, **20 YEARS**

Aatthew O'Neil, 15 YEARS Richard Slonaker, 15 YEARS effrey Volosin, 15 YEARS

---- Jerome Butler, **5 YEARS**

2022 **Code 400** FPD **Peer Awards** & Achievements

Congratulations to all of the 2022 FPD Peer Award recipients! Thank you to our nominators for their work recognizing our FPD teams and individuals for their exceptional achievements. Please use the link below to view the award recipients.

2022 FPD PEER AWARD RECIPIENTS

ROBERT H. GODDARD AWARD RECIPIENTS

Congratulations to all of the 2022 Robert H. Goddard Award recipients! Thank you to our nominators for their work recognizing our FPD teams and individuals for their exceptional achievements. Please use the link below to view the award recipients.

2022 RHG AWARD RECIPIENTS

NOVEMBER 16TH

Congratulations to the Artemis team! NASA's Artemis I flight test is the first integrated flight test of the agency's deep space exploration systems: the Orion spacecraft, Space Launch System (SLS) rocket, and ground systems. SLS and Orion launched on November 16, 2022, at 1:47 a.m. EST, from Launch Pad 39B at the Kennedy Space Center. Although uncrewed, Artemis I will test essential systems for future crewed missions to the lunar region.







Congratulations to the Artemis team!



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Throughout its journey, the Artemis I mission, including Orion and SLS, will receive comprehensive communications and navigation services from NASA's two networks: the Near Space Network, managed at Goddard and the Deep Space Network, managed at the Jet Propulsion Laboratory.

Congratulations to the JPSS-2 team!





Congratulations to the Joint Polar Satellite System (JPSS)-2 team on a successful launch on November 10, 2022! A United Launch Alliance (ULA) Atlas V rocket carrying the JPSS-2 polarorbiting weather satellite for the National Oceanic and Atmospheric Administration (NOAA) and NASA's Low-Earth Orbit Flight Test of an Inflatable Decelerator (LOFTID) tech demo launched from Space Launch Complex-3 at Vandenberg Space Force Base in California at 1:49 a.m. PST (4:49 a.m. EST) to join the fleet of JPSS satellites.

For more than a decade, the JPSS satellites, a partnership between NOAA and NASA, have each orbited the Earth from the North to the South pole 14 times a day, flying over every spot on the planet at least twice.

Read more about the mission's final preparations before launch on page 10.

> For more information on the JPSS-2 mission, visit the JPSS-2 website.

Let Your Voice Be Heard -**D&I Committee Hosted Listening Sessions**

We are fast approaching the conclusion of the Agency's experimental phase for our current hybrid work environment. The Flight Projects Directorate We do expect to see some guidance from the committed to hosting two check-in sessions Agency and Center in the coming months. FPD during this experimental phase. FPD management intends to utilize your valuable feedback to respond identified its Flight Projects Diversity and Inclusion to and implement guidance from higher levels and (D&I) Committee as a valuable resource to both to develop our own policies and best practices where needed. FPD efforts will continue to support management and our teams to support these connections, in addition to their exceptional work the hybrid and telework environment, thanks in in the diversity, inclusion, equity, and accessibility part to your feedback. The D&I Committee will spaces. This enables FPD to work closely with the also continue to serve as a resource and a voice committee to ensure they can be a resource for our for all of our team members. We encourage you team members and a voice when you need them. to contact D&I Committee members/allies and our Directorate-level staff as well as utilizing the The D&I Committee hosted the check-in sessions anonymous feedback site so that we can continue with our team members at the forefront of their to receive your input. We value your opinion and minds and ensured the sessions were a safe space

insights and appreciate your engagement! to gain honest feedback. They held sessions in July and October for all of our divisions in addition to FPD Let Your Voice Be Heard three open sessions.

There was phenomenal participation for these sessions. The D&I Committee briefed FPD management and our Divisions on your feedback, ensuring they maintained anonymity for all inputs. The Committee utilized Quick Response Teams to gather resources to answer your guestions and launched the Let Your Voice Be Heard responses/ resources site.

JULY:

Flight Projects D&I Committee hosted 10 sessions with nearly 500 participants; received more than 370 comments/ submissions

OCTOBER:

Hosted an additional 10 sessions including 2 open sessions with more than 680 participants: received more than 450 comments/ submissions



July Feedback Overview



Productivity, Collaboration Days, Support Networks/Teamwork Health

Hybrid Work Environment



COVID Concerns, Personal Preferences Technoloav

Hoteling, Equipment Needs, Internet

Policies B

Consistency, Best Practices, Support Teams, Contracts



Facilities Onsite Services. Cleanliness. Water/Air Quality, Office Space



Commute Work/Life Balance, Purpose-Driven In-Office Davs

KNOWLEDGE MANAGEMENT Insights

The Smart Mission

NASA's Knowledge Management (KM) community was recently invited to a talk by Ed Hoffman and Larry Prusak. Ed Hoffman was NASA's first Chief Knowledge Officer and founder of the NASA Academy of Program/Project & Engineering Leadership (APPEL). Laurence Prusak was a strategy consultant to Hoffman at NASA. Hoffman and Prusak shared passages from their new book, swapped stories, and conveyed some nuggets of wisdom. It was a fun and lively discussion. Following are excerpts from the discussion and their book, The Smart Mission: NASA's Lessons for Managing Knowledge, People, and Projects.

• "Never has there been more urgency" for lessons in teamwork. "The social dimension of knowledge and the need for people to collaborate remains constant as projects become increasingly complex and pose tougher technical challenges."

- The most effective teams are noisy. When Ed Hoffman worked with a strong team, there were lots of conversations; they had arguments; you'd see lots of movement as people got up, walked around the office, and engaged with each other.
- When you don't talk to each other, it's the ultimate sign of disrespect. You need to nourish a team so that it is encouraged to talk and to disagree. We get better because we learn from each other. Even arguments can lead to laughter.
- Jerry Madden, a well-known Goddard project manager, spoke to NASA Academy participants. He shared a story of working on a space mission with a German space agency. He noticed that whenever they went to Germany for reviews and design meetings, they

decided that the next time they went to Germany, his team would host a party - a good old-fashioned American barbecue with the best meat and barbecue sauce. A few days later, a system on the satellite had a minor problem. Madden's project was too small to move up in the queue for immediate help. While he was talking about the issue, a technician heard this and asked, "isn't this the barbecue people?" The technician said, "let them know I'll stop by over my lunch break – we'll fix the harness." Per Madden, "that basically is project management – it's all about the relationships."

would meet for dinner. Jerry

"I look at engineers and scientists as heroes. They really change the world for the better."

- ED HOFFMAN

- A few years ago, a *New York Times* article asserted that the presence of women on a team promoted "smarter teams." The increased collective intelligence due to the ability to judge the mental states of others is known as 'theory of mind.' On effective teams, members are better at reading emotional cues.
- Jiro Nonaka, a hero of Larry Prusak's, is a humble man who gets called in to consult with large corporations. The Canon corporation asked Nonaka for help in improving their productivity and effectiveness. Jiro spent a week observing their culture and meeting with key employees. When asked what they could do to improve, he replied, *"Drink tea."* In response, a nice conference room was set aside. All the senior managers came to the office and met in the morning to have tea and talk with one another, and it worked.
- Years ago, a Government Accountability Office NASA audit recommended having more stories in the knowledge program around improving costs. The benefits of sharing stories: a communal sense of meaning, clarity about what is important, a sense of connection through a strong emotional link. Storytelling builds the muscles of reflective leadership.
- Data Information Knowledge Wisdom How do you explain this so that others understand it? Per Larry Prusak, "Let's say you plan to make a fine dinner for someone you care for. The letters in a printed recipe are data, the recipe is information, knowledge is the ability to cook, and wisdom is marrying a good cook."

References

Edward J. Hoffman, Matthew Kohut, Laurence Prusak, *The Smart Mission: NASA's Lessons for Managing Knowledge*, *People, and Projects*, The MIT Press, 2022.

Jerry Madden – 100+ Lessons Learned for Project Managers https://llis.nasa.gov/lesson/1956

- Continuous learning is necessary for project professionals at all career levels. The rapid pace of digital transformation will require continuous *unlearning* of what has worked in the past to do the experimentation that leads to new discoveries.
- The relationship between the rate of change and the speed required to respond to it increases the likelihood of relying on shortcuts such as heuristics and cognitive biases. It is tempting to lean on familiar patterns to reduce friction. The risk is that information that can be easily recalled may not be relevant. A more effective approach is to keep asking: Are we doing the right things? Are we doing things, right?
- Artificial Intelligence (AI) does not include knowledge – knowledge involves human judgement and wisdom. AI is an accretion of information. AI won't replace managers, yet the managers who use AI will be in high demand.
- The Friction Project, an initiative by Stanford professors, seeks to "understand the causes and cures for destructive organizational friction." Astra Zeneca, the pharmaceutical firm, has committed to simplification to free up hundreds of thousands of wasted hours that could be put to more constructive uses.

Judy Dickinson / Code 400 FPD Knowledge Management Lead

Why Some Teams are Smarter Than Others: https://www.nytimes.com/2015/01/18/opinion/sunday/whysome-teams-are-smarter-than-others.html

The Friction Project

https://www.bobsutton.net/friction-project/articles-cases/ https://ecorner.stanford.edu/series/friction/



Steve Sabia

Flight Projects Directorate; Code 410 Visual Designer/Developer - Graphics, Web, UX Designer/ Developer/Team Lead

Born Baltimore, MD

ducation BS Computer Science – Towson University MS Computer Science – Hopkins/Applied Physics Lab (APL) Certificate in Fine Art - Maryland Institute College of Art (MICA)

Life Before Goddard

A few threads consistently weave through Steve's life from an early age – a passion for figuring out how things work, building things, the outdoors, solo sports, water and art. Steve often got in trouble for taking things apart, and "losing interest in putting them back together" as well as "making noise banging on something in the basement." He built his first boat in guestions. The fear of asking the basement at age 19, a 16-foot catamaran. He barely got it out the door.

Growing up in the 1960s/1970s his love of the ocean and science was fueled by Sunday night shows like The Undersea World of Jacques Cousteau. But being advised against a career in marine biology and knowing that his steel worker dad was NOT paying for art school, he entered college with no particular academic direction. Experimenting, he found courses in computer science easy, straightforward, and scratched the "need to build things" itch. He took art classes on the side to keep that and "C". He was in deep. Realizing spark alive.

Life at Goddard

After two years in Computer Science, he applied for a co-op position at Goddard, where he was mentored by several excellent engineers, and NASA paid for his college education. Among many lessons learned, perhaps most useful was that one must get comfortable with asking smart people apparently dumb such questions prevents a clear understanding of the requirements needed to do a proper job.

With a BS in Computer Science, Steve was hired into a group tasked with introducing new technologies into NASA's projects and infrastructure. The group was predominantly hardware engineers, designing custom VLSI chips, circuit boards and ultimately complete systems for NASCOM's real-time data processing requirements. Steve was targeted to be the "software guy" that made the hardware "go" writing low level assembly code he had a deficit in areas such as digital logic and hardware, he went

to graduate school at night, at Hopkins/APL. As part of a great team with key mentors, he was able to successfully turn software concepts into fully tested and deployed systems.

That effort completed, Steve decided to chase a dream to travel cross-country (twice!), living out of a van while also completing his graduate degree. This was long before #vanLife and #passionProjects were a thing.

He spent the next two summers roaming across the country, reading historic novels about US westward expansion while travelling through the areas they covered, ultimately ending up in Oregon, surfing the coast, windsurfing the Columbia River Gorge and snowboarding the Mount Hood glacier each summer on a rotating basis, simply driven by the whims of the weather conditions.

Returning to Goddard after this 1.5-year adventure, with grad school complete, he decided it was now time to study art. He had no idea what he would do with an art degree but followed the thread anyway.



Steve enjoys windsurfing, boat-building, and all types of water sports. CREDIT: ALL PHOTOS COURTESY OF STEVE SABIA.

Concurrently, the World Wide Web was just getting off the ground in the mid-1990s. Steve suddenly saw a pathway to tie together his visual/art and programming skills. He started to sell his integrated visual design/programming skill set to anyone at GSFC that would listen, leading to work designing basic websites, webapp user interfaces, posters, logos, animations, and ultimately project websites.

Just 10 months prior to JWST's launch on Christmas Day, 2021, Steve was given the green light by NASA HQ to develop a publicfacing website for JWST's launch and deployment. Steve's design integrated a vast amount of material into a clean, easy-tounderstand, cleverly cooperative set of interactives that tracked and presented the near real-time

state of Webb as well as the entire commissioning process. The pages visualized and tracked the schedule, launch, deployment, flight to L2, temperature profile of the spacecraft, alignment of the mirrors, commissioning of the instruments and finally the first images.

The site exceeded expectations of the JWST team and the target audience with very high hit rates and fantastic feedback from users all over the world, who stated they were thankful for the mission's transparency and "addicted" to the Where Is Webb tracker page. The site was consistently in NASA's top ten for the year after only being live for a matter of weeks. It received over 450 million page views in the December and January timeframe during launch and deployment.





Life Outside Goddard

Steve's love of water and the design/build process have always been tied together. He built his first snowboard out of a wooden waterski from Goodwill in the late 70s.He began designing and building his own surfboards and sailboards in 1991 shortly after returning from Oregon. More recently, he's been building kiteboards and hydrofoil wing boards using vacuum bagging techniques and carbon fiber composite technology, similar to those used to build satellites. He has traveled both coasts extensively, riding his own surfboards, sailboards, kiteboards and foilboards from Nova Scotia to Central America, and from Seattle to Baja.



Gene Martin

Space Weather Observations (SWO) Programs Division; Code 490 **Deputy Program Systems Director**

Born Baltimore, MD

Education BS and MS in Mechanical Engineering, University of Maryland, College Park

Life Before Goddard

Gene grew up in Ellicott City and participated in the University of Maryland's (UMD) well-known engineering program. Having checked the box for electrical engineering on his application, he soon realized there was an error and he had been grouped with the mechanical engineering students. He approached the professor, who pointed him in the direction of the electrical group that was quickly walking away. At that point, his intended discipline had simply walked too far and thinking this was karma, he decided then and there to pursue mechanical engineering. Gene studied power plant design, power generation, and engines, choosing a structural analysis concentration.

Gene's education, success in his studies, and the broad application of stress analysis, coupled with UMD's great job placement program, provided him opportunities at companies across the spectrum and country. In the end, he chose to work for General Dynamics Space Systems Division in San Diego on Titan/ Centaur launch vehicles and

the Atlas missile system. As a stress analyst, he specialized in manufacturing, structural welding, and worked on several new technologies, including the first five Atlas II missiles and Titan/Centaur vehicles 8 through 14 (including Cassini). He liked living in San Diego and fondly remembers riding his bike through its beaches to work. The cost of living and desire for a comfortable future with a family drove him to look at positions closer to home.

Life at Goddard

Gene joined Goddard as the structural systems manager for the Orbital Launch Services Project (the old Code 470) in 1991. He supported more than 20 launches on 5 different launch vehicles (Delta-2, Scout, Atlas-E, Titan II, and Pegasus) and recalls two projects that were really impactful. He served as the development manager for the Dual Payload Attachment Fitting (DPAF; used on four NASA Earth science launches) and the standard and stretch composite fairings for the Delta-2 rocket. The stretch composite fairing was developed for the Earth Observing Aura

mission, concluding with use on the ICESat-2 mission more than 20 years after its initial development.

He later joined the Geostationary **Operational Environmental** Satellite (GOES)-R project as its Hyperspectral Environmental Suite instrument manager, where he noted the great people on the team. To this day, he is impressed by the length and stability of that GOFS-R Team.

Gene left NASA to join the Missile Defense Agency. He worked as a structural lead evaluating the seabased X-band radar and working on standard missile 3 for the Navy missile defense system, the Exo-atmospheric Kill Vehicle, and the kinetic energy interceptor first and second stages. He worked at the ATK rocket motor facility in our own backyard in Elkton, where they complete hot fires of solid rocket motors just 200 yards from Route 1 and Interstate 95. The differences in culture and challenges at the Department of Defense had Gene quickly returning to NASA.

He rejoined NASA as the Polar Operational Environmental Satellite instrument systems manager



marriage at the University of Maryland chapel; Gene with his mentor.

CREDIT: PHOTO COURTESY OF GENE MARTIN AND THERESA THOMAS

and later as the deputy project manager for the Meterological Operational Satellite (MetOp)-B mission and project manager for the MetOp-C mission. He assisted in successfully rebuilding the instruments from the NOAA N-Prime incident from 2003 that launched in 2018 and are still operating today. He compares repairing the instruments with dropping a TV off a roof and then repairing it without taking it apart and successfully having it exceed original requirements. For MetOp-C, he recalls the magnificent launch from French Guiana in 2018. He led the team as they coordinated technical logistics, 24-hour flights that were required to get there, and working with the Europeans and locals, who were exceptional hosts. The

MetOp-C mission was also one of the last launches that Mike Freilich attended, which holds a special memory for the entire MetOp team given his impact to NASA.

"Stay frosty, take the high road and this too shall pass...."

Gene's latest adventure leads him down the path of operational Space Weather as NASA's Deputy Program Systems Director for the new Space Weather **Observations Projects Division** (Code 490). When asked about his career to date, Gene appreciated participating in more than 40 launches alongside exceptional team members and friends. He also recalls the one paperwork



(Clockwise from left) Gene being detailed by French Foreign Legion on Devils' Island, French Guinea (not arrested at this point); Metop-C Launch Team at Guiana Space Centre (CSG) in Kourou, French Guiana; Gene and his wife, Peggy, renewing their vows after 30 years of

error back at UMD that led him to mechanical engineering and enabled him to build and repair the most magnificent machines, meeting requirements and exceptional people.

Life Outside Goddard

Gene has built an amazing life with wife, Peggy, who is a pediatrician. He focuses on family when not at work, proudly raising his two kids alongside his wife. Daughter Selena is completing her PhD at Johns Hopkins University in cellular and molecular biology and is about to begin her post-doctoral program at the Massachusetts Institute of Technology. Their son Daniel is a third-year student following in his Dad's footsteps as a Terp studying computer science.





Peter Sooy (Code 448) and his wife welcomed new baby Sabrina, who was born in March 2022 at 9 lbs. 1 oz and measured 21.5 inches. (Left)

Congratulations to Terri Hynson (472) and her husband Ronnie, who have become grandparents for the first time! Terri's son, Giovanni and wife Samantha welcomed their baby boy, Joseph James "JJ" Cifolilli, on August 3, weighing 7 lbs. (Right)







Dan Blackwood (Code 400) and wife Kristi welcomed two more grandchildren!

Ella Kristine was born September 6 and Olivia Ann was born September 14. Older Sister Harper is very excited about her Baby Sister Olivia, and Dan is relearning how to hold a baby as small as Ella. (Left)

Share your news! Weddings, births, interesting travel experiences...we want to know!

Please send your inputs to Paula Wood. Include your name, phone number to:

- paula.l.wood@nasa.gov \sum_{a} Code 460
- Ext. 6-9125

NASA'S SEARCH AND RESCUE (SAR) OFFICE CONTINUES ITS EFFORTS TO

THE LATEST SAR SAVES DEVELOP AND IMPROVE ON LIFE-SAVING DISTRESS BEACON TECHNOLOGIES.



COSPAS-SARSAT rescues from March 2022 through September 2022 are shown above.

TRANS DAY OF REMEMBRANCE NOV 20

November 20th is observed as the International Transgender Day of Remembrance? The day was founded in 1999 to draw attention to violence endured by transgender people. You can read more here and find additional resources.



Each icon on this map represents one rescue event, though multiple saves may be involved with each event. The Search and Rescue Satellite Aided Tracking (SARSAT) system is able to detect three types of beacons:

Personal Locator Beacons (PLBs)



Used primarily by hikers and outdoor anthusiaste

Emergency Position Indicating Radio Beacons (EPIRBs)

Used by commercial and recreation ships

Emergency Locator Transmitters (ELTs)





DID YOU KNOW..?

We want to be in the know!

If you have something to share, send it to Matthew Ritsko. Include your name, phone number and send it to:



matthew.w.ritsko@nasa.gov





Flight Project Diversity and Inclusion Committee



Coming and Goings

March 1 through September 30, 2022

Coming and Goings

March 1 through September 30, 2022



Michelle Rizzo (External) to 418/Geostationary and Extended Orbit (GEO-XO)

Michael Skube (External) to 457/Near Space Network Project (NSN)

Andre Gondouin (External) to 418/Geostationary and Extended Orbit (GEO-XO)

Ruma Das (External) 450.1/ Commercialization, Innovation and Synergies (CIS) Office

Konrad Bergendy (544) to FPDP

Christopher Strickland (548) to FPDP

Joe Jones (External) to 450.1/ Commercialization, Innovation and Synergies (CIS) Office

Timothy Beach (101) to 401/Project Formulation and Development Office (PFDO)

Matthew Ritsko (150) to 400/ Flight Projects Directorate (FPD) Matthew Magsamen (383) to 455/ Integrated LCRD Low-Earth-Orbit (LEO) User Modem and Amplifier-Terminal (ILLUMA-T) Integrated LCRD Low-Earth-Orbit (LEO) User Modem and Amplifier Terminal

Elizabeth Corderman (581) to 416/ GOES-R Ground

Sarah Austin-Blevins (224) to 401/Project Formulation and Development Office (PFDO)

Erik Richards (External) to 457/Near Space Network Project (NSN)

Caitlin Kohli (592) to 421/ GeoCarb ATS

Robert Hurley (802) to 401/ Project Formulation and Development Office (PFDO)

Bonita Seaton (581) to 443/ James Webb Space Telescope (JWST)

Goinas

Thomas Martin (456) to JSC Joseph O'Brien (459) to 569 **Christopher Carson** (465) to HO

Scott Schaire (4501) to 802

Robert Lilly (490) Retirement

Robert Buchanan (429) Retirement

Mark Jarosz (417) Retirement

John Durning (443) Retirement

Del Jenstrom (429) Retirement

Pam Taylor (448) Transfer out

Vickie Moran (425) Retirement

Paul Geithner (443) Retirement

Thomas Gitlin (4501) Retirement

Daniel Tani (4504) Transfer out **Robert Caffrey** (465) to 802



Reassignments/ **Realignments Details** within Code 400

Cathy Peddie (455) to 460/ Explorers and Heliophysics Projects Division (EHPD)

Betsy Park (460) to 421/ GeoCarb ATS

Jim Simpson (465) to 483/ Orbital Servicing, Assembly and Maintenance 1 (OSAM-1)

Andy Mitchell (423) to 426/ Landsat NeXt

Neerav Shah (401) to FPDP

Stephanie Vidal (401) to FPDP

Gyanesh Chander (416) to 417/GOES-R Flight

Jason Hair (418) to 425/ Atmosphere Observing System (AOS)

Candace Carlisle (417) to 418/ Geostationary and Extended Orbit (GEO-XO)

Keith Parrish (443) to 417/ GOES-R Flight

Diane Stassi (443) to 425/ Atmosphere Observing System (AOS)

Robert Estep (497) to 427.1/ Ocean and Color Instrument (OCI)

Kristen Brown (FPDP) to 460/ Explorers and Heliophysics Projects Division (EHPD)

Milton Davis (FPDP) to 483/ Orbital Servicing, Assembly and Maintenance 1 (OSAM-1)

Mike Scott (470) to 471/ QuickSounder

Corina Koca (FPDP) to 465/Geospace Dynamics Constellation (GDC)

Jesse Walsh (401) to 465/Geospace Dynamics Constellation (GDC)

Adam Matuszeski (472) to 435/Mars Sample Return Capture Containment & Return System (MSR-CCRS)

Ronald Williams (417) to 418/ Geostationary and Extended Orbit (GEO-XO)

> Karen Rogers / Code 400 Administrative Officer

FLIGHT PROJECTS LAUNCH SCHEDULE 2022-23

FALL/WINTER 2022

SPRING/SUMMER 2023



Joint Polar Satellite System (JPSS-2)





ILLUMA-T