National Aeronautics and Space Administration

Goddard View

Volume 11 Issue 3
April 2015

www.nasa.gov

GoddardView

TRENDING

GCDC Students Participate in Egg Drop Experiment
The NASA Goddard Child Development Center held its annual Great Egg Drop on April 10. Students, with the help of their parents, developed contraptions to keep a raw egg intact when dropped from 15.5 feet.

Goddard Welcomes Mitzi Perdue for Women's History Month
Science writer and author Mitzi Perdue visited Goddard for its celebration of Women's History Month. Perdue, who married the founder of Perdue Farms, shared life experiences, leadership lessons and tips for success.

MAVEN Completes 1,000th Mars Orbit
The Mars Atmosphere and Volatile Evolution mission completed 1,000 orbits around Mars on April 6, four and a half months into its yearlong primary science mission. MAVEN is the first mission devoted to understanding the planet's upper atmosphere.

NSBE Honors Goddard Employees
Several Goddard employees were recently recognized at the National Society of Black Engineers annual convention for their work with aspiring engineers in Maryland, Virginia and Washington, D.C.

CONTENTS

GoddardView

Trending – 2
Public Visits Goddard in Celebration of Hubble – 3
Goddard's Exceptional Achievers Honored at Awards Ceremony – 5
Safety Week 2015: Situational Awareness – 5
50 Years Later: Rick Obenschain Reflects on His Career at Goddard – 6
From New Kid on the Block to Deputy Center Director – 8
Employee Spotlight – 10
NASA Features Webb Telescope at SXSW Festival – 11
Outside Goddard: Diamantino Sforza – 12

On the cover: Rick Obenschain, now former deputy center director, receives a standing ovation at his retirement party on March 27. Photo credit: NASA/Goddard/Bill Hrybyk

NP-2015-4-278-GSFC

GoddardView Info

Goddard View is an official publication of NASA's Goddard Space Flight Center in Greenbelt, Maryland. Goddard View showcases people and achievements in the Goddard community that support the center's mission to explore, discover and understand our dynamic universe. Goddard View is published by the Goddard Office of Communications.

You may submit story ideas to the editor at darrell.d.delarosa@nasa.gov. All contributions are subject to editing and will be published as space allows.

PUBLIC VISITS GODDARD IN CELEBRATION OF HUBBLE

By Trena Ferrell

Since its launch in April 1990, the Hubble Space Telescope has made numerous scientific breakthroughs and provided the public with breathtaking photos from the far reaches of the universe. In celebration of the telescope's 25th launch anniversary, NASA's Goddard Space Flight Center hosted a public event to reflect on Hubble's accomplishments to date and discuss what the future may bring. More than 200 visitors of all ages arrived at the visitor center to hear from some of those who have documented and worked on Hubble over the past quarter of a century.

"Hubble has turned into a great tool for engaging the public," said Center Director Chris Scolese, who provided opening remarks.

Jennifer Wiseman, senior project scientist for Hubble, presented several images that Hubble has gathered over the years and explained how they have helped answer some of the most compelling astronomical questions of our time, such as the age and expansion rate of the universe.

Wiseman also credited the scientists and engineers who continue to keep Hubble in full operation even after 25 years, allowing it to continue providing the scientific community with more discoveries. "Hubble is a telescope in tip-top shape," she said.

Former NASA astronaut Scott Altman, who commanded the fourth and fifth servicing missions to Hubble in 2002 and 2009, respectively, shared his thoughts on the challenges and rewards of working on Hubble. "Before going into space I had to work on 120 different tools," he recalled.

Documentary photographer Michael Soluri presented a pictorial perspective on Hubble partly taken from his book Infinite Worlds.

Visitors also participated in activities such as stargazing and hands-on demonstrations of astronaut tools used to service Hubble.

Event attendee Bill Twyman from Bowie, Maryland, remembered growing up during the Space Race and being fascinated with everything about space at a young age. That same fascination today encouraged him to participate in the event.

"The speakers were all amazing, and we got to meet an astronaut. I saw with my naked eye, through a telescope, the Orion Nebula where stars are being born," he said. "I am still in total awe from that great evening." ■

Above: Former astronaut Scott Altman, who commanded the fourth and fifth servicing missions to Hubble, shares his experiences with attendees. Photo credit: NASA/Goddard/Tabatha Luskey

Below: Guests enjoy an evening of stargazing outside the visitor center. Photo credit: NASA/Goddard/Tabatha Luskey

A total of 181 awards were presented to individuals and teams for their contributions to Goddard's missions and achievements.

GODDARD'S EXCEPTIONAL ACHIEVERS HONORED AT AWARDS CEREMONY

By Tashiana Osborne

Every year, NASA's Goddard Space Flight Center recognizes the achievements of its workforce during the Robert H. Goddard Honor Awards Ceremony. The awards committee reviewed hundreds of nominations before narrowing down the list of recipients.

On April 8, 181 awards in 17 categories – ranging from engineering and science to mentoring and outreach – were presented to employees and teams that have made substantial contributions to Goddard's missions and achievements. Two new categories were added to this year's awards list. The "new opportunities captured" category recognizes teams that have brought new business to the center primarily through competitive proposals. The "mission and enabling support" category honors individuals who have provided exceptional engineering, architecture and information technology support to Goddard's missions.

Three individuals received the Robert H. Goddard Award of Merit, which recognizes career accomplishments for select individuals typically with 20 or more years of federal service. The award is the highest individual honor bestowed by the center. Angelita Kelly, mission operations manager, was recognized for her career supporting Goddard and international mission operations programs. Aerospace engineer Sandra Irish was honored for her leadership in engineering, education, diversity and inclusion, and outreach.

"It is such an honor to receive a Goddard award," Irish said. "We all work so hard here at Goddard, and it's very special to me to be recognized for my hard work!"

Physicist John Hagopian was recognized for more than three decades of work in the development of technologies and instruments that have revolutionized the field of optics. "I feel very blessed to be working at Goddard and having the opportunity to work with the best scientists, engineers and technical managers in the world," he said.

All awardees received a framed certificate from Center Director Chris Scolese. "This ceremony recognizes the great accomplishments we as a center have made, but more importantly, the accomplishments of individuals and teams," Scolese said. "Without your dedication and skill, we couldn't accomplish the things that we do." ■

Opposite: Center Director Chris Scolese delivers remarks to recipients and guests at the Robert H. Goddard Honor Awards Ceremony on April 8. Photo credit: NASA/Goddard/Bill Hrybyk

Below: Director of Human Capital Management Ron Brade introduces the award recipients. Photo credit: NASA/Goddard/Bill Hrybyk

SAFETY WEEK 2015: SITUATIONAL AWARENESS

Goddard's safety division dedicates one week per year to Safety Week. This year, safety sessions will begin on April 27 and run through May 1. The theme for 2015 is "Situational Awareness." Safety Week offers training courses and events across the Goddard campus.

Training will focus on the importance of realizing and understanding what is happening in various situations and finding ways to avoid or stop potentially dangerous incidents. The overarching mission is to provide tools and techniques to help employees safely and responsibly prevent, diminish or react to possible life-threatening situations. All Goddard employees are encouraged to participate.

Some of the covered topics include:

- CPR
- Electrical safety
- Hazardous waste and materials
- Domestic violence awareness
- Emergency preparedness
- Fire safety
- Suicide awareness
- Pet safety

For more information and a complete list of sessions, visit sma.gsfc.nasa.gov/sac.

50 YEARS LATER: RICK OBENSCHAIN REFLECTS ON HIS CAREER AT GODDARD

By Ashley Morrow

"It actually proved a blessing that I wasn't very bright," Rick Obenschain said, looking back at his 50-year career at NASA's Goddard Space Flight Center.

It sounds like the punch line to an odd joke, but Obenschain means it. He retired on March 31 after serving most recently as Goddard's deputy director.

"We'll miss Rick's mentorship and leadership," Center Director Chris Scolese said. "He is too humble to say so himself, but his intense dedication and ability to tackle hard problems have benefitted Goddard, NASA, and the nation for over 50 years."

Obenschain attributes his career to luck, chances given and learning from his mistakes. When he had the opportunity in college to work at the center, Obenschain jumped at the chance. He began as a summer engineering aide in 1962 just after the center's third anniversary. At the time, the majority of Goddard employees were not even on location at the center in Greenbelt.

Obenschain worked with a team that put together a satellite in record time. "We went around the center," he said. "We found some solar arrays, and we put together a satellite in 90 days using stuff you could essentially find in your junk box. Then we sent it to the launch site. Even as a very junior observer, I could see what amazing work was being accomplished by a group of folks who didn't understand 'can't.'"

The spacecraft Package Attitude Control-A launched in 1969 to determine if a Delta rocket could become a platform for another mission.

"We didn't know what we didn't know, so we were willing to do anything," he recalled.

In the early days of space exploration, NASA did make some mistakes, which was only natural in that new field. Employees bounced back from mistakes out of necessity, learning as much as they could before moving on.

Over the years, he learned to ask the right questions and came to be known as a problem solver. That reputation followed him through five project management roles, including a stint in the early 1990s on the Geostationary Operational Environmental Satellite project during a troubled period.

"A terrible thing happened in 1990," he said. "Saddam Hussein invaded Kuwait. On the front page of The New York Times, there was a picture of the Iraqi tanks crossing the border. The only other thing above the fold in the Times that day was an article on the left side that said, essentially, the GOES project is a disaster."

Scientists had discovered yet another flaw on the newest GOES instrumentation, which would further delay its launch. This was a project with national importance because of its role in weather and environmental services.

A single satellite provided overviews of weather conditions at that time, and U.S. officials feared it would fail before GOES launched, causing a lapse in weather images and data. NASA Headquarters in Washington charged John Klineberg, then the center director at Goddard, with finding a new project manager.

Shortly afterward, Klineberg called Obenschain to his office. Obenschain worried he might be fired, thinking he had bantered a bit too much with the center director at a budget meeting. Instead, Klineberg offered him the GOES project manager position.

"To be given a project with national importance with 15 months' project management experience because I didn't have enough sense to keep my mouth shut was pretty cool," he said. "You're talking about someone who was really lucky."

From there, Obenschain's career took off. He turned the GOES project around. It launched four years after he began managing the project and provided critical data for weather forecasting until it was retired in 2004.

He managed three more projects before entering senior leadership at Goddard as the deputy director of engineering. After eight combined years in that position and other senior leadership roles, he became deputy center director, serving for an additional seven and a half years.

Being a leader is simpler than people think, according to Obenschain. "There's one overarching rule," he said. "Have fun. If work is not the most fun you're having during the week, do something else. I feel so sorry for people who talk about how they've only got 17 more years until retirement."

Obenschain dedicated almost his entire career to Goddard because of his immense respect for the agency, the people and the work. "I'm just so attuned to NASA's mission," he added. "We've had the same mission for 53 years. We answer the questions that inspire."

Still, he insists it's time to hand over the mission to the next generation.

"I've had a wonderful career. I was given all these opportunities," he said. "Sometimes I failed, sometimes I didn't. I learned from my mistakes, or at least enough of them. Now I'm moving forward." ■

Above, left: Rick Obenschain addresses colleagues, friends and family members during his retirement party at Goddard on March 27. Photo credit: NASA/Goddard/Bill Hrybyk

Above, right: Rick Obenschain receives his 40-year service award from then-Goddard Center Director Edward Weiler in 2005. Photo credit: NASA/Goddard/Debora McCallum

FROM NEW KID ON THE BLOCK TO DEPUTY CENTER DIRECTOR

By Clare Skelly

Upon graduating from the University of Virginia in 1983, George Morrow began his decades-long career at NASA's Goddard Space Flight Center. His first day of work was typical for a new employee, feeling uneasy and overwhelmed in a new environment. "I didn't know anyone and back then my desk didn't have a computer I could play on," he said.

Fast forward 32 years later and Morrow is now Goddard's deputy director, helping oversee the center's programs and projects as well as its nearly 9,000 employees. He officially took over on April 1 following the retirement of his predecessor Rick Obenschain and after serving as Goddard's director of flight projects since 2007.

A graduate in chemical engineering, Morrow spent his first few years at Goddard in the power systems branch working with batteries and solar arrays. All missions need robust power systems and he was supporting most Goddard missions at the time. He saw how different projects were managed, prompting him to think seriously about the trajectory of his career.

"What does it take to be a project manager?" Morrow recalled asking himself. He proceeded to seek out those opportunities with the goal of becoming a project manager with each new position.

In 1988, Morrow joined the Hubble Space Telescope project as a systems engineer. He supported launch and commissioning as well as the first two servicing missions. He was the observatory systems manager for the first servicing mission and deputy project manager for flight systems and servicing for the second.

"Believe me, I cannot believe it's been 25 years," Morrow said about Hubble's upcoming launch anniversary on April 24. "You can walk down the street at Goddard and ask people you pass, 'Do you have any association with Hubble?' and probably around 70 percent will say yes."

Before Hubble's success there was a period of stress and worry. While the launch was successful, the flawed mirror and solar arrays on Hubble caused problems for NASA. "The agency could not let the first servicing mission fail," Morrow said. He remembers working long hours, but said the blood, sweat and tears of everyone involved paid off.

He described the feeling of being a part of the Hubble legacy as surreal. "I often wonder how I got the good fortune of getting involved in something so incredible," he added.

In 2001, Morrow left NASA briefly. He remembered the first phone call he received after making the decision to accept an industry position. "Rick [Obenschain] called me and said, 'I wish you well, but are you sure you know what you're doing? I did that and I came back.'"

Morrow returned to Goddard less than two years later.

Before Obenschain became the center's deputy director in 2007, he and Morrow worked closely together in the flight projects directorate. Morrow described himself and Obenschain as each other's alter egos during that time.

"Rick would do anything to make the center successful and he had the wherewithal and leadership qualities to make it happen," Morrow said. He credits much of his own success to Obenschain's guidance and counsel.

Looking over his career to date, Morrow is most proud of the progress of the flight projects directorate as an organization. "It used to be normal for projects to overrun their budgets and schedules," he said. Today, more projects such as the Tracking and Data Relay Satellite, the Global Precipitation Measurement mission and Landsat 8 are being developed under budget and finishing on schedule.

As Morrow gets settled in his new role, his colleagues have expressed full confidence in his ability to be an effective leader for the center.

"George knows Goddard and understands the challenges we face to accomplish our missions," said Judy Bruner, safety and mission assurance director. "He can tackle any technical challenge, but I think the greatest attribute he brings to the position is that he cares about our people and what we do."

"His character, work ethic and outstanding leadership skills reflect devotion, perseverance, reliability and loyalty," added Lisa Hoffman, administrative officer for the flight projects directorate. "His admiration for and knowledge of NASA will make him a great deputy center director."

In his new position, Morrow, along with all other leadership deputies, will ensure that Center Director Chris Scolese and Goddard are successful in their work. This includes addressing things necessary to keep the center functioning efficiently along with projects ranging from the James Webb Space Telescope to the Global Ecosystem Dynamics Investigation mission.

In the coming months, Morrow looks forward to learning more about parts of the center that he is not as familiar with and Goddard's three remote facilities: Wallops Flight Facility in Wallops Island, Virginia; the Goddard Institute for Space Studies in New York; and the Independent Verification & Validation Facility in Fairmont, West Virginia.

"I will help continue the vision that keeps good work here at Goddard," he said. "I will also keep our people and facilities busy doing the cutting-edge things we've always done and the things the country needs us to do in the future." ■

Above, left: George Morrow took over as Goddard's deputy director on April 1, following the retirement of Rick Obenschain. Photo credit: NASA/Goddard/Bill Hrybyk

Above, right: George Morrow and Chris Scolese (seated left and right, respectively), both then-project managers for the Goddard Earth Observing System, with a group of sponsored interns and the interns' mentor in 1998. Photo credit: NASA/Goddard/George Morrow

Rich Phiboonphanuvat

Code 240, Counterintelligence Special Agent from NASA Headquarters

Why Goddard?: Broader opportunities to innovate and excel.

Hobbies/interests: culinary arts, motorcycling, craft brewing

Juana E. Sosa

Code 113, Human Resources Specialist

Why Goddard?: A new challenge and an opportunity to be part of a great agency.

Hobbies/interests: family, reading, Chicago

Carly Sandin

Code 541, Pathways Intern, Materials Engineering Branch

Why Goddard?: It's my dream to be a part of the mission.

Hobbies/interests: reading, cooking, visiting national parks

Michael Monahan

Code 140, Attorney

Why Goddard?: I am a space geek. I came to see the agency from a different perspective than headquarters.

Hobbies/interests: playing with my kids, exercise, cooking, Navy football games

Dylan Baker

Code 583, Pathways Intern, Ground Software Systems Branch

Why Goddard?: I have been inspired by space exploration since a very young age.

Hobbies/interests: technology, research, physics, cooking, soccer, kayaking

Caroline W. McCullough

Code 113, Human Resources Specialist

Why Goddard?: Exploring the unknown to benefit humankind is an amazing belief to undertake.

Hobbies/interests: traveling, family, tennis, bowling

Cristina Lemon

Codes 603/672, Resource Analyst

Why Goddard?: I could not retire with the U.S. Army due to injuries, but I still wanted to serve my country.

Hobbies/interests: sports, outdoor events, dancing

EMPLOYEE SPOTLIGHT

Goddard is pleased to welcome these new employees to the NASA community.

NASA FEATURES WEBB TELESCOPE AT SXSW FESTIVAL

By Laura Betz

This year at the South by Southwest interactive festival in Austin, Texas, NASA presented its "Experience NASA" exhibit to leaders and enthusiasts in the science and technology communities. The exhibit showcased many of NASA's missions, including the James Webb Space Telescope, to approximately 150,000 attendees. NASA partnered with the Space Telescope Science Institute and the Northrop Grumman Corporation on the exhibit.

Through replicas and a video monitor, visitors saw how the Webb telescope will increase our understanding of the universe by exploring beyond the reaches of the Hubble Space Telescope. They also compared themselves to the size of Webb's mirrors and learned about its unique materials as well as how it will see objects in infrared.

Set to be the most powerful space telescope once completed, Webb is designed to observe the most distant objects in the universe, provide images of the first galaxies formed and study unexplored planets around distant stars. Scheduled to launch in October 2018, the Webb telescope is a joint project of NASA, the European Space Agency and the Canadian Space Agency. ■

Photo credits: NASA/Goddard/Laura Betz and Lynn Chandler

OUTSIDE GODDARD

By Elizabeth M. Jarrell

Gentleman Farmer

Diamantino Sforza is a gentleman farmer in the Italian tradition, competing with his 85-year-old father for the first tomato, the first cucumber and the first pepper of the season. His father's family had great prominence during the Italian Renaissance. They were known as the Sforza Court in Milano and they were generous patrons of Leonardo da Vinci. They were also the originators of the illuminated book Sforza Hours, a classic piece studied in art history classes to this day. But for Sforza, it's all about gardening.

"I guess the Italians have always been big gardeners," Sforza said. "My father grows food more as a celebration. Whoever gets the first tomato wins bragging rights."

Sforza, a mechanical engineer and deputy program manager with Bastion Technologies at Goddard, cultivates a 15-by-75-foot garden in Upper Marlboro, Maryland. He finds the gentle rhythms of gardening a relaxing counterpoint to the demands of his job.

He plants onions and garlic in the fall. Around mid-April after the threat of frost is gone, he plants tomatoes, peppers, zucchini, cucumber, lettuce and spices such as basil, rosemary and thyme.

He focuses on the tomatoes, a mainstay in Italian cuisine. He selects six or seven strains, including heritage varieties.

"Those big, ugly, purple tomatoes are like honey pots; they're just so sweet and thinner-skinned," said Sforza.

The harvest begins in late May with the zucchini closely followed by the lettuce and cucumber. Spices come up in late May as well. Tomatoes are ripe from July through September. The peppers arrive in late July.

Sforza waters as needed depending on the rainfall. One of his tricks to conserving water is spreading a layer of straw around the entire garden. It keeps the weeds down, conserves rain, causes the water to percolate down and adds nutritional value.

Another of his gardening tricks involves the use of international heritage chickens, which he got in 2013 after a year of preparation.

"The chickens are part of it because in their own way, they also garden and keep their own schedule," he said. "They keep the soil loose by scratching, they eat insects of every kind and they give back to Mother Earth, plus they produce delicious eggs." The birds also provide manure for fertilizer.

He feeds the chickens soy-free, organic feed supplemented with calcium. He also tosses scratch grains like corn and other seeds onto the dirt so they can peck. He gets about four eggs a week from each chicken. Recently, he discovered two small brown eggs, but has yet to identify the producer.

"Some people really treat their chickens like pets, but they can carry lice and have other issues," Sforza said. "I'm not super-attached although feel badly if they suffer in any way. I'm halfway between farmer and pet owner. I eat their eggs, but not the chickens. I will let my old chickens just hang out after they no longer produce eggs."

Sforza shares his garden's produce with his friends and neighbors. He likes to eat the fruits of his labor and, much like a chef, likes to eat his creations.

"The beauty of fresh vegetables is that it's not cooking, it's just eating – almost like cheating," said Sforza. "You just chop, put on vinegar and oil, and then eat."

Sforza, who occasionally makes his own pasta, almost always makes tomato sauce using his harvest. He generally puts the sauce over spaghetti and adds aged, grated Italian Parmesan cheese.

"It is pleasurable watching things grow. Gardening connects me with the environment, the seasons and my heritage," he said. "When you garden, it is a very slow process. When you're out there, you have time to think. It's a form of relaxation in the middle of greenery, and at the end you get a delicious reward." ■

Center: Diamantino Sforza

Photo credit: NASA/Goddard/Bill Hrybyk