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Goodard View

**Commemorative Issue
Royal Visit 2007:
Her Majesty Queen Elizabeth II
May 8, 2007**



Special Thanks From Dr. Weiler



Photo credit: Bill Ingalls

Caption: NASA Administrator Mike Griffin and Goddard Director Dr. Edward Weiler welcome Her Majesty to Goddard. Mrs. Griffin looks on.

On May 8, Her Majesty Queen Elizabeth II and her husband Prince Philip, the Duke of Edinburgh, visited the Goddard Space Flight Center (GSFC). For nearly two hours, NASA and GSFC were on center stage representing our country and our Agency to the world. I am very proud to say that we came through with flying colors representing the best of the present peaceful use of space and the future of exploration.

Joining us for the Queen's visit were members of our Congressional delegation, led by Senators Barbara Mikulski and Ben Cardin, as well as House Majority Leader Steny Hoyer, and Congressmen C.A. "Dutch" Ruppersberger and Roscoe Bartlett.

The NASA delegation was led by Administrator Mike Griffin who was joined by a number of the Agency's senior leaders. Throughout the day, NASA shared examples of our missions and science, from *Hubble* to the *Solar Dynamic Observatory*, to operations and communications capabilities, to science and education with the Queen and Prince Philip.

Many, many people contributed to the day's success.

The GSFC Security staff did a marvelous job in planning and coordinating the efforts of at least six different security organizations and in supporting the Secret Service in keeping our guests safe. It is hard to overstate how complex an operation this was and how well it was executed.

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Cover Caption: Queen Elizabeth II

Image Credit: NASA

David Friedlander is the winner of the employee photo contest; see his photo on Page 3.

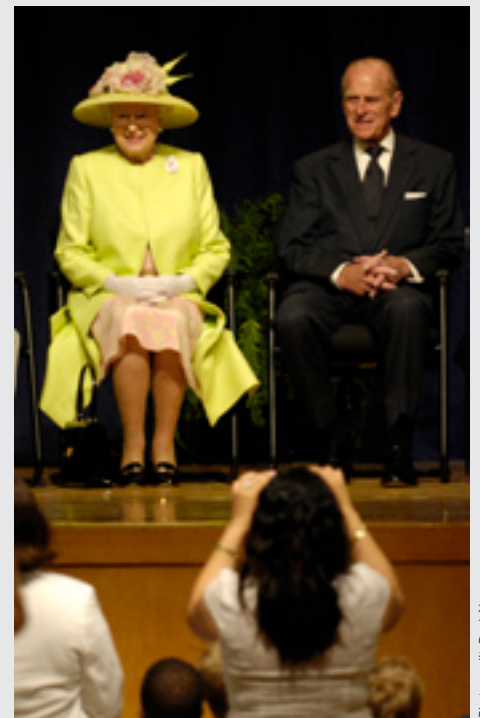


Photo credit: Paul Alers

Caption: Her Majesty and Prince Philip seated in the Building 8 Auditorium for a special presentation.

GoddardView Info

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Did You Say the Queen is Coming to Goddard?

By Nina Harris



Photo credit: David P. Friedlander

Caption: Employees anxiously greet the Queen and take pictures as she takes a stroll to her next stop at Building 8.

How do you get ready for a visit by Her Majesty the Queen (HMQ) and His Royal Highness (HRH)? Once they're here, what do you say to them? Where do you take them? And the biggest question of all? Do you bow or curtsy, or simply smile and say "very pleased to meet you, Your Majesty?"

What's the big deal you may ask? We have visitors come to Goddard every day, and we provide tours and presentations regularly. Yes, but we don't typically have to work with such large and diverse numbers of people and organizations. Let's see, first there were the British Embassy folks, and then there were the Palace folks (yes, as in Royal residence), and then there was Scotland Yard, and our NASA Headquarters colleagues in External Relations, Legislative Affairs, Public Affairs, and let's not forget our Maryland congressional representatives. And finally, last, but not least, there were the Secret Service guys and gals. So you see, we have quite a few people who thought they were leading the planning of this Royal extravaganza, when in fact it was really a very dedicated group of Goddard men and women who did the lion's share of the planning and implementing of this historic NASA event.

Initial Planning and Implementation Team

The first to "take the reins" was our own Mike Ryschkewitsch, who did an excellent job rounding up the key players who would make this event happen.

We started having weekly tag-ups with all the leads at Goddard like Roger Flaherty, Project Manager, Space Network Project Office (Code 452) who would make sure the Queen could talk to the International Space Station (ISS) Astronauts; Preston Burch, Associate Director, Astrophysics Project Division (Code 440) who would see that the Duke had a chance to meet and talk with the Servicing Mission (SM) 4 Crew and learn about the upcoming *Hubble* Space Telescope (HST) servicing mission; and Liz Citrin, Project Manager, Solar Dynamics Observatory (SDO) (Code 464) who could tell Prince Phillip about the exciting science and technology behind the SDO. By the way, SDO is being built and tested right here at Goddard and we're collaborating with the UK on this mission.

The first thing the advance team from the Palace—a mere 15 or so folks—suggested after one of their initial walkabouts was, "let's make sure this is informal, creative, and fun" for the principals (meaning HMQ and HRH—that's what you call them, while you're trying to keep everything under wraps). We'll do it, I thought "as only NASA can," taking into account that we will have a window of less than two hours to execute the details for six tour stops, eight when you count the separate tour stops for the Duke.

No problem!

One of my favorite moments during the planning, was when Mark Hess, Chief, Office of Public Affairs, heard: "Greenbelt, we have a problem."

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Photo credit: Paul Alier

Caption: Her Majesty the Queen and His Royal Highness the Duke received a special token of appreciation from Senator Barbara Mikulski and Majority Leader, Congressmen Steny Hoyer.

We were notified from Johnson Space Center (JSC) coordinators of the ISS communication link, that the window of opportunity to talk to the ISS astronauts was greatly diminished because the UK decided to shorten the overall time for the visit. As a result, the official agenda for the visit had to be reworked (for the umpteenth time).

Who Gets to See the Queen?

Another interesting aspect of the visit turned out to be planning for the auditorium session. When we found out our British friends were interested in having a short welcome session in the auditorium, we had to decide how we could choose who would attend. It was suggested that the fairest way was to have a lottery for all 9,000+ employees. Some wondered if anyone would even be interested in coming? There would be magnetometers (metal detectors) to go through, (please leave your cell phones, PDAs, pocket knives and chewing gum in your office), everyone will have to arrive early and stay in their seats, for a show that will only last about 15 minutes. Who would want to do that? Here's the answer—within the first 90 minutes over 900 e-mail replies were received from employees who wished to attend the auditorium event! Ultimately, over 2,600 people entered the lottery for about 200 available seats.

The Auditorium event was a great opportunity for NASA Administrator Mike Griffin to tell Her Majesty and the Duke of Edinburgh “a bit about what we do at NASA,” and to introduce our special guests: Senators Barbara Mikulski and Ben Cardin, and Majority Leader Steny Hoyer, and a few other important Maryland dignitaries, such as Representatives Bartlett and Ruppberger. Other special guests included U.S. Ambassador to the UK, Robert Holmes Tuttle and Mrs. Tuttle; Dan Mote, President of the University of Maryland; UK Science Minister, Malcolm Wicks; Matt Mountain, of the Space Telescope Science Institute; and our own Mayor of Greenbelt, Judy Davis.

A special thank you goes out to Debbie Hollebeke and Kelly Farrell for graciously hosting our Congressional guests and their staff.

In addition to the royal guests, our British dignitaries included UK Foreign Secretary, Margaret Beckett, and the UK Ambassador to the U.S. Sir David Manning and his wife Lady Manning.

The Auditorium session was also a nice place during the day's events to show off our next generation of scientists and engineers from the Goddard Child Development Center (GCDC)—great job singing “It's a Small World” kids! We heard that Her Majesty especially likes little tykes; after all, what grandmother doesn't?

A special thank you to Rebecca Elliott, Office of Public Affairs, and her team, who coordinated all aspects of the auditorium event. Rebecca is the reason it all ran so smoothly.

Bob Freitas, Lynn Baker, and the Customer Support Office received over 2,606 “valid” entries from employees wishing to take part in the Queen's visit to the Building 8 Auditorium. “Valid” is in quotes because Bob had to wean out all the duplicate entries. Once that was done, he downloaded the e-mail addresses to an Excel spreadsheet. A Web site called www.random.org allowed him to generate 2,606 unique numbers, which were then assigned to each e-mail address. After a shuffle, the first 200 names were chosen to win a seat in the auditorium. “It was actually fun,” Bob said, “and I got to play HRH the Duke during the rehearsal.”

More Planning

Mike Ryschkewitsch had some rather pressing NASA stuff that he had to attend to in the few weeks prior to the visit, so another senior member of the Goddard management team was asked to step in and lead the core planning team.

To the rescue came our fearless leader, Judy Bruner, Assistant Director for Safety and Security. Mind you, Judy was just finishing up her assignment with the Near Field Infrared Experiment (NFIRE) launch, and had very little sleep over the past several weeks.

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Photo credit: Bill Ingalls

Caption: The Queen Greets the Maryland Congressional Delegation: Senator Barbara Mikulski, Majority Leader, Congressmen Steny Hoyer, Senator Ben Cardin, and Representatives Roscoe Bartlett and C.A. "Dutch" Ruppersberger.

However, Judy graciously agreed to lead our team for the final planning phase. Judy kept saying: "Hey, only two weeks, and it will all be over... what kind of challenges could there possibly be?"

I would be remiss, if I didn't mention the individual who handled dozens and dozens of those challenges, like the dedicated professional she is—Sue Pierpoint—the person on our planning team who was the "glue" holding so many things together.

Side Benefits—The Center Got a Facelift

As a wonderful side benefit to the Royal Visit, many Goddard facilities, sidewalks, roads, and landscaping received some much-needed attention. Our Visitor Center got quite a facelift as well. Aging model signs were replaced, brick walls mended, rockets painted, and the yard was trimmed and mulched. Thanks to the tireless efforts of Terry Spagnuolo's Facilities Division (Code 220), the Center got a lot of "sprucing up." A special thank you goes out to Andre Jackson and Jim Gorham, of Code 222 and their fabulous multitasking, hard-working, "we can do anything" team.

The Auditorium got a bit of redecorating as well, thanks to Jimmy Barcus, HST Development Project Office (Code 442), who gave us the spectacular HST images, and Darrel Williams, Associate Chief, Hydrospheric and Biospheric Sciences Laboratory (Code 614), who provided the beautiful *Landsat* images.

Darrel also designed the Earth Science commemorative piece, presented to Her Majesty, when she visited Science on a Sphere. Special thanks to Carol Ladd, NASA Graphic Artist, (Code 271), who worked closely with Darrel and Jimmy to produce this amazing NASA artwork. Carol was also responsible for the lovely commemorative program.

Keeping Us Safe, Secure, and on the Move

Another key component of this visit was security. All joking aside, it was a major challenge for our Goddard Security Team, led by Chuck Lombard, Terry Evans, Jack Forsythe, and Robert Raimond of Code 240.

They had to work closely with a myriad of security organizations to ensure the safety and well being of our special visitors, as well as our workforce. They did a fantastic job under some unusual circumstances, like a 20+ vehicle motorcade and mounted police!

Another special thank you to Marilyn Tolliver, Luly Carson, and all of their Transportation and Logistics teams (Code 270), for the superb job of supporting this unique and historic event.

Chuck Lombard, GSFC Emergency Preparedness Officer of Security was integral in coordinating a security force that consisted of over 120 members from the U.S. and UK Secret Services, Maryland State Police, Maryland National Capital Park and Planning Police, Prince George's County Police, Goddard's own security force, plus extra security members from other NASA Centers. ■

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Caption: Winners of the Queen's Visit Lottery await the arrival of our "special guests" in the Building 8 Auditorium.

Photo credit: Warren Case

A Production Like No Other

I liken this visit to a theater production because there is an awful lot of activity and planning that goes on behind-the-scenes that the audience and special guests never see. In theater, you need a Director (Judy), and a production staff or team (Public Affairs and dozens of others), who will see to it that all of the sets are built, the scripts written and rewritten, the lights, cameras, and sound equipment are in place, the Stars' (HMQ & HRH) gifts are designed and framed, refreshments are in the green room, programs are designed and printed, the theater and stage seats are arranged, the flags are properly set according to protocol, and last, but not least, the rehearsals are scheduled and run smoothly.

Did you Say Rehearsals?

Speaking of rehearsals, we had several. There were simulations of the ISS communication link, there were run-throughs with the students and teachers involved in the student workshop, which was led flawlessly by Bonnie McClain of the Public Affairs Education Office. Even our own Director of Sciences and Exploration, Dr. Laurie Leshin, rehearsed her special presentation of Science on a Sphere, perhaps a few dozen times or more, to be sure that it would go smoothly. And of course, the GCDC children practiced their song many times, so they'd be ready for their "royal command performance." My favorite was the final dress rehearsal, in which I was asked to play Her Majesty for the run-through of the entire visit. With NASA Administrator "Mike Griffin" at my side (played superbly by Garvey McIntosh), we made our way through the crowds and the flashing cameras.

"Putting Goddard on the Map"—Capturing the Event

Now that we have the event planned, the guests invited, the timeline approved, the Center "all spruced up" and secure, we needed to share this bit of history with the world. Here's where the Public Affairs team of professionals came on the scene.

We needed to capture this with our photography experts, our television experts, our journalists, and our Web experts. We also needed to work closely with the print and broadcast media who wanted to cover the story. By the way, over 700 members of the media applied to the UK Embassy Press Office for accreditation to cover the Royal Visit to GSFC.

This article would not be complete without recognizing the efforts of Ed Campion, PAO News Chief, and the entire PAO newsroom including Sarah Dewitt, and Rani Gran, TV Producers; Patrick Kennedy, TV Production Manager; and the entire TV production team (three LIVE television events were produced and aired); and Lynn Jenner, Web master, and her team of Web professionals. Photos and stories were posted to the Web in real time, and in less than two hours after the Royal Visit the NASA photo galleries were up for all of the world to see!

[In addition, a special note of thanks goes to our NASA photographers, Pat Izzo, Debbie McCallum, Chris Gunn, Paul Alers, Bill Hrybyk, and Bill Ingalls, who shot hundreds of photographs throughout the day.](#)

In some way, shape, or form, everyone in Goddard's Office of Public Affairs, had a role to play with this royal production. We in PAO are all thankful that we had the cool, calm, and collected Mr. Hess at the PAO helm. Mark spent countless hours leading this effort for the Center and in so doing, helped us all to "put Goddard on the world map!"

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Photo credit: Pat Izzo

Caption: Dr. Weiler opens the presentation of the phenomenal Science on a Sphere exhibit at the Visitor Center.

Day of the Event—May 8th, 2007

What can I say? The event went flawlessly. The visitors arrived in their 20+ vehicle motorcade, were greeted by Dr. and Mrs. Griffin and Dr. Weiler, and then proceeded to see first hand a mere smattering of the amazing things we do at NASA—like working with the incredible men and women of the Astronaut Core, building and testing in-house spacecraft, designing and manufacturing tools and equipment to make working in space easier, and inspiring the next generation of scientists, engineers, and Nobel Prize winners.

Inside the Science on a Sphere auditorium, Her Majesty heard Laurie Leshin and British Astronaut Piers Sellers describe amazing images of the Earth, the solar system, and the universe. The Queen also had an opportunity to meet and talk with each of the *Hubble* Servicing Mission 4 Crew.

Outside, in the Rocket Garden, hundreds of Goddard employees waited patiently for a glimpse of Her Majesty, and they were not disappointed. With the majestic Delta Rocket behind her, Queen Elizabeth participated in the ceremonial planting of a tree. Just prior to grabbing her golden shovel with both hands, Her Majesty handed off her pocketbook to the Countess of Airlee (her Lady in Waiting), so that she could be sure and heave a healthy amount of soil on the young dogwood. I believe she's done this on more than one occasion. After a few more hundred photos and smiles to the Goddard Family, they departed, at 11:40 a.m. ■



Photo credit: David P. Friedlander

Caption: Her Majesty commemorates her historic visit by planting a young dogwood tree with the help of NASA Administrator Mike Griffin.

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Photo credit: Bill Ingalls

Caption: Children from the Goddard Child Development Center wait to welcome the Queen with flowers on the lawn at GSFC.



Photo credit: Bill Ingalls

Caption: Children from the Goddard Child Development Center welcome the Queen while waving the British flag.



Photo credit: Pat Izzo

Caption: Dynae Fullwood, NASA Education Specialist with Eastern Middle School students Katherine, Molly Rose Flannigan, Michael Powell and Justin Teng who explained their research to the Queen during the "Exploration: From Questions to Discoveries," workshop held at the Visitors Center.



Photo credit: Debbie McCallum

Caption: Goddard employees and their children wait on the lawn for the arrival of the royal guests.

Special Thanks From Dr. Weiler

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Photo credit: Debbie McCallum

Caption: Her Majesty the Queen, NASA Administrator Mike Griffin, and Dr. Weiler stroll the Goddard campus greeting employees.

The plant operations, maintenance, and logistics teams of Code 200 put our best foot forward in getting buildings and grounds ready. The Public Affairs Office was super in coordinating the visitor logistics and the media efforts to get the reports of the visit out to the world.

It would be impractical, if not impossible, to cite here the names of every employee who helped organize and implement this historic visit. However, I would like to acknowledge the exemplary work of Sue Pierpoint, Nina Harris, and Judy Bruner. Sue and Nina put in long hours months before the event, meeting with Embassy and Headquarters officials, developing the tour route, coordinating visitor lists and communicating regularly with the UK Embassy and NASA HQ to

make sure we were always on the same page. Judy provided intelligent and focused leadership through out the planning of the visit. Her discipline and commitment, and her patience to deal with the myriad of conflicting agendas, ensured that the day would go off without a hitch.

It was an outstanding team effort. I would like to thank the whole Goddard community for your cheerful cooperation and good will in supporting this event and showing our best face to the world. ■

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Photo credit: Chris Guinn

Caption: Preston Burch, HST Program Manager, presents His Royal Highness, the Duke of Edinburgh with a piece of the Hubble Space Telescope's original solar array.



Photo credit: Debbie McCallum

Caption: The Duke chats with Senator Mikulski, Dr. Weiler, and Colleen Hartman, Deputy Administrator for the Science Mission Directorate who gave the Duke a lapel pin for the Cosmic Background Explorer (COBE) mission.

Queen Elizabeth II and Prince Philip, Explore with Maryland Students

By Amy Pruett

Queen Elizabeth II and Prince Philip, the Duke of Edinburgh made history by visiting Jamestown, Va. to commemorate the 400th anniversary of the Jamestown settlement. During the visit, celebrated Captain John Smith's exploration tools—such as binoculars and a compass—as well as his own eyes, were reflected upon as was the immense impact of his adventure. That same spirit of exploration was witnessed by the royal couple during their visit to NASA Goddard Space Flight Center on Tuesday, May 8, 400 years after the forming of Jamestown.

NASA's astronauts, scientists, engineers, and other key contributors under NASA's Vision for Space Exploration are adventurers, just like Captain Smith and his group of fearless colonists. Of course, in the four centennials past, explorers' tools have changed, but none more so than the tools we use in investigating our solar system and the universe. For instance, light is one of NASA's essential tools. During a student workshop involving four Maryland primary schools and one university, the Queen and the Duke of Edinburgh learned the importance of light in human exploration.

Two students representing both high school and college were on hand as a representation of how NASA's education opportunities in exploration are available to all. Their participation in the workshop provided private poster sessions for the royal party to view and the students were available to describe their research projects and subsequent discoveries to the Queen and the Duke.

The remaining students, all in middle school and most from NASA Explorer Schools, investigated light as an exploration tool during a NASA education workshop titled, "Exploration: From Questions to Discoveries," designed by Goddard education experts. The workshop began a few hours prior to the royal party's arrival, engaging students in activities designed to help them discover how enabling technologies like satellites, the *Hubble* Space Telescope, and the separation of colors of the electromagnetic spectrum contribute to life on Earth, as well as advance long duration space flight.

The Education Workshop was designed to inspire student curiosity and increase their awareness. For the day, students became explorers, pursuing answers to specific questions through a series of activities at each of three learning stations. Each student answered the following questions: 1) What is the relationship between light and exploration?

2) Why do we use light to study Earth? 3) How do we use light to explore the Universe?

"The workshop was an opportunity for the world to see the role NASA plays in educating the next generation of explorers," said Bonnie Eisenhamer, Program Manager of the *Hubble* Space Telescope Institute and workshop mentor.

Their visit to the learning stations gave each student a different perspective in the understanding of light as an exploration tool. For example, one station explained how light is used to help categorize galaxies. However, after each student had discovered answers to their questions, their job was still incomplete. As much as explorers' have the duty to investigate the unknown, it is equally important for them to share their knowledge and spread their understanding. Just as Captain Smith reported to King James I, who granted a charter to colonize Virginia, the students of the NASA workshop shared the results of their expeditions with the royal couple.

Separately, the Queen and the Duke of Edinburgh visited each of three groups of middle school students, inquiring about the results of their explorations. Some students were able to demonstrate to the royal couple the use of light in mapping Earth via satellites.

"Getting to explain my research project to people of such importance is a great honor," said Michelle Steiner, a 2006–2007 Academic High School Intern who displayed a poster she designed titled, "Nebular Dust Analogs as Catalysts in Organic Molecule Product." "It is really an exciting way to end my school year and internship experience at NASA!"

In the end, NASA's expertise is in creating once-in-a-lifetime, thrilling exploration opportunities. The participants of the NASA Education Workshop became explorers and scientists much like Captain Smith and his crew were back in 1607. They learned the importance of communicating and sharing discoveries, and shared those discoveries with the Queen who listened to the young explorers, showed appreciation for their discoveries, and granted them well wishes. Her acknowledgment could just be the boost to further propel the workshop participants and future NASA explorers on a new journey of discovery to the Moon, to Mars, and beyond.

For highlights of Queen Elizabeth II and Prince Philip, the Duke of Edinburgh's historic visit to NASA Goddard Space Flight Center, visit: <http://www.nasa.gov/Goddard> ■

Queen Elizabeth II and Prince Philip, Explore with Maryland Students



Photo credit: Pat Izo

Caption: Her Majesty enjoys some time with middle schools students Jonece Layne and Randi Williams of Kenmoor Middle School, Landover, Md., at their learning stations as they work to answer their three research questions.

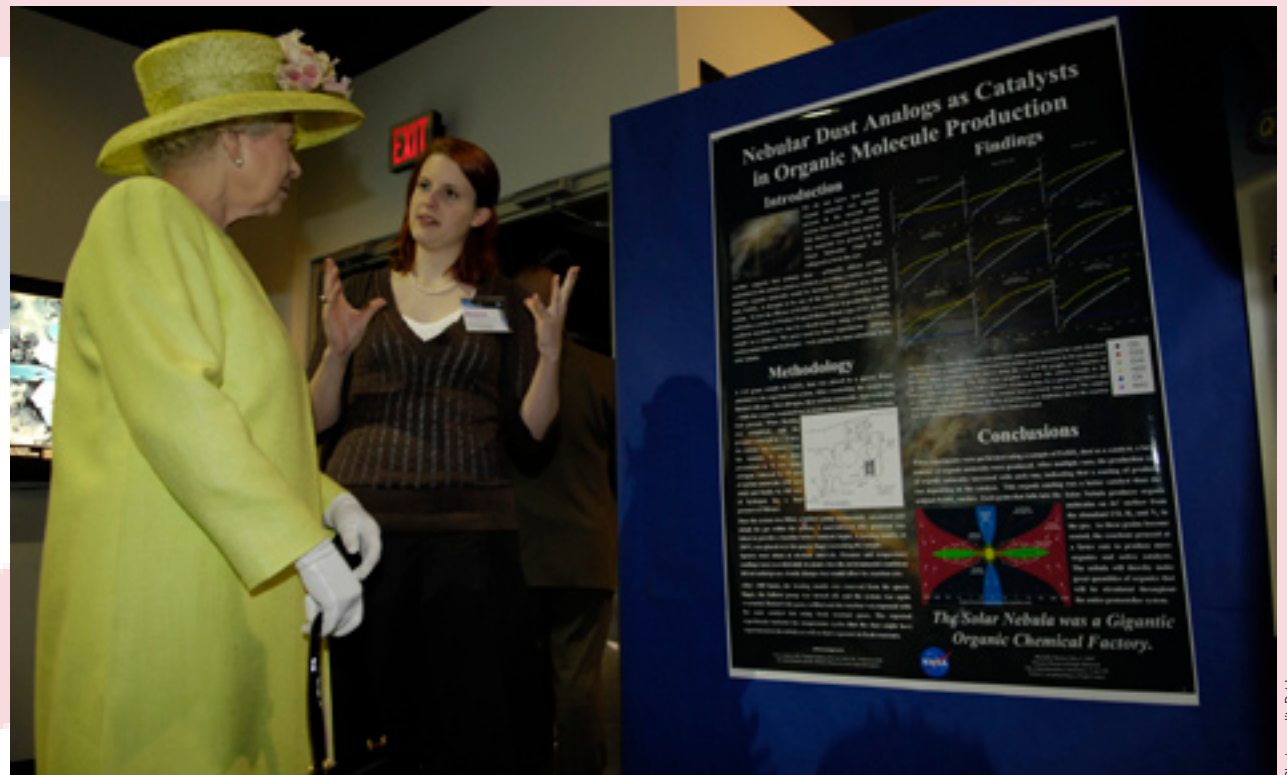
“The Royal Visit was a wonderful opportunity for NASA, but it was especially wonderful for Goddard Education,” said Bonnie McClain, Student Workshop Lead. “Education was a requested component of the visit. I did homework about education in the UK to invent an authentic education event. We decided to have a ‘real’ workshop taking place rather than a staged one and we timed everything so that the Queen would be visiting the workshop as the students were starting work on their third learning station. This gave students time to learn about what they were doing and allowed the visitors the opportunity to just observe or to interact if they so chose.” ■

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Caption: Her Majesty talks with British Astronaut Piers Sellers about living and working in space.

Photo credit: Pat Izzo



Caption: Michelle Steiner, a participant of the Academic Year High School Intern Program from Eleanor Roosevelt High School in Greenbelt, Md., explains her research project to the Queen.

Photo credit: Pat Izzo

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Photo credit: Bill Ingalls

Caption: British Astronaut Michael Foale introduces the Queen to the crew of the International Space Station.

The Network Project Team was responsible for coordinating the communication between the Queen and the International Space Station (ISS). Roger Flaherty's team worked with the planners at Johnson Space Center (JSC), the ISS, and the Flight Operations Team and Goddard's own network people to ensure the communications link between the ISS and Goddard would be working when we needed it to be.

"The biggest obstacle was overcoming the timeline," Flaherty said. "While the TDRSS has a continual view of the ISS, because of the orientation of the Space Station, they only have a single communications antenna and they get blockages that prevent them from seeing the TDRSS. The line of sight between the antenna and the TDRSS is what allows for two-way communication. The blockage could last for a few minutes or tens of minutes. The first order of business was to get with the ISS people to work out how we could overcome this issue. ■



Photo credit: Bill Hrybyk

Caption: Her Majesty and Astronaut Michael Foale.

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Photo credit: R. Robinson

Caption: The Duke walks with Colleen Hartman, U.S. Ambassador Robert Holmes Tuttle, and UK Deputy Ambassador Alan Charlton.



Photo credit: Leann Phillips

Caption: The Duke, with his Secret Service escort, arrive at the Visitor Center.



Photo credit: Chris Gumm

Caption: The Duke talks with John Grunsfield and Mike Massamino of Hubble Space Telescope Servicing Mission 4 crew.



Photo credit: Chris Gumm

Caption: Astronauts Scott Altman, Greg Johnson, and Megan McArthur describe upcoming HST servicing missions to His Royal Highness.



Photo credit: Chris Gumm

Caption: Liz Citrin, Project Manager for the Solar Dynamics Observatory (SDO), tells The Duke and Colleen Hartman about the spacecraft's testing and integration.



Photo credit: Chris Gumm

Caption: Preston Burch, Mike Ryschkewitch, Coleen Hartman, and astronauts greet The Duke as Andy Thomas and Nicholas Patrick look on.