



Print

Close

Marshall Star, October 26, 2011 Edition

MARSHALL STAR

In This Week's Star (Click to Expand)

- › [Marshall Establishes Flight Programs and Partnerships Office](#)
- › [Teresa Vanhooser Leads Flight Programs and Partnerships Office at Marshall](#)
- › [Bus Schedule Announced for Nov. 1 Combined Federal Campaign Rally](#)
- › [Marshall Exchange Opens UPS Store in Building 4203; Marshall Post Office to Close Nov. 5](#)
- › [U.S. Space & Rocket Center Celebrates the Life of Dr. Wernher von Braun with New Exhibit](#)
- › [Team Redstone to celebrate Native American Indian Heritage Month Nov. 9](#)
- › [Oct. 27 Marks 50th Anniversary of First Saturn Launch](#)
- › [Ask an Expert: The Sun Has "Cirtain" Flare](#)
- › [Obituaries](#)

Marshall Establishes Flight Programs and Partnerships Office

By Kim Newton

The Marshall Space Flight Center recently reorganized to align with NASA's goals of extending the life of the International Space Station, supporting the growth of commercial space industry, and addressing important scientific challenges while maintaining the agency's commitment to robust human space exploration, science and aeronautics programs of exploration and discovery.

A new office Marshall established to support the agency's new direction is the Flight Programs and Partnerships Office, which became operational Aug. 28. The office will focus on International Space Station operations, robotic mission programs, and human exploration development, which include elements that support human exploration activities including projects, tasks, technical support, integration and architecture studies. The Flight Programs and Partnerships Office will also seek to develop and enable future partnerships with external customers.



Teresa Vanhooser (NASA/MSFC)

Teresa Vanhooser, previously the director of the Ares Projects Office, has



Paul Gilbert (NASA/MSFC)

been assigned to lead the office. She is assisted by Deputy Manager Paul Gilbert.

International Space Station

The International Space Station is a major stepping stone in achieving NASA's exploration goals across the solar system and provides a space-based research and development (R&D) laboratory to safely perform multidisciplinary, cutting-edge research.

FPPO has established the International Space Station Office, responsible for developing and sustaining the Marshall-supplied International Space Station vehicle hardware and Marshall payloads through 2020, and possibly beyond.

The station office manages project planning, budgeting, scheduling, engineering design, development, integration, testing, cost control, sustaining engineering, and operations of projects and activities in support of space station.

This includes managing and operating the human spaceflight payloads and facilities that accommodate station payloads and managing, operating, and sustaining the Environmental Control Life Support System for the Human Exploration Operations Mission Directorate. The office performs project management functions for Marshall space station science payloads and will serve as the Marshall Center point of contact to the station program manager at Johnson Space Center for all space station activities.



Annette Sledd (NASA/MSFC)

Robotic Mission Programs

The Robotic Mission Programs Office performs program management for a number of NASA flight mission programs. This includes the Discovery, New Frontiers and Lunar Quest Programs, managed on behalf of the NASA Headquarters Science Mission Directorate; and the Technology Demonstration Missions Program, managed on behalf of the NASA Headquarters Office of Chief Technologist.



Dennon Clardy (NASA/MSFC)

The Discovery Program challenges scientists to find innovative ways to unlock the mysteries of the solar system with low-cost, highly focused planetary science investigations. New Frontiers provides a similar opportunity for scientists to enhance our understanding of the solar system using cost-effective, mid-sized spacecraft to execute missions that are too aggressive on

a Discovery mission budget. These programs give the science community an opportunity to propose full investigations to be conducted as a way to launch exploration missions in the solar system. In contrast, the Lunar Quest Program consists of directed missions designed to strategically address lunar science community prioritized science objectives. Examples of science missions from these programs include solar wind, comet and asteroid sample return missions; a mission to fly by Pluto, missions to orbit Mercury, Jupiter, asteroids Vesta and Ceres and a mission to study the lunar atmosphere and dust.

Missions are currently led by NASA's Jet Propulsion Laboratory, Ames Research Center, Goddard Space Flight Center, and Johns Hopkins University Applied Physics Laboratory. Most recently launched is the Gravity Recovery and Interior Laboratory, or GRAIL, which launched in September 2011. After an almost four-month journey, the twin GRAIL spacecraft will be placed in a lunar orbit and will make detailed measurements of the moon's gravity field, aiding scientific understanding of the moon's structure and dynamics.

NASA's new Technology Demonstration Missions Program bridges the critical, mid-technology readiness gap between early conceptual studies and infusion of a new technology onto the critical path of a science or exploration mission. The Technology Demonstration Missions Program exists to mature revolutionary, crosscutting technologies to flight readiness status through directed and competed projects that perform relevant environment testing.

Human Exploration and Operations Office

The Human Exploration and Operations (HEO) Office is tasked with managing Marshall's support to NASA's Human Exploration Operations Mission Directorate (HEOMD). The office conducts project planning, budgeting, scheduling, engineering design, development, testing, cost control, sustaining engineering, and operations of projects and activities. The office develops processes and strategies and provides cross-program system integration in support of NASA's Human Exploration Capabilities Office, and provides project and engineering support to the Launch Abort System for the multi-purpose crew vehicle. The office is also tasked with developing concept and architecture requirements for the Exploration Mission Systems Office, providing technical support to NASA's Commercial Orbital Transportation Services (COTS) partners and the Commercial Crew Project Office and NASA contractor partners as part of the Commercial Crew Development agency effort.



Chris Cianciola (NASA/MSFC)

The Office also manages Marshall's Advance Exploration System projects and tasks, developing cutting-edge research and development to enable future deep space human exploration. For example, Marshall has formed a LOx-Rich Staged Combustion Engine Partnership with the Aerojet Corp. that will involve testing and modeling of a liquid oxygen/kerosene-fueled staged combustion propulsion system for heavy-lift launch vehicles. This partnership will involve testing of the AJ-26 liquid oxygen/kerosene engine.

The office also manages the Robotic Lander Development Project that is currently testing a warm-gas lander prototype that serves as a platform to develop and test algorithms, sensors, avionics, ground and flight software and ground systems to support autonomous landings on airless bodies where aero-braking and parachutes are not options. This lander technology could aid in developing a next-generation robotic lander system.



Steve Tesney (NASA/MSFC)

Partnerships Office

One of NASA's key goals is to facilitate the sharing of NASA technology and capabilities by engaging in partnerships with other government agencies, industry, and international entities to stimulate development of the commercial space industry and support other government and commercial entities in leveraging Marshall's unique skills, knowledge and experience.

The Partnerships Office identifies opportunities to develop and maintain partnerships external to the agency that will achieve NASA's vision and Marshall's mission. The office is responsible for maintaining executive interfaces with Marshall partners and its responsibilities also include tracking and maintaining an integrated awareness of all center external partnerships.

The organization will also provide project management of projects or tasks as necessary to execute on partner commitments, or delegation of this management role to another center organization.

The Partnerships Office will also support the formulation of the National Institute for Rocket Propulsion Systems -- an institute intended to provide stewardship of our nation's propulsion capabilities, recognizing their vital role in national security, economic competitiveness and the continued exploration of space. The institute, initially operated out of the

Marshall Center, will work in partnership with the Department of Defense, other government agencies, and commercial industry to support the preservation and advancement of government and industry propulsion capabilities to meet current and future aerospace needs.

Newton is a public affairs officer in the Office of Strategic Analysis & Communications.

[› Back to Top](#)

Teresa Vanhooser Leads Flight Programs and Partnerships Office at Marshall

The Marshall Star recently spoke with Teresa Vanhooser about her new leadership responsibility as manager of the Flight Programs and Partnerships Office -- one of the new offices established during the recent Marshall Space Flight Center reorganization.

The Flight Programs and Partnerships Office (FPPO) will focus on International Space Station operations, robotic mission program management, and human exploration development, which include elements that support human exploration activities including projects, tasks, technical support, integration and architecture studies. FPPO will also seek to develop and enable future partnerships with external customers. Can you explain the organization's structure -- how it's organized and how it operates?



Teresa Vanhooser (NASA/MSFC)

The Marshall FPPO supports multiple directorates at Headquarters, such as the new Human Exploration and Operations Mission Directorate (HEOMD), Science Mission Directorate (SMD) and Office of Chief Technologist (OCT). We laid out the organization, to the extent practical to support our primary customers: International Space Station (ISS), SMD, OCT, HEOMD, and external partners. We have unique program/project roles with each of these directorates.

What role will FPPO have in the center's mission?

The FPPO will play numerous critical roles in two of our center's strategic goals supporting the agency: Develop and operate integrated vehicles and systems to enable human space activities; develop, integrate, and operate instruments and conduct research to expand knowledge of the universe. We will enable human space activities: by providing sustaining, production, integration and operations functions for the ISS; and providing cross-program integration support, perform architecture analysis, support the multi-purpose crew vehicle and the commercial crew activities for HEOMD. We will enable the advancement of science through the SMD robotic programs we manage, and OCT programs. Our Partnerships Office provides an interface to external customers who want to use our unique Marshall capabilities to further their commercial space objectives.

What kind of collaboration with other Marshall Center organizations and NASA centers do you anticipate?

We will have many touch points across the center. We of course depend on Engineering and Safety and Mission Assurance Directorate Offices for technical support, Space Launch System as we perform our HEOMD tasks, Office of Strategic Analysis and Communication (OSAC) and legal to help us establish partnerships, and all center support organizations to help us get the job done. Each FPPO office has its unique set of other NASA center and Headquarters offices that they collaborate with. There are very few, if any, that we don't have an opportunity to collaborate with.

What is your management philosophy?

I am a firm believer that if you set the direction for the organization and provide employees the resources they need to do their jobs, they will make you proud. An organization that continues to provide their employees learning and growing opportunities will be strong in the end. We need to provide the highest value to our center and I believe FPPO supports sustaining and using the center's core capabilities, and helps provide a balanced portfolio. We have drawn upon the center's

unique skill mix to create this new office, bringing in people from the Ares Projects, Shuttle Program, S&MA, OSAC, and the Engineering Directorate to join the excellent team we brought over from the Science and Mission Systems Office. The diversity of this team will enable a more collaborative culture with the other center organizations.

What do you want to see FP accomplish?

I see the FPPO office playing a vital role with the space station by maintaining the onboard hardware – microgravity glovebox, research racks, etc. -- and supplying spares through 2020, or beyond. FP also will manage many of the robotic programs for NASA (Discovery, New Frontiers, Lunar Quest and the Technology Demonstration Missions) looking for low-cost solutions and technologies to unlock the mysteries of our solar system. FPPO will provide key support to HEOMD and help enable our Commercial Space Partners. The office will also help grow the center's partnerships, which will aid in developing technology that is applicable to NASA's mission needs.

What is your vision and what do you see as your biggest challenge to realize it?

I want FPPO to be seen as an organization that meets its commitments, develops its people and provides excellent project managers who can deliver their products while providing a safe, inclusive environment for their team. I think this is well within the reach of our team and I am confident in the leadership that is in place. I see our primary challenge is to help the center diversify its work portfolio, by identifying and capturing projects which engage our center capabilities while supporting the agency and centers' strategic goals.

[› Back to Top](#)

Bus Schedule Announced for Nov. 1 Combined Federal Campaign Rally



The Marshall Space Flight Center's annual rally supporting the Combined Federal Campaign is set for Nov. 1 from 10:30 a.m. to 12:30 p.m. in Activities Building 4316.

Buses to the event will run continuously from 9:30 a.m. to 12:30 p.m. The first bus will make stops at the main entrance of Building 4200 and the north entrance of Building 4203. The second will pick up participants at the south entrances of Buildings 4600 and 4487.

Siran Stacy, who played football for the University of Alabama in Tuscaloosa from 1989-1991, will present the keynote address. In 2007, he lost his wife and four of his five children when a drunk driver collided with their family van. Now he travels as a motivational speaker, sharing the importance of family, community and spirituality as healing forces in the face of tragedy. A CFC charity expo during the rally will give team members the opportunity to learn more about Huntsville-area charitable organizations and their services. Light refreshments will be served.

The Marshall Center's goal is to raise \$700,000 by the campaign's end Dec. 16. As of Oct. 24, team members had contributed \$183,247.

Team members can visit the Marshall ExplorNet for more information or to make a contribution.

[› Back to Top](#)

Marshall Exchange Opens UPS Store in Building 4203; Marshall Post Office to Close Nov. 5

A new Marshall Space Flight Center branch of The UPS Store opened Oct. 24 on the first floor of Building 4203, courtesy of the Marshall Exchange.

Operating hours are from 10:30 a.m. until 2:30 p.m. Monday through Friday. The store will offer UPS shipping -- including

next day, second day, three-day select, ground, domestic, and international -- as well as packaging services, packaging supplies, UPS freight and UPS drop-off service -- such as merchandise returns with pre-printed UPS shipping labels.

In addition, the store will offer all U.S. Postal Service items, including first-class letter stamps and various mailing options, such as Postal Service express overnight letter, priority, parcel post, first class, flats, certified mail, international, and APO shipments.

The Marshall Post Office in Building 4200 will close Nov. 5. The Redstone Arsenal Post Office in Building 3710 on Marshall Road South will remain open.

The UPS Store rates at the Marshall branch are 10 percent below the standard UPS shipping rates in the Huntsville area and 10 percent below the rates shown on the UPS website as an incentive to use the Marshall branch location. Stamps will be sold for regular Postal Service retail prices -- currently 44 cents for a one-ounce, first-class letter, increasing to 45 cents Jan. 22, 2012. All other Postal Service services rates will be 10 percent less than other UPS Store retail rates charged for Postal Service services.

The UPS Store will have a letter drop box in its new location. For same-day postmark, letters need to be in the UPS box in Room 1102 no later than 2:30 p.m. For Postal Service overnight mail, UPS agents will actually take that mail to a branch of the U.S. Post Office.

"The Marshall Exchange is excited to offer this new service to all Marshall team members and all Redstone Arsenal personnel displaying an Army- or NASA-issued badge," said Edwin Jones, Marshall Exchange operations manager. "In addition, the Marshall Exchange will receive a portion of every sales transaction, allowing the Exchange to provide an even greater number of services and events to benefit all Marshall team members."

Army-issued badge personnel are permitted to follow a NASA-badged employee into Building 4203 to access the UPS store. Those with Army-issued badges can also call 4-UPSS or 4-8777 from the west side airlock phone, or 256-544-8777 from a cell phone, and ask one of the UPS agents to open the door just outside the store.

All official NASA mail, shipping, or property movement must continue to be processed through appropriate official channels using existing procedures and policies of the Marshall Center Operations Logistics Office, Jones noted.

[› Back to Top](#)

U.S. Space & Rocket Center Celebrates the Life of Dr. Wernher von Braun with New Exhibit

To honor the 100th birthday of renowned rocket scientist and the Marshall Space Flight Center's first center director, Dr. Wernher von Braun, the U.S. Space & Rocket Center has added a new exhibit -- 100 Years of Von Braun: His American Journey.

The exhibit features an extensive display of historical artifacts, photographs, videos, spacecraft models and personal items to

showcase von Braun's American experience, beginning with his surrender to U.S. forces at the end of World War II, through his accomplished career with the U.S. Army and NASA, to his death in 1977 at age 65.





In addition to covering the history of von Braun's time in the United States, the exhibit offers a unique look at some of the more personal aspects of his life, including his hobbies, family, celebrity status and daring visions of the future.

Image left: Dr. Wernher von Braun uses binoculars to monitor data on the closed-circuit TV screen in the Firing Room of the Launch Control Center at Kennedy Space Center during the final preparation for the Apollo 14 launch. (NASA)

The exhibit is open through May 2012 and is included in the general admission to the Space & Rocket Center. For more information, click [here](#).

[› Back to Top](#)

Team Redstone to celebrate Native American Indian Heritage Month Nov. 9

Team Redstone -- which includes the Marshall Space Flight Center and U.S. Army organizations on Redstone Arsenal -- will commemorate Native American Indian Heritage Month with a special program Nov. 9. The event will be held at 10 a.m. in Bob Jones Auditorium at the Sparkman Center, Building 5304.

Guest speaker will be Red Hawk, founder of OPM Management Solutions LLC. The company specializes in diversity training, as well as providing keynote addresses about cultural understanding and cultural competency.

Team Redstone also is sponsoring essay and display contests to mark Native American Indian Heritage Month. Submissions for both contests must reflect this year's national theme, "Service, Honor, Respect: Strengthening our Cultures and Communities." Essays need to be two pages, double spaced and emailed by 5 p.m. Nov. 1 to Sgt. 1st Class Jason Cundiff at jason.cundiff@us.army.mil, or to Sgt. 1st Class James Epps at james.epps@smdc.army.mil. Display contest participants must contact Cundiff or Epps by Nov. 1 for submission directions. Judging for both contests will be held Nov. 2. Awards will be presented to winners at the Nov. 9 program.

[› Back to Top](#)

Oct. 27 Marks 50th Anniversary of First Saturn Launch

Oct. 27 marks the 50th anniversary of the first Saturn launch. Click [here](#) for more details.



[› Back to Top](#)

Ask an Expert: The Sun Has "Cirtain" Flare

By Janet Anderson

The sun is the largest and most important object in our solar system – it is a huge glowing ball that provides, light, heat and energy to our Earth. But our beneficial space neighbor is also capable of some stellar temper tantrums. How often do these tantrums occur? What other solar behaviors occur?

On Oct. 27, Dr. Jonathan Cirtain, a solar scientist at the Marshall Space Flight Center, will answer your questions about how our sun works and produces phenomena such as sunspots, solar flares and solar storms -- hot topics that have communications and health implications for everyone on Earth. To join the chat, visit [this page](#) a few minutes before 3 p.m. CDT. The chat module will appear at the bottom of the page. After logging in, wait for the chat module to be activated, then ask your questions.



Jonathan Cirtain (NASA/MSFC)

More about chat expert Cirtain:

Cirtain is an expert in heliophysics and is the Hinode project scientist as well as the co-investigator on Hinode's onboard X-ray telescope. He also has served on the science team for the Atmospheric Imaging Array, an instrument on the recently launched Solar Dynamics Observatory satellite. Additionally, Cirtain serves as the principal investigator for two sounding rocket experiments: the Solar Ultraviolet Magnetograph Instrument, or SUMI, and the High Resolution Coronal Imager, or Hi-C. SUMI will complete its second launch June 12, 2012, from White Sands Missile Range, and Hi-C will launch June 19, 2012, also from White Sands.

Cirtain also is the institutional principal investigator for the Solar Wind Electrons, Alpha and Protons instrument, or SWEAP, slated to launch no later than 2018 aboard the Solar Probe Plus mission to explore unprecedented regions in space, transforming our understanding of the sun and its effects on the solar system.

Anderson is a public affairs officer in the Office of Strategic Analysis & Communications.

[› Back to Top](#)

Obituaries

Paul E. Anderson, 81, of Mount Pleasant, Iowa, died Sept. 26. He retired from the Marshall Center in 1981 as a contract specialist.

Richard Charles Brunell Jr., 64, of Huntsville died Sept. 30. He retired from the Marshall Center in 2007 as an experimental facilities development engineer. He is survived by his wife, Nina Yager Brunell.

Frank Wayne Bynum, 73, of Decatur died Oct. 7. He retired from the Marshall Center in 1997 as the director of personnel. He is survived by his wife, Gloria Bynum.

Harold E. "Red" Parks, 83, of Huntsville died Oct. 8. He retired from the Marshall Center in 1985 as an emergency planning specialist. He is survived by his wife, Bess Hayden Parks.

John W. "J.W." Smith, 83, of Fort Walton Beach, Fla., died Oct. 11. He retired from the Marshall Center in 1990 as an electronics engineer.

Find this article at:

<http://www.nasa.gov/centers/marshall/about/star/index.html>