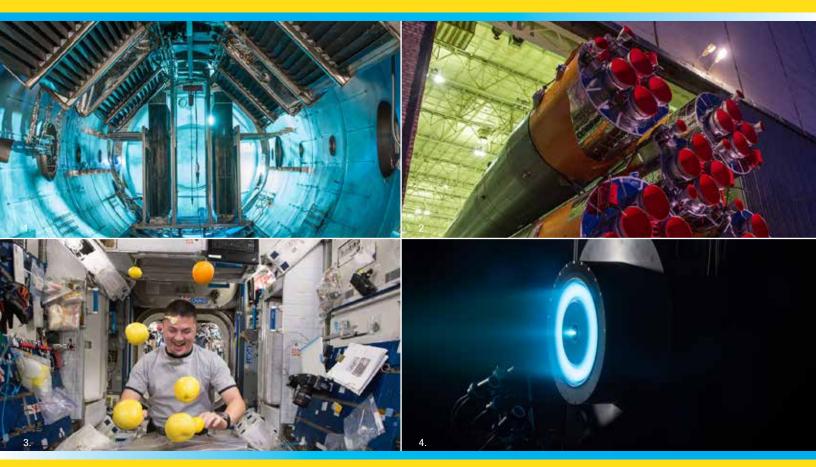
National Aeronautics and Space Administration



Small Business Programs (OSBP) where small business makes a **big** difference



Small Business Program Guide

Vision

The vision of the Office of Small Business Programs (OSBP) at NASA Headquarters is to promote and integrate all small businesses into the competitive base of contractors that pioneer the future of space exploration, scientific discovery, and aeronautics research.

Mission

- To advise the Administrator on all matters related to small business,
- To promote the development and management of NASA programs that assist all categories of small business,
- To develop small businesses in hightech areas that include technology transfer and the commercialization of technology, and
- To provide small businesses with the maximum practicable opportunities to participate in NASA prime contracts and subcontracts.

A galactic spectacle. (X-ray: NASA/CXC/SAO/J. DePasquale; Infrared: NASA/JPL-Caltech; Optical: NASA/STSCI)



Letter from the **Associate Administrator**

NASA is committed to providing small businesses with opportunities to participate in both NASA prime contracts and subcontracts. The NASA Office of Small Business Programs is here to facilitate open and effective communication between our Centers and small businesses nationwide to make that commitment a reality. This brochure includes invaluable information on how to do business with NASA, its Centers, the Mentor-Protégé Program (MPP), and more while focusing on the socioeconomic small business categories. If you'd like to learn more, additional information is available 24/7 on the NASA OSBP Web site, *www.osbp.nasa.gov.*

Glenn A. Delgado Associate Administrator Office of Small Business Programs



Image Credit: NASA, ESA, J. Trauger (Jet Propulsion Laboratory)

How To Do Business with NASA

1)

Identify Your Product or Service

- Know the Federal Supply Class (FSC) codes (*https://www.nasa.gov/pdf/104404main_FSCTable1.pdf*) and the North American Industry Classification System (NAICS) codes (*https://www.census.gov/naics/*) for your products or services.
- Prepare a capability brief in both printed and electronic versions with an emphasis on Government work.

2)

Register Your Business

- Obtain a Data Universal Numbering System (DUNS) number (https://www.dandb.com/fedgov).
- Register with the System for Award Management (SAM) (https://www.sam.gov).
- Register with the NASA Vendor Data Base (NVDB) (https://vendors.nvdb.nasa.gov).

3)

Identify Your Target Market Within NASA

- Identify what each NASA Center (https://osbp.nasa.gov/about-centers. html) procures by reviewing its top NAICS code and the NASA Acquisition Forecast (https://www.hq.nasa.gov/office/procurement/ forecast/).
- Review the NASA Web site (*https://www.nasa.gov*), the OSBP Newsletter (*https://osbp.nasa.gov/newsletter.html*), and industry publications such as *Space News*, *Aviation Weekly*, and *Physics Today*.
- Contact the Small Business Specialists (SBSs) (https://www.osbp.nasa.gov/map.html) located at each NASA Center for assistance on how to do business with that particular NASA Center.



6

Identify Current NASA Procurement Opportunities

Identify current procurement opportunities in your product or service area by checking the Federal Business Opportunities Web site (*https://www.fbo.gov*), which can assist you in identifying NASA requirements and send you e-mail notifications of requirements.

Familiarize Yourself with NASA Contracting Procedures

Be familiar with the Federal Acquisition Regulations (FAR) (https://farsite.hill.af.mil) and the NASA Federal Acquisition Regulation Supplement (https://www.hq.nasa.gov/office/procurement/regs/NFS.pdf).

Investigate Federal Supply Schedule (FSS) Contracts

Contact the U.S. General Services Administration (GSA) (https://www.gsa.gov/portal/category/100611) for information on how to obtain a Federal Supply Schedule contract. Many NASA purchases are, in fact, orders on FSS contracts.

Seek Additional Assistance as Needed

- Request training and counseling on marketing, financial, and contracting issues at minimal or no cost from Procurement Technical Assistance Centers (PTACs) (*http://www.dla.mil/HQ/SmallBusiness/PTAC.aspx*). PTACs are located in most states and are partially funded by the U.S. Department of Defense (DOD) to provide small business concerns with information on how to do business with DOD and other Government agencies.
- Consult with the U.S. Small Business Administration's (SBA) Procurement Center Representatives (PCRs) (https://www.sba.gov/contracting/contractingofficials/procurement-center-representatives) and the SBA Business Development Centers (https://www.sba.gov/tools/local-assistance/sbdc). The SBA provides each NASA Center with a liaison.
- Get free and confidential mentoring by former CEOs through SCORE (https://www.score.org).





Explore Subcontracting Opportunities

Obtain information on subcontracting opportunities through the SBA's SUB-Net (http://web.sba.gov/subnet/search/index.cfm) or Subcontracting Assistance Directory (https://www.sba.gov/contracting/ finding-government-customers/subcontracting/subcontractingassistance-directory). Solicitations and notices are posted by prime contractors.



Investigate NASA Small Business Programs

Explore other small business programs, such as the NASA Mentor-Protégé Program (*https://osbp.nasa.gov/mpp/index.html*), the Small Business Innovation Research Program (*https://sbir.gsfc.nasa.gov*), and the Historically Black Colleges and Universities and Minority Institutions Program. Information on these and other programs is available on the NASA Office of Small Business Programs Web site (*https://osbp.nasa.gov*).



Market Your Firm Well!!!

After you have identified your customers, researched their requirements, and familiarized yourself with NASA procurement regulations and strategies, it is time to market your product or service. Present your capabilities directly to the NASA Centers that buy your products or services. Realize that, as with yours, their time is valuable. If the match is a good one, you can provide them with a cost-effective, quality solution to their requirements. Good luck!



Marshall Space Flight Center 2015: Advancing Technology to Power NASA's Journey to Mars

Engineers are practicing "snow cleaning'" on a test telescope mirror for the James Webb Space Telescope at NASA's Goddard Space Flight Center in Greenbelt, MD. By shooting carbon dioxide snow at the surface, engineers are able to clean large telescope mirrors without scratching them..



Historically Underutilized Business Zone (HUBZone)

Purpose

 It is NASA policy to provide the maximum practicable number of acquisition opportunities to HUBZone small businesses.

Eligibility Requirements

- Must be a small business by SBA standards.
- Must be owned and controlled at least 51 percent by U.S. citizens, or a Community Development Corporation, an agricultural cooperative, or an Indian tribe.
- Must have its principal office located within a HUBZone, which includes lands considered "Indian Country" and military facilities closed by the Base Realignment and Closure Act.
- At least 35 percent of its employees must reside in a HUBZone.

Certification Requirement

The Small Business Administration conducts the HUBZone certification.

Procurement Incentives

- A Federal Government—wide statute established goals of 3 percent of the total contract and subcontract value.
- > NASA goals are 3 percent of the total prime and subcontract value.
- There is set-aside authority in the Federal Acquisition Regulations (FAR) for HUBZone set-asides.
- Competitive and sole-source contracting.
- 10 percent price evaluation preference in full and open contract competitions, as well as subcontracting opportunities.
- More information on HUBZone small businesses can be found at *https://www.sba.gov/hubzone/*.

Authority/References

- Title VI of the Small Business Reauthorization Act (1997) (15 U.S.C. 631)
- FAR 19.13

Artist's rendering of the Low-Density Supersonic Decelerator that was tested at the U.S. Navy's Pacific Missile Range Facility in Kauai, HI.

IASA's Solar Dynamics Observatory captured an image of a mid-level solar flare on March 7, 2015, seen as a bright flash of light on the left side of the Sun. This image is a blend of two wavelengths of light—171 and 131 angstroms—typically colorized in gold and teal, respectively.

Image Credit: NASA/SDO

HUBZone Small Business Goals

- Increase the number of annual contract actions and contract dollar value to HUBZone small businesses.
- Increase the number of HUBZone small businesses in high-tech areas by expanding the Mentor-Protégé Program.
- Monitor the performance of HUBZone small business subcontracting through the use of Individual Subcontract Reports (ISRs) at each Center.
- Monitor the Agency's annual HUBZone small business subcontracting dollars through the Summary Subcontract Report (SSR).
- Provide outreach to HUBZone small businesses through small business events and matchmaking opportunities at outreach events.
- Increase communication with HUBZone small businesses through the use of the OSBP Web site.
- Include training for the NASA acquisition workforce on HUBZone small businesses.
- Monitor the Federal databases to ensure that all data are entered accurately and reviewed regularly.
- Require NASA Centers to report initiatives in support of HUBZone small businesses on a semiannual basis.
- Use an enterprise model to execute these goals and track accomplishments.

Contact Information

- Web site: https://www.osbp.nasa.gov
- Telephone: 202-358-2088
- E-mail: smallbusiness@nasa.gov (include "HUBZone" in the subject line)



Hubble's cameras in near-infrared and visible light, the stunning image is a

celebration of the 25th anniversary of the launch of the Hubble Space

Telescope on April 24, 1990.

Women-Owned Small Business (WOSB)

Eligibility Requirements

- Must be at least 51 percent owned by one or more women who are U.S. citizens; or, if publicly owned, it must be small in its primary industry in accordance with the U.S. Small Business Administration's (SBA's) size standards.
- The owner of the company must control and manage the daily business operations.
- In order for a WOSB to be deemed "economically disadvantaged," its owners must demonstrate economic disadvantage in accordance with the requirements set forth in the final rule.

Certification Requirement

> Women-Owned Small Businesses may self-certify or use a third-party certifier.

Procurement Incentives

- NASA goals are 5 percent of the total prime and subcontract value.
- Effective December 31, 2015, the Federal Acquisition Regulations (FAR) grants authority to award sole-source contracts to Women-Owned Small Businesses and Economically Disadvantaged Women-Owned Small Businesses (EDWOSB). There is set-aside authority in the FAR for set-asides for Women-Owned Small Businesses in certain NAICS codes.
- Refer to the links in this section for more information on Women-Owned Small Businesses.

Authority/References

- Executive Order 12138 (1979) created the National Women's Business Enterprise Policy and established the Women-Owned Business Program.
- The Federal Acquisition Streamlining Act of 1994 (P.L. 103-355) (enacted October 10, 1994) established the annual Government-wide goal for Women-Owned Small Business concerns at 5 percent of the total value of all prime contract and subcontract awards.

Women-Owned Small Business Goals

- Increase the number of annual contract actions and contract dollar values to WOSBs.
- Increase the number of Women-Owned Small Businesses in high-tech areas by expanding the Mentor-Protégé Program.
- Monitor the performance of Women-Owned Small Business subcontracting through the use of Individual Subcontract Reports at each Center.
- Monitor the Agency's annual Women-Owned Small Business subcontracting dollars through the Summary Subcontract Report.

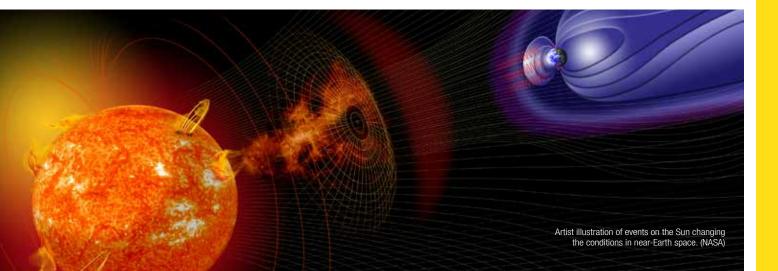
- Provide outreach to Women-Owned Small Businesses by participating in U.S. Women's Chamber of Commerce events and attending other conferences.
- Increase communication to Women-Owned Small Businesses through the greater use of the OSBP Web site.
- Include training for the NASA acquisition workforce on Women-Owned Small Businesses.
- Monitor the Federal databases to ensure that all data are entered accurately and reviewed regularly.
- > Require NASA Centers to report initiatives in support of Women-Owned Small Businesses on a semiannual basis.
- Use an enterprise model to execute these goals and track accomplishments.

Women-Owned Small Business Federal Contract Program

- The Small Business Administration revised the WOSB contracting program, effective April 1, 2011, with the aim of expanding Federal contracting opportunities to WOSBs and EDWOSBs.
- There are 92 NAICS Codes designated eligible for Federal contracting under the WOSB program: 79 NAICS codes in which WOSBs are underrepresented EDWOSBs and 38 NAICS codes in which women are substantially under represented. A contracting officer may set aside requirements if it is deemed that there are two or more capable WOSBs and there is a reasonable expectation that a contract can be awarded at a fair and reasonable price.
- For further information on the WOSB program, including the complete list of eligible NAICS codes and certification information, please visit https://www.sba.gov/contracting/government-contracting-programs/women-ownedsmall-businesses

Contact Information

- Web site: *https://www.osbp.nasa.gov*
- Telephone: 202-358-2088
- E-mail: *smallbusiness@nasa.gov* (include "WOSB" in the subject line)



Veteran-Owned Small Business (VOSB)/ Service-Disabled Veteran–Owned Small Business (SDVOSB)

Veteran-Owned Small Business (VOSB)

Eligibility Requirements

- Must be a small business, as determined by the Small Business Administration.
- Must be at least 51 percent owned by at least one veteran, as defined in 38 U.S.C. 101(2); or, if a publicly owned business, at least 51 percent of the stock must be owned by at least one veteran.
- Must have management and daily operations controlled by at least one veteran.

Certification Requirement

Veteran status may be self-certified in accordance with FAR 52-219-1.

Procurement Incentives

There is no set-aside program for Veteran-Owned Small Businesses.

Service-Disabled Veteran–Owned Small Business (SDVOSB)

Purpose

In accordance with Section 2(a) of Presidential Executive Order 13360, NASA has published a 2-year strategic plan to focus the Agency's efforts on providing service-disabled veterans with the maximum practicable number of contracting and subcontracting opportunities.

Eligibility Requirements

- Must be a small business, as determined by the SBA.
- Must be at least 51 percent owned by at least one service-disabled veteran, as defined in 38 U.S.C. 101(16); or, if a publicly owned business, at least 51 percent of the stock must be owned by at least one service-disabled veteran.
- Management and daily operations must be controlled by at least one service-disabled veteran or by the spouse or permanent caregiver of the service-disabled veteran if such veteran has a permanent and severe disability.

Certification Requirement

> Veteran status may be self-certified in accordance with FAR 52-219-1.

A United Launch Alliance Atlas V rocket with Orbital ATK's Cygnus cargo spacecraft on top stands at the launch pad at Space Launch Complex 41, Cape Canaveral Air Force Station, FL.



Procurement Incentives

- Set-aside opportunities may apply.
- There is set-aside authority in the FAR for SDVOSB set-asides.
- 8(a) Program eligibility may apply on a case-bycase basis if the SBA determines that a servicedisabled veteran is also disadvantaged.
- For more information, please visit https://www. osbp.nasa.gov, https://www.va.gov/osdbu, and https://www.vetbiz.gov.

Veteran Goals

- Increase the number of annual contract actions and contract dollar value to Veteran-Owned Small Businesses.
- Increase the number of Veteran-Owned Small Businesses in high-tech areas by expanding the Mentor-Protégé Program.
- Monitor the performance of Veteran-Owned Small Business subcontracting through the use of Individual Subcontract Reports at each Center.
- Monitor the Agency's annual Veteran-Owned Small Business subcontracting dollars through the Summary Subcontract Report.

Businesses by participating in small business events and attending other conferences.

- Increase communication to Veteran-Owned Small Businesses through increased use of the OSBP Web site.
- Include training for the NASA acquisition workforce on Veteran-Owned Small Businesses.
- Monitor the Federal databases to ensure that all veteran-owned data are entered accurately and reviewed regularly.
- Require NASA Centers to report initiatives in support of veteran programs on a semiannual basis.
- Use an enterprise model to execute these goals and track accomplishments.

Contact Information

- Web site: https://www.osbp.nasa.gov
- Telephone: 202-358-2088
- E-mail: *smallbusiness@nasa.gov* (include "SDVOSB/VOSB" in the subject line)

Provide outreach to Veteran-Owned Small

Historically Black Colleges and Universities (HBCUs)/ Minority Institutions (MIs)

Eligibility Requirements

Per 20 U.S.C. 1067q, Investment in Historically Black Colleges and Universities and other Minority Institutions:

An institution of higher education is eligible to receive funds from the amounts made available under this section if such institution is-

- 1. a part B institution (as defined in section 1061 of this title);
- 2. a Hispanic-serving institution (as defined in section 1101a of this title);
- 3. a Tribal College or University (as defined in section 1059c of this title);
- 4. an Alaska Native-serving institution or a Native Hawaiian-serving institution (as defined in section 1059d(b) of this title);
- 5. a Predominantly Black Institution (as defined in subsection (c));
- 6. an Asian American and Native American Pacific Islander-serving institution (as defined in subsection (c)); or
- 7. a Native American-serving nontribal institution (as defined in subsection (c)).

Historically Black Colleges and Universities

Certification Requirement

The Higher Education Act of 1965, as amended, defines an HBCU as: "...any historically black college or university that was established prior to 1964, whose principal mission was, and is, the education of black Americans, and that is accredited by a nationally recognized accrediting agency or association determined by the Secretary [of Education] to be a reliable authority as to the quality of training offered or is, according to such an agency or association, making reasonable progress toward accreditation."

Minority Institutions

Certification Requirement

"Minority Institution" must be an institution of higher education whose enrollment of a single minority or a combination of minorities (as defined in paragraph (2)) exceeds 50 percent of the total enrollment.

Minority is defined, in 20 U.S.C. 1067k, as American Indian, Alaskan Native, Black (not of Hispanic origin), Hispanic (including persons of Mexican, Puerto Rican, Cuban, and Central or South American origin), Pacific Islander or other ethnic group underrepresented in science and engineering.

Astronomers using NASA Hubble Space Telescope have found a bow shock around a very young star in the nearby Orion nebula, an intense star-forming region of gas and dust.

This enhanced-color image of Jupiter's Great Red Spot was created by citizen scientist Gerald Eichstädt using data from the JunoCam imager on NASA's

Juno spacecraft.

NASA HBCU/MI Goals

maintain its program for HBCUs/MIs.

Web site: https://www.osbp.nasa.gov

1 percent HBCU/MI goal.

Telephone: 202-358-2088

Contact Information

▶ 51 U.S.C. 30304 (Pub. L. 111-314) provides NASA with separate authority to

Effective August 2017, NASA's HBCU/MI goal was added to the NASA FAR Supplement section 1826.302, General Policy, to implement the Agency-wide

E-mail: *smallbusiness@nasa.gov* (include "HBCU/MI" in the subject line)

This image, taken by the JunoCam imager on NASA's Juno spacecraft, highlights a feature on Jupiter where multiple atmospheric conditions appear to collide.

Mentor-Protégé Program (MPP)

Purpose

The NASA Mentor-Protégé Program encourages NASA prime contractors to assist eligible protégés, thereby enhancing the protégés' capabilities to perform on NASA contracts and subcontracts, fostering the establishment of long-term business relationships between these entities and NASA prime contractors, and increasing the overall number of these entities that receive NASA contract and subcontract awards.

Eligibility Requirements

The mentor and protégé must both meet the established eligibility requirements in order to participate in the MPP, as defined in NASA FAR Supplement (NFS) 1819.72 and summarized below. A list of approved mentors is available for review on the MPP Web site at *https://osbp. nasa.gov/mpp/index.html*.

Mentors

All approved mentors are eligible to participate in the program and must resubmit a renewal application every 6 years to verify their continued eligibility. Mentor applications can be submitted at any time during the year with or without a Mentor-Protégé Agreement (MPA). In accordance with NFS 1819.72, a mentor must be:

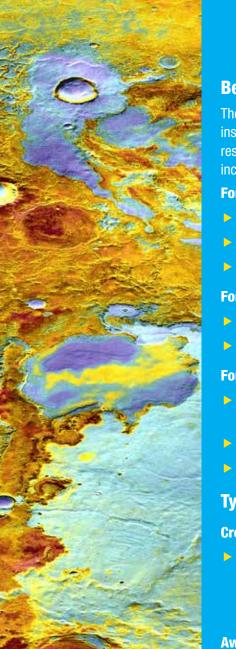
- 1. A large prime contractor performing under a NASA contract with at least one approved Federal subcontracting plan, as required by FAR 19.7 (the Small Business Subcontracting Program), and
- 2. Eligible for the receipt of Government contracts.

Protégés

To participate as a protégé, an entity must meet one of the eligibility requirements as defined in NFS 1819.72 and must maintain that status for the life of the agreement. If the protégé self-certifies that it meets the eligibility requirements, a separate written self-certification of its small business status must be provided with the MPA. (Note: If a protégé's eligibility expires prior to the end of the agreement period, the agreement may still be approved for the remaining duration but must include the condition that any credit received is subject to the protégé's recertification.)

A protégé may not participate in the NASA MPP more than twice. In addition, a protégé may have only one NASA mentor at any given time. In accordance with NFS 1819.72, the following entities are eligible to be chosen as protégés:

- 1. Small Disadvantaged Businesses (SDBs)
- 2. Women-Owned Small Businesses (WOSBs)
- 3. Historically Underutilized Business Zone (HUBZone) concerns
- 4. Veteran-Owned Small Businesses (VOSBs)
- 5. Service-Disabled Veteran–Owned Small Businesses (SDVOSBs)
- 6. Historically Black Colleges and Universities (HBCUs)
- 7. Minority Institutions (MIs)
- 8. Small businesses with an active SBIR or STTR Phase II contract
- 9. Companies participating in the AbilityOne Program



The Meridiani area has a long sedimentary story; this false color image shows rockier areas in redder hues and dustier ones in cool tones. This image, 260 kilometers (161 miles) wide, was captured by NASA's Thermal Emission Imaging System (THEMIS).

Benefits of Participation

The MPP has the ability to uniquely transform a small business or minority institution and enhance its capabilities to win contracts and subcontracts as a direct result of participation in the program. Some of the potential benefits of the MPP include the following:

For Mentors:

- Develop long-term business relationships with small business concerns.
- Develop a qualified small business subcontracting base.
- Accrue credit toward small business subcontracting goals.

For Protégés:

- Receive relevant technical and developmental assistance.
- Qualify for sole-source contracts from mentors.

For All Participants:

- Cultivate teaming opportunities with their partners to win new contracts and/or subcontracts.
- Engage the MPP as a marketing tool.
- Foster networking opportunities.

Types of Agreements

Credit Agreement

In a credit-based MPA, a mentor receives credit on a one-to-one basis toward its subcontracting goals. The credit is reported on the Individual Subcontract Report for the specific contract, as identified prior to the approval of the agreement.

Award Fee Pilot Program Agreement

 In the Award Fee Pilot Program, a mentor is eligible to receive an award fee at the end of the agreement period based upon the mentor's performance in providing developmental assistance to its protégé. Only NASA Small Business Innovation Research (SBIR) or Small Business Technology Transfer (STTR) Phase Il protégés are eligible to participate with mentors in the pilot program.



planet as they were traveling to planet as they were traveling to the Moon on December 7, 1972. It was the first time astronauts were able to photograph the South polar ice cap. (NASA)

NASA Responsibilities

- NASA Contracting Officer's Representatives (CORs) act as liaisons between the mentor and the Contracting Officer (CO). A signed endorsement letter from the COR must be added to the agreement package before submission to the CO.
- NASA Contracting Officers are responsible for adding approved Mentor-Protégé Agreements to existing contracts through a contract modification. A signed letter endorsing the MPA must be added to the complete package before submission to the relevant Center's SBS.
- NASA Center Small Business Specialists are responsible for the overall administration and management of their respective Centers' MPAs. As the Center's MPP point of contact, the SBS is responsible for reviewing and endorsing all agreements received at the Center before forwarding the complete applications for final approval to the Office of Small Business Programs at NASA Headquarters. Additionally, the SBS ensures that all agreements endorsed by the Center fulfill the requirements of NFS 1819.72.
- NASA's Mentor-Protégé Program Manager (PM) at OSBP coordinates and manages the program from the Headquarters perspective with participating Centers to ensure successful program execution.
- The Office of Small Business Programs is responsible for overall NASA MPP administration, policy, and oversight. The OSBP will review all mentor applications and conduct an annual MPA performance review that highlights the progress and accomplishments gained under the approved MPA.

Agreement Evaluation

The evaluation of all proposed agreements will be based on the following criteria:

- Perceived benefit and/or value of the agreement to NASA
- Merit of the developmental assistance to the protégé
- Developmental assistance cost ratio
- > Potential subcontracting opportunities available to the protégé
- Utilization of HBCU/MIs, Procurement Technical Assistance Centers (PTACs), and SBA Business Development Centers (SBDCs)
- Proposed cost

Contact Information

- Web site: https://www.osbp.nasa.gov
- Telephone: 202-358-2088
- E-mail: *smallbusiness@nasa.gov* (include "Mentor-Protégé Program" in the subject line)

Noctis Canyon. Volcanic activity stretched and fractured the Martian crust. As cracks and faults opened, ice and water in the surface escaped, causing the ground to collapse. This false-color mosaic focuses on one junction where canyons meet to form a depression 4 kilometers (13,000 feet) deep..

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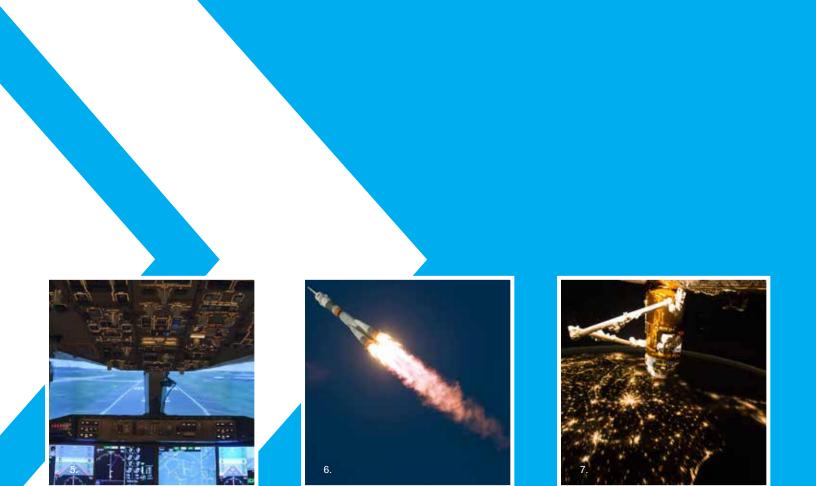


Additional Resources

Important Web Sites

NASA Main Web Site: https://www.nasa.gov NASA Office of Small Business Programs: https://osbp.nasa.gov NASA Vendor Data Base: https://vendors.nvdb.nasa.gov NASA Procurement Web Site: https://www.hq.nasa.gov/office/procurement NASA Acquisition Forecast: https://www.hq.nasa.gov/office/procurement/forecast/ NASA Freedom of Information Act: https://www.nasa.gov/FOIA/NASA-Centers.html North American Industry Classification System: https://www.census.gov/eos/www/naics System for Award Management: https://www.sam.gov Federal Business Opportunities: https://www.fbo.gov Federal Acquisition Regulations: http://farsite.hill.af.mil General Services Administration: https://www.gsa.gov Procurement Technical Assistance Centers: http://www.dla.mil/HQ/SmallBusiness/PTAC.aspx SBA Small Business Size Standards: https://www.sba.gov/federal-contracting/contracting-guide/size-standards Electronic Subcontracting Reporting System: https://www.esrs.gov Past Performance Information Retrieval System: https://www.ppirs.gov Subcontracting Opportunities (SUB-Net): https://www.sba.gov/subnet Department of Defense Office of Small Business Programs: http://www.acg.osd.mil/osbp

Chasma Boreale. Chasma Boreale is a long valley that cuts into Mars' north polar icecap. In this view, the result of climate cycles that deposit ice and dust to build the polar cap season by season, year by year, are visible. Mars Odyssey, NASA.



Captions

- Journey to Space in a Vacuum Chamber. Supporting the testing of electric propulsion and power systems, VP-5 has the highest pumping. (MASA)
- Expedition 43 Soyuz Rolls Out for Launch. The Soyuz TMA-16M spacecraft is rolled out by train to the launch pad. (MASA)
- NASA astronaut Kjell Lindgren corrals the supply of fresh fruit that arrived August 25, 2015 on the Kounotori 5 H-II Transfer Vehicle (HTV-5.) Visiting cargo ships often carry a small cache of fresh foodfor crew members aboard the International Space Station. (NASA)
- 4. An ion propulsion system is test-fired at NASA's Glenn Research Center in Cleveland. (NASA)
- Testing on Deck. NASA Langley Research Center engineers in Hampton, Va., use the Research Flight Deck flight simulator to continue developing new cockpit technologies, to make airliners safer and more efficient.
- 6. This image shows the Expedition 46 Soyuz Launch to the International Space Station.



on the Web

National Aeronautics and Space Administration

NASA Headquarters

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www.nasa.gov

7. Clear Skies Over the United States. (NASA). (NASA)