National Aeronautics and Space Administration

program plan

2012

Space Flight Awareness
NASA

www.nasa.gov

2012

The NASA Vision

To reach for new heights and reveal the unknown, so that what we do and learn will benefit all humankind.

The NASA Mission

Drive advances in science, technology, and exploration to enhance knowledge, education, innovation, economic vitality, and stewardship of Earth.

Contents

NASA's Strategic Goals

1. Extend and sustain human activities across the solar system.
2. Expand scientific understanding of the Earth and the universe in which we live.
3. Create the innovative new space technologies for our exploration, science and economic future.
4. Advance aeronautics research for societal benefit.
5. Enable program and institutional capabilities to conduct NASA's aeronautics and space activities.
6. Share NASA with the public, educators, and students to provide opportunities to participate in our Mission, foster innovation and contribute to a strong national economy.

Message

This has been a remarkable year punctuated by completing the assembly and outfitting of the International Space Station (ISS), celebrating the 50th anniversary of human spaceflight, safely retiring the Space Shuttle Program, and completing all mission objectives for the final flights. We have also been taking bold steps to begin new commercial partnerships and a new journey of American human spaceflight exploration.

Now that its final mission, assembling the Space Station, and the Shuttle program are complete, I want to salute the thousands of men and women who made the Shuttle an unqualified success and who did their very best to the very end, finishing strong, completing the missions safely, and fortifying the Space Station with everything it needs to produce world-class science for years to come. This amazing workforce continues to exceed expectations. When I think of the Shuttle program legacy, I do not think of the hardware. I think of the people that supported the program. The Shuttle is an example of the wonderful, amazing, and seemingly impossible things that a group of individuals can accomplish if they are united in a single compelling endeavor. The 30 years of Shuttle operations took dedication and commitment. Some of the workforce made the ultimate sacrifice, their lives. We lost crewmembers and co-workers, but we continued onward with renewed dedication to learn and improve. This workforce has advanced our knowledge of space operations and vehicle design and left an amazing ISS to carry on the spirit of exploration, learning and doing things never done before.

The STS-135 landing in Florida marks the end of the final Space Shuttle mission.

In the NASA Authorization Act of 2005, Congress designated the U.S. segment of the ISS as a National Laboratory. Today, the ISS has state-of-the-art scientific research facilities that are supporting high-energy particle physics, Earth remote sensing and geophysics experiments, protein crystallization experiments, human physiology research (including bone and muscle research), radiation research, plant and cultivation experiments, combustion research, fluid research, materials science experiments, and biological investigations. NASA has made great strides in its effort to engage other organizations in the ISS program. We now have Memoranda of Understanding with five Federal agencies and Space Act Agreements with nine companies and universities.

In addition to the direct research benefits to be gained by the ISS as a National Laboratory, this innovative arrangement also supports NASA's effort to promote the development of a low Earth orbit space economy. This year, NASA finalized a cooperative agreement with the Center for the Advancement of Science in Space to manage the portion of the ISS that operates as a National Laboratory. The independent, nonprofit research management organization will help ensure the Station's unique capabilities are available to the broadest possible cross-section of U.S. scientific, technological, and industrial communities.

We are encouraging the commercial sector to take over the role of transporting cargo and crew to the Space Station. Catalyzing this new partnership between NASA and an increasingly capable space industry, we expect to achieve a greater U.S. crew-launch capability to the Station sooner and at lower cost to the taxpayers. Through this partnership, NASA will be able to focus its limited budget on exploring deep space and venturing beyond low Earth orbit for the first time in 40 years. NASA's efforts

The International Space Station

to assist in the development of U.S. commercial cargo and crew vehicles represent a new way of doing business for the Agency. Using this approach, we plan to procure domestic crew transportation services – rather than own and operate vehicles or procure services from an international partner – to support the ISS. By providing the foundation on which private industry can build, NASA will also encourage the use of these systems by other customers as well.

While the Space Station offers extraordinary opportunities for advancing science and technology to other Government agencies, non-profit research foundations, and private firms, it will also continue to meet NASA's mission objective to prepare for the next steps in human space exploration – steps which will take astronauts beyond low Earth orbit to destinations such as the asteroids, the Moon, and eventually, Mars.

NASA has selected the design of its new heavy-lift deep space launch system that will take American astronauts further into space than any nation has gone before. In combination with the Orion Multi Purpose Crew Vehicle already under development, commercialization of astronaut travel to low-Earth orbit, the extension of activities on the ISS and a fresh focus on new technologies, the new Space Launch System will be the cornerstone of our deep space human exploration program.

As we pursue these new exploration challenges, we look forward to NASA and contractor organizations continuing to partner with, participate in, and support the human Space Flight Awareness (SFA) Program in recognizing our workforce for their exemplary human spaceflight contributions. We look to the SFA Program to continue helping us in motivating and providing employee recognition to our dedicated civil service and contractor workforce for our various programs and mission successes. Let's continue to work together and focus on the future and the exciting opportunities ahead.

William H. Gerstenmaier,
NASA Associate Administrator for
Human Exploration & Operations Mission Directorate

Space Flight Awareness Motivation and Recognition Program

NASA established the Space Flight Awareness (SFA) Motivation and Recognition Program as a formal program after the Mercury and Gemini period, to infuse the space program with a renewed and strengthened consciousness of quality and flight safety. As NASA's human space flight program continued and developed, the NASA Centers increased the assistance they provided to the employee motivation programs of their contractors and other government agencies. The future of space flight brings new opportunities and challenges for the SFA Program. The program must keep pace with an ever-changing environment of people, systems and processes that design, build, fly and support human space flight.

The National SFA Panel works diligently to ensure an effective program, one of value to the human space flight workforce. The focus of the program continues to be excellence in quality, safety and mission success.

2012 Space Flight Awareness Program Goals

1. Sponsor employee recognition and motivation events utilizing our Astronaut Corps and senior management.
2. Sponsor three major milestone events.
3. Conduct an SFA Program awareness campaign.
4. Continue to promote the International Space Station missions and recognize significant accomplishments.
5. Promote awareness of future programs by becoming a resource in developing awareness and safety products and recognizing significant program milestones.

Space Flight Awareness Objectives

1. Improve employee awareness on the importance of their role in promoting safety, quality and mission success.
2. Conduct events that motivate and recognize the workforce and improve employee morale.
3. Function as an internal communications team to disseminate key program safety, quality and mission messages.
4. Increase awareness of the Space Flight Program with a focus on safety and mission success. Acknowledge objectives, accomplishments, and milestones.
5. Maintain supplier motivational and recognition programs.

Space Flight Awareness Program Development Teams

Cost and Performance

Provide input of costs incurred on the Program as well as data on awards presented and astronaut visits.

Products

Produce products that highlight safety and awareness of human space flight programs.

Program Plan

Establish a comprehensive plan of the Space Flight Awareness history, current year objectives, schedule, recognition program and metrics.

3-5 Year Plan

Position the Space Flight Awareness Program to support evolving programs and contribute to the awareness of future space exploration initiatives.

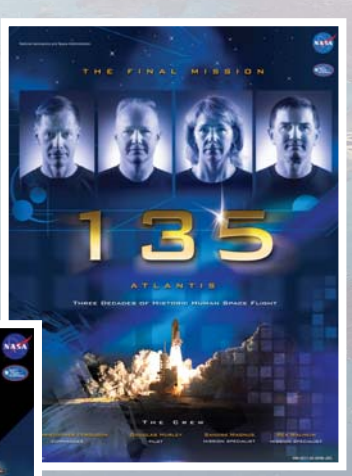
Supplier

Promote awareness and provide recognition to critical suppliers which provide outstanding products and services in support of the human space flight programs and mission.

Artist's rendering of the initial 70 ton configuration of the Space Launch System with Orion.

Space Flight Awareness Program History

NASA established the Space Flight Awareness (SFA) program in 1963. Since its inception, SFA's mission has been to ensure that all employees involved in human space flight are aware of the impact their actions can have on astronaut safety and mission success. During this time, thousands of individuals have been recognized for their contributions to the safety and success of NASA's programs. The key to SFA's longevity is its two-pronged approach to meeting its goal – awareness and recognition.



Awareness Program

Awareness activities include motivational visits and the development, display and distribution of motivational tools.

SFA Motivational Visits

SFA works to arrange executive and astronaut visits to help remotely located employees feel that they are part of the human space flight team, and to give them an opportunity to get to know those who will use the products they design and build.

SFA Motivational Tools

SFA uses a variety of products to focus on key aspects of human space flight requirements and activities:

- Printed products – safety, quality, reliability, mission, astronauts, significant milestones
- Decals – Shuttle and International Space Station missions
- Lapel Pins – vehicle, mission, milestones
- Safety Day activities

SFA Recognition

Ongoing recognition activities are accomplished through the use of SFA awards.

SFA Silver Snoopy Award

This is the astronauts' personal award. To qualify for this award, eligible candidates will have made contributions toward enhancing the probability of mission success, or made improvements in design, administrative/technical/production techniques, business systems, flight and/or systems safety or identification and correction or preventive actions for errors. This award is generally not intended for management. Only one Silver Snoopy award per individual is permitted.

SFA Team Award

This award is used to recognize small groups of employees that have demonstrated exemplary teamwork while accomplishing a particular task or goal in support of the human space program.

SFA Honoree Award

This award is one of the highest presented to NASA and industry and is for first-level management and below. This award is presented to employees for their dedication to quality work and flight safety. To qualify, the individual must have contributed beyond his or her normal work requirements to achieve significant impact on attaining a particular human space flight program goal; contributed to a major cost savings; been instrumental in developing modification to hardware, software, or materials that increase reliability, efficiency, or performance; assisted in operational improvements; or been a key player in developing a beneficial process improvement.

SFA Management Award

This award is intended for recognition of mid-level managers who consistently demonstrate loyalty, empowerment, accountability, diversity, excellence, respect, sharing, honesty, and integrity, and are proactive.

SFA Flight Safety Award

This award recognizes significant, outstanding individual or team contributions related to the prevention of anything that could lead to a catastrophic mishap to the vehicle, crew or mission. The approval process for this award includes the SFA National Panel, the Flight Safety Panel and the NASA Associate Administrator for Safety and Mission Assurance.

SFA Supplier Award

This annual award honors outstanding performance by hardware, software or service suppliers who support NASA human space flight programs. Awardees are chosen based on their production of high-quality products, excellent technical and cost performance and adherence to schedules.

For more information on Space Flight Awareness and the national database visit http://sfa.nasa.gov.

2011 Fiscal Year Metrics

404 Silver Snoopy Awards

NASA Headquarters	2
Goddard Space Flight Center	2
Johnson Space Center	145
Kennedy Space Center	60
Marshall Space Flight Center	75
Stennis Space Center	18
Ames Research Center	13
Dryden Flight Research Center	1
Glenn Research Center	9
Langley Research Center	4
Defense Contract Management Agency	2
NASA Engineering and Safety Center	1
ATK Launch Systems	14
The Boeing Company	12
Lockheed Martin Space System	10
United Space Alliance	20
Pratt & Whitney Rocketdyne	16

729 Honoree Awards

NASA Headquarters	26
Goddard Space Flight Center	20
Johnson Space Center	150
Kennedy Space Center	67
Marshall Space Flight Center	96
Stennis Space Center	33
Ames Research Center	5
Dryden Flight Research Center	10
Glenn Research Center	8
Langley Research Center	10
Defense Contract Management Agency	5
NASA Engineering and Safety Center	5
NASA Shared Services Center	1
ATK Launch Systems	30
The Boeing Company	120
Lockheed Martin Space System	29
United Space Alliance	78
Pratt & Whitney Rocketdyne	36

136 Rollout Honoree Awards

NASA Headquarters	3
Goddard Space Flight Center	5
Johnson Space Center	30
Kennedy Space Center	13
Marshall Space Flight Center	18
Stennis Space Center	5
Ames Research Center	1
Dryden Flight Research Center	1
Glenn Research Center	1
Defense Contract Management Agency	1
NASA Engineering and Safety Center	1
ATK Launch Systems	6
The Boeing Company	20
Lockheed Martin Space System	6
United Space Alliance	19
Pratt & Whitney Rocketdyne	6

Ground test of a full-scale abort motor for the launch abort system of the Orion crew exploration vehicle.

52 Team Awards

Goddard Space Flight Center	3
Johnson Space Center	2
Kennedy Space Center	18
Marshall Space Flight Center	8
Glenn Research Center	1
The Boeing Company	7
Lockheed Martin Space System	5
United Space Alliance	7
Pratt & Whitney Rocketdyne	1

1,059 Team Members

Goddard Space Flight Center	38
Johnson Space Center	25
Kennedy Space Center	451
Marshall Space Flight Center	96
Glenn Research Center	6
The Boeing Company	131
Lockheed Martin Space System	157
United Space Alliance	130
Pratt & Whitney Rocketdyne	25

3 Supplier Awards

The Boeing Company	1
United Space Alliance	2

48 Astronaut Visits

Goddard Space Flight Center	2
Johnson Space Center	1
Kennedy Space Center	11
Marshall Space Flight Center	4
Stennis Space Center	1
Ames Research Center	1
Glenn Research Center	4
ATK Launch Systems	2
The Boeing Company	8
Lockheed Martin Space System	6
United Space Alliance	5
Pratt & Whitney Rocketdyne	1

1 Flight Safety Award

Pratt & Whitney Rocketdyne	1

54 Leadership Awards

Goddard Space Flight Center	2
Johnson Space Center	8
Kennedy Space Center	24
Stennis Space Center	2
Glenn Research Center	1
Langley Research Center	1
The Boeing Company	12
United Space Alliance	4

A Space Exploration Vehicle rover docked to the Habitat Demonstration Unit near Flagstaff, Arizona in September 2010.

Space Flight Awareness Proposed Events

February 2012

50 Years of Americans in Orbit
John Glenn and Scott Carpenter
Location: Kennedy Space Center Visitor Complex
Date: February 17-18, 2012
Event: Local recognition event

April 2012

J-2X Test Firing
Location: SSC
Date: April 2012
Event: Engine Test Firing – Employee recognition event

July 2012

Welcome Home Expedition Mission Crews
Location: JSC
Date: July 2012
Event: Employee recognition event

September 2012

Desert RATS – Research and Technology Studies
Location: JSC
Date: September 2012
Event: Employee recognition event

Other Possible Events

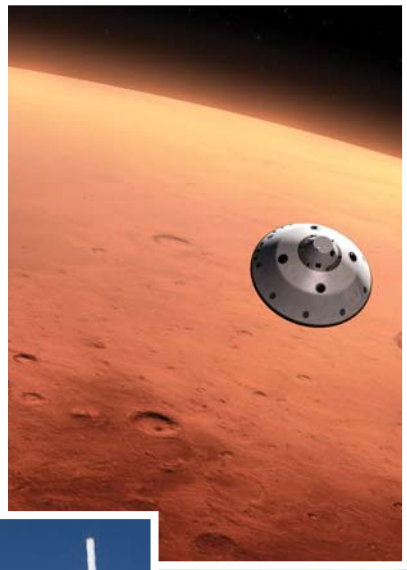
Wallops Demo Antares Launch
Location: Wallops
Date: TBD
Event: Local recognition event

SpaceX Falcon 9 Launch
Location: KSC
Date: TBD
Event: Local recognition event with team and management awards

Mars Science Lander Landing on Mars
Location: JPL
Date: August 2012
Event: Employee recognition event

Ongoing Awards

Silver Snoopy, Team, Management, Supplier Awards



Space Flight Awareness Panel Members

Jeannie Aquino
NASA Johnson Space Center

Cynthia Bailey
United Space Alliance

Sallie Bilbo*
NASA Stennis Space Center

Gena Cox
NASA Marshall Space Flight Center

Richard (Rocky) Lind**
NASA Headquarters

Tiffany Lindsley
NASA Kennedy Space Center

Amy Pruett
NASA Goddard Space Flight Center

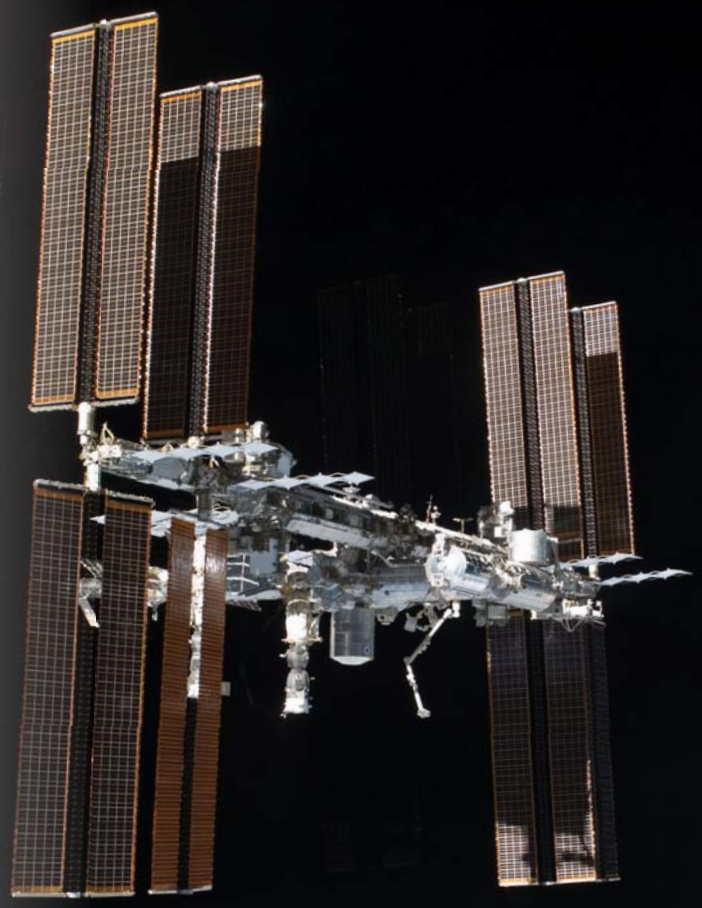
Alotta Taylor
Office of Human Exploration and Operations
NASA Headquarters, Program Manager

Agnes Vargas
The Boeing Company

Julie Zingerman
United Technologies Corporation

* Ames Research Center, Dryden Flight Research Center, Defense Contract Management Agency

** Glenn Research Center, Langley Research Center, NASA Shared Services Center, NASA Engineering & Safety Center



Background Photos

2: Artist's rendering of the Orion Command Module.

3: One of NASA's two prototype rovers – the Space Exploration Vehicles – stands ready for work in the Arizona desert.

4: NASA's tri-ATHLETE – or All-Terrain Hex-Limbed Extra-Terrestrial Explorer – demonstrates its heavy lifting power by moving a mock habitat across the Arizona desert.

5: The surface of Mars.

6: Earth as seen by the Expedition 17 Crew aboard the International Space Station (ISS).

7: Another view of Earth as seen by the Expedition 17 Crew aboard the ISS.

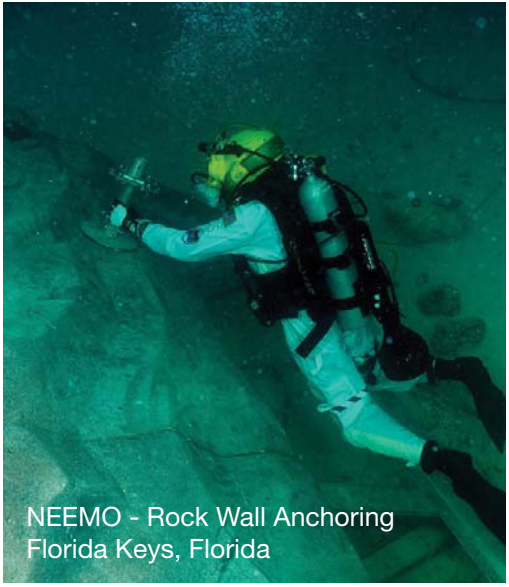
8: Artist's rendering of the Space Launch System Rocket during launch.

9: This view of Earth rising over the moon's horizon was taken from the Apollo 11 spacecraft.

10: Artist's rendering of the Orion Command Module.

11: The International Space Station photographed at an unusual angle by a crewmember of STS-135.

Acoustic Testing
Lockheed Martin,
Colorado



NEEMO - Rock Wall Anchoring
Florida Keys, Florida

J-2X Engine Test
Stennis Space Center,
Mississippi

Development Motor-2 Test
Alliant Techsystems, Utah

2009 Astronaut Class
Johnson Space Center, Texas

International Space Station
Low-Earth Orbit

SpaceX
Demonstration
Mission
Cape
Canaveral,
Florida

Pressurized Cargo Module
Orbital Sciences Corporation, Italy

"As a former astronaut and the current NASA Administrator, I'm here to tell you that American leadership in space will continue for at least the next half-century because we have laid the foundation for success — and failure is not an option."

Charles Bolden,
NASA Administrator