



Mission

To promote, preserve and restore artifacts and technology that chronicle the history of manned and unmanned spaceflight. We educate the public, and inspire the next generation of dreamers

The Spaceflight America Museum and Science Center is part of Volanz Aerospace, a non-profit (IRS 501c3) Maryland corporation formed to provide science and space-related education and research opportunities.

The Spaceflight America Museum and Science Center is an extension of the educational work to enhance science literacy using manned spaceflight operations as the theme.

From The Director

We will be open during the Science Expo on February 24th with special activities and a special price. Planetarium Shows at 11 AM and 1 PM. Admission is just \$2.00 per person (Cash Only).

We still have over 1000 artifacts in storage that need to be put on display. So how do we do that? We need your support - as docents and volunteers, and we need your continuing financial support. For example, we have 6 space suits in storage, ranging from Apollo to Chinese. Many are historic. The problem is we have no cases to display them in. They need to be purchased, and that requires financial contributions.

The Museum and Planetarium are located beside Calvert High School at 520 Fox Run Boulevard in Prince Frederick, MD.

<http://www.spaceflightamericamuseum.org>

On Twitter @SpaceMuseumMd

On Facebook Spaceflightamericamuseum

Email: sa-museum@wsi-edu.org

Mailing address:

P.O. Box 81
Dunkirk, MD 20754-0081

Hours:

Usually open the third Saturday of the month from 10 AM – 4 PM. Check the calendar on the museum web site for confirmed openings.

Entrance Fees:

\$5.00 per adult
\$4.00 for 10 and younger
3 years and younger free

CASH ONLY/NO CREDIT CARDS

BRING A GROUP TO THE MUSEUM

Contact us at sa-museum@wsi-edu.org to schedule a visit.

No amount of support is too little. Come join us! We can use all the help we can get!

Alan

At the Museum

In October, we celebrated the 70th Anniversary of the Air Force. We had the Civil Air Patrol present the colors. A young cadet was moved up in rank during the ceremony.



Visitors were treated to tours given by Civil Air Patrol members as well as activities conducted by them.



A real space cadet!



Help us make the museum a success.

Volunteer!

Volunteers are what makes the museum such an exciting place. The artifacts are interesting but the docents and curators help tell the stories.

If you are looking for a unique volunteering opportunity, join us at the Spaceflight America Museum and Science Center. Volunteering at the museum is a fun and rewarding experience. Because we are a non-profit, we rely on volunteers for support in many areas, to share their creativity, talents, and expertise or simply use their skills to assist with special events, daily operations, and programs. Join Us!

For more information, check us out at <http://www.spaceflightamericamuseum.org>.

Spaceflight America Museum and Science center needs display cases.

Currently, we have many more artifacts than can be displayed in the three used display cases we have. We have floor space for displays but no funds to buy them. If you know anyone with a business who has display cases they are not using, please pass along our need. We have spacesuits we would like to display but cannot display them without the protection of a display case.



We could display this! It is an actual Apollo Space Suit that was made for the Apollo 18 mission. While it has never been in space (Apollo program was cancelled after Apollo 17) it was used in the training program for Sky Lab.

Mercury/Gemini Space Suit Precursor Museum Exhibit



You are looking at the A/P 22S-3 Full Pressure Suit. This was a US Air Force (USAF) adopted US Navy (USN) Mark IV suit made by the B.F. Goodrich Company in 1960. The USAF for limited production accepted this suit, until the A/P 22S-2 model was ready for use. The suit has 2 layers, 12 torso sizes, 7 glove sizes, and 2 helmet sizes. Suit pressure was 3.5 to 4.0 PSI.

The A/P 22S-2 pressure suits were used in the X-15 rocket-powered aircraft, and other high altitude aircraft.

The USN Mark IV suit was the precursor for the Project Mercury space suit, while the A/P 22S-2 suit was considered the precursor for NASA's Gemini space suits.

This suit is an example of the need for display cases. No matter how hard you try to impress people with the notion that the suit can be damaged by touching it, it is too tempting when it is out in the open.

Falcon Heavy: A Multi-User Spaceport Success Story



Lifting off at 3:45 p.m. from Launch Complex 39A at NASA's Kennedy Space Center, a SpaceX Falcon Heavy begins its demonstration flight. This is a significant milestone for the world's premier multi-user spaceport. In 2014, NASA signed a property agreement with SpaceX for the use and operation of the center's pad 39A, where the company has launched Falcon 9 rockets and prepared for the first Falcon

Heavy. NASA also has Space Act Agreements in place with partners, such as SpaceX, to provide services needed to process and launch rockets and spacecraft. *Credits: NASA/Kim Shiflett*

The launch of a SpaceX Falcon Heavy rocket on its demonstration flight is another sign that NASA's Kennedy Space Center in Florida is continuing to grow as the nation's premier, multi-user spaceport. The new vehicle lifted off from NASA's historic Launch Complex 39A at Kennedy at 3:45 p.m. EST on Feb. 6.

Acting NASA Administrator Robert Lightfoot congratulated the entire SpaceX team on the successful launch of the Falcon Heavy.

"All of us in this business know the effort it takes to get to a first flight of any new vehicle and recognize the tremendous accomplishment we witnessed today," he said. "I am really proud of the hard work of our NASA team, in particular at Kennedy, for the transformation into a multi-user spaceport. Watching the Falcon Heavy rise above the historic pad that has been the launch point for so many critical missions is a true testament to the hard work transitioning our nation's launch infrastructure in support of the commercial launch industry."

Kennedy Space Center Director Bob Cabana also expressed congratulations to Space X on the launch of the Falcon Heavy.

"The successful launch of a new vehicle on its first flight is a significant accomplishment they can be very proud of," he said. "As a multi-user spaceport, I look forward to the continued expansion of commercial spaceflight from Kennedy and the integration of a new class of launch vehicle into our Nation's space program."

In 2014, NASA signed a 20-year property agreement with SpaceX for the use and operation of the launch pad.

Beginning in 2011, Kennedy sought partnerships with the U.S. aerospace industry to use former space shuttle facilities. Today, NASA has partnerships with more than 90 companies that enable commercial space manufacturing, processing and launch operations along Florida's Space Coast.

Kennedy's first significant partnership with industry allowed Boeing to use Orbiter Processing Facility 3, now known as the Commercial Crew and Cargo Processing Facility, or C3PF. Here Boeing is manufacturing and processing its CST-100 Starliner spacecraft, which is slated to carry astronauts to the International Space Station for NASA's Commercial Crew Program. SpaceX will similarly launch astronauts from Launch Complex 39A for NASA.

A handful of NASA employees serve as customer advocates and support the space center's commercial partners. Through reimbursable Space Act Agreements, NASA provides services that are needed at a spaceport.

"We support launch campaign activities such as propellant and life support services, which includes providing commodities such as helium and nitrogen to support launch, flight hardware transport and

roadblock security support near the launch pad," said Robyn Mitchell, the NASA customer advocate who supports SpaceX.

In her customer advocate role, Mitchell monitors the partner's processing and facilities schedules to help ensure their operations and mission milestones are met. This includes integrating support plans in response to the partner's requests for services.

"When partners, such as SpaceX, are preparing for a launch, we have Support Readiness Reviews," Mitchell said. "While SpaceX is responsible for the launch vehicle and payload, NASA organizations verify support requests are complete and confirm the readiness of Kennedy's facilities, equipment and infrastructure for launch."

Mitchell noted that the ongoing responsibilities of her office are key to establishing and maintaining a multi-user spaceport capability at Kennedy, specifically working with commercial partners to help them identify technical requirements, anticipate operational impacts and develop solutions taking advantage of the center's unique launch infrastructure and capabilities.

The test is evidence of the transformation of NASA's Kennedy Space Center as a multi-user spaceport. NASA and its commercial and international partners are looking to return humans to the Moon and beyond, and there will be opportunities for a wide range of rockets and capabilities.

NASA's Space Launch System (SLS) rocket and Orion spacecraft is targeted to lift off next year from nearby Launch Complex 39B. The initial SLS rocket is expected to have a liftoff thrust of 8.8 million pounds, and is designed to be an evolvable launch vehicle able to meet the most challenging deep space crew and cargo needs.

"As SpaceX continues to refine operations of its Falcon Heavy rocket, we welcome this capability to be added to those available soon from NASA's SLS," said Tom Engler, Kennedy's director of Center Planning and Development.

*By Bob Granath
NASA's Kennedy Space Center, Florida*