September 2026

TRAJECTORIES

Official Newsletter of the Cape Canaveral Space Force Museum

Quote of the Month:
"We benefit from the grid modernity imposes on our lives, even as the quiet logic of antiquity continues to surprise and impress us."
- John Lewis Gaddis

60th Birthday

On 28 August 1966, what was then the Air Force Space Museum at Cape Kennedy Air Force Station opened to the public. More than 2,000 visitors from 25 states toured the new museum that first day. It was the beginning of something extraordinary.

By 1970, annual visitation had surpassed one million. In 1975, the museum welcomed its 10 millionth visitor. Over six decades, millions more have come here to stand where history happened, encounter authentic artifacts, and discover the remarkable people, technology, innovation, and determination behind America's space and missile programs.

Much has changed since 1966. The museum has grown beyond historic Launch Complex 26 to include Hangar C and the Sands Space History Center. Names, exhibits, facilities, and even military services have changed. The mission has not.

For 60 years, we have collected, restored, preserved, exhibited, and interpreted these extraordinary artifacts and structures. We have used them to educate and inspire generations of visitors from across America and around the world.

As we celebrate our diamond anniversary, we honor those who built this museum, those who sustain it today, and every visitor who walks away with a greater appreciation for this remarkable history.

DID YOU KNOW?

In 1958, the Air Force seriously considered adapting the Thor missile for human spaceflight. Proposed configurations paired Thor with Vanguard or advanced fluorine-powered upper stages, with planners envisioning a crewed orbital mission as early as October 1960. Cost and complexity ultimately helped shift attention toward Atlas. Mercury-Thor never reached the launch pad, but it remains a fascinating reminder that America's path to human spaceflight could have looked very different.

Message from the Director

James W. Draper

Museums love mission statements. They tell the public what we do, but perhaps more importantly, they remind us why we exist. Changing a few words can signal a significant change in philosophy.

Consider the Smithsonian's National Museum of American History. Before 2019, its mission prominently referenced "collections and scholarship" and sought to inspire "a broader understanding of our nation and its many peoples." Its vision celebrated "incomparable collections, rigorous research" and the "infinite richness and complexity of American history."

Today, the mission is to "empower people to create a just and compassionate future by exploring, preserving, and sharing the complexity of our past." The vision emphasizes becoming more "accessible, inclusive, relevant, and sustainable." Those are admirable aspirations, but something fundamental disappeared: collections.

That concerns me because artifact collections are what distinguish museums from other institutions. Everything else a museum does is done equally well or better by other organizations. Museums uniquely build their work around three-dimensional objects entrusted to them for future generations.

Imagine our museum without artifacts. Picture Hangar C as an empty building. Imagine walking into the Launch Complex 26 blockhouse and finding vacant rooms. We could still tell stories, but something irreplaceable would be missing: the tangible evidence that connects us directly with the past.

Objects are extraordinarily complex. Consider two drones displayed in Hangar C: the Quail decoy and Firebee target drone. Today, when unmanned aircraft are transforming warfare, these artifacts provide fascinating historical context. Yet their meanings extend far beyond that connection. We can explore their technology, materials, purpose, manufacturers, operators, military doctrine, Cold War origins, and the memories of people associated with them. Future generations will undoubtedly ask different questions of those same objects. That is what makes museum work so dynamic and exciting.

Museums should also be cautious about adopting fashionable language that transforms them from institutions of inquiry into institutions of advocacy. The growing assertion that museums cannot be neutral too easily becomes an expectation that museums must take political positions. That risks alienating audiences and undermining the public trust that museums have spent generations building.

Our mission at Cape Canaveral remains refreshingly straightforward: to collect, restore, preserve, exhibit, and interpret artifacts related to the United States' space and missile programs. Those five verbs aren't fashionable. They don't need to be. They describe what a museum does.

And if we do those things exceptionally well, the artifacts and stories entrusted to us can educate, challenge, inspire, and perhaps even change people without the museum first deciding what conclusions they should reach.

The Curator's Corner

with Sabra Gossett

A Titan's Provenance

On 21 August 1965, Gordon Cooper and Pete Conrad launched from Launch Complex 19 at Cape Kennedy aboard Gemini V. Beneath them was Titan II Gemini Launch Vehicle 62-12560.

About 2½ minutes after launch, the first stage separated at an altitude of approximately 40 miles. It wasn't supposed to be seen again. But this first stage had other plans.

After separation, it continued a ballistic trajectory, reaching an estimated 420,000 feet before reentering the atmosphere and impacting the Atlantic at 279 mph, nine minutes after launch. A Dougals HC-54 aircraft of the 84th Rescue Squadron from Kindley AFB, Bermuda, soon spotted a section of the booster floating in the ocean, approximately 450 miles from Cape Kennedy.

USS *Du Pont* was sent to investigate. At 1200, the destroyer pulled alongside the floating section. Recovering a roughly 23-foot-long, 10-foot-diameter section of a rocket with the equipment available aboard a Navy destroyer was no small task, but the crew had the booster aboard by 1355.

The *Du Pont* carried its unexpected cargo to Bermuda and then Norfolk, arriving on 31 August. On 1 September, the booster was transported by truck to the Martin Company plant in Baltimore.

Martin engineers conducted an extensive examination of the recovered Stage I oxidizer tank, studying evidence of reentry heating, structural stresses and damage. Components including rate gyros, wiring, and other hardware were removed for analysis. The resulting engineering evaluation provided information that could be used in the development of recoverable booster systems.

In 1966, the booster had entered the collection of the National Museum of the United States Air Force, unveiled on 6 November 1966, at its new home on the front lawn of the museum.

In 1970, NMUSAF loaned the booster to the new Alabama (now U.S.) Space & Rocket Center in Huntsville through its Civilian Museum Loan Program. It spent years on display in the center's rocket park before moving to storage in the mid-1990s.

There it remained for decades. Then, in February 2022, the booster resurfaced.

On 14 February, someone in Huntsville alerted former CCSFM Curator Bill Paul that the Gemini V booster was still there. Paul contacted NMUSAF the following day, and on 15 March, CCSFM contacted Blast Off Inc. in Atmore, Alabama, about retrieving and restoring it.

Accountability was formally transferred from Huntsville to CCSFM on 15 September 2022. The booster left Huntsville on 28 October for stabilization and restoration by Blast Off. The U.S. Space Force Historical Foundation, Inc. funded the stabilization, display cradle, and transportation.

On 19 January 2023, the booster finally returned to Cape Canaveral and was placed on display in historic Hangar C. Today, the surviving booster section rests less than 3.5 miles from Launch Complex 19—close to where its journey began, but with a story considerably longer than anyone expected when it left the ground.

Museum Updates and News

Hangar C is Back!

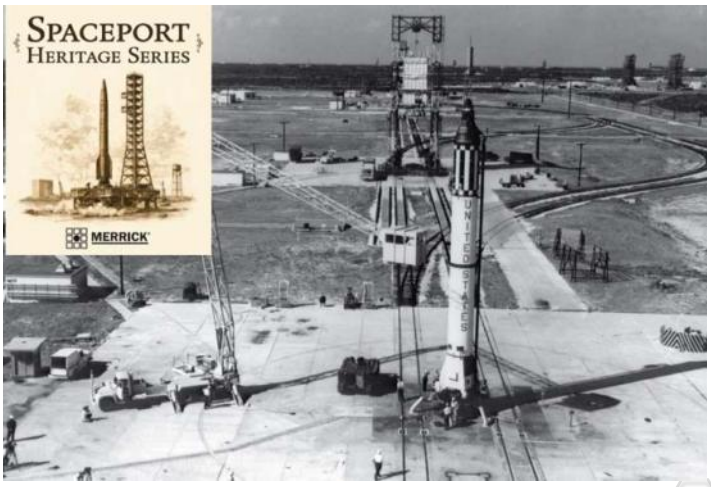
Hangar C reopened for public tours and events in mid-July following weeks of extensive cleanup and repairs. Additional work will continue in the coming months, with Blue Origin covering the costs. Most importantly, none of the historic artifacts sustained visible damage. We're thrilled to have the doors open again and to continue sharing Hangar C's remarkable collection of space and missile history with visitors. *(To the right is an image of contractors placing temporary sheets of metal over the broken windows until replacement glazing arrives later this year.)*

Collectors Converge at the Sands

Another successful Space Collectibles Show & Sale is in the books! More than 350 visitors joined us for this annual event hosted by the U.S. Space Force Historical Foundation. But it's about more than buying, selling, and trading. The show brings collectors, historians, and space enthusiasts together for fellowship, stories, and a shared appreciation for the artifacts and memorabilia that keep space history alive.
(To the left is a view of the crowds at this year's fun and fantastic Space Collectibles Show & Sale.)

Our Story Goes Global

The Cape Canaveral Space Force Museum and its mission took center stage in the latest Global Spaceport Alliance Spaceport Heritage Series. The feature explores how Cape Canaveral grew into the World's Premier Gateway to Space while highlighting the importance of preserving its extraordinary heritage. It's an inspiring story of dedication, innovation, and accomplishment spanning more than 75 years of American space and missile history.
(To the right is the iconic historical image of LC-5/6 that ran with the article.)



Museum Updates and News

A Trunk with a Journey

Museum volunteers recently helped preserve a small piece of Operation Paperclip history. A trunk and crate belonging to an original German scientist brought to America through the program were secured at the Museum from a donor in Melbourne. Their eventual destination is the U.S. Space & Rocket Center in Huntsville. Until travel arrangements are finalized, we're happy to safeguard them and support our fellow history organizations. *(On the left is an image of the trunk and crate as they arrived.)*

Looking Up, Keeping it Dark

The Brevard Astronomical Society returned to the Sands Space History Center on August 19 for its second meeting here this year. More than 50 attendees gathered for presentations focused on local dark-sky initiatives. Speakers representing several organizations discussed energy savings, human health, ecological benefits, astronomy, and more. It was another great opportunity for the Sands to serve as a gathering place for science, education, and community conversation. *(To the right is a view of the crowd gathered at the Sands for a video at the beginning of the meeting.)*

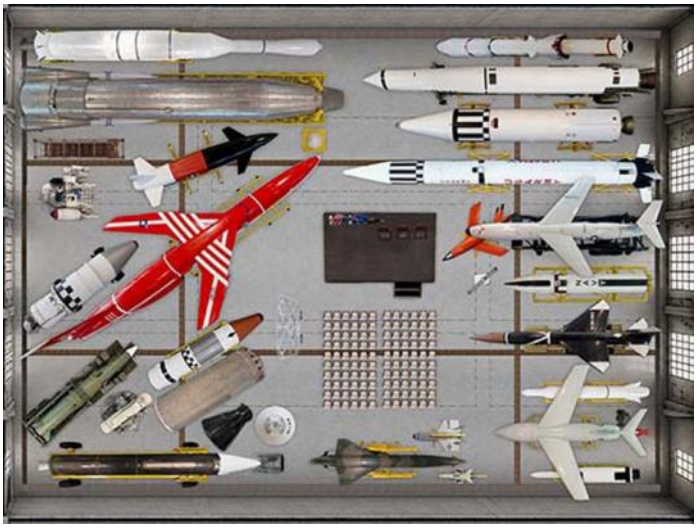
A Historian Comes Calling

Space Launch Delta 45 Historian Wade Scrogham and Museum Curator Sabra Gossett recently welcomed Dr. Kathleen Nawyn for a special visit. Dr. Nawyn serves as the Space Support Historian for the Air Force History and Museums Program, working specifically with the U.S. Space Force. Sabra provided a tour of Museum facilities and collections, giving our guest an up-close look at the history we preserve and interpret every day. *(To the left is Wade Scrogham and Dr. Nawyn posing with Rupert the Space Armadillo at the Blockhouse.)*

Museum Updates and News

Mapping Hangar C

Museum Volunteer Jim Behling recently tackled a unique project: mapping the restorations and artifacts inside Hangar C. Using some creative camera and tripod work, AI tools, and outside assistance, Jim produced an impressive new view of the historic hangar and its contents. The resulting map will be much more than a neat visual. It can assist with exhibit planning, artifact placement, visitor traffic routes, and future projects. *(To the right is a low-res rendition of the Hangar C mapping. Notice the unique overhead view.)*



Jamie Gains Velocity

After spending 120 days off his injured leg following a bicycle accident, our notorious Museum Director is learning to walk again. Visitors may have spotted Jamie around the Museum, Hangar C, or the Sands navigating with a boot and walker. Physical therapy, pain management, and plenty of frustration are part of the process. He may be moving a little slowly now, but we expect him to gain velocity over time! *(To the left is a view of Jamie goofing off with Rupert outside the Blockhouse.)*

Conspiracies at the Sands

Things got wonderfully weird at the Sands on July 31 when the Space Chasers hosted Conspiracy Theory Night. Refreshments, costumes, tin-foil hats, and plenty of questionable “evidence” set the stage for an evening of creativity and big laughs. Participants took turns using the projector to defend their favorite wild theories. Organizer Dani B. tackled perhaps the most important question of all: What if the Coneheads are real? *(To the right is Dani presenting one of her slides on the Coneheads conspiracy.)*

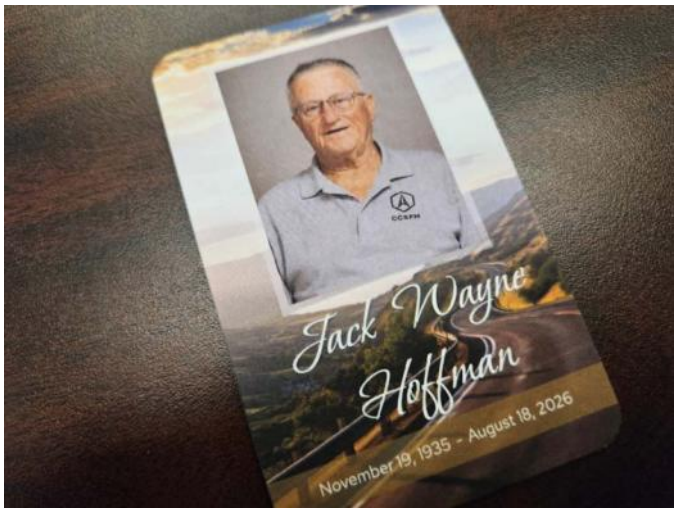
Museum Updates and News

Reaching the Community

Museum Curator Sabra Gossett recently organized a new outreach committee to help spread the word about the Museum. Staff and volunteers have begun attending community events with promotional materials highlighting the Sands Space History Center, Rupert the Space Armadillo, and our preservation mission. These appearances help us connect with new audiences, strengthen community relationships, and make the Museum just a little less of the Space Coast's "hidden gem." (*On the left is an image of a promotional table setup for the Museum.)*

Remembering Jack Hoffman

We were saddened by the passing of longtime Museum volunteer Jack Hoffman on August 18. Jack and his wife, Barbara, have been valued members of our Museum family for many years. A U.S. Air Force veteran, Jack spent decades working in aerospace. He also loved square dancing, road trips, and time with family. His life reflected a deep commitment to God, family, community, and country. *(To the right is a view of the card from Jack's service held on 24 August on Merritt Island.)*



Capitol Hill Comes to the Sands

The Sands Space History Center recently welcomed congressional staff members representing several prominent U.S. Senators. The visit served as the first stop on a fact-finding tour of Cape Canaveral Space Force Station. While at the Sands, the group received briefings from Space Launch Delta 45 Commander Col. Brian Chatman and U.S. Space Force Historical Foundation Chairman Ray Sands before continuing their tour of the installation. *(To the left is a photo of Ray Sands briefing the group before they leave for the rest of their tour.)*

Rupert's Launch Pad

10...
9...
8...
7...
6...
5...
4...
3...
2...
1...
0...
LIFT OFF!

CAPE CANAVERAL SPACE FORCE MUSEUM

See You Next Year!

My home away from home, the Sands Space History Center, recently hosted the annual Space Collectibles show. You could look at or buy all sorts of interesting things related to missiles and spaceflight. There were even Rupert toys that looked just like me! Missed it? Don't worry, we'll see you next year!

Word of the Month

"meteor"

[MEE-tee-er]

Also known as a "shooting star," a meteor is seen when a rock or piece of dust called a meteoroid burns up in the sky. If the meteor reaches the ground it is called a meteorite.

Rupert Remembers

It's been 70 years since a Jupiter-C missile launched on Sept. 19, 1956, to begin a series of test flights that would lead to a version of the booster used to send America's first satellite, Explorer 1 ,into orbit in 1958. It can get a little confusing, but the Jupiter-C was based on the U.S. Army's Redstone missile. For Explorer 1, the Jupiter-C became the Juno-1 with an upgrade. And then another version of the Redstone was used to launch NASA's Mercury astronauts Alan Shepard and Gus Grissom on two brief spaceflights during 1961. Pictured here is that first Jupiter-C launched in 1956.

My Favorite Things

Now 30 years old, one of my favorite exhibits at the Space Museum's Launch Complex 26 is a display dedicated to Air Force General Bernard Schriever, who was known as the "Father of Air Force Space and Missiles." He didn't like that nickname because he said so many people helped develop the missiles that defended the nation and provided rockets to launch satellites and astronauts into space. For information about how you can see this great exhibit in person, visit www.ccspacemuseum.org.

Help Rupert break the secret missile code

During the early days of the space program, the U.S. Army's Redstone, Jupiter-C, and Juno 1 rockets sported a secret two-letter code on the first stage. The code hid a number that revealed in what order that booster was made. The code was based on the name of the city in Alabama where the rockets were built -- Huntsville. They skipped the second "L" and added an X to stand for zero. In each of the images below, take the two letters on the first stage and use the secret code to write the number of the rocket. The first one is done for you.

H	U	N	T	S	V	I	L	E	X
1	2	3	4	5	6	7	8	9	0

UE	HL	UV	ST	TT	SV	UT	NE
							
29							

Images from NASA, Army, and Air Force sources.

Our Museum Family

Museum Staff:
James Draper, Museum Director
Sabra Gossett, Museum Curator
Rupert the Space Armadillo, Mascot

Museum Volunteer Association:
Bill Jelen, Chairperson
Susan Dabrowski, Vice Chairperson
Jack Kennedy, Secretary

Executive Committee Members:
Raymond Sands, Chairman
Stephen Houser, Vice Chairman
Rob Quigg, Treasurer
Roger McCormick, Secretary

Board Members:
Robert VanVonderen
Victor Latavish
Tim Oliver
Joey Genovesi
Jim Banke *(Honorary Member)*

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