

# TRAJECTORIES

*Official Newsletter for the Cape Canaveral Space Force Museum*

## Quote of the Month:

"We are limited only by our imagination and our will to act." *Ron Garan*

## GT-5 Returns Home!

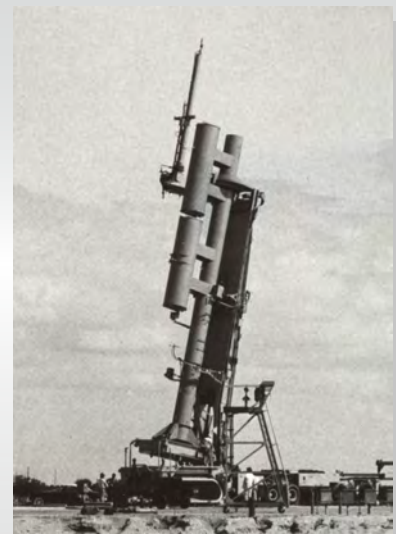


A truly unique and remarkable booster returned home to Cape Canaveral in January. Gemini-Titan 5 (GT-5) launched from LC-19 on Cape Canaveral in August 1965. It carried NASA astronauts Gordo Cooper and Pete Conrad into orbit. They set a longevity in space record over their eight-day flight.

They launched aboard a modified Titan II rocket. The first stage jettisoned 50-miles above the Earth and dropped to the Atlantic Ocean. The upper half miraculously caught an air pocket and remained afloat. The *U.S.S. Du Pont*, a U.S. Navy destroyer, retrieved the 27-foot booster fragment four days later. This exceptional artifact remains the only retrieved launched Titan booster in existence. It is also the only retrieved booster from the entirety of America's crewed missions leading up to the Space Shuttle program!

The U.S. Space Force Historical Foundation generously funded the stabilization, display cradle, and transportation of the GT-5 booster from the U.S. Space and Rocket Center in Alabama to Cape Canaveral. Today visitors can view it on prominent display in Hangar C, among other significant aerospace vehicles.

## DID YOU KNOW?



The Navaho winged intercontinental missile was designed as a mobile weapon system. This rare image shows a mass simulator / fit test unit on the mobile launcher used for Navaho engine tests on Launch Pad 10. The pad was demolished to make room for the Minuteman Launch Complexes 31 and 32 in 1959. All the equipment pictured here has also been lost to time. It's a rare glimpse into the unique story of Navaho.



CAPE CANAVERAL  
SPACE FORCE  
MUSEUM

# Message from the Director

*James W. Draper*

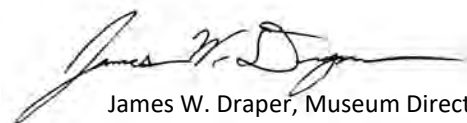


Welcome to our new "Trajectories" newsletter! Huge thanks to William Donelson for the expert redesign. The brand new newsletter format accompanies our name change to the Cape Canaveral Space Force Museum, a new museum logo, new web address ([www.ccspacemuseum.org](http://www.ccspacemuseum.org)), new signage, and many other new developments to be unveiled throughout 2023! It's going to be an exciting year! As you will notice in the following pages, we began yet another New Year at a sprinter's pace. The return home of the Gemini-Titan 5 booster kicked off the season.

We must not lose sight of our lofty institutional mission and purpose when engaged in so many exciting new improvements. My recent participation in the annual Roger That! Conference allowed me the rare opportunity to reflect on our essential mission. I took a new audience (via Zoom) to historic Launch Complex 34 with a presentation entitled "Power of Place: Tragedy and Triumph at Complex 34". I sought to explain what gave that location "power". In doing so, I elaborated on the unique history of the site, what occurred there, the significance of that history, and its relevance to our spacefaring activities today. Essentially, our crewed-space program experienced its first fatalities there, with the tragic deaths of Apollo 1 astronauts Gus Grissom, Ed White, and Roger Chaffee in 1967. Then, like a phoenix rising from the ashes, we experienced the triumphant launch of Apollo 7 from that site in 1968 - the first successful crewed mission of Project Apollo. Both tragedy and triumph helped pave our path to the Moon.

It's what we call in situ, or onsite, history. It's more than just a memorial to fallen astronauts. You can feel the immensity of history as you traverse the pad. Today it remains as a visceral tangible connection to our early space programs. It connects us to the intensity of the Cold War Space Race. You walk in the footsteps of our astronauts and the many support crews that made their fantastic journeys possible. LC-34 remains a site for perspective and reflection. Gazing to the north brings a view of LC-37, which launches Delta Heavies today – a reminder of how we learned from the tragedies and triumphs on the Cape to advance our space programs.

You can experience that Power of Place throughout the Cape, but cannot replicate it elsewhere. We must use it to educate and inspire. We must preserve and interpret it for future generations. One important vehicle among those trajectories includes the ancient art of story-telling, which Bill details in the following pages.



James W. Draper, Museum Director



# *The Curator's Corner*

*with Bill Paul*

## **Keepers of the Stories**

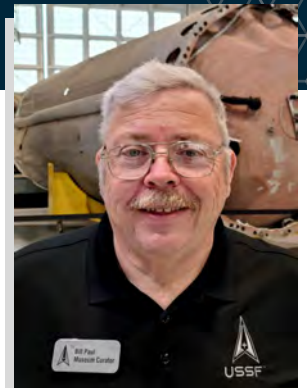
Over the last three years you have listened to me prattle on ad nauseum about the purpose and mission of museums. Once you filter out the hyperbole, my now standard BS and boil it all down to the basics, museum folks (this includes both the docents and staff), are just storytellers. When you get down to it, we're not that far removed from the village elders of pre-historic times sitting around a fire built to keep them warm on a chilly night while keeping away predators (bears, panthers, rabid armadillos and of course the much feared proto-telemarketers) and entertaining the villagers with tales of heroic deeds and epic failures of the tribe's ancestors, all while trying to get the young people to put down their stone tablets long enough to listen. Sometimes they would show some relic that had been passed down through the generations, like the stone knife that "Bubba" Grog used in taking down that Sabre-tooth armadillo...and when he was through, he pointed them to the gift shop. In other words, they were preserving, interpreting and sharing the history of their people.

Even though we are separated by several hundred generations, what we do today is not that much different from what those early storytellers did 10,000 years ago. Sure, there are differences. We've gone from clothing ourselves in animal skins to slacks and polo shirts, rely on central air instead of a fire, and show people rocket engines instead of Grog's knife, but in many ways our function has not changed (yet we still haven't found a way to eradicate those pesky telemarketers). Our job is to share with the public the rich history of

the Cape and to educate them on the amazing events that have happened here over the past seven decades.

In some ways what we do is a little more involved than our story telling ancestors. Part of what we have to do is take some somewhat complicated concepts and put them into terms that our visitors can easily understand. To be effective we need to have at least a cursory knowledge not only of the history, but also the science of rocketry and space flight so we can better explain to our visitors what we do at the Cape. Now before any of you have a cow, you don't have to bury yourself in technical manuals – just go through display areas, read the panels and signage whenever you have some slack time or go onto our website and before long, you'll have a good working knowledge of Cape history. Also talk to and listen to your fellow docents. Many of them have worked at the Cape at various times in its history and were firsthand witnesses to the events you talk to the public about. They are full of great stories.... some of them are even true.

And speaking of the truth, while our story telling ancestor (gotta come up with a name for this guy) wasn't concerned about his audience googling everything he said. There are a lot of stories out there that have either been partially or wholly "value-added" to over the years to the point they have been accepted as fact. An example I've heard many times is about the V-2 launch from White Sands that went awry and landed in a cemetery near Juarez, Mexico. After



## *The Curator's Corner* cont.

doing a little research I found some newspaper articles about the event and found that while a V-2 did take a wrong turn near Albuquerque and landed near Juarez, it wasn't anywhere near a cemetery and there weren't bodies strown about. Sorry to burst your bubble (not really, I've been a big bubble buster from way back). Point is if something sounds too good, check its validity or don't use it ...if in doubt, leave it out.

Before you start thinking I've gone off my medication again, there is a reason for this diatribe. Over the past couple of years there have been many changes at the Museum, but there is one that has kind of snuck up on us. Between a renewed interest in the space program and the formation of a new branch of the military to operate in this domain, our visitation has been on the increase and the Museum is quickly becoming one of the major interfaces between the public and the U.S. Space Force. There was a study done a few years back that showed that only about 5 percent of the U.S. population under the age of 65, had served in the military, had a family member who was in the military or had extended contact with someone who served. Like it or not, the impression that many people will get of the Space Force and operations at the Cape will come from visiting the Museum.

So, even though we have a lot in common with our pre-historic storyteller (Murry? Eugene?) our audience has become much larger than his little village. As the Museum grows in both size and prominence that audience will keep expanding. Our story will keep expanding because history is being made inside these gates every day. When the public enters, it's up to us to tell them the history of Cape Canaveral and why it's important to them, because we are the keepers of the stories. Just remember, when you are out there meeting the public - be professional, be accurate and after you're done inspiring them.....

...point them toward the gift shop.



# Museum Updates and News



## Scout Campouts

Two weekends of scout campouts took place at the Museum grounds. The first included boys and girls from Scouting BSA Troop 373 the weekend of 13-15 January. Theirs included a first for the Museum—a La Caja China pig roast! Then Girl Scouts from the Citrus Council camped out on 3-4 February. Both campouts included historical tours, multiple adventures, and beach cleanup service projects. The campouts help the Museum fulfill its educational mission. *(Rupert pictured to the left hanging out with the scouts.)*

## The Next Featured Rocket

After the success of the first annual T-Minus 10-Miler U.S. Space Force run in December, efforts began toward planning the 2023 run. Museum staff selected the featured rocket for this year's event—the North American XSM-64 Navaho supersonic intercontinental cruise missile. Eleven Navaho missiles launched from Cape Canaveral between 1956 and 1958. The Museum displays the only Navaho left in existence. *(To the right is the official emblem for the second annual T-Minus 10-Miler—<https://runspaceforce.com/>.)*



## Astronaut Tom Jones

A special meeting for the Museum Volunteer Association was held at the Sands Space History Center on 30 January. Former astronaut Tom Jones participated as the guest speaker. He completed four Space Shuttle flights from 1994 through 2001. He offered some unique insights on the future of crewed space missions to a full house. Members of Canaveral Council of Technical Societies and the Missile, Space and Range Pioneers attended, too. *(To the left, astronaut Tom Jones giving his presentation at the History Center.)*

# Museum Updates and News

## Archival Treasure Found

A cache of over 75 boxes of archival records was discovered on Patrick Space Force Base. They contain original documents dating back to the 1950s! Volunteers from the 45th Weather Squadron helped transport them to the Museum Archives. Efforts to rehouse, organize, and develop finding aids will commence soon. Special thanks to Tim Harold, records manager, and Dr. Charles Dusch, Director of History & Heritage, for securing them for the Museum. *(To the right, the new records secured in the climate-controlled Museum Archives.)*



## LEGO Competition

A FIRST LEGO League youth competition was held at the Sands Space History Center on 25 February as part of the CAPE Series. The competition included three teams from three local counties. The program helps guide students through the basics of STEM and instills healthy habits of learning, confidence, and teamwork. Reviewers for the event included members from the Canaveral Council of Technical Societies. *(To the left, students prepare their builds for the competition.)*

## Roger That!

Jamie Draper participated in the 7th Annual Roger That! Conference in Grand Rapids, Michigan with a virtual tour from the Cape. His presentation was entitled "Power of Place: Tragedy and Triumph at Complex 34". He took the audience on a tour of the remains of LC-34 and described the historical significance of the site. The conference is an annual celebration of space exploration in honor of Roger B. Chaffee. Special thanks to Museum Volunteer Curt Mason for serving as cameraman. *(To the right, a view of Jamie Draper giving his virtual tour of LC-34 for the conference.)*





# Museum Updates and News

## Glass Slides Donation

Among recent donations to the Museum is this exceptional set of glass slides from the 1950s. They appear to be a part of an early onboarding or newcomers presentation to Cape Canaveral. They include original photographs, illustrations, and maps detailing 1950s activity on the Cape, including images from early Bumper rocket launches. Museum staff will explore options for digitizing the set. *(To the right, a view of the historic glass slides in their original wooden cases.)*



## AFIO Presentation

Jamie Draper gave a luncheon presentation on 11 February to the local chapter of the Association of Former Intelligence Officers, or AFIO, at Satellite Beach. The PowerPoint presentation included a detailed look at the past, present, and future of the Cape Canaveral Space Force Museum. It's just one example of the Museum's efforts toward community outreach and exposure. *(To the left, a view of Jamie Draper giving the presentation.)*

## Explorer I Model

A life-size Explorer I model returned to the Museum. It used to be displayed at the Museum facilities at LC-26. In recent decades, it was on display at the Spaceport Integration Office (formerly Detachment 1). Museum staff retrieved the model; Bill Paul added new antennae; and it was placed on prominent display at the Sands Space History Center. The story of Explorer I is integral to the Museum's scope and the history of the Cape. *(To the right, a view of the Explorer I model on display in the LC-26 section of the History Center.)*



# Museum Foundation Updates

## Foundation

The Amazon Smile program has gone away, so there won't be any need to go to Amazon Smile when ordering online. Anyone who uses Smile has most likely received the email informing of the change. We are sorry to lose it.

## Gift Shop

A new book "Skywalking" by shuttle astronaut Tom Jones, copies autographed by author.

Patches and coins (bronze & color) for the Crew VI Mission are in stock .

Insulated water bottles with Armed Forces insignia.

Rupert the Space Armadillo is back in stock both small and large sizes

We now also carry a variety of Blue Origin logo merchandise.





# *Our Museum Family*



CAPE CANAVERAL  
**SPACE FORCE**  
MUSEUM

## **Museum Staff:**

James Draper, Museum Director  
Bill Paul, Museum Curator

## **Museum Volunteer Association:**

Randy Wehrung, Chairperson  
Lee Kjesbo, Vice Chair  
Bill Jelen, Secretary



UNITED STATES  
**SPACE FORCE**  
HISTORICAL FOUNDATION

## **Executive Committee Members:**

Raymond Sands, Chairman  
Steven Lepper, Major General, USAF (ret.)  
Vice Chairman  
Rob Quigg, Treasurer  
Roger McCormick, Secretary

## **Board Members:**

Robert VanVonderen  
Stephen Houser  
Therrin Protze  
Victor Latavish  
Tim Oliver

## **Foundation Employees:**

Deborah Allison, Foundation Services Manager  
Sharon Rodriguez, Executive Assistant



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