

"To keep peace on Earth we must keep peace in space." *Tory Bruno, CEO of United Launch Alliance* 

# LC-14 ADDED TO THE MUSEUM!

One of the most historic launch complexes of Cape Canaveral (and the history of America's space activities) now belongs to the Museum! John Glenn became America's first astronaut launched into orbit from LC-14 in 1962. Three more astronauts followed aboard their Mercury spacecraft atop Atlas boosters. Agena Target Vehicles launched later in support of Project Gemini. The significance of LC-14 is immeasurable.

For decades Detachment 1 served admirably as custodians of the site. Their recent inactivation allowed the Museum to take the helm. It is a stewardship the Museum takes very seriously. Improvements are already taking place on the exterior of the Blockhouse. Ideas will be discussed on how to best improve the site and utilize it to help fulfill the Museums mission of preservation and education. The future of this site holds lots of promise.



# DID YOU KNOW?



On 4 August two launches occurred in one day from the Cape - an Atlas V and a Falcon 9 – a feat unmatched since the 1960s! In 1967 a Delta G carrying BIOSAT-2 and an Atlas-Centaur carrying SURVEYOR-5 launched nine hours apart. In 1966 Gemini-Titan XII and it's Atlas-Agena Target Vehicle launched one hour 40 minutes apart. With the current uptick in launch volume from the Cape, this may become a common occurrence in the near future.



#### SSC COMMANDER VISITS MUSEUM

Lt Gen Guetlein, Commander of Space Systems Command (SSC), visited Cape Canaveral for the final SBIRS launch in 2-4 August. His visit concluded with exclusive tours of the Museum and Hangar C, where Museum Staff revealed a vision for future museum expansion. Lt Gen Guetlein was very impressed with all the fantastic Cape history on display and the efforts of the Museum team. (To the right, Museum Director Jamie Draper tours Lt Gen Guetlein and team through Hangar C.)

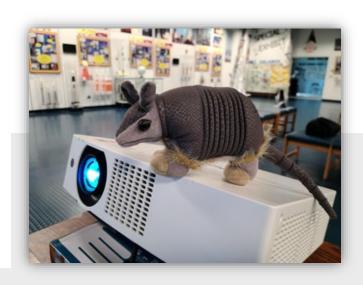


#### FINAL SBIRS SATELLITE LAUNCH

The sixth and final Space Based Infrared System Geosynchronous Earth Orbit (or SBIRS GEO 6) satellite launched from the Cape on 4 August. This spacecraft with powerful scanning and infrared surveillance sensors will help the U.S. Space Force track all ballistic missile threats around the world. Once again, more history made at the Cape! (To the left, a view from the Museum grounds shows the colorful SBIRS launch at dawn.)

## **NEW PROJECTOR FOR PROGRAMS**

Museum Staff took advantage of some year-end funds by investing in some much-needed upgrades. A new, updated portable projector was among them. This technological upgrade will dramatically improve educational programming and special events at multiple Museum facilities. It's one of many gradual improvements facilitated to enhance Museum operations and to make Cape Canaveral history more engaging and interactive. (To the right, Rupert testing the new projector at the Sands Space History Center.)







#### **NEW SOCIAL MEDIA SERIES**

Keep watch for updates to our new social media series, #JupiterJourney, on Facebook, Instagram, and Twitter. The series focuses on the Jupiter Intermediate Range Ballistic Missile (IRBM) and how influential it was in America's early space and missile programs. Several historic videos, photos, and documents have been posted as part of this series. Many more interesting historical tidbits on the way! Stay tuned for more. (To the left, the signature graphic for the #JupiterJouney series.)

#### CAPE SERIES PROGRAM – 920TH

The monthly CAPE Series of programming featured a special presentation on the 920<sup>th</sup> Rescue Wing. On 21 July MSgt Floyd Gordon of the 920<sup>th</sup> described his background and that of the Wing. This premier combat search and rescue unit (based at Patrick SFB) harbors a storied history and an essential national defense mission today. (To the right, MSgt Gordon describes the role and mission of the 920<sup>th</sup> Rescue Wing to an audience at the Sands Space History Center.)





#### **DONATIONS HIGHLIGHT**

Every month brings new and interesting material donations to the Museum. Museum Staff analyze every offer to ensure it fits the scope and mission of this museum operation. One recent highlight included an assortment of materials connected to Naval Air Station Banana River (which eventually became Patrick SFB. The donor's mother served as a WAVE on base just after the end of World War II. The Museum Curator is diligently sorting and accessioning the materials into the Museum collection. (To the left, a view of the donation.)



#### WINSTON SCOTT FILMING

The Health First Foundation recently conducted some filming on the Museum grounds as part of an educational/inspirational message to health care workers on Florida's Space Coast. Former astronaut Winston Scott presented a message as part of the filming project. (To the right, the film team interviewing Winston Scott at Launch Complex 5/6 on a very hot and sunny day!)





#### LAUNCH VIEWING FUN

The first two launch attempts for Artemis produced tons of press attention, large crowds, and two scrubs. They also generated opportunity for Museum Staff and Volunteers to interact with the public in fun new ways. The Lighthouse and Hangar C were designated as one of few official launch viewing locations on the Cape. Hangar C was opened for visitors and tours. You may have heard some unofficial reports of the movie *Spaceballs* projected on the outside of Hangar C. (To the left, an unofficial view of the projection.)

### **IMPROVEMENTS TO LC-14**

Work will be taking place on the outside of the Blockhouse at Launch Complex 14. Contractors will be renovating the stairs and viewing platforms, as per safety concerns. The work will take several months and the area will be off-limits during that time. Please abide by the barricades at the entrance to the complex. (To the right, image showing the railing removed from the stairs as one of the first stages of the renovation project.)





**Foundation:** The USSF Historical Foundation hosted the 7th Space Collectibles Show and Sale event Saturday 13 August. There were 23 tables of merchandise and over 350 visitors. Every year the number of visitors increases. The Foundation looks forward to hosting next year's event August 2023.

The US Space Force Historical Foundation's Legacy Wall is a popular site on the Foundation's website recognizing men and women and their organizations – military and civilian. It also recognizes the present-day personnel who carry on that spirit and tradition for the next generation. Space Force Historical Foundation Legacy Wall.

**Gift Shop:** The Gift Shops continue to maintain a large inventory of Space Force merchandise, including mugs, shot glasses, t-shirts, caps, lapel pins, patches, and stickers.

The latest addition to our inventory is a collection of space photos by "We Report Space" photographers Michael Seely, Bill & Mary Ellen Jelen. The photos are matted and ready for framing.

Just in a new shipment of United Launch Alliance (ULA) themed merchandise, including: 2 different-shirt designs, caps, pens, keyrings, notebooks, and small (350th scale) rockets.





"Space: our new warfighting domain!" Something you see in news media incessantly these days. Concern rises as our opponents develop intricate space warfighting capabilities, as we appear to be falling behind. Just last year Russia launched a missile that destroyed an old Soviet-era satellite, resulting in 1,500 pieces of space debris in orbit. China's been allegedly testing hypersonic glide vehicles and a fractional orbital bombardment system. Clearly none of these developments are meant for peaceful applications, such as space exploration.

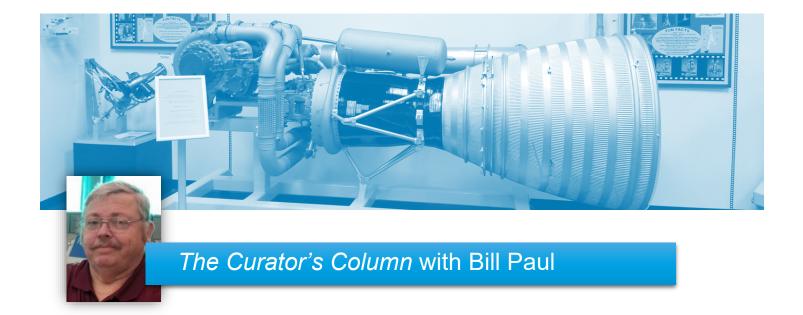
We (as in the team at the Air Force Space & Missile Museum) know that space has been a warfighting domain for over 70 years. This is nothing new. From the first Bumper launch from Cape Canaveral in 1950, Department of Defense initiatives have been deeply ingrained in our space activities. Our first reentry vehicles (tested at the Cape) launched into space and returned as tests for deploying nuclear warheads to targets across the globe. All the boosters that launched our first satellites, space probes, bioflights, and astronauts into space were modified ballistic missiles. Most of our early satellites propelled into orbit served U.S. Armed Forces through transmitting weather, communications, missile-warning, and reconnaissance data. The rapid acceleration of our early space programs was due to the Space Race of the Cold War. Everyone knew that superiority in space was essential.

Basically, space has been a military sphere for decades. Our hardware in orbit provides essential real-time data to help our warfighters on land, sea, and air. What's changed in recent years? The weaponization of space, making it a true theater of combat. We now see countries developing technologies to attack space assets and to attack targets on Earth from space.

How does all this apply to our museum? We collect, preserve, and interpret America's space and missile history. That rich history offers many lessons. Our mission is to educate the general public and our military personnel on this history, so they can avoid repeating failures of the past and build off successes. An informed warfighter is a more formidable warfighter. An informed public will support that warfighter.

Today we are more dependent on space than ever before. America needs to maintain supremacy to preserve peace, a lesson learned from the Cold War. It may not seem like it, but space is closer than you think!

James W. Draper, Museum Director



#### **Plans and More Plans**

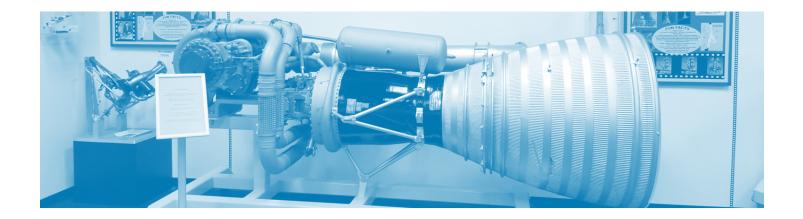
One of the primary missions of the AFSMM is to identify, collect, preserve, and interpret the history of the Cape and U.S. military space activities. While each museum tells its own unique story, there is one big difference in the story we tell compared to other history focused museums in the area. While others concentrate on a specific point in time, a particular event or a person's lifetime, our story is ongoing. While the stories other museums tell are static and fixed for the most part, ours continues to evolve with the men and women of the Cape making history daily. As advances in launch vehicles have made access to space easier and more affordable, the number and variety of launches that have taken place at the Cape has quickly increased over the past few of years to a cadence not seen since the early 1970s. Our challenge is keeping up and documenting all this new history.

To successfully do this takes planning... lots of planning. Planning can take on many forms. Of course, there are the expansion plans that have caused (or should be causing) so much excitement lately, but most planning involves everyday activities that help keep the museum running and enables us to better tell our visitors the amazing story about what we do here at the Cape and about the people who do it. In order to better tell our story, there are two major areas that are dealt with separately but are interconnected.... Exhibits planning and Collections planning.

The Exhibits and Collections plans are pretty much what the titles say... one is a guide for exhibits we want to build and the other on what types of artifacts and archival material we want for the Museum's collection. While technically they are separate plans (because the folks at BIG AF tell us to do it that way) in practice they are joined at the hip, where the actions in one plan often winds up driving what happens with the other.

The primary reason these plans are needed in the Museum is because of space. Sort of a weird thing to be concerned about in a museum dedicated to space flight, but I'm talking about the limited amount of exhibit and collections storage space we have in our facilities. Personally, I'd love to take in and display everything offered to us, but we just don't have the room. The Exhibit and Collections plans serve as guides for helping us decide what items to take and what items to pass on.

The Exhibits plan is a basic storyline for the Museum. It lays out the primary story we want to tell the public and identifies exhibits and other displays that reinforce the storyline and best convey our history to our visitors. It helps us define the parameters of our exhibits, allowing us to focus our efforts. It also serves as a



guide for deciding what artifacts and documents to accept into the collection. Once we have a good idea what story we want to tell, it's much easier to decide whether the artifact offered can help us tell that story.

A collections plan works much the same way. Like the Exhibit plan, it serves as a guide to help us decide what to accept into the Museum's collection. As I've said in the past, just because something is old, or is signed by an astronaut, commander or some other personality does not automatically make it historic or useful in an exhibit. An object's importance lies in the story associated with it -- that is its association to a particular person, place or event dealing with the history of the Cape, the U.S. Space Force or its predecessors. Again, as with the Exhibit plan, we start with the overall storyline and then roughly determine what artifacts and photos we want or need to help support the story or idea we are trying to get across to the visitor. Once you have a general idea of what we need or want, we compare it to what we already have in the collection. Then we have a pretty good idea what we need to look for.

Neither one of these plans are written in stone -- in fact, it's more akin to Silly Putty. As I said in the beginning of this rant, the history of the Cape is still being written and evolving. New stories are coming to light as records from older programs are being de-classified or copies of records thought to be lost are found. All this new information can lead to major changes in the Exhibits plan. Our Jupiter nose cone is a good example. For years it was thought to be just one of many launched from the Cape, but not long ago we found records showing it was the first full scale re-entry vehicle flown and recovered, proving the viability of the ablative heatshield. Finding this out completely changes its history and affects the way we exhibit it.

Then again, both the Exhibits and Collections plans can change because something really, really, good comes through the door that we never anticipated. Recently Bill Breyer had acquired a Thermal Protection Tile with documentation showing it had come from the *Challenger* and offered it to the Museum. Normally we don't take Shuttle items because it was a NASA program and were flown from the Kennedy Space Center with very little Air Force/Space Force involvement other than tracking through the Eastern Range. Because we were able to document it as a flown item that had gone through re-entry and by combining it with other items we already have in the collection, we can consider an exhibit on the development and technology of heat shields—something we had not thought of in our original exhibit plans.

In addition to the above, we also must look toward the future. With new launch vehicles coming into service and legacy systems being retired, as well as being in the middle of the stand-up of the U.S. Space Force, we need to determine what is in use today that we need to get and preserve for the future. What is being used now that the Museum will need 25 or 50 years down the road?

So, as you can see, long range planning (or even short-range planning for that matter) in a museum is a moving target at best. We try our best to create a set path to follow, but at the same time we must be flexible as our story changes and evolves. It can be a royal pain in the butt, but necessary to provide the best possible product for our visitors and preserve our history of future generations.



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