



USS

# HORNET

Sea, Air & Space Museum

## ON 15 MARCH 1944

Over 3,500 sailors and members of the ship's air wing boldly set sail aboard *Hornet* CV-12, one of the 24 legendary Essex-class aircraft carriers and the eighth ship in U.S. naval history to be named "Hornet," for their first mission in the Pacific Theater of World War II.

## ON 24 JULY 1969

*Hornet* and her crew recovered astronauts Armstrong, Aldrin, and Collins from the Pacific Ocean after man's boldest voyage yet—the journey to the Moon and back.

*Whether at sea, in the air, or in space, the intrepid crew of USS Hornet didn't know the challenges for the world ahead, or that their stories would inspire visitors across generations 76 years later.*

## ON 17 OCTOBER 1998

The USS Hornet Museum (now the USS Hornet Sea, Air & Space Museum) opened to honor these heroes and others by preserving history to educate the public, support and provide a space for veterans to come together, and serve the community.

**Our Mission** is to utilize USS *Hornet* and its collections, exhibitions, and educational programming to inspire and to promote awareness and understanding of history, science, technology, and service.

**Thanks to the support of past, present, and future donors, here's how we carry it out.**

*Images to the right: (top) An SB2C-3 aircraft over USS Hornet in January 1945; (middle) USS Hornet approaches the Apollo 11 capsule for recovery on 24 July 1969*



“Common experience and common aspirations make a nation, and they can be most easily found and most fully understood through a study of its history...The nation is greater than our own experiences, and its greatness can be comprehended only by knowing something of the deeds and the hopes of our fellow Americans.”

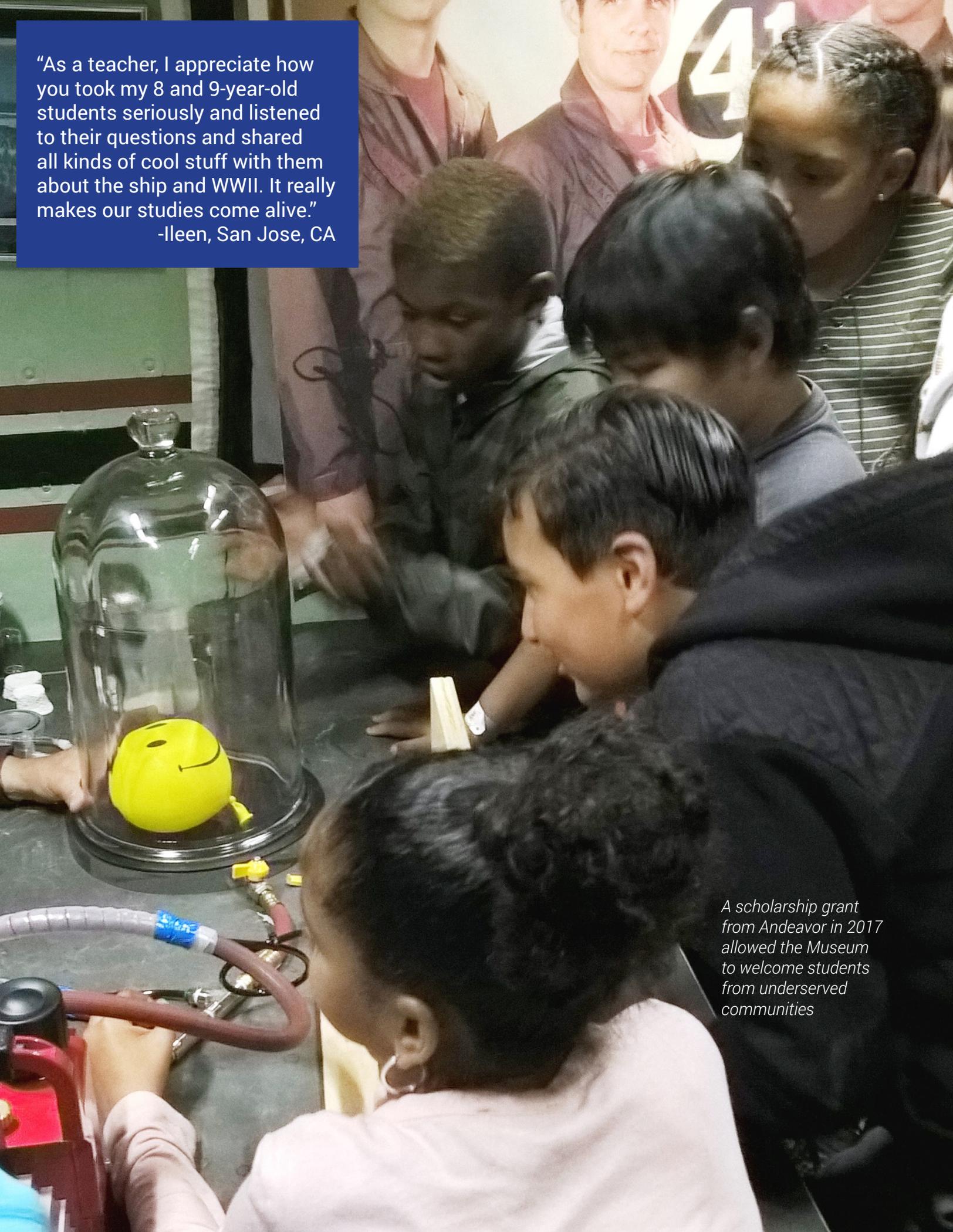
- American Historical Association



*USS Hornet CVS-12 enters Pearl Harbor, Hawaii following recovery of the Apollo 11 spacecraft and astronauts, 26 July 1969*

“As a teacher, I appreciate how you took my 8 and 9-year-old students seriously and listened to their questions and shared all kinds of cool stuff with them about the ship and WWII. It really makes our studies come alive.”

-Ileen, San Jose, CA



*A scholarship grant from Andeavor in 2017 allowed the Museum to welcome students from underserved communities*

# USS HORNET SEA, AIR & SPACE MUSEUM

**The USS Hornet Museum is located at historic Pier 3 in Alameda, California.**

This pier was part of the Alameda Naval Air Station that was active from 1940 until 1997. In April 1942, the top-secret Doolittle Raid left from the very same pier.

In an average year, **over 60,000 visitors come to the Museum.** They come to step into history and learn about the long service history of this great ship. That history spanned from **1943 – 1970** and included service in the **Pacific Theatre of World War II, the Cold War, the Vietnam War, and finally as part of NASA's Apollo program.**

Visitors learn about how sailors lived, the aircraft they flew, the recovery of the Apollo 11 and 12 astronauts, and more. The Hangar Deck, Flight Deck, and 2nd Deck are open for self-guided tours. Lower decks and the Island super-structure can be accessed as part of guided tours and include the engine room, catapult systems, and much more.

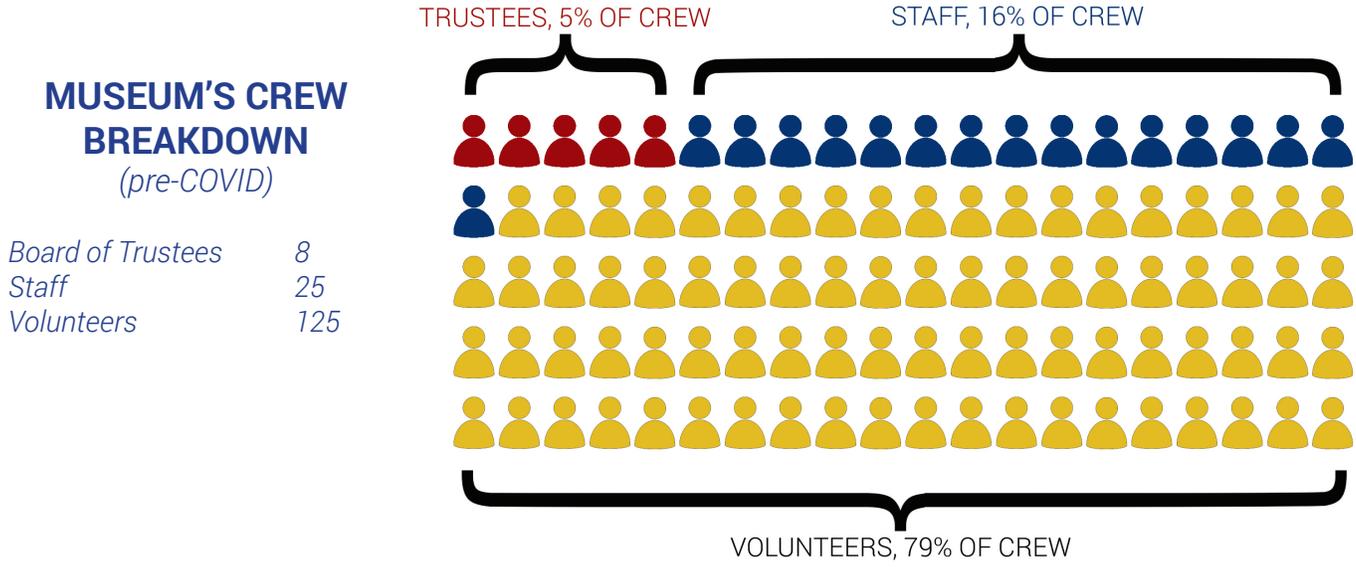
The Museum has robust **Education programming** and works with schools from all over the Bay Area. We also hold engaging **Community Events** and are a unique venue for **Private Events.** Our crew of staff and volunteers works hard to ensure everyone's experience aboard the ship is a memorable one! We are also a **resource for veterans**—many of our crew are veterans and many of our community events are focused on veterans and, more generally, civic duty and service.





# WE ARE A CREW DEDICATED TO SERVING AS A COMMUNITY ASSET

Since 1998, we have been a community asset. Out of the 60,000 guests annually, over 20,000 are students attending our daytime and overnight educational programs. We help to preserve the history and heritage of not only the nation but of the Bay Area and, whether they come aboard for education or for one of the many events hosted here, visitors are given the chance to walk in the footsteps of astronauts and heroes.



# COMMUNITY EVENTS

Every year the Museum hosts events for the Community. These events include a Naturalization Ceremony for new citizens, a 4th of July celebration, Apollo 11 and 12 recovery anniversaries, a Halloween Party, Veterans Day, New Year's Eve Gala, and more. We also hold events and have special exhibits for Black History Month, Hispanic-American Heritage Month, Asian-American and Pacific Islander Heritage Month and others, highlighting the history and service of all communities from around the Bay Area and beyond.

The Museum is also a great venue for **private events** as our large and spacious Hangar Deck and Flight Deck make for a unique setting for any event.



*(above) A commemoration of September 11<sup>th</sup>; (below) Our Naturalization ceremony held July 2, 2021 for new US citizens*



# USS HORNET IS TANGIBLE AMERICAN HISTORY AND STEM THEORY

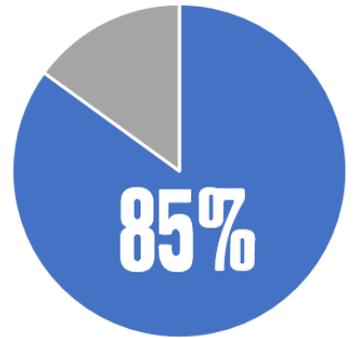
## Our Education Goal is to provide quality, engaging STEM and history curriculum for local schools and beyond.

Carrying the voices of heroes, past and present, we—as stewards of the ship and collections, educators, and preservationists—stand for historic preservation and education. In doing so, we provide **a unique platform for cross-curricular education** across science and humanities fields in an immersive setting through the authenticity of our ship and our stories. We preserve history to educate for the future.

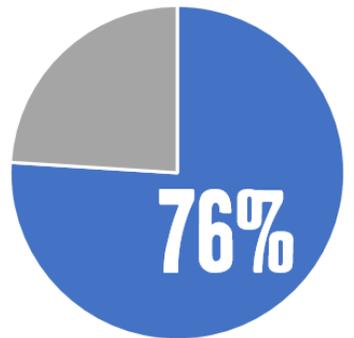
The Museum has grown its STEM and history educational programming by an average of 14% over the last several years and **between 2012-2019, has welcomed 89,555 students.** We developed and implemented programs that have been well received in the professional museum community and have even offered our programming, such as our overnights, as models to other museums.

Additionally, **the Next Generation Science Standards (NGSS) has guided our STEM-to-Stern program**, the first official STEM program created by the Education Department, since its launch in 2012. These rigorous standards require students to understand science concepts and apply engineering principles to solve various problems, a process that they can carry with them through future learning. Education staff and volunteers have also developed hands-on, Problem-based Learning (PBL) activities in **collaboration with the United States Naval Academy's STEM Outreach Office with additional input from the NASA Ames Research Center.**

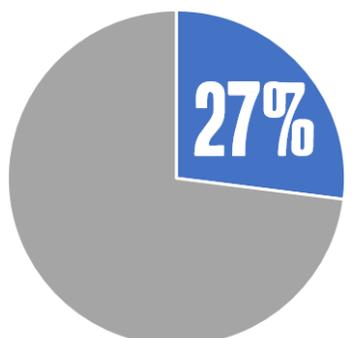
## AMERICA'S EDUCATION CRISIS



*85% of 8<sup>th</sup> graders lacked proficiency in U.S. History, with approximately 75% falling short in geography and civics.\**



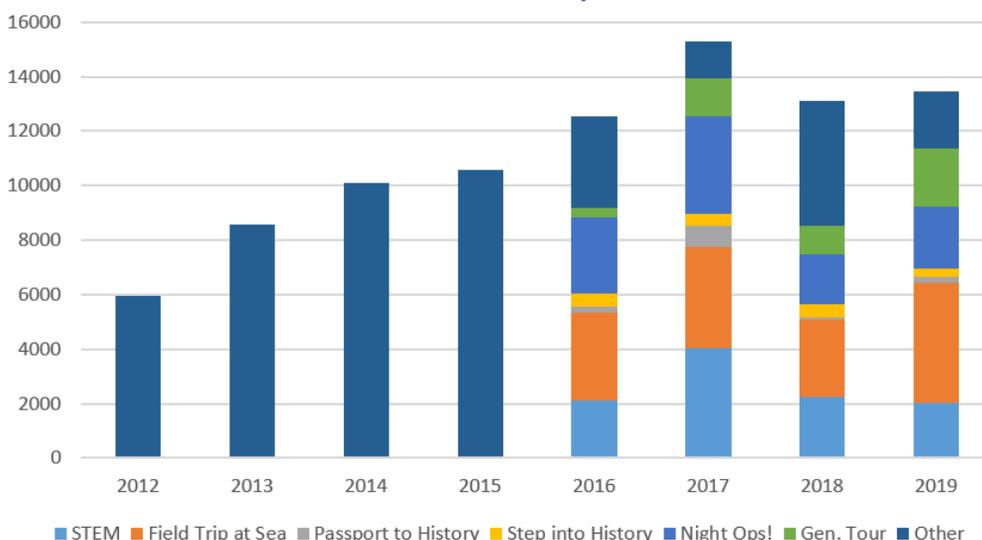
*76% of 8<sup>th</sup> graders were not proficient in mathematics, and 54% failed to demonstrate proficiency in engineering and technology literacy.\**



*Only 27% under 45 across the country demonstrate a basic knowledge of U.S. History.\**

*\*Data from Nationsreportcard.gov, Woodrow Wilson Foundation study (2019), and a New York Post national survey (2019)*

## STUDENTS SERVED, 2012-2019





*Education Instructors Mike Arrowsmith and Lewis Ross give students a hands-on lesson on levers in the ship's Foc's'le (anchor room)*

## Our Education Objectives

- **Convert our field trip opportunities to accessible, online experiences** in compliance with Next Generation Science Standards (NGSS) and California standards
- **Develop additional digital content**, including closed captioning, but also audio-only and downloadable/tactile content to address different learning styles
- **Reach out** to the greatest number of students possible as part of our ongoing mission to provide quality educational experiences using historic USS *Hornet* as a living example of practical applications of STEM theories
- Maintain a **scholarship fund** for schools to participate in virtual and onboard field trips
- Provide **educator professional development** activities
- **Continually evaluate** the efficacy and accessibility of the programming to improve future educational programs and projects

In 2016, the Museum worked closely with the **United States Naval Academy STEM Center** to develop and enhance our STEM learning platform. Concurrent to the Office of Naval Research Grant, we have also secured grants from Marathon Petroleum, McMicking Foundation, and Quest Foundation to provide a **bus scholarship fund**. This fund was a great success, bringing aboard over **1,500 youths for STEM education during its first year**.



"The *Hornet* creates a great reference for my students to understand how the science, math, and engineering they are learning are applied in real life!"

– Nathan Haley, Stockton CA

*Students build catapults to explore technology aboard the ship in the Officers' Wardroom*

# WE ARE RECOGNIZED AS A PROFESSIONAL EDUCATIONAL INSTITUTION



In 2016, the Museum was a dual recipient of the distinguished federal (ONR) **Office of Naval Research Award** for STEM development when we worked with the United States Naval Academy STEM Center to develop and enhance our STEM learning platform.

The Museum is also a **Smithsonian Affiliate**, an honor which required our site and programs being favorably reviewed and evaluated by representatives of the Smithsonian Institution.



**Smithsonian**  
*Affiliate*



*A student explores the STEM theories behind flight*

# WE PRESERVE THE SHIP, A STATE AND NATIONAL HISTORIC LANDMARK, AND TELL HER STORY

**Our Artifacts Collections and Exhibitions Goal is to provide innovative, diverse, and accessible exhibits on the legacy of *Hornet* and her place in world history and relevance today**

The Museum experience provides a unique lens through which visitors (in person and virtually) can examine history and STEM to make connections to today's world. The Museum has unusual accessibility challenges as a historic aircraft carrier, and we have been working toward the digitization of our artifacts for over five years, photographing and processing over 20,000 photographs, documents, and objects. Moving forward, the Museum will be able to utilize these developed digital and physical content, equipment, and programs to further expand accessibility both onboard and online.

## Our Collecting and Exhibition Objectives

- Continue to **digitize the artifacts in our Permanent Collection** to improve accessibility for enthusiasts and researchers and to use a wider variety of artifacts in display that might otherwise be too fragile or difficult to view from afar
- Create new exhibits **reflecting the diverse cultural history** of the Bay Area
- **Increase access** for visitors with a range of learning styles and differences and with physical limitations





CO2  
FIRE EXT  
ANGAR  
DOOR  
CONTROL

A HERITAGE OF EXCELLENCE  
USS

HORNET  
PLUS  
THREE

North American Aviation  
APOLLO BLOCK 1 COMMAND MODULE  
CM 011

AD-202 MISSISSAUGA CHRYSLER

MC-107B RECONSTRUCTION

CHECK IT OUT!  
Check out the new  
Apollo Block 1  
Command Module  
on display in the  
Museum's Space  
Exhibit. This is  
the only one of its  
kind in the world.  
It was used for  
testing the Apollo  
14 mission.

The Museum's Space exhibit includes a real Apollo test capsule, a Gemini boilerplate, and the Mobile Quarantine Facility from Apollo 14



*Our Uniform storage*

## **Our Collecting Goals**

We are proud to own a robust collection with some 20,000 artifacts, but consequently have nearly full collection storage spaces. Because of this, we are limited in what new objects we are able to accept. Typically, we focus our collecting on objects that fall under the following subject matters:

1. **Items related to identified crewmen** during their time aboard USS *Hornet*.
2. **Items related to Hornet's sister ships:** USS *Essex*, *Yorktown*, *Intrepid*, *Franklin*, *Ticonderoga*, *Randolph*, *Lexington*, *Bunker Hill*, *Wasp*, *Hancock*, *Bennington*, *Boxer*, *Bon Homme Richard*, *Leyte*, *Kearsarge*, *Oriskany*, *Antietam*, *Princeton*, *Shangri-La*, *Lake Champlain*, *Tarawa*, *Valley Forge*, and *Philippine Sea*.
3. Exceptional items produced by the U.S. Navy or used by sailors between WWII and 1970: USS *Hornet's* commissioned years.
4. **Items related to the NASA Apollo 11 and Apollo 12** space programs.

# WE ARE A RESOURCE TO VETERANS

**Our goal as a Veterans' Space is to provide a place for veterans to feel accepted, understood, and valued**

We host military ceremonies (e.g., retirements, promotions) at cost and observe all the major military holidays with veteran focused events, such as speakers, exhibits, and commemorations. On these holidays (e.g., Memorial Day) admission is free for veterans.

## Our Objectives as a Veterans' Space

- Establish a PTS Resource Center on the Museum's website
- Increase the number of veteran volunteers
- Increase the number of non-holiday special events for veterans (e.g., presentations, workshops, and wellness fairs)



*Our Women In Space & Aviation panel in January 2019, part of our Apollo 50<sup>th</sup> Anniversary programming, was a big hit! Moderated by Sarah Cruddas, guests included Catherine Keys, Wendy L. Holforty, Dr. Yvonne Cagle, and Tina Silva.*



*Our Veterans Day event in 2019 featured guests such as WWII veteran Mickey Ganitch, the Flying Tigers Flight Attendants, the Walking Ghosts of Black History, and Fayeth Gardens and included the Hornet Band, BSA Troop #152 to provide color guard, and a wreath toss*



*USS* **HORNET**  
**Sea, Air & Space Museum**

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For questions about the Museum, our mission, upcoming events, or more, please contact [outreach@uss-hornet.org](mailto:outreach@uss-hornet.org).