

FROST  
SCIENCE



Celebrating  
American  
Innovation



## Project Overview

Here we celebrate 250 American scientists, innovators, and engineers in the fields of marine science, paleontology and natural history, astronomy, and flight through the following:

- ★ **Poster exhibit**
- ★ Companion guide
- ★ Lesson plans for grades 6-12
- ★ Planetarium show (3-5 minutes)



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## Poster Specs

- ★ Total number of posters: 36 (24x36)
- ★ Total sq. ft.: Approximately 3,440 (sizes vary)



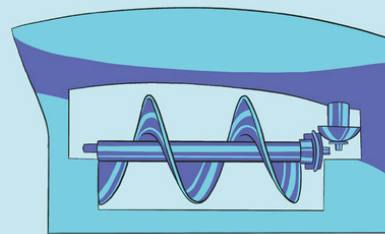
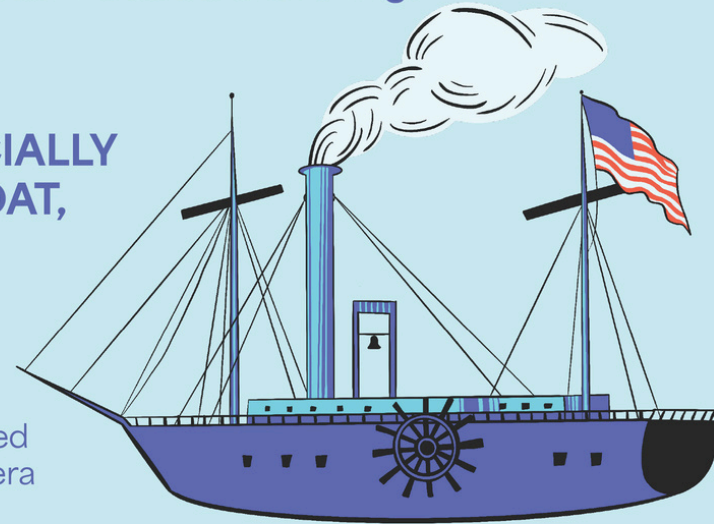
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# Powered Vessels

American innovation has paved the path of efficient and powerful ocean-based traveling.

## 1807 - FIRST COMMERCIALY SUCCESSFUL STEAMBOAT, ROBERT FULTON

Robert Fulton designed and invented the first commercially successful steamboat. Although this steamboat would only traveled a short distance, it launched the era of powered watercraft.



## 1843 - FIRST PRACTICAL SCREW PROPELLER, JOHN ERICSSON

John Ericsson, a Swedish American inventor and mechanical engineer, developed one of the first practical screw propellers and oversaw the construction of the U.S. Navy's first screw-propelled ship, launched in 1843. The adoption of the screw propeller marked a major advance in naval engineering. This technology is still used as the primary form of high-speed marine propulsion today.

## CONNECTING CULTURES: Ancient Polynesian Navigation

People have been sailing the ocean for thousands of years, using wind and currents to reach lands near and far.

The ancient Polynesians navigated the vast Pacific Ocean using the stars and signs from the ocean and sky in canoes made of wood. These traditional wayfinding methods have mostly disappeared with the emergence of Western technology, though they are still used by navigators in Pacific Islands nations.

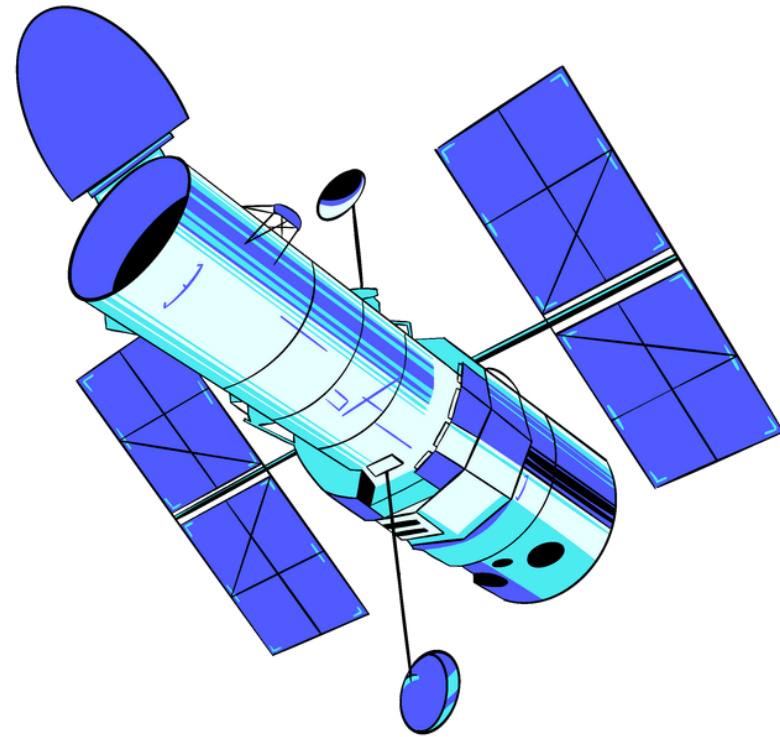
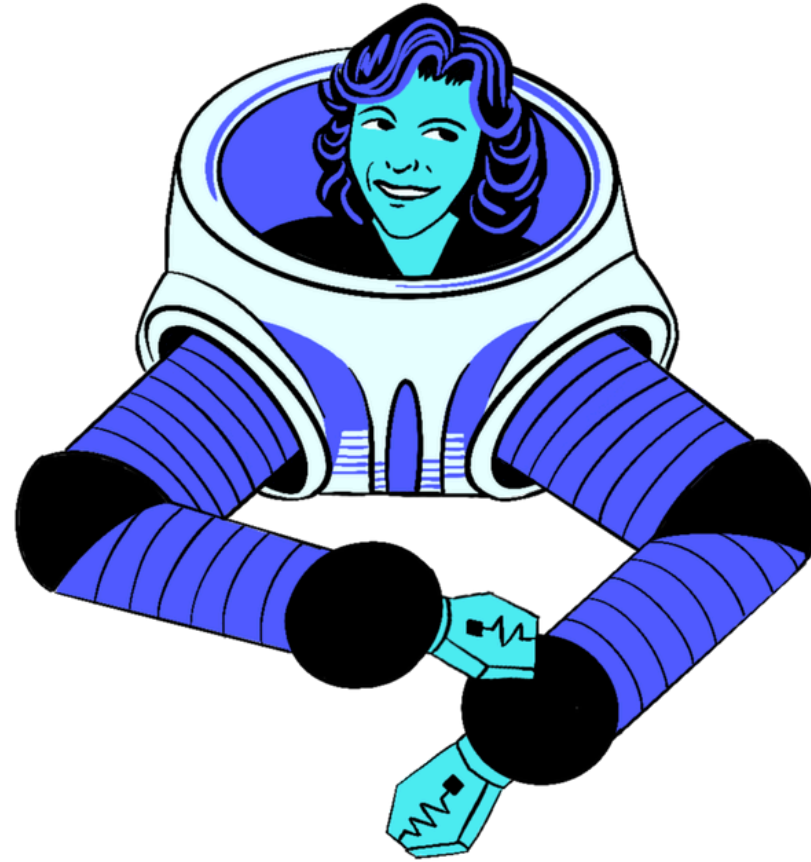
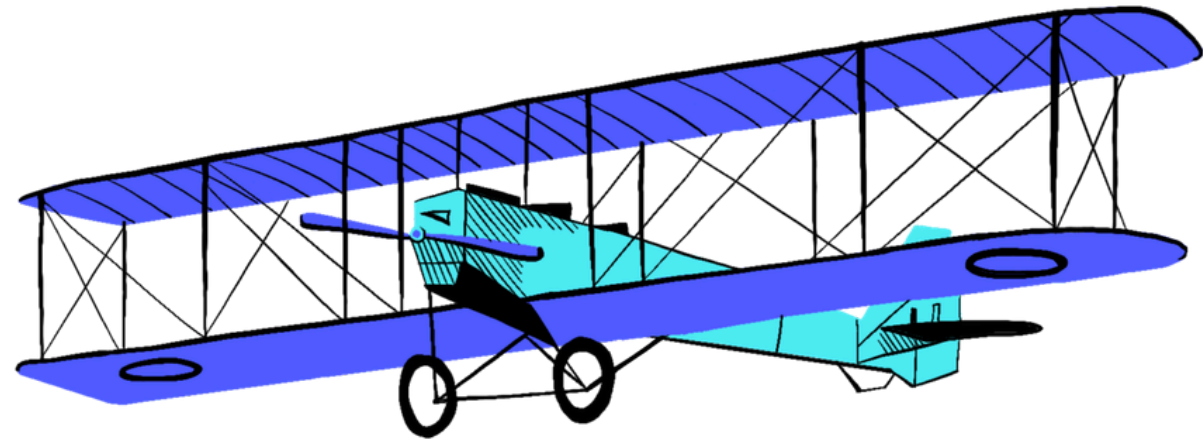


# Sample Poster



# Celebrating American Innovation

# Sample Illustrations



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# Disciplines and Themes

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FROST   Celebrating  
SCIENCE AMERICA 250 American  
Innovation



8 posters

Approx. 220 sq. ft.

# Marine Science

## Breaking the Surface and Connecting Cultures

From early navigation, mapping, and seafaring technologies to modern tools like Scuba, submersibles, and remotely operated vehicles, American innovation has pushed the boundaries of ocean exploration. These technologies can be traced to foundational exploration methods developed by cultures around the world. Here, we highlight the connections between American innovation and the rich, global history of ocean exploration.

### *Sections/Themes*

- ★ Powered Vessels
- ★ Mapping Oceans
- ★ Exploring the Deep
- ★ Ocean Stewardship and Protection



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8 posters  
64 sq. ft.

# Astronomy

## Earthbound Observations to Interstellar Exploration

American space exploration began with observing the cosmos from Earth. Tools such as radio astronomy observatories, telescopes, and planetariums have allowed us to learn about the universe safely from the ground. American ingenuity has also driven major advances in how we explore space by taking humankind to the Moon and the International Space Station, sending rovers to far away planets, and even taking photos of black holes. Here, we explore the individuals who contributed to space exploration, with emphasis on innovative tools used from Earth and beyond.

### *Sections/Themes*

- ★ Observing the universe from Earth
- ★ Leaving Earth
- ★ Public engagement with science



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8 posters  
168 sq. ft.

# Flight

## What it Takes to be Airborne

How did we become airborne, and how did flight change the way we experience the world? From the laws of physics to bold inventions and creative problem-solving, humanity's path to flight transformed how we travel, communicate, and connect. Driven in part by the ingenuity and engineering feats of American scientists, this journey led to a more global and connected society.

### *Sections/Themes*

- ★ Understanding motion and forces
- ★ Engineering the sky
- ★ Making flight a global system



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8 posters  
120 sq. ft.

# Human Health

## Collaboration in Healthcare

In healthcare, human connection matters at every level: from the relationship between patients and doctors to the collaborative work behind new treatments, medical equipment, and discoveries. Across American history, scientists working together have developed vaccines, improved blood transfusions and transplants, and transformed lives.

### *Sections/Themes*

- ★ Patient–Provider Partnerships
- ★ Peer Connection & Mutual Support
- ★ Community Voice & Experience



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4 posters  
112 sq. ft.

# Paleontology

## The Puzzle of Earth's Past

From uncovering new fossils to developing technologies that deepen our understanding of the past, the story of natural history is one of exploration and collaboration across centuries. American innovation has helped identify new frontiers in natural history, paving the way for new ways of seeing, studying, and rediscovering our planet's past.

### *Sections/Themes*

- ★ Breaking Ground on Discovery
- ★ Imagining Earth's past
- ★ How emerging technologies can help us understand past discoveries



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# Logistics



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# How to Credit Frost Science

We will provide an introduction poster which provides an overview of the exhibit and credits Frost Science.

*Option 1:*

Place the introduction poster at least once alongside poster exhibit.

*Option 2:*

Include the below copy at least once alongside the poster exhibit.

★ *This exhibit was curated and designed by the Phillip and Patricia Frost Museum of Science in Miami, Florida ([www.frostscience.org](http://www.frostscience.org)).*



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# Packages Available

## Option 1: Posters as-is

All posters as is along with additional assets. This includes:

- ★ 1 Introduction poster (24x36)
- ★ 36 content posters (24x36)
- ★ 5 background illustrations (Various sizes)
- ★ Suite of logos and illustrations

## Option 2: Graphics and Assets to Build-your-own

All poster exhibit assets for teams to use however. Organizations may resize or edit assets as needed. This includes:

- ★ 1 Introduction poster in .ai working file format
- ★ 36 content posters in .ai working file format
- ★ 5 background illustrations in .ai working file format
- ★ Suite of illustrations and logos (various formats, .eps, .png)



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