TIME & NAVIGATION



A major new exhibition at the Smithsonian's National Air and Space Museum



National Visibility





- World's showcase of aerospace technology
- > 7 million visitors per year
- ➤ Up to 11 million web site virtual visitors per year
- > Rare opportunity to create a new permanent 5,000 square-foot exhibit
- Unique collaboration between two Smithsonian museums:

National Museum of American History and National Air and Space Museum



Exhibition Highlights

Unique artifacts and activities will demonstrate four major themes:

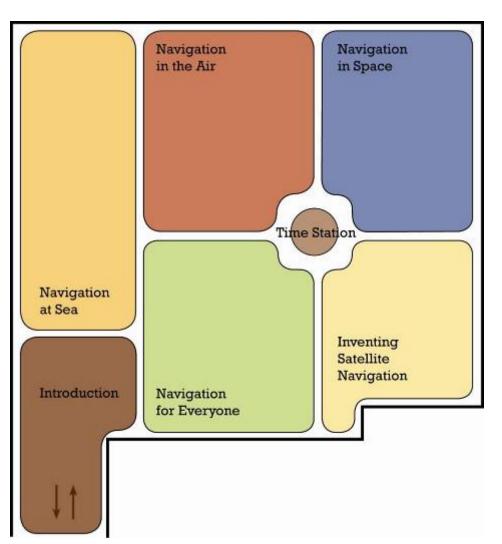
- If you want to know where you are, you need an accurate clock.
- Exploring new environments—sea, air, and space—has driven changes in how we navigate.
- For centuries, nations have invested enormous resources to determine time and place.
- Precise timekeeping and navigation change our view of the world.

Exhibit highlights include:

- A walk-through 19th-century sailing vessel
- A submarine navigation center
- Navigation satellites
- A historic aircraft
- A robotic vehicle



Exhibition Plan



Introduction

If you want to know where you are, you need an accurate clock.

Navigation at Sea

Learn how mariners were lost at sea without clocks.

Navigation in the Air

See how aviators adapted marine techniques and took to the skies.

Navigation in Space

Meet the navigators who guide spacecraft across the solar system.

Inventing Satellite Navigation

Encounter the teams who put clocks in satellites to locate points on Earth.

Navigation for Everyone

Discover the role of time and navigation in your life.







How did you find your way here today? How do we see our place in the world?

If you want to know where you are, you need an accurate clock.



Navigation at Sea



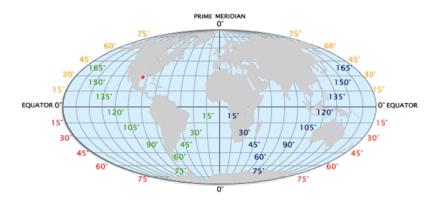


Learn how mariners were lost at sea without clocks.



Navigation at Sea

- > Where in the World?
- ➤ Navigating Without a Clock
- > The Longitude Problem
- > America Goes to Sea







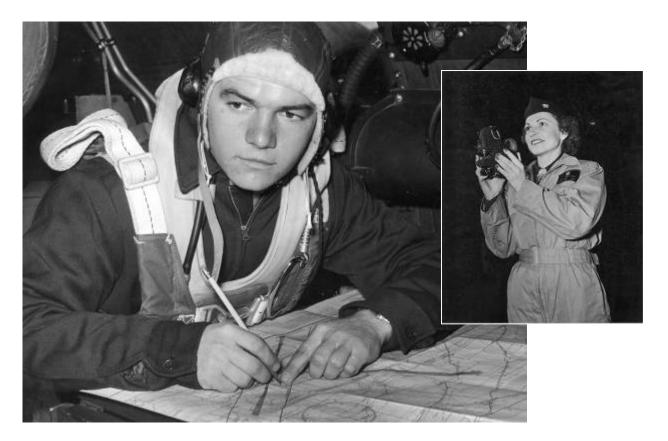


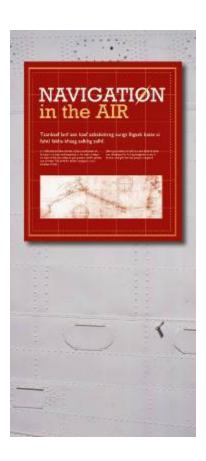


Learn how mariners were lost at sea without clocks.



Navigation in the Air





See aviators overcome the challenges of navigating in the air.



Navigation in the Air

- Challenges of Air Navigation
- Learning to Navigate in the Air
- The World at War







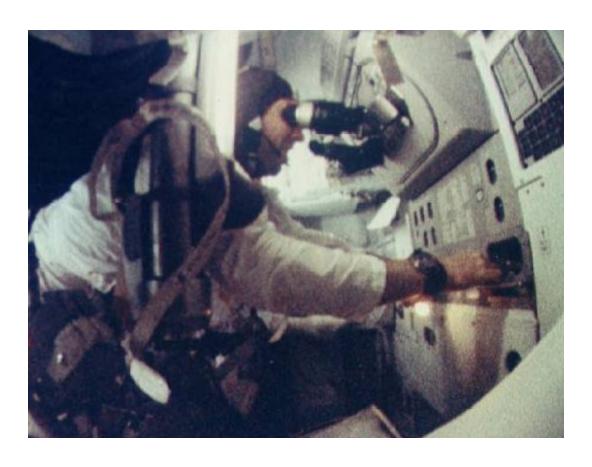




See aviators overcome the challenges of navigating in the air.



Navigation in Space





Meet the navigators who guide spacecraft across the solar system.



Navigation in Space

- Inventing Space Exploration
- ➤ A Radio Network for Space Navigation









Meet the navigators who guide spacecraft across the solar system.



Inventing Satellite Navigation





Encounter the teams who put clocks in satellites to locate points on the Earth.



Inventing Satellite Navigation

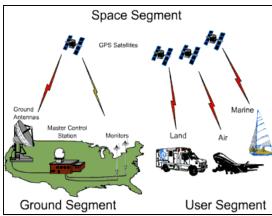
- ➤ Early Satellite Navigation
- Inventing GPS
- GPS for the Battlefield









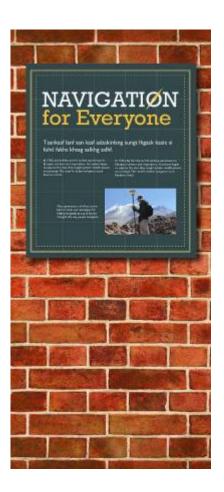


Encounter the teams who put clocks in satellites to locate points on the Earth.



Navigation for Everyone





Discover the role of time and navigation in your life.



Navigation for Everyone

- ➤ New Frontiers
- > From Field to Table
- Global Opportunities,Challenging Questions
- A Changed World









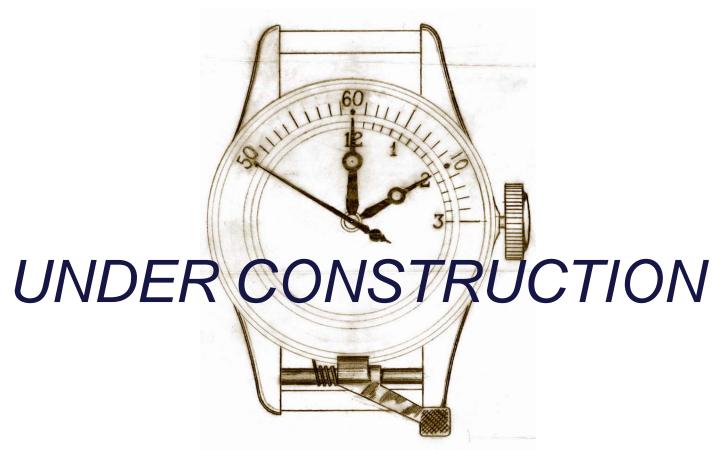




Discover the role of time and navigation in your life.







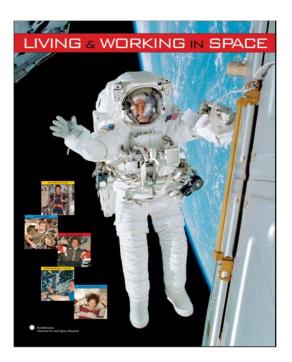
Hear key figures discuss the central role of time in navigation.



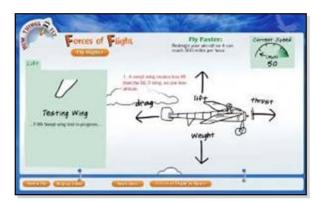
Educational Outreach



Family Day events are free and open to the public.



Classroom resources that promote STEM education.



Online exhibition activities on the websites of both museums.

Take content beyond the gallery walls to enrich the experience.



Communication

Media Outreach

- Advance tour for long-lead media
- Press kit (to include sponsor statements)
- Press event (just before public opening)

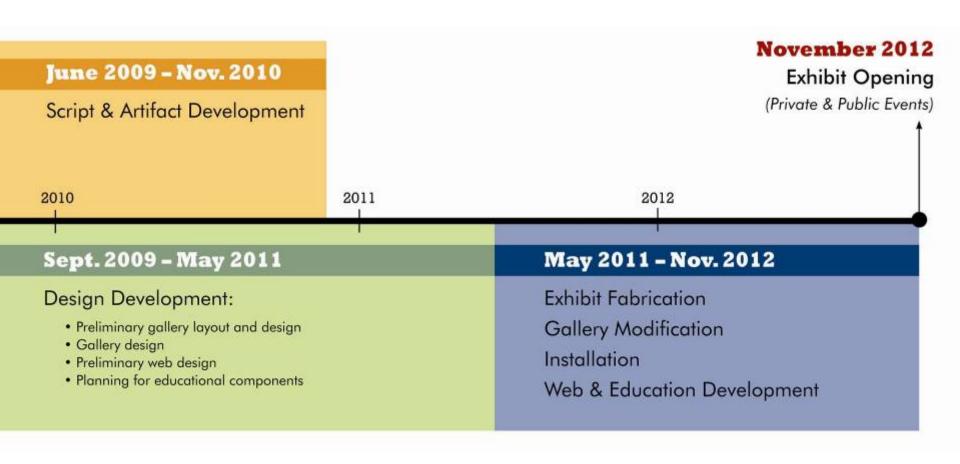
Marketing Plans

- Advertise using new electronic methods
- Reinforce with traditional placements (Washington Post, e-newsletter, etc.)





Schedule







Northrop Grumman

ITT Corporation

Honeywell

National Geospatial-Intelligence Agency

U.S. Department of Transportation

Magellan

National Coordination Office for Space-Based Positioning, Navigation and Timing

Rockwell Collins

Institute of Navigation