



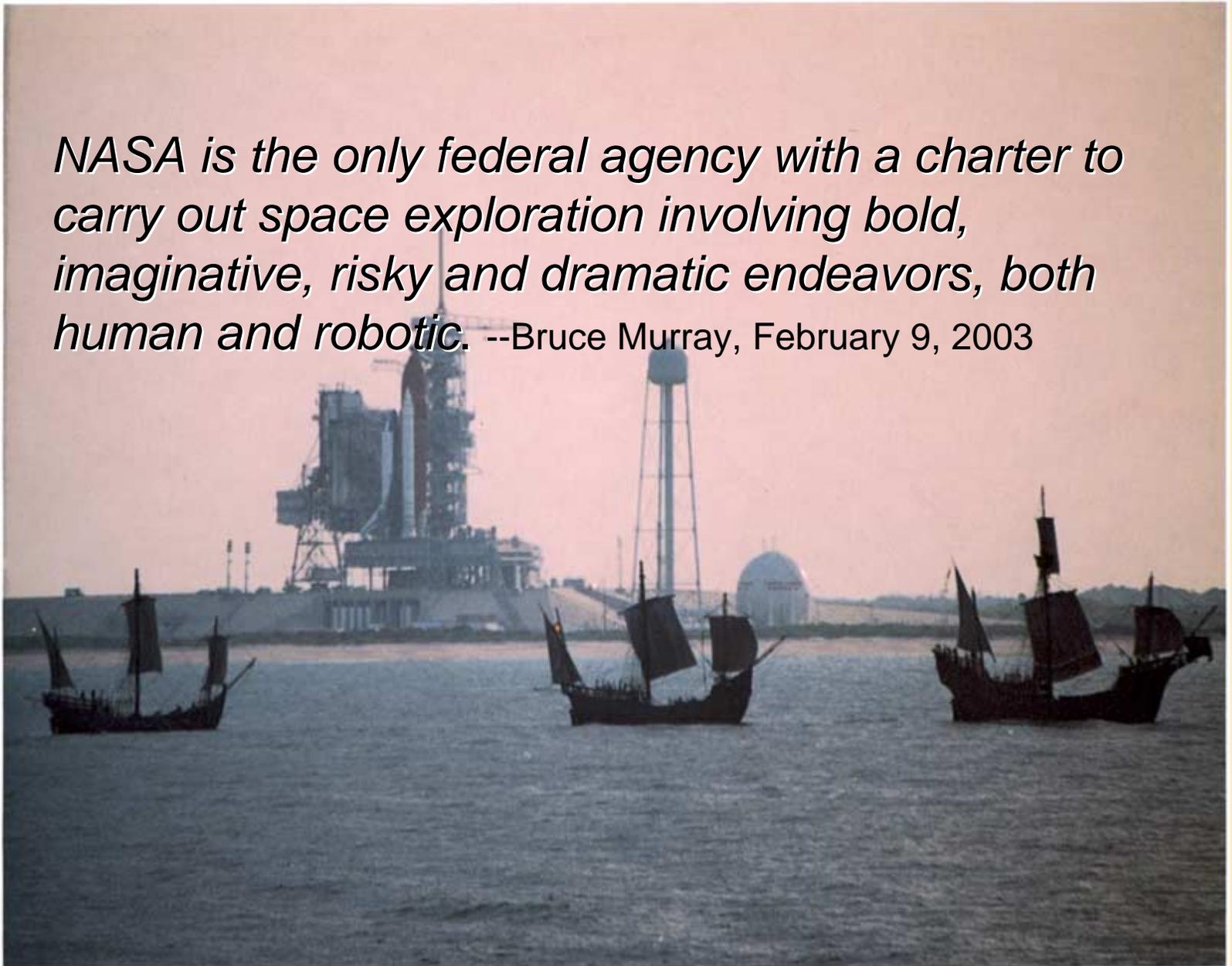
# NASA

## Linking the Past to the Future

**Dr. Shannon W. Lucid**  
**NASA Chief Scientist**



*NASA is the only federal agency with a charter to carry out space exploration involving bold, imaginative, risky and dramatic endeavors, both human and robotic.* --Bruce Murray, February 9, 2003



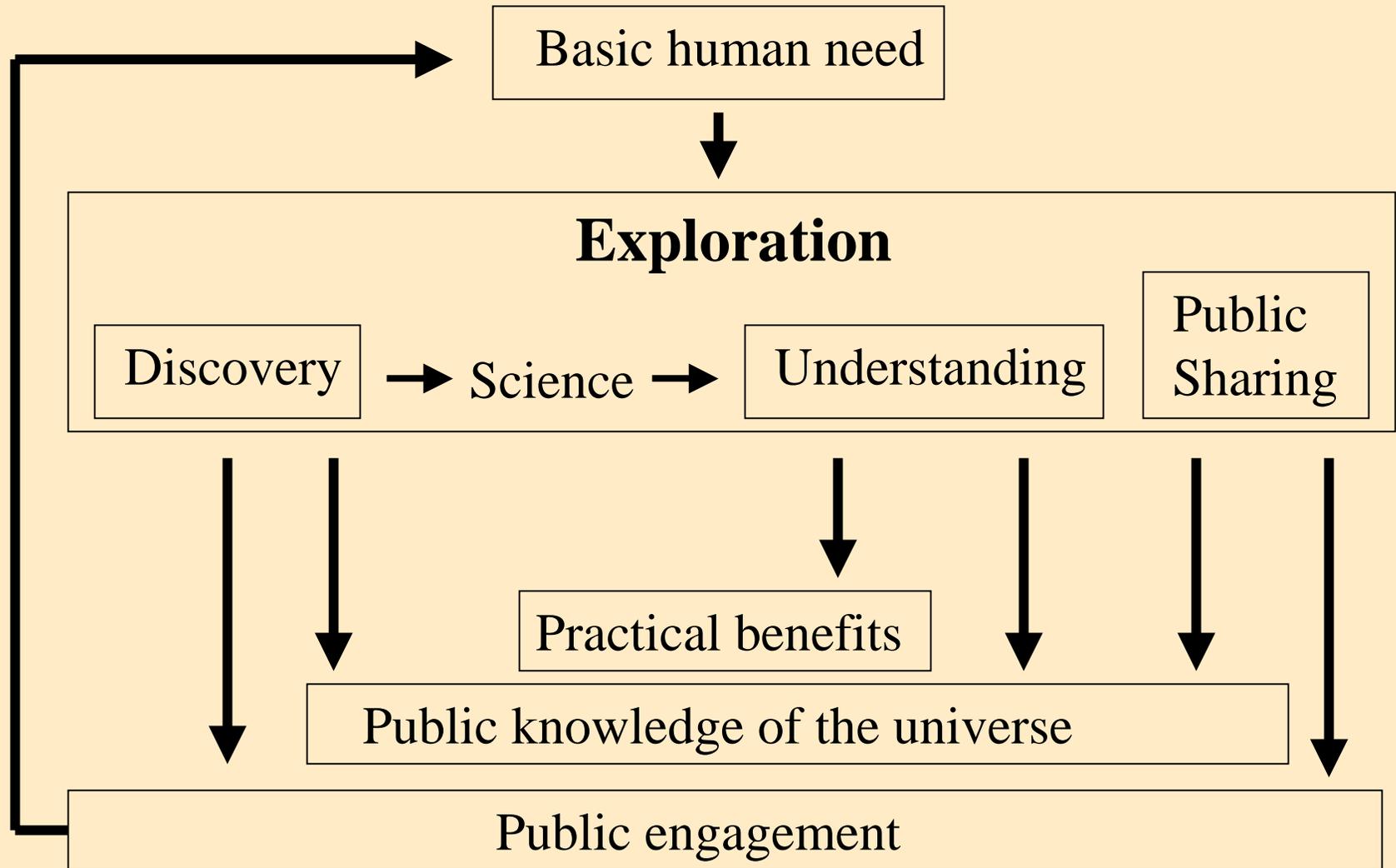


“This cause of exploration and discovery is not an option we choose; it is a desire written in the human heart” - George W. Bush, Feb. 4, 2003





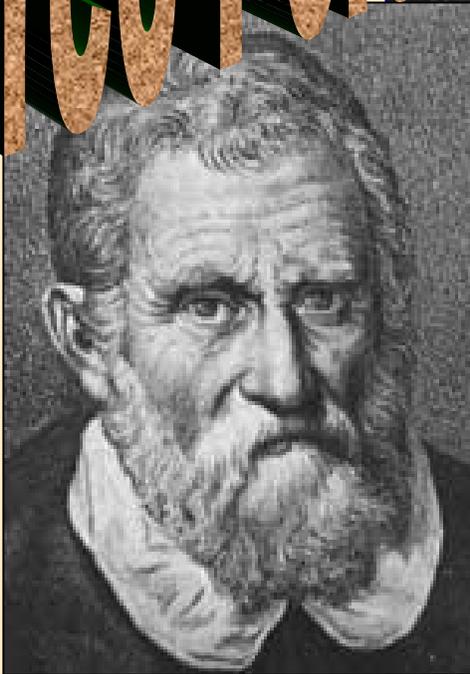
# Exploration Schematic





# Human Legacy of Exploration

## Marco Polo's Travels



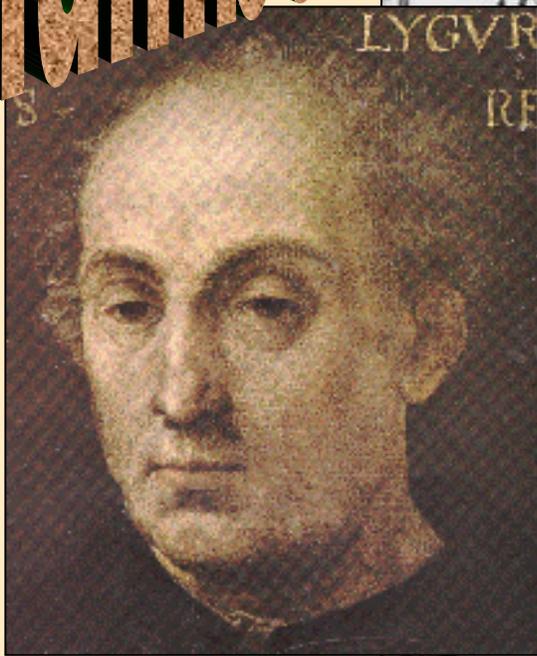
Photograph by Michael Yamashita  
© 2001 National Geographic Society. All rights reserved.

The Adventures of Marco Polo  
National Geographic magazine, May 2001



# Human Legacy of Exploration

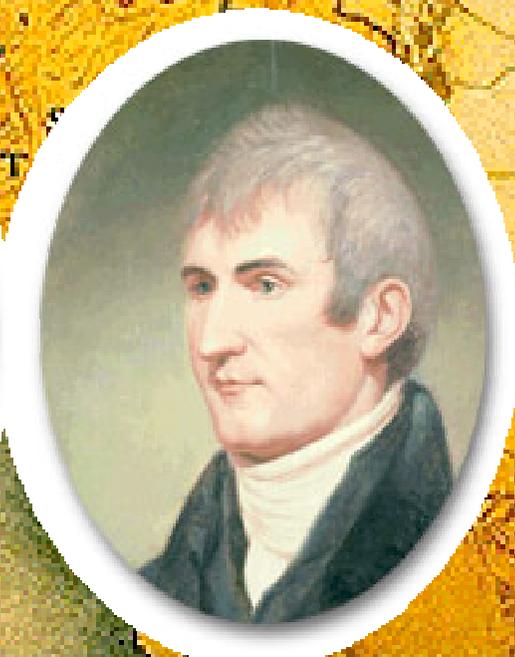
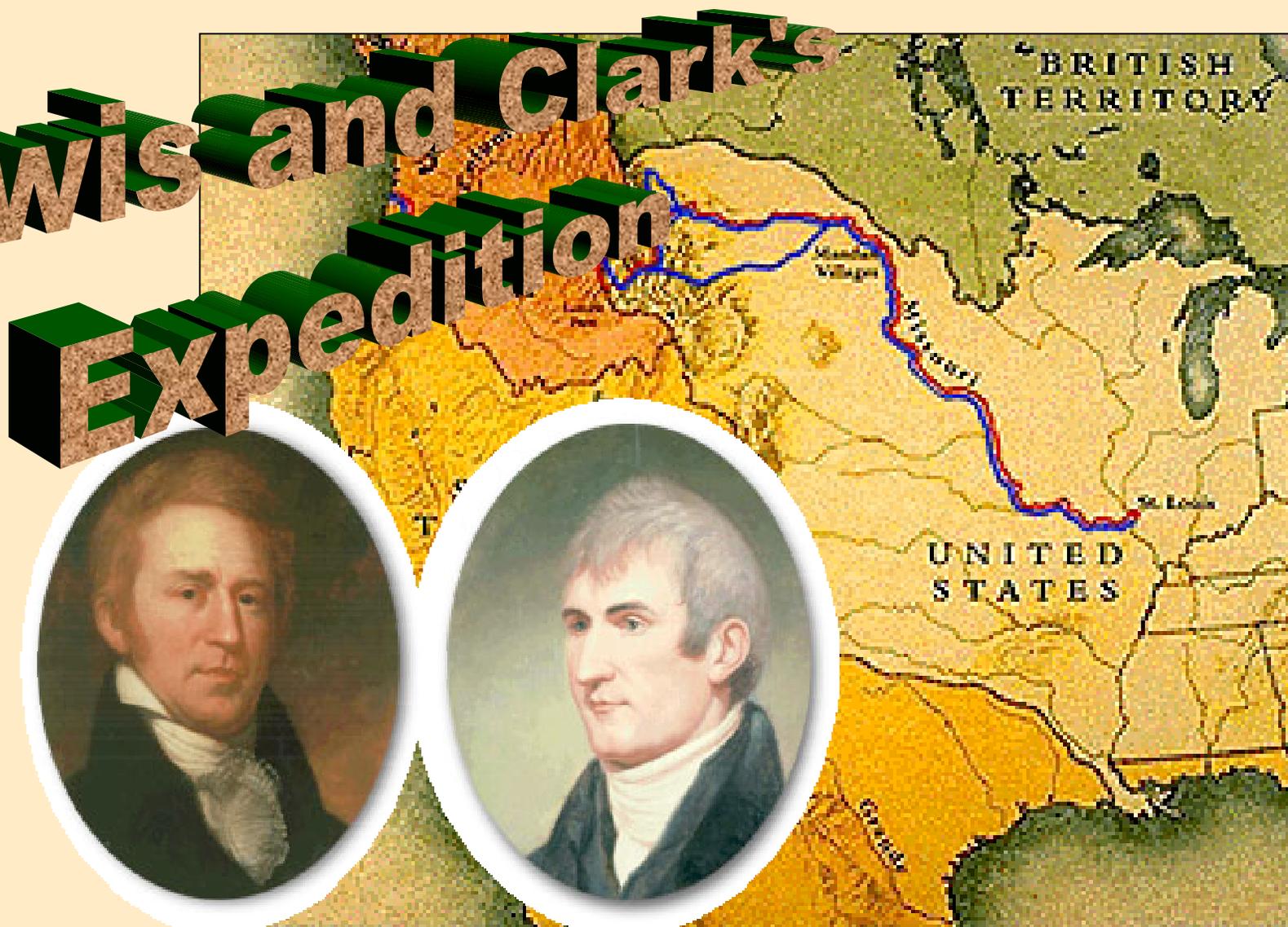
## Columbus' Voyages





# Human Legacy of Exploration

## Lewis and Clark's Expedition



# National Aeronautics and Space Administration

**Vision** Our mandate is:

- To improve life here,
- To extend life to there,
- To find life beyond

**Mission**

- To understand and protect our home planet
  - To explore the Universe and search for life
  - To inspire the next generation of explorers
- ...as only NASA can





# Achieving the NASA Mission

## To Understand and Protect our Home Planet



### GOAL 1



Understand the Earth system and apply Earth system science to improve prediction of climate, weather, and natural hazards.

### GOAL 2



Enable a safer, more secure, efficient, and environmentally friendly air transportation system.

### GOAL 3



Create a more secure world and improve the quality of life by investing in technologies and collaborating with other agencies, industry, and academia.



# Achieving the NASA Mission

## To Explore the Universe and Search For Life

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### GOAL 4



Explore the fundamental principles of physics, chemistry, and biology through research in the unique natural laboratory of space.

### GOAL 5



Explore the solar system and the universe beyond, understand the origin and evolution of life, and search for evidence of life elsewhere.



# Achieving the NASA Mission

## To Inspire the Next Generation of Explorers



### GOAL 6



Inspire and motivate students to pursue careers in science, technology, engineering, and mathematics.

### GOAL 7



Engage the public in shaping and sharing the experience of exploration and discovery.

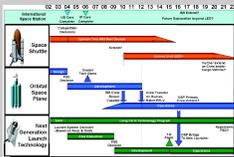


# Achieving the NASA Mission

## Space Flight Capabilities: Goals to enable the Mission



### GOAL 8



Ensure the provision of space access and improve it by increasing safety, reliability, and affordability.

### GOAL 9



Extend the duration and boundaries of human space flight to create new opportunities for exploration and discovery.

### GOAL 10



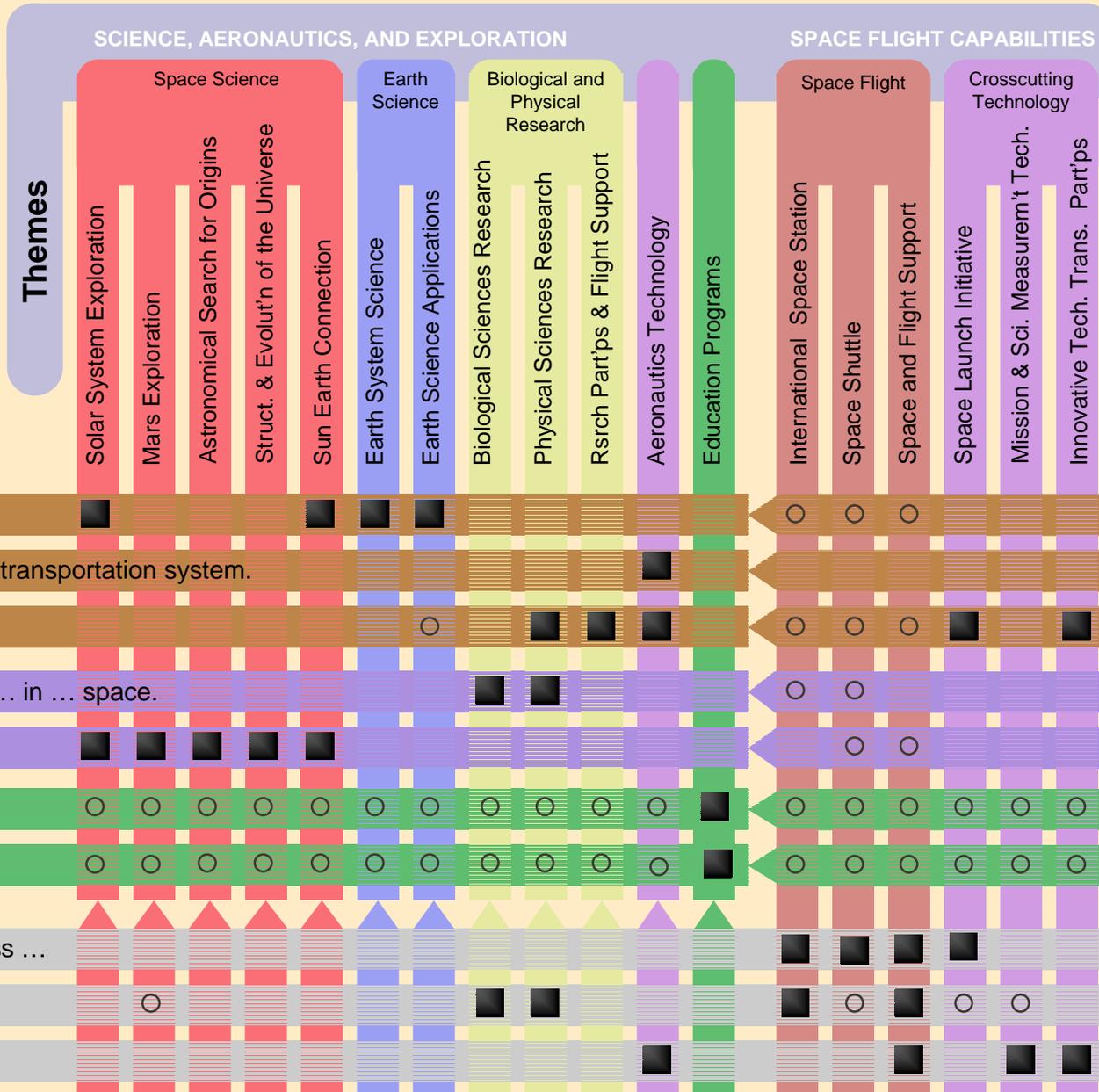
Enable revolutionary capabilities through new technology.



# The Strategic Organization

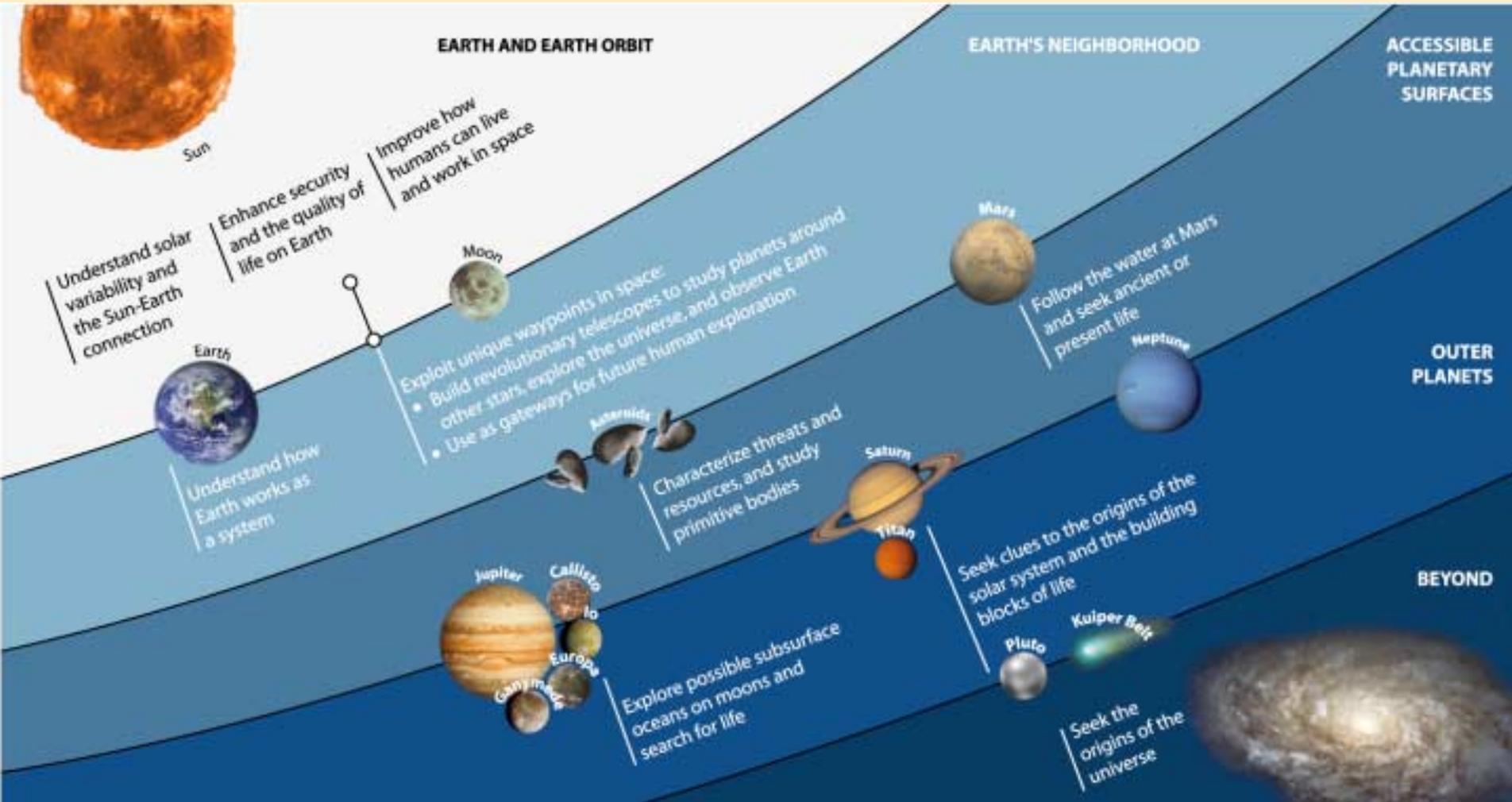
**ONE NASA**

Primary contribution to a Goal  
 Supporting contribution to a Goal





# Robust Strategy for Scientific Discovery: Stepping Stones to Human and Robotic Exploration





# The International Space Station

