

# JPL and Our Spacecraft

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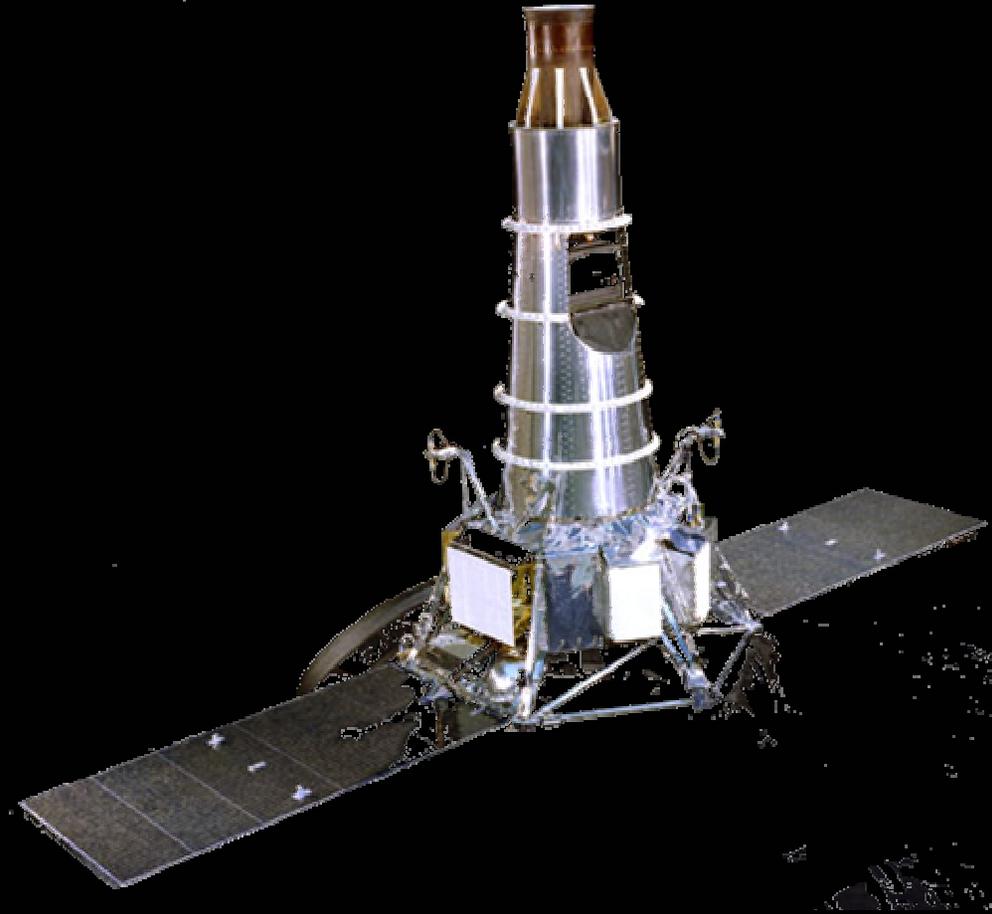
# Overview

- Select Planetary Missions
    - Ranger & Pioneer
    - Voyager & Galileo
    - Cassini
    - DS1
  - Select Mars Missions
    - Pathfinder & Sojourner
    - Mars Surveyor and DS2
    - Mars Exploration Rovers
- 

# Early JPL Spacecraft (1960's)

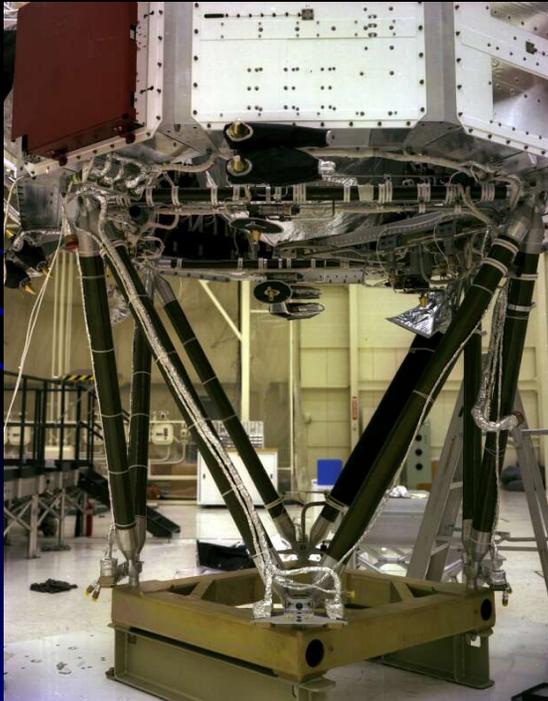
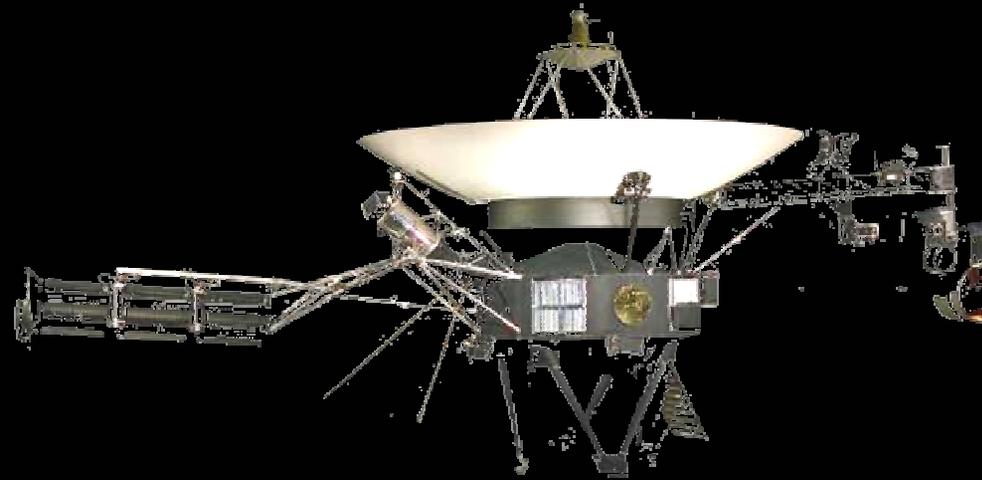


Mariner Series



Ranger Series

# Early JPL Spacecraft (1970's)



Voyager

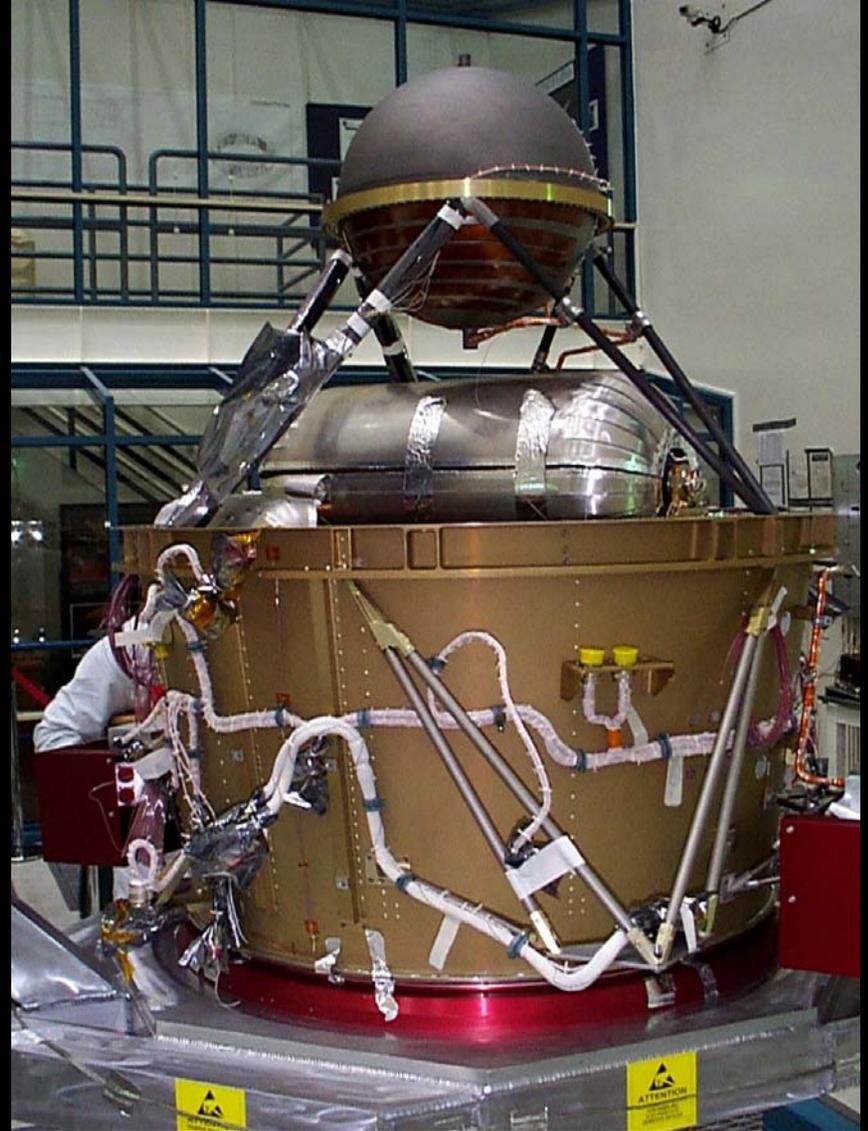


Galileo

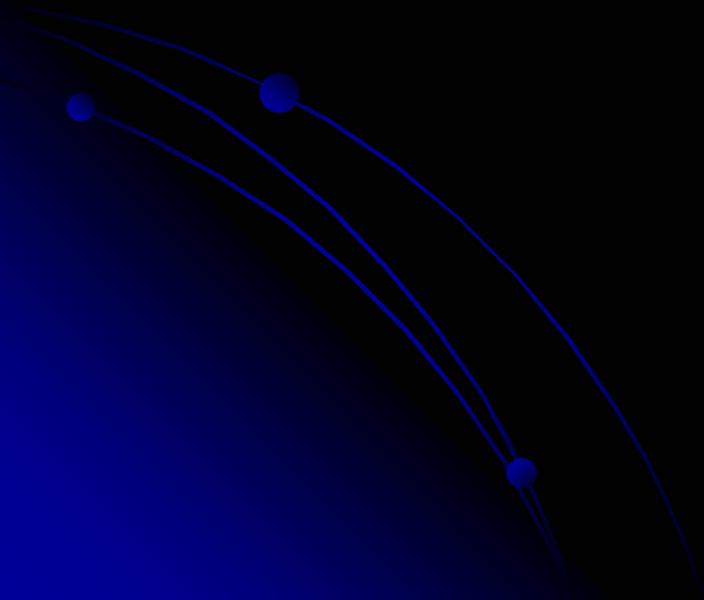
# Cassini (1990's)

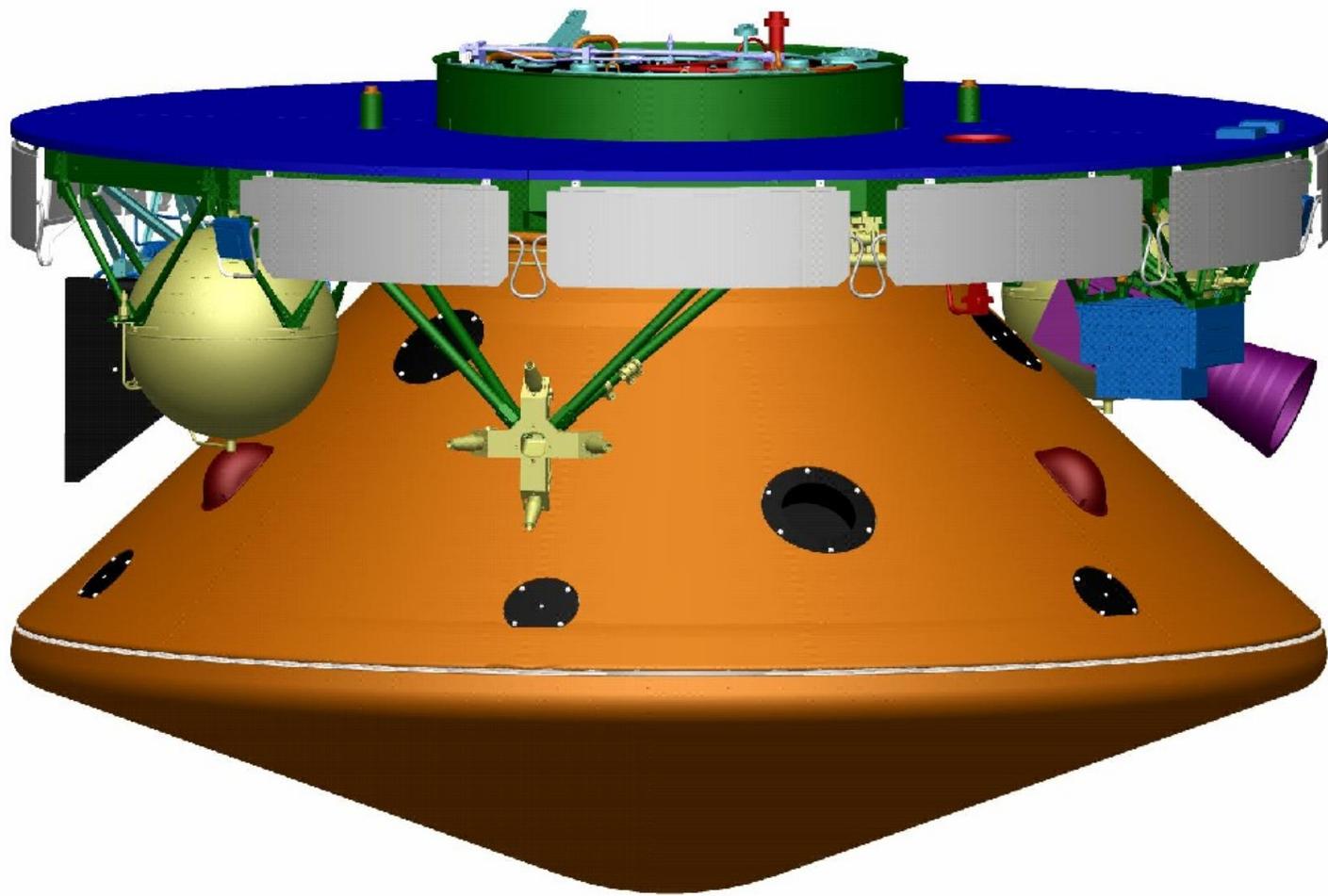


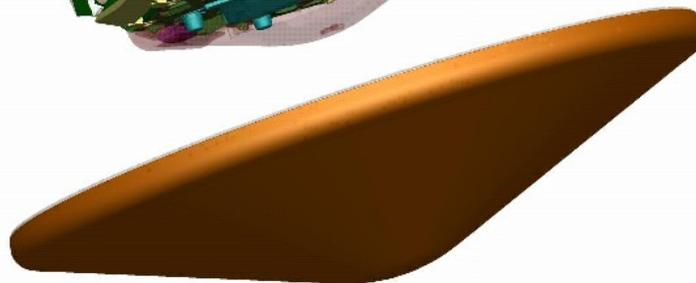
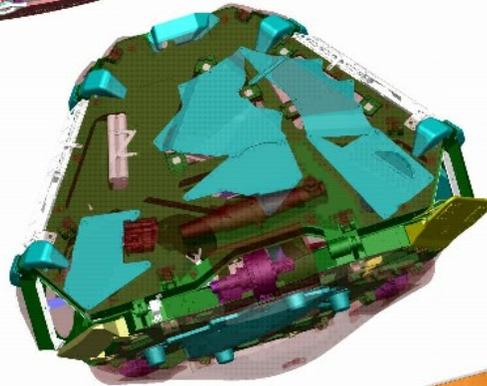
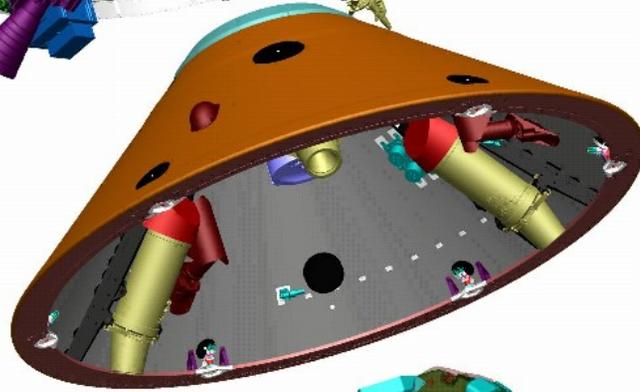
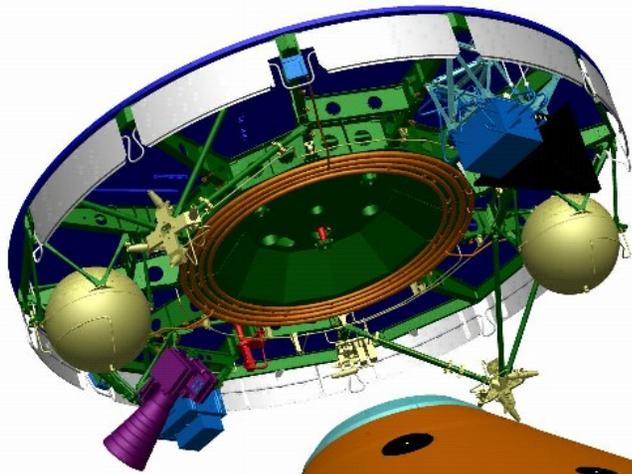
# Deep Space 1 Spacecraft



# Mars Vehicles



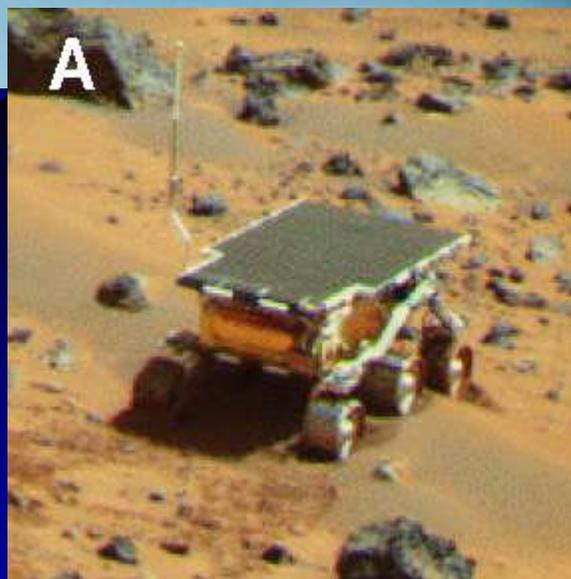
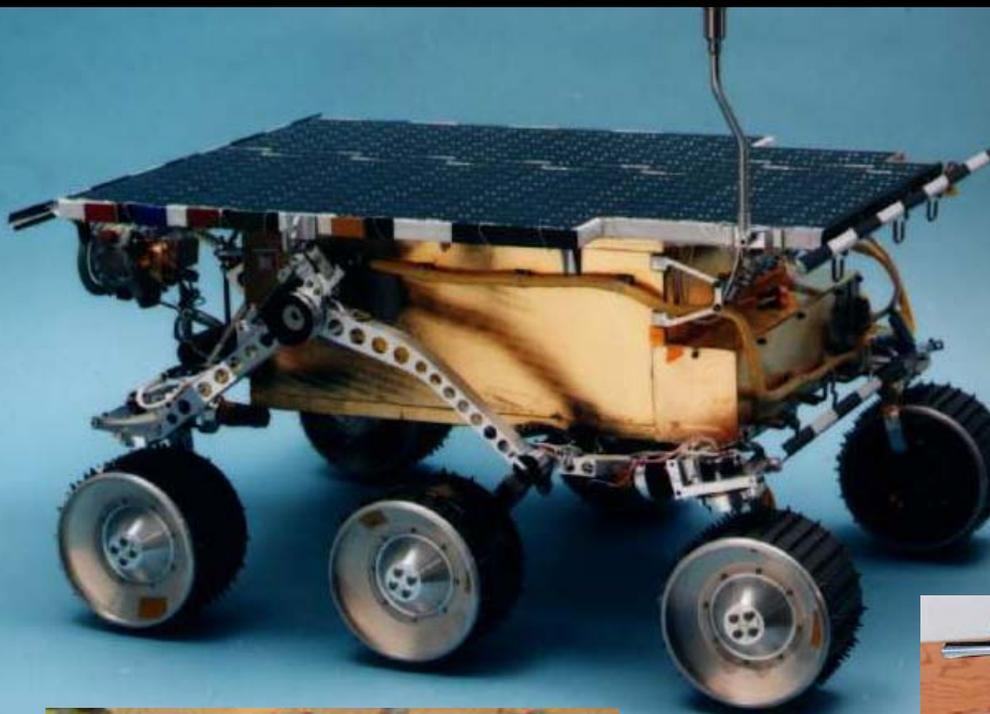




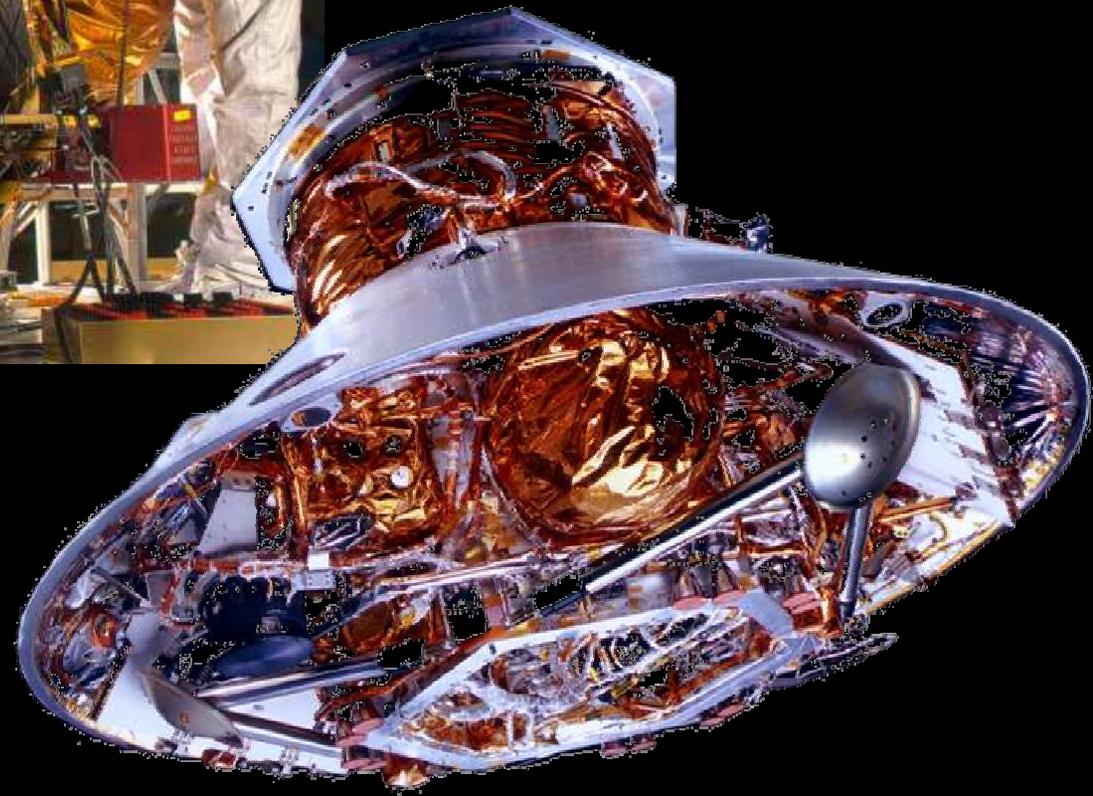
# Mars Pathfinder



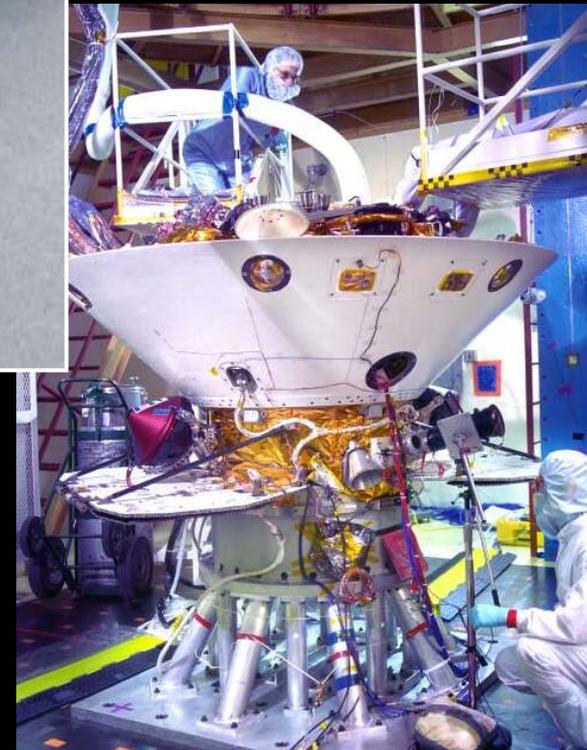
# Sojourner Rover

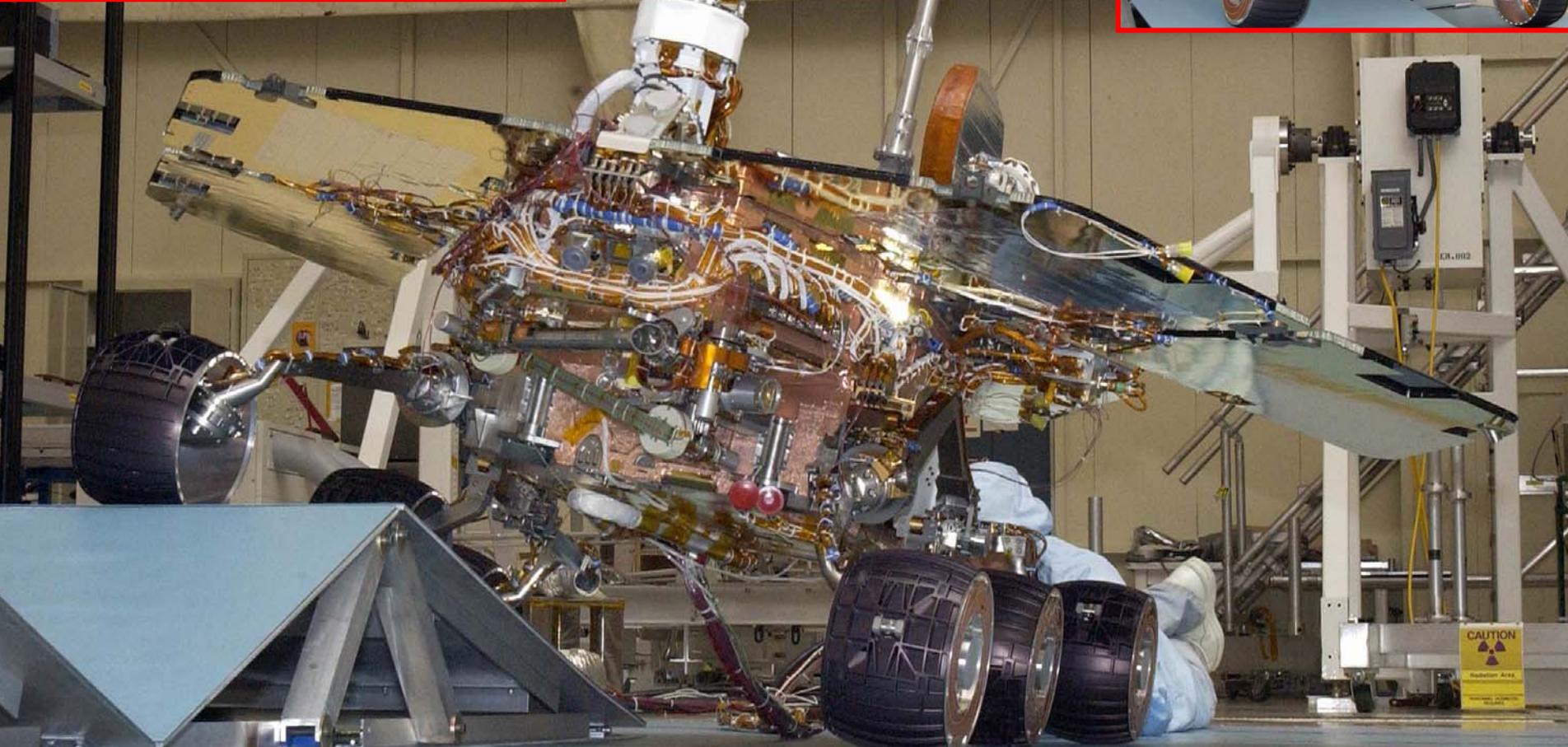
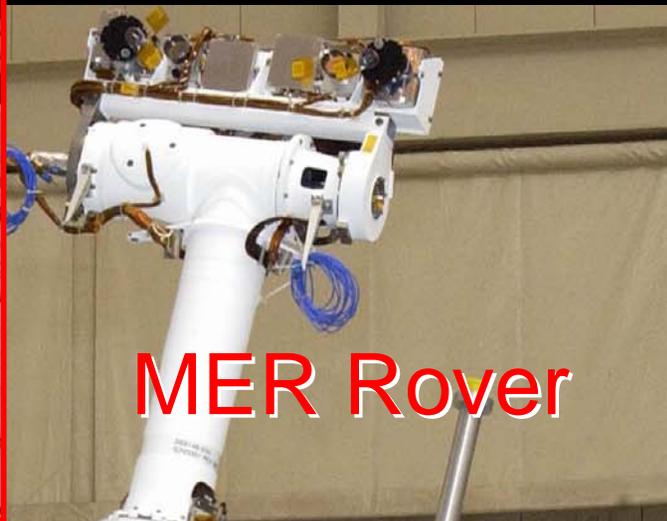


# Mars Surveyor Orbiter and lander

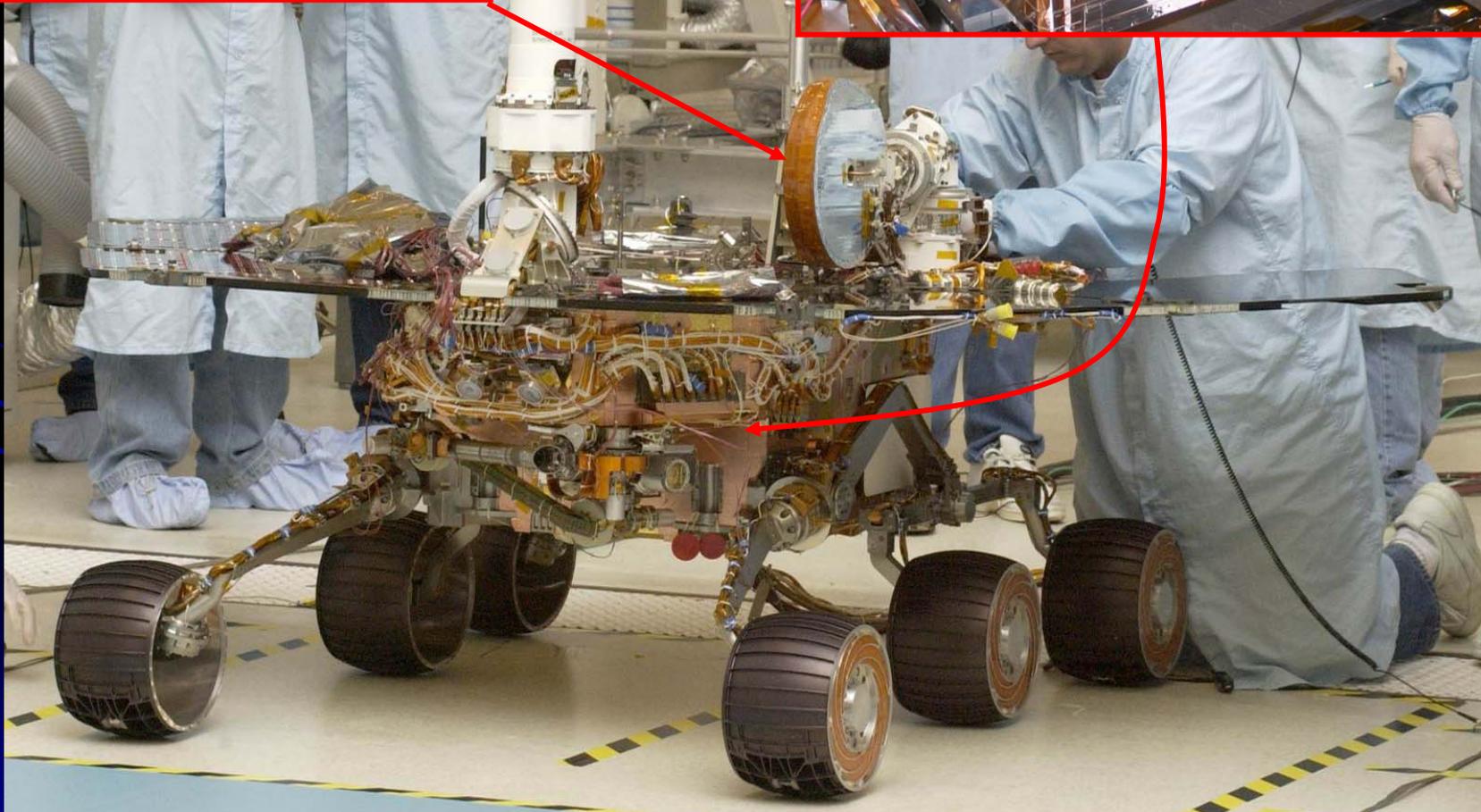
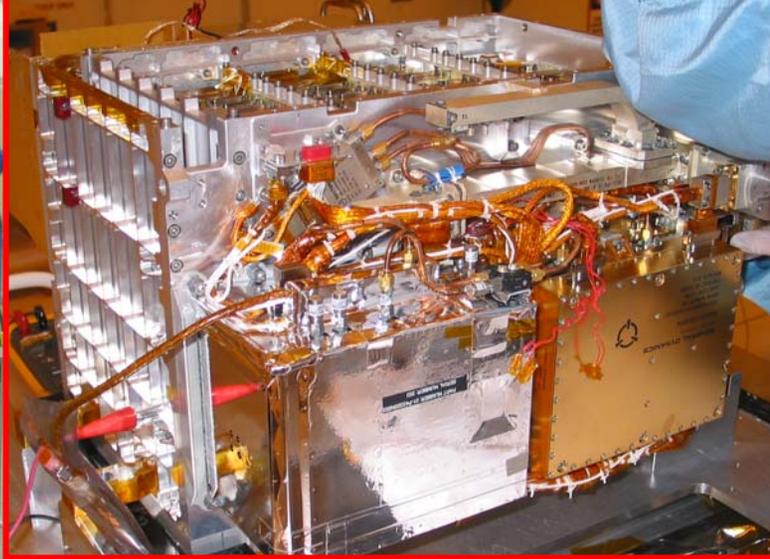
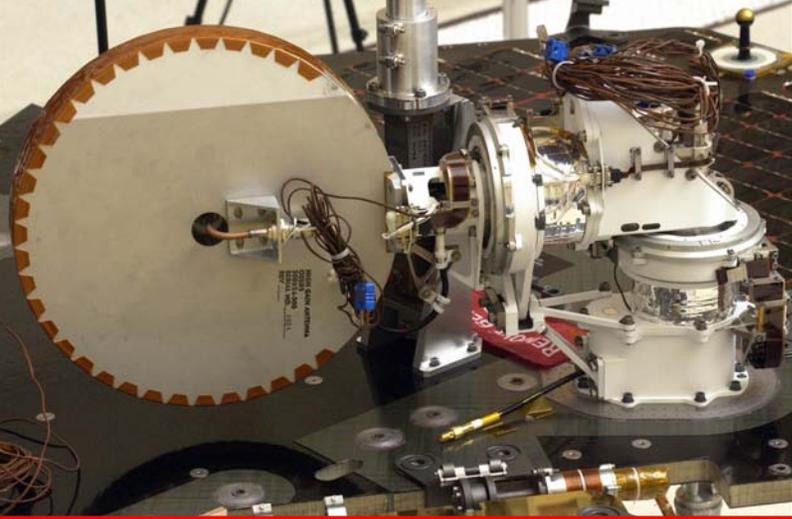


# Deep Space 2 Mars Micro Probe

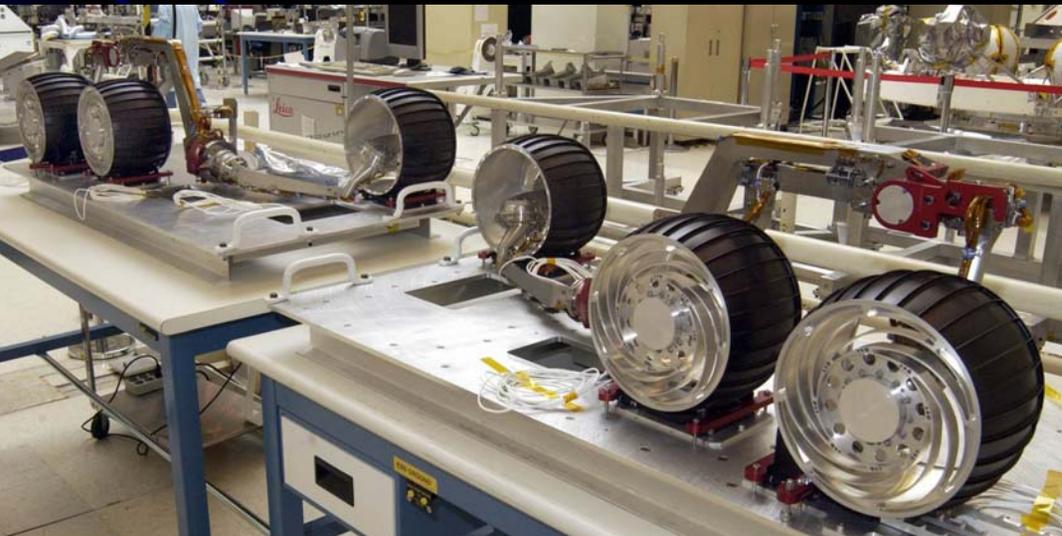
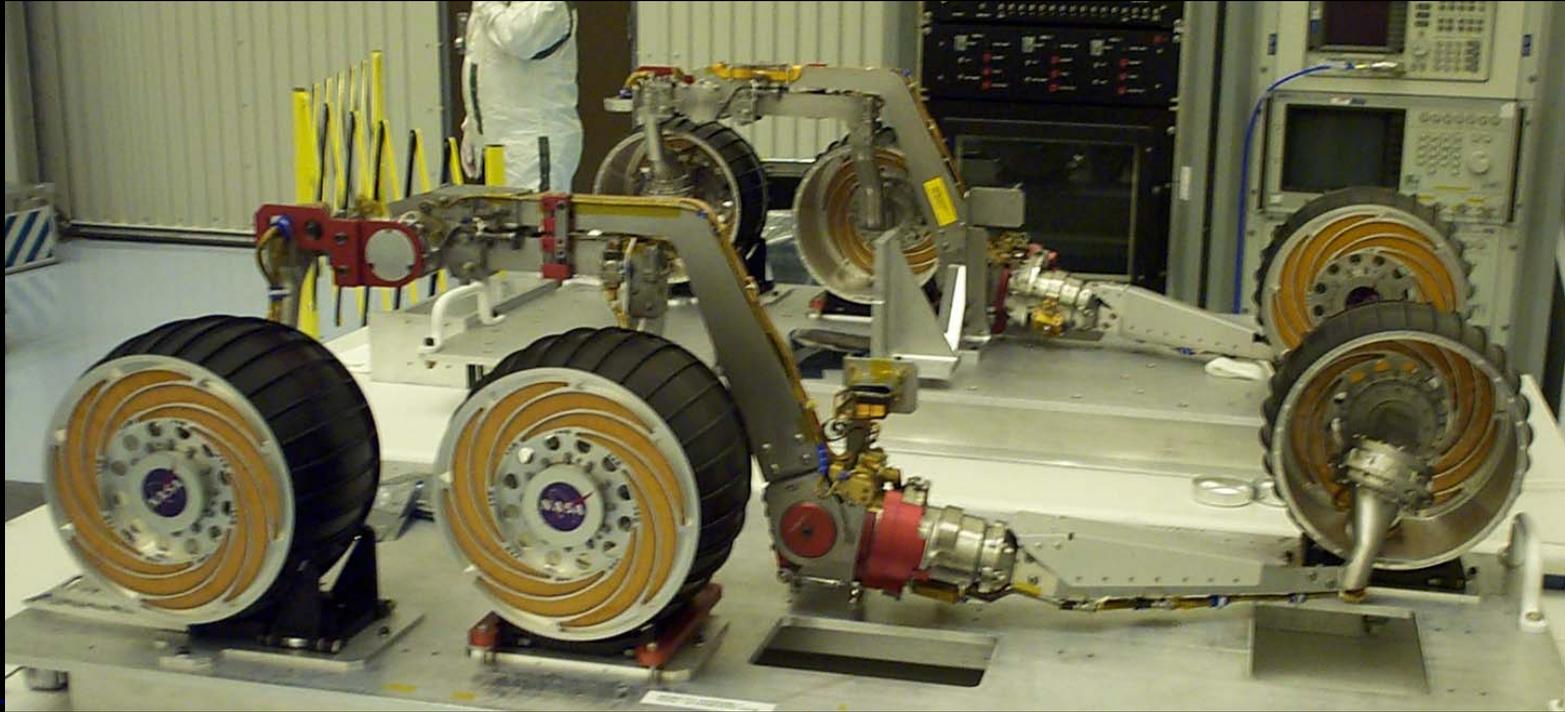




# MER Rover



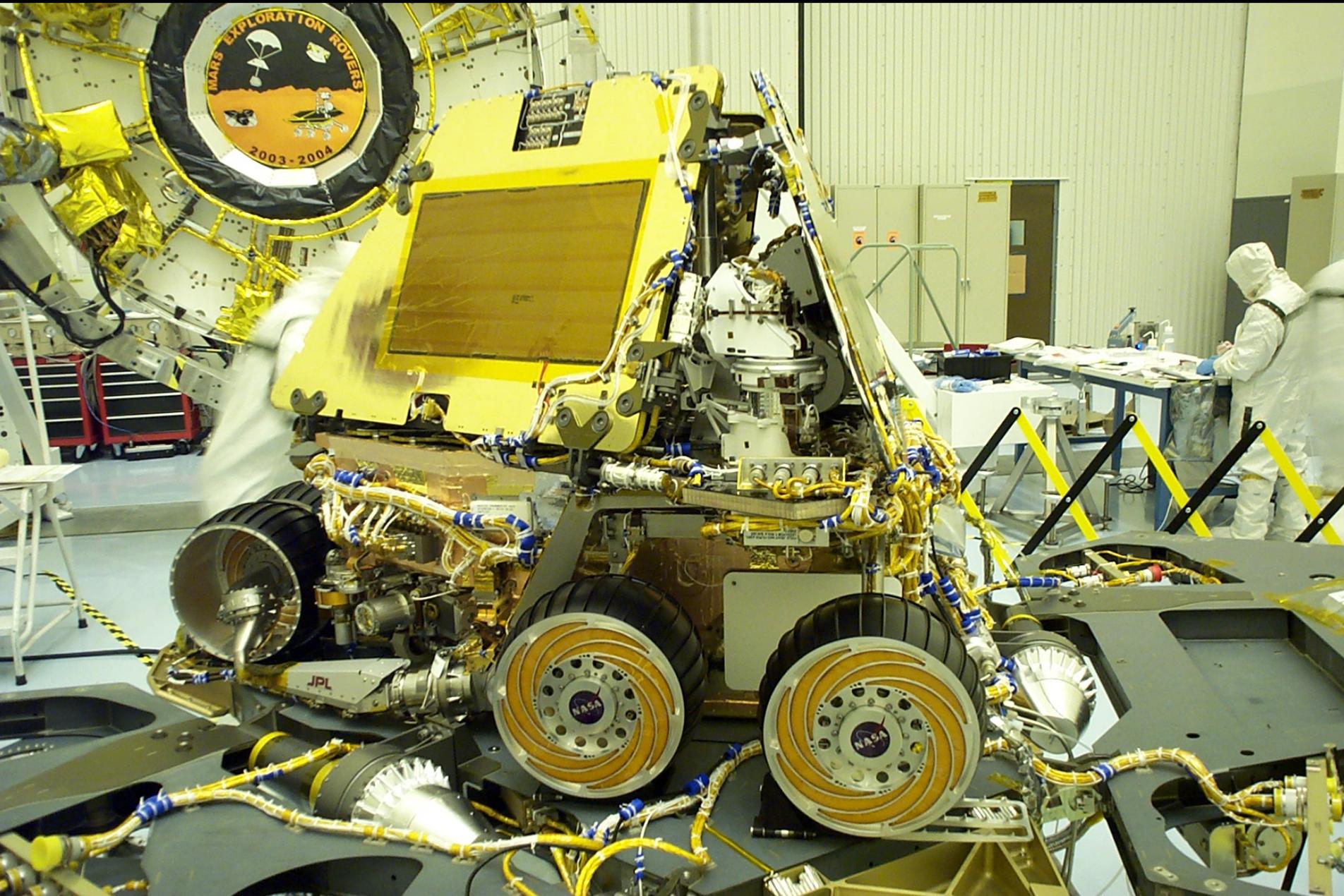
# MER Rover Mobility System



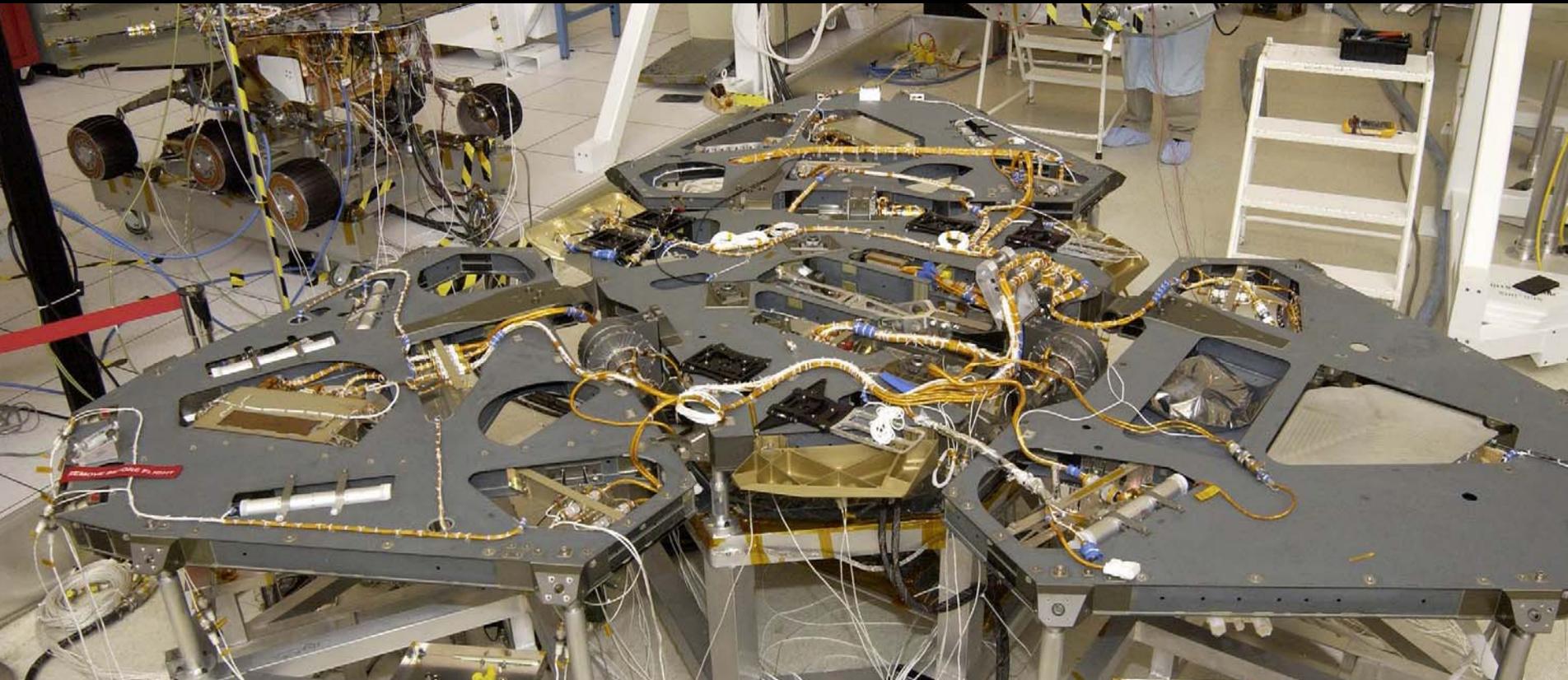
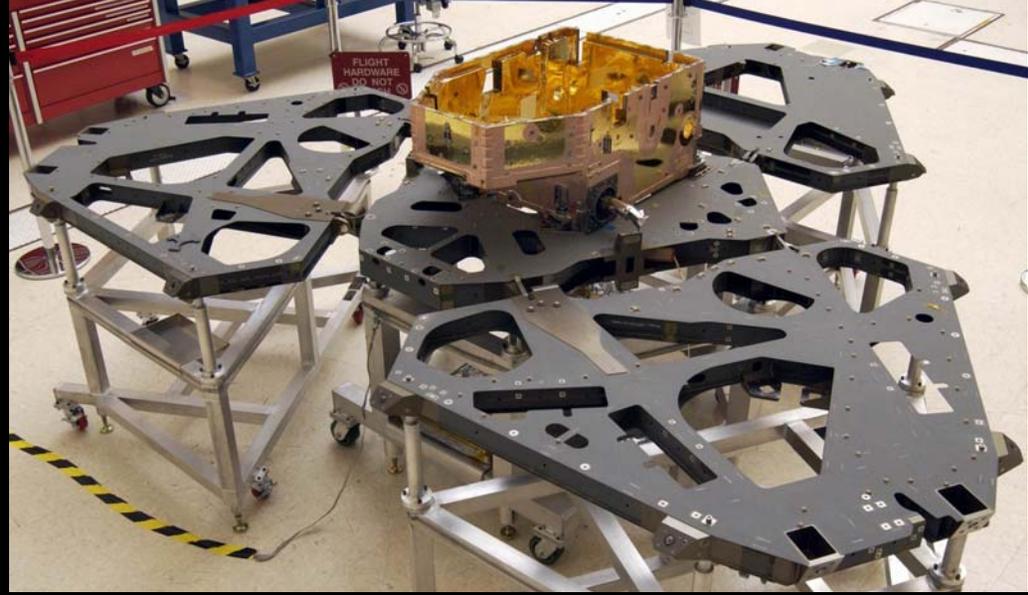
# Rover with Harness and Mobility



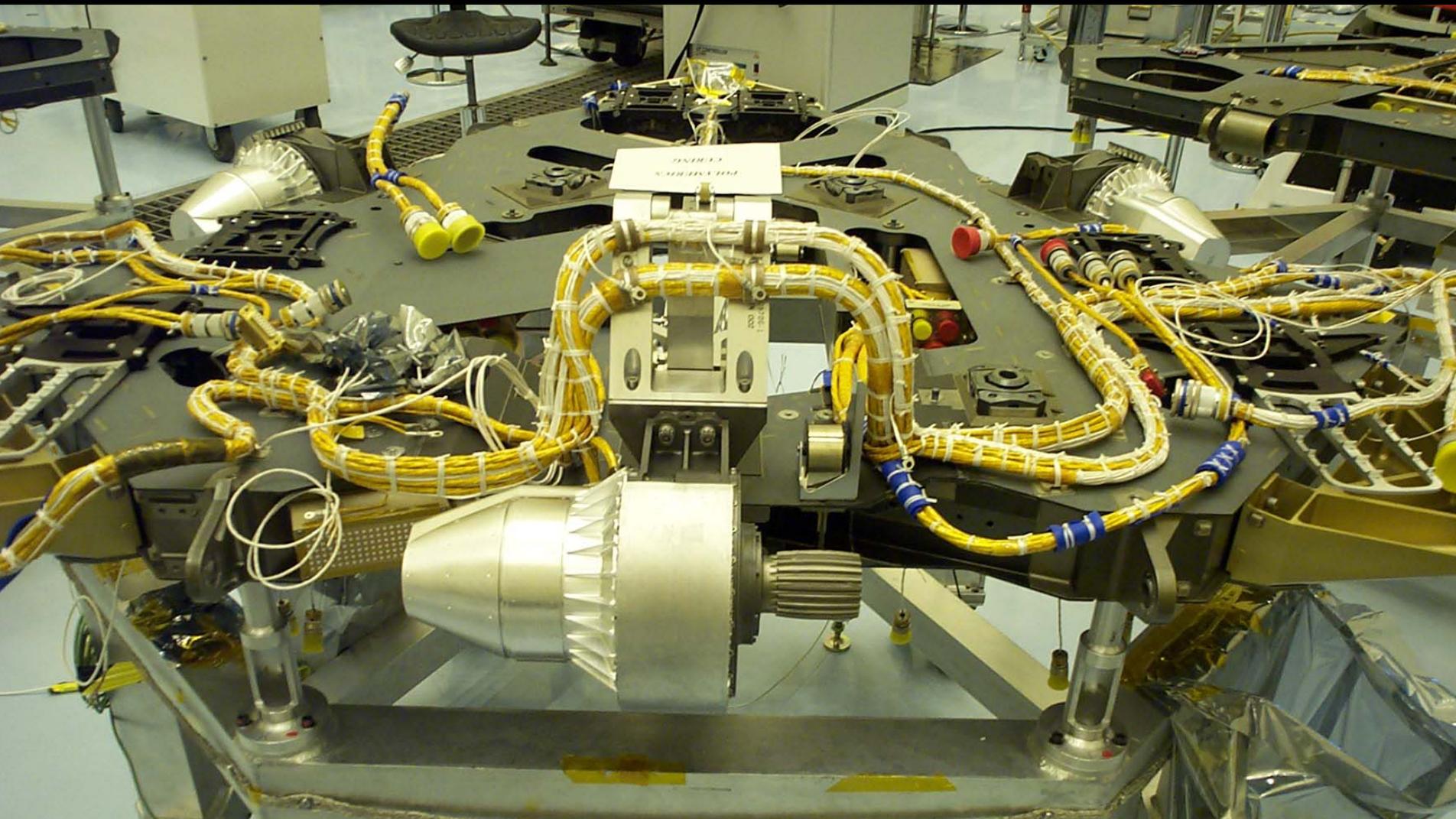
# Stowed Rover



# The Lander



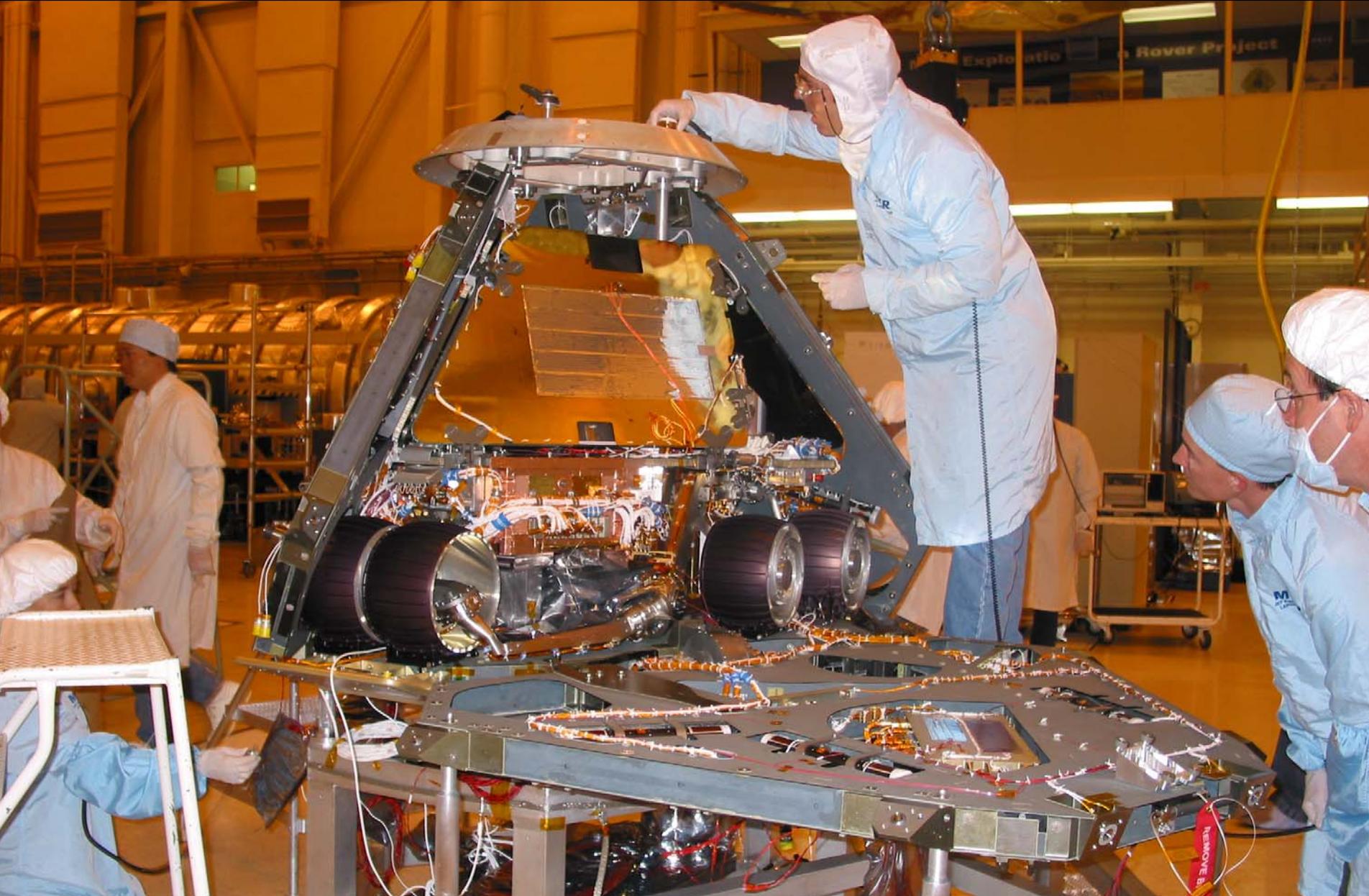
# Lander Petal Actuators



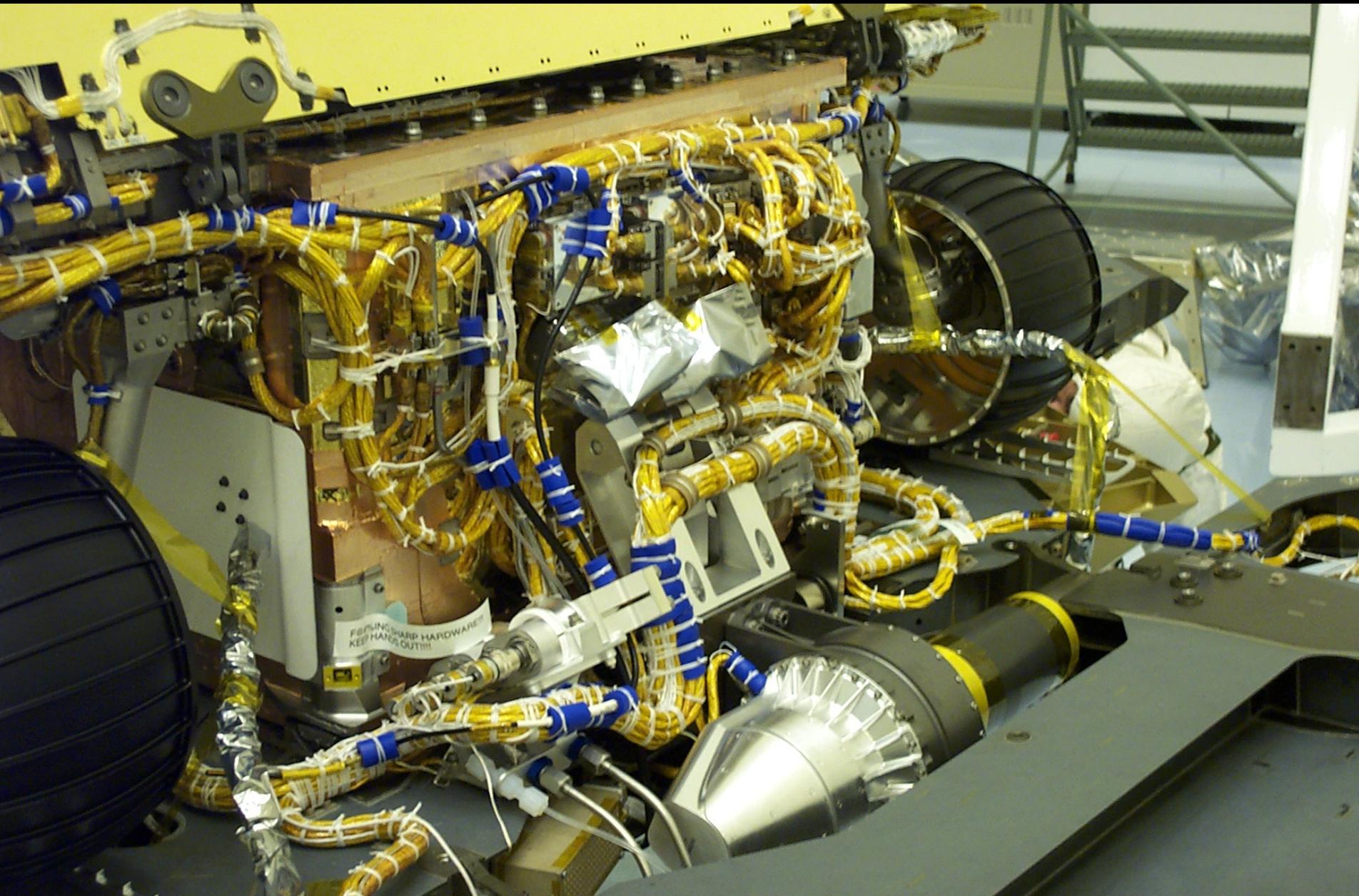
# Rover Mounted to Lander



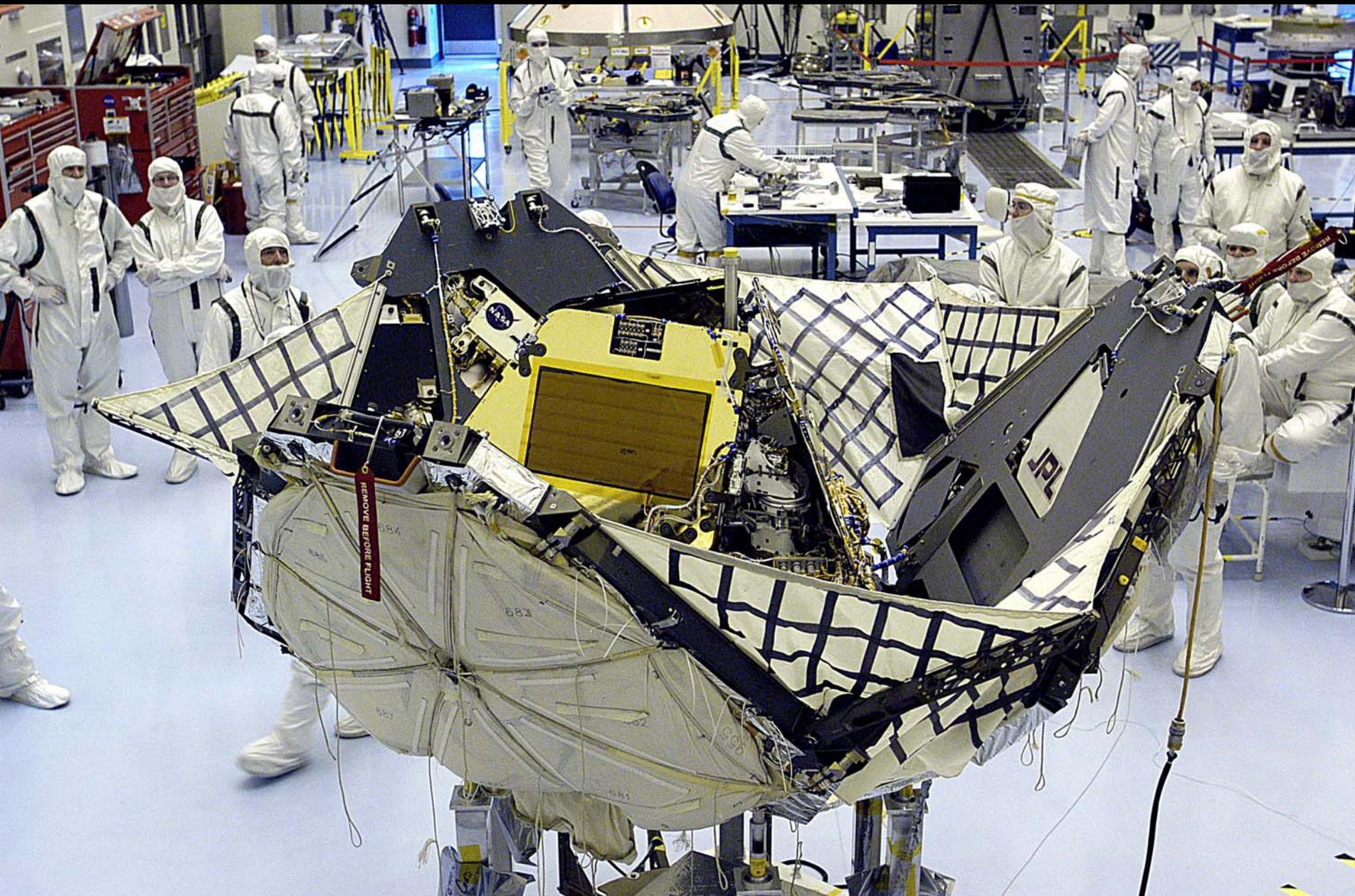
# Fit Checking Lander to Aeroshell



# Rover Harness



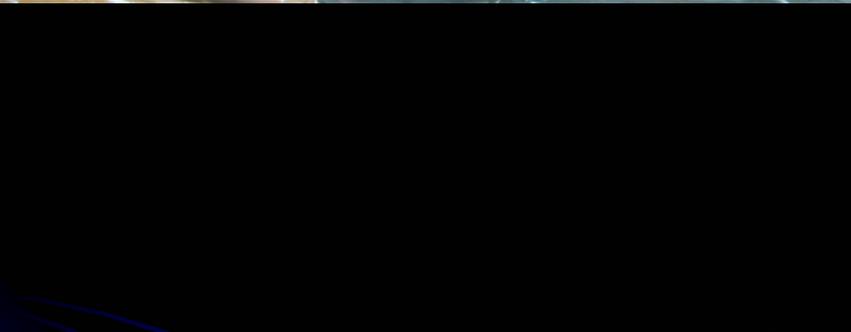
# Final Closure of Lander



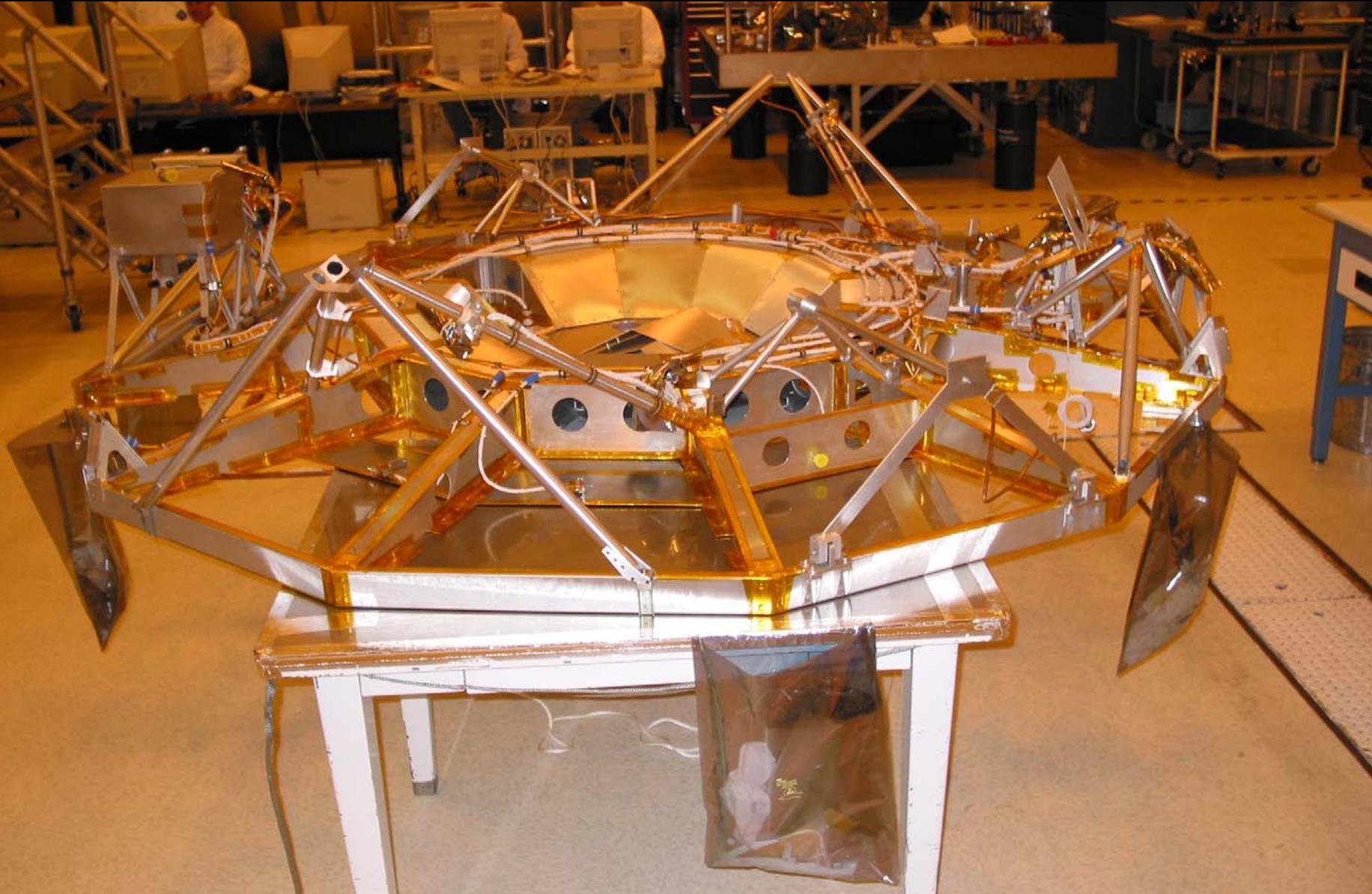
# Complete Landed System



# Aeroshell



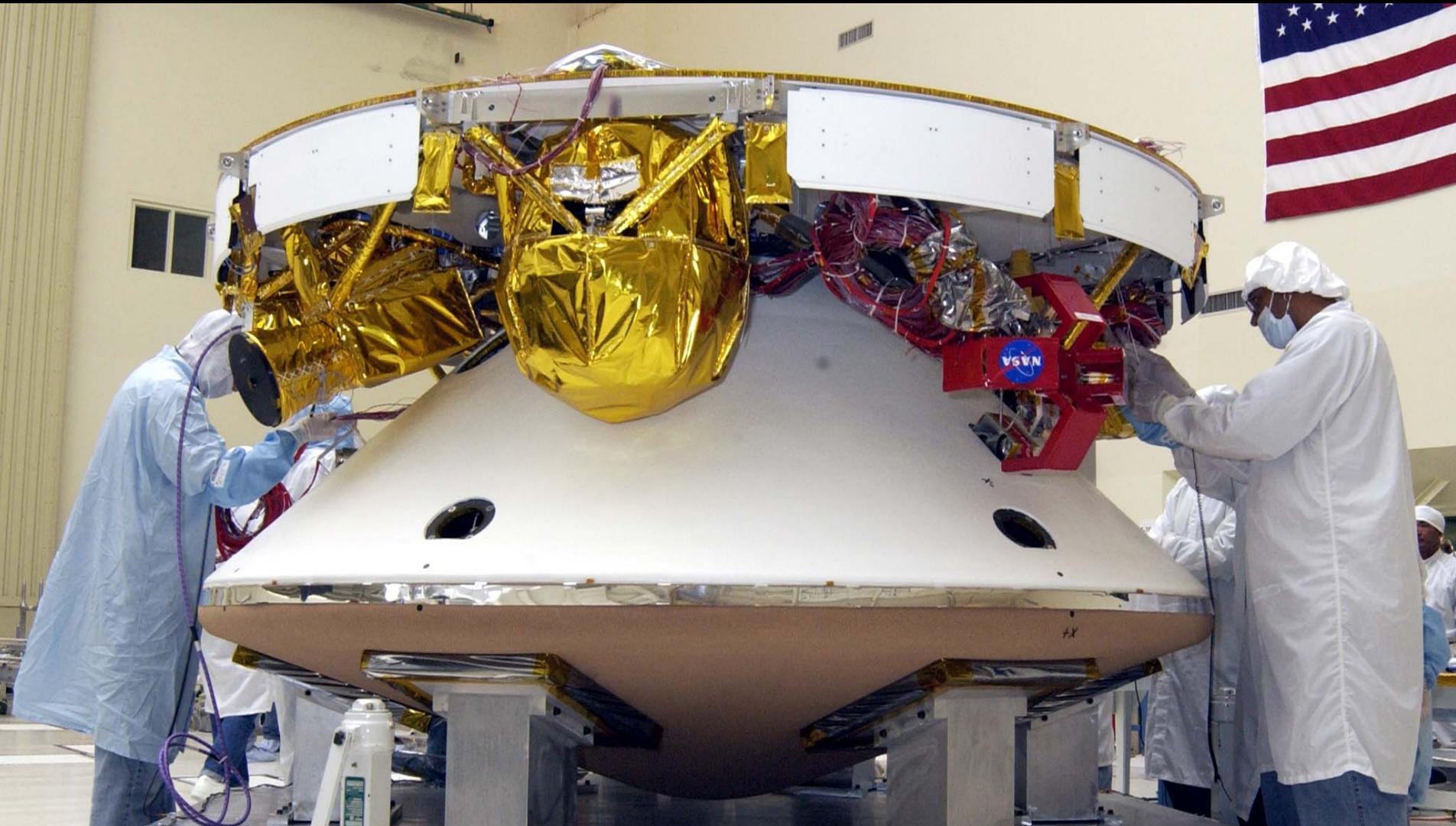
# Cruise Harness Mockup



# Final Cruise Stage Assembly



# Entry Vehicle



# MER Compared to Other Spacecraft

## Schedule as function of Complexity

