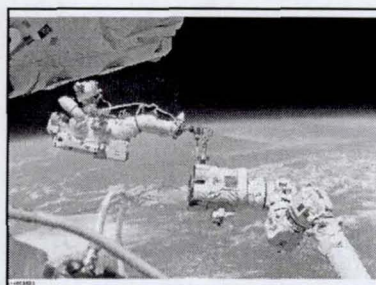
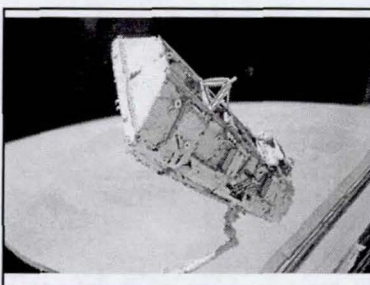
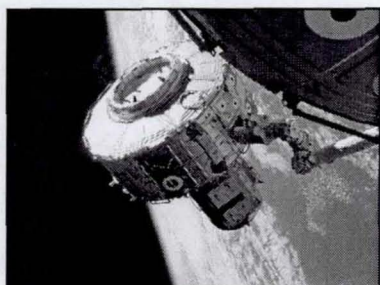
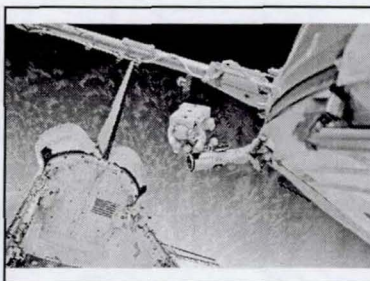
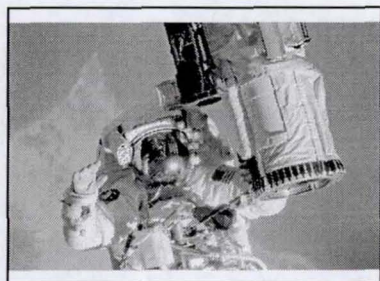
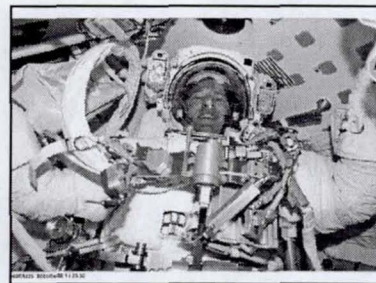
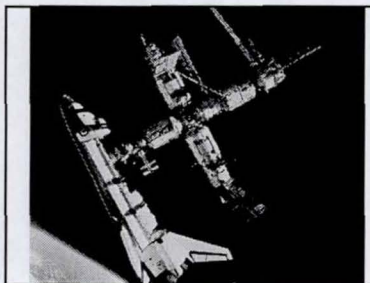
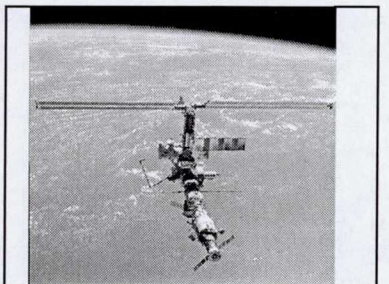
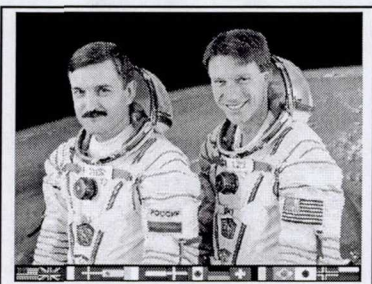
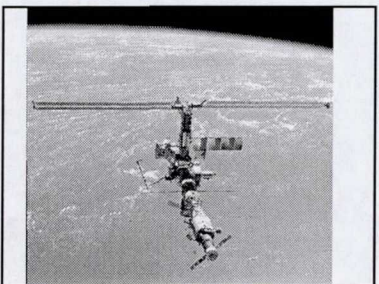
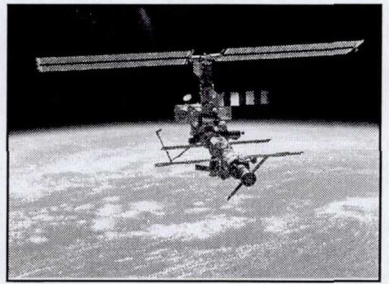
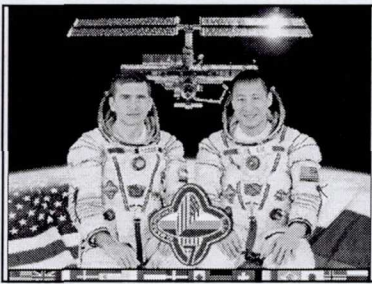
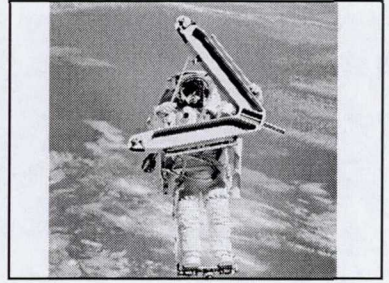
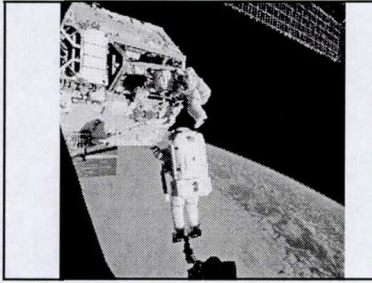
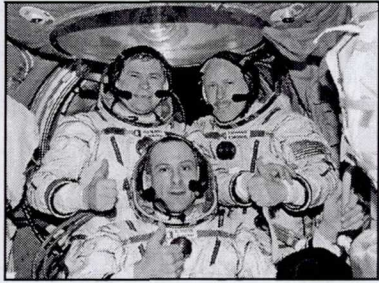


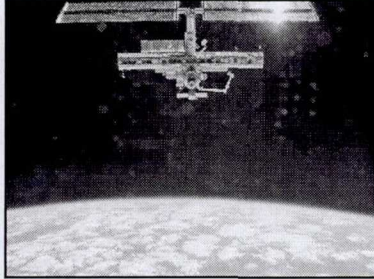
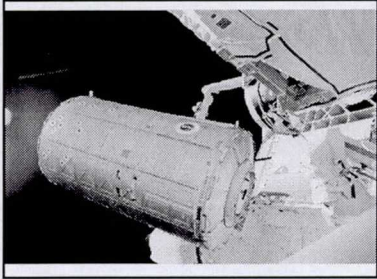
Source of Acquisition  
NASA Johnson Space Center





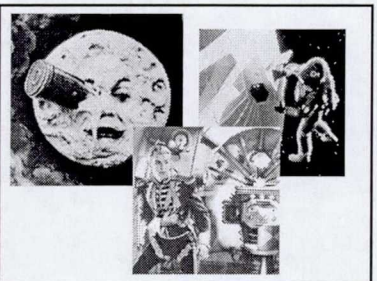
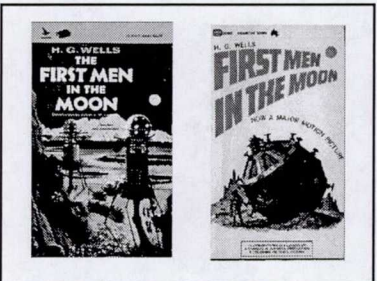
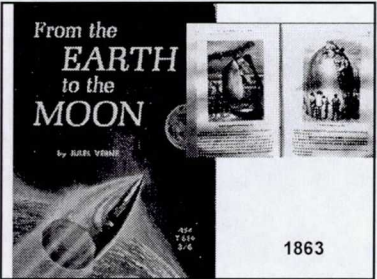
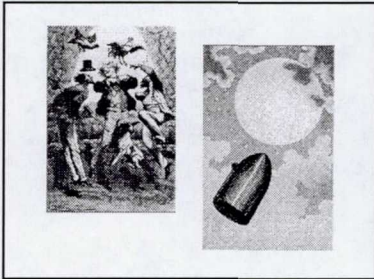




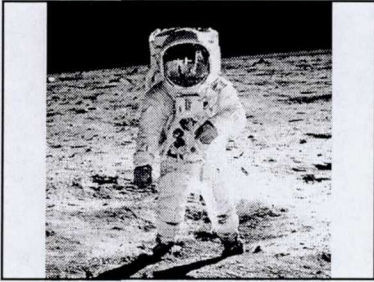


Future ...

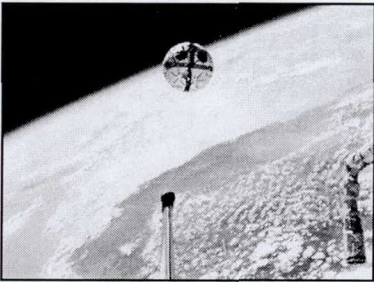
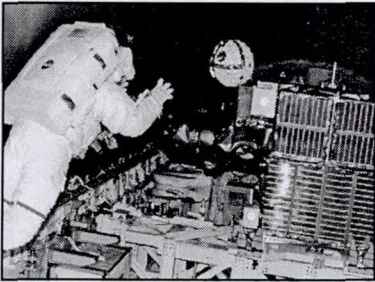
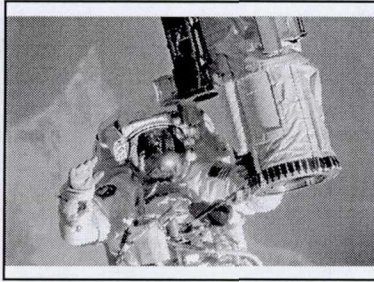
*It Comes from our  
Imagination*



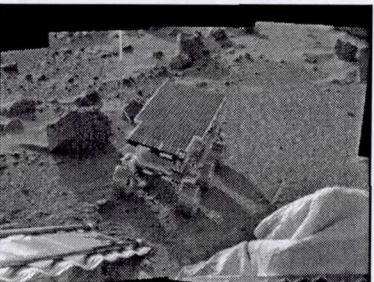
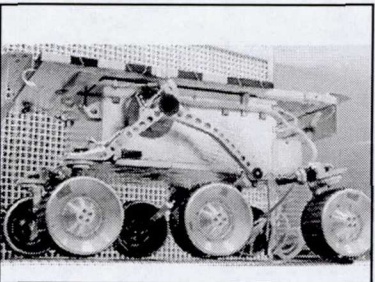




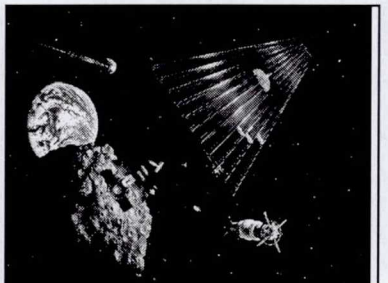
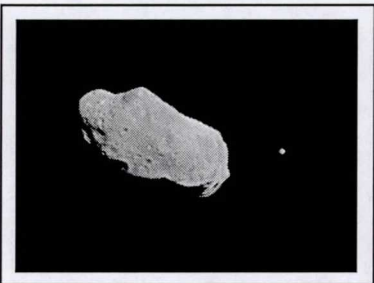
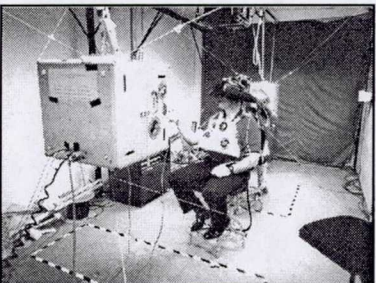
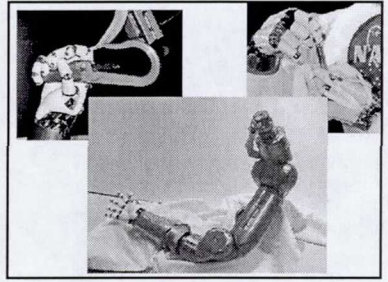
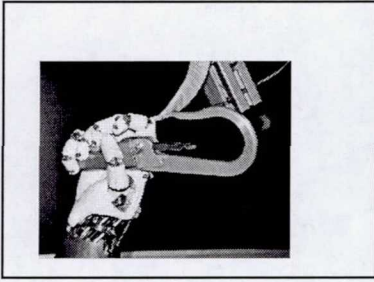
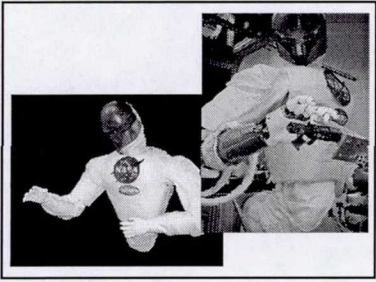
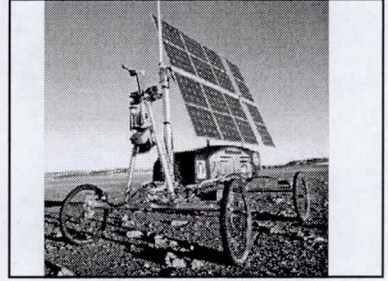
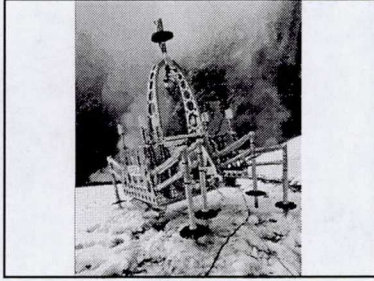
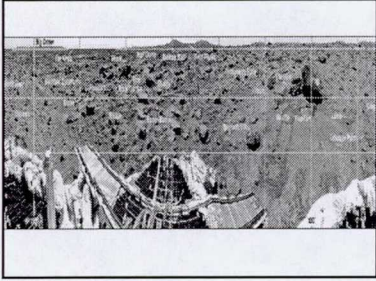
# Robotics




# Robotic Planetary Exploration










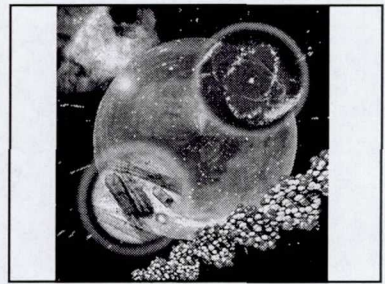
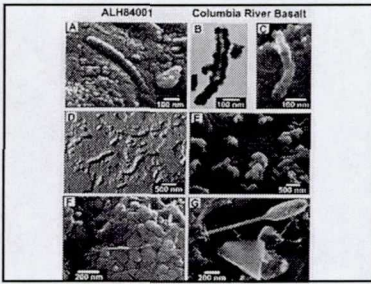
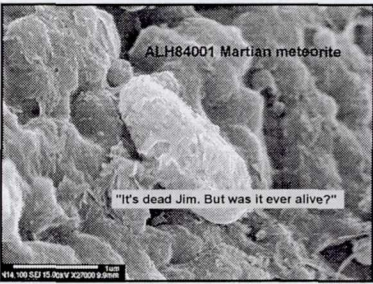
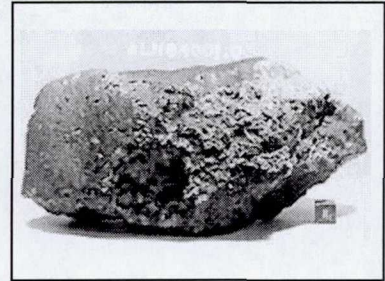


# Astrobiology

"the study of the living universe".

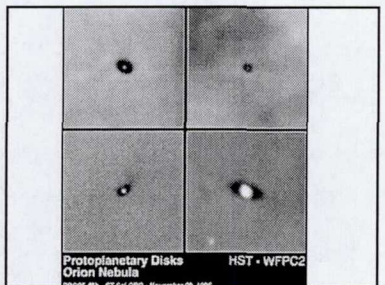
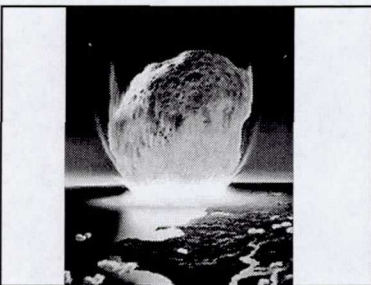


- ### Goals of Astrobiology
- GOAL ONE: How Life Arose on Earth
  - GOAL TWO: Organization of Matter into Living Systems
  - GOAL THREE: How Life Evolves
  - GOAL FOUR: Co-evolution of the Biosphere and Earth
  - GOAL FIVE: Limits for Life
  - GOAL SIX: Habitable Planets
  - GOAL SEVEN: Signatures of Life on Other Worlds
  - GOAL EIGHT: Life on Mars and Europa
  - GOAL NINE: Environmental Change on Earth
  - GOAL TEN: Terrestrial Life in Space

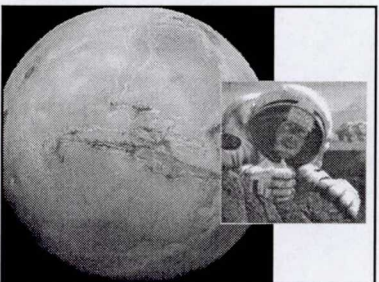
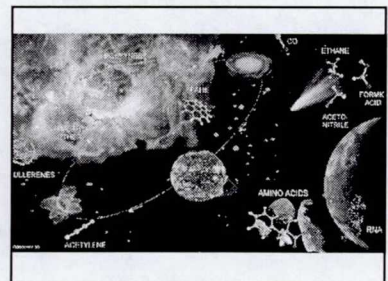
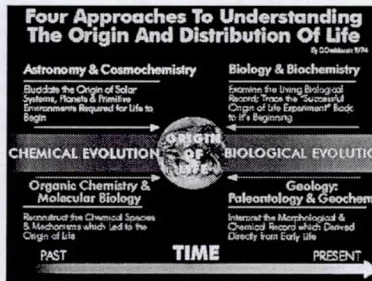
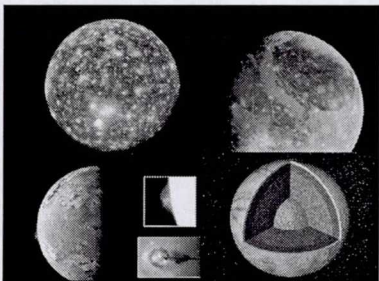
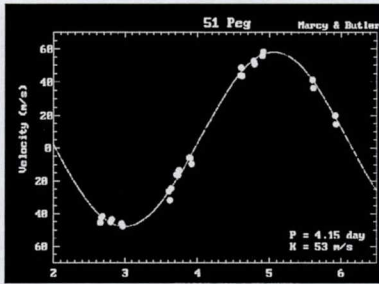


MICHIGAN STATE UNIVERSITY

Center for Genomic and Evolutionary Studies  
on Microbial Life at Low Temperatures

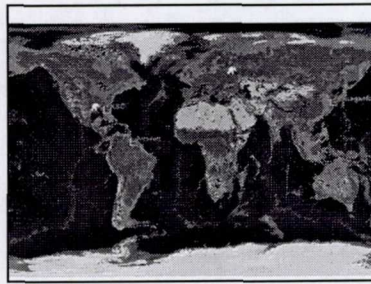
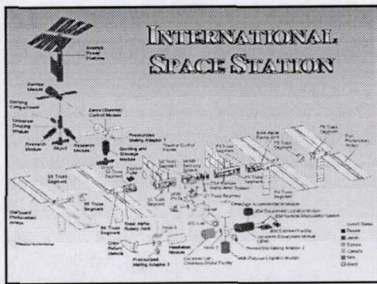
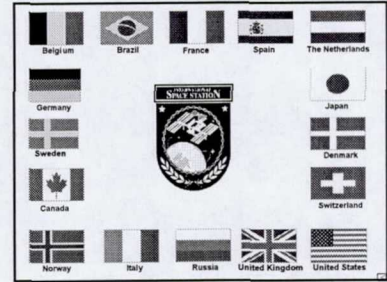
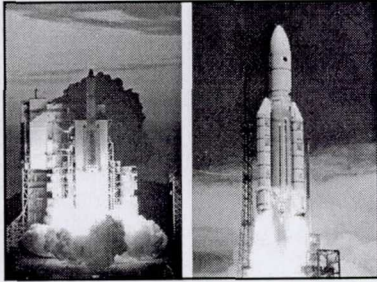




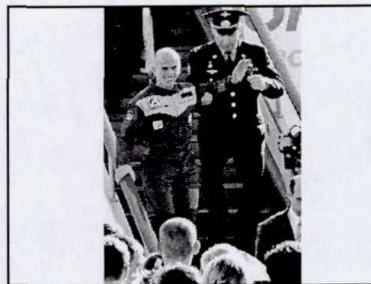
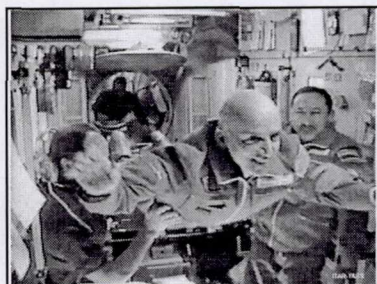


International



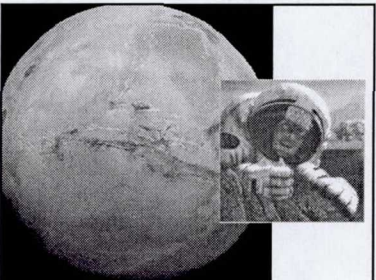
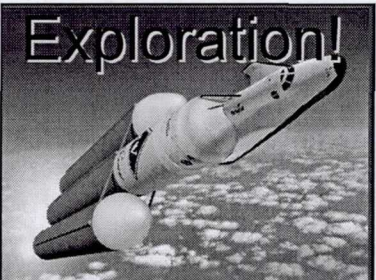
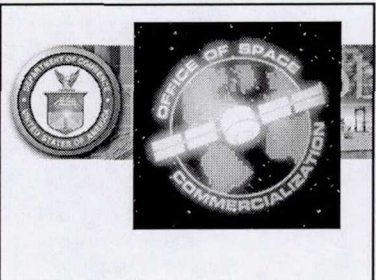
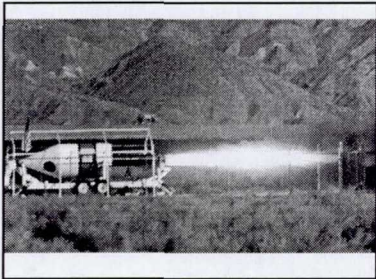
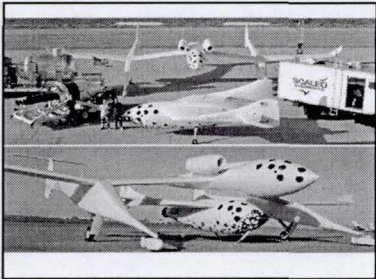
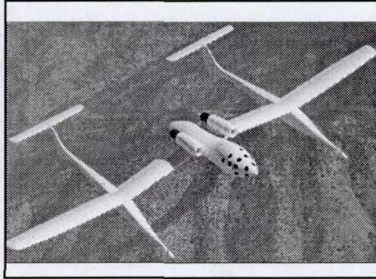
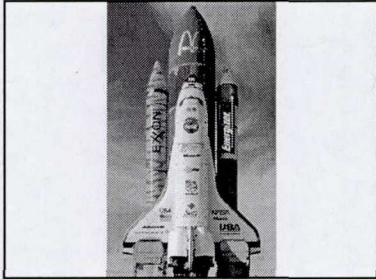


Space  
Tourism

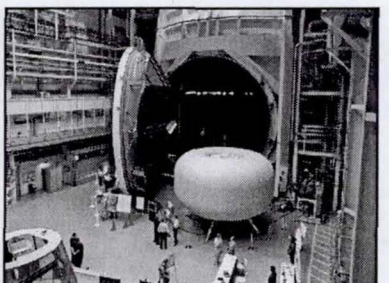
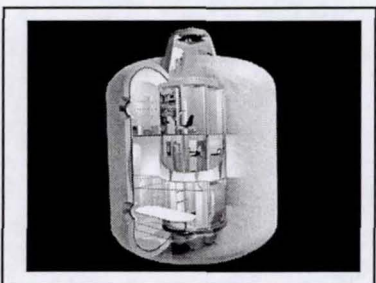
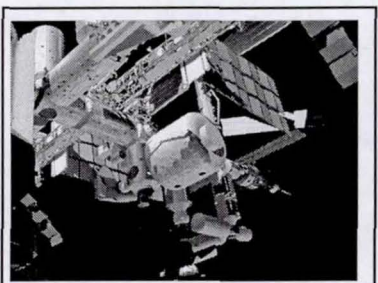
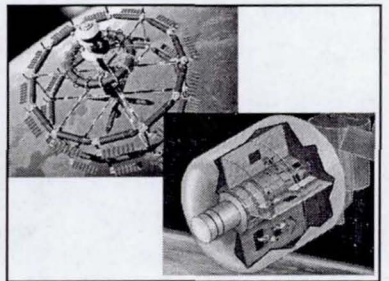
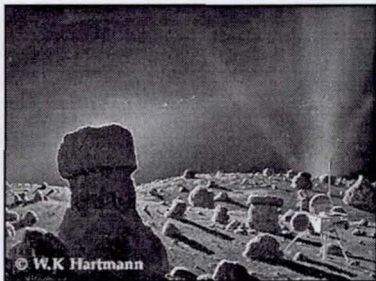
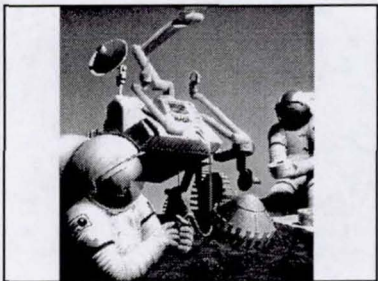
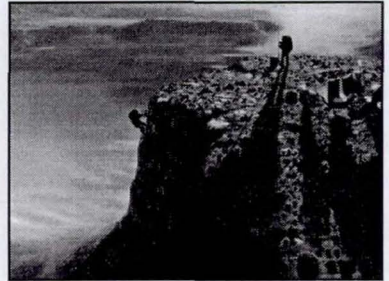
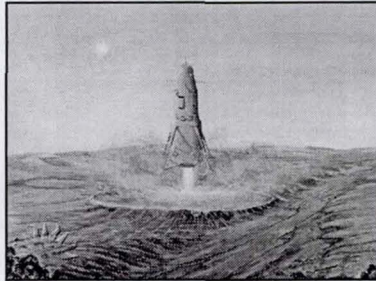
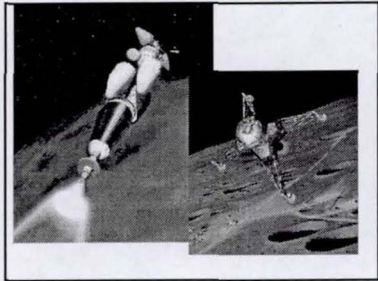




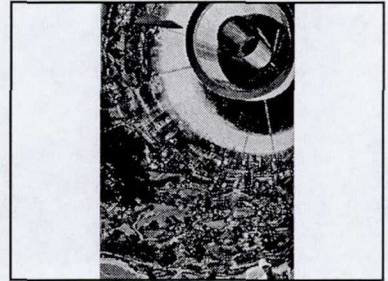
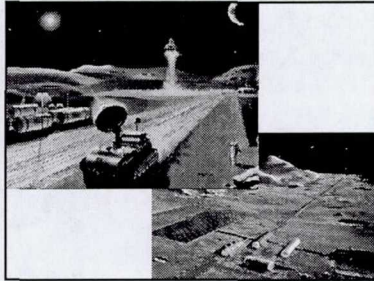
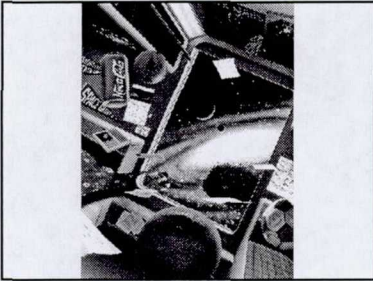
Commercialization



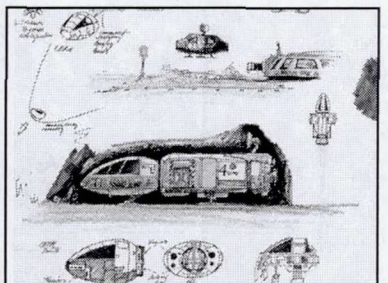
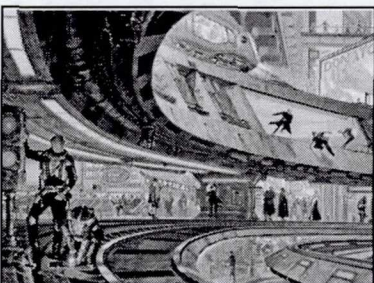
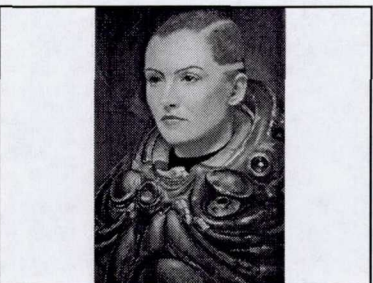
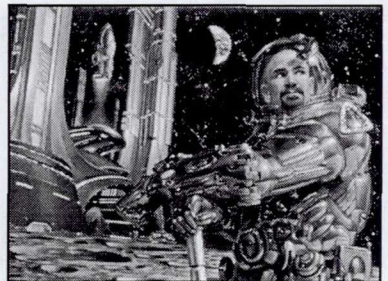
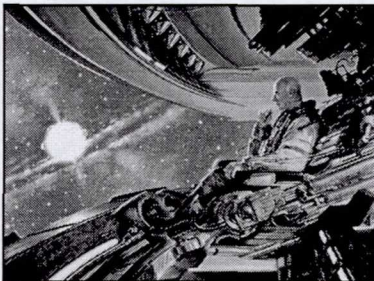




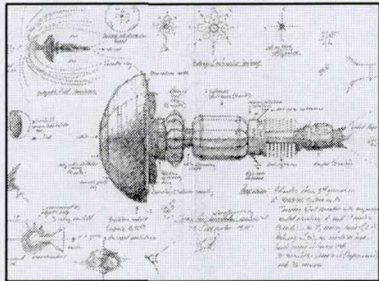




Imagination





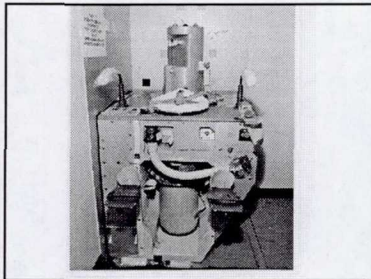


*"It is difficult to say what is impossible, for the dream of yesterday is the hope of today and the reality of tomorrow."*

*– Robert H. Goddard*

# The End

"How do you go to the bathroom in Space?"



# Columbia

*"This cause of exploration and discovery is not an option we choose; it is a desire written in the human heart. We are that part of creation which seeks to understand all creation."*

*President Bush  
at JSC Memorial  
4 February 2003*

