Living and Working in Space

International Space Station Overview
Crew Exchange
Return of Expedition 8 aboard Soyuz 7
April 29, 2004  7:12 pm CDT - Kazakhstan
A human outpost in space bringing nations together for the benefit of life on Earth… and beyond.

We will make revolutionary discoveries and establish a permanent international presence of humans in space, to advance the exploration of the solar system and enable commerce in space.
Safely build, operate, and utilize a continuously inhabited orbital research facility through a partnership of governments, industries, and academia.
The International Space Station is more powerful, and 4 times larger, than any human space craft ever built.

It is 171 ft. long, 240 ft. wide (solar array larger than the wingspan of a 777), 90 ft. high, weighs 197 tons (400,000 lbs.) and has 15,000 cubic feet of habitable living space (equivalent to a 3 bedroom house).

ISS plans include micro gravity science laboratories from four space agencies. U.S. Lab “Destiny” operating since Feb. 2001.

ISS flies in an orbital inclination of 51.6 degrees, approximately 240 miles above the Earth, in a path that covers 90% of the world’s population. It is visible to the naked eye.

ISS travels at the speed of 17,500 miles per hour, and covers the equivalent distance to the Moon and back in a day.
ISS Multi-dimensional challenges

- Integrating International Partners
- Engineering Excellence
- Prioritizing Science
- 24/7 Space Operations
- Organization, Budget, and People
Over 100 people have visited the ISS so far, 17% for the second time.
16 International Participants

5 International Partners

United States  Russia  Canada  Europe  Japan
RM and MLM are included in Russian plans and launched on Russian vehicles.
Integrated Engineering in Space
Elements are invented around the world and come together in space with hairline tolerance.