

SPACE SHUTTLE
STS-64/DISCOVERY



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DENISE CARROLL
7 BLACKSTONE DR. 54
NASHUA, NH 03063

SPACE SHUTTLE (STS-64/DISCOVERY)

The 19th flight of Space Shuttle Discovery will begin with liftoff from Kennedy Space Center's Launch Pad 39B. NASA will test the usefulness of lasers for conducting environmental research from space on the STS-64 mission.

The STS-64 mission patch depicts Discovery in a payload bay-to-Earth attitude with its primary payload, LITE-1 (Lidar In-Space Technology Experiment), operating in support of NASA's Mission to Planet Earth. LITE-1 is a lidar (light detection and ranging) system that uses a three-wavelength laser, symbolized by the three gold rays emanating from the star in the payload bay that form part of the astronaut symbol. A secondary payload on STS-64 is the free-flier SPARTAN-201 satellite shown on the shuttle's arm post that will be deployed and later retrieved by Discovery's crew during the nine-day spaceflight. The second flight of the SPARTAN-201 payload will gather further data on the acceleration and velocity of the solar wind, and measure aspects of the sun's corona in support of the Ulysses spacecraft's south polar pass of the sun.

Mission commander is Richard "Dick" N. Richards, who will be making his fourth spaceflight. The pilot is L. Blaine Hammond Jr., his second flight into space. Mission Specialists Mark C. Lee and Carl J. Meade will embark on their third space voyage while mission specialist Susan J. Helms will make her second spaceflight. The only first-time flyer is mission specialist J.M. Linenger, a medical doctor.

Astronauts Lee and Meade will also test a new extravehicular activity (EVA) rescue device during a space walk on Flight Day 8.