

27 March 2008

By: Gabriel Gache, Science News Editor



Image of space shuttle Endeavor during landing
Reuters

Space Shuttle Lands Safely on Second Attempt

The 22nd shuttle landing during nighttime

After it had missed the first re-entry attempt due to cloudy weather, the space shuttle Endeavor landed at NASA's Kennedy Space Center in Florida, at 8:39 p.m. CDT, in complete darkness, thus ending the mission STS-123. Endeavor was supposed to land at 7:05 p.m. CDT, one hour before sunset; but in the last minute before beginning the re-entry procedure, clouds moved in above Florida. Mission control decided to delay the landing until the second scheduled attempt.

After another orbit around the Earth, the sky had cleared enough to satisfy the flight controllers. Upon asking the opinion of space shuttle commander Dominic Gorie, he cleared the space shuttle for re-entry and began the descent towards Earth.

Space-shuttle night landings are extremely rare, as are space shuttle liftoffs. In fact, this was only the 22nd space shuttle landing in the history of NASA. Also rare is the situation when space shuttles lift off and land in darkness conditions. Endeavor launched into space on the 11th of March, also during nighttime.

In its 16-day trip to the International Space Station, Endeavor and its seven-member crew traveled 10.5 million kilometers, delivered the first section of the space laboratory Kibo, assembled the Canadian built robot Dextre and conducted a heat shield repair experiment. With the new additions, the ISS is now 70 percent complete and weighs 270,000 kilograms.

For the next two years, NASA has scheduled another 10 space-shuttle flight missions to complete the build of the ISS and another to the Hubble Space Telescope. Once the space station is complete, the US shuttles will be completely withdrawn from service and replaced by new spacecrafts. The next mission to the ISS is set to take place in the month of May, when the Discovery shuttle will fly the second section of JAXA's space laboratory, Kibo.

Meanwhile, the crew of the space station is preparing to welcome the Automated Transfer Vehicle Jules Verne, which will arrive with supplies on April 3rd. The approach maneuver will begin on March 29. Another spacecraft is expected to launch on April 8 from the Baikonur launchpad in Kazakhstan, in order to replace the crew of the station.