

# STS-117 Post-Mission Summary



The Shuttle Atlantis launched from Kennedy Space Center (KSC) Launch Pad 39A on June 8, 2007 at 2338Z and landed at Edwards Air Force Base on June 22, 2007 at 1949Z. Commander Rick Sturckow and the [STS-117](#) crew successfully delivered [Expedition 15](#) crew member Clay Anderson to the International Space Station and installed an additional truss and solar arrays on the Space Station. Weather had significant impacts to the mission including a rollback to the Vehicle Assembly Building following hail damage to the vehicle and four waveoffs for landing attempts at KSC. Following the unsuccessful landing attempts at KSC on June 21st, an on-orbit burn was performed to provide an additional opportunity at Edwards to try and avoid the potential for gusty afternoon winds.

Atlantis was originally rolled out to the pad on February 15th, 2007. However, a hail storm on February 26th produced damage to the external tank. The vehicle was rolled back to the vehicle assembly building to perform repairs. Atlantis was then rolled back out to Pad 39A on May 15th to complete preparations for a June 8th launch attempt.

Launch proceeded smoothly on June 8th with no weather flight rule violations forecast for KSC. Rain showers moved briefly within flight rule limits during the final countdown but were never a threat to scrub the launch. After closely monitoring the potential for low clouds and fog using Meteosat satellite imagery and weather reconnaissance reports, SMG forecast Istres, France GO for launch. Light showers developed within flight rule limits at Zaragoza, Spain about 1-hour prior to launch. However, analysis of Spanish radar images and weather reconnaissance reports allowed SMG to update the Zaragoza forecast to GO 15 minutes prior to launch giving the crew and Flight Director two possible TAL sites in the event of a launch abort. The launch produced a beautiful launch plume in the evening sunlight - a scene captured by several [photographs](#).

End-of-mission was set for June 21st after Mission Managers extended the mission for 2-days to perform repairs to the thermal blankets surrounding the Orbital Maneuvering System (OMS) pods and complete other on-orbit activities. KSC was the only CONUS landing site called up for the first days landing opportunities.

Weather on the 21st provided little opportunity to land at KSC. A weak low pressure area was slowly moving south-southeast across northern Florida. The low produced cloud ceilings below flight rule limits and the threat of showers and thunderstorms. SMG forecast both landing opportunities NO-GO throughout the morning. In addition, forecasters predicted thunderstorms would develop by the 2nd opportunity. Although initially acceptable, ceilings quickly deteriorated to below flight rule limits. Rain showers also began developing within flight rule limits and moving across the Shuttle Landing Facility and through the orbiter's planned flight path. Weather reconnaissance did not find the conditions any different than depicted by the weather radar and satellite images. Flight Director Norm Knight then decided to wave off the

