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NASA Moves Up Landing Because of Storm

By KENNETH CHANG

With Hurricane Dean headed toward the Gulf of Mexico, the space shuttle Endeavour undocks from the International Space Station today, a day early, and is scheduled to land Tuesday.

The worry is that the hurricane may threaten Houston, site of mission control, the Johnson Space Center. In that case, NASA would transfer flight operations to the Kennedy Space Center in Florida, where the shuttle is scheduled to land. Moving the landing day forward to Tuesday should preclude that possibility.

Hurricane Dean was expected to pass south of Houston, with landfall in northern Mexico, but mission managers decided to take precautions in case the storm takes a right turn.

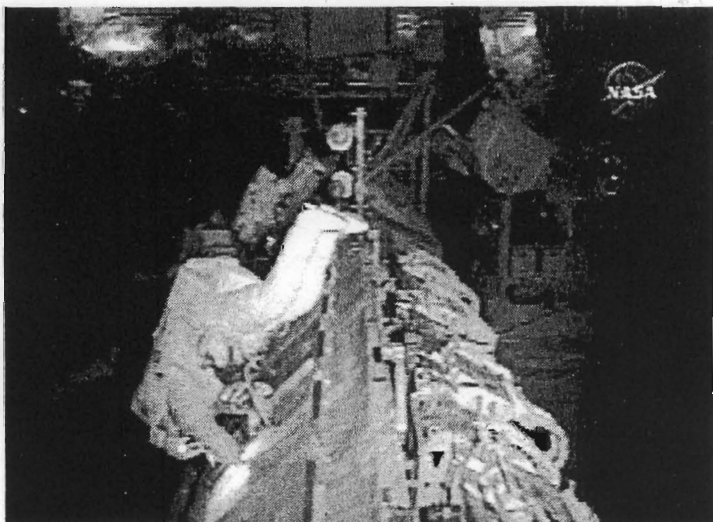
"It would be irresponsible for us to not pay attention to this storm," LeRoy Cain, chairman of the mission management team, said at a news conference yesterday.

For the shuttle to land Tuesday, astronauts had to finish packing up and close the hatches to the space station last night. This required shortening a fourth spacewalk by the Endeavour's astronauts yesterday to five hours from the planned six and a half.

The astronauts retrieved two experiments from the outside of the space station that will return to Earth on the Endeavour.

After undocking this morning, the shuttle crew will spend a couple of days preparing for landing, including conducting another inspection of the shuttle's nose

Jim Rutenberg contributed reporting from Crawford, Tex.



NASA, VIA ASSOCIATED PRESS

Dafydd R. Williams of the Endeavour yesterday on the last spacewalk of a mission with the International Space Station.

cone and the leading edge of the wings to make sure they did not suffer any damage from micrometeoroids while docked to the space station.

If the storm is approaching Houston, flight controllers will land the Endeavour at one of three sites on Tuesday — either at the Kennedy center or at backup sites in California and New Mexico. If it is not approaching Houston, and weather does not permit landing in Florida, controllers will have the shuttle stay in orbit another day before considering backup sites.

The Endeavour has enough supplies to stay in orbit until Friday, but barring a major mechanical problem, it will land no later than Thursday.

During the mission, NASA engineers spent a lot of time analyzing

the effects of a small gouge in the underside of the Endeavour's belly, caused by foam falling from the external fuel tank at liftoff.

After conducting experiments, mission managers decided no repair was necessary. Otherwise, the mission has gone smoothly. "Endeavour has been a very clean and great-running vehicle," Mr. Cain said.

In Crawford, Tex., where President Bush was on vacation, aides said he had approved a request from Gov. Rick Perry for a "pre-landfall emergency declaration," which allows federal assistance, and federal coordination with federal authorities, to flow into a state ahead of a storm.

Gordon Johndroe, a spokesman for Mr. Bush, told reporters that the president was carefully following the storm's path.