

Shuttle passes obstacle, heads toward LA museum

October 13 2012, by Alicia Chang



The space shuttle Endeavour makes it's way down Manchester Blvd. over a closed 405 fwy in Inglewood, Calif., Friday, Oct. 12, 2012. Endeavour's 12-mile road trip kicked off shortly before midnight Thursday as it moved from its Los Angeles International Airport hangar en route to the California Science Center, its ultimate destination. (AP Photo/Chris Carlson)

Slowly surmounting a key obstacle, the shuttle Endeavour maintained a heading Saturday through the streets of Los Angeles toward its

retirement home at a museum.

Endeavour's final mission began when it departed from the [Los Angeles International Airport](#) before dawn Friday, rolling on a 160-wheeled carrier past diamond-shaped "Shuttle Xing" signs.

Friday evening it stopped as crews spent hours transferring the shuttle to a special, lighter towing dolly. Then around midnight, it traveled over a bridge across Interstate 405, an especially tricky part of the complicated journey because of the size of the space craft and width of the bridge.

The shuttle was pulled across the Manchester Boulevard bridge by a Toyota Tundra pickup, and the car company filmed the event for a commercial after paying for a permit, turning the entire scene into a movie set complete with special lighting, sound and staging.

Police stopped traffic on the freeway below for the duration of the traverse, which took about three minutes.

Crews preparing for the crossing had to take down power lines, leaving about 400 residents of surrounding Inglewood without power for what was expected to be several hours.

Once on the other side, crews began the lengthy process of returning it to the original carrier, before resuming its journey early Saturday.



The Space Shuttle Endeavour is slowly moved across Interstate 405 by a Toyota Tundra, Friday, Oct.12, 2012, in Los Angeles. The shuttle is on its last mission—a 12-mile creep through city streets. It will move past an eclectic mix of strip malls, mom-and-pop shops, tidy lawns and faded apartment buildings. Its final destination: California Science Center in South Los Angeles where it will be put on display. (AP Photo/Mark J. Terrill)

Another tricky part comes later in the day when Endeavour treks through a narrow residential street with [apartment buildings](#) on both sides. With its wings expected to intrude into driveways, residents have been told to stay indoors until the shuttle passes.

On Friday, hundreds of camera-toting spectators, some with pajama-clad children in tow, gaped as the 170,000-pound (77,000-kilogram) Endeavour inched by with its tail towering over [streetlights](#) and its wings spanning the roadway.

Over two days, it will trundle 12 miles (19 kilometers) at a top speed of 2 mph (3 kph) to its final destination—the California Science Center where it will be the centerpiece of a new exhibit. It's expected to reach the museum sometime Saturday evening.



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After an initial bumpy ride and a brief delay, the shuttle pulled off a massive feat of parallel parking by backing into a shopping center parking lot for a layover as crowds cheered on.

"This is unlike anything we've ever moved before," said Jim Hennessy, a spokesman for Sarens, the contract mover.

Spectators flocked to the parking lot in the Westchester neighborhood to get a glimpse of Endeavour, which was guarded by an entourage of police, private security and construction crews.



Spectators gather around the Space Shuttle Endeavour before it is moved along city streets, Friday, Oct.12, 2012, in Los Angeles. Endeavour's two-day, 12-mile road trip to the California Science Center, where it will be put on display, kicked off early Friday. Rolled on a 160-wheeled carrier, it left from a hangar at the Los Angeles International Airport, passing diamond-shaped "Shuttle Xing" signs, and reached city streets about two hours later. (AP Photo/Mark J. Terrill)

Janet Dion, a family therapist from nearby Manhattan Beach, marveled at the shuttle, its exterior weathered by millions of miles in space and two dozen re-entries.

"You can sense the magnitude of where it's been," Dion said, fixated on the heat tiles that protected the shuttle during the return to Earth.

James Nieuwdorp, a technician for a transit agency, saw Endeavour's aerial victory lap around California last month and traveled to see it again before it becomes a museum piece.

He enjoyed how the shuttle brought strangers together. There was "lot of camaraderie—something that's hard to be seen these days," he said.



Spectators gather to watch the space shuttle Endeavour in Los Angeles, Friday, Oct. 12, 2012. Endeavour's 12-mile road trip kicked off shortly before midnight Thursday as it moved from its Los Angeles International Airport hangar en route to the California Science Center, its ultimate destination, said Benjamin Scheier of the center. (AP Photo/Mark J. Terrill)

Shuffling a five-story-tall shuttle through urban streets was an undertaking that took nearly a year to plan. Because the 78-foot

(24-meter) wingspan hangs over sidewalks in some locations, police enforced rolling street and sidewalk closures along the route.

The limited access frustrated some businesses that counted on huge crowds lining the curbs to boost business.



A couple poses with a street sign temporarily removed prior to the transfer of the space shuttle Endeavour in Los Angeles, Friday, Oct. 12, 2012. Endeavour's 12-mile road trip kicked off shortly before midnight Thursday as it moved from its Los Angeles International Airport hangar en route to the California Science Center, its ultimate destination, said Benjamin Scheier of the center. (AP Photo/Jae C. Hong)

Saturday is typically the busiest day for James Fugate, who co-owns Eso Won Books in South Los Angeles. But with Endeavour expected to pass

through, Fugate braced for a ho-hum day in sales.

"We don't close because we're slow. That's when you pull out a book to read," he said.



The Space Shuttle Endeavour sits before it is moved along city streets, Friday, Oct.12, 2012, in Los Angeles. Endeavour's 12-mile road trip kicked off shortly before midnight Thursday as it moved from its Los Angeles International Airport hangar en route to the California Science Center, its ultimate destination, said Benjamin Scheier of the center. (AP Photo/Mark J. Terrill)

The baby of the shuttle fleet, Endeavour replaced Challenger, which exploded during liftoff in 1986, killing seven astronauts. It thundered off

the launch pad 25 times, orbited Earth nearly 4,700 times and racked up 123 million miles (198 million kilometers).

Transporting Endeavour required a specialized carrier typically used to haul oil rigs, bridges and heavy equipment. The wheels can spin in any direction, allowing the shuttle to zigzag past obstacles. An operator walks alongside, controlling the movements via joystick. Several spotters along the wings are on the lookout for hazards.



Spectators take pictures of Space Shuttle Endeavour as it slowly moves along city streets, Friday, Oct. 12, 2012, in Los Angeles. The shuttle is on its last mission—a 12-mile creep through city streets—on its way to the California Science Center in South Los Angeles where it will be put on display. (AP Photo/Mark J. Terrill, Pool)

Before Endeavour could travel through the streets, some 400 trees were chopped down, cable and telephone lines were hoisted, and steel plates were laid down to protect the streets and underground utilities.

Endeavour will mostly travel on wide boulevards with some boasting as many lanes as a freeway. While there have been advance preparations, there was remaining work to be done during the move, including de-energizing power lines.



Spectators take pictures as the space shuttle Endeavour is pulled by a Toyota Tundra pickup truck on its way across the 405 freeway in Inglewood, Calif., Friday, Oct. 12, 2012. Endeavour's 12-mile road trip kicked off shortly before midnight Thursday as it moved from its Los Angeles International Airport hangar en route to the California Science Center. (AP Photo/Patrick T. Fallon)

The route was selected after ruling out other options. Dismantling the

shuttle would have ruined the delicate heat tiles. Helicoptering it to its destination was not feasible. Neither was crossing on freeways since the [shuttle](#) is too big to fit through the underpasses. The cost of transporting it cross-town was estimated at over \$10 million.

As complex as the latest endeavor is, Southern California is no stranger to moving heavy things.

In 1946, Howard Hughes' "Spruce Goose" aircraft was built in sections and hauled from Culver City to Long Beach, 30 miles (50 kilometers) away. In 1984, an old United Airlines DC-8, with its wings and tail disassembled, was towed from Long Beach to the science center.

Earlier this year, a two-story-tall chunk of granite was hauled 105 miles (169 kilometers) from a rock quarry to the Los Angeles County Museum of Art.

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