

Space shuttle blasts off, finally flying on try 3

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Space shuttle Discovery lifts-off from the Kennedy Space Center at Cape Canaveral, Fla. Friday Aug. 28, 2009. Discovery and a crew of seven will deliver supplies and equipment to the International Space Station. (AP Photo/Marta Lavandier)

(AP) -- Space shuttle Discovery and seven astronauts blazed into orbit Saturday on a spectacular midnight flight to the international space station, hauling up a treadmill named after a TV funnyman and thousands of pounds of more solemn supplies.

Discovery lit up the sky for miles around as it thundered away on NASA's third launch attempt. Lightning flashed far in the distance, and the ascending shuttle resembled a bright star until it blinked out of sight five minutes after [liftoff](#).

The space station was soaring more than 220 miles above the Indian Ocean, southwest of Tasmania, when Discovery took off. The shuttle will reach the orbiting outpost Sunday night.

"It looks like third time really is the charm," launch director Pete Nickolenko told commander Rick Sturckow. "We wish you and your team good luck and Godspeed."

Tuesday's launch attempt was called off by thunderstorms and Wednesday's by fuel valve trouble. Everything came together in NASA's favor Friday night; even the valve and its indicator switch behaved, allowing Discovery to blast off seconds before midnight Friday. The shuttle safely reached orbit eight minutes later, on the following day.

NASA officials were relieved to see no foam flying off the fuel tank; a surprising amount of the insulation came off the [fuel tank](#) during last month's launch of Endeavour, causing minor damage. More analysis is needed to ascertain whether any debris broke off Discovery's tank, said space operations chief Bill Gerstenmaier.

Discovery's most prominent payload is NASA's new \$5 million treadmill, which is named after Comedy Central's [Stephen Colbert](#).

Colbert tried to get a space station room named after himself and even won the online vote earlier this year, but NASA went with Tranquility instead in honor of the 40th anniversary of man's first moon landing.

The comedian said the treadmill - for "all those chubby [astronauts](#)" - is a consolation prize.

The treadmill is flying up in more than 100 pieces and won't be put together until sometime next month.

In all, the space shuttle will deliver about 17,000 pounds of gear to the space station. The experiments include six mice that will remain at the orbiting complex until the following shuttle visit in November. Part of a bone loss study, the mice will be the first mammals - other than humans - to spend a prolonged period at the space station.

"Let's go step up the science on the [international space station](#)," Sturckow radioed right before liftoff.

Three spacewalks will be performed during the 13-day shuttle flight, to install a new ammonia tank, part of the space station's cooling system, and replace other equipment and retrieve outdoor experiments.

The station also will get a new resident, Nicole Stott. She will replace an astronaut who moved in during the 13-day shuttle flight last month. That spaceman will return to Earth aboard Discovery, as will Buzz Lightyear. The action figure toy has been in orbit for more than a year, courtesy of Walt Disney World.

Stott, who will spend at least three months at the space station, tapped her heart with her right hand before climbing aboard Discovery and said, "I love you" to the cameras, presumably for her husband and 7-year-old son.

Discovery's crew includes two Hispanics, the first time two have flown together in space. Both are Mexican-Americans, and one of them, Jose Hernandez, grew up in a migrant worker family. Hernandez will file bilingual Twitter updates from orbit. A Swede is also on board.

It was NASA's 33rd nighttime shuttle launch and preceded, by just two days, the 25th anniversary of Discovery's first liftoff. Flags flew at half-staff throughout Kennedy Space Center on Friday in memory of Sen. Edward Kennedy.

There were times Friday night that NASA feared thunderstorms might cause yet another delay. Launch officials were in touch with the weather officer every 15 minutes as conditions flip-flopped between "go" and "no go."

"All the hot air from all the talk we did blew all the clouds away," joked Mike Moses, chairman of the mission management team.

Only seven shuttle flights remain, including this one. A blue-ribbon review committee should file its report soon, offering options to President Obama for the direction of NASA's human spaceflight program. As it stands now, the space shuttles will be retired after space station construction is completed in the next year to year-and-a-half.

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