## Shuttle

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A great ride — and, unfortunately, one you won't be able to take from the United States, unless you happen to be a realfor-sure astronaut. The model I went orbiting in on Monday in a Canoga Park warehouse is the only one of its kind — and it's being shipped this week to a children's museum in Caracas, Venezuela.

In fact, WonderWorks officials are somewhat puzzled that their shuttle has generated great interest in Venezuela, Korea, Japan and Canada but not in the United States.

## Exporting the shuttle

As no other country on Earth has anything approaching the Space Shuttle, you have to wonder if this is another example of the United States neglecting the education of kids like Jessica, who find space naturally interesting.

"It's one place where you still have to learn about things," said Jessica, who just passed her written test to be an amateur radio operator and wants to be an astronaut.

The Venezuelans were referred to WonderWorks by the Smithsonian, said Wonder-Works founder Brick Price, a former Hughes Aircraft Co. engineer. The museum spent \$1.7 million on a roomful of true-to-life WonderWorks space playthings. The exhibits will occupy a special glass building over a thoroughfare, connected to the five-story children's museum.

WonderWorks General Manager John Palmer envisions a similar display at the Los Angeles County Aerospace Museum. A full-length shuttle could double as an auditorium, he said.

Although every last moment of the shuttle trip is simulated,

the spacecraft is realistic.

Only the seats are kid-sized.

The rest is a full-scale copy



WonderWorks officers are, from left, Brick general manager; and John Lawrence, presi-Price, chief executive officer; John Palmer, dent of Image Work Communications.

with controls lifted right from Rockwell International Corp. blueprints, said John Lawrence, president of Image Work Communications, the Woodland Hills company that developed the laser-disk projection programs that make you think you're in orbit.

A hydraulic platform beneath provides movement synchronized to the visuals. Multiple speakers do the rest.

In addition to rides on the shuttle, the Museo de los Niños will also offer Venezuelan children the chance to climb into a full-scale model of the Apollo Lunar Lander spacecraft for an imaginary descent to the moon.

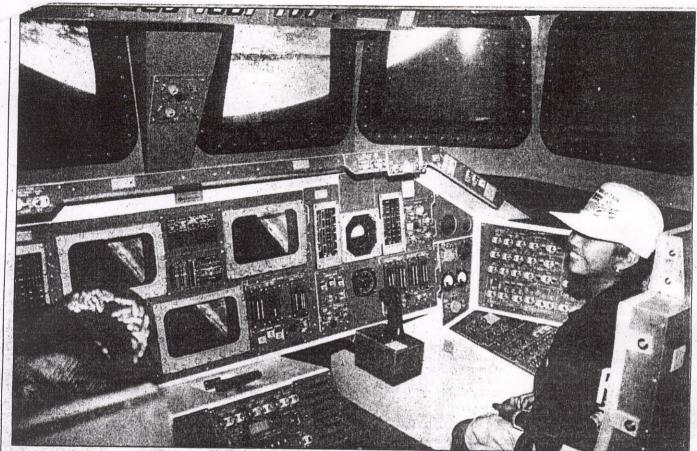
The moon trip won't stop when they leave the spacecraft—unseen, a cable will be hooked onto the back of their spacesuits. Suspended from the cable, they will bounce around a play moon surface at only one-sixth of their normal weight.

From a seat in a look-alike \*encouraged.

NASA control room, the children also will be able to command a full-scale model of the Viking Lander robot to scoop up Martian soil. The response is delayed, just as it was for NASA scientists waiting for signals to cross the 50 million miles back to Earth.

A one-fifth-scale, kid-proofed model of the Space Shuttle has a working robot arm.

Climbing around on the wings and in the cargo bay is strictly encouraged.



Bob Halvorsen/Daily News

Elene Contreras, 10, sits in the simulated space shuttle watching as the Earth is shown through the craft's "windows."

## Young rocketeers with 'write stuff'

By Stephanie Brommer Daily News Staff Writer

CANOGA PARK — Fourth-grader Elene Contreras looks at the nighttime sky and dreams of going to Pluto.

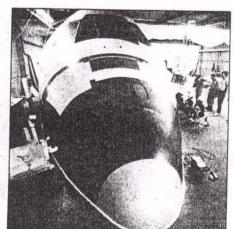
The 10-year-old pupil at Woodland Hills' Calvert Street Elementary School got her first taste of space Tuesday in a space shuttle simulator built in Canoga Park for a children's museum in Venezuela.

Elene and three of her peers belted themselves into the 30-foot shuttle's cockpit, looked at the control panels and windows and "took off" on a five-minute simulated flight in space.

Solid rocket boosters were released — jolting the cockpit — and photos of the earth and moon flashed across the front windows. Mission control told the young astronauts what they were seeing and experiencing.

After a bumpy re-entry, the youngsters gave thumbs-up signs, beamed broad smiles and said they want to be astronauts when

they grow up.
"I want to be an astronaut and walk on Pluto, because me and my brother keep dreaming about Pluto," said Elene, who lives in Los Angeles. "I want to learn about space and see all the planets and what they look like."



The simulator is contained in this full-size partial mock-up of the space shuttle.

The Calvert Street fourth-graders won the simulator ride after writing class essays on why they want to fly in space. On Tuesday, Rocketdyne, a Canoga Park aerospace firm that builds the space shuttle's main engines, and Wonderworks, a Canoga Park special-effects company, treated the essay winners—as well as a goldfish named Jupiter and a dog named Astro—to a ride in the simulated cockpit.

Wonderworks designers consulted Rocketdyne engineers on the world's only full-scale shuttle cockpit replica. It cost \$600,000 to build and was sent Tuesday to the Museo de los Ninos in Caracas, Venezuela

"Creating motion theater for education has been a dream of mine," said John Palmer, Wonderworks' general manager. "It's based in fact, not fantasy, but it makes kids fantasize about really doing these things in their future careers."

Having written in her winning essay that she wanted to press the buttons for liftoff and grow up to be an astronaut, 9-year-old Rashida Henry of Reseda gazed incredulously at the control buttons all around the cockpit. She and the others gasped when flames caused by the simulated re-entry were flashed on the screens.

"I didn't know that there would be a lot of buttons on the ceiling," said Deborah Cho, 9, of Reseda. "I liked it when the screen looked like it was on fire. It was so bright; and we felt like we were going faster."

The short ride accelerated the young adventurers' interest in space, they said.

If just one of the students maintains an interest in science, Wonderworks and Rocketdyne officials will accomplish their goal, they said.