

Discovery shuttle ready for first flight

United Press International

CAPE CANAVERAL — The confident crew of the shuttle Discovery arrived by jet at the Kennedy Space Center Sunday eager for the start of the new spaceship's countdown and its twice-delayed first launch Wednesday.

"Once again, it's good to be back here," shuttle commander Henry Hartsfield said. "We fully intend to make it this time. The bird is ready to go and I can guarantee you one thing, the crew is still ready and we're anxious to get going."

Hartsfield, co-pilot Michael Coats, and crew members Judy Resnik, Steven Hawley, Richard Mullane and Charles Walker — the same crew that rode out Discovery's aborted blastoff June 26 — arrived at the shuttleport for the start of the countdown, including 14 hours and 35 minutes of built-in "holds."

If all goes well, the countdown will end at 8:35 a.m. Wednesday with the maiden blastoff of America's third space shuttle on a six-day mission to launch a record three communications satellites.

"We have the privilege of flying the first flight of the Discovery and if the Discovery turns out to be as good as the Challenger and the Columbia have been we're going to be in great shape," said Resnik, the second American woman to fly on a shuttle flight.

Discovery's blastoff abort in June

forced mission planners to cancel the shuttle's second flight, scheduled for Aug. 29, and to combine the payloads of the first two missions to lessen the impact of the delay on the rest of the year's shuttle schedule.

The first launch attempt June 25 was scrubbed when a backup flight computer broke down.

Engineers still do not know exactly what caused the abort but they suspect microscopic particles in the No. 3 main engine's hydraulic system interfered with the operation of the main hydrogen fuel valve, prompting engine shutdown just four seconds before liftoff.

The big rocket motor was replaced and engineers are confident the problem will not be repeated.

Locked inside Discovery's 60-foot-long payload bay are two commercial communications satellites, a military relay station and an experimental collapsible solar cell array that will tower 10 stories above the shuttle when fully extended.

About 30 minutes after the countdown begins, engineers will power up Discovery's electronic systems. The countdown slips into high gear Tuesday night with preparations to begin filling the shuttle's huge external tank.

The crew is scheduled to enter Discovery's cabin about 6:45 a.m. Wednesday to await their ground-shaking launch to orbit.

A&M scientist studies sea basin formations

University News Service

A Texas A&M University geophysicist is participating in Japanese and French expeditions to the Okinawa Trough in the East China Sea to learn how the basin developed.

Dr. Thomas W.C. Hilde, director of the Geodynamics Research Program of the College of Geosciences, said the basin adjacent to the Ryukyu Island Arc south of Japan "apparently developed rapidly in the last one-half million years" as the seafloor spread behind island arcs as a result of plate convergence and subduction (moving of one geological plate under another) of the Earth's crust.

Hilde and other scientists on the September and October expeditions feel the history of the region is contained in an "expanded geological record" locked within the sediments and rocks of the trough.

"What we learn may help us to un-

derstand the general processes of development for many such sedimentary basins," he said.

During the expeditions, the scientists will use seismic reflection data to determine crust structure, ocean bottom seismometers to determine earthquake activity and the nature of crust movement, heat flow measurements to examine geothermal activity, as well as dredging and coring to determine the age and composition of rocks and sediments in the trough.

Hilde has suggested that deep-sea trenches created by converging plates in the Earth's crust may be used to dispose of waste materials, including junked nuclear submarines.

He found that giant depressions, known as grabens, are formed in the "downgoing" plates of the Earth's crust as the plates bend downward into the trenches.

Pole vaulter leaps for ballot

United Press International

ALEM, Ore. — Populist Party presidential candidate Bob Richards, a 1950s Olympic pole-vaulter star, failed to jump onto the Oregon Populist Party's state ballot but he's not giving up yet.

Richards, who lives on a 6,400-acre ranch in central Texas, grew up in Champaign, Ill. He was ordained a Brethren minister at the age of 19 and now gives motivational speeches.

Richards, 58, became a national hero when he twice won the Olympic pole vault gold medal, in 1952 and 1956. His picture appeared on a popular cereal's box for 14 years, also appearing in TV commercials.

On Saturday, Richards told about

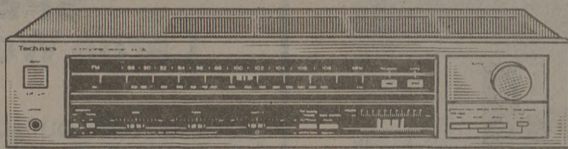
200 supporters in Salem that he stands for lower taxes, lower interest rates and less government.

"Our economic and political life is all out of balance because of interest and taxes," Richards said. "We've got to cut interest rates in half. We've got to cut taxes in half."

He needed the signatures of 1,000 Oregon voters who attended Saturday's state Populist Party convention, but only about 200 people showed up.

Ed Shaw, public relations director for Richards, said if the secretary of state cannot be persuaded to voluntarily put Richards' name on the ballot, the candidate will go to court and try to win a spot.

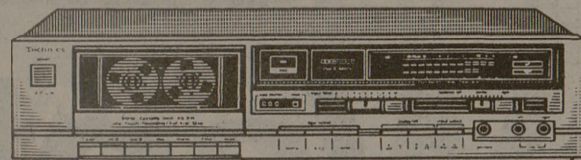
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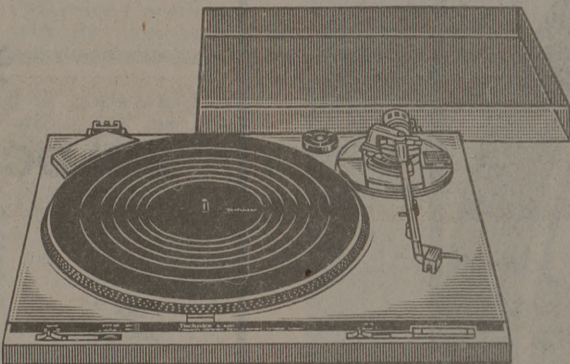


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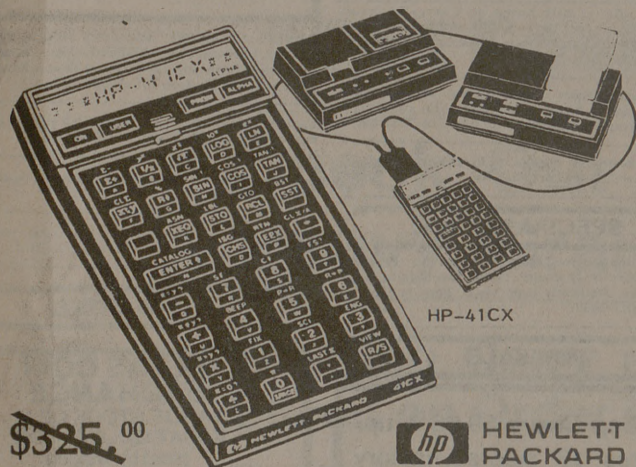
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