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**Second Attempt to Launch the Shuttle with the Hubble Space Telescope**

@@ Discovery's five astronauts returned Sunday for a second attempt to launch the shuttle with NASA's most valuable and celebrated payload, the $1.5 billion Hubble Space Telescope. Discovery is scheduled to lift off at 8:31 a.m. EDT Tuesday. ``We feel very confident that things are going to go well this time,'' said Discovery's commander, Air Force Col. Loren J. Shriver. ``We're going to come out OK on Tuesday morning and, if not, we'll just keep trying until we do. That's kind of the name of the game here,'' Shriver said. NASA test director Mike Leinbach said Sunday that the countdown was proceeding smoothly and the shuttle appeared to be in perfect condition. The countdown got under way Saturday afternoon. A faulty power unit forced the first launch attempt to be scrubbed four minutes before liftoff April 10. The unit was replaced with a new one, which tests showed to be fine. ``Hopefully, we'll get the shuttle off the pad this time,'' Leinbach said. A 70 percent chance of favorable weather was expected at launch time, with low clouds being the main concern, said the Air Force's Ed Priselac, shuttle weather officer. A weak cold front from the north was expected to pass through the area by Monday night. The outlook is considerably better for Wednesday and Thursday, Priselac said.

@@ As Discovery's astronauts arrived from Johnson Space Center in Houston early Sunday afternoon, the shuttle Columbia was being transported to a launch pad 1.6 miles from Discovery. It is only the second time both shuttle launch pads at Kennedy Space Center have been occupied simultaneously. The first time was in January 1986; 16 days after Columbia lifted off, Challenger exploded. Columbia commander Vance Brand said he does not believe the National Aeronautics and Space Administration is moving too fast with his shuttle. NASA expects to launch Columbia with an astronomical observatory called Astro no earlier than May 16, one week later than planned because of Discovery's two-week delay. ``In some cases, it could be a problem'' having shuttles on both launch pads, Brand said. ``In this particular case, everything's fitting together.'' NASA has until Saturday to get Discovery off the ground. After that, all launch attempts must be halted for eight days so Hubble's batteries can be recharged. The six nickel-hydrogen batteries will power Hubble from the time it is disconnected from Discovery's electrical system until its two energy-collecting solar panels take over in space.

@@ Discovery's payload bay was sealed late Saturday night, drastically reducing the risk of contamination to the telescope's finely polished 94.5-inch mirror. Discovery will aim for an altitude of 380 miles, the highest a shuttle has ever gone, so the telescope can be placed in its proper orbit far above Earth's distorting atmosphere. During Hubble's 15-year journey through space, astronomers expect to look back to nearly the beginning of time and solve some of the universe's most perplexing mysteries. Astro will measure ultraviolet radiation undetected by Hubble and thus provide additional targets for the telescope. The $100 million observatory also will focus during Columbia's nine-day mission on Comet Austin, believed to be on its first trip through the solar system. Both Hubble and Astro were scheduled for launch in 1986 but were delayed by the Challenger accident.

What was the mission of Discovery's five astronauts?

Documenting earth from space in high quality resolution.

Filming a movie on space.

Arriving with Discovery to the moon.

**Launching the shuttle with NASA's Hubble Space Telescope.**

What happened on the first time that both shuttle launch pads at Kennedy Space Center have been occupied simultaneously?

There wasn’t time before because now it’s the first time it happened.

Both shuttles were launched and return successfully to earth.

**One shuttle was exploded.**

Both shuttles had technical problems and didn’t launch.

Why does Discovery aim for an altitude of 380 miles, the highest a shuttle has ever gone?

Because of the traffic on other altitudes.

**So the telescope can be placed in its proper orbit far above Earth's distorting atmosphere**

This altitude was randomly chosen and doesn’t have important reason.

It’s safer and easier for navigation.