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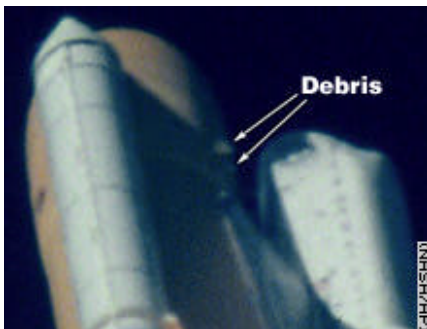
HOUSTON, Texas (CNN) -- A few days before the Columbia shuttle disaster, NASA noted that debris striking the left wing after takeoff might have "the potential for a large damage area to the tile."



Tile damage stemming from the launch "may certainly be the leading candidate" in the search for the cause of the disaster that claimed seven lives Saturday morning nearly 40 miles above Texas, according to the agency.

The memo, written on day 12 of the 16-day mission, noted that something hit the tiles during the shuttle's launch January 16, most likely foam from the craft's external fuel tank. (Read the memo)

An analysis of the impact showed that multiple tiles were missing over a 7-inch-by-30-inch area, but that the loss shouldn't be a problem, NASA official Don L. McCormack wrote in the memo, dated 17 years to the day after the shuttle Challenger disaster.



"Thermal analyses indicate possible localized structural damage but no burn-through, and no safety of flight issue," the document said.

In other words, a few tiles might have been knocked off, which has happened before, but the overall integrity of the mosaic of tiles, which protects the underbelly of the shuttle from temperatures of more than 3,000 degrees Fahrenheit during re-entry, was thought to be sound.

"We looked at the two worst cases: the loss of a single tile near the main door and the loss of multiple tiles in a larger area," Ron Dittmore, manager of NASA's space shuttle program, said Monday.

He and many ~~NASA~~ engineers determined at the time that there was no reason for worry.

Meanwhile, a newly surfaced video shows the doomed shuttle over California, with what appear to be pieces falling off of it as it re-enters the atmosphere. This could indicate that Columbia was already in trouble well westward of Dallas, Texas, where its final



disintegration occurred Saturday.