

4 February 2008

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Image of the problematic coolant line
NASA

Bent Hose Problem Will Not Delay Atlantis

Launch schedule still on track

Last week NASA confronted another possible problem that could have set back the launch of Atlantis even further. During a routine inspection of the shuttle that is supposed to take the European module Columbus to the International Space Station, engineers discovered that one of the hoses used to carry Freon coolant to one of the shuttle's heat radiation was severely bent out of its shape. Other coolant hoses had been retracted successfully into their storage boxes. Similar problems had been experienced with the space shuttle Discovery while the other shuttle in service, the Endeavour did not. Shuttle program manager Wayne Hale said that for it to function correctly, the hose must be in a straight position, but this particular one is bending in an unnatural way. Nonetheless, NASA engineers decided yesterday that the shuttle may fly at least one time without experiencing any severe problems. Previously the space shuttle Discovery had carried out to mission with a flawed hose. They are designed to deliver coolant to the shuttle's radiators, during the re-entry stage when the spacecraft experiences extreme temperatures due to air friction. If the hose is to fail, then the radiator it feeds will most likely be shutdown, the leak contained and its load will be taken by the other radiator systems on board the shuttle. While closing the doors to the shuttle's payload yesterday, a NASA technician was given the task to try to push the hose into its retraction box with the help of a long pole equipped with a hook at one end. NASA has still to release a press statement saying whether the operation was successful or not, but the liftoff procedure will probably remain on track if the shuttle doesn't experience any additional problems. The Atlantis space shuttle made two unsuccessful launch attempts on December last year, due to the appearance of several problems with the sensor fuel gauges. The reparations seem to have solved these problems for now. Also, to ensure that the mission will not be delayed even further, NASA decided to return to its previous launch procedure. During the second launch attempt in December, the U.S. space agency modified the launch criterion from three of the four fuel gauges working, to four out of four. Its already tight schedule however cannot permit any further delays, thus the three out of four launch criterion has been reintroduced.