A team of Lockheed Martin engineers sent NASA key maneuvering data for the $125 million Mars Climate Orbiter in non-standard units, probably since the craft was launched in 1998, according to a NASA official trying to explain the loss of the craft.

Miscalculations due to the use of English units instead of metric units apparently sent the craft slowly off course -- 60 miles in all -- leading it on a suicide course through the Martian atmosphere.

But the space agency was quick to deflect blame from Lockheed Martin, which had been controlling the day-to-day operations of the craft, saying that NASA should have had safeguards to catch the error.

"We're not in the blame game," said Thomas Gavin, deputy director for space and Earth science at NASA's Jet Propulsion Laboratory. "A single error should not bring down a $125 million mission."

He did say, however, that NASA operates using metric units, "and has for a long time."

House Science Committee Chairman F. James Sensenbrenner, Jr., sounding stunned, released a two-word statement after hearing the news about the miscommunication: "I'm speechless."

The origin of the mistake apparently dates back to the very first maneuverings of the craft, which was launched on December 11, 1998.

A Lockheed Martin spokesperson confirmed that their engineers had been sending data in English units.

When asked whether the company was aware that NASA had been expecting metric units, the spokesperson said, "Obviously not."

"I don't think this is a matter of Lockheed Martin making a mistake," the spokesperson added.

Thrusters used to help point the spacecraft had, over the course of months, been fired incorrectly because data used to control the wheels were calculated in incorrect units. The problem did not affect the craft's propulsion system, Gavin said.

Lockheed Martin, which was performing the calculations, was sending thruster data in English units -- in this case, pounds -- while NASA's navigation team was expecting metric units, Newtons. One pound is equal to 4.48 Newtons.

NASA safeguards and positioning models never caught the mistake, Gavin said, apparently because the trajectory shift was so gradual.

Mission controllers say that the orbiter dipped 60 miles closer to the Martian surface than expected -- falling just 38
miles (60 kilometers) above ground.
Friction from atmospheric entry probably tore the craft apart or deflected it into a useless trajectory in space.
The craft was to study weather patterns and climate on Mars.