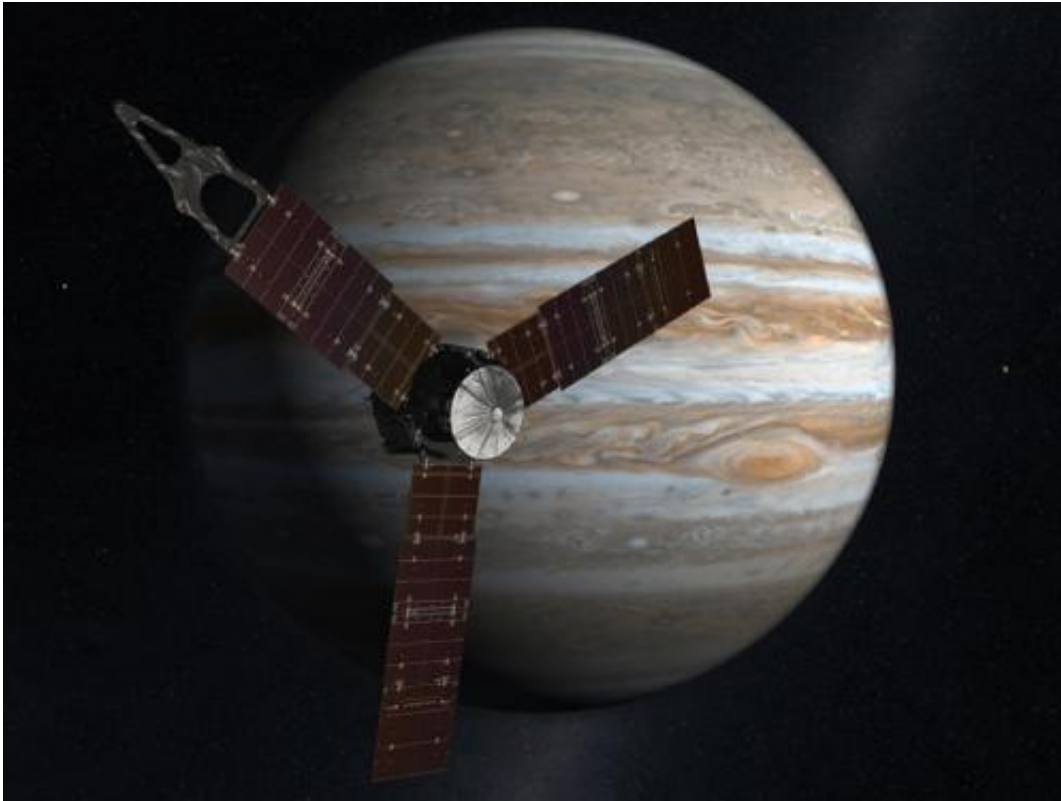


# Gas giant spacecraft all gassed up

July 8 2011, By Priscilla Vega and DC Agle

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NASA's Juno spacecraft passes in front of Jupiter in this artist's depiction. Juno, the second mission in NASA's New Frontiers program, will improve our understanding of the solar system by advancing studies of the origin and evolution of Jupiter. Credit: NASA/JPL-Caltech

(PhysOrg.com) -- The Juno spacecraft completed hydrazine fuel loading, oxidizer loading and final tank pressurizations this week, and now the complete propulsion system is ready for the trip to Jupiter. The

spacecraft is currently at the Astrotech processing facility in Titusville, Fla.

Hydrazine is the fuel of choice for most spacecraft because of its stored energy. When the fuel is mixed with the [oxidizer](#), the liquid ignites in the propulsion system's main engine to perform the spacecraft's four large maneuvers. One of these maneuvers includes inserting the spacecraft into orbit around Jupiter in 2016.

With the fueling completion, the spacecraft is 99 percent ready for launch. Once the final thermal blanket closeouts and wet spin tests are complete, the spacecraft will be 100 percent ready for installation onto the Atlas 551 [launch vehicle](#).

Provided by JPL/NASA

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