European cargo rocket to supply Space Station

An unmanned Ariane rocket is scheduled to launch a cargo vessel into orbit on Tuesday in Europe's second mission to carry supplies to the International Space Station (ISS), space officials said on Friday.

The modified Ariane launcher will lift off at 7.08 p.m. (2208 GMT) from Europe's spaceport in Kourou, French Guiana, on the northeast coast of South America, carrying a 20 tonne cargo module, the heaviest payload ever launched on an Ariane rocket.

The vessel, dubbed "Johannes Kepler" in honor of the 17th century German astronomer and mathematician, is the second Automatic Transfer Vehicle (ATV) Europe has contributed to the ISS program. The first docked with the ISS in early 2008.

The ATV is designed to deliver fuel, food, clothing and oxygen to the ISS crew as well as spare parts and is due to dock with the ISS on February 23.

Billed by the European Space Agency (ESA) as a major challenge for Europe's space program, the ATV docks with the ISS without human intervention.

"The precision of the ATV is tremendous compared to the mass of the vehicle," Nico Dettmann, ESA's ATV Programme Manager said in a television interview. "We have redesigned the (cargo) racks and every rack is 50 kg (110 lb) lighter," he said.

The ATV has three times the cargo capacity of Russia's Progress vehicle and was developed by the ESA as part of a barter arrangement with the U.S. space agency NASA.

Instead of paying cash for its share of the station's operating costs and also to secure additional astronaut access, ESA is providing the ATV and other components.

"A full ATV mission costs around 350 million Euros ($475 million), the ATV spacecraft itself accounting for around 200 million Euros ($270 million)," Pal Hvistendahl, ESA spokesman told Reuters.

"The program that led to the development, manufacturing, qualification and launch of ATV-1 (launched in 2008) cost 1.3 billion Euros ($1.75 billion)," he said.

Four more ATVs are planned for the space station, and NASA may buy more with the ESA as its space shuttle fleet is due to be retired after its next planned launch on February 24.

The space station, which is about 85 percent complete, is a $100 billion project by 15 nations.

(Reporting by Alexander Miles, editing by Tim Pearce)

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