European space cargo ship set for ISS docking

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Picture taken and released on July 29, 2014 by the European Space Agency (ESA) shows an Ariane 5 ES heavy rocket carrying the Automated Transfer Vehicle ATV-5 lifting off from the launch pad at the ESA base in Kourou, French Guiana

Europe's final robot cargo ship to the International Space Station (ISS) is scheduled to dock on Tuesday, its manoeuvres webcast live from several angles, France's CNES space agency said on Monday.

The automated transfer vehicle (ATV), the fifth and last that Europe had pledged for lifeline deliveries to the orbiting outpost, was blasted into space on July 30 from Kourou in French Guiana.

Weighing in at more than 20 tonnes, the double decker bus-sized craft is carrying the biggest-ever payload of more than 6.6 tonnes, including fuel, water, oxygen, food, clothes and scientific experiments for the six ISS crew.

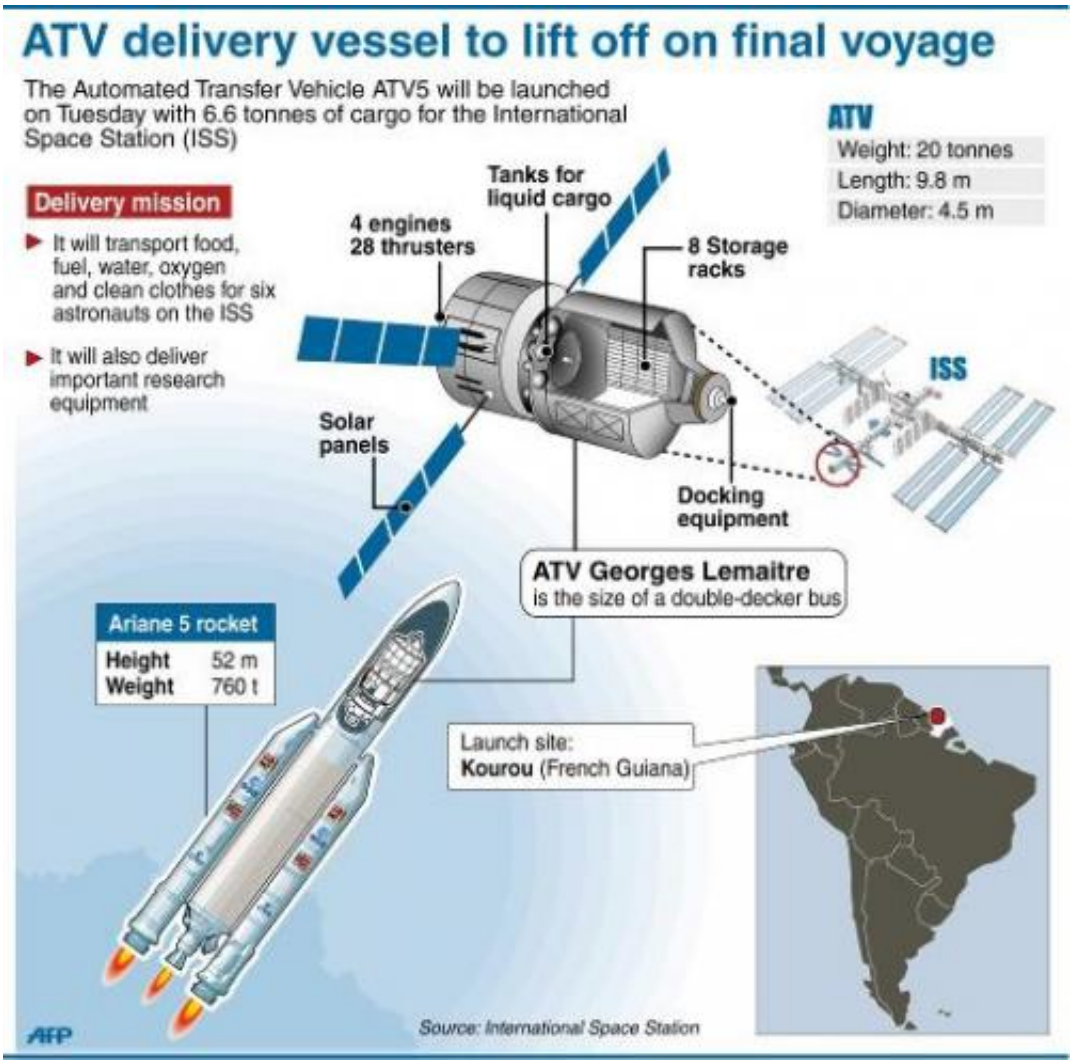
Having navigated its way to the ISS by starlight, the craft is set to dock with its target at a height of about 400 kilometres (250 miles) above the Earth at 1330 GMT on Tuesday.

"For the first time, CNES will be broadcasting live pictures of the event on its website from five cameras," the agency said in a statement.

The webcast will start at 1245 GMT.

This will include live footage of the approaching ATV from cameras on the ISS and updates from the ATV control room at the CNES Space Centre in Toulouse, in charge of docking operations.

The craft is named after Georges Lemaitre, the Belgian astrophysicist who proposed the "Big Bang" theory of how the Universe came into being.



Graphic explaining the Automated Transfer Vehicle (ATV5) which is sset to dock with the International Space Station (ISS) Tuesday

After unloading its cargo, the 10-metre (33-feet) pressurised capsule will provide additional living and working space for the astronauts and use its onboard engines to boost the altitude of the space station, which loses height through atmospheric drag each day.

At the end of its six-month mission, filled with garbage and human waste, the spacecraft will undock and burn up in a controlled re-entry

over the South Pacific.

The ISS will in future be resupplied by Russia's Progress freighter and the Dragon and Cygnus craft built by two NASA-contracted private American firms—Space X and Orbital Sciences.