

Mission accomplished for Europe's cargo freighter

2 November 2013



The ICC portion of the Automated Transfer Vehicle Albert Einstein, the fourth in a series of lifeline vessels bringing supplies and critical altitude boosts to the International Space Station, being weighed at Kourou space center, French Guiana

Europe's heaviest-ever cargo carrier to the International Space Station burned up in Earth's atmosphere Saturday in a controlled manoeuvre after a five-month mission, the European Space Agency (ESA) said.

Filled with about six tonnes of garbage and waste produced on board the ISS, the Automated Transfer Vehicle (ATV) met its fiery end over an uninhabited zone of the southern Pacific Ocean at 1204 GMT, it said in a statement.

Dubbed Albert Einstein, the lifeline craft had detached from the ISS on Monday, then hovered at a safe distance until Saturday, when its engines were fired to send the vessel back towards Earth for a planned, complete disintegration.

"Albert Einstein performed a series of delicate

manoeuvres to reenter below the Station in order for the astronauts to observe the spacecraft's fragmentation in the upper atmosphere, providing unique information on reentry physics," said the statement.

Europe's fourth ATV to service the ISS was rocketed into space from Europe's spaceport in Kourou, French Guiana, on June 5 and docked 10 days later.

The size of a double-decker bus, it ferried a record cargo of about seven tonnes to the ISS—food, fuel, water, oxygen, science experiments and special treats for the orbiting crew.



This handout picture released on January 1, 2013 by Arianespace shows the loading process for ATV Albert Einstein beginning at Europe's Spaceport in Kourou, French Guiana

At nearly 20.2 tonnes, ESA's penultimate cargo delivery to the ISS was the heaviest payload ever launched by an Ariane rocket. It also left the station with the largest-ever amount of waste, said an ESA statement.

The unmanned vessel was 10 metres (33 feet) long and 4.5 metres (15 feet) in diameter.

One of its key functions was to boost the ISS, constantly falling towards Earth due to atmospheric resistance, back into a higher orbit.

The Albert Einstein followed the hi-tech trail of three others since 2008 that also carried the names of science gurus—the Jules Verne, the Johannes Kepler and the Edoardo Amaldi.



The Ariane 5 blasts off from the French Guyana European Spaceport of Kourou on June 5, 2013

It will be followed next year by the last in ESA's ATV series—the George Lamaitre named for the father of the Big Bang theory of the Universe's creation.

"ATV Georges Lemaitre, has already arrived by boat at the European spaceport in French Guiana," said the agency.

"Loading cargo into the pressurised module will start in March next year. ATV-5's modules will then be combined and placed on its Ariane launcher for launch at the end of June."

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