

Arianespace Flight 164: Successful launch of the heavy-lift Ariane 5 ECA

The Ariane 5 ECA launcher successfully orbited two satellites on Saturday, February 12: the XTAR-EUR communications satellite for operator XTAR, and the Sloshtat scientific satellite for the European Space Agency (ESA). The MAQSAT-B2 structure was also integrated in the Ariane 5s upper composite to validate the launchers performance.

Ariane 5 ECA offers record payload capacity

The success of Flight 164 establishes a new standard in commercial space transportation.

Ariane 5 ECA offers payload capacity of nearly 10 metric tons into geostationary transfer orbit, giving Arianespace customers even greater performance, flexibility and competitiveness for the worlds best launch service.

With the in-flight validation of Ariane 5 ECAs Vulcain 2 main engine and the ESC-A cryogenic upper state, Arianespace and the entire European space industry have fully demonstrated their ability to upgrade the Ariane 5 launcher.

Offering unexcelled reliability and availability, the Ariane launch system continues to set the global standard for all major operators.

Flight 164 at a glance

Flight 164 was carried out by the Ariane 5 ECA from Europe's Spaceport in Kourou, French Guiana.

Liftoff was on Saturday, February 12 at 6:03 pm local time in Kourou (21:03 GMT, 4:03 p.m. in Washington, DC, and 10:03 p.m. in Paris).

Provisional parameters at injection of the cryogenic upper stage (ESC-A) were:

Perigee: 249.9 km for a target of 249.9 km (4)

Apogee: 35,821 km for a target of 35,918 km (260)

Inclination: 6.98 degrees for a target of 7.00 degrees (0.07)

The Flight 164 launcher carried a total payload of 8,312 kg., including 3,772 kg. for the XTAR-EUR and Sloshtat satellites. To validate the launchers performance, Ariane 5 also carried the MAQSAT-B2 structure, weighing 3,496 kg. and integrated in the upper composite.

XTAR-EUR, the first commercial satellite to deliver X-band services, will be positioned at 29 degrees East, allowing it to offer coverage from the East Coast of Brazil to Southeast Asia.

Built by Space System/Loral of the United States, XTAR-EUR is fitted with 12 high powered X-band transponders. XTAR is a joint venture of Loral and Hisdesat of Spain. The XTAR satellite will provide governmental and military communications, in particular for the United States and Spain.

The MAQSAT-B2 structure is an instrumented model designed to measure the launchers behavior during the mission, transmitting both technological measurements as well as images from two onboard DVCAM cameras.

In addition, this structure carried the Sloshtat microsatellite, which will test fluid dynamics in microgravity after its successful separation from MAQSAT-B2 during Flight 164. MAQSAT-B2 was designed and produced by Germanys Kayser-Threde. Sloshtat, built by the Dutch space agency NLR, is part of a European Space Agency technology program.