

Europe's access to space in jeopardy after Vega-C rocket failure

December 21 2022, by Guillaume Reuge with Mathieu Rabechault and Juliette Collen in Paris



Tuesday's failure is a major setback for the ESA, which has 22 member states and is responsible for European launcher programs.

Flights of the new European Vega-C rocket have been suspended

pending an investigation into an overnight launch failure, French firm Arianespace said Wednesday, leaving Europe with few avenues into space.

Just minutes after the Vega-C rocket lifted off from Europe's spaceport in Kourou, French Guiana at 10:47 pm local time on Tuesday (0147 GMT Wednesday), its trajectory deviated from its programmed route and communications were lost, Arianespace said.

The order to destroy the launcher, which was carrying two satellites built by Airbus, was then given by French space agency CNES.

"The launcher fell down" into [international waters](#) in the Atlantic Ocean, Arianespace's chief technical officer Pierre-Yves Tissier told a press conference.

If successful, it would have been the first commercial launch—and second overall—for the Vega-C since its inaugural flight on July 13.

The rocket was launched over the Atlantic Ocean and had shot past 100 kilometres (62 miles) altitude and was more than 900 kilometres north of Kourou when the problem occurred.

Tissier said the "failure seems limited to Zephiro 40", the second stage of the launcher built for the Vega-C by Italian aerospace company Avio.

Avio CEO Giulio Ranzo said the company took full responsibility for the failure.

If it had been successful, it would have been the first commercial launch of the rocket following its inaugural flight on July 13.

The flight data was recovered and will now be analysed as part of an inquiry that will be co-led by the European Space Agency and Arianespace.

The independent commission aims to determine "the cause of the failure and to propose robust and long-lasting corrective actions to guarantee a safe and reliable return to flight of Vega-C," Arianespace chief executive Stephane Israel told the press conference.

Latest Europe space setback

The suspension leaves Europe with few options after numerous delays to the next-generation Ariane 6 rocket and cancelled Russian cooperation over the Ukraine war.

Just two launchers remain of the previous-generation Ariane 5, with the only other option being Vega-C's predecessor Vega.

Otherwise, Europe has no way to launch satellites into orbit or heavy payloads into space until Ariane 6's long-delayed inaugural flight planned for late 2023—or when Vega-C flights resume.

Israel said that "neither Ariane 5 or Ariane 6 are impacted by the failure that occurred".

The failure marks the latest setback for the European Space Agency

(ESA), which is aiming to make Europe more competitive in the rapidly expanding satellite market.



The Vega-C launcher was lost over the Atlantic Ocean around 10 minutes after liftoff, Arianespace said.

Elon Musk, the CEO of US rival rocketmaker SpaceX, tweeted that he was "sorry to hear" of the failure.

"It is a sobering reminder of the difficulty of orbital space flight," he added.

The Vega-6 rocket had been trying to bring into orbit two Earth

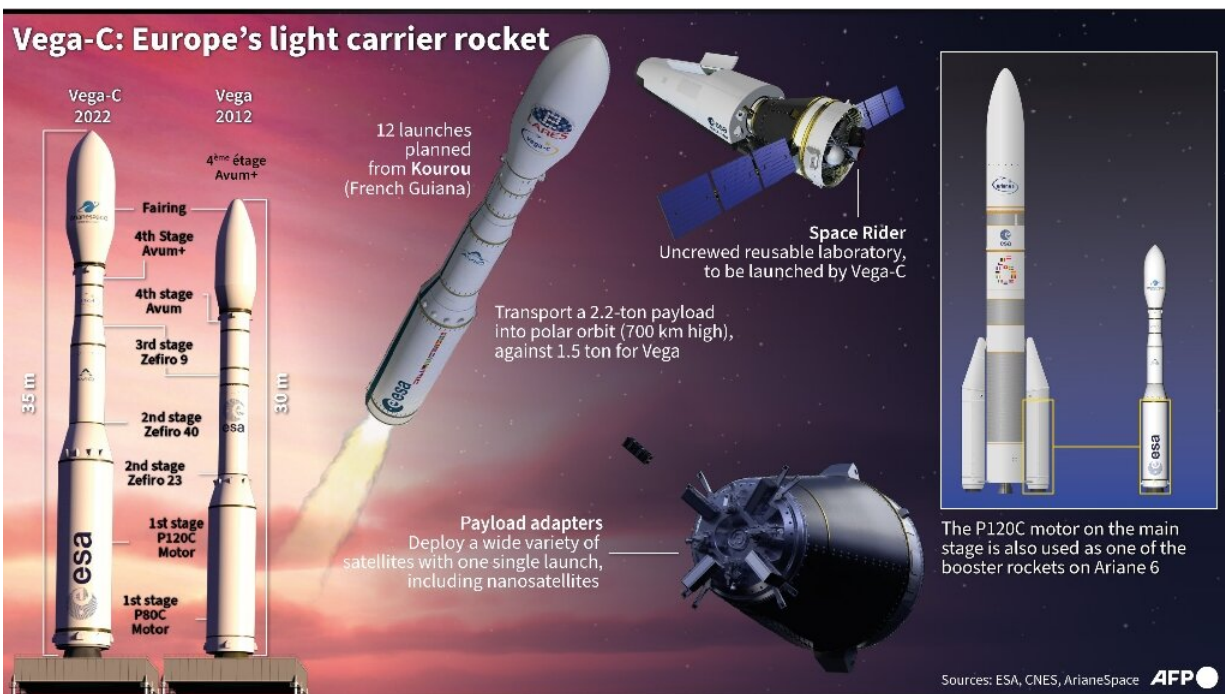
observation satellites built by European aerospace giant Airbus.

They were planned to join the Pleiades Neo constellation, which is capable of capturing very high-resolution images of any point on the globe several times a day.

The failure is a blow for Airbus, which developed the programme, whose services are sold to both companies and the military.

Satellites that bring in commercial revenue are usually insured. An industry insider said that the lost Pleiades Neo 5 and 6 satellites were covered for 220 million euros (\$233 million), potentially allowing Airbus to build them again.

Airbus did not comment when contacted by AFP.



Factsheet on the Vega-C, Europe's light carrier rocket.

Third failure in nine launches

Tuesday's launch was originally scheduled for November 24.

However it was postponed due to a faulty piece of equipment linked to the payload fairing, a type of nose cone, Arianespace's CEO Israel told AFP, though the problem was not connected to Tuesday's failure.

Tuesday marked the third failure out of the last nine launches of Vega or Vega-C.

It is also a blow to Avio, which has been involved in three of those failed launches. Avio's [share price](#) plunged more than 9.5 percent on Wednesday.

As well as the Ariane 6 delays, Europe's [space](#) sector has been further weakened in the aftermath of Russia's invasion of Ukraine.

Moscow pulled its Soyuz rocket launchers and technical personnel from Kourou earlier this year in response to EU sanctions over the Ukraine invasion.

In the absence of an alternative, ESA has been forced to turn to SpaceX to launch two scientific missions.

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