

Europe delays maiden launch of Soyuz with sat-nav payload

20 October 2011



A Russian Soyuz rocket is transferred to Arianespace's launch pad on October 14 at Europe's Spaceport launch site in Kourou, French Guiana. The maiden launch of a Russian-built Soyuz from Europe's space base, carrying the first satellites of a planned rival to the GPS, was scrubbed around two hours before liftoff, officials said.

Europe announced a 24-hour delay in the maiden launch Thursday of a Russian rocket laden with the first satellites in a rival scheme to America's GPS geopositioning system.

The first launch of the legendary Soyuz from Europe's space base was scrubbed some two hours before lift-off after a problem developed in fuelling the rocket's third stage, Arianespace said.

"We are going to make a new attempt tomorrow at 7:30 a.m.," the launch operator's chief executive, Jean-Yves Le Gall, told a press conference.

The operation depends on replacing a defective valve and on the freshness of the launch crews after a 24-hour postponement, he said.

Carrying the first satellites in the Galileo system, Europe's 5.4-billion-euro (7.2-billion-dollar) answer to the US Global Positioning System (GPS), the Soyuz had been set for a 7:34 a.m. (1034 GMT) liftoff.



The Soyuz VS01 rocket on launch pad at the Arianespace spaceport in Sinnamary, 12km from Kourou, French Guiana. Europe has announced a 24-hour delay in the maiden launch of a Russian rocket laden with the first satellites in a rival scheme to America's GPS geopositioning system.

It is the first launch under a 2003 deal to deploy the rocket beyond the historic Soyuz bases in Plesetsk, northern Russia, and Baikonur, Kazakhstan.

The contract is designed to harvest revenue for Russia's space industry and add a medium-weight lifter to Arianespace's heavy Ariane 5 and a future lightweight rocket, the Vega.

Galileo is designed to comprise 27 operational satellites and three spares by its completion in 2020.

It should be accurate to within a metre (3.25 feet), whereas the GPS is currently accurate to between three and eight metres (10 and 26 feet), according

to official websites.

Soyuz is built at the Samara space complex on the banks of the Volga. Its journey to Kourou is a weeks-long odyssey by train to St. Petersburg, by special freighter across the Atlantic and finally by truck from the port of Pariacabo, on the Kourou river.

The rocket ranks alongside the Saturn V, which took the Apollo astronauts to the Moon, as the most famous launcher in space history.

Its heritage can be traced to the dawn of the space race in 1957 with the launch of Sputnik and Yuri Gagarin's first manned flight in 1961. It is still being built at the rate of 15 to 20 rockets per year.

All told, its family has notched up 1,776 launches, with a success rate of more than 94 percent.

From Kourou, Soyuz will be able to hoist 2.8 tonnes into geostationary transfer orbit, compared with 1.7 tonnes from Baikonur. The difference is explained by the extra push given by Earth's rotation at the Equator.

(c) 2011 AFP

APA citation: Europe delays maiden launch of Soyuz with sat-nav payload (2011, October 20) retrieved 18 September 2019 from <https://phys.org/news/2011-10-europe-maiden-soyuz-sat-nav-payload.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.