

Latest Galileo satellites reach launch site

February 6 2015



Galileo satellite unloaded. Credit: ESA–Paul Muller

Another two Galileo satellites have touched down in French Guiana ready to take their place in Europe's satellite navigation constellation.

The pair, safely cocooned inside their air-conditioned containers inside an Air France Boeing 747, landed at Cayenne–Félix Eboué Airport yesterday.

They were then taken by lorry to be installed in the cleanroom

surroundings of Europe's Spaceport to begin final preparations for launch.

The seventh and eighth Galileo satellites will be launched together by Soyuz in late March, resuming the interrupted building of the satnav constellation. The previous Soyuz launch saw the satellites released into the wrong orbit.

The reason for the malfunction has been pinned down to an installation error in the Fregat upper stage that delivers the satellites into their final orbits. A hydrazine fuel line was bracketed next to a liquid helium line, freezing the hydrazine and resulting in Fregat's faulty orientation.

Arrival in French Guiana is the final stop in a complex production and test line that snakes back across Europe. The satellites are built by OHB in Bremen, Germany, with their navigation payloads coming from Surrey Satellite Technology Ltd in Guildford, UK, both companies being supplied in turn by subcontractors across much of the continent.

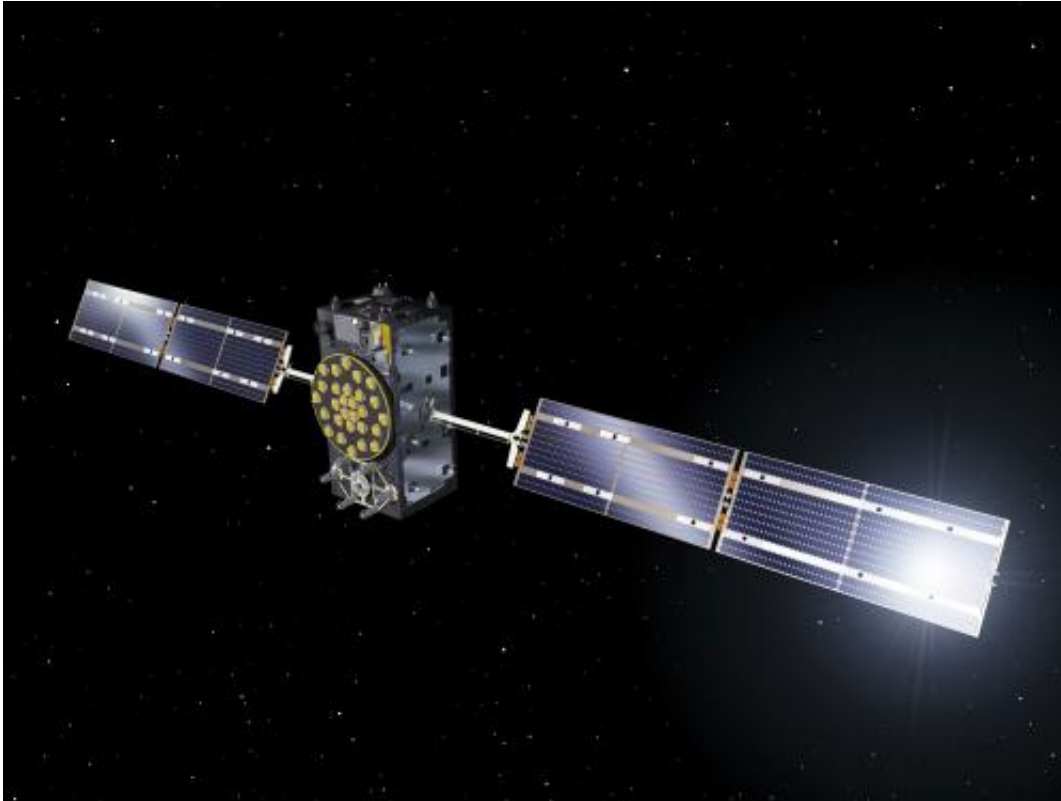
The complete satellites are then delivered to ESA's ESTEC technical centre in Noordwijk, the Netherlands, home to Europe's largest [satellite](#) test centre.



Galileo container. Credit: ESA–Paul Muller

There, a series of tests reproduces every aspect of the space environment, including acoustic noise and thermal vacuum simulations, to ensure their readiness for space.

Each satellite is also plugged into the entire worldwide Galileo ground network for days on end to check it works as planned.



Galileo satellite. ESA–J. Huart, 2014

Their testing ended with a clean bill of health and they received clearance on Tuesday to travel to French Guiana. Loaded onto lorries on Wednesday, they arrived at Paris Charles de Gaulle Airport later that day, taking off for French Guiana on Thursday.

These two satellites are planned to be launched during last week of March, following the European Commission's endorsement of the resumption of Galileo launches.



The seventh and eighth Galileo satellites were flown on this Air France Boeing 747 from Paris Charles de Gaulle Airport in France to Cayenne–Félix Eboué Airport in French Guiana on 5 February 2015. Credit: ESA–Paul Muller

Provided by European Space Agency

Citation: Latest Galileo satellites reach launch site (2015, February 6) retrieved 2 May 2024 from <https://phys.org/news/2015-02-latest-galileo-satellites-site.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.