

New breed of satellites

June 25 2013



Credit: OHB

(Phys.org) —These pictures give the first detailed views of the next batch of Galileo satellites, the first of which has already been delivered to ESA for rigorous testing in simulated space conditions.

The first [Galileo](#) Full [Operational Capability](#) (FOC) satellite was delivered to ESA's ESTEC technical centre in Noordwijk, the Netherlands on 15 May.

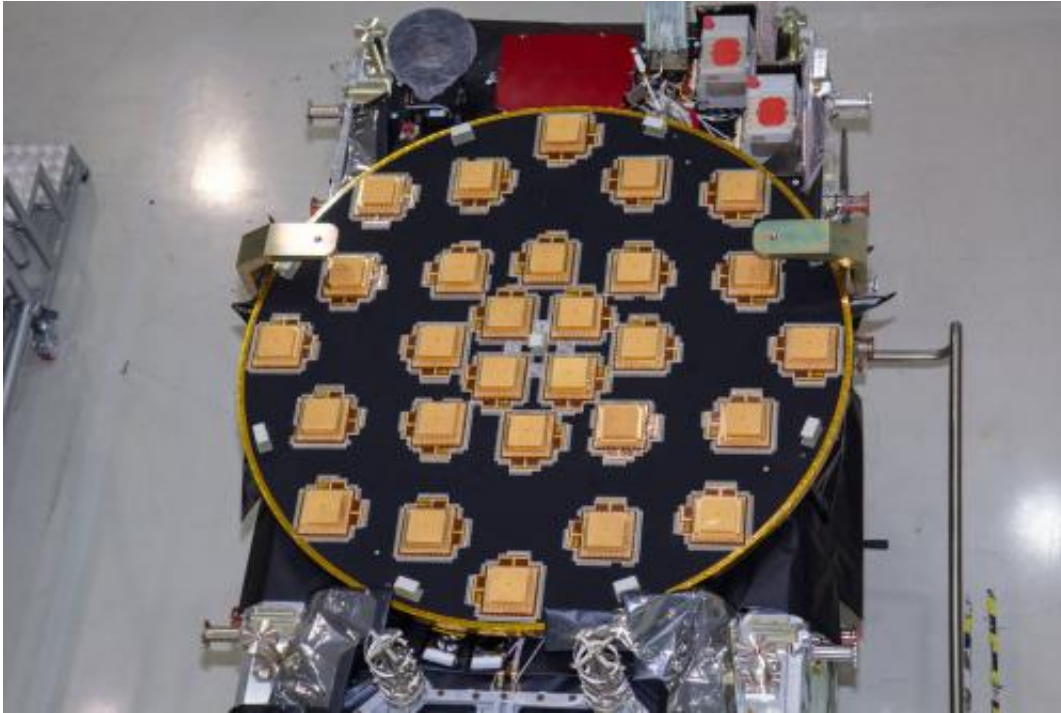
It is being prepared for testing in the ESTEC [Test Centre](#), a unique facility for Europe with all the facilities needed to validate a satellite for launch under one roof.

This initial FOC satellite is functionally identical to the first four Galileo In-Orbit Validation satellites already in orbit, the operational nucleus of the full Galileo constellation, but has been built by a separate industrial team.

Like all the other 21 FOC satellites so far procured by ESA, the satellite's prime contractor is OHB in Bremen, Germany and the navigation payload was produced by Surrey Satellite Technology Ltd in Guildford, UK. The photos shown here were taken at OHB.

The satellite is approximately the size and shape of an old-fashioned telephone booth, dominated by its circular L-[band antenna](#) that will continuously broadcast navigation messages down to Earth.

The smaller, hexagonal antenna beside it will perform a no less vital task – picking up emergency messages from vessels in distress to relay to [search and rescue](#) authorities, contributing to the international Cospas–Sarsat system.



Credit: ESA

A second Galileo FOC satellite is due to join its predecessor at ESTEC later this summer, preparing for a launch scheduled for later this year.

Provided by European Space Agency

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