



arianeGROUP

Press release

Ariane 6 Vinci engine: successful qualification tests

Vernon, October 19, 2018

-
- **Qualification tests on the Vinci® engine which will power the Ariane 6 upper stage were completed with the 148th test**
 - **This final qualification test took place on October 12 on the PF52 test bench at ArianeGroup's Vernon site**
 - **Vinci® is a re-ignitable engine which contributes to the extreme versatility of the Ariane 6 launcher, whose first flight is scheduled for 2020**
-

The final qualification test, carried out on the PF52 test bench at ArianeGroup's site in Vernon (France), had a duration of more than 15 minutes (957 seconds) with two boosts.

This success, decisive for continuing the development of Ariane 6, ends the qualification test campaign, during which the Vinci® engine will have run for a total of 52,156 seconds (more than 14 hours).

These tests in Vernon followed the development/qualification tests in space vacuum conditions carried out in 2017 and 2018 on the P4.1 test bench of the German Aerospace Center (DLR) site in Lampoldshausen, Germany.

The qualifying campaigns have achieved several major 'firsts' in terms of performance, such as:

- an series of 20 successful consecutive boosts during a single test of 300 seconds
- a test with a total duration of 1,569 seconds

The objective was to test the Vinci® engine beyond its operational requirements: during its missions, it will only need to be ignited up to four times, with a maximum burn time of 900 seconds in flight.

"The conclusion of the Vinci engine qualification tests is a major step in the development of Ariane 6. It means that, from the beginning of 2019, we will be able to assemble in Vernon the first Vinci engine flight model, identical in configuration to the qualified model. It will then be integrated with the upper stage of the first Ariane 6 launcher flight model at the ArianeGroup site in Bremen, Germany," said Alain Charmeau, CEO of ArianeGroup.



arianeGROUP

Press release

At the same time, the production of the first parts of the Vinci[®] flight engines is underway at various ArianeGroup sites, with the combustion chambers at Ottobrunn in Germany, the divergent nozzles at Le Haillan near Bordeaux (France), and the hydrogen turbopumps at Vernon.

The Vinci[®] engine developed by ArianeGroup for Ariane 6 gives the future European launcher considerable versatility. Its main feature is its multiple ignition capability: Vinci[®] will be able to re-ignite as often as necessary to place several payloads into orbit at different locations, according to the specific requirements of the mission. This engine will enable the Ariane 6 launcher to carry out all types of missions, whatever their duration and target orbit, notably the deployment of satellite constellations, for which demand is continuing to grow.

As the design authority and industrial lead contractor for Ariane 6 launcher development and operation on behalf of the European Space Agency (ESA), ArianeGroup coordinates an industrial network of more than 600 companies in 13 European countries, including 350 small and medium enterprises.

Contacts:

Astrid EMERIT - T. +33.6.86.65.45.02

astrid.emerit@ariane.group

Julien WATELET - T. +33.6 88.06.11.48

julien.watelet@ariane.group

About ArianeGroup

ArianeGroup develops and supplies innovative and competitive solutions for civil and military space launchers, with expertise in all aspects of state-of-the-art propulsion technologies. ArianeGroup is lead contractor for Europe's Ariane 5 and Ariane 6 launcher families, responsible for both design and the entire production chain, up to and including marketing by its Arianespace subsidiary, as well as for the missiles of the French oceanic deterrent force. ArianeGroup and its subsidiaries enjoy a global reputation as specialists in the field of equipment and propulsion for space applications, while their expertise also benefits other industrial sectors. The group is a joint venture equally owned by Airbus and Safran, and employs approximately 9,000 highly qualified staff in France and Germany. Its 2017 revenues amounted to 3.4 billion euros.

www.ariane.group