



MBDA and ALPhANOV Inaugurate a Test Lab for Laser Weapons in Bordeaux

On 27 March, In Bordeaux (France), MBDA and ALPhANOV inaugurated their common Vulnerability Test Facility (VTF).

This new facility, in development since 2016, is designed to test the effects of lasers on materials. To do this the site utilises laser power sources adjustable from 1 to 10 kW and multiple measurement means (fast, visible and infrared imaging, pyrometers, thermocouples, etc.) to monitor the effects delivered by the lasers. This cooperation includes the completion of the VTF as well as its Joint Implementation for a 4 years period.

The VTF has the ability to simulate many of the real world conditions of a real-life laser firing, including: the imperfections of pointing a dynamic beam, employment against crossing and spinning targets, and the complex interactions between the laser and target materials, among others. This will allow the requirements to be defined for all the individual components of a laser weapon (laser source, aiming accuracy, beam focus, etc.) and the optimization of future laser system architectures against the various types of targets that they may engage (aircraft, missiles, drones, shells, optical sensors, vehicles, naval vessels, etc.).

CEO MBDA Antoine Bouvier said: "Adding to MBDA's unique technical capabilities in Europe, the VTF may contribute to the on-going projects we are conducting for our German and British customers, as it will allow us to specify our future laser weapons in order to meet the exact needs of our military customers. This test facility is a major milestone on the path to a complete mastering of laser weapons and to strategic autonomy in this area. This is the objective of MBDA, as well as the objective of our domestic nations; now shared by Europe through its policy of Permanent Structured Cooperation."

Notes to editors:

MBDA is involved in a number of **laser weapons projects in Europe** with a technology demonstrator being tested in Germany since 2015 and another in development in the United Kingdom (project DragonFire) since 2016.

Established in 2007, **ALPhANOV** is the optics and lasers technology center of the ALPHA-Route des Lasers & des Hyperfréquences cluster. It acts as a technology transfer accelerator and uses its expertise and know-how to serve innovative projects with industrial target short and mid-terms. It offers multiple modes of action which enable it to act all along the value chain. Its fields of expertise include laser processes and micromachining, laser sources and fiber components, laser and optical systems and health applications of photonics.

MBDA is the only European group capable of designing and producing missiles and missile systems that correspond to the full range of current and future operational needs of the three armed forces (land, sea and air).

With a significant presence in five European countries and within the USA, in 2018 MBDA achieved revenue of 3.2 billion euros with an order book of 17.4 billion euros. With more than 90 armed forces customers in the world, MBDA is a world leader in missiles and missile systems. In total, the group offers a range of 45 missile systems and countermeasures products already in operational service and more than 15 others currently in development.

MBDA is jointly owned by Airbus (37.5 %), BAE Systems (37.5 %), and Leonardo (25 %).

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