## **Press Release**



## 11 October 2010

## MBDA Conducts Successful Demonstrations of New Bunker Buster Warhead

The second test firing of the Hard and Deeply Buried Target (HARDBUT) Next Generation Multiple Warhead System (NGMWS) was carried out successfully at the Biscarrosse test range of DGA Essais de Missiles on 14<sup>th</sup> September 2010. The HARDBUT Technology Demonstration Programme (TDP) is a successful warhead research programme jointly funded by the UK MoD and French Direction Générale de l'Armement (DGA) with MBDA UK as the Prime Contractor. The NGMWS is designed to defeat a wide range of targets such as command and control facilities, infrastructure and underground facilities including caves, reflecting current and potential future operations.

The firing was carried out using a representative missile airframe on the long rocket sled test track at Biscarrosse. The live Precursor Charge (PC) was detonated just in front of the massive concrete target and the inert Follow-Through Bomb (FTB) penetrated through and exited the rear face of the target, demonstrating a penetration capability significantly in excess of any warhead currently produced by MBDA. The trial was also designed to assess the robustness of the compact Ruggedized Electronic In-line Fuze (REIF) which will incorporate embedded smart fuzing algorithms. The target and trial set-up were designed to be operationally representative.

This trial builds upon the successful 1<sup>st</sup> trial conducted at the Biscarrosse test range on the 18<sup>th</sup> May 2010, where the novel concepts underpinning the NGMWS design were successfully demonstrated.

The TDP is being jointly managed by the UK MoD (DE&S) and the French MoD (DGA), supported by Defence Science and Technology Laboratory (DSTL) and the Commissariat à l'Energie Atomique et aux énergies alternatives, Centre de Gramat (CEA Gramat), and successfully delivered by MBDA teams in the UK and in France, Thales Missile Electronics (TME), QinetiQ, BAE Systems Global Combat Systems Munitions (GCSM) and Fluid Gravity Engineering (FGE). The TDP has previously been independently audited by Cranfield University and assessed as delivering research of a world class standing.

The MBDA team has now twice successfully demonstrated the performance of this new warhead design by perforation of massive concrete targets, together with successful recovery of the inert FTB and fuze from the capture butt. This represents the successful conclusion of the second stage of this TDP, proving the warhead concept and enhancing MBDA's world leading capability in warhead design. A third and final proving trial will conclude the TDP research objectives.



## **Notes to editors**

With industrial facilities in four European countries and within the USA, MBDA has an annual turnover of €2.6 billion and an order book of €12 billion. With more than 90 armed forces customers in the world, MBDA is a world leader in missiles and missile systems.

MBDA is the only 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). 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 held by BAE SYSTEMS (37,5%), EADS (37,5%) and FINMECCANICA (25%).