

Paris, 17 June 2013

## **ALENIA AERMACCHI M-346 LIGHTNING CERTIFICATION ACTIVITIES COMPLETED**

---

The testing phase planned as mean of compliance for HIRF and lightning certification of Alenia Aermacchi M-346 in the full trainer configuration has been completed.

The testing sessions were carried out at the Alenia Aermacchi Venegono and Turin-Caselle test center; the certification evidence was collected during numerous testing sessions in which innovative measurement techniques were implemented to verify the M-346 hardening versus high intensity radiated field (HIRF) environment, lightning indirect effects, electrostatic discharged effects as well as the demonstration of mutual electromagnetic compatibility among emissive and, potential, victim equipment.

Many tests were performed, for the first time, in a real operational scenario; the M-346 was set-up in different external stores configurations, thanks to the Alenia Aermacchi Anechoic Chamber - the largest in Europe for aeronautical testing - nearby the Turin Airport.

The Anechoic Chamber was essential for the antenna noise and desensitization test of the communication and navigation M-346 receiver; the test required the desensitization evaluation of communication and navigation system, i.e. the measurement of electromagnetic noise generated by M-346 aircraft itself, especially by the avionic system, and captured by the many radio communication and navigation system antennas. During the antenna noise and desensitization testing phase, the M-346 aircraft was raised at five meter height with the landing gear closed, electrically powered and with the avionic bays air conditioned.