

Leonardo: first M-345 production aircraft performs its maiden flight

- **The M-345 is the new basic-advanced jet trainer aircraft produced by Leonardo**
- **The Italian Air Force, the launch customer, has a requirement for up to 45 M-345s**
- **Lucio Valerio Cioffi, Aircraft Division Managing Director, said: “The M-345 will enable air forces to significantly enhance training effectiveness and reduce operating costs”**

Rome, 21 December 2018 – The first M-345 HET (High Efficiency Trainer) production basic/advanced trainer aircraft successfully performed its maiden flight at Venegono Superiore airport (Varese, Italy) today with pilots Quirino Bucci and Giacomo Iannelli onboard.

Quirino Bucci, Aircraft Division’s Trainer Project Test Pilot, said: “The airplane performed excellently, perfectly meeting design parameters and expectations. The engine in particular showed exceptional response to power changes, a key factor for the role the M-345 will play, particularly for aerobatic flights. We’ve also tested the advanced on-board systems and I’m extremely happy with the excellent avionics integration and man-machine interface.”

Lucio Valerio Cioffi, Leonardo Aircraft Division Managing Director, said: “I am extremely happy with what we’ve done so far and the short time it took to achieve such an excellent result. Thanks to its performance and the integrated training system the M-345, which has already generated interest among many air forces worldwide, will deliver a significant enhancement in training effectiveness and operating cost reduction. It’s an aircraft that is able to combine a jet’s superior performance and effectiveness with the cost of a high power turboprop trainer.”

The Italian Air Force, the launch customer, has a requirement for up to 45 M-345s (designated the T-345A by ITAF) to progressively replace 137 MB-339s, which first entered service in 1982, and to become the Italian Air Force’s new aerobatic team airplane. The customer has so far placed an order for five aircraft and the first will be delivered in early 2020. The new M-345s will integrate the M-346s used during the advanced training phase of the Italian Air Force’s pilots. Through the International Flight Training School the Air Force will be able to strengthen its

training school's growth and internationalization while increasing at the same time capabilities and services offered to customers.

Note to the Editors

The new M-345 HET (High Efficiency Trainer) reduces the time required by Air Forces to train pilots. It also gives trainees the chance to fly an aircraft that features higher performance characteristics than other basic/advanced trainer aircraft currently in service around the world. The performance of the M-345 allows it to carry out the most demanding mission types found in a training syllabus, delivering high quality training at significantly lower cost.

The M-345 cockpit architecture is the same as the frontline fighters. The M-345 can also perform operational roles, thanks to an extended flight envelope, with a high-speed maneuvering capability even at high altitudes, modern avionics systems, high load capacity and performance.

The M-345 is designed with a long life-cycle and an approach to maintenance based on just two levels, eliminating the need for expensive general overhauls. The aircraft's Health and Monitoring Usage System (HUMS) also contributes to a lower cost of ownership.

A sophisticated on-board training simulator confers a number of benefits. For instance, M-345 pilots are able to plan maneuvers before live training, allowing for higher efficiency during flight. Trainees are also able to fly in formation with other pilots in the air and on the ground in simulators, via a real-time data-link. The aircraft's Mission Planning and Debriefing Station (MPDS) allows trainees to analyze the missions they have just flown.

The M-345's engine is a Williams FJ44-4M-34 turbofan optimized for military and aerobatic use. The cockpit is based on HOTAS (Hands On Throttle-And-Stick) controls and features a glass cockpit with a three-colour MFD (Multi-function Display) touch screen. The aircraft's heads-up display is mirrored by a fourth screen in the rear seat.