



AERMACCHI M-345: THE NEXT GENERATION HIGH EFFICIENCY TRAINER

The new M-345HET (High Efficiency Trainer) is the latest-generation training platform from Leonardo Aircraft, ideally-suited to the entire training syllabus, from basic to advanced training missions.

The M-345HET leverages the consolidated experience of Leonardo Aircraft in the design and manufacture of jet trainer aircraft since more than 60 years. All essential M-345's systems are designed for maximum safety and reliability with minimised maintenance requirements. As a result, the M-345HET offers the high-performance of a turbofan jet trainer with life-cycle costs comparable to heavy turboproppowered basic aircraft.

Operators benefit from a two-level maintenance concept (organisational and intermediate) for aircraft, equipment and systems. An on-board Health & Usage Monitoring System (HUMS) enables data-collection and monitoring.

The aircraft benefits from a modern avionic system and high external load capacity, for mission versatility in a secondary operational role.

The M-345HET training system includes a complete Ground Based Training System (GBTS) package made of e-learning components as the CBT, Computer-based Training; the PTD, Procedural Training Device; an Operational Flight Trainer (OFT), with a 180° wide display and a life-like cockpit where the student pilots can use the same controls they will find on actual aircraft.

This simulator will allow for the introduction to tactics to be then completed in-flight with the ETTS, able to generate on the Multi-Function Displays (MFD) the tracking of targets, friend or foe aircraft, threats and all the necessary elements to create an effective virtual operating scenario.

Dimension

Wing span	8,47 m (27.78 ft)
Length	9.85 m (32.32 ft)
Height	3.74 m (12.27 ft)
Wing area	12.6 sqm (135.6 sqft)

Weights

Take-off (Trainer)	3,300 kg (7,275 lb)
Take-off (maximum)	4,500 kg (9,920 lb)

Power plant

Engine, turbofan	Williams FJ44-4M-34
Maximum Thrust	1,540 kg (3,400lb)
Internal fuel	700 kg (1,545 lb)

Performance (Clean, ISA)

Max level speed (SL/20 kft)	380/420 KTAS	
Limited Speed	400 KEAS / 0.8 MN	
Stall speed (landing, 20% fuel)	88 KCSA	
Rate of climb (SL)	5,200 ft/min	
Service ceiling	40,000 ft	
Limited Load Factors	+7 / -3.5 g	
Take-off / Landing ground run (SL)	520 m (1,720 ft)	
Ferry range	760 nm (1.410 km)	
(clean / 2 ext. thanks - 10% reserve) 1,000 nm (1.850 km)		





