

AERMACCHI M-346AJT

The Advanced Jet Trainer



AIRCRAFT DIVISION

 **LEONARDO**

Aermacchi M-346AJT | The Advanced Jet Trainer

The M-346 is a twin-engine, tandem-seat, latest generation Advanced Jet Trainer (AJT), key element of an Integrated Training System (ITS) designed to enable student pilots to develop the knowledge, skills and practices required for maximum exploitation of modern combat aircraft.

The M-346AJT is purpose-designed for a wide range of training missions, long-term reliability and cost effective operations. These characteristics – along with its Integrated Training System solution comprised of simulators and Ground Based didactic devices, including an operational Live, Virtual, Constructive environment – make the M-346AJT the best solution to train the new generation of fighter pilots.

The modern Human-Machine Interface (HMI) and the advanced mission management suite offered by the M-346's Embedded Tactical Training System (ETTS), able to generate a tactical scenario with threat and targets, Computer Generated Forces (friend or foe), on-board sensors and weapons, make this jet trainer truly representative of the last generation combat fighters.

The M-346AJT superior quality and characteristics contribute to maximize teaching effectiveness and to allow flight hours to be downloaded from Operational Conversion Unit to Pilot Training Unit, in the Lead In Fighter Trainer (LIFT) role.

In addition, the M-346AJT performance levels, flight characteristics, on-board systems and five hardpoints (three wet) offer significant capabilities also as a Companion trainer, Red Air and, when armed, for operational "Air policing" roles.

Operators benefit from a two-level maintenance concept (Organisational and Intermediate) for aircraft, equipment and systems. Health & Usage

Monitoring System (HUMS) and Structural-Health (S-HUMS) enable monitoring and data collection of on-board equipment and airframe structure.

Key attributes include:

- Carefree handling capabilities in the whole flight envelope
- ETTS for air-to-air and air-to-ground training
- Two independent Head-Up Displays with next generation fighter symbology
- Two independent Helmet Mounted Displays
- NVG fully compatible cockpit
- Comfortable environment and wide Field Of View from both cockpits
- Air-to-air refueling capability
- No scheduled depot-level structural maintenance



CHARACTERISTICS

WEIGHTS

Take off (Clean)	16,755 lb	7,600 kg
Ramp (Maximum)	21,165 lb	9,600 kg

POWERPLANT

Engines, turbofan:	2 Honeywell F124-GA-200	
Max Thrust, SLS, ISA	2 x 6,280 lb	2 x 2,850 kg
Internal fuel	4,420 lb	2,005 kg

PERFORMANCE

Max Level Speed, Low Altitude	590 KTAS	1,090 Km/h
Limit Speed	572KEAS/ 1.15 MN	1,060 km/h
Service Ceiling	45,000 ft	13,715 m
Rate of Climb (SL)	22,000 ft/min	6,705 m/min
Sustained Load Factor, SL	8.0 g	
Sustained Turn Rate, 15,000 ft	12.5 deg/s	
Ferry Range, 10% reserve, Clean/ 3 Ext. Tanks	1,040 nm/ 1,375 nm	1,925 km/ 2,550 km