



MIRACH 100/X TRANSONIC AERIAL TARGET SYSTEM

The Mirach 100/X is a transonic high-performance threat simulator, designed and manufactured by SELEX Galileo as an upgraded follow-on of the successful Mirach 100/5, in current use by worldwide Armed Forces to train and qualify all main air-defence weapon systems.

The Mirach 100/X is a reusable multi-threat simulation system offering transonic performance and unparalleled flight agility with realistic signatures. Directly derived from the Mirach 100/5, it leverages the predecessor's mission reliability and operational flexibility, seamlessly integrating into the proven ground segment, featuring aerial target command and control, mission planning and re-tasking, mission rehearsal and play back, operators training.

The Mirach 100/X is able to mimic modern high-performance threats and their trajectories and signatures by carrying a wide selection of mission payloads installed inside the fuselage, under the wings or underbelly. The system provides real-time information in complex engagement scenarios for training and weapon systems testing and evaluation.

KEY FEATURES

- State-of-the-art Transonic Aerial Target System
- Unmatched maneuverability
- Fighters-like thrust-to-weight ratio
- Enhanced mission endurance
- Category lowest life-cycle costs
- Customised configurations available
- Simulates most present-day threats in terms of kinematics and signatures, including:
 - Sea Skimming ASM
 - Fighters and strike aircraft
 - Cruise missiles
 - UAS/UCAVS.



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TECHNICAL SPECIFICATIONS

Physical

Length	4.09 m
Wingspan	2.68 m
Height	0.86 m
Fuselage Diameter	0.40 m
MTOW	360 Kg

Performances (ISA conditions)

Endurance	>100'
Max Speed Mach	> 0.92
Min Altitude	3 m
Max Altitude	12.500 m
Load Factor Instantaneous	9g
Sustained:	8g
Max payload	70 Kg

Payload

RCS reduction kits
Active and passive RCS augmenters
IR augmenters
IR and chaff dispenser
RF Jammer (customisation)
2 Towed body systems (IR, active/passive RF Tow targets)
2 Air launched autonomous expendable sub-targets (Locusta)
Missile seeker head simulators (eg. AN DPT-1)
Miss distance indicator
Vector scoring system
Smoke generator system

The Mirach 100/X is launched via two JATO boosters offering true all-weather capability, from fixed ground installations (e.g. ranges) as well as mobile stations (e.g. ships or a/c). Target drone recovery is on ground or at sea, with a turn-around time of less than 3 hour for ground recovery and 6 hours for sea recovery.

The airvehicle structure sturdiness coupled to all Mirach100/5-derived proven subsystems reliability makes the system's overall life-cycle costs the lowest in its category.

The system is able to modulate the airvehicle or the tow target's Radio Frequency (RF) or InfraRed (IR) signatures by means of dedicated on-board mission equipment, as well as providing near-real time miss distance evaluations. Additional capabilities are chaff/flares dispensers, customised RF jammers, smoke generation, seeker heads simulation.

Also featured is an innovative payload, the Locusta, specifically developed for the Mirach family, consisting of an expendable air-launched, jet-propelled, autonomous secondary target drone, carried in pairs under the wings. A direct hit on an autonomous fast closing-in threat improves firing exercise realism and provides a cost efficient solution to recurring training.

The Mirach 100/X fully automatic pre-flight test prevents in-flight system failures thus adding to overall mission reliability. Automatic flight navigation and BIT ensures alleviation of overall operator workload, however the operator can resume air vehicle control at any time throughout the mission.

Since the 1980s SELEX Galileo's capability includes Turn-key Aerial Target Systems Services for all-inclusive and cost-effective weapon systems T&E and training according to the most stringent customer needs.

The high quality standard of the after-sales customer support service guarantees the products quality and performance for the entire scheduled service life.