



Martin-Baker

Eurofighter Ejection seat Mk 16A

The development of the Mk16A ejection seat for the Eurofighter Typhoon was carried out at Martin-Baker's facilities at Denham, Chalgrove and Langford Lodge. Due to the capabilities and wide operating envelope of the aircraft, Martin-Baker was presented with a series of challenges which have had to be overcome during the development of the seat, such as the accommodation of a wider range of pilot models covering height and weight requirement, as well as achieving compatibility with equipment such as the Head Mounted Display (HMD), Chemical and Biological protection units (CB) and general aircrew equipment.

The Mk16A ejection seat utilises a second generation digital seat sequencer which incorporates a strategy of continuous sensing of external environmental parameters. Under certain speed and altitude conditions the recovery timings at which the parachute is deployed are varied in order to optimise the terrain clearance.



Specifications

Operating ceiling
Minimum height/speed
Crew boarding mass range
Crew size range
Maximum Speed for ejection
Parachute type
Parachute deployment
Drogue parachute
Drogue deployment
Aerosurface deployment system
Harness type
Ejection seat operation type
Ejection gun
Ejection initiation

Automatic back-up unit
Electronic sequencer
Barostatic time-release unit
Timers
Seat adjustment
Arm restraints
Leg restraints
Oxygen supply
Personal survival pack (PSP)
Aircrew services

Command ejection
Canopy jettison
Miniature detonating cord
Interseat sequencing system

Mk16A Eurofighter

50,000+ft (15,250m)
Zero/zero in near level attitude
61.0 to 133.5 kg
Eurofighter specific crew size range
600 KIAS
GQ Type 5000
Cartridge initiated
Yes
Cartridge initiated, electronic sequencer controlled
Yes, upper and lower. Lower is gas operated
Combined
Ejection guns and underseat rocket motor
Twin
Handle on seat pan initiates gas operated seat firing system
Yes, barostat controlled
Yes, powered by thermal batteries
No
Time delay for canopy jettison
Up/down actuator operated 28 Vdc
Yes
Passive leg restraint system
Bottled emergency oxygen
Yes + automatic deployment and liferaft inflation
Aircrew services package, interface for:
- breathing gas - NBC ventilation supply
- mic/tel - anti-g trousers
Head equipment assembly services module
Liquid suit connector assembly
Auxiliary oxygen bottle
Yes
Yes
No
Yes, via mode selector



EJECTION SEAT