

Mk18

The MK18 takes the best and proven groups of leading sub-system technology from the MK16 family of qualified seats. The MK18 introduces passive arm restraint and seat pitch control. Optimized for cost through efficient manufacture and commonality of parts, spares and pyro. Common pyro with existing Martin-Baker USAF seats. Full spec compliance (MIL-HDBK-516C).



SPECIFICATIONS

MK18

Operating Ceiling	up to 55,000ft (16,764m)
Minimum Height/Speed	Zero/Zero
Crew Boarding Mass Range	103 to 245lbs (nude)
Crew Size Mass Range	JPATS multi-variate body size cases 1 - 8
Maximum Speed for Ejection	600 KEAS
Parachute Type	IGQ Type 8000 aeroconical 4-colour (less than 23ft/s decent rate)
Parachute Deployment	Sealed unit using ballistic gas and telescopic pistons, cartridge initiated with MOR back-up
Drogue Parachute	Yes, pressure packed for life
Drogue Deployment	Connected to seat via bridle assembly
Harness Type	Torso Harness (compatible with PCU-15/P, PCU-16/P & PCU-56/P)
Ejection Seat Operation Type	Catapult and underseat rocket motor (USRM)
Ejection Gun	Twin catapult
Ejection Initiation	Handle on seat bucket initiates gas operated seat firing system
Stabilization	Stabilizing drogue bridle assembly Seat Pitch Management System (incorporating Pitch Rate Module, Sequencer and Rotating USRM)
Modular	Yes, for maintenance simplicity
Electronic Sequencer	Martin-Baker Sequencer (MBS), powered by thermal batteries
Timers	Time delays imposed by sequencer and Digital In-line Timers (DIT)
Seat Adjustment	Up/down actuator operated 28Vdc with 7.4" stroke Fore/aft manual tilt mechanism adjustment
Emergency Location Beacon	Yes, automatic operation at seat/occupant separation
Head Restraint	Yes, passive Neck Protection Device (NPD) Yes, Head Support Panel (HSP)
Arm Restraint	Yes, Passive Arm Restraint System (PARS)
Leg Restraint	Yes, Passive Leg Restraint System (PLRS)
Oxygen Supply	Bottled back-up/emergency oxygen Connection to main On Board Oxygen Generation System (OBOGS)
Seat Survival Kit	Yes, with automatic drop deployment
Tree Escape	Yes, fully compatible with in-service systems
Aircrew Services	Connection to main oxygen supply, mic/tel, anti G, thermal cooling Interface and quick disconnect to helmet and systems
Pilot Flight Equipment	Compatible with USAF and USN equipment
Canopy Jettison	Yes, compatible with current systems
Canopy Fracturing System	Yes, compatible with current systems
Interseat Sequencing System	Yes, hot gas signalling via mode selector with three modes