

US18E

EJECTION SEAT FOR LOCKHEED MARTIN F-16 Block 70/72



1100 US16E F-35 EJECTION SEATS CURRENTLY IN SERVICE



8 LIVES SAVED WITH THE US16E F-35 EJECTION SEAT



Lockheed Martin selected the US18E Ejection Seat for the F-16 Block 70/72 aircraft to replace the legacy ACES II. The US18E is entirely based on the US16E that is installed in the Lockheed Martin F-35 aircraft with over 1100 in service and 8 lives saved to date. The US18E enables safe ejection for aircrew equipped with a Helmet Mounted Display (HMD) across the size and speed range.

The modular seat design will considerably reduce the maintenance hours associated with canopy removals. Martin-Baker manufactures its own CAD/PAD with shorter lead times than operators currently experience with the legacy seat, being replaced with the US18E.

SPECIFICATIONS

US18E F-16

Operating ceiling	55 000ft (16,768m)
Minimum height/speed	Zero/zero in near level attitude
Crew boarding mass range	103lb (46.7kg) to 245lb (111.1kg) (nude) light crew switch fitted mass boundary set at 150lbs (68kg)
Crew size range	CAESAR Case 1 to 95 percentile range
Maximum Speed for ejection	600 KEAS
Parachute type	IGQ 6000 aeroconical 4-colour
Parachute deployment	Cartridge initiated
Drogue parachute	Yes
Drogue deployment	Cartridge initiated
Harness type	MG5 Integrated
Ejection seat operation type	Catapult and underseat rocket motor
Ejection gun	Twin catapult
Ejection initiation	Center handle on seat bucket initiates gas operated seat firing system
Automatic back-up unit	Yes, mechanical system with barostatic time-release
Electronic Sequencer	Martin-Baker Sequencer (MBS) 23,500ft/18,000ft altitude switch, powered by thermal batteries
Timers	Time delays imposed by sequencer and ABU
Seat adjustment	Up/down actuator operated 115Vac with 6" (15.24cm) stroke
Arm restraints	Yes, active system Type II
Leg restraints	Yes, passive system
Oxygen supply	Bottled back-up/emergency oxygen supply 50 cu.in to 150 cu.in cylinders can be fitted
Seat survival kit	Yes + automatic deployment and liferaft inflation
Aircrew services	Connection to CRU-120/P Interface to helmet
Canopy jettison	Yes
Canopy severance system	No
Interseat sequencing system	N/A
Auto eject system	No

