

T-38 & F-5 Ejection Seat Programme Upgrade US16T

In June 2005, Martin-Baker was selected to upgrade the escape system in the supersonic T-38 Talon advanced trainers of the US Air Force and Air Education and Training Command (AETC). The seat was designated the US16T.

This major project has improved pilot safety, increased accommodation and guaranteed ejection seat logistic to ensure that the Talon remains one of the best advanced training aircraft in the world. The seat offers a state of the art, lifesaving performance, which interfaces with the existing canopy jettison system whilst contents of the Personal Survival Pack (PSP) matches operator's requirements to suit the aircraft role. The seat also offers maximum possible pilot size and weight range accommodation (without airframe changes).

The seat installation is simple and provides reduced life cycle costs.



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
 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
 Seat survival kit (SSK)
 Aircrew services
 Command ejection
 Canopy jettison
 Miniature detonating cord
 Interseat sequencing system

US16T T-38

50 000ft (15,250m)
 Zero/zero in near level attitude
 57.1 to 123.8kg
 JPATS multi-variate body size cases 1 to 6
 600 KIAS
 GQ Type 5000
 Cartridge initiated
 Yes
 Cartridge initiated, tilt and deploy
 Torso
 Ejection guns and underseat rocket motor
 Twin
 Handle on seat bucket initiates gas operated seat firing system
 Yes
 No
 Yes + g-restrictor, cartridge initiated
 Time delay cartridges
 Up/down actuator operated 115 Vac
 fore/aft manual backrest adjustment
 No
 Yes, four garters
 Bottled emergency oxygen
 Yes + automatic deployment and liferaft inflation
 Connection to main oxygen supply, mic/tel
 Yes
 Yes
 No
 Yes, via mode selector

