



ACES 5® ADVANCED CONCEPT EJECTION SEATS

NEXT GENERATION EJECTION SEATS

Advanced, life-saving technology

ACES 5® is the latest addition to the Collins Aerospace family of Advanced Concept Ejection Seats. It incorporates significant safety and cost saving upgrades compared to the legacy ACES II®, which is credited with saving more than 690 lives since its 1978 introduction.

While retaining the proven performance of the ACES II, Collins Aerospace engineers incorporated technology improvements to create the next generation ACES 5 ejection seat. The seat is rigorously tested to validate performance, reliability, and compliance with the latest safety requirements.

The modular design of ACES 5 simplifies routine maintenance and enables maintainers to quickly return the aircraft back into service.

Improved pilot safety. Improved ease of maintenance. Decreased life-cycle costs. All backed by program execution and teamwork that made ACES 5 the best choice for the Next Generation Ejection Seat (NGES) program.



KEY FEATURES

- Passive head and neck protection qualified to 2016 update of MIL-HDBK-516C injury requirements
- Passive leg and arm restraints
- Improved drogue system provides improved high-speed stability
- Common CAD/PAD with thousands of fielded ACES II® ejection seats worldwide
- Stability Package (STAPAC) active pitch stabilization system
- Largest survival kit volume (1,500 cubic inches)
- CKU-5C rocket catapult provides "softest ride" available; spinal injury rate of <1%
- GR7000 main recovery parachute provides lower descent and oscillation rates
- Functionally modular design

DISTINCTIVE SAFETY AND MAINTENANCE DETAILS

Distinctive solutions set ACES 5 apart from other ejection seat offerings. The ACES 5 unique stability features provide a faster deploying drogue parachute and a stability package (STAPAC) to compensate for pitch changes due to varied aircrew weight and aerodynamic effects, reducing the risk for injury. Additionally, the simple, mechanical head and neck protection system provides requirement compliant safety performance.

The modular seat structure eases performance maintenance by improving overall access to the internal service life components of the seat as another benefit. The seat bucket can also be easily removed to facilitate finding foreign objects in the cockpit and alternatively, the entire seat can be removed from the cockpit without canopy removal, thereby increasing aircraft availability.

PERFORMANCE ENVELOPE

Electronic sequencing provides enhanced performance at all altitudes and airspeeds, balancing minimum recovery altitude and injury potential.

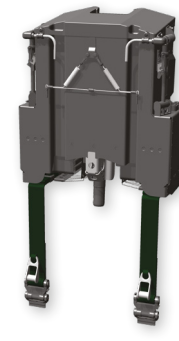
- Speed: Zero airspeed to 600 KEAS
- Altitude: Zero to 50,000 feet (60,000 feet for F-22 seat)

ADDITIONAL FEATURES

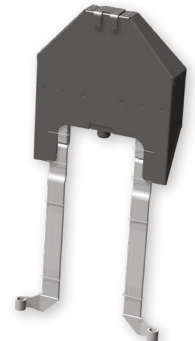
- Modular structure (15 minute seat removal, 25 minute re-installation)
- Automatic height adjusting headrest
- Accommodates JPATS Cases 1-7 (103 to 245 lbs. aircrew)
- Worldwide logistics and support for more than 29 air forces
- Redundant initiation and sequencing system for critical seat functions for unsurpassed reliability
- Proven mortar deployed parachute
- Modernized ACES seat sequencer
- Compatible with standard U.S. military aircrew interfaces
- Compatible with USAF Personnel Flight Equipment (PFE)
- Berry Amendment compliant
- Superior rear visibility
- Improved instructor forward visibility in tandem trainer aircraft
- 100% manufactured using US supply base



Seatback Module with Headrest



Recovery Parachute



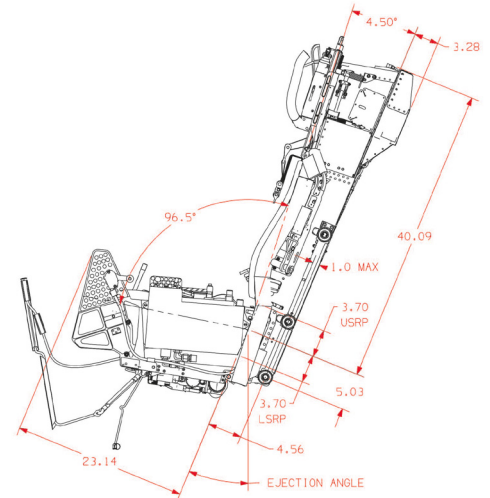
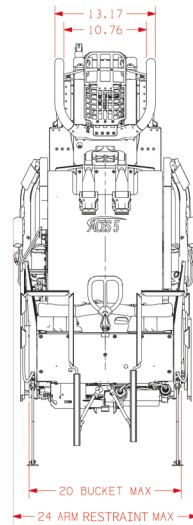
Drogue Parachute



Full Seat



Seat Bucket



Statistics based on internal and external test reports. Specifications subject to change without notice. This document does not contain any export controlled technical data.

Specifications subject to change without notice.



COLLINS AEROSPACE

+1.757.902.2803

learnmore@collins.com

collinsaerospace.com