

Helicopters

ACME True Q[®] Dynamic Motion Seats look, feel and function just like the actual helicopter seats. All the motion components are inside the seat. The seats translate simulator acceleration signals into realistic, convincing motion cues that emulate the forces and sensations felt in flight. ACME has a full range of Commercial-Off-The-Shelf (COTS) helicopter seat systems available without design or development costs. Or, we can easily produce seats to match your specific helicopter type or a more generic, fits-all seat design.



AH-64



EH-101



NH90



S-92



UH-72



H-60



AH-1Z



UH-1Y



S-70

Motion Cues are *Training* Cues



**Weapons
Effects**

**Touchdown &
Taxiing**

**Translational
Lift**

**Terrain
Effects**

**Hoist
Load**

**Flight
Maneuvers**

**Sling
Load**

**Sea
Landings**



Feel all these effects and more in an ACME Dynamic Motion Seat

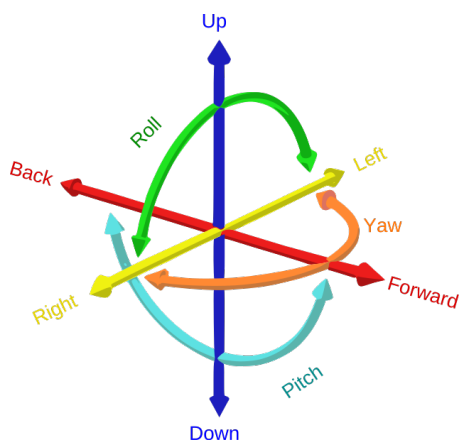
Helicopters have unique motion events that provide keys about the aircraft state. Pilots use the cues to control the aircraft – more than any other aircraft, helicopters are still flown by the seat of the pants.

ACME's True Q[®] Dynamic Motion Seats provide realistic cues that mirror the sensations in the aircraft. With True Q[®], crews can feel engine rotor effects, hovering effects, hoist loads, sling loads, weapon effects, taxiing and landing effects, and even specialized cues like translational lift and rotor malfunctions. And, ACME motion seats include up to 20 specialized buffets and impacts customized for the user. The seats provide cues across the full mission – from start-up to shut down and everything between.

PITCH, ROLL, YAW, DIVE, CLIMB, ACCEL/DECEL

MULTI-CHANNEL MOTION CUEING

EYE-POINT CORRECTION, ACTUATED HARNESSES



- 1 - Back Pan Tilt
- 2 - Back Pan Surge
- 3 - Seat Pan Heave
- 4 - Seat Pan Tilt
- 5 - Bucket Heave
- 6 - Active Harness

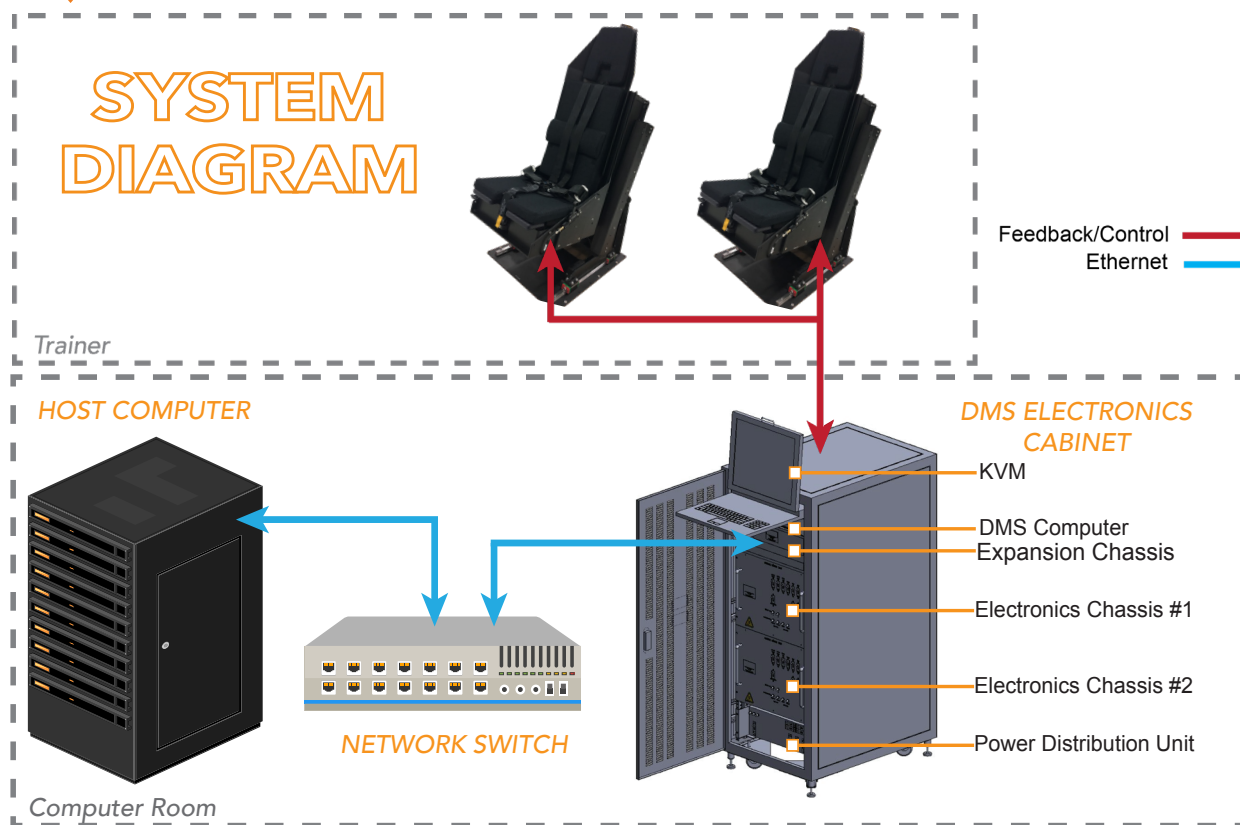


ACME Motion Seats provide full 6-DOF cueing

True Q[®] seats mirror the actual aircraft and include actual components like harnesses, buckles, and headrests. Special details like realistic armor panels and arm rests make ACME seats look, feel, and function like the actual helicopter seats.

ACME's patented, multi-channel motion system is built right into the seat body. It provides cueing in all 6 Degrees of Freedom. 6-DOF cueing is critical to effective helicopter motion simulation. Realistic cueing is much more than just individual motion axes.

True Q[®] Dynamic Motion Seats use a combination of motion channels working in a continuous, seamless concert to provide realistic, immersive 6-DOF cueing.



Complete system includes all the components needed to translate acceleration signals from the flight model into realistic motion cueing. System includes executable software to drive the seat system. One computer can drive it all.

- Replica Seat with Motion System and Sensor Suite
- Electronics Cabinet including
 - Motion Seat Computer with executable software
 - Electronics Chassis to drive the seat
 - Keyboard/Video/Mouse
 - Power Distribution Unit
- Power and Signal Cable Set
- Technical Documentation Package
 - Operations and Maintenance Manual
 - Acceptance Test Procedures
 - Interface Control Document
- Standard, one-year, return-to-factory warranty

ELECTRONICS

PILOT CABINET SHOWN

