

FEEL LIKE A FIGHTER PILOT

ACME TRUE Q[®]
DYNAMIC MOTION SEATS

THE FORGOTTEN HARNESSTENSION MOTION CUE

During flight maneuvers, fighters climb, bank, invert, speed up or down, and load or unload the jet. In these situations, pilots feel the varying tension on the harness as the jet changes.

For example, under positive g-loads, the crew compresses down a bit in the seat and away from the harnesses. So, the harness tension decreases. But, when pilots roll inverted or push the jet into negative g-loads, the crew rises on the seat and pushes up into the harnesses.

The same is true for acceleration/deceleration. As the jet accelerates crews sink down in the seat and the harness tension lessens. If the pilot deploys the speed-brakes or pulls the throttles back, the jet slows. As the jet slows, the crew eases forward on the seat under inertia. So, crews feel increasing harness tension as the jet slows.

Harness tensioning is an important cue. But, it's often left out of motion cueing systems. Even

other motion seat manufacturers leave out this important cue. This can be a 'forgotten motion cue' in many simulators.

ACME offers the harness tension cue option on *any* of our motion seat systems.

ACME's seat harness tension works like the other cue channels in our 6-degree of freedom (6-DoF) seats. The motion seat computer drives the tensioning using flight model signals.

There's no need to specifically drive the tensioner. The performance is tunable in real-time without stopping the seat or the simulator. And, the actuated harnesses work with the automatic inertia locking and the extending/retract systems just like the actual seats.

Ask for the 'forgotten cue', Harness Tensioning, for your motion seats and feel the difference.