



U.S. Army Aeromedical
Research Laboratory
Fort Rucker, Alabama

Tactile Situation Awareness System



TSAAS



www.usaarl.army.mil

Tactile Situation Awareness System

The Tactile Situation Awareness System (**TSAS**) uses the sense of touch to provide situation awareness information to pilots. **TSAS** presents information, including body position, attitude, altitude, velocity, navigation, acceleration, threat location, and target location through the use of tactile stimulators distributed on the torso.

The potential safety benefits of **TSAS** to the military include reduced spatial disorientation mishaps, improved situation awareness, improved pilot control, and reduced pilot workload during critical flight maneuvers, such as hovering in zero visibility, flight transitions, approach, and landing.

TSAS reduces pilot workload and increases situation awareness and mission effectiveness allowing pilots to devote more time to weapons delivery systems and other tasks requiring visual attention.

Research using **TSAS** to treat patients with balance problems due to traumatic brain injury has shown positive results.



For more information please visit:

<http://www.usaarl.army.mil>

or contact:

U.S. Army Aeromedical Research Laboratory

Science Information Center

Post Office Box 620577

Fort Rucker, Alabama 36362-0577

ssc@amedd.army.mil

(334) 255-6906

U.S. Army Medical
Research & Materiel Command
Ft. Detrick, Maryland



U.S. Army
Medical Command
Ft. Sam Houston, Texas