



# USAMRDC Good News Story



## U.S. Army Medical Research and Development Command

### *USAARL, Next-Gen Technology Deliver Boost to Army's Future Vertical Lift Efforts*

- On September 17, the U.S. Army Aeromedical Research Laboratory (USAARL) debuted an innovative Blackhawk helicopter simulator at Fort Rucker, Alabama.
- The simulator, known as the Cockpit Academics Procedural Tool–Enhanced Visual Capable System (CAPT-E-VCS) is a reconfigurable research platform allowing for swift, mission-responsive research in support of the Army's Future Vertical Lift priorities.
- The CAPT-E-VCS is designed to allow for the evaluation of variables like workload and the impact of high-altitude flight environments on pilots; and can further be paired with other USAARL training modules to create realistic testing environments.
- The CAPT-E-VCS was developed in partnership with the U.S. Army Combat Capability Development Command's System Simulation, Software, & Integration Directorate, and pairs a Blackhawk helicopter cockpit and academic simulator with a 12-inch projection dome and state-of-the-art X-IG image generation software.



Clockwise from top left (all credits: Scott Childress, USAARL): USAARL Commander Col. Mark McPherson, assists aerospace engineer Joshua DuPont with the CAPT-E-VCS ribbon-cutting; USAARL Soldiers operate the new CAPT-E-VCS during a test-run of the machine; Capt. Justin Stewart gives Master Sgt. Kenneth Carey a CAPT-E-VCS tutorial; A "Remove Before Flight" ribbon separates USAARL's CAPT-E-VCS control room from the actual CAPT-E-VCS.

**OUTCOME:** To meet the demands of Future Vertical Lift priorities, the USAMRDC is contributing to the effort to both develop and acquire next-generation aircraft and unmanned systems designed to fly, fight, and prevail in any environment.