Phoenix™

DIGIFLIGHT

Accelerate Mission Success

About Phoenix

Phoenix is the next-gen AH-64 Apache simulator built for realism, efficiency, and global scalability. It combines advanced software, next-gen mixed reality goggles, high-fidelity hardware, and intelligent coaching to deliver high-impact training in a compact, cost-effective footprint. Developed by DigiFlight with deep expertise in Army Aviation, Phoenix supports mission readiness across both fixed and mobile environments. The goal: Deliver turnkey pilot training and secure long-term service agreements in key markets, including the US, UK, Saudi Arabia, UAE, Egypt, Poland, and India.

Technical Summary

The Phoenix platform is currently configured as the Army's premier Attack Helicopter (AH-64 Apache) with pilot and co-pilot gunner stations in a tandem-seated trainer design. The Phoenix platform is intended to suit any current or future rotary wing design. Multiple trainers can be interconnected and positioned to suit training facility requirements and conform to customer needs. Simulators will be anatomically correct and equipped with industry-leading instrument panels, realistic flight controls, and data displays with high physical and functional fidelity, providing a completely realistic experience. The design facilitates the integration of additional haptic devices and technologies, such as affordable 6DoF systems and/or dynamic motion seats, for a complete immersive experience.

Software

Phoenix utilizes advanced Commercial Off-the-Shelf (COTS) software to simulate AH-64D/E systems with high fidelity, including day and night, as well as tactical flight conditions. Mixed reality enables the seamless integration of physical controls with virtual elements for unparalleled realism. The software supports a Modular Open Systems Approach (MOSA), Plug-ins such as the Army's OneSAF via DIS, SECore terrain, instructor fault tools, and real-time cockpit feedback.

Additional Training Tools:

AI IP Coach: Phoenix addresses the high cost and complexity of live flight training by delivering immersive simulation enhanced with next-gen eye tracking and AI-driven coaching. Unlike traditional After-Action Reviews, Phoenix delivers insights during the training itself. Its AI IP Coach guides pilots through both simple and complex crew tasks in real time, making it especially effective for multi-crew Apache events where instructor bandwidth is limited. By reducing task saturation and instructor overload, Phoenix ensures safer, more effective training across a range of operational scenarios.

Debriefings: Combined with Pilot AI IP Coaching, debriefing tools are included in the package, allowing instructors/users to capture, replay, and analyze any given situation. This core functionality will enable aviators and instructors to understand the conduct of the exercise and gain maximum benefit from training.

Eye Tracking Analyses: Using gaze analysis and eye tracking tools, instructors can monitor pilot gaze in real-time, visualize scanning patterns as heatmaps or timelines, and identify scanning gaps. This enables targeted feedback on visual scan discipline and supports live coaching during mission rehearsal—improving situational awareness and reducing the risk of mid-air collisions, system failures, and obstacle strikes.

Project Summary

We aim to create, build, and field cutting-edge "Next Generation" mixed reality training solutions to support training programs globally. We do it better, faster, and cheaper, significantly reducing both recurring and non-recurring costs associated with flight simulation, including development, sustainment, and facilities.

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In Partnership with: