SimuSphere® HD
“NOW YOU CAN SEE IT”

The Solution
L-3 Link Simulation & Training’s SimuSphere® HD™ display solution immerses pilots in a virtual training environment equivalent to real-world flying missions, far exceeding the visual system capabilities on currently fielded training devices. Representing the next generation in visual display technology, SimuSphere® HD provides pilots with an unprecedented level of resolution, brightness and contrast for out-the-window imagery.

SimuSphere® HD’s state-of-the-art digital projectors provide a sharp, bright Heads-Up-Display and provide a high-fidelity, physics-based stimulated Night Vision Goggle (PNVG) capability for goggle on/goggle off night training operations. The integrated system design is fully compatible with Helmet Mounted Cueing Systems (HMCS) and future visual/sensor capabilities (PNVG, NVCD).
The Value
- Realistic Detection, Orientation, Recognition, Identification of targets throughout full 360°
- 20/40 visual acuity, easily field upgradeable to 20/20

An eye-limiting visual display capability enables SimuSphere® HD to support formation flight and bogey detection/identification training with visual acuity pilots experience during actual missions. Pilots can train as individuals or teams to detect, identify and attack targets, while gaining training credit equivalent to live aircraft training.

The Technical Edge
- Uniform resolution, brightness and contrast across the display
- High performance screen material and optical quality mirrors

SimuSphere® HD incorporates the latest advancements within display, projection and image generation systems.

Eighteen projectors beam high definition imagery onto 18 display channels surrounding simulator cockpits providing pilots with a 360° field-of-view. HDTV-like display channels are the same shape and size and each is positioned 40 inches from the pilot's eye point. This design provides the pilot with computer imagery that has consistent resolution, brightness, contrast and scene content throughout the field-of-view and supports the use of simulated and stimulated NVGs.

The Flexibility
- Digital Projectors – Solid state reliability
- Automated Alignment – Improves image quality available to pilots

SimuSphere® HD can be configured to provide visual coverage from 180° to 360° in the same floor space as Link's original SimuSphere® display. The modular structure and integrated maintenance design affords ease of assembly and maintenance. The new commercial-off-the-shelf LCoS projectors auto converge to reduce support costs and preserve the image quality to original specifications.

Whether you are considering the acquisition of a new display system, or upgrading from a current lower fidelity display, SimuSphere® HD is the natural choice.

The Proven Credentials
- Compatible with F-16, F-22 and F/A-18
- Proven approach to Helmet Mounted Cueing System (HMCS) training

For nearly a decade the SimuSphere® product line has been embraced by militaries worldwide to support fast jet pilot training on simulators that support the F-22, F/A-18 and F-16 platforms. Over 100 SimuSphere® systems have been sold and are providing pilots with a fully immersive simulation experience. Over 30 of the SimuSphere® visual displays L-3 Link has delivered have been integrated with HMCS units, enabling pilots to obtain situational awareness and/or cue weapon systems during simulated exercises.

SimuSphere® HD, as part of HD World’s next generation product line, extends L-3 Link’s commitment to providing superior high-fidelity training solutions.