

Immersive training and simulation domes

Professional solutions for flight training

Simulated training has become a key factor in improving modern, fast jet and helicopter pilot performance. The continuous need for greater realism and versatility in this field has led to the development of TREALITY's SEER (Small Environment-Enhancing Reality) mini-dome and LTSD (Large Training and Simulation Dome) system. By offering a seamless, spherical image with a high pixel fill factor, both systems meet the most stringent requirements for jet fighter and rotary wing training.



A recognized solution

More than 250 SEER systems in use worldwide, TREALITY's dome solutions are tried and tested. They are low-risk solutions that do not require further development. Furthermore, TREALITY engineers and technicians have designed the system for quick and easy installation.

Projectors in TREALITY's training and simulation domes can be realigned quickly and easily with TREALITY's user-friendly XDS RACU controller and AutoAlign tool suite.



The highest levels of realism

TREALITY's dome simulators feature the latest in projection technology. We offer solid state illuminated projectors. Both single- and three-chip DLP as well as LCoS (liquid crystal on silicon) platforms, specifically geared towards simulation.

Esterline solutions are fully compatible with stimulated night vision goggle (NVG) technology, to guarantee a realistic training experience even in dusk and night scenarios.

They offer unparalleled visual performance for fast moving imagery.



F(S)70 4K UHD



F(S)40 4K UHD



A complete system

The SEER and LTSD systems are complete TREALITY solutions. This means that you only need one company for your entire design, installation and service. Because we have decades of experience in the field under our belt, each component has been designed with system integration in mind. This includes not only the projectors, but also the mechanical set-up, screen and automated alignment tools that guarantee a longer uptime and shorten maintenance periods.

Networked training



Specifically, our SEER systems' space-saving size allows them to be situated in close proximity to one another in the same training area. This simplifies networking of domes, so pilots can train as a group in mission-based exercises.

Perfect multi-channel operation

Esterline uses the following simulation-specific optimizations for use in multi-channel systems:

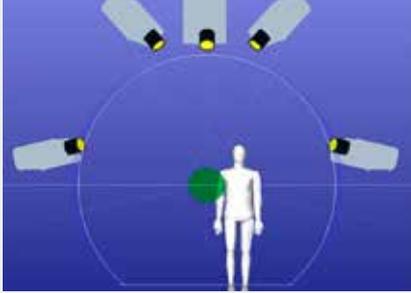
- **NOCTIS Edge blending**, whether electronic or optical, fixed or motorized, creates smooth overlaps between projections to result in one seamless image
- **DynaColor** and linked **Constant Light Output (CLO)** match color and brightness differences between projectors to give the composite image the same consistent image quality
- **AutoAlign** suite is a powerful tool to automatically re-align Esterline's visual display system, ensuring image quality over time



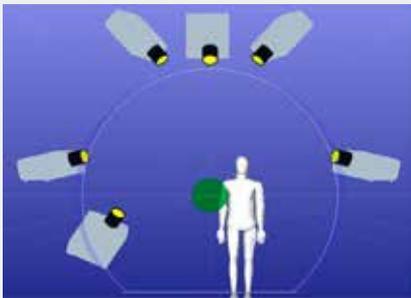
Dedicated customer involvement

From system design, to pre- and full installation support, to full-service project management, Esterline TREALITY® is ready to serve your entire system implementation needs. We also offer a complete portfolio of industry-leading maintenance contracts and spare parts programs.

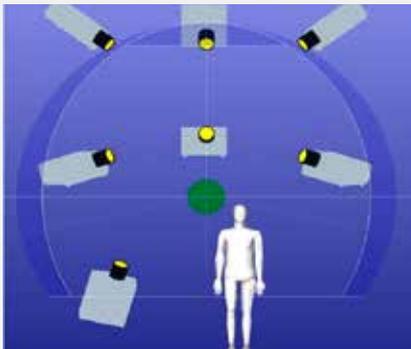
Our global network for system support provides professional, accurate, and timely responses.



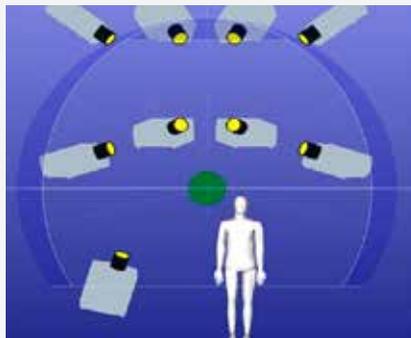
SEER-5



SEER-6



SEER-7



SEER-9



LTSD-13

Dome type	Dome Radius	Resolution average	Brightness average	System contrast	Field of view
SEER 5	1,5 m	5.7 arcmin/OLP	8 Ft Lamberts	≥ 7,3:1	HFOV: +110°/-110° VFOV: +90°/-50°
SEER 6	1,5 m	5.1 arcmin/OLP	9.6 Ft Lamberts	≥ 7,4:1	HFOV: +110°/110° VFOV: +90°/-50°
SEER 7	2 m	4.4 arcmin/OLP	6.4 Ft Lamberts	≥ 6,8:1	HFOV: +120°/-120° VFOV: +90°/-45°
SEER 8	2 m	4.1 arcmin/OLP	7.9 Ft Lamberts	≥ 6,6:1	HFOV: +120°/-120° VFOV: +90°/-45°
SEER 9	2 m	4.2 arcmin/OLP	6.6 Ft Lamberts	≥ 6:1	HFOV: +135°/-135° VFOV: +90°/-45°

Values based on F70-4K6

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Esterline Belgium Simulation is an ISO 9001:2008 registered company. The information and data given are typical for the equipment described. However any individual item is subject to change without any notice. The latest version of this brochure can be found on www.Esterline.com.

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