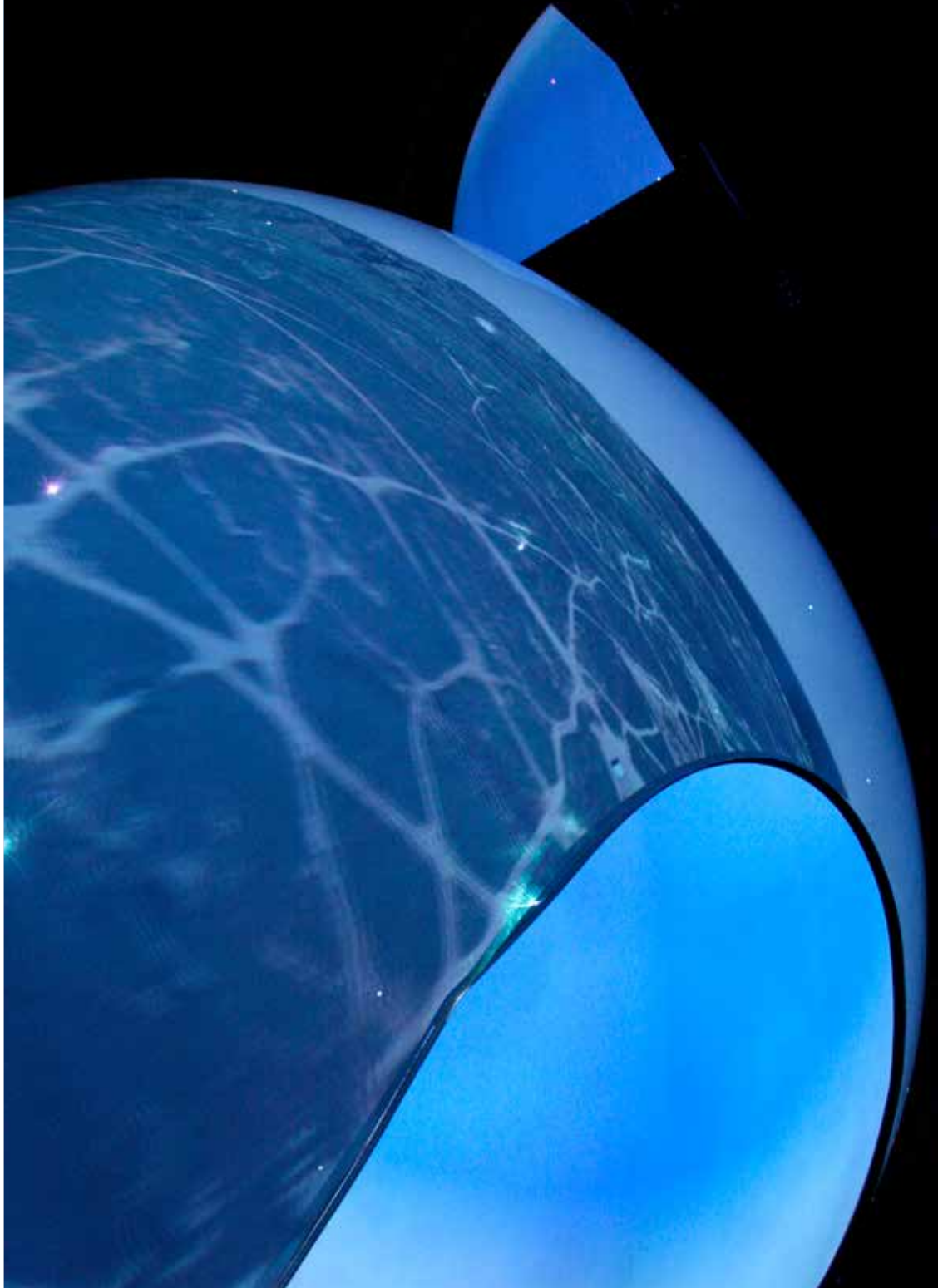


Rear-projected dome display

Welcome to the real world

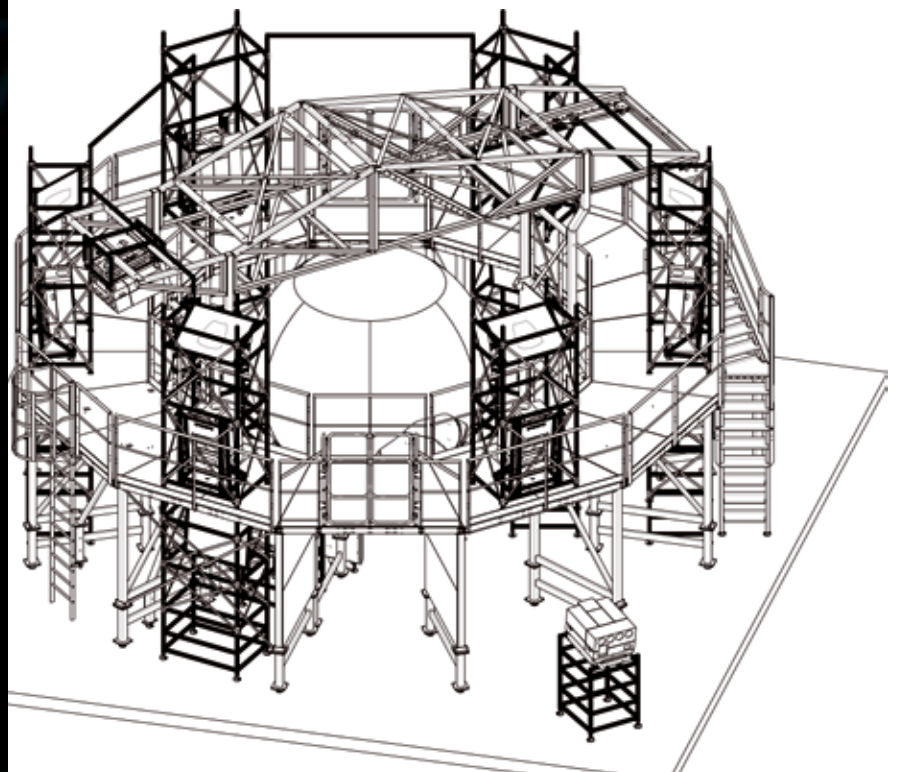
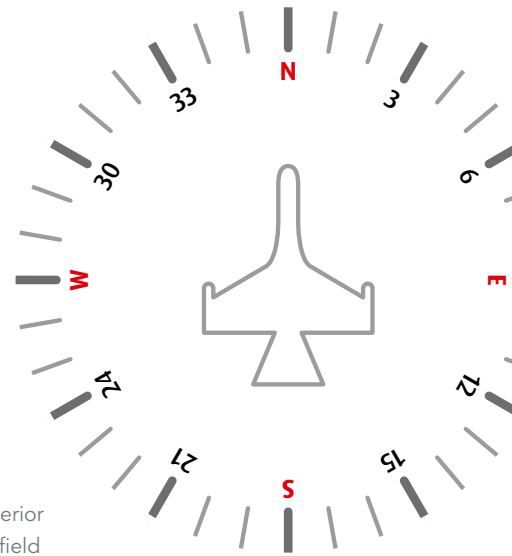


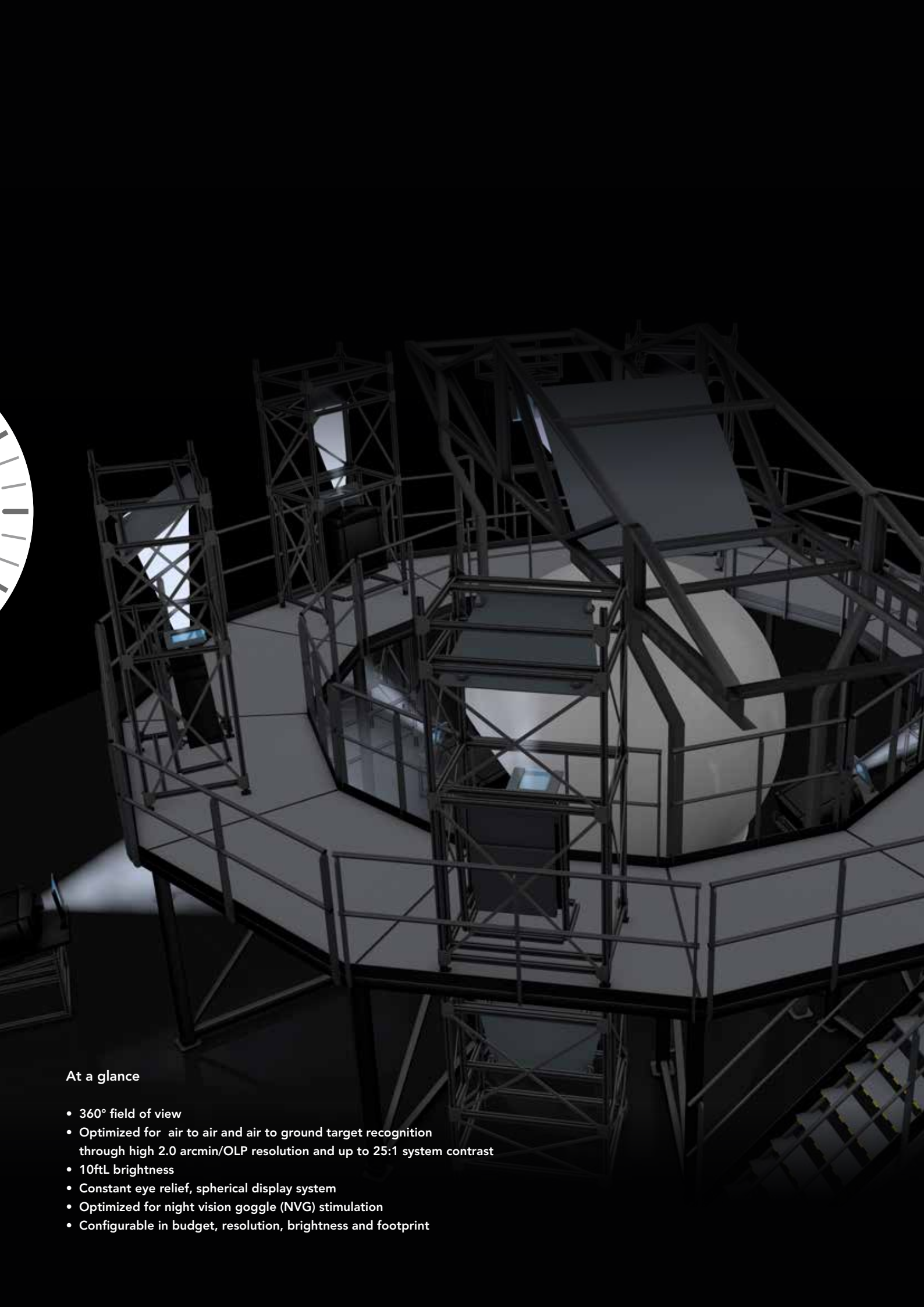


Rear-projected dome display

The TREALITY® rear-projected dome display – the RP-360 – creates a **360° environment** for flight training. This dome is a response to the ever-growing **need to reduce training costs**, by bringing more training tasks to ground-based training systems. This is now possible thanks to the improved level of realism.

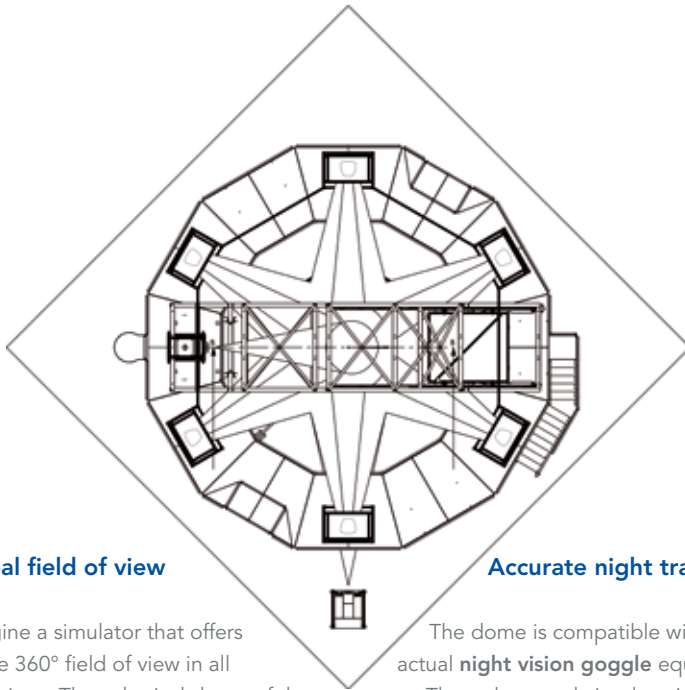
The RP-360 offers the most accurate image quality on the market today. With fewer projectors, the system achieves superior results, long MTBF, an optimized realistic field of view, realistic air and ground target detection, recognition and identification, improved display contrast and advanced scenarios for both night and day training.





At a glance

- 360° field of view
- Optimized for air to air and air to ground target recognition through high 2.0 arcmin/OLP resolution and up to 25:1 system contrast
- 10ftL brightness
- Constant eye relief, spherical display system
- Optimized for night vision goggle (NVG) stimulation
- Configurable in budget, resolution, brightness and footprint

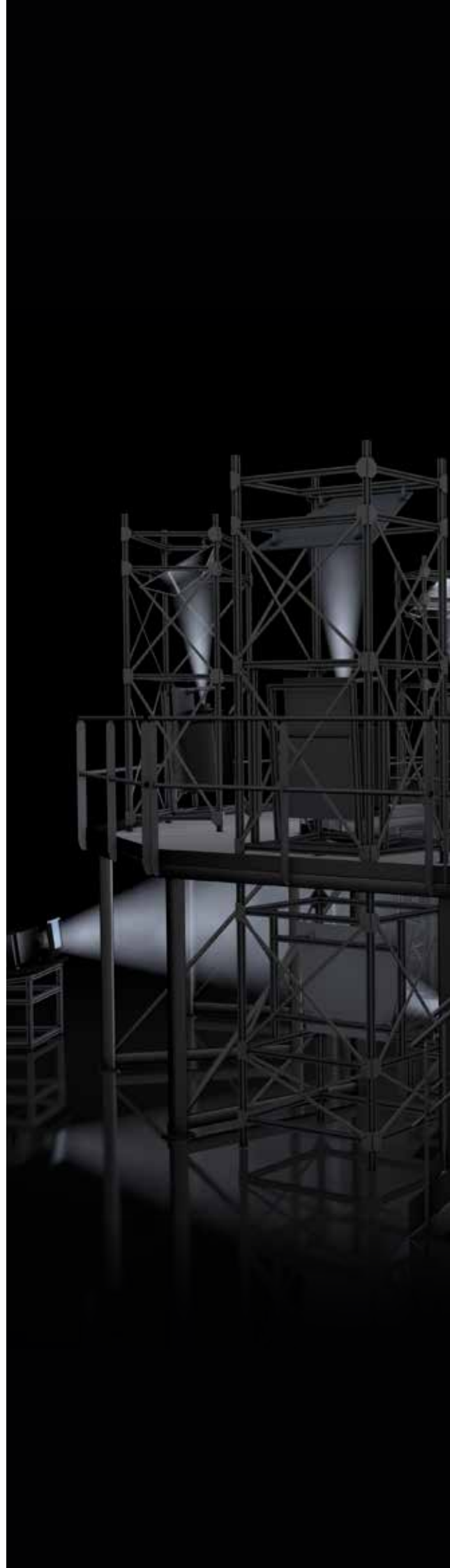
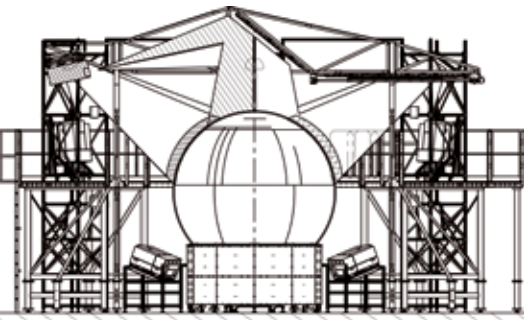


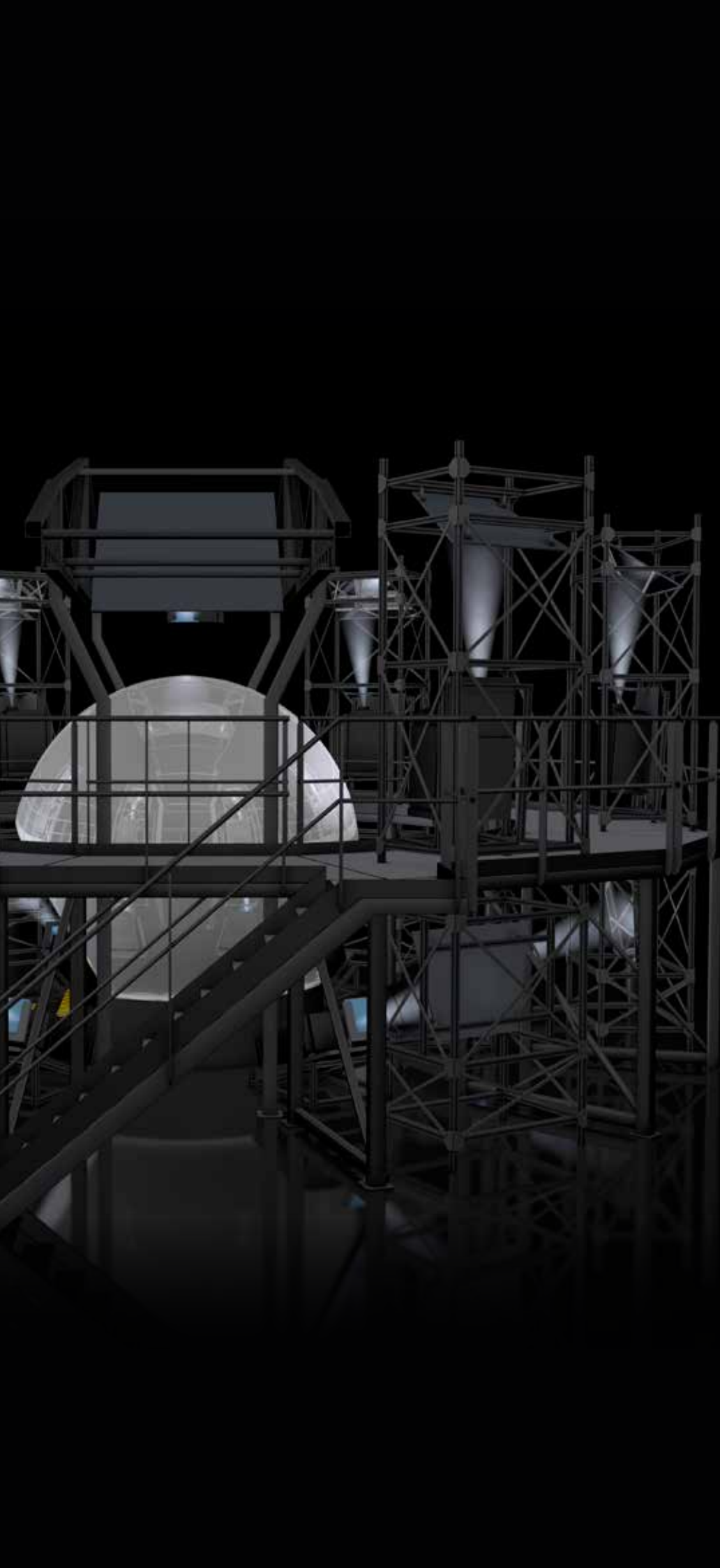
A real field of view

Imagine a simulator that offers a true 360° field of view in all directions. The spherical shape of the screen with the pilot in the center point, creates a pervasive sense of realism and offers constant **eye relief and free head movement**. Because only rear-projection is used, there is no shadow or light disturbance. The assembled, all-spherical screen shows no segments or seams.

Accurate night training

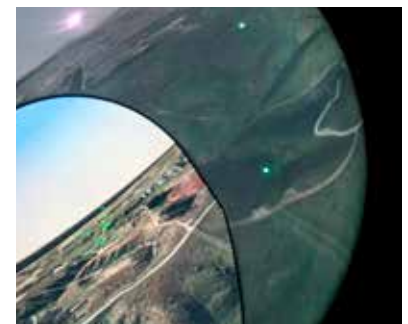
The dome is compatible with actual **night vision goggle** equipment. Through several visual optimizations, the system displays halo and bloom effects with extreme realism. One of these optimizations is the projectors' increased infrared (IIR) spectrum. In this way, pilots can gain experience that is crucial for life-critical night missions.





Real DORI

DORI (Detection, Orientation, Recognition and Identification) requirements are vital to the effectiveness of any simulation system. With the RP-360 dome, pilots can keep track of fast-moving targets all the time thanks to the large field of view and visual optimizations such as high system contrast and the 120 Hz smear free imagery. The dome handles high-speed imagery effortlessly and offers “eye limiting resolution capability”.





Acuras



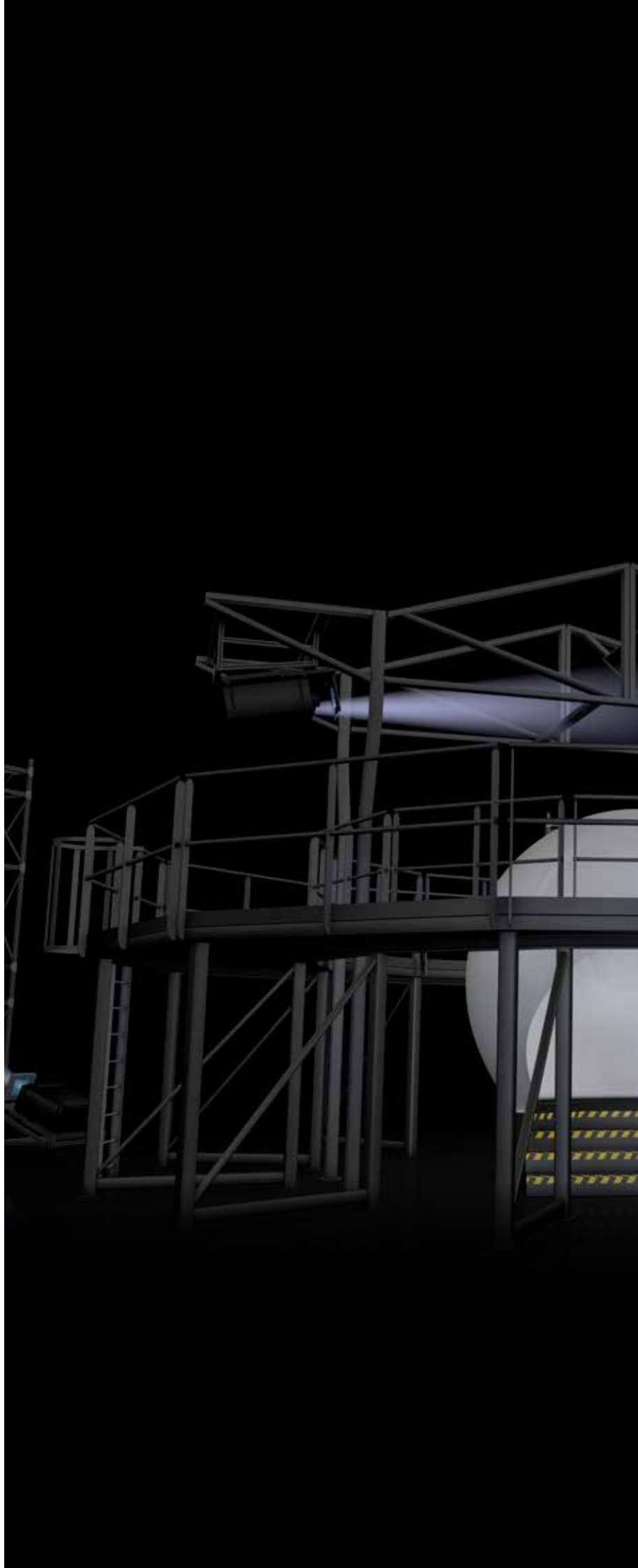
XDS-RACU

Real up-time

The TREALITY® RP-360 dome was **designed with service and a maximum up-time in mind**. In case a projector needs to be swapped, training can continue in less than one hour. The TREALITY® laser diode array trackers (LDAT) indicate the right spot for the projection to be mapped. TREALITY® has also developed an **entire set of alignment tools**, (including the Acuras system and the XDS-RACU controller) that make system set-ups easier, quicker and repeatable with predictable results. In addition, the TREALITY® global service teams ensure fast intervention and efficient, professional assistance.



Projectors can be rolled in and out easily for quick part replacements.





Native 4K and 8K shifted

Drastically reduced training costs

To reduce the real flying training cost without jeopardizing the training skills, simulators that allow true-to-life flying conditions are required. Thanks to the improved performance of its visual system, the TREALITY® RP-360 is able to offer these realistic training possibilities. What's more, these superior results are established using fewer projectors than previously thought possible.

The right technology

The standard projector that drives the TREALITY RP-360 is a 8K shifted projector with liquid crystal on silicon (LCoS) technology. We also offer 4K UHD DLP projectors. Both feature **dedicated technologies** for multi-channel set-ups:

- **120Hz Refresh rate:** handles fast-moving imagery effortlessly
- **Night vision goggle support**
- **Linked constant light output:** brightness equalization across channels, important for TCO and maintenance
- **DynaColor:** automatic color calibration across channels
- **Edge blending:** creates one seamless composite image
- **Warping:** precise geometry correction for curved surfaces

The set-up to suit your needs

Standard configurations:

The TREALITY RP-360 system is available in several standard configurations. It can also be tailored to any specific requirements and budget.



F70 4K UHD

Proven technology

The TREALITY® RP-360 is designed from the ground up with TREALITY® technology. In-house developed, powerful design tools allow us to accurately predict the system's ideal set-up and performance, and feedback from the field allows us to improve the design tools and processes each time. The dome's entire mechanical structure, projection and screen technology all feature proven TREALITY® technology, and the screens have a special coating that increases its overall image quality.



The TREALITY® solutions are not limited to large dome set-ups. Its product range and installed base of systems includes compact SEER mini-domes for flight training, collimated displays for dual-cockpit simulation as well as systems for naval, air traffic control, vehicle and arms training.

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However any individual item is subject to change without any notice.
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