

project: syntropy (Germany / KSA / Sweden / Singapore)
 creates dvLED- / projection-based visual technologies and solutions for professional simulation and training environments, immersive XR environments, XR-CAVEs, media based attractions and much more.

Project

Turnkey Visual Display Solution for an Eurocopter EC135 Fixed Base Simulator at DLR

Customer

DLR Institute of Flight Systems, Braunschweig/Germany.

Project

Turnkey visual display solution incl. follow-up upgrade for the Eurocopter EC135 fixed base simulator ft. a 180° hemispherical screen. 2nd Upgrade with nine 4k Solid State LED-Projectors (initial system 15 W-UXGA LED projectors) and auto-alignment system for for AVES (Air Vehicle Simulator) simulator centre.

Project Details

On June 5, 2013 the new AVES (Air Vehicle Simulator) simulator centre of German Aerospace Center DLR in Braunschweig was opened. We delivered the complete visual display solution for the Eurocopter EC135 fixed base simulator featuring a 180° hemispherical screen equipped with 15 W-UXGA LED projection channels and a domeprojection.com auto-alignment system.

Our work included the technical design of the overall solution as well as installation, integration and initial calibration of the complete visual display system including the dome.

8 years later we provided a 9-channel 4k solid state LED-Projection upgrade for the fixed base simulator incl. the latest domeprojection.com ProjectionTools solution including their color calibration feature. Furthermore, we upgraded the AVES dynamic simulator with the same 4k solution for its visual display, taking special care of a minimally invasive system design. With the upgrade, DLR ensures that the AVES simulator centre is ready for the next decade with a state-of-the-art visual system requiring next to zero maintenance.

About DLR Simulator Centre Braunschweig

The DLR Institute of Flight Systems in Braunschweig/D works on the analysis and assessment of the dynamic behaviour of aircrafts with regard to future aviation requirements.



Leading Provider of Next Generation Visual Display Systems

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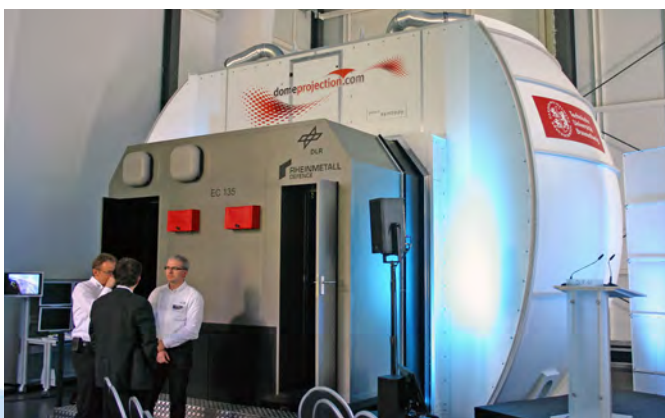
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The simulator centre, as the link between the applied research of DLR and TU Braunschweig's educational programmes, will primarily serve to prepare test flights for the Advanced Technology Research Aircraft (ATRA) platform, a modified Airbus A320, and the Flying Helicopter Simulator (FHS), a modified Eurocopter EC135. Its unique modular design enables parallel research on helicopters and fixed wing aircraft, as well as mobile and fixed simulators. The simulator's cockpits are exchangeable.

A core concern of the centre is research into the dynamic interface between man and machine. It will evaluate the manageability of fixed wing and rotary wing aircraft, particularly in borderline situations such as flying in turbulence with reduced visibility near the ground, and in case of system failures. The centre also tests helicopter pilot assistance systems, to improve flight stability with externally suspended loads.

Videolink: <https://youtu.be/F5dB0g2zd4k>



project: syntropy's visual display solutions for

- FMS FULL-MISSION-SIMULATORS
- FFS FULL-FLIGHT-SIMULATORS (EASA Level D)
- CT COCKPIT SIMULATORS
- HELICOPTER FLIGHT SIMULATORS
- FNPT / FTD TRAINING SIMULATORS
- COMBAT SIMULATION
- JFST ACTION TRAINERS
- JTAC TRAINERS
- ATM TOWER SIMULATORS
- DRIVING SIMULATORS
- SHIPS BRIDGE SIMULATORS
- INDUSTRIAL SIMULATORS
- RESEARCH SIMULATORS

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- APPLICATION DEVELOPMENT
- CONSTRUCTION, MANUFACTURING, INSTALLATION
- ADVANCED SOLUTIONS FOR NVG STIMULATION
- FULLDOME SYSTEMS
- tailor-made dvLED-/Projection-based VISUAL DISPLAY SYSTEMS
- AFTER SALES SERVICES
 - training
 - maintenance and support
 - tailored service-level-agreements (SLA)
 - spareparts supply

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