

REISER

project: syntropy (Germany/Sweden/Shanghai-Singapore-Taiwan) creates technologies and solutions for professional simulationand training environments, interactive immersive media based attractions, xD theatres, planetariums and multimedia experiences.

## **Project**

# Airbus H145 Level D Full Flight Helicopter Simulator for Lufthansa Aviation Training (LAT)

#### **Customer**

Reiser Simulation and Training GmbH, Berg-Hoehenrain/ Germany, for the end user Lufthansa Aviation Training GmbH, Frankfurt a.M., Germany.

#### **Project**

Visual Display Solution for Level D certified H145/135 Helicopter Full Flight Simulator (FFS) based on a 240° x 80° field of view dome display using eight dual-channel LED-IR projectors, domeprojection.com autocalibration and their patented NBlend-Technology for optical blend masks.

#### **Project Details**

The third Reiser Level D Full Flight Simulator "Made in Germany" for Lufthansa Aviation Training (LAT) at their training centre in Frankfurt Airport is "ready for training", since the EASA FFS Level D certificate – the highest possible certificate for flight simulators –has been approved by the Luftfahrt-Bundesamt (LBA) on August 27th, 2020.

Because of the success of two completed Level D certified helicopter simulator projects, we were awarded the third visual system for the Airbus H145/H135 Helicopter Full Flight Simulator by Reiser - the latest and world-leading simulator technology for training in Helicopter Emergency Medical Services (HEMS). The simulator comprises a 6 DOF-electric motion and vibration system, a directly projected moving imagery using eight dual-channel LED-IR projectors on a dome screen having a field of view of 240° by 80° like the second project for Norwegian Competence Center Helicopter (NCCH). Again, domeprojection.com's patented NBlend-Technology was used for the production of super-precise optical blend masks.



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# The Airbus H145/H135 Helicopter-Simulator for Lufthansa Aviation Training

The helicopter simulator is equipped with an interchangeable cockpit and can therefore display both specifics of the Airbus H145 and H135 models. The simulator is capable of displaying numerous realistic landing scenarios with moving objects in the landing area or different operational locations, for example, scenarios at airports, hospitals, landings on ships or oil platforms or in confined terrain.

As air rescue operations are increasing at night, the high quality and resolution of the visuals make the modern helicopter FFS H145/H135 particularly suitable for training of essential flight manoeuvres in a realistic night atmosphere. The pilots can use their own night vision equipment and thus exactly replicate the reality of the mission.

The helicopter simulator is the result of a cooperation between LAT and the DRF Luftrettung, who are cooperating more closely in the field of pilot training and further education. Together they want to open up a new market, as the helicopter-simulator is also to be made available to other helicopter operators.

#### **About Lufthansa Aviation Training (LAT)**

Lufthansa Aviation Training GmbH, which was created at the beginning of 2017 from Lufthansa Flight Training and Swiss Aviation Training, is one of the leading companies in the field of flight training with its expertise in the training and continuing education of cockpit and cabin personnel at twelve training locations. Lufthansa Aviation Training's customer portfolio includes over 200 nationally and internationally renowned airlines as well as the Lufthansa Group airlines. The company is based in Hallbergmoos near Munich and employs a total of around 1,000 staff.

Under the brand name European Flight Academy, Lufthansa Aviation Training bundles all flight schools of the Lufthansa Group in Germany, Switzerland and the USA.



### project: syntropy's visual display solutions for

- **FMS FULL-MISSION-SIMULATORS**
- **FFS FULL-FLIGHT-SIMULATORS**
- CT COCKPIT SIMULATORS
- HELICOPTER SIMULATORS
- **TARGET SIMULATION**
- **JFST ACTION TRAINERS**
- **JTAC TRAINERS**
- **ATM TOWER SIMULATORS**
- DRIVING SIMULATORS
- **SHIPS BRIDGE SIMULATORS**
- **INDUSTRIAL SIMULATORS**
- **RESEARCH SIMULATORS**

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project: syntropy offers turnkey solutions and full-service throughout your entire project:

- **CONSULTING**
- **CONCEPT AND DESIGN**
- **APPLICATION DEVELOPMENT**
- **CONSTRUCTION AND INSTALLATION**
- ADVANCED SOLUTIONS FOR NVG STIMULATION
- **FULLDOME SYSTEMS**
- **TURNKEY DIGITAL CINEMA**
- **AFTER SALES SERVICES** 
  - training
  - maintenance and support
  - tailored service-level-agreements (SLA)
  - spareparts supply

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