



We are

REISER

Our PASSION

Simulation and Training.

Our VISION

Rise to the best simulation technology.

Our DUTY

Enhance safety through innovation.

Reiser Simulation and Training GmbH (RST) has been actively shaping the change in aviation training for more than 30 years. To this end, RST supplies innovative developments made in Germany worldwide, thus contributing to the efficient and safe training of flying personnel. RST's wide range of products is not only aimed at pilots during various stages of their training and further education. The portfolio also includes training rigs for maintenance, repair and loading tasks, available at any time without tying flying equipment to the ground.

RST approaches all individual training solutions holistically and consistently with the demand for highest precision and attention to detail. The company's aviation enthusiasts always begin their work by assessing the customers' needs and requirements. RST thus offers support already in the planning stage, taking into account economic and technical aspects, project management, and last but not least, the development and production of unique training solutions. Meanwhile, the company closely monitors current regulations of national and international certification authorities and maintains a constant exchange with leading aircraft manufacturers as well as military and civil operators.

# **Mothership Concept**

Modular solution for unique training efficiency

Our next-gen Roll-On/Roll-Off capability allows adapting the training device to your training fleet composition by simply exchanging the functional cockpit. This outstanding feature secures your investment for many years to come.



### Intuitive IOS with Touch Display

Intuitive on-board Instructor Operator Station plus options for simultaneous training of the rear cabin crew. **pp.7-9** 



### Visual System

Most modern high-definition LED projectors, night vision goggle capability and super high-resolution image generator for unprecedented immersion. pp.7-9



### 3<sup>rd</sup> Crew Member

Mixed-reality 3rd Crew Member Station.
The downward view of both the immediate
forward perspective and the image
vertically beneath the aircraft are
displayed to both pilots and instructor.





### Full-Scale-Replica Cockpit

Cockpits of different helicopter OEMs can be integrated within the same mothership. p.13



### Roll-On/Roll-Off

Convenient cockpit exchange within less than 2 hours. p.15



# **Intuitive IOS**

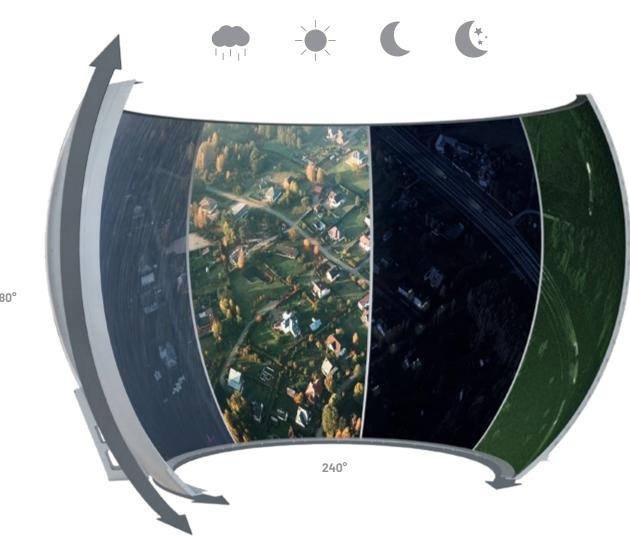




### Focus on your mission

The intuitive Instructor Operator Station (IOS) is located in the aft cabin, allowing cockpit and instrument panel observation. The IOS further provides options for rapid Roll-On/Roll-Off cockpit swaps and simultaneous training of the rear cabin crew.

The remote IOS consists of a handheld computer (tablet) that is connected to the simulation network via WLAN. An external IOS may optionally provide identical features. The optimal solution when the customer's training concept allows the instructor to operate outside the simulator.



### Train challenging search-and-rescue missions

Simulated avionics suite, 240°x80° field-of-view, chin windows for visual cues during landing, high-definition LED projectors, night vision goggle capability, super high resolution image generator, worldwide database with 25,000 airports, realistic computer generated entities, a 6-DoF motion and vibration platform - aggregated in an easy-to-maintain approach and with one of the lowest power consumption rates on the market.



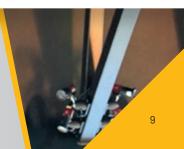
### Go for ultimate realism

Visual system night vision projection and cockpit equipment lightning are compatible with real NVG according to MIL-STD-3009 and MIL-L-85762A.

For training with night vision goggles, the IOS is entirely isolated from the cockpit, so that no lights can disturb the NVG operation.



**Visual System** 



## **3rd Crew Member Station**

### Perform multitasking

Our mixed-reality (MR) 3rd Crew Member Station is located in the aft-cabin behind the cockpit inside the dome and incorporates a simulated side door for the crewman. As with the aircraft itself, there is an input from a camera mounted under the tail rotor which shows a downward view of both the immediate forward perspective and the image vertically beneath the aircraft. This view is displayed to the pilots and to the instructor; the position of the Rescue Man (an avatar) – on a cable which can be up to 60 metres (196 feet) in length – can be controlled by the instructor to make the bold arm gestures which are the primary signalling function for the positioning input.

Both IOS and two tablet computers in the dome provide intuitive control of the simulated Rescue Man such as hand signals and movements on the ground via a touch screen.

### Realistic Training

Training is improved by a night vision mode that simulates the typical enhanced view through a Night Vision Goggle (NVG) and further by a torch, equipped with a tracker system, projecting a simulated light beam to illuminate landing and accident site.

The simulated light beam is visible for both MCM(through MR goggle), Pilot and Co-Pilot in the dome which provides most realistic training during night missions. The MCM Station provides next generation training during Rescue Man / Underslung Maneuvers, Search and Rescue Missions, Take-Off and Landing Maneuvers in confined areas, paired with an immersive benefit for crew coordination.

# **Full-Scale Replica Cockpits**



### Wide variety of cockpits

The interchangeable cockpit allows training centers scaling their business by adding one or more aircraft cockpits to their offering without investing directly in another simulator bay. Several aircraft types are currently available as FFS.

In addition, a variety of different helicopters can be trained in one mothership. Exemplary cockpits are H125, H135, H145 or the AW 169.





# www.reiser-st.com

### Easy installation and future compatibility

The modular system architecture of our simulators forms the baseline of the outstanding Roll-On/Roll-Off (RoRo) capability. The uniform interface reveals unexpected possibilities of engaging different training media. One single cockpit can thus be operated both in a Level D FFS and in any other flight training device.





Consistent system architecture reduces the cost of spare parts and maintenance. Our RoRo interface is engineered to respond immediately to your customers' needs. Maximize your efficiency by exchanging functional cockpits of different platforms between different training sites and secure your investment for many years to come.

Curious? Watch our video clip by scanning the QR-Code or visit www.reiser-st.com/simulators.



# **Be Part of the Family**





### Avionic Desktop Trainer

A classroom solution for realistic and cost-efficient procedure training and familiarization. The Avionic Desktop Trainer (ADT) replicates avionics and aircraft systems to prepare pilots and flight personnel for simulator sessions at a premier stage of training. The ADT features high fidelity flight dynamics, engine and AFCS models for all standard and emergency procedures and provides instrument procedures in both manual and AFCS modes, including VOR, NDB, ILS, RNAV, GPS approaches.

### F-Light Line The Future of Helionix® Flight Training Devices

Helicopter Flight and Navigation Procedures Trainer (FNPT) II MCC and Flight Training Devices (FTD) powered by our approved Level D Full-Flight Simulation Software.

The unique modular and upgradable F-Light Line trainers open up new opportunities for your individual training needs.

Contact our partner RS Flight Systems to learn more about the vast configuration options.







# **Full-Flight Simulator Derivatives**

# REISER

SIMULATION - TRAINING

Reiser Simulation and Training GmbH Oberer Luessbach 29-31 82335 Berg / Germany

+49 8178 8681 -0 www.reiser-st.com







