

BRUNNER

dedication + innovation

FLIGHT TRAINING SOLUTIONS.



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The wide spectrum of leading and innovative Control Loading Systems, Drop-In Devices and Simulation Components offered by BRUNNER become an enabling technology for a wide range of modern Flight Training Devices globally.

Starting from the highest end these are certified Full-Flight-Simulators (FFS) representing all aircraft and type-specific physical and operational characteristics of a real aircraft. One category below are the Flight-Training-Devices (FTD) that often don't utilize motion or visual systems, but still fully represent the original aircraft.

Much more simplified and representative for a class of aircraft only are so-called Flight and Navigation Procedure Trainer (FNPT) and Aviation Training Devices (ATD). Even more simplified applications are Basic Instruments Training Devices, Desktop Trainers or Role-Playing Stations.

BRUNNER CONTROL LOADING SYSTEME.

The precise replication of the physical men-machine interaction is a key-factor to the quality of a Flight Training Devices. BRUNNER has developed a strong portfolio of leading Control Loading Systems. As a result, we provide Drop-In devices and Simulation Components that reacts with realistic movements to even finest inputs and offers artificial feeling that qualifies for most professional Flight Simulator applications.

Drop-In stands for the full integration of all elements belonging to the device in only one box. As a result, our Control Loading Systems are truly compact solutions that can quickly integrate in any existing or new simulator environment.



FLIGHT AND NAVIGATION PROCEDURE TRAINER.



Type Rating and multi-Crew Coordination Training is very often handled in Flight and Navigation Procedure Trainer (FNPT).

At BRUNNER we pay high attention to these mid-size and mid-fidelity training systems and support this segment with our efficient and powerful Drop-In Control Loading Systems and Simulation Components. Supporting standard procedure training as well as abnormal and emergency procedure training, our devices and components provide excellent quality, highest fidelity and unique durability at an unmatched price-performance level.

An example for the successful application of our products and components can be found at FSB Flight School Berlin. They operate a B737 NG FNPT II which is used for EASA certified type-rating and Multi-Crew-Coordination training on Boeing B737. The FNPT is the cornerstone of the achieved training success.

ADVANCED AVIATION TRAINING DEVICES.

Flight Schools all around the world utilize modern Advanced Aviation Training Devices (AATD) as their high-value training solutions below the class of Full-Flight-Simulators and Flight-Training-Devices. Modern AATDs benefit from an ongoing technology and performance transfer down from the Full-Flight-Simulators and most-often achieve an unmatched price-performance level. BRUNNER supports this development and the tremendous demand for AATDs globally with innovative and high-quality Drop-In Control Loading Devices and powerful Simulation Components. Since all our products are modular, scalable and configurable, they fit perfectly into a huge number of training applications. The benefit for the AATD training is obvious: an increase in training quality !



DESKTOP AVIATION TRAINING DEVICES.

Desktop Aviation Training Devices are one of the most efficient forms of cost-aviation training. The quality of these devices and the achieved training value depend strongly on the quality and level of integration of the used simulator elements. BRUNNER defines a new standard with its high performance and cost efficient Control Loading solutions. CLS-H und CLS-E Yokes are robust and reliable and provide highest resolution and quality at an unmatched price-performance ratio. Functions like Autopilot and Trim are realistically build-in. By using our CLS2Sim Software, CLS-H und CLS-E can be interfaced with commercial simulation products like X-Plane, M-FSX, and Prepar3D®. Any other 3rd party simulator software can be easily integrated using our remote interface protocol and TCP/IP or UDP.



MODULAR FLIGHT CONTROL STATION.



Designer and Engineers building modern Training Systems aim for a highest level of modularity and flexibility for their systems. This leads to a growing demand for pre-integrated simulator building blocks and functional Modules.

A real Plug&Play capability allows a fast, simple and low risk integration to the simulator. BRUNNER supports this demand with innovative Drop-In Control Loading Systems and will grow into the role of a strong competence partner for the entire Simulation Industry. The Concept of Modular Flight Control Station builds the perfect base form realization of Part-Task or Flight and Navigation Procedure Trainers and can be integrated in type specific Flight Training Devices.

Our Control Loading Systems provide excellent quality, highest fidelity and unique durability at an unmatched price-performance level. It is supporting single as well as dual pilot applications. A unique real-time synchronization logic enables unmatched and automatic pilot/co-pilot take-over functionality for MCC applications. This allows the integration in any Flight Control Station for either Helicopter or Fixed-Wing Setups.

BRUNNER ELEKTRONIK AG

Development, production and customer services at the highest level: this describes the business activities of BRUNNER Elektronik AG and our motivation to convince every customer with individualized controls, drives and components. Also, we are proud of supporting our customers with complex integrated solutions and our own innovative and strong simulation product portfolio.

As a modern family-owned technology company we are a powerful and reliable partner of numerous companies in different industries and markets for more than 40 years now. Our ability to handle all corporate core processes, from development to production and customer support, fully in-house creates sustainable advantages for our customers and partners: short response times, high flexibility and an integral understanding of quality. Our engaged and highly qualified employees share our enthusiasm for working for our customers, take over responsibility and live the values of team spirit and fairness.

We pay attention to the environment and the ecological use of resources.

