VR Group ®

Subsidiary of LOM PRAHA
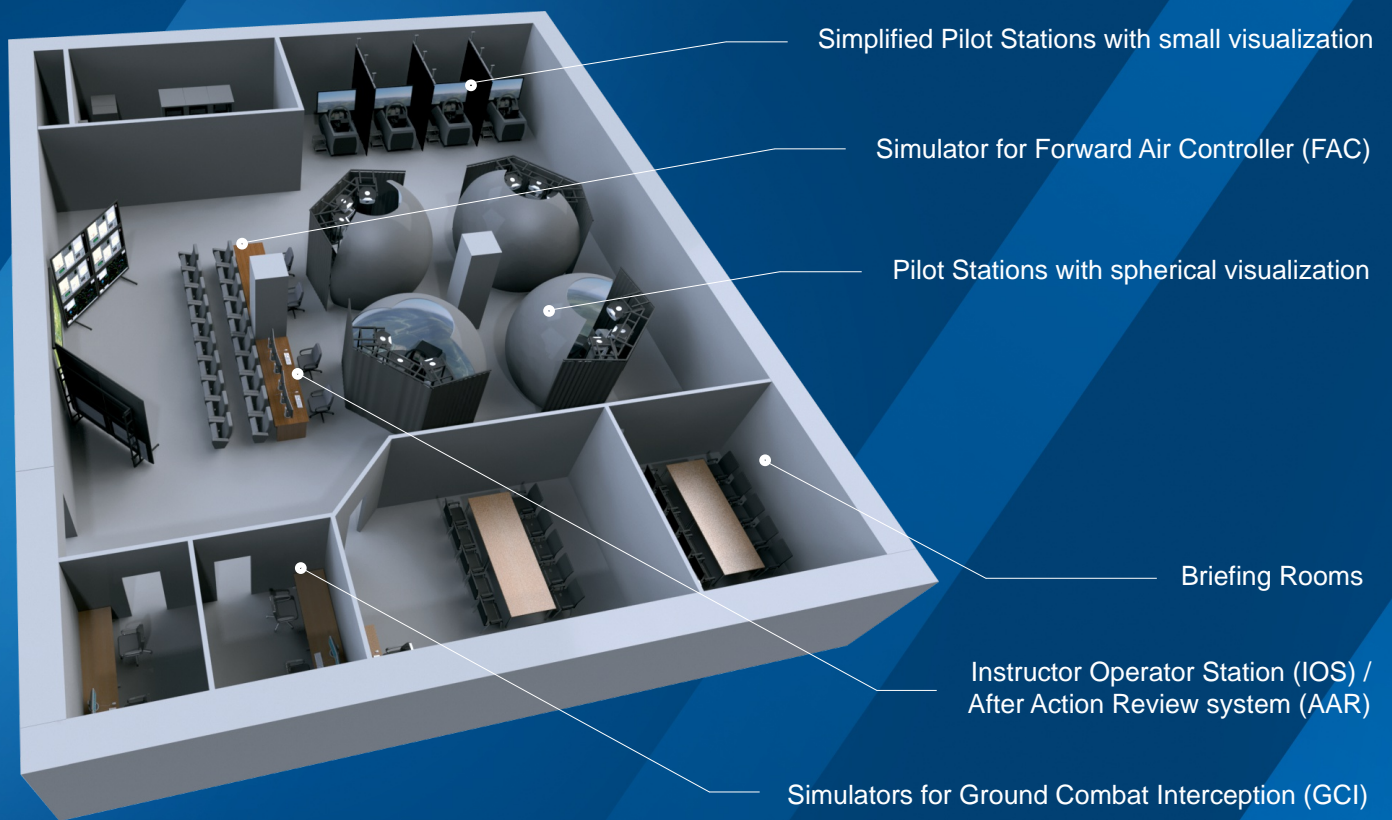
Air Force
Tactical Simulation Centre (TSC)

Air Force Tactical Simulation Centre

The purpose of the Tactical Simulation Centre (TSC) is to provide the Air Force (AF) with a universal platform for simulated tactics training of pilots, commanders and ground staff (mainly GCI and FAC).

The Air Force Tactics Training System provides pilots and instructors with simulators and other tools necessary for effective planning, conduct and evaluation of training tasks.

Modular, open and highly customizable architecture allows tailoring the system in accordance with current and future needs of the air force.

- Simplified Pilot Stations with small visualization
- Simulator for Forward Air Controller (FAC)
- Pilot Stations with spherical visualization
- Briefing Rooms
- Instructor Operator Station (IOS) / After Action Review system (AAR)
- Simulators for Ground Combat Interception (GCI)
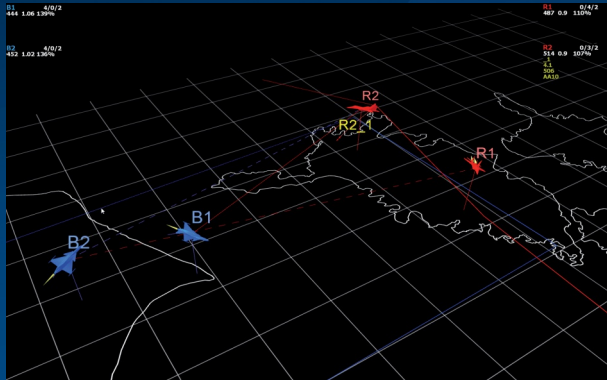

View of Pilot Station

View of Simplified Pilot Station

Training Options

The TSC allows training up to eight pilots, two GCI operators and one FAC operator under the supervision of an instructor; either all together, or in various separate groups.

Each course consists of several training tasks (usually about eight). Each task can be performed in day or at night, in different weather conditions, within several typical terrain databases and in various tactical situations.

Mission overview

3D terrain database with simulated aircraft

Pilot´s control panel L-159

Pilot´s control panel JAS-39

Pilot´s control panel L-39

Pilot´s control panel F-16

Tactics Training Blocks

- Basic BVR courses – include basic principles of BVR tactics and deployment of semi-active and active rockets from one versus one to four versus many situations
- Advanced BVR courses – include advanced principles of BVR tactics and training of cooperation among up to four pilots in QRA, ROE and ATO training
- DCA courses – specialized courses for training of defensive air operations under different conditions; include FAOR training, HVAA protection training and cooperation with allied GBAD
- OCA courses – specialized courses for training of offensive air operations; include mainly COMAO, escort and sweep training
- CAS and AI course – focused on training of tactics and procedures of air-to-surface operations with support of FAC

Pilot Stations and Simplified Pilot Stations

The Pilot Stations and Simplified Pilot Stations simulators are designed with respect to the dimensions and proportions of real aircraft cockpits.

The cockpit configuration allows switching between the JAS-39, F-16, L-159 and L-39 aircraft types and possibly other aircraft with similar stick and throttle position configuration (HOTAS).

All main controls and displays are simulated via touch screen. The cockpit is equipped with a fully functional replica of the HOTAS.

The Simplified Pilot Stations and Pilot Stations are identical, with the exception of the large six-channel spherical visualization system, which is replaced with one HD resolution flat screen.

Pilot Stations

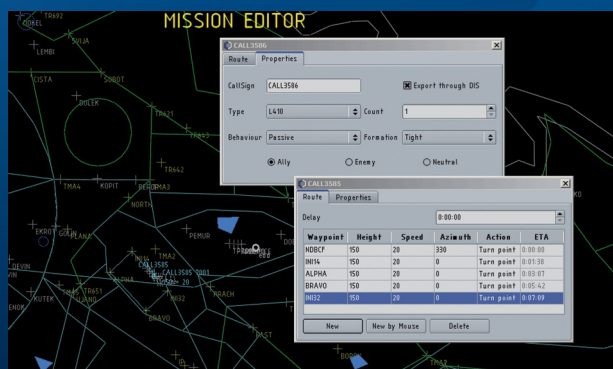Simplified Pilot Stations

Simulator for GCI

The software equipment simulates the function of primary and secondary ground radar stations with realistic detection range, detection delays and errors. All this information is dynamically used for creating the visual output for GCI console.

Simulator for FAC

The software equipment simulates the function of forward air controller with all the tools necessary for target detection, recognition and communication with the pilot including simulated laser homing of guided munitions.

Instructor Operator Station (IOS)

The IOS provides the instructor with all the equipment necessary for controlling of the TSC training system.
It enables the instructor to perform diagnostics, setting of the mission parameters, monitoring the training course and exercise evaluation.

GCI Editor

Instructor Operator Station (IOS)