SkyBreaker™

Fighter Aircraft Mission Training Center
Tactical Training

Elbit Systems™
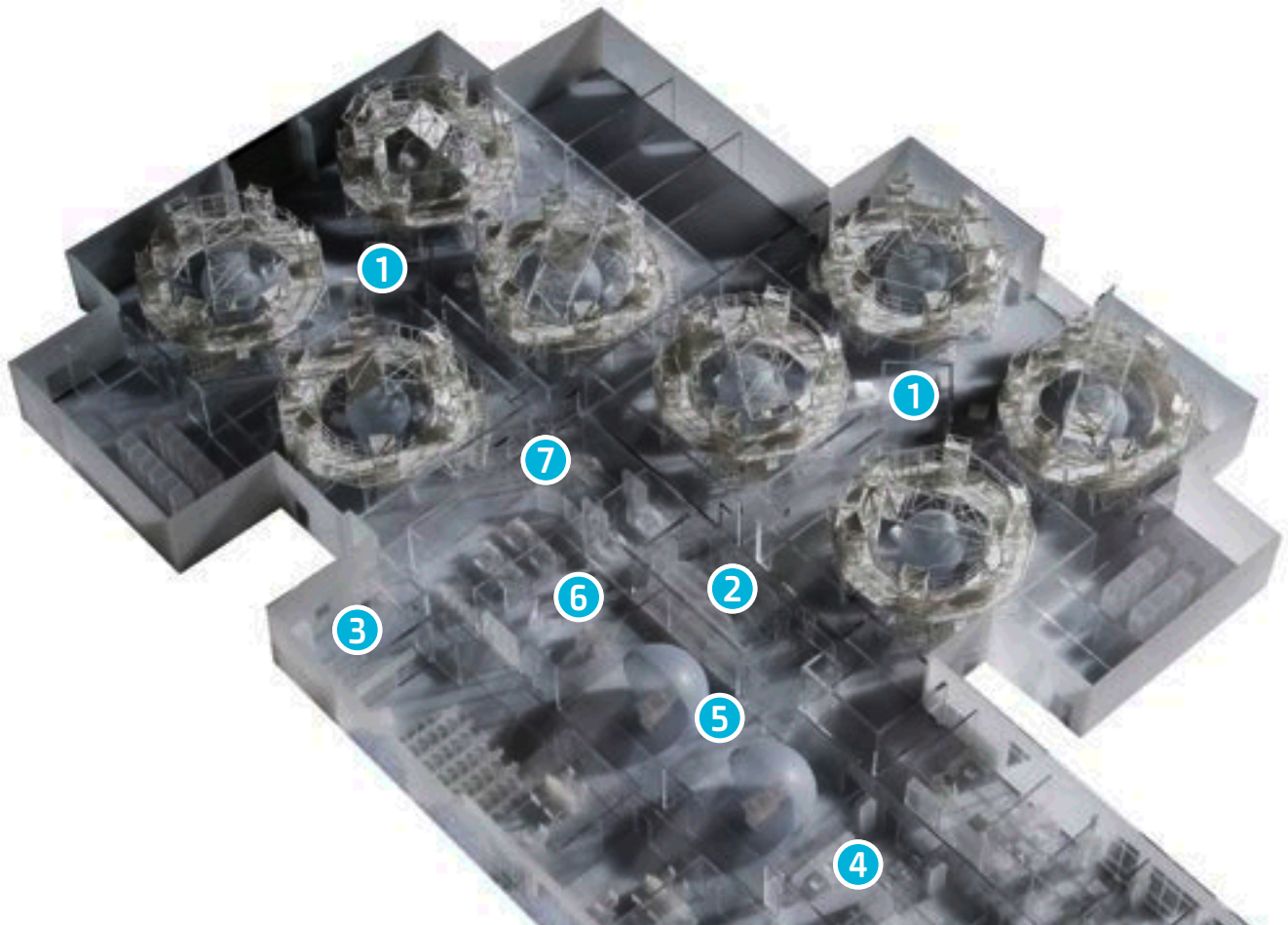*Aerospace*

SKYBREAKER
Mission Training Center

SkyBreaker is Elbit Systems' Fighter Aircraft Mission Training Center (MTC), a networked multi-cockpit, mission-oriented training center supporting many aircraft types. The MTC provides realistic simulated battlefield training using all aircraft systems and mission scenarios to enhance all levels of pilot training. A world leader in field-proven training and simulation solutions, Elbit Systems developed SkyBreaker to save actual flight hours, by presenting aircrews with high-fidelity, simulator-based training.
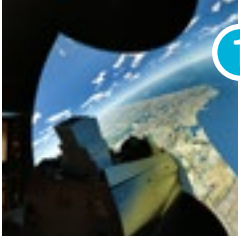
Our SkyBreaker facility houses a complex networked system designed to provide an entire squadron with the tools to practice modern air combat using SkyScen™, a sophisticated computer generated forces (CGF) solution, in a fully integrated military setting.

SkyScen was developed based on the requirements of pilots with vast operational experience. It is capable of running thousands of entities, using the highest level of artificial intelligence.

The MTC covers all stages of the mission including planning, rehearsal, training and debriefing.
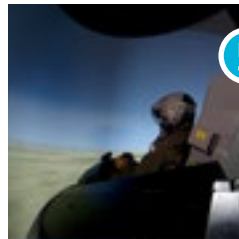
SkyBreaker components include:

(1) Blue Cockpit Stations roll-in/roll-out cockpits, allowing several aircraft types training in the same center, with accurate simulation of all aircraft systems, avionics and weapons.

The cockpits are integrated with Elbit Systems' SkyView™ - Quad HD Image Generators that drive wide field-of-view (FOV) displays. The display is integrated with Elbit Systems' TARGO™ Helmet Mounted Display and uses the most advanced Rear Projection Dome. This enables a resolution of up to 3 arcmin/OLP, which is extremely close to normal eyesight resolution.

The system incorporates multiple blue cockpits operating simultaneously over Elbit Systems' simulation infrastructure, with minimum transport delay, creating a fully synchronized training session.
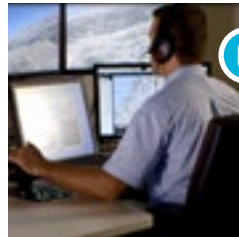
(2) Combat Control Station enables the incorporation of operational controllers to take part in managing the mission providing an even more realistic combat training environment.
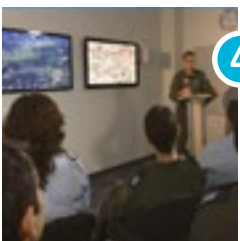
(5) Red Cockpit Stations facilitate training using large FOV display systems with simulated avionics and weapons, full radio communications and C^{4}I display.

(3) Mission Planning/Briefing Stations allow full scenario planning and rehearsal, and can be synchronized to the customer's operational mission planning system.

(6) Role Player Stations enable the control, steering and management of any virtual entity with a man-in-the-loop to enrich the virtual arena.

(4) Formation Debriefing Stations allow display and storage of training information, reports and comparative data.

(7) Central Mission Management Station allows command and control of all training elements and displays all trainee information.

SkyBreaker - Unlimited Access to the Sky

SkyBreaker

Fighter Aircraft Mission Training Center – Tactical Training

Key Benefits

- Implements the "Train as you Fight" concept, by enabling training in the actual mission area under live combat engagement rules, ensuring maximum safety
- Maximizes cost-effectiveness of tactical training using high-fidelity simulation of airborne platforms
- Supports all tactical flying procedures including planning, briefing, actual flying and debriefing
- Improves team coordination as well as individual and operational proficiencies
- Flexible, versatile and easily adapted to customer requirements and doctrines
- Implements operational lessons throughout training

Key Features

- Includes high fidelity cockpits (Blue Cockpits), Red cockpits, role player stations, command and control stations, brief and debrief stations, ground controllers and maintenance stations, all providing greater than 95% system availability
- SkyView, including Elbit Systems' Quad HD Image Generators, TARGO helmet and a 360-degree FOV display system
- Fully networked system supporting full scale LVC (Live, Virtual, Constructive) training, based on standard protocols
- Roll-in/roll-out systems to accommodate different platforms as required
- SkyScen, an advanced arena generator designed by pilots with vast operational experience
- Fast data exchange network architecture