

# TACTICAL TRAINING GOES

*The Combat Training Centre at Mont de Marsan was created in 1983 to assess the performance of Mirage F1 and Mirage 2000 systems.*

*With the introduction of the 2000-5 to the forces, and in expectation of the Rafale program, the French Air Force has launched a renovation program for the CTC. Sogitec was selected by DGA for the implementation of this program.*



*Instructor consoles (3 stations).*

**M**odern air combat is more and more complex, multi-aircraft and multi-target. This double characteristic requires the creation of a synthetic battlefield to define the operational tactic for new weapon systems, then teach and train the pilots.

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#### FULL-SCALE RAIDS CONDUCTED FROM SEVERAL BASES



The specifications for this renovation led Sogitec to implement a system capable of covering all types of air defence missions: escort, sweep, combat air patrol (cap). The goal is to involve ground attack and air defence

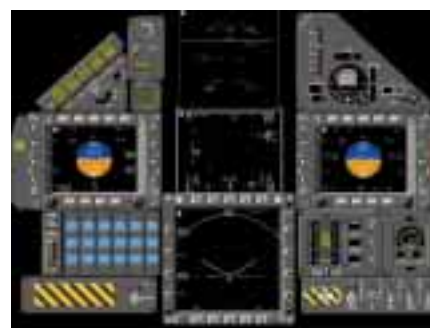
specialists to conduct joint operations and to make possible the organisation of missions entailing the use of several resources from several air bases: assembly on one trajectory, conduct of the mission, visual identification of targets and coordination of the complete air component.

The power of the concept enables the control of a complex situation (orbiting zones, assembly points, area overflights, etc.) in which any air player (out of 43 possible) may be a pilot in his simulator (up to 10 pilots) or a virtual player.

In addition to tactical studies, the missions of the CTC may cover experiments concerning equipment: consequences of the extension of radar range on a weapon system for example, and combat training in general.



*Mirage F1CT instrument panel.*



*Mirage 2000-5 instrument panel.*

# ON-LINE

## TEN FULLY IMMERSED PILOTS



In its new configuration, the CTC has all the simulation equipment in a single building: four simplified pilot stations (PPS), and six spheres in which the pilots will have a field of vision of about 300° horizontal by 140° vertical. Three of these spheres, built in the middle 1980s will be modernised by addition of terrain projectors in particular. Sogitec will deliver three new spheres.

The exercise area covers all of France and includes 40 airfields and a number of firing ranges. The system enables the linking of the different phases of a mission for a total duration of up to two hours. At any time in the session, specific sequences may be replayed; the exercise can be resumed at any moment.

Before the mission, the briefing room allows each pilot to prepare his flight. Immediately after the session or later, a debriefing station enables analysis of the mission with access to all the displays, cockpit among others, and statistical analysis of the data resulting from the flight.

## THE POWER OF THE TACTICAL ENVIRONMENT SERVER



The tactical server controls 33 aircraft (virtual players) in accordance with realistic aircraft characteristics (flight mechanics, tactical characteristics in combat) and

representative missile trajectories (Air/Air, Ground/Air), all in total interactivity with the pilot players.

It thus enables restitution of all the realism of a complex mission involving many players (friend and foe, air, ground or naval), day or night, in the electronic warfare environment.

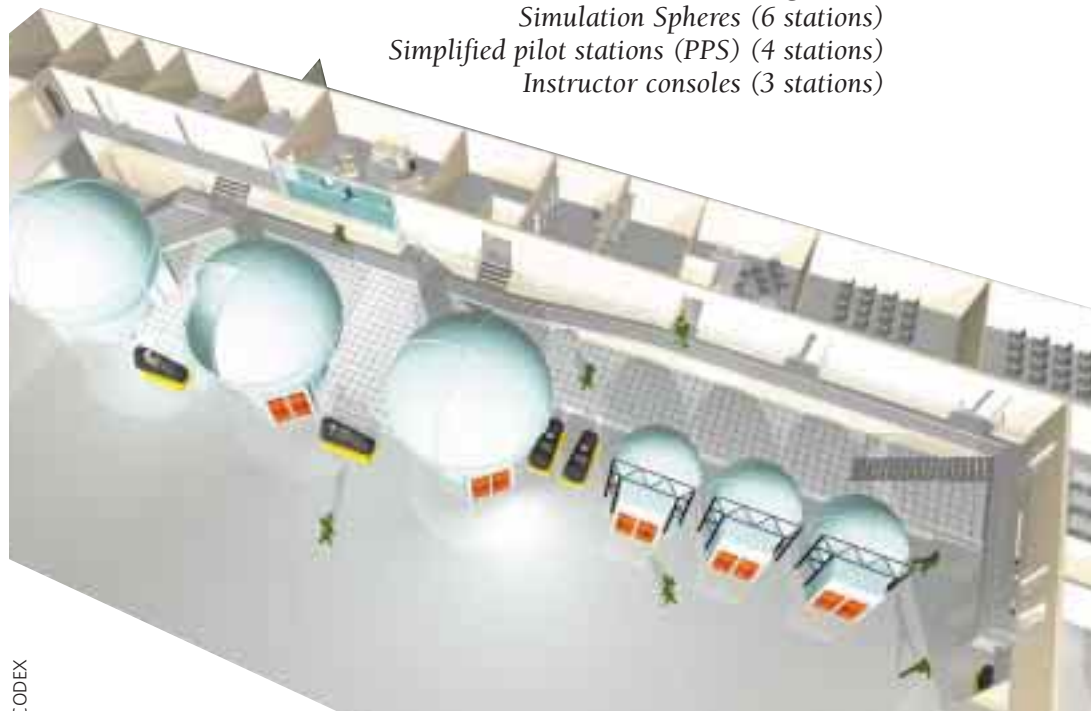
## INTERACTIVITY AND FLEXIBILITY



The renovated Combat Training Centre will have a platform offering a wide variety of possible configurations:

- Complex missions with 10 pilot-players,

- Implementation of 2 totally distinct missions, executable simultaneously,
- Preparation and debriefing of a session in parallel with conduct of sessions,
- Option of changing the cockpits in the spheres for up to 6 single-seater aircraft or 4 two-seater aircraft of the same type.



*Air Combat Training Centre  
Simulation Spheres (6 stations)  
Simplified pilot stations (PPS) (4 stations)  
Instructor consoles (3 stations)*

*View of CEC equipment*

DECODEX