

# FRENCH MIRAGE 2000-5: PREPARING FOR ACTION

*The new mission planning system for the Mirage 2000-5 reaps the full benefits of expertise acquired from export sales of the aircraft.*

The French Air Force's fleet of Mirage 2000-5s, operated principally in an air defense role, are to be outfitted with a complete mission planning system designed and developed by INTEMIS, a subsidiary of Sogitec and Matra Systèmes et Information.

## PLANNING AND COORDINATING COMPLEX MISSIONS

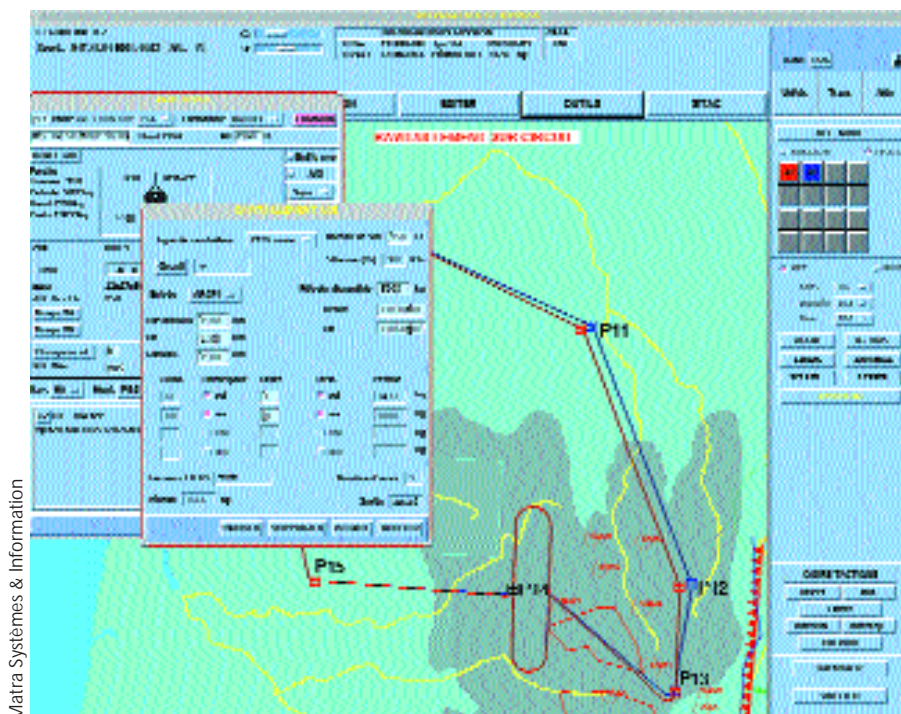
The new local mission planning system, called Judy, integrates all the data required to plan complex missions coordinating up to 16 aircraft, i.e., definition of the theater of operation, tactical situation, air defense mission and aircraft configuration; threat assessments and calculation of

navigation, refueling and escort trajectories; implementation of electronic warfare systems; preparation of frequency plans; generation of flight documents; and programming of onboard mass memory units—MBM (Mirage 2000-5) or MIP (Mirage 2000 DA)—that transfer mission data to the cockpit displays.

In the modern era, reaction times are critical to mission success, so planning has to be completed as quickly as possible.

## FAST AND EFFECTIVE

Sogitec's new mission planning system is a lot more powerful than its predecessors and its user interface is more intuitive.



*Planning a circuit for in-flight refueling at point P14.*

Preparation time varies from a few minutes for a single aircraft to half an hour for a sortie involving 16 aircraft, including programming of MBMs and generation of flight documents. Each squadron at an air base is equipped with several Judy systems, one of which is portable. They can thus communicate with other squadron aircraft or with Judy systems being used by another squadron operating in the same zone or deployed at another remote site. Being able to exchange shared data directly between systems ensures consistency and saves time.

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**EASY  
TO  
DEPLOY**

◆  
The mission planning system comprises a workstation with a high-resolution 20-inch monitor, an MCM rack (Moyen Chargement Mémoire) to interface with the aircraft, a printer and two uninterruptible power supplies. All these elements are integrated inside self-supporting units, thereby facilitating deployment. Sogitec, already closely involved in developing data formatting software, is supplying the portable Judy units and MCM racks. Each rack comprises an MBM drive and six slots for programmed electronic warfare memory modules (MIP GE). Pilots can access the information stored in the MBM in flight and in real time during all phases of the mission—be it an escort or air superiority mission—in coordination with other aircraft.



*Cockpit of a French Mirage 2000-5.*

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**OPTIMIZING  
AIR-TO-AIR  
MISSIONS**

◆  
Operational parameters (tactical situation, in-flight refueling, threats, countermeasures, etc.) and flight safety parameters (fuel reserves, contingency landing sites, etc.) can be selected and displayed on cockpit screens at any moment. Further, the automatic pilot takes care of flight control tasks so that pilots can focus on radar surveillance, and on protecting themselves more effectively against threats and firing missiles if necessary.

The contract for the French Mirage 2000-5 mission planning system was awarded to INTEMIS at the start of 1997.

The system is currently in development and aircraft interface tests on the Mirage 2000-5 were completed last autumn. It will be integrated and readied for use before delivery to the French defense procurement agency's aeronautical equipment division (SPAé: *Service des Programmes Aéronautiques*) this year.