

HIGH-TECH. Faster, further, stronger: French soldiers are boosting their capabilities with the Félin integrated equipment suite built by Sagem Défense Sécurité.

FÉLIN, FOR TOMORROW'S SOLDIERS



Each Félin platoon leader has a terminal information system (SIT-COMDE) giving him a real-time view of the unit's tactical situation.

Soldiers in Western armies face increasingly demanding missions and far-flung deployments. At the same time, casualties must be kept to a minimum. The logical conclusion is to provide better protection for each soldier by improv-

ing mobility, firepower and environmental control.

In France, the solution is called Félin (*Fantassin à Equipements et Liaison Intégrées*), or integrated infantry soldier combat suite. The program was announced by French defense

procurement agency DGA in 2002. In March 2004, the DGA awarded Sagem Défense Sécurité an 800 million euro contract for system development, and the production and support of more than 30,000 Félin systems. "Félin will make our soldiers far more capable in

UNPRECEDENTED VOLUME PRODUCTION IN FRANCE

Sagem Défense Sécurité delivered 30 Félin systems at the end of September, and will deliver 358 by the end of February 2008. The French army ordered a total of 31,500 systems to outfit all infantry regiments and several other units by 2012. In addition, 2,000 combat vehicles will be fitted with Félin interfaces. This is the first contract in France involving such large-scale production of electronic and optronic equipment: several tens of thousands PEPs, over 10,000 sights, 1,200 tactical information systems, etc.

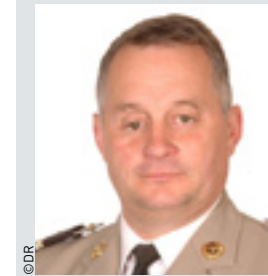
every area," enthuses Philippe Rioufreyt, director of land combat programs at Sagem Défense Sécurité. "All equipment is highly integrated, making Félin a state-of-the-art warfighter system."

A complete suite

The Félin integrated system is built around a lighter, more ergonomic uniform, which can be fitted with armor offering different levels of ballistic protection. On the offensive side, advanced optronic sighting systems multiply the effectiveness of individual weapons, day or night. Soldiers also have headgear that displays images captured by the sight on their own weapons – or even from their fellow soldiers' weapons!

The backbone of the integrated system is the Félin Information Network (RIF), providing short-range data transmission and wireless communications. Each soldier is equipped with a man-machine interface called the Portable Electronic Platform (PEP), which manages data exchanges as well as the operation of weapon-mounted sensors. The platoon leader has access to GPS data, allowing him to see the relative positions of his soldiers on a touch-sensitive pad, similar to a PDA.

VIEWPOINT



Lieutenant colonel XAVIER HOFF, FÉLIN OFFICER WITH THE FRENCH ARMY'S ENGINEERING SECTION

smooth communications between each company's commanding officers.

But aren't the Americans also in the lead with their Future Force Warrior system?

The American concept is very different from ours. Roughly speaking, you could say that the Future Force Warrior aims to revolutionize land combat by making the soldier a platform for sensors that send information to a second command level. Félin has more modest, practical goals.

It will not change basic operating modes, but simply augment each soldier's capabilities. Furthermore, Félin will enhance the value of infantry units, by ensuring the quick circulation of data via SIT-COMDE.

What does the Félin program mean for the French army?
Félin is one of the army's major programs. It will considerably enhance the value of our soldiers and their capabilities by integrating infantry units in the digital battlefield, in full harmony with the information systems now being deployed at all command levels. The cornerstone of the Félin system is the SIT COMDE, or Dismounted Combatant Terminal Information System, which guarantees

Where does Félin stand in relation to similar systems in other armies?
Several Western countries have also launched so-called "future soldier" programs, including the United Kingdom, Germany, Finland and Norway. But the French army has made significant progress, starting with the original ECAD dismounted combatant system demonstrator. Today, Félin is undoubtedly the most advanced of these systems, since it will be widely deployed starting next year.

This pad can also display images from sensors and digital maps; it interfaces with the regiment-level information system via PR4G radios. "The Félin-equipped warfighter will never be isolated," notes Philippe Rioufreyt with pride. "He will be operating as part of an integrated network that multiplies his own capabilities."

Production qualification

"Each soldier will carry two batteries to power the communications equipment and optronic sensors for his weapons," explains Rioufreyt. "This gives him about 24 hours of run time. After that, he can recharge these batteries using

special adapters on his unit's armored vehicles, the modernized VAB* or the future VBCI**."

Félin is now in the process of qualification. In October, the French army's engineering unit STAT started testing 30 complete systems. As from March 2008, two companies will be outfitted with a total of 358 systems to test these systems in the field. All French infantry regiments will subsequently be outfitted, paving the way for a revolution in military operations. ■

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* VAB: forward-armored vehicle
** VBCI: infantry combat armored vehicle