



Operational requirement

Helicopter units are called to operate in a wide range of operation theatres where they are required to counter a great variety of threats, more often using infrared guidance.

The proliferation of very short range missiles may also threaten helicopters at any time during peace keeping missions or as a result of terrorist activities.

The solution

Since the Gulf war, helicopters are no longer sent into battle without self-protection. Chaff & Flare dispensers are the first essential step offering active protection for the best cost-to-efficiency factor.

SAPHIR-M is the NH-90 and Tiger advanced Chaff and Flare dispenser.

ELIPS-NH is progressively replacing form, fit and function SAPHIR-M on the NH-90 in the form of a mid-life update.

- Suitable for all types of helicopter
- High decoy capacity
- Fully programmable
- In service for all types of NH-90 and Tiger

SAPHIR-M / ELIPS-NH

**DECOYING
SELF-PROTECTION SYSTEM
FOR HELICOPTERS**



AIR

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SAPHIR-M is a decoy dispenser delivering countermeasures against radar and missile threats by optimised ejection of chaff and/or flares. It comprises the following units:

Cartridge Dispenser Modules (CDMs)

The CDMs house the ammunition magazines and perform the loading identification, the management of the firing impulses and the interface with the SSU and the magazines. SAPHIR-M can operate up to 6 CDMs.

Sequencing Supply & Safety Unit (SSU)

The SSU provides the management of the chaff and flare dispenser and the interface with the helicopter and alarm detectors of the EW system when available. It stores the mission parameters and elaborates the ejection programmes. The software embedded in the SSU is optimised for helicopter use.

Cockpit Control Unit (CCU)

The CCU includes the controls and displays of the system. A rotary switch selects between Automatic, Semi-Automatic, and Manual ejection modes. A selector allows ejection on either left, right or both sides.

Magazines

The magazines are capable of carrying cartridges in a desired mix of chaff and flares in a variable configuration. The type and number of decoys as well as their position are automatically known by reading coded plugs at each magazine.

Ammunition

SAPHIR-M can identify and use different formats of decoys:

- NATO 1»x1»x8» and 2»x1»x8» (32 cart. per magazine)

Above decoys can be:

- Infrared flare
- Advanced flare (spectral)
- RF (chaff)

Mission Planning

SAPHIR-M and ELIPS-NH come with a mission planning system to generate the library parameters and upload it into the ELIPS before mission. It can take the form of an autonomous station or software to be embedded in an EW system mission planning system.

Programme status

SAPHIR-M and ELIPS-NH are in mass production for the NH-90 and Tiger, for European and Export users.

Name

- SAPHIR-M
- ELIPS-NH

