Selex ES Introduces Miysis DIRCM

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Recognising the worldwide threat to fixed-wing aircraft and helicopters from advanced infrared (IR) guided missiles, Selex ES is launching the Miysis Directed InfraRed CounterMeasure (DIRCM) system.

Miysis is the pinnacle of DIRCM capability, and builds on Selex ES' long and extremely successful history of delivering world-leading DIRCM equipment. The Miysis DIRCM system uses the latest generation of technology, in a readily exportable format, and is suitable for air platforms and customers where DIRCM protection was not previously available.

The global threat from IR weapons, and especially the easily portable and widely available shoulder-launched weapons known as MANPADS, continues to grow. These threats have been used with lethal effect in every major conflict over the past 40 years, and as they become more sophisticated, the traditional defence mechanisms such as countermeasure flares are increasingly less effective.

Today, no military, VIP or civilian air platform is immune from a potentially lethal attack, and DIRCM systems have become recognised as essential to airborne survivability. The Miysis DIRCM system protects the host aircraft and its occupants by accurately locating and tracking the inbound threat, and then directing a modulated laser beam to attack and defeat the missile. It can operate independently and autonomously as a stand-alone equipment, or can be the cornerstone of a wider Defensive Aids System.

Selex ES has decades of world-leading experience in the fields of DIRCM pointer/trackers and airborne lasers. This is all brought together in the latest generation product, Miysis DIRCM. As a Selex ES private venture, the company set itself 3 key technical challenges to ensure that the Miysis DIRCM system met the most exacting requirements, allowing the most demanding customers to operate safely in the most hostile environments. These challenges were to excel in terms of weight, laser power and speed of response.

First, to be suitable for light aircraft, smaller helicopters and UAVs, Miysis DIRCM had to be small, lightweight and draw very low power from the host aircraft whilst providing optimum protection. In practice this meant designing a complete detection and protection system capable of all-aspect (spherical) defence that would draw less than 500W of electrical power and add less than 50kg to the host aircraft.

Second, this small package had to deliver enough laser power onto a threat missile target to protect the largest strategic aircraft and support helicopters. This demanded advanced laser technology, superior threat tracking accuracy and ultra-efficient direct laser coupling instead of fibre-optic links.

Finally, Miysis DIRCM had to engage any IR MANPAD threat immediately after launch, regardless of the range from which it was fired. For the most demanding, very short-range attacks, this required exceptional response speed with very few moving parts.

Miysis DIRCM is unique in achieving all of these key aims in a flexible and affordable format that can be provided as either federated equipment, or else a role-fit pod solution. Open architecture ensures ease of installation onto platforms previously considered unsuitable for a DIRCM and the

system is designed to work with a range of missile warning technologies. With the moving parts sealed behind a 5.5in dome, Miysis DIRCM provides dependable and persistent protection and the ability to defeat simultaneous, multiple attacks.

With Miysis DIRCM, Selex ES offers new levels of protection to the international community. The world's most advanced solution to a growing global problem, Miysis DIRCM has a unique combination of light weight, small size and superior capability and sets the standard for military, VIP and civil aircraft protection, now and in the future

Miysis DIRCM will be on show in a podded format throughout IDEX at Stand B07 in Hall 06.