



HeliMedia's Video Mission Box (VMB) in successful MoD trials to combat IED threat...



MX-15 HDi

Identifying, tracking and countering the movement of terrorists and the associated threat of Improvised Explosive Devices (IEDs) is one of the MOD's top priorities, forming the background to a 5 year research project jointly funded by the MoD and an organisation of industry leaders. HeliMedia was contracted by SELEX, one of the industry leaders, to design a new airborne video capability as part of a set of trials known as HydraVision 2, held at Porton Down in May 2010.

The objective was to develop new airborne sensor and data processing techniques to track the movement of terrorists and in particular, look for anomalies in behaviour and environment which would trigger an alert to deploy forces before an incident could occur.

SELEX contracted HeliMedia because of its previous success installing a VMB for Italian-based Helica, which was used to help coordinate operations during the L'Aquila earthquake in 2009.

The airborne video solution from HeliMedia needed to satisfy the following key requirements:

- Stabilised 1080p HD EO+ IR imagery
- High quality video recording at 1080p HD, at 100Mbps
- Camera that can be automatically slewed to targets by PicoSAR
- Quick to install/remove system with minimum fixed modifications to the airframe
- EASA certified
- Experienced camera operator for the duration of the trial

In order to achieve these requirements, HeliMedia used an L-3 Wescam MX-15HDi airborne camera system and its own cabin-mounted Video Mission Box (VMB-C). The VMB-C interfaces directly with MX-15HDi, and includes an aviation grade, solid state HD video recorder from Skyquest. All of the video outputs from the MX-15HDi and all of the control ports, are placed on the VMB-C connector panel. These video outputs are then supplied to a range of other equipment, including displays and hand-held solid state HD video recorders. PicoSAR communicated with the MX-15HDi via an Ethernet comms port.

From contract award to design, manufacture, delivery and VMB-C certification, HeliMedia implemented the solution in just 18 weeks including full EASA installation approval.

The trial was a huge success with helicopters flying across Porton Down collecting 40 terabytes of images and data. It is hoped this multiple-sensor technology will help save lives in war zones such as Afghanistan and Iraq.

HeliMedia Ltd

Aerotech Business Park
Bamfurlong Lane
Cheltenham
Gloucestershire
GL51 6TU

Tel: 01452 857155
Fax: 01452 857115
info@helimedia.co.uk

www.helimedia.co.uk

VMB-C/June2010