RADAR ON CHESAPEAKE BAY

On 19th February Kelvin Hughes announced that it has supplied SharpEye™ Solid State X Band surveillance technology to the Maryland Natural Resources Police (MNRP) to enhance their enforcement network in protected areas.

This network monitors illegal activity across 3,100 miles of Maryland coastland, including oyster sanctuary waters in Chesapeake Bay. Such solid state radars are able to detect small, low-radar cross section targets such as boats used by poachers.

SharpEye™ radars are key sensors in the MNRP Maritime Law Enforcement Information Network (MLEIN), whose mission is to secure the 3,100 miles of Maryland coastline. The system was launched in the autumn of 2013, with the first detection of illegal activity taking place shortly after. The two X Band radars provide high resolution radar pictures 24 hours a day in all weather, and these images are transmitted to officers in the field in real time. The information is shared with other government and law enforcement agencies, to assist in detecting illegal activities or help with search and rescue operations on the water.

Solid state radars are ideal for the MNRP’s application as they enable the detection of small, low radar cross section targets, such as the boats typically used by oyster poachers. One such incident occurred in Tangier Sound, with two poachers apprehended by an officer watching his laptop as the cameras and radar units of the MLEIN tracked the watermen.

Officer John Bromley of the MNRP said, “MLEIN was a definite asset on the water and enhanced our ability to respond to the situation. It was like having an extra pair of eyes on the patrol boat.”

Other benefits that led to the MNRP’s selection of SharpEye™ include enhanced detection of small targets in heavy rain and high sea states; and the advanced detection in poor conditions allowed by the patented pulse sequence and Doppler processing.

Adrian Pilbeam, Vice President of Kelvin Hughes LLC added, “SharpEye™ radars provide MNRP with reliable, low maintenance surface search radar. Detection of small targets was critical in the selection of the radar, which already has assisted MNRP in successfully intercepting illegal activity.”

Enhanced enforcement is one of the goals under Maryland Governor Martin O’Malley’s 10-point Oyster Restoration and Aquaculture Development Plan. In 2011, he signed a sweeping law that included stricter penalties for both
egregious first-time and serial offenders. The SharpEye™ radars ensure the poachers have nowhere to hide.

About the Maritime Law Enforcement Information Network (MLEIN)
MLEIN is an enforcement network employed by the Maryland Natural Resources Police (MNRP) (see also www.dnr.md.us/nrp/) to monitor and prevent illegal activity in protected areas. Since adopting SharpEye™ Solid State X Band surveillance radar technology, the MNRP is confident that new technology will continue to improve the MLEIN’s ability to prevent poachers from compromising precious natural resources.

About Kelvin Hughes
Kelvin Hughes Surveillance division is a global provider of surveillance and navigation radar systems for land and sea environments. The company is over 250 years old, employs over 350 people, operates 12 offices in eight countries and supplies 30 of the world’s navies. The company has a long tradition of technology firsts, most recently with SharpEye™ solid state radar; leading to subsequent applications in multiple markets and through different radar products due to the scalable nature of the technology. Kelvin Hughes’ surveillance division provides coherent SharpEye™ and non-coherent radar technologies capable of detecting the smallest of targets and lowest velocities in clutter, meeting the surveillance, safety, and security needs of the world’s navies, coastal and border agencies, and security patrols.

Headquartered in London, UK, there are three divisions of Kelvin Hughes: Surveillance Systems, Marine Systems and KH Charts.

Picture captions

KH 1
*The Chesapeake Bay antenna.*

KH2
*Screen shot.*

KH3
*The Kelvin Hughes radar transceiver.*