Look, no hands! Autonomous capability trial makes waves

Dress rehearsal for Royal Navy's Unmanned Warrior I6 exercise demonstrates how our innovative technologies mean that threats at sea can be evaluated without endangering lives

major security alert in the Solent. A highly manoeuvrable rigid-hulled inflatable boat (RIB) is deployed to check out the situation...

Reconnaissance complete, and fears allayed, the RIB is returned to the shore, with no human beings put

This state-of-the-art boat, complete with unmanned aerial vehicles featuring 360-degree cameras, had no-one at the helm. Instead it was operated by remote control, a safe distance away.

Science fiction? No, this realistic scenario was actually trialled in Portsmouth's Langstone Harbour, thanks to leading-edge technology that we've developed in partnership with a number of companies including Fareham-based ASV.

Called Unmanned Capability, this event showcased the impressive unmanned systems technologies that we offer to naval operations, and demonstrated the planning, tasking, control and monitoring of these systems.



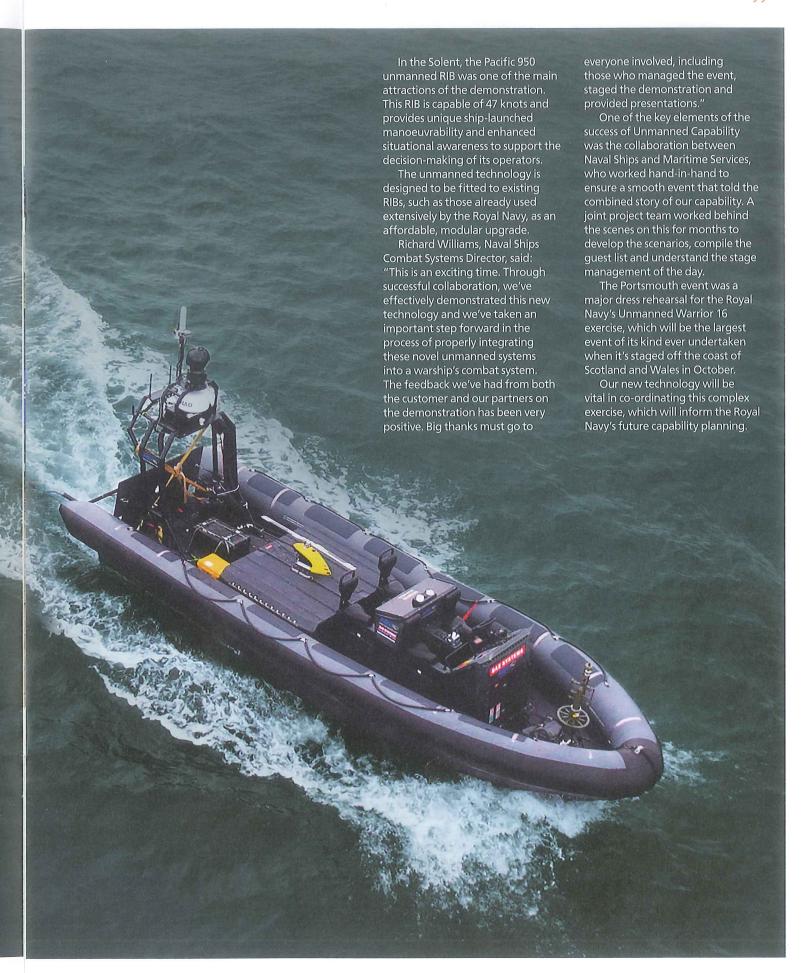
At the heart of the demonstration was our Combat Management System, acting as the information hub for each of the unmanned vehicles and creating a single overall picture to support the command team's decision-making. The system, which is in operation across the entire Royal Navy surface fleet, has been advanced for unmanned operations, through an intelligent software enabler – developed in collaboration with QinetiQ and SeeByte – known as Maritime Autonomous Platform Exploitation (MAPLE).

ABOVE: Intelligent network – our Combat Management System information hub is graphically

RIGHT: Unmanned warrior – the Pacific 950 It all acts as a transportable command and control centre with the capability of integrating unmanned systems from different suppliers. This minimises the number of screens and controls needed to conduct missions, making the whole system highly efficient with minimum risk of human error.

Also integral to the demonstration was MarTacNet technology, an intelligent maritime communications network that enables the type of high-speed communication essential for different vehicles from a range of suppliers to communicate in unmanned operations. This capability has been developed in collaboration with Cloudnet IT Solutions, which uses part of the ultra-high frequency spectrum made redundant by the digital TV switchover to provide highbandwidth, long-range tactical communications.

It could mean that unmanned surface vessels may be able to operate up to 20 nautical miles away from a ship.



BAE Systems Maritime