



System incorporates high performance long range thermal, TV and laser sensors



Benefit of service-proven fire control platforms on a range of naval vessels

Sea Eagle FCEO

Electro Optical Fire Control System

Sea Eagle FCEO (Fire Control Electro Optical) is an advanced electro optical fire control system that provides precision tracking of surface and air targets and accurate gunfire control in surface (ASuW), air (AAW) and shore (NGS) engagements. Capable of controlling any in service naval gun, the system provides 24-hour detection, acquisition, tracking, identification and engagement of surface and air targets through its thermal and TV sensors.

Part of the Chess Dynamics Sea Eagle family of systems, FCEO utilises service-proven common module sensors and processor units. Chess Dynamic's modular approach to system design provides increased flexibility of configuration with reduced integration costs while increasing supportability and reducing spares holdings.

Features

- Long range thermal imager and daylight TV cameras provide 24-hour passive target detection and classification/identification
- High performance eye-safe laser rangefinder provides accurate target range
- Programmable, horizon and sector scanning with automatic target detection provides Wide Area Surveillance for Situational Awareness
- Automatic target acquisition and tracking
- Anti-air, anti-surface, naval gunfire support and indirect engagements
- Automated capture of target 'snapshot' images
- Designed as a stand-alone system or for integration into a Combat Management System
- Can be controlled from a multi-function console or dedicated system control console.

System Outline

Sea Eagle FCEO uses a high performance electro-optical sensor suite to provide target acquisition, tracking and gun engagement 24 hours a day. The system uses sophisticated processing techniques to enhance target tracking and ballistic prediction, which increases overall gun system accuracy and effectiveness.

EO Sensors

The electro-optical sensors comprise a high resolution mid-wave thermal imager, colour TV camera and eye-safe laser rangefinder. They have been selected to provide effective target detection and classification within the engagement envelope of the system.

EO Director

The performance of the Sea Eagle director has been optimised to meet the requirements for rapid acquisition and precision tracking of dynamic air and surface targets. The director provides high acceleration and slewing rates to reduce acquisition times which, coupled with smooth tracking under both auto tracker and line of sight gyro control, ensures engagement accuracy.

Gun Control

Sea Eagle FCEO is designed with performance parameters to match the engagement ranges of current and future naval guns. The system employs ballistics predictors and processors with a range of operational modes that ensure control of any calibre gun mounting in surface, air and naval gunfire support engagements, with compensation for meteorological effects.

Operation

Sea Eagle systems have been designed to be controlled from either a dedicated operator's console or from a combat management system multifunction console. For dedicated applications, a range of console configurations are available to suit different vessel layout arrangements and space limitations.

