



Innovative Systems for Individual Solutions



#### **Our Commitment**

We help our customers protect what matters most by providing the best in proven technology with high availability for demanding environments. We hire the best people and always provide a solution to a need rather than push a product.









### **Our Values**

#### **Teamwork**

We work together to provide our customers with solutions.

# Integrity

We do what we say, when we say. We act with honesty and are trustworthy.

# Excellence

We take pride in what we do. We strive to continuously improve ourselves and the business.

## Courage

We are not afraid of taking on challenges with diligence, endurance and nerve.





### A COHORT PLC COMPANY

Chess Dynamics is a surveillance, fire control and large positioning systems specialist, providing solutions for Land and Maritime domains.

Defence Leaders around the world work with Chess for market-leading, reliable defence systems.

Chess designs and manufactures an extensive range of Electro-Optical (EO) tracking and surveillance intelligent sub-systems for military land and maritime applications.

These solutions incorporate thermal imagers, TV cameras, laser range finders and radars.

Chess enables the user to control the platform by joystick, auto-track, slew-to-cue, radar-cue and remote sensor-cue for passive target detection, recognition and identification.

The more complex EO systems are integrated and used as part of complete fire control systems and may also be integrated into vehicle surveillance systems.

The comprehensive portfolio of proven surveillance and fire control technology solutions also includes counter-sUAV (drone) protection systems, the Vision4ce branded real time video and image processing solutions for electro-optic systems.

A complete service can also be provided. Including survey, installation, training and maintenance across its entire product range, including bespoke engineering solutions.

Chess Dynamics has been supplying equipment, sub-systems and solutions to defence leaders and prime contractors since 2005.

Cohort acquired a majority share in Chess in 2018 and the company is led by David Tuddenham.

Designed by experts, built by specialists, maintained by professionals. We are Chess.







SeaEagle
Maritime Systems











# **SeaEagle Family of Maritime Systems**

SeaEagle is a family of electro-optical systems that meets a broad range of maritime surveillance and gun fire control applications. System solutions are available for all classes of surface vessels; from fast interceptors and patrol boats, to major warships.

## **Advanced Image Processing**

SeaEagle systems feature a video processing system that provides a high level of automation to the surveillance, acquisition and tracking functions.

- Programmable horizon and sector scanning with automatic target detection
- Multiple target detection and acquisition
- Panoramic display of the scanned sector with detected targets labelled
- Automatic slewing to radar contact target indications
- Real time target tracking with automatic selection of tracking algorithm to suit target/background parameters
- Automatic cueing of multiple targets within field of view
- Automatic capture of target 'snapshot' images
- Graphical display of all system, target and ship data
- Digital video and data recording
- Artificial Intelligence & Auto Target Classification

#### **Fire Control**

SeaEagle systems can be configured for control of any in-service naval gun in various anti-air, anti-surface and naval gunfire support engagements.

A range of interface formats are available to match both new build and earlier design mountings.

Chess provides a full installation and trials service, including live firing trials and analysis.

- Range table based ballistic prediction including compensation for meteorological effects
- Surface (ASuW) engagements with semi-automated splash spotting
- Air (AAW) engagements in area and self-defence modes
- Naval Fire Support (NFS) engagements in direct and indirect modes with crest clearance
- Ability to conduct surface engagements using trackwhile-scan data from a surface search radar
- Ability to fire extended range ammunition
- Graphical display of all system, weapon, target, ship and meteorological data
- System can be integrated into and controlled from a Combat Mission System multi-function console or supplied with its own dedicated console or workstation







Hawkeye Land Systems











## **Hawkeye Family of Land Systems**

Having a visual image of both hostile and friendly forces, at a range that enables the commander to make informed decisions and is an essential element of modern ground operations.

Hawkeye is a family of advanced multi-sensor surveillance and targeting systems from Chess Dynamics that provides this visualisation capability. The systems provide comprehensive 24-hour surveillance and target identification in a broad range of operational scenarios and tactical applications.

The Hawkeye family of systems employs the latest image processing and system automation techniques to reduce dependence upon operator time and skill, thereby reducing workload and training requirements.

Based upon common system architecture, the Hawkeye family provides a flexible approach to surveillance that enables different applications to be accommodated, whilst employing standard operating procedures, a low training burden and an integrated support philosophy.

### Surveillance

- Target Classification
- Mast Mounted
- Target Location
- Video Tracking
- Video Analytics
- Image Processing
- Video Recording
- Georeferencing
- Laser Range Finder
- Ruggedized processing

# **Targeting**

- Long Range
- Track & Engage
- Target Handoff
- Low Power
- Networked Video
- Georeferencing
- Joint Fires Terminal
- Laser Target Designator







#### **About Vision4ce**

Chess brand Vision4ce provides high performance video and imaging processing solutions for electro-optical systems. This covers the supply of rugged embedded hardware for harsh environments on land, sea and air along with integrated software solutions incorporating sophisticated image processing algorithms including object detection and tracking.

Our automated video tracking and image processing solutions present simplified, actionable information from even the most complex environments. We combine our extensive knowledge of defence and security challenges with our proven video tracking and image processing technology to solve problems and reduce risk.

Flexible configuration capabilities enables system specifiers and architects to promptly meet their customers' requirements.

Our extensive knowledge is due to our rich heritage and experience in the defence and security space. Specialist EO understanding and capability sets us apart, and ensures our customers gain everything they need from a highly experienced and responsive team.









## Partnering for Support

At the heart of every long term partnership is a strong and trusted bond between customer and supplier. Here at Chess Dynamics our mission is to provide effective post-delivery services and solutions which meets our customers operational needs.



**Relationship management** - Our dedicated Services & Support team will work closely with you to ensure you receive the required services necessary to maintain exceptional levels of equipment reliability and performance.



**Customised Support** - Every customer has a unique set of needs. Here at Chess, our support services are designed to be adaptable and scalable ranging from basic pay-as-you go services to customised Service Level Agreements.



**Communication** - We provide regular progress updates on all open issues in accordance with agreed reporting frequencies allowing you to plan future activities with confidence.



**Contact Us** - We look forward to meeting with you to discuss your in-service support requirements and create your tailored service solution.





Chess Dynamics Limited Quadrant House

Quadrant House North Heath Business Park, North Heath Lane Horsham, West Sussex, RH12 5QE United Kingdom

sales@chess-dynamics.com

**www.chess-dynamics.com Tel:** +44 (0)1403 249 888

**Fax:** +44 (0)1403 249 555