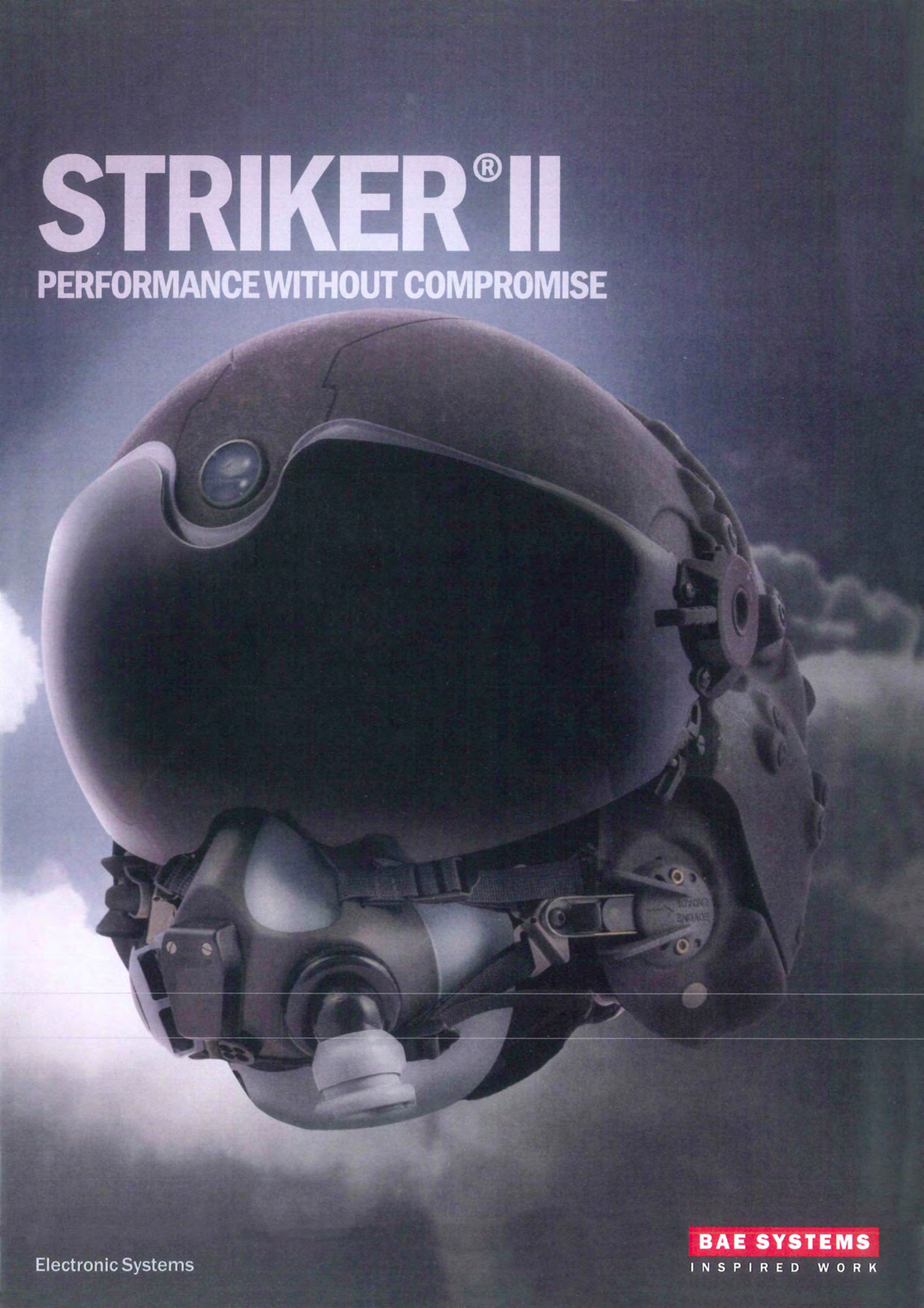
STRIKER® II

PERFORMANCE WITHOUT COMPROMISE



Electronic Systems

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INSPIRED WORK

PERFORMANCE WITHOUT COMPROMISE

With decades of combat-proven experience, the new platform-agnostic Striker® II helmet-mounted display (HMD) builds upon BAE Systems' current Striker HMD, which has been successfully deployed in theatre on Eurofighter Typhoon and Gripen fleets. Striker II is a fully digital solution that provides today's combat pilot with exceptional night vision and target tracking technology within a fully integrated visor-projected HMD system.

INTRODUCING STRIKER®II

ALL NEW DIGITAL HELMET-MOUNTED DISPLAY SYSTEM WITH INTEGRATED NIGHT VISION CAMERAS — PERFORMANCE WITHOUT COMPROMISE

ALL THE CAPABILITY — ALL THE TIME

Striker II helmet-mounted display (HMD) brings its high performance digital night vision camera inside the helmet, which helps reduce G-force effects on the pilot's head and neck to improve comfort, and eliminates the need to manually configure and adjust night vision goggle (NVG) hardware for day-to-night transitions. With its high resolution binocular visor-projected display, the new system integrates a centre-mounted ISIE™-11 sensor based on Intevac Photonics' patented advanced imaging sensor technology, known as electron bombardment active pixel sensor (EBAPS™). This advanced sensor increases the display's 24-hour capability — bringing the system's night vision acuity to a level equivalent to or better than NVG performance but without the compromises that NVGs impose.
The Striker II system delivers the ultimate in day/night situational awareness through immersive visor-projected imagery augmented with symbology.

MAXIMUM INTEGRATION FLEXIBILITY

Striker II HMD is designed for ease of integration across a range of platforms types. It is compatible with aircraft that have analogue display drive electronics, via a low latency conversion device, and has a digital interface for aircraft with digital display drives. Striker II also offers a true plug and play solution for aircraft equipped with the current generation Striker HMDS.

FAST – VISION WITHOUT DELAY

A cutting-edge tracking system that ensures the pilot's exact head position and the aircraft computer system are continuously in sync, reducing problems common to other HMDs. The Striker II tracking system, with new hybrid opto-inertial tracker technology, creates an unlimited 'head motion box' and eliminates any delay in determining where the pilot is looking. The system can therefore perfectly position symbology onto the visor, even if optical tracking is lost. The results are high-precision target tracking and engagement as well as superior situational awareness and mission effectiveness, including 'near zero' latency on tracked symbols.

LIGHT – OPERATION WITHOUT FATIGUE

The new night vision integrated configuration also significantly reduces weight, when compared to today's HMD/NVG solutions so pilots can fly longer duration missions with reduced fatigue. The system also enables increased aircraft G-limits for night HMDS operations. Striker II also offers a better balance and centre of gravity with its integrated night vision camera delivered through the 'cyclops' configuration which increases comfort in G-level manoeuvres.

ENHANCED PILOT EXPERIENCE – PERFORMANCE WITHOUT COMPROMISE

The low profile design of the integrated night vision camera within the helmet eliminates physical cockpit/canopy interaction issues experienced with NVGs. The new lighter and more compact system allows the pilot unhindered movement within the cockpit whilst maintaining tracking and display performance throughout the mission.

WHY STRIKER®II

High resolution, 40-degree field-of-view, fully overlapped binocular digital display

- HD equivalent 1280 x 1024 high resolution, high brightness display
- Large fully overlapped binocular field of view for best presentation of night vision camera video and sensor imagery
- Independent channel for each eye allowing display of stereoscopic and 3-D imagery

Visor-projected conformal symbology and video available 24/7

Fully integrated, high resolution night vision camera

- Optimally positioned centre-mounted 'cyclops' camera
- 1600 x 1200 resolution camera with 60 Hz update rate
- Digital zoom enabled with no loss of display quality
- Integrated on-head night vision camera image processing which eliminates display latency
- Seamless transition between day and night operation with no need for reconfiguration, transition time or cockpit storage
- Symbology present at all times, day or night

Low latency, high accuracy opto- inertial tracker

- Includes inertial sensing
- 100% coverage even if optical tracking is lost – no blanking
- High accuracy prediction enables 'near zero' latency for tracked symbols

About BAE Systems

We're building on our strength as a global provider of defence and security products to shape support services that meet the changing needs of our customers. From sophisticated cyber services and military support to mission critical electronic systems and protection equipment, we aim to be at the forefront of defence technology and science.

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Approved for public release by BAE Systems, 07/14
Export approval number: ES-CCS-070914-0325

07.14.STRIKER.CS-14-E58-001