BATTLE HAWK
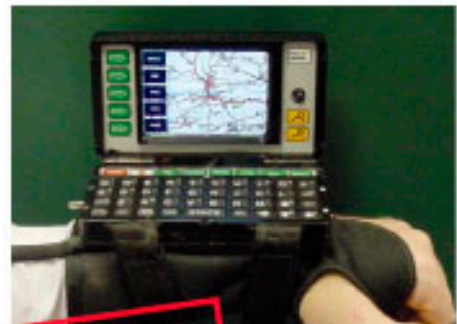
C4I SOFTWARE AND SYSTEMS

Validated, Intuitive and Flexible
Battlefield Management System

APPROVED

CHELTON
Defence Communications

Following extensive trials with the British Army at the Armoured Trials and Development Unit, **BattleHawk** has emerged as a validated, intuitive and flexible Battlefield Management System. In addition, the **BattleHawk** IS (Infantry Soldier) system has been selected for the UK's Future Infantry Soldier Technology (FIST) V.I programme.

The **BattleHawk** C4I software and hardware design has evolved from our practical experience with end users from many specialists units in the UK and overseas. This experience has created installation solutions across several vehicle types, addressed the weight and power issues so critical to the infantry soldier, and enabled us to develop an effective and intuitive interface and information management system.

Typical turret installation

Compact display unit (UDT)

Command vehicle installation

Briefing facility in use on the command vehicle

Benefits

BattleHawk ensures that you operate at maximum tactical effectiveness, providing ground forces with complete awareness, and ensuring clarity and accuracy of communications. Utilising common communication protocols, the system supports interoperability with other forces - a lifesaver in times of international co-operation.

Improved Situation Awareness: The high-resolution user display terminal presents detailed tactical data on a digital map background . Accurate information is supplied on own position, and that of friendly, hostile and unknown forces, together with other geo-referenced tactical elements.

Improved Tempo of Operations: The system provides flexible data management, enabling the transfer of information within a local tactical group, onward transmission to higher echelons, and sideways transmission to other local groups. The semi-automatic data generation and transmission significantly improves the speed of transfer and the acquired situation awareness.

Faster and More Accurate Reporting: The introduction of **BattleHawk** into a new or legacy platform provides a means of generating and transmitting reports semi-automatically. Most of the report content is provided from the platform systems, allowing minimal user input and a 'launch-and-forget' message system. This enables the transmission of data moments after it is acquired, with a significant reduction in operator errors. This is maintained at the Infantry Soldier's level, with target acquisition being accomplished through a link to the soldiers weapon.

Reduced Operator Workload: The **BattleHawk** system has benefited from significant input by 'Hands on' operators. The functionality and physical interfaces have been fine-tuned to reduce operator workload in conflict conditions. For the Infantry Soldier, data is repeated on a helmet-mounted display when the user-terminal is in the stowed position.
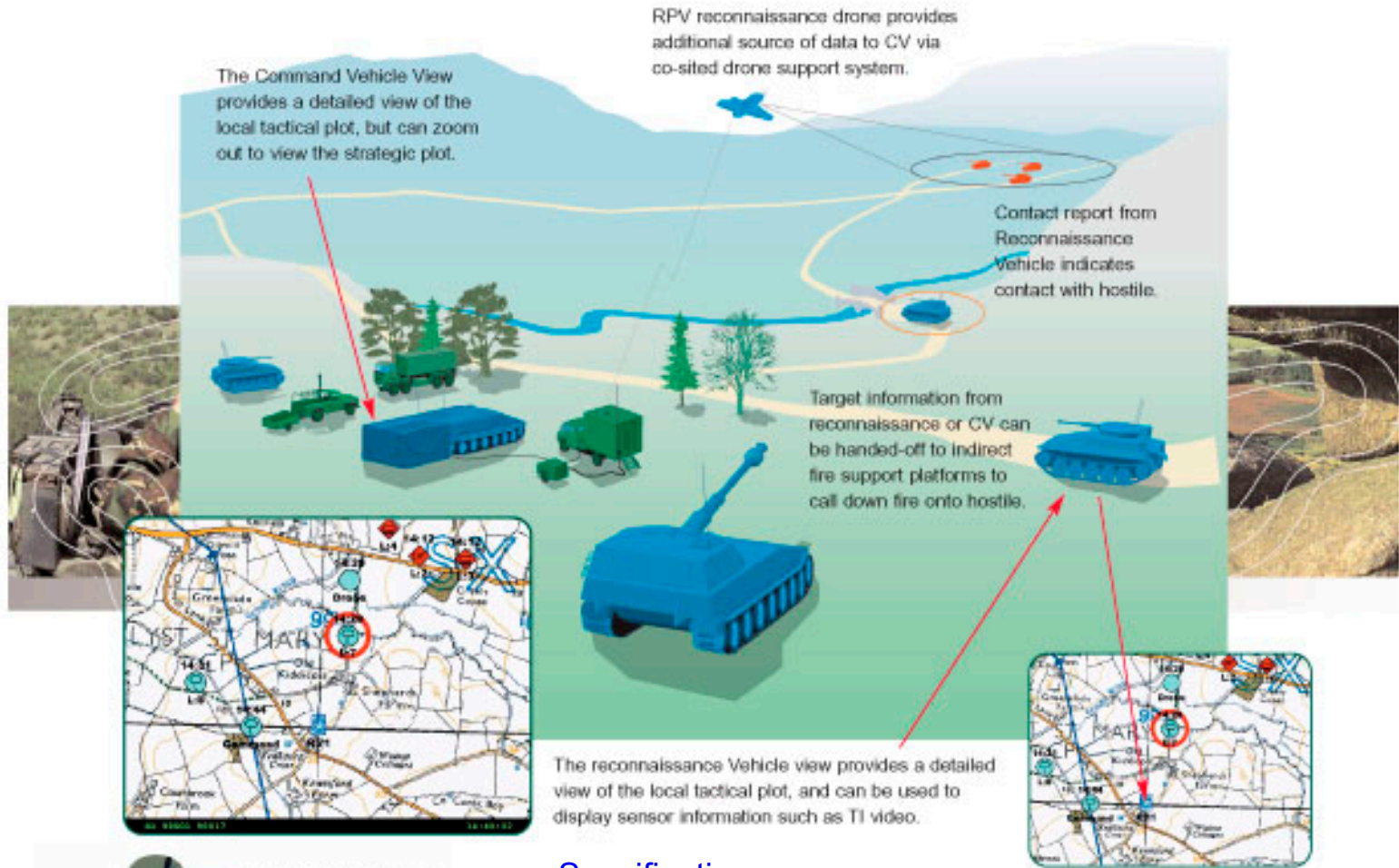
Enhanced Battle Group Effectiveness

The Command Vehicle View provides a detailed view of the local tactical plot, but can zoom out to view the strategic plot.

RPV reconnaissance drone provides additional source of data to CV via co-sited drone support system.

Contact report from Reconnaissance Vehicle indicates contact with hostile.

Target information from reconnaissance or CV can be handed-off to indirect fire support platforms to call down fire onto hostile.

The reconnaissance Vehicle view provides a detailed view of the local tactical plot, and can be used to display sensor information such as TI video.

Helmet Mounted Display

Data-enabled Personal Role Radio (DEPRR)

Weapon System

Soldier Interface Unit

BattleHawk Infantry Soldier Generation 2 (BHIS-G2)
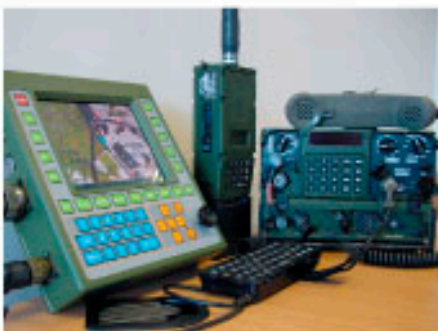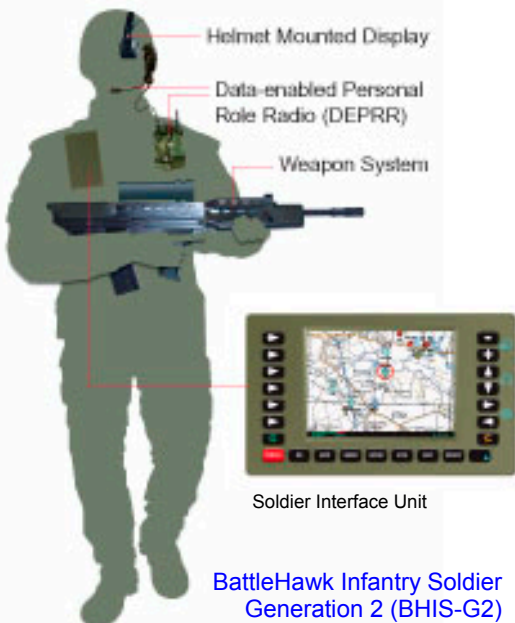
UDT and Panther V Radio

Specifications

All land forces are linked from individual soldiers at section level, up to higher echelons on command. The transfer of tactical data is paralleled within the vehicle based system, deriving significant automatic data input from systems integration. Many elements of the Reports and Returns are populated automatically, significantly reducing operator workload, and reducing reporting errors.

Navigation: The **BattleHawk** system interfaces with both GPS and INS systems, and can accept an input from an independent digital magnetic compass (DMC). The system offers facilities for creation and editing of waypoints, route planning, and derived information on heading to next waypoint, ETA etc.
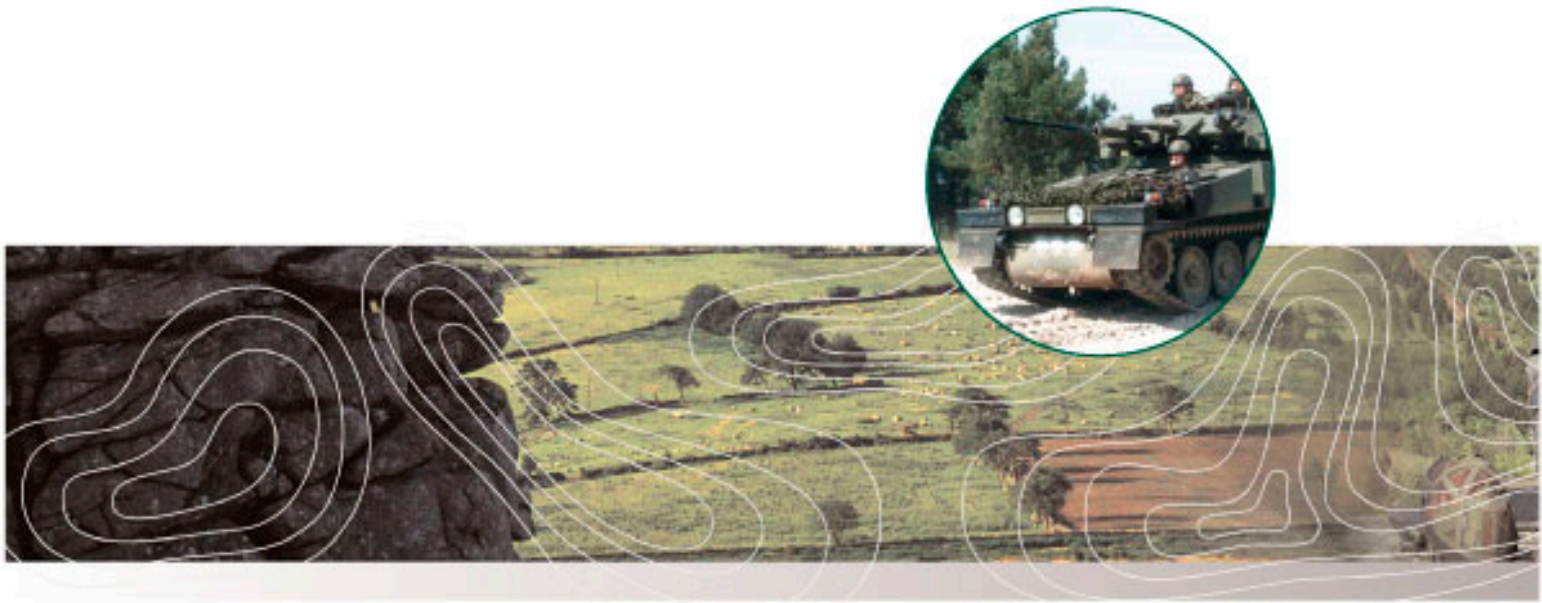
Communication: The system interfaces with many forms of communicating, be it satellite, radio or physical links. The infantry system allows multiple radios, such as VHF and data-enabled PRRs, and vehicle-based systems can support multiple VHF,HF and other communications from a single command console.

Sensors - Optics and Radar: **BattleHawk** supports multiple real-time sensor inputs whilst maintaining its other roles of displaying situation awareness, aiding navigation, and supporting data communications. The system can also support optical sensors, tactical radar, seismic intrusion alarms or weather reporting sensors.

Reporting: Reports are generated semi-automatically, reducing vehicle crew workload by monitoring platform status and reporting levels of fuel, munitions, water and other consumables. The Infantry Soldier can produce status reports on communication, weapon and personal health status.

At Chelton Defence Communications, we have been supplying tactical information and management systems since the 1980's, with dedicated solutions for the naval and land forces environments. These solutions have been converging on common hardware and GIS software solutions for a number of years. As a result, we now operate a shared development programme, ensuring that all products are inherently compatible to support amphibious operations. This programme is known as 'Project Hawk'.

Installation and Support

With a commitment to 5% of turnover in continuous R&D, **BattleHawk** is a product that you can rely on for the long term. Our supremely skilled Installation and Systems Integration Engineers are adept at working with a wide range of legacy platforms and system architectures, providing an integrated solution with operational benefits beyond the sum of its parts.

For more information on **BattleHawk** or its sister product, the Naval variant **WaveHawk**, contact Chelton Defence Communications.