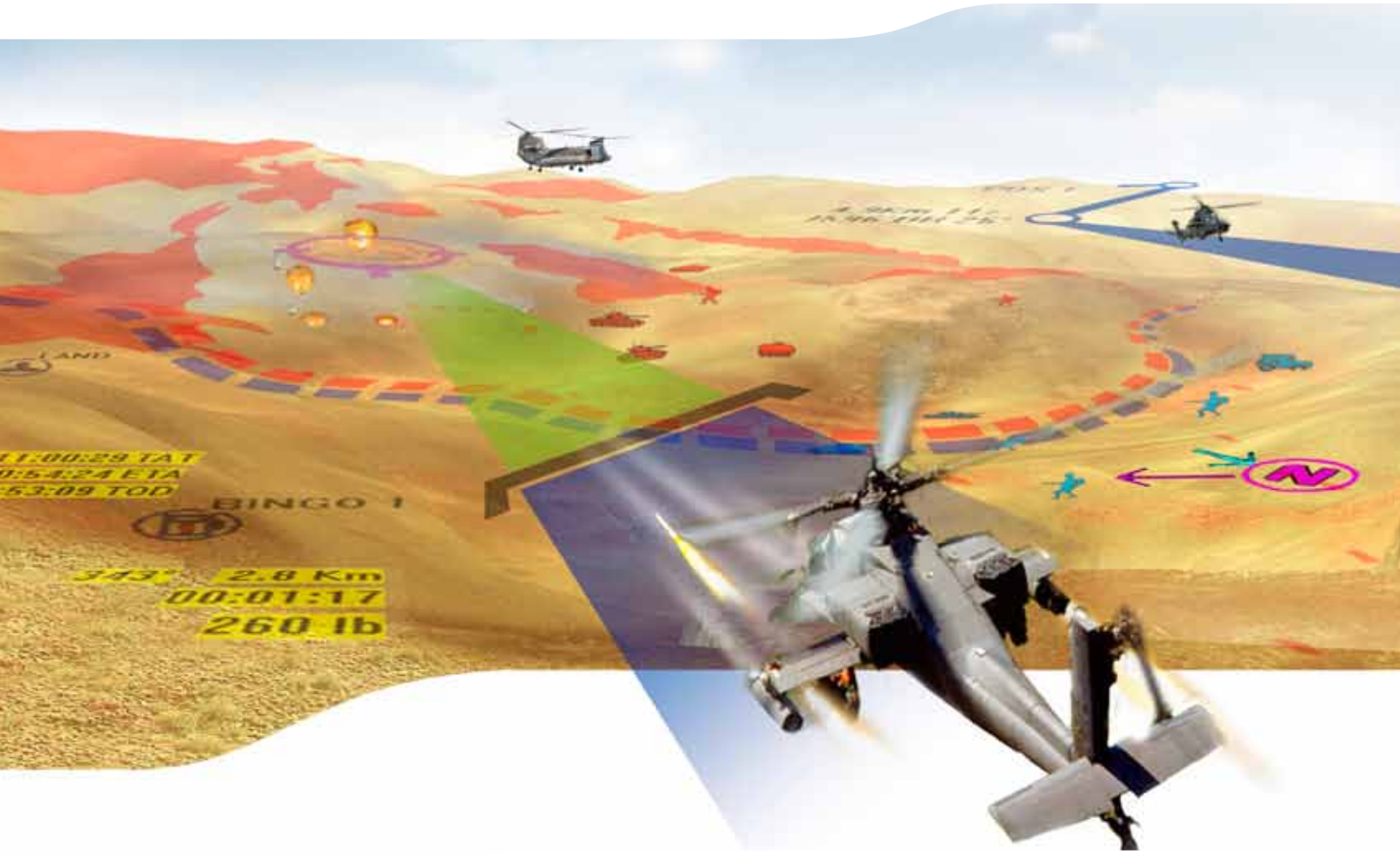
HeliC^{3}om™

Battle Management System (BMS) for Helicopters



Elbit Systems
Aerospace

Intelligent C⁴I & Mission Management for Helicopters

Elbit Systems' HeliC³om™ is a fully digital, integrated Command, Control, Communications and Mission Management System that provides helicopter pilots and crew with data communications and transmissions; accurate, real time tactical pictures, enhanced situational awareness and optimal mission management in a friendlier and more accessible interface than ever before.

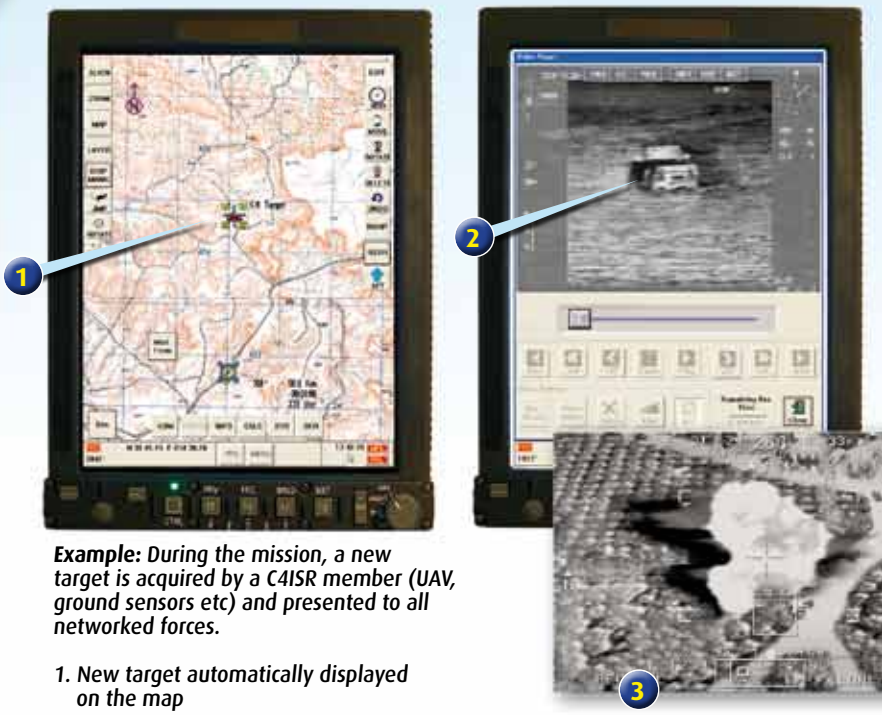
Mission planning

Plan the mission on the HeliC⁴om's Mission Planning Station and load all necessary data aboard the aircraft using a portable flash cartridge.
Missions can also be planned using the onboard system, or in the field with the portable Mission Planning Station.

Preflight planning and training
- Plan and edit route waypoints and targets
- Create a digital checklist
- Insert vector layers and mission aids
- Rehearse and simulate the mission

Manage the mission dynamically

Adjust to constantly changing information in flight
- Advanced Graphical User Interface (GUI) for inflight mission editing
- System control options include:
  - Touchscreen
  - Additional pointing device on the display
  - Hands-On collective and stick operation
  - Next generation automatic mission and route planning



Example: *During the mission, a new target is acquired by a C4ISR member (UAV, ground sensors etc) and presented to all networked forces.*

1. *New target automatically displayed on the map*
2. *Video image broadcast to the cockpit*
3. *EO payload automatically slaved to the target*

Installed in a variety of platforms, HeliC³om™ is combat proven and developed by active pilots whose first-hand combat experience is incorporated into all facets of the system.

Maintain situational awareness at all times

Always have access to vital information:

- Mission Calculations – time, fuel, bingo, distance, bearing, Line Of Sight
- Performance Calculations – height, temperature, available power alerts, warnings, messages
- Vocal and Visual alerts - obstacles, threats, no flight zones, bingo etc
- Masking capability
- 3D and vector maps for optimal data presentation

Route to original target can be recalculated automatically to avoid newly detected threats or adapt to ongoing developments

Advanced 3D maps

Share data in a tactical network

Keep all forces updated with the evolving mission in real-time with inputs from networked C⁴I sources:

- Receive and transmit video and data to/from all forces
- Update ground troops positions, air and naval assets, and vital operational data
- Integrate various radios over a wide band of frequencies and com methods: RF SATCOM, WiFi, Cellular

Debrief the mission from every point of view

- During flight: recording and playback of video and data, pilot/maintenance faults list
- On the Ground: a single station for planning & debriefing displays 4 synchronized video sources simultaneously

HeliC³om™

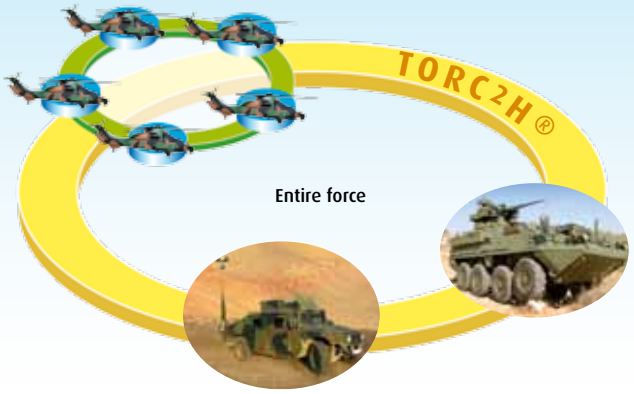
Battle Management System (BMS) for Helicopters

Helic³om™ Network Interoperability

HeliC³om™ is a modular system designed to grow as needs evolve, from a single helicopter, to an operational group network, to an entire army.

Force Wide Network - BMS Node
Connect all air and Ground forces for a complete C⁴I solution

Helicopter Network
Share Common Operational Picture (COP) among fleet group members



Multi Functional Touch Display (MFTD)

- 6"x6" LCD Touch screen XGA
- Day/Night NVG Capability
- Wide viewing angle (±85°)
- Direct sun readable
- Supports digital and analog video interfaces
- Bezel programmable switches and touch screen data entry/system control
- Backup mouse-like pointing device; hard keys
- Dimensions:
  - Height: 192 mm
  - Width: 198 mm
  - Depth: 240 mm
  - Weight: 2.8 Kg

Dual processing Environments:
Mission Processor (MPC)
- 1.4 GHz Core2Duo
- 3D Graphic Display Accelerator
- Solid state disk

Real Time Processor
- PowerPC based processor
- OpenGL Graphics Accelerator

- Extreme conditions survivability (-40°C to +71°C in 20,000ft)
- Multiple I/O capabilities for digital, discrete, analog and video interfaces:
  - Ethernet, MIL-STD-1553 and RS232/422 serial
  - data channels
  - Input and output discrete signals
  - Analog video input
  - Digital and analog video output

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