

Total modularity: From a single aircraft to an entire force

Helic³om™ is a modular system designed to grow as needs evolve, from a single helicopter, to an operational group network, to an entire army.

Single Aircraft:

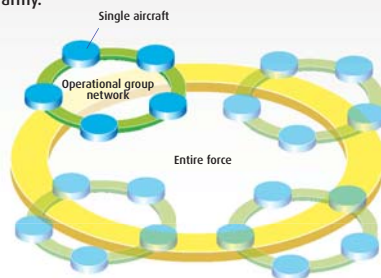
Mission PC, Digital data & Video Recorder, 1-2 Multi-Functional Touch Displays (optional use of existing Multi-Functional Displays).

Operational Group Network:

Share data over operational group network, connecting several aircraft and formations.

Force-wide:

Connect all Air, Ground and Naval assets for a complete C⁴I solution.



Helic³om™ Advanced C⁴I & Mission Management System



Technical Specifications

Multi-Functional Touch Display (MFTD)

- 6" x 8" LCD Touch screen SVGA
- Day/Night NVG capability in accordance with MIL-A85762-A
- Wide viewing angle (±85°)
- Direct sun readable
- Supports digital and Analogue video interfaces
- Touch screen for data entry and system control
- Backup mouse-like pointing device & hard-keys
- Dimensions: Height: 257mm; Width: 190mm; Depth: 48mm
- Weight: 2.8kg



Mission Processing Computer (MPC)

- 1.4 GHz Pentium M Processor with 1 GB 333MHz DDR RAM and low power consumption
- 30 minutes backup battery
- 3D Graphic Display Accelerator
- Removable solid state disk
- 2 modems capable of handling up to 4 separate networks and a wide variety of frequencies and methods - VHF/UHF, KU, L-Band, Cellular, IRIDIUM and various other COM setups which work over IP
- Extreme conditions survivability (-40°C to +71°C in 20,000ft), in accordance with MIL-STD-810C & 461C
- Multiple I/O capabilities for digital, discrete, Analogue and video interfaces: Ethernet, MIL-STD-1553 and RS232/422 serial data channels
- Input and output discrete signals
- Analogue video input
- Digital and analogue video output
- Dimensions: Height: 252mm, Width: 170mm, Depth: 345mm
- Weight: 12.8kg



Digital Video and data Recorder (DVR)

- Simultaneous recording of 4 video, 2 audio and data channels on a single cartridge
- Ethernet and MIL-STD-1553
- Up to 16 hours of video and audio recording
- In-flight control capabilities - Record, Play, Pause, Fast Forward/Rewind
- Additional COTS Compact Flash Cartridge (with USB II interface) for mission data loading to the avionics suite and/or flight data retrieval for maintenance tracing
- Internal accurate real-time clock for multi-channel/ multi-aircraft synchronised debriefing capabilities
- Installation - Hook mount or DZUZ mount
- Dimensions - Depth: 220.4mm, Width: 148mm, Height: 120mm
- Weight - 3.4kg - Including the storage cartridge





ELEVATES MISSION MANAGEMENT TO NEW LEVELS

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.

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 HeliC3om™'s Mission Planning Station and load all necessary data aboard the aircraft using a portable large size flash cartridge. Missions can also be planned using the on-board 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

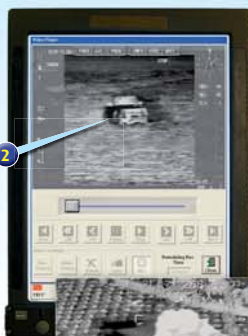
Adjust to constantly changing information in-flight with the advanced Graphical User Interface (GUI) for in-flight mission editing during flight.

System control options include:

- Touch screen
- 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 C³ISR member (UAV, ground sensors etc.) and presented to all networked forces. The new target is automatically displayed on the map (1), video image is broadcast to the cockpit (2), clicking on the target slaves the EO Payload automatically for fast interception (3)



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



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**



Advanced 3D maps

Share data in a tactical network

Keep all forces updated with the evolving mission in real-time with inputs from networked C³I 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

Debriefing

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 synchronised video sources simultaneously

