Black Hawk Common Avionics Architecture System

Improved safety and mission effectiveness with an affordable avionics upgrade program.

Proactively addressing cockpit avionics obsolescence now ensures your aircraft are fully mission ready when called. Cost-effective modernization starts with a proven solution. That’s why helicopter fleets around the world are selecting Rockwell Collins’ Common Avionics Architecture System (CAAS).
Improved safety and mission effectiveness require an affordable avionics upgrade program.

Multiple benefits. One proven provider.

The capabilities that have made Rockwell Collins a preferred helicopter avionics provider are the same ones that will most benefit your avionics upgrade program.

When it comes to integrating Rockwell Collins products and systems on your platform, we’re second to none. Our experience in providing CAAS for some of the most demanding helicopter missions in the world is what uniquely enables us to ensure the low-risk solution you need. Experience makes the difference.

Low risk also means cost effective. We strategically select off-the-shelf products for our CAAS offering to minimize – or even eliminate – development costs.

We know that for you, cost effectiveness can’t come at the expense of mission effectiveness. Rest assured that the modern cockpit displays and capabilities of your CAAS upgrade will improve every mission, anywhere you fly.

Key features

› Improved situational awareness and multimission operability
› Precision navigation for safety and tactical operations in degraded weather
› Digital moving map
› Search-and-rescue patterns
› Advanced navigation sensors
› 10 times greater reliability on the primary flight displays
› Reducing logistics costs with 40 percent fewer LRUs
Creating a more capable Black Hawk.

To safely meet the growing list of mission requirements for today’s Black Hawk, flight crews need more information than has ever been available to them before. And they need it delivered by equipment that is reliable, no matter what the operating environment.

The Rockwell Collins CAAS upgrade is designed to meet these requirements. Based on combat proven, MIL-qualified hardware and advanced software and display symbology, the system provides increased situational awareness for every mission type.

Advanced capabilities. Intuitive operation.

- Advanced flight management system
- Flight situational awareness
- Integrated navigation management
- Integrated communication management
- Avionics systems status management
- Integrated mission sensor management
- Tactical situational awareness

Integrated mission management.

- Digital map system
- Search-and-rescue patterns
- Avionics systems status management
- Integrated mission sensor management
- Tactical symbology overlays

Ensure your Black Hawk’s flexibility with mission-specific systems options.

- DF-500 search-and-rescue direction-finding system with full COSPAS and SARSAT beacon interoperability
- RSC-125G combat search-and-rescue direction finder and personnel locator system
- AN/ARN-153(V) digital TACAN navigation
- Integrated electro-optical and FLIR sensors
- TTR-4100 traffic alert collision avoidance system (TCAS II)
- RTA-4100 MultiScan™ weather radar
- HeliSure™ flight situational awareness solutions featuring Helicopter Synthetic Vision System (H-SVS) and Helicopter Terrain Awareness and Warning System (H-TAWS)

Component highlights of the H-60 and S-70 CAAS integrated avionics upgrade package include:

**MFD-268C3A multifunction display**
- Five fully interchangeable, 6-by-8-inch AMLCDs
- 3D graphics-generation capabilities
- Multi-video-channel display capabilities
- High brightness, fully sunlight readable
- Complies with MIL-STD-85762A for full NVIS compatibility
- Lighter weight and higher reliability than mechanical displays

**CDU-7000D control display unit**
- Provides easy, centralized management of displays, radios, navigation and communications
- Fully ruggedized for military rotary-wing applications
- Dual MIL-STD-1553B data bus controllers
- ARINC 739 compatibility

**PSM/VPM-8600 general-purpose processing unit**
- 23-port high-integrity Ethernet data bus switch
- Advanced video processing module for analog and digital video management
- Embedded, high-integrity mission processor with dedicated graphics engine

**DTU-7100 data transfer unit**
- Compact, digital mass-memory storage unit
- Provides access to worldwide navigation databases as well as mission-specific data
- Access and transfer map data files in real time from industry standard compact flash cards

Rockwell Collins’ Black Hawk CAAS upgrade will provide military, government and special-missions operators with the same capabilities and reliability of new aircraft avionics at 10 percent of the cost of a new aircraft.

To further enhance your ongoing operational viability, all of the avionics, support, software upgrades, spare parts and technical documentation will be provided through Rockwell Collins’ global support network.

No matter how you evaluate it, the Rockwell Collins Black Hawk CAAS upgrade update is the highest return, lowest risk option available.

Building trust every day.

Rockwell Collins delivers innovative aviation and high-integrity solutions to commercial and government customers worldwide. Backed by a global network of service and support, we stand committed to putting technology and practical innovation to work for you whenever and wherever you need us. In this way, working together, we build trust. Every day.

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