

AEW & EW Systems

E-2C Hawkeye™ 2000

Battle Management Command and Control



NORTHROP GRUMMAN

Hawkeye 2000 is the latest generation E-2C Hawkeye and incorporates significant enhancements in data management, system throughput, operator interfaces, connectivity, and situational awareness to support the Navy's evolving Theater Air and Missile Defense mission. This Hawkeye capitalizes on the "Group II" baseline fully integrated system, which includes the AN/APS-145 radar system, improved identification friend/foe (IFF) system, the Joint Tactical Information Distribution System (JTIDS), a global positioning system (GPS) and the Carrier Aircraft Inertial Navigational System (CAINS) II navigation system. A glass cockpit upgrade to satisfy Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) requirements incorporates large, active-matrix liquid crystal displays with growth towards a tactical fourth operator (T4O) at the co-pilot position.

At the core of the Hawkeye 2000 system's configuration is the open architecture central mission computer. The computer capitalizes on commercial off-the-shelf (COTS) technology, to provide the memory, processing power, and data throughput to support the Hawkeye mission system's growth. The computer capability is accompanied by COTS technology tactical workstations, commonly referred to as the Advanced Control Indicator Set (ACIS), which provides each operator with greater flexibility in display management and presentation.

Integrated into the Hawkeye 2000 and key to the Theater Air and Missile Defense mission is the Cooperative Engagement Capability (CEC) system. This new system provides a high capacity data exchange of detailed target information to the carrier's command center and surface combatants for enhanced fleet-wide connectivity and situational awareness. The cooperative engagement processor facilitates the network's data exchange with onboard tactical information and enables relay to extend surface long-range connectivity.

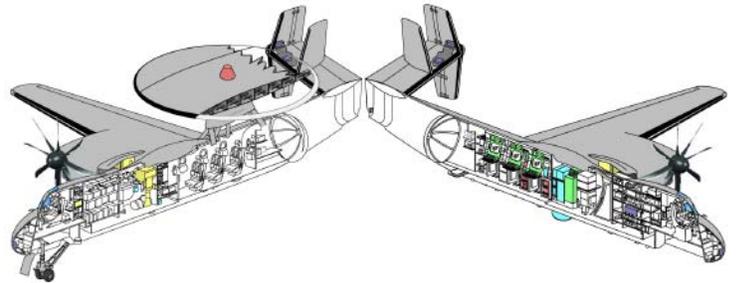
The Hawkeye's vast communications suite has been expanded with a fully integrated satellite communications (SATCOM) capability. Incorporation of a SATCOM radio communications set and the Multimission Advanced Tactical Terminal (MATT) provides the Hawkeye with an expanded over-the-horizon (OTH) wide-band and narrow-band voice and data communications capability for enhanced situational awareness of the Hawkeye's surveillance volume and beyond.

An electronic support measures (ESM) system upgrade provides enhanced electronic emissions detection, identification, and monitoring capabilities utilizing fewer system components that significantly reduces weight and volume.

The growth of the avionics system's cooling requirements has been addressed through incorporation of a

higher capacity cooling system. This system utilizes an environmentally friendly refrigerant.

The aircraft also incorporates several producibility, reliability, and maintainability improvements, including the eight-bladed NP2000 propeller, a modular main power distribution box, a redesigned fault reporting system, and numerous other aircraft improvements.



| Dimensions | |
|-----------------------|---|
| Wingspan | 80 ft 7 in. (24.56 m) |
| Width, wings folded | 29 ft 4 in. (8.94 m) |
| Length overall | 57 ft 8.75 in. (17.60 m) |
| Height overall | 18 ft 3.75 in. (5.58 m) |
| Diameter of rotodome | 24 ft (7.32 m) |
| Weight | |
| Weight empty | 40,484 lb (18,364 kg) |
| Internal fuel | 12,400 lb (5,624 kg) |
| T.O. gross weight | 54,426 lb (24,689 kg) |
| Performance | |
| Max. level speed | 338 kt (626 km/hr) |
| Max. cruise speed | 325 kt (602 km/hr) |
| Cruise speed | 259 kt (480 km/hr) |
| Approach speed | 103 kt (191 km/hr) |
| Service ceiling | 37,000 ft (11,278 m) |
| Min. T.O. distance | 1,850 ft ground roll (564 m) |
| Min. landing distance | 1,440 ft ground roll (439 m) |
| Ferry range | 1,541 nmi (2,854 km) |
| General Data | |
| Crew members | 5 |
| Power plant | Two Rolls Royce T56-A-427 Turboprop engines rated at 5100 eshp each |

Hawkeye Nation

Global presence in support of sovereign power projection for national defense and security

