As the technology in air-based aircraft and weaponry advances, the need to protect against low-altitude air threats becomes more urgent. The Forward Area Air Defense (FAAD) Command and Control (C2) system was developed by Northrop Grumman to provide command and control (C2) for the U.S. Army Short Range Air Defense (SHORAD) Systems. FAAD C2 receives air track data from multiple local sensors as well as multiple external track and C2 sources. All track data is correlated, and a single integrated air picture (SIAP) is distributed to all SHORAD weapons, along with engagement orders and weapon control status to provide complete situational awareness (SA). FAAD C2 also provides both its local air picture and the status of SHORAD weapons to higher echelon air defense and maneuver elements.

**A Proven Fielded System**

Originally fielded in 1993, FAAD C2 continues to be actively employed by the U.S. Army as well as several foreign nations. Northrop Grumman’s sensor/weapon independent architecture, coupled by our years of experience developing FAAD C2, facilitates the integration of new local sensors, weapons and external track/C2 sources, per the needs of the customer.

**Expandable**

Not only does FAAD C2 currently interface with many sensors, weapons and external track/C2 sources, it can also be expanded to interface with other new or legacy systems. Depending on customer requirements, Northrop Grumman can either support the system developer in implementing one of FAAD C2’s standard interfaces or can implement the other system’s legacy interface.

**Transportable**

FAAD C2 may be incorporated into a wide variety of platforms from a mobile command center such as the Air Defense Air Management (ADAM) Cell to a transit case for maximum versatility.

**Scalable**

The FAAD C2 scalable network architecture enables the air defense force protection unit to provide support from a standalone battery to an entire battalion, while still providing connectivity to higher echelons.
Sensor Interfaces
- Comprehensive family of warfighter SA and C2 software
- Sentinel (AN/MPQ-64)
- Lightweight Surveillance Tracking and Acquisition Radar (LSTAR)
- Giraffe Agile Multi-beam (GAMB)
- Ku-Band Radio Frequency Sensor (KRFS)
- Highly Adaptable Multi-mission Radar (HAMMR)/Ground Based Fighter Radar (GBFR)
- Expandable to new or legacy sensors

Weapon Interfaces
- Avenger (AN/TWQ-1)
- Chaparral
- Expandable to new or legacy weapon systems

External Track/C2 Interfaces
- MIL-STD-6016 (Link-16)
- MIL-STD-6011 (Link-11B)
- MIL-STD-3011 A/B/C
- Link-16 Multicast
- Cursor on Target (CoT)
- Counter Unmanned Aerial System (UAS)
- Low Level Air Picture Interface (LLAPI)
- Air and Missile Defense Workstation (AMDS)
- Automatic Dependent Surveillance-Broadcast (ADS-B)/Universal Access Transceiver (UAT)/Mode S Squitter
- Air Traffic Navigation, Integration and Coordination System (ATNAVICS)
- Blue Force Tracking
- Expandable to new or legacy Track/C2 sources

Weapon Interfaces
- Joint Tactical Information Distribution System (JTIDS)/Multifunctional Information Distribution System (MIDS)
- PRC-117F/G
- Local area network (LAN) (Fiber, Wireless)
- Rajant
- Internet protocol version 6 (IPv6)
- Secure Terminal Equipment (STE) (asynchronous)
- Serial (asynchronous)
- Global Position System (GPS)/Precision Lightweight GPS Receiver (PLGR)/Defense Advanced GPS Receiver (DAGR)/Polaris
- Network Time Protocol (NTP) Server
- Mode 5/S squitter
- Cooperative Aviation Surveillance Sensor (CASS) receiver

Sensor Management Capabilities
- Sensor registration
  - Align sensor to truth aircraft source
  - Provide bias correction to sensor
- Sensor cueing
- Sensor merging
- High precision J2.0 PPLI
- Sensor exclusion zones
- High precision track message
- Time synchronization

Exportability
All interfaces and capabilities are subject to export compliance regulations and may not be available to all customers.

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