A force for the 21st century.
Unmatched capabilities from a trusted provider
Rockwell Collins is a leader in the design, production, integration and support of communications, avionics, networks and platform electronics solutions for government and commercial customers worldwide. We deliver to our government customers a solution set with capability that is affordable, extensible and quick to market.
The changing nature of war

One dominant force

Wars are being waged on multiple fronts, against an asymmetrical enemy operating globally in a variety of settings, including the littorals. The Navy’s ability to thrive in this new environment is contingent upon a command and control component that delivers on robust, reliable, interoperable communications; timely, accurate, and secure information; and a format that’s logical and understandable. Rockwell Collins delivers critical components that enable Navy transformation.
Enabling transformation through FORCEnet

Navy requirements

As the primary catalyst for Naval Transformation, FORCEnet will integrate warriors, sensors, command and control, platforms, and weapons into a networked, distributed combat force that is effective, efficient, and adaptable in diverse and harsh operating environments. Rockwell Collins is committed to delivering capabilities key to implementing FORCEnet and supporting the warfighter at all levels.
Rockwell Collins’ open architecture, IP-based solution incorporates best practices and key technologies from the telecommunications and computer industries. We isolate civil and military functionality to facilitate upgrades and lower life-cycle costs. Processing resources embedded in an IP-based switched fabric network enable users to add processors for increased capabilities. In integrating commercial and COTS technologies, we ensure data integrity by addressing military performance like information transport (timeliness and guaranteed delivery), information assurance (security/crypto) and environmental packaging (full-spectrum ruggedization).

Capabilities that are extensible, affordable and quick to market

Open systems architecture
A trusted expert providing network centric capability

Dynamic, networked technologies

Rockwell Collins provides the foundation for network centric operations. Our communications and network technologies provide the capabilities necessary to implement FORCEnet across the battlespace, including:

- Robust, reliable and secure communications
- Reliable, accurate and timely information
- Tailorable, user-defined representation
- Technology that ties information to time and space
- Data links and networks that enable persistent ISR and time-critical targeting
- Quick incorporation of new capabilities
- Fully integrated logistic support
Delivering robust, reliable and secure communications

Legacy communications

From String to Light, Rockwell Collins is a leading provider of commercial and military communications products that include:

- **VLF** – Rockwell Collins is providing the VLF system for the Navy’s TACAMO program, and MMRT, a common VLF/LF receive solution for Navy and Air Force land, sea, and airborne communication platforms.

- **UHF/VHF** – With more than 18,000 radios on 140 platforms worldwide, Rockwell Collins’ ARC-210 is the accepted standard for multi-band, multi-mode radios within all branches of the U.S. military.

- **HF** – Rockwell Collins’ SCOPE Command represents a highly automated ground HF communications network and HF Messenger™ software provides a scalable, affordable communication solution that ensures global interoperability and ease of use through wireless data transmission.
Providing tactical data links and network solutions

Empowering the warfighter

Rockwell Collins is a leading provider of tactical data link and network solutions including:

- Link 16 terminals of all classes*
- MIDS, MIDS on Ship and MIDS-J*
- WDL Terminal
  - QNT
- BEAM
- TTNT

* Through DLS – A Rockwell Collins/BAE LLC
Disseminating reliable, accurate and timely information

Dynamic interoperability

In conjunction with DARPA and the U.S. Air Force Research Lab, Rockwell Collins is developing Tactical Targeting Network Technology (TTNT), a high-throughput, low-latency capability that features a sensor to shooter link. TTNT is an IP-based, high-speed, dynamic ad hoc network designed to enable the U.S. military to quickly target moving and time-critical targets – a vital asset for today’s military operations. Advanced airborne military networking took another step closer to becoming reality when the U.S. Air Force successfully demonstrated several applications of TTNT during the Joint Expeditionary Force Experiment (JEFX) held in 2006 at Nellis Air Force Base. As a key piece of JEFX-06 networking infrastructure, TTNT provided the high bandwidth, reliable, ad hoc network required to connect forces at the tactical edge.
At Rockwell Collins, we have developed a track record as a leader in Software Defined Radio (SDR) solutions for all domains. We are a member of the Joint Tactical Radio System (JTRS) Ground Mobile Radio (GMR); Handheld/Manpack/Small Form Fit (HMS); and Multifunctional Information Distribution System-JTRS (MIDS-J) teams and have a prominent role on the Boeing Airborne, Maritime and Fixed Station (AMF) team. In addition, we are developing dedicated SDR products to meet international customers’ requirements that include the Tactical Data Radio System (TDRS) for the Swedish military and the FlexNet family of radios. Rockwell Collins is a principal developer of Software Communications Architecture (SCA) compliant JTRS waveforms and has a demonstrated ability to achieve interoperability with the majority of currently fielded radio systems. Using standard IP-based protocols and appropriate commercial technologies, our SDR solutions provide connectivity to legacy and transformational forces operating within the Global Information Grid.
Rockwell Collins is a premier supplier of high quality cockpit display systems for tactical, rotorwing, tanker, and transport military aircraft. Rockwell Collins’ advanced display capabilities, coupled with our relationship with valued suppliers enables us to provide rugged avionics display solutions for Head Down, Head Up and Helmet Mounted Display requirements.

Our display systems meet the most demanding cockpit and environmental requirements, performing reliably in adverse conditions while displaying vital information to the pilot that can make the difference between mission success and failure.
Displaying information at the tactical edge

Helmet mounted displays

Rockwell Collins supplies a wide range of display systems for U. S. and international military tactical aircraft applications including those requisite to the demanding carrier operations environment. Vision Systems International, LLC (VSI), a joint venture company between Rockwell Collins and Elbit Systems Ltd., is providing helmet mounted display systems for F-15, F-16, F/A-18, and JSF fighters. Rockwell Collins is developing the Eye HUD™ helmet to enhance situational awareness for rotorwing applications.
Tying technology to time and space

GPS leadership

Rockwell Collins remains at the forefront of radio navigation and GPS receiver technology. We deliver nearly 50,000 GPS receivers annually, with offerings that include shipborne GPS, airborne GPS, radio navigation, handheld/surface mobility, precision guided missiles and munitions. Our expertise in GPS extends to Rockwell Collins’ development of networking and waveforms for the Navy version of the Joint Precision Approach and Landing System Program (JPALS). JPALS will allow for precision monitoring and control of air traffic in the proximity of the carrier, shore and austere runways.
Providing technology for preparation of the battlefield

EW-SIGINT solutions

Rockwell Collins EW-SIGINT products and sub-systems form the key elements of intelligence systems used by the U.S. military and Allied governments to provide the warfighter with a fused Electronic Order of Battle (EOB). These commercial off-the-shelf subsystems and products, designed for airborne, shipboard, man packable or mobile applications, encompass Electronic Attack, ELINT, ESM, and COMINT applications. Rockwell Collins EW-SIGINT is committed to providing comprehensive, next-generation hardware, software and system solutions.
Performance based logistics

Solution focused

Rockwell Collins’ Performance Based Logistics and Integrated Logistics Support solutions are focused on:

› Increased
  – System Reliability
  – Asset Availability

› Reduced
  – Total Life Cycle Costs
  – Weapon System Obsolescence
  – Customer Wait Times

Rockwell Collins provides the Navy with Performance Based Logistics for service and logistics management of AN/ARC-210 radios, F/A-18 and F-14 displays. Our extensive experience in implementing performance based solutions for commercial and military aircraft has consistently demonstrated increased mission capability at lower costs.
Sense and respond logistics

Logistics transformation

Sense and Respond logistics ensure mission capability on the dynamic network centric battlefield.

- Effects-based
- Support widely distributed operations
- Sustained high levels of readiness required in tomorrow’s battlespace
- Adaptive to dynamic tactical situations

In support of customer requirements, Rockwell Collins leverages its expertise in networking waveforms, communications systems and information management to support the military’s logistics transformation. Sense and Respond logistics is enabled by Rockwell Collins’ proven network centric technologies, industry leading LEAN execution and integrated supply chain.
Simulation and training capabilities to meet Navy requirements

Training and simulation

Rockwell Collins Simulation & Training Solutions has built a reputation of delivering quality products on time and on budget to our customers. Current Navy programs include:

- E-2C Hawkeye 2000 Weapon System Trainer
- E-2C Simulated Maintenance Trainer
- TH-57 Operational Flight Trainer
- T-34 Service Life Extension Program
- T-45 Operational Flight Trainer
- EA-6B Maintenance Training Unit
- P-3C Operational Flight Trainer
- Submarine Tactical Visual Training System
- MIDS MOS CBT and IETM FMS trainer and training course
- P-3 CNS/ATM
Modeling, Simulation, and Integration Center (MSIC)

Modeling and simulation

- Dedicated M&S and Integration Facility
- M&S of C4ISR systems
- Architectural validation of systems and software
- Demonstration of new technology, protocols, and applications
- Capability for connecting to other labs, within and outside Rockwell Collins
- Equipment-in-the-loop testing and analysis
- System and architectural definitions using DoDAF
Putting it all together . . .

End-to-end solutions

Mission System Integration

Cockpit Integration

- Enhancing mission effectiveness through innovative technology
  - OSA Backbone
  - Multi-level secure workstations
  - Multi-level secure network enabling access to multi-security levels at a single workstation
  - Clear/secure internal and external communications using VoIP

- Seamless integration through:
  - Open architecture and standards
  - Global access to airspace
  - Enhanced situational awareness
  - Satisfaction of interoperability requirements

. . . with cradle to grave support
Rockwell Collins

Your integrator of choice for
Navy aircraft flight deck and
mission avionics
and
Preferred supplier of Network Centric
Information Systems for the
Naval Enterprise.
Building trust every day.

Rockwell Collins delivers smart communication and aviation electronics solutions to 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.

For more information contact:

Rockwell Collins  
400 Collins Road NE  
Cedar Rapids, Iowa 52498  
800.321.2223  
319.295.5100  
Fax: 319.295.4777  
E-mail: collins@rockwellcollins.com  
Web site: www.rockwellcollins.com/gs