

## Innovative Network Solutions

**Booz Allen Hamilton delivers innovative solutions to the battlefield through its partnership with the Defense Information Systems Agency (DISA) Network Operations Warfare Facility (NOWF), a leading-edge defense laboratory that develops and tests emerging technologies for military networks, applications, and satellite communications.**

### Building a Secure Network

As part of the Defense Information Systems Agency, the NOWF requires a deft combination of high-tech expertise and practical military know-how to develop communications technologies that can give a strategic or tactical advantage to US forces. Many cutting-edge communications technologies are commercially built and so must be adapted to military technical standards to ensure security, interoperability, and reliability in austere conditions. Booz Allen-developed systems engineering process for delivering and deploying quick reaction capabilities (QRC) has been essential for getting cutting edge commercial technologies out of the lab and into the battlefield to meet changing Warfighter needs.

### Assuring Satellite Communications

In support of the Global Broadcast Service satellite system for DISA, Booz Allen Hamilton's strategy and technology consultants are helping NOWF identify, prototype, test, and field emerging IT and

satellite technologies for deployed US military forces in Afghanistan, Iraq, and other theaters.

We built a team with the requisite technical expertise in IT and systems engineering, integration, and emerging commercial technologies, including highly-skilled engineers in hybrid communications protocols, for developing end-to-end system designs that leverage wireless, SATCOM, and terrestrial infrastructure. The team also includes military advisors with operational experience who understand the technical challenges and mission requirements for effective military communications. Our work has included integrating commercial off-the-shelf (COTS) equipment to meet near-term requirements and obtaining security accreditation quickly. Our consultants work closely with DISA and teams of warfighters to perform beta testing and shorten the cycle from idea to implementation.

For example, Booz Allen has collaborated with DISA and warfighters to:

- Leverage commercial Digital Video Broadcast Satellite - Second Generation Broadband Services (DVB-S2) technology to demonstrate more than a 40 percent improvement on IP over SATCOM efficiency using high coding and modulation techniques, making it dramatically easier for warfighters to send video and data transmissions using satellite resources.

- Deploy two-way IP satellite communications using DVB Return Channel via Satellite (RCS), a capability that enables re-broadcasting of UAV Full Motion Video and other intelligence, surveillance, and reconnaissance products for ongoing missions in Afghanistan and Iraq.
- Build on this DVB-RCS capability to support the Army's counter-IED task force and its requirements for real-time ISR dissemination.
- Deliver one of the first successful demonstrations of Internet Protocol version 6 (IPv6) over a joint communications platform as part of an effort to improve transmission of GBS applications over the Department of Defense's GIG infrastructure.
- Integrate enterprise applications with SATCOM systems to enable the seamless, end-to-end transfer of valuable military information to the tactical warfighter.
- Perform next generation wireless technology assessments looking at commercial solutions such as WiMax (802.16e) to meet tactical last mile dissemination needs.

### Helping DISA and Warfighters be Ready for What's Next

Since 1999, Booz Allen has helped DISA accelerate the delivery of sophisticated commercial technologies and enhanced satellite services to

the battlefield, often within just three to 12 months from concept to deployment. Our consultants collaborate daily with DISA and its warfighter clients—listening to their challenges, envisioning solutions together, and getting feedback on results. The breakthrough communications solutions we provide in logistics, telemedicine, ISR solutions, high-speed data transmission, and other areas are essential to the military's vision of network-centric warfare. Today, the Department of Defense is taking many of these battle-ready solutions to other programs and offices throughout the military.

### Ready to Help You

Our work developing and fielding emerging technologies through DISA's Network Operations Warfare Facility is just one example of how Booz Allen Hamilton's strategy and technology consultants can help military leaders adapt and respond instantly to new threats. Our consulting teams draw from the firm's wide range of technical capabilities in engineering and information technology as well as our depth in complex program management, organization and change, operations, and logistics. With our battlefield-to-boardroom experience, guided by an independent perspective and collaborative approach, Booz Allen delivers customized solutions that address each client's unique challenges. To learn more about our support to DISA and how we can help your team be ready for what's next, visit [boozallen.com](http://boozallen.com).

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