Streamlining the Deployment of SIPRNET and JWIC Networks in BRAC Design-Build Construction Projects

The 2005 round of the Base Realignment and Closure Commission (BRAC) called for the re-positioning of tens of thousands of troops and provided billions in funding for the construction and modernization of U.S. military facilities through 2014. In order to deal with the unprecedented activity in military construction, many government agencies began to leverage a design-build process to dramatically streamline the design and acquisition process.

Many BRAC projects require more secure network cable pathways than originally designed. The challenge is how to ensure accreditation of the classified network(s)

While this process was extremely effective from an acquisition perspective, it unfortunately was difficult for military units to keep pace with changes in technology and operational requirements.

One growing requirement for BRAC facilities is to provide personnel access to unencrypted Secret and Top Secret networks (i.e. SIPRNET, JWICS, etc). With this requirement comes the increased challenge of protecting the network cabling infrastructure to meet security requirements. The traditional approach is to install a hardened protected distribution system (PDS) constructed of rigid metallic conduit. These systems are placed in a visible location typically on the outside surface of walls so they can be inspected each day; inspections are the sole method for ensuring the security of a hardened PDS.

However, with the increased requirement for access to secure networks – especially TOP Secret networks – many of the current designs for the BRAC and MILCON projects simply do not accommodate such an extensive secure network deployment or higher classification. BRAC projects often have the Secret and Top Secret cable pathways completely concealed either above the ceiling or below the raised floor – making these conduits not visible or accessible for inspection. Therefore, they do not support the inspection requirements for a hardened carrier PDS system and cannot be certified and accredited as currently designed in order to receive authority to operate the network.

In order to modify the BRAC project designs to meet NSTISSI 7003 requirements, *all* of the conduits would have to be re-designed and relocated to be installed along the walls either below the ceiling or above the raised floor. Unfortunately, due to the criticality of finishing BRAC projects on time and on budget, general contractors cannot afford to delay the project for weeks or months, and military units cannot afford the hundreds of thousands of dollars that an extensive change order would cost to re-design the secure network cable pathways to meet NSTISSI 7003 requirements and be certified and accredited for Secret or Top Secret traffic.

Interceptor is the answer

With the approval of the Interceptor alarmed carrier PDS system for both Secret and Top Secret networks in CONUS and OCONUS, there is now a significantly easier way to provide for the increased coverage of SIPRNET and JWICS in a new BRAC facility using the **as-designed** cable pathways above the ceiling or below the floor – eliminating potential construction schedule delays and increased costs.

The Interceptor can be installed *after* construction is completed to protect the fiber optic cables that reside inside the EMT or rigid conduit. It provides complete protection for the SIPRNET or JWICS network circuit from end to end in accordance with NSTISSI 7003. In fact, one single rack unit Interceptor can completely protect as many as 50 workstation drops for medium- to high-density work centers.

Best of all, by protecting the network cables with Interceptor, all of the EMT and conduit can still be installed above the ceiling or below the raised floor as designed, resulting in improved building aesthetics. Additionally, the government or military personnel are not burdened with conducting daily visual inspections of the PDS system – the Interceptor protects the network 24 hours a day, 7 days a week!

Interceptor + Interlocking Armored Cable

For new military construction projects where the design has not yet been finalized, Interceptor can be used along with an interlocking armored fiber optic cable to completely eliminate *all* requirements for EMT or rigid metallic conduit for SIPRNET or JWICS networks. Supporting the increased focus on LEED and green building criteria, this can save literally miles of steel or aluminum pipes from being installed through the facility. Using armored cables in place of the rigid conduit significantly reduces the installation time and complexity and dramatically streamlines the logistics and pre-planning to procure and stage the required EMT.

By leveraging Interceptor with interlocking armored cable, the cost and complexity of providing SIPRNET and JWICS network connections is a fraction of what it traditionally has been – while at the same time provides exponentially greater security and availability of the network.

Resources:
Learn more about Interceptor and the Interceptor + Interlocking Armored Cable solution.
Visit the Making SIPRNet Easy blog to find out what's new in alarmed carrier PDS technology.
Contact a Network Integrity Systems representative.