



**Project Name and Location:**

Southern Command, Miami, FL

**Client/Owner Contact:**

Critchfield Mechanical, Inc.  
Client Name: Kalam Momin  
Contact phone: 650-333-2581

**Completion Date:**

September 2010

**Final Contract Amount:**

\$12,500,000

**Project Size:**

4,600 tons



**Project Scope:**

The intent of this massive project was to provide a building designed from the ground up to support 24/7/365 operation, to provide an internal data center capable of meeting the base's needs, and to provide the necessary security for Sensitive Compartmentalized Information Facility areas for processing classified information.

Hill York was subcontracted by Critchfield Mechanical Incorporated, out of San Diego, California (CMI). CMI was the engineer of record and prime mechanical contractor, who worked for general contractor Hensel Phelps. The contract on record initiated with the Arm Corps of Engineers. The end user is a joint military task force of the Navy/Marines, Army, and Air Force which is the U.S. Southern Command. The Southern Command oversees all military operations in South America and the Caribbean areas.

Hill York installed a new 4000 ton central chiller plant with chillers, cooling towers with solid separators, and pumps with a primary/secondary chilled water loop configuration, with variable speed secondary chilled water pumps and cooling tower fans for substantial energy savings. We also installed all piping to service three buildings on the base; The Headquarters, Services, and CIOC buildings. This includes underground piping, and piping under a raised floor for an approximately 1000 ton data center. We had to accommodate SCIF areas by installing dielectric barriers to ensure no electromagnetic radiation from the space was transmitted by the metallic pipes.

At project completion we performed a full system commissioning to verify correct operation of all components, including laser alignment of all pumps.



## Quick Summary:

### Objectives:

Install new CHW system with N+1 redundancy, meet SCIF requirements in top secret areas

### Project Location:

Miami, Florida

### Major Decision Drivers:

Security, Reliability

### Building Type/Size:

Military

### HVAC Equipment:

Chillers, Cooling Towers, Solid Separators, Pumps

### Total Cooling:

4000 tons

### Design Considerations:

Classified facility with EMR transmission requirements, 24/7/365 Operation, N+1 Redundancy

### Unique Features:

1000 ton data center, high security, full system commissioning w/independent CXin agent

### Installation Date:

2009 - 2010

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