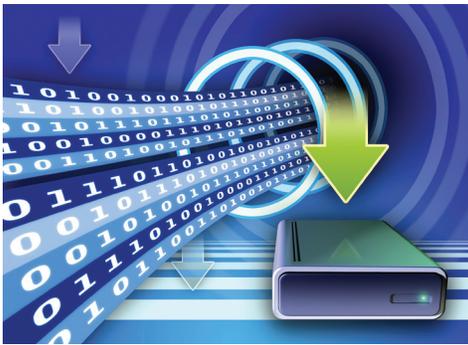


McKenney's has Fort Gillem network communications building under control

The new network communications building at Fort Gillem near Atlanta, Georgia houses complex network servers and conduit racks and is the hub for all communications on the base.



The building contains a network room, office, restroom and underground vault. Space is at a premium. As a result, McKenney's team of automation and controls experts worked closely with the general contractor and the U.S. Army Corps of Engineers (USACE) to establish an optimal environment for peak mechanical equipment performance.

McKenney's devised a strategy, involving several controllers, to regulate temperature, humidity and other environmental set points for the space. Four factory controllers were installed for the individual NRAC units and the team also deployed a programmable, inter-operable MicroNet 800 Series master controller to provide rotation sequencing and to ensure failure/backup operation for the NRACs.

USACE team members were ecstatic when it was revealed that the controller was self-sustaining. It is programmed to automatically activate additional NRAC units as required to accommodate increased capacity and is prepped for integration with future remote access via military communications networks.

Controllers only work if ductwork is configured properly. McKenney's accommodated the many ductwork redesigns by providing and incorporating isolation dampers for installation directly on air units to more effectively control air flow as required. As a result, if additional reconfiguration is necessary, the isolation dampers will minimize its effect on the entire system.

As with any military project, security was a critical element. McKenney's deployed an anti-terrorism switch to isolate the building from outside threats. With the push of a button, intake and exhaust fans stop and the building's environmental controls are handled completely from within the structure.

Thanks to McKenney's innovations and a concerted team effort with the general contractor and USACE team, vital NRAC equipment in the Fort Gillem network communications building now operates at peak energy efficiency.

The content of this document is not intended as an endorsement.

For more information contact McKenney's at 404-622-5000.

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Project Team

- General Contractor: RC Construction Co., Inc.
- Owner: Fort Gillem, U.S. Army Corps of Engineers (USACE)

The Challenge

- Install cooling controls for newly built network communications building
- Configure extensive ductwork in limited space
- Optimize cycle times and sequencing
- Isolate building environment from terrorist threats

The Solution

- Implement controllers for sequencing and operational rotation
- Deploy master controller to streamline communications with four Network Room AC (NRAC) units and prepare for future remote access via military communications networks
- Install isolation dampers to control airflow, minimize reconfigurations

The Results

- Optimal temperature and humidity control for communications equipment
- Scalability to accommodate additional capacity without reprogramming
- Energy savings achieved, on time and on budget