



Digital Power

BY PETER M. CURTIS

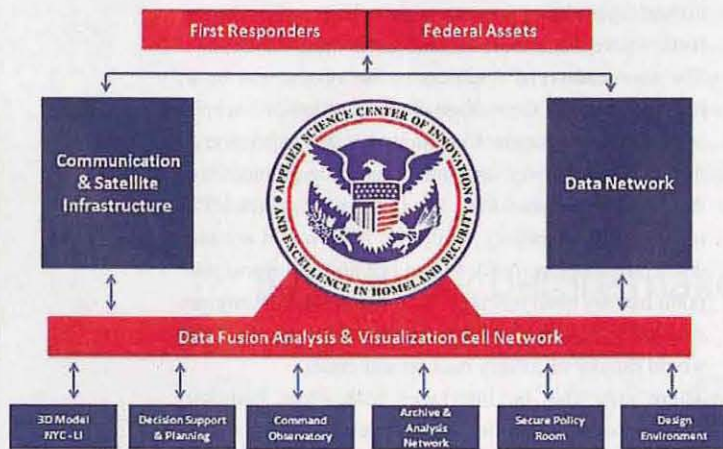
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Keeping the Nation Safe

A visit to the the Applied Science Center of Innovation and Excellence in Homeland Security



Applied Science Center -Data Integration



In the aftermath of the September 11th, 2001 attack on the World Trade Center, New York State, the Department of Homeland Security (DHS), and a group of local defense and technology companies helped design a facility to deal with natural and human-caused disasters that affect the region. The Applied Science Center of Innovation and Excellence in Homeland Security (the Center) in Bethpage, NY, is located on the site where the Lunar Module was built in the late 1960s. The Center is intended to be a research center under normal conditions and an emergency operation center (EOC) during critical events. Using robust technology, it will operate as a communication hub that provides a common operating picture (COP) for government assets when called upon.

The Center was envisioned and passionately spearheaded by the late C. Kenneth Morrelly, president of the Long Island Forum for Technology (LIFT), and it was made possible because of the support of New York State Senator Dean Skelos and a \$25 million grant. Construction of the Center will be completed late this year.

Functioning as an applied science and a regional emergency operation hub, the Center will conduct operation analysis of EOC activities whether they are planned drills or actual emergency responses. The Center's duality could help it become a unique national or even global model that addresses the geographic concerns of particular regional challenges. A typical workday will see applied research underway along with various homeland security projects.

For example, deploying an interactive COP in the Center improves the capabilities of first responders to manage an incident in an effective manner by sharing actionable information between local, state, and federal responders for enhanced situational awareness. Extending this capability beyond the Center through a mobile technology package will provide local incident commands the ability to deploy COP for field use by the individual first responder, providing direct access to a common view of an unfolding emergency event.

An operational test bed at the Center for integrating, testing, and productizing new sensor technologies from National Labs, DHS-sponsored research, and commercial initiatives, will add improvements to the COP such as communication path optimization, data fusion, and cyber layers. The ability

to correlate disparate datasets and legacy systems will provide additional data to a regional COP for emergency-response situations, including imagery warehouses, deployed surveillance and tracking systems, access to city-wide street and parcel databases, and facility building systems, thus adding another level of intelligence to an incident response.

While Long Island and the entire eastern seaboard and Gulf Coast states must contend with hurricanes, the West Coast deals with earthquakes and wildfires, the midwest sees tornados, and New England has the potential to see crippling ice storms. Long Island is also in very close proximity to New York City, where anything is possible. A policy room within the building enables political and other high-level officials to discuss courses of actions during critical events.

The Center's anchor tenant will be Northrop Grumman, and the facility will also house local resident research partners that include Siemens Enterprise Communications, Globecom Systems, AFCO Systems, Applied Visions, Retlif Testing Laboratories, Balfour Technologies, Strategic Planning, Cameron Engineering, and my company Power Management Concepts. There is also continued dialogue with other major government organizations that expect to sign on early in 2010. The Center will also collaborate with university research partners including Polytechnic Institute of NYU, NYIT, Farmingdale College, Hofstra University, CUNY, St. John's University, Dowling College, Stony Brook University, Adelphi University, and Long Island University. The presence of a constant revenue stream from the research partner tenants provides the Center with a self-sustaining and sound year-round business model.

As a dual-purposed facility, the Center can be reconfigured to accommodate emerging new technologies, and is capable of becoming a major fully operational EOC equipped to handle regional training exercises and emergency events and incidents. With the quickness and precision of a static transfer switch, the Center will transform from research to emergency operations armed with technology solutions that expedite response using its unique COP.

The vision and passion of the late C. Kenneth Morrelly and the LIFT organization will create new technology jobs helping develop-

leading edge Homeland Security solutions, while fostering a unique model of innovation that integrates both resident and university research partners. ■

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