

# Inauguration Support to the U.S. Secret Service

BY CHRIS VAUGHAN

The 56th presidential inauguration again proved that NGA remains at the forefront of cutting-edge geographic information system technologies. For this special event, the NGA team supporting the U.S. Secret Service delivered a total package consisting of high-resolution commercial satellite imagery, airborne imagery and immersive imagery (hand-held or ground view photography) of event venues to the agency's mission partners, rendering a 360-degree view of their operational environment.

## Immersive Imagery

A key benefit of immersive imagery is the ability to accurately depict an area of interest with realistic detail. Over the last several years, NGA has streamlined the delivery of massive amounts of data to end users through the use of online services. Immersive imagery, much like commercial satellite imagery, faces the same technical challenges regarding storage, access and dissemination.

For the inauguration, NGA ensured that forward-deployed partners had an online warehouse of immersive imagery available. Pulling from various imagery vendors, partners could choose from a streaming feed of imagery or from selected feeds of digital 360-degree stills to enhance a user's situational awareness. From an operational standpoint, decision makers could easily immerse themselves from a desktop environment into a complex, 3-D world.

## Palmtop Computers

In support of the inauguration, NGA provided homeland security partners with palmtop computers used to watch the event feed from NGA's recently updated Web application Palanterra™, a family of interfaces for consolidating and disseminating geospatial Intelligence (GEOINT) resources. With an approximately seven-inch screen, the palmtops featured an integrated cellular modem, access to an unclassified network for official use, NGA's Google Earth™ system and a Web browser, all running on a standard operating system. The computers ensured that NGA mission partners could take full advantage of GEOINT resources whether in a command center or on the street.

## Service-Oriented Architecture

NGA analysts also made extensive use of the agency's expanding geographic information system services through NGA's service-oriented architecture (SOA), an information technology approach that allows developers as well as users to blend data stores from many providers to create unique looks into the available data. SOA allows NGA to reach out to all mission partners.

Palanterra™ X3, released just prior to the Inauguration, typifies the use of SOA. Palanterra™ developers worked hard to integrate data from many sources into their application and make that data available to end users. In addition, developers added a new feature

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Crowds gather for the 56th presidential inauguration in Washington, D.C., on Jan. 20, 2009.

Satellite image courtesy of GeoEye ©-2009.

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locations throughout the National Capital Region provided onsite GEOINT analysis, maps, data and imagery used for security planning and implementation. Each organization received support tailored to its particular needs, including commercial imagery and infrastructure data and event-specific information.

Active collaboration between NGA and its mission partners in the crisis and consequence management community allows the agency to continue to meet evolving GEOINT requirements. As demonstrated by the

agency's efforts to support the presidential inauguration, NGA's resources and extensive network of embedded personnel are ready for even the most critical missions. P

*Michelle Bonifas is the NGA liaison officer at FEMA.*

## Inauguration Support to the FBI

By Chris Viselli

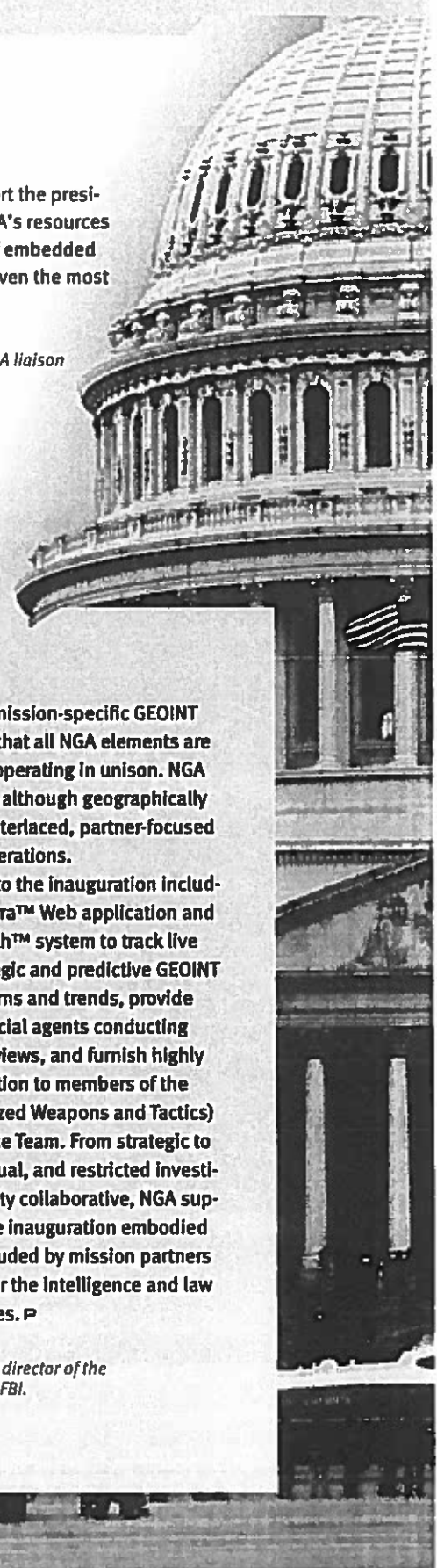
NGA's collaborative support to the FBI during the 56th presidential inauguration marked seven years of deploying to support the bureau and other lead federal agencies during National Special Security Events. The agency has conducted over 50 field deployments in those seven years, reflecting mission partners' increasing reliance on NGA. In true collaborative fashion, NGA analysts were embedded in a number of FBI command centers, including the bureau's Joint Operations Center, Intelligence Operations Center and Tactical Operations Center. Each of these command centers seamlessly ties together and shares crisis management, intelligence and counterterrorism missions with the Secret Service, the Federal Emergency Management Agency (FEMA), and other federal, state and local security partners and first responders.

While providing dedicated geospatial intelligence (GEOINT) to inaugural activities, embedded NGA teams used a wide array of collaborative tools to maintain constant, real-time communication with agency teams located with the Secret Service, FEMA and the Armed Forces Inaugural Committee and at other locations. Using this model, NGA leads

in providing dedicated, mission-specific GEOINT support, while ensuring that all NGA elements are connected virtually and operating in unison. NGA homeland deployments, although geographically dispersed, function as interlaced, partner-focused and well-coordinated operations.

Specific NGA support to the inauguration included use of NGA's Palantir™ Web application and the agency's Google Earth™ system to track live incidents, perform strategic and predictive GEOINT analysis of activity patterns and trends, provide rapid analysis to FBI special agents conducting investigations and interviews, and furnish highly focused tactical information to members of the bureau's SWAT (Specialized Weapons and Tactics) team and Hostage Rescue Team. From strategic to tactical, hardcopy to virtual, and restricted investigative to cross-community collaborative, NGA support to the FBI during the inauguration embodied the best practices applauded by mission partners as a successful model for the intelligence and law enforcement communities. P

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that allows Palanterra™ users to add their own content to customize their GEOINT experience using data that the user maintains. Palanterra™ proved very popular because it requires only a Web browser and Internet access to use. The 400,000 Palanterra™ generated map draws on Jan. 20 alone validated the SOA approach.

Users also enjoyed a 3-D option made possible by pairing NGA's version of Google Earth™ with the agency's

Geospatial Intelligence Advancement Testbed (GIAT), which is charged with innovating new GEOINT solutions. The GIAT team provided this augmented experience by connecting with many of the same sources as the Palanterra™ team. For example, the GIAT team ingested the Palanterra™ team's event feed and added 3-D features, including models of key Washington, D.C., landmarks, to provide enhanced GEOINT for NGA's mission partners using the agency's Google Earth™ system.

Although often behind the scenes, GEOINT resources assisted the agency's numerous partners with carrying out their respective duties with precision. With major responsibilities before and during the inauguration, the NGA team assigned to the Secret Service delivered a substantial portion of GEOINT to ensure a secure transition of power. P

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## Inauguration Support to FEMA

**By Michelle Bonifas**

NGA continued its ongoing collaboration with the Federal Emergency Management Agency (FEMA) during the 56th presidential inauguration. As it does for all National Special Security Events, FEMA coordinated the federal government's preparations for and response to all domestic disasters, natural or man-made, including acts of terrorism.

In the Washington, D.C., metropolitan area, FEMA activated and staged Urban Search and Rescue (US&R) teams comprising state and local first responders. For more than 10 years, NGA has provided crucial tactical geospatial intelligence (GEOINT) in the field to US&R teams during crises, and the inauguration proved no exception. NGA deployed its Domestic Mobile Integrated Geospatial-Intelligence System (DMIGS) to the US&R staging area to be ready to assist first responders, had they been called into action. DMIGS, a mobile, self-contained

command vehicle, enables deployed NGA analysts to work onsite and collaborate remotely on analysis and time-critical products.

The NGA team in the DMIGS provided numerous on-demand GEOINT products to US&R operations, including commercial imagery and gridded search reference graphics. Being fully integrated with FEMA's US&R operations, NGA analysts provided not only requested information but also predictive analysis to aid first responders in mission planning.

NGA continues to work closely with FEMA and US&R teams. As recently as March 2009, the agency deployed to support US&R operations in North Dakota in response to major flooding, demonstrating that the inauguration was another one on a long list of events and crises during which NGA has successfully provided critical GEOINT to the nation's first responders. P

*Michelle Bonifas is the NGA liaison officer at FEMA.*

*The U.S. Capitol hosts preparations for the inauguration of President Obama.*  
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