GEOINT Symposium: All Grown Up

USGIF Leadership Share Thoughts on the 10th GEOINT Symposium

The GEOINT 2013* Symposium is significant for many reasons. Not only does this morning's kickoff signify success for a Community that has persevered through a tumultuous sequestration and federal government shutdown, but it also marks the start of the 10th GEOINT Symposium. USGIF leadership took time out from planning the event to reflect upon the postponement, and more importantly, how the event and overall GEOINT Community have grown during the past decade.

KEITH MASBACK, USGIF CEO

The postponement of GEOINT 2013 in the fall as a result of the federal government shutdown was unprecedented. How do you feel now that the event has finally arrived?

I am incredibly appreciative and thankful for the way our members, exhibitors, sponsors, speakers, and attendees stood by us since the fall. It is hard to express. Their steadfast support is a testament to what we feel is a sacred contract between the Foundation and everyone we work with on GEOINT symposia and other events and programs. It almost feels like the good karma we've created over the years by always making sure to value all of our relations so significantly, has come rushing back to us at a time that was incredibly confusing and demanding. Because of that loyalty and shared sacrifice we've been able to not just postpone the event

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>
> —Keith Masback, USGIF CEO

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GEOINT CERTIFICATION TOWN HALL

The GEOINT Certification Town Hall, held **Tuesday from 2 to 4 p.m.** in meeting rooms 24-25, will provide the audience with background information on what certification is and why it matters. The session will feature program overviews by chief learning officers from OSD and NGA, as well as USGIF's leader for Professional GEOINT Certification. We invite you to engage in lively discussion about this important topic and further develop an understanding of GEOINT Certification.

Presentations will include:
- An overview of Professional Certification by Global Skills X-Change (GSX)
- Reese Madsen, Chief Learning Officer, DoD Intelligence, OUSD
- Timothy Hegarty, Chief Learning Officer and Certification Lead, NGA
- Dr. Darryl Murdock, Vice President, Professional Development, USGIF
- Breakout Session: Development of Ideas About Certification

SHOOTING WITH SOF

Around 50 participants had the opportunity to take aim alongside Special Forces operators at the Shooting with SOF event at Shooter's World in Tampa on Sunday. Developed by a former operator, this event creates a spirit of fellowship in a unique series of shooting events. Sunday's event raised money for SOF Charities such as the Green Beret Foundation and The Navy SEAL Foundation.


PHOTO BY RYAN NEIL

THERE'S AN APP FOR THAT

GEOINT 2013* Information in the Palm of Your Hand
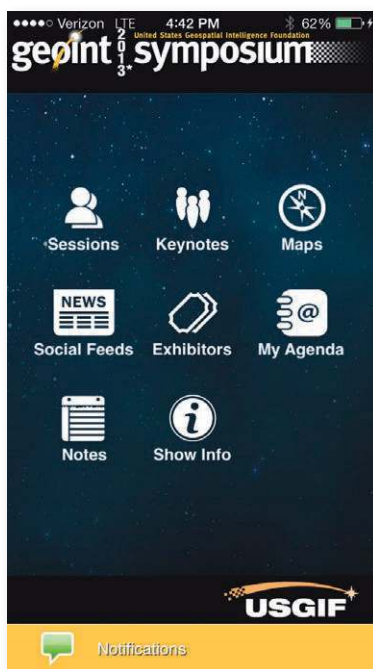
Download the free GEOINT 2013* Symposium app via iTunes, Google Play, and Blackberry World to stay informed throughout the event. Sponsored by L-3 National Security Solutions, the app features a full agenda, a list of exhibitors, information on keynote speakers, venue maps, social media and news feeds, and general information. The app also contains a "My Agenda" feature, allowing you to create a personal schedule by selecting which events you are most interested in attending. The app's notification system will also alert you to any agenda changes or major news updates throughout the week
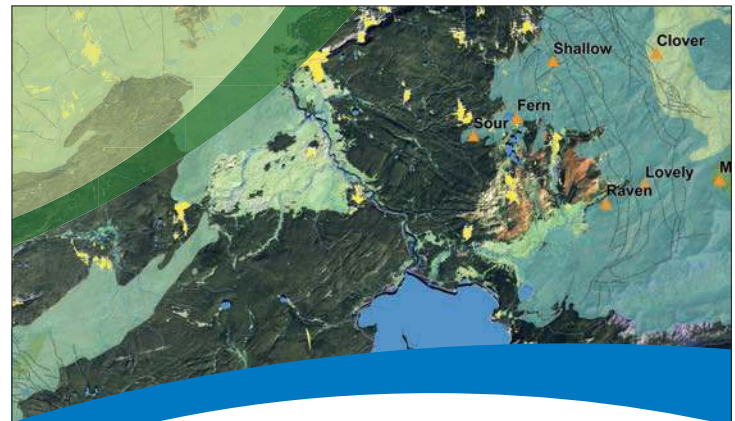
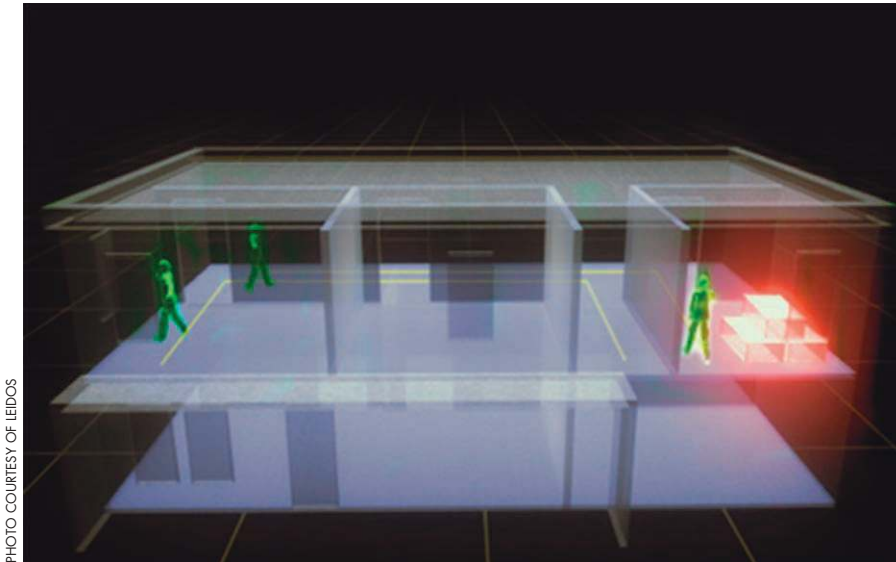## Understanding our world.

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PHOTO COURTESY OF LEIDOS

Leidos to highlight Big Data solutions at GEOINT 2013*

DATA ANALYSIS IN THE PALM OF YOUR HAND

Leidos Highlights Mobile Big Data Solutions and More

At GEOINT 2013*, **Leidos (Booth 4001)** will share how it is working to make Big Data searchable and retrievable from your mobile device.

The company will demonstrate solutions to Big Data challenges that will enable operators to more easily find and act upon information.

"Our markets are increasingly demanding advanced capabilities in turning data around faster and turning it into useful information," said Rob Zitz, Leidos' senior vice president and chief systems architect. "We'll be demonstrating solutions for those challenges at GEOINT 2013*."

These new tools combine both structured and unstructured real-time data from a combination of sources, make sense of it, and then help the user employ key products. This process can also be done on the go via mobile devices, even if they are disconnected from communications networks.

The Leidos Advanced GEOINT Framework rapidly ingests and correlates a wide range of data, and the GR Globe provides plug-and-play utility, allowing users the ability to conduct detailed GEOINT analysis within an intuitive, user-friendly globe environment.

Data solutions include the Automated Image Management and Exploitation System (AIMES), which exploits full-motion video, and ISRCrossCue, which enable users to rapidly discover other subject matter experts and quickly form a community of interest for collaboration purposes.
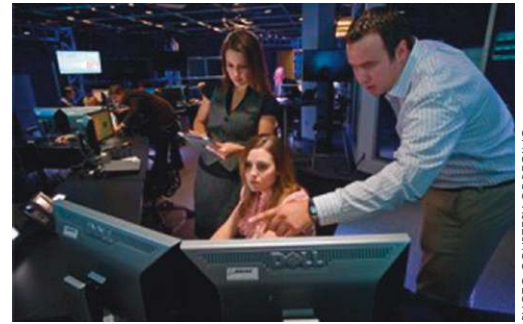

PHOTO COURTESY OF BEOING

TAC, a web-based data-monitoring product will be part of Boeing's GEOINT 2013* exhibit. TAC allows users to discover links between seemingly unrelated items.

Big Solutions for Big Data

Boeing Aims to Improve Geospatial Data Management

Boeing (Booth 5007) is known for building awesome aircraft. However, the GEOINT challenge of the future isn't just engineering new platforms — according to Boeing, the real challenge is quickly, affordably, and effectively managing the geospatial data those platforms collect.

"We believe tomorrow's fight will be in the spectrum, and so Boeing offers customers solutions that collect, manage, and exploit enormous volumes of data from a variety of collection systems," said Dewey Houck, vice president and general manager for Boeing's Electronic and Information Solutions. "By offering a range of geospatial intelligence tools that will make that process faster, better, and more affordable, we hope to create an asymmetric advantage for the GEOINT Community."

During GEOINT 2013*, Boeing will highlight its approach to Big Data by demonstrating key technology upgrades for analyzing, processing, and sharing large, complex datasets, including:

- **Data Master 5.3,** a data management solution that allows text tagging of video streams and files to an information-product library for improved search, retrieval, and distribution of full-motion imagery across multiple security domains.
- **HardwareWall 3,** which enables secure data transfer with reduced setup and maintenance time, as well as a simpler, more powerful software configuration for cross-domain use.
- **TAC+ and Mobile TAC,** upgrades to Boeing's TAC data analysis software, which features a new embedded tool for geospatial analysis and mobile data access.

Additionally, Boeing's booth will feature satellites models from the company's Space & Intelligence Systems business, which Houck said has introduced two evolutionary satellite designs in less than three years, and is the first to market an all-electric satellite.

FLOOR EXHIBIT HALL HIGHLIGHTS

THE RISE OF SMALL BUSINESS
Opportunities for Small Businesses Abound at GEOINT 2013*

An exciting new feature has been added to the GEOINT 2013* exhibit hall—the Small Business Pavilion. This area houses 23 small business exhibits and provides the opportunity for these organizations to network with one another while showcasing their products and services for GEOINT Symposium attendees.

Also be sure to stop by the Government Pavilion Stage in the exhibit hall to hear presentations on small business. Tuesday from 3:15 to 4:15 p.m. will feature "Small Business Opportunities in Defense and Intelligence," with representatives from the small business program offices at various federal agencies, U.S. Special Operations Command, and U.S. Air Force Air Mobility Command.

Wednesday from 3 to 4 p.m. will highlight "Small Business Opportunities in the Tampa Bay Area." This presentation will include small business experts from several local organizations such as the Tampa Bay Defense Alliance, Tampa Bay Technology Forum, the Greater Tampa Chamber of Commerce, Tampa Hillsborough Economic Development Corporation, and the Greater Tampa Bay Chapter of Women in Defense.

Immediately following Wednesday's presentation, USGIF's Small Business Advisory Working Group will host a reception from 4 to 5 p.m. in the Government Pavilion.

Companies exhibiting in the Small Business Pavilion include:

- Airborne Resources Inc.
- Amulet Hotkey
- Compunetix
- Digital Results Group Inc.
- Envitia Inc.
- Ergo
- FluxData Inc.
- GameSim Inc.
- Geodesic Dome Co.
- Hortonworks
- InTec LLC
- MapBox
- MapLarge
- MapR Technologies Inc.
- Meadowgate Technologies
- NT Concepts
- Opus Medicus Inc.
- Pherson Associates LLC
- Primordial
- SitScape Inc.
- SpaceCurve
- Spectrum Systems - Emtec Federal
- Summit Terragraphics Inc.

Government Pavilion Stage to Feature Speakers from NGA, DIA, NSA, USSOCOM, and More

As you tour the GEOINT 2013* exhibit hall, be sure to stop by the Government Pavilion Stage located at **Booth 4105**. Each afternoon, Tuesday through Thursday, government representatives will take the stage to brief on critical topics and discuss what capabilities they seek from industry.

Speakers will include 10 senior leaders from the National Geospatial-Intelligence Agency (NGA), as well as leadership from the National Security Agency, Defense Intelligence Agency, U.S. Geological Survey, U.S. Special Operations Command, and other government organizations. Topics of discussion range from "Revolutionizing the NGA Industry Relationship" to "Focusing the R&D Community on GEOINT of the Future" to "Small Business Opportunities in Defense and Intelligence."

This is a rare opportunity to interact with the personnel implementing Intelligence Community programs, and USGIF encourages all registered attendees to take advantage of this portion of the Symposium agenda.

The Government Pavilion Stage is sponsored by **Accenture (Booth 5086)** and **DigitalGlobe (Booth 5019)**.

DON'T GET STUCK IN THE BELLY OF A LION

Dave Snowden Discusses "Human Sensor Networks" at GEOINT Foreword

The key to applying human geography as a research tool is to gather resources and adapt them to meet change, Dave Snowden told the audience during his GEOINT Foreword keynote on Monday.

"Build a network for ordinary purposes, activate it for extraordinary need," advised Snowden, founder and chief scientific officer of international consultancy Cognitive Edge, which specializes in research for strategy and decision-making by organizations and governments.

The network Snowden refers to is comprised of "human sensors," who input stories shaped by what they see and what affects them every day, even in ordinary daily life.

"Fundamentally we are defined by our stories," Snowden said. Stories tell how people react to "very complex ideas in simple ways … Stories determine the way society sees the world."

Those stories form a narrative, painting a picture of a situation to which an organization can react. They answer the primary question: "How do we make sense of the world so we can act?" he said.

For example, by analyzing the stories in a human sensor network, you can't predict terrorist events, but you can detect when the nature of the landscape is shifting and know you need to put more resources and attention there, Snowden said.

"[We] make that visible to senior decision-makers so they can see what people are doing," he added.

How an organization or government decides to act is a separate issue.

Dave Snowden, Founder and Chief Scientific Officer, Cognitive Edge, gave the opening keynote address on "Human Geography Beyond Big Data."

A narrative built upon citizens' stories painted a picture of unrest in Eqypt six months before the Arab Spring began, according to Snowden.

Through its SenseMaker software and Cynefin framework, Cognitive Edge seeks to move human sensor input from the qualitative to the quantitative by mapping the stories. This visualization moves decision-making options from the possible to the plausible.

But, Snowden warned, while stories may be elicited, they should not be directed: "It's not the stories people tell in response to questionnaires, focus groups, or answers to interview questions. It's the stories they tell in school, at the water cooler, or over beer or coffee after work [that are important]."

He cautioned against systems that don't allow for free-flowing input, and hypotheses that "restrict what you expect to see."

"The power of interpretation goes to the story teller, not to the researcher," Snowden said.

His style is to mix data, fact, and opinion with humor. During his more than 75 minutes at the podium, Snowden drew frequent chuckles from the audience. For example, he illustrated a restrictive system overwhelmed with data by describing a man being attacked by a lion.

"He will automatically scan all available data, capping it off with the flora and fauna of the African veld, and having identified 'lion,' will get information on how to best deal with the situation," Snowden said. "By that time, the only document [of any value] will be an escape manual from the digestive track of a large carnivore. I've yet to see a copy of that, even in a second-hand bookstore."

However, the value of open-source data produced by human geography doesn't always include the reason for the actions. That's part of what separates man from machine.

"Big Data can tell you what is happening, but it can't tell you why," Snowden said. "The reality is that the brain is much more sophisticated than a series of processes."

It's why human geography is best practiced by marshalling resources early enough to offer a glimpse into the future, then further examining and combining resources when it's time to react. ∎

Unlock your geospatial data

Google's enterprise geospatial solutions let all your personnel visualize the critical mission data they need, make better decisions and optimize people and assets using the world's most popular map.

Please visit location #3009 in the GEOINT expo hall this week to see demonstrations of how Google's enterprise products are helping the defense, intelligence and homeland security communities meet their mission goals.

Presentation schedule

Tuesday, April 15	2:00 - 2:15pm	Growth through partnering with Google
	3:00 - 3:15pm	Enabling direct engagement with mobile teams
	4:00 - 4:15pm	New from Google: high-quality, low-cost imagery
Wednesday, April 16	11:30 - noon	Off the grid: maps for disconnected users
	1:00 - 1:15pm	Providing online and offline content with Google Maps Engine
	2:00 - 2:15pm	Geospatial at Google scale
	3:00 - 3:30pm	Google Glass demo
	4:00 - 4:15pm	Customer spotlight: providing rich geospatial visualization for the IC
Thursday, April 17	1:00 - 1:15pm	Real-time resource management for law enforcement
	2:00 - 2:15pm	New from Google: high-quality, low-cost imagery
	3:00 - 3:15pm	Off the grid: maps for disconnected users
	4:00 - 4:15pm	Geospatial at Google scale

WHAT'S THE NEXT BIG THING?

Presenters Discuss Emerging Technologies, at Lightning Speed

R ace cars, coastal changes, and mapping the Arctic waters. These were among the topics covered in a round of lunchtime lightning talks Monday during GEOINT Foreword.

The eight presentations—each lasting only five minutes—were chosen from 50 abstracts submitted to USGIF's Emerging Technologies Subcommittee, which helps identify and track new technologies to address geospatial intelligence needs.

Janae Lee of Quantum gave a presentation titled, "What does a world-class car race have to do with GEOINT?" and compared the data management challenges of collecting race footage (i.e., speed of capture, highest resolution) with gathering geospatial data.

"Race data is Big Data," Lee said. "When you're collecting 1,200 hours of footage from 20 cameras stationed every 450 feet, you've got a lot of data coming at you."

She said broadcasting professional races is like "a Super Bowl every weekend," and talked about the tools and techniques used to keep the

Dr. Sophia Liu, U.S. Geological Survey, discussed "Crowdsourcing Imagery Tagging to Detect Coastal Change After Extreme Storms" during lunch and lightning talks.

sport safe—and entertaining. One way the data is used, for instance, is for analysis of and response to accidents in real time, and for training purposes after the race.

"Events on the speedway have driven a need for best practices," Lee said, noting even the entertainment industry can help support national defense and first responders.

The U.S. Geological Survey's Dr. Sophia Liu talked about Coast—a research project that uses crowdsourcing to help scientists identify coastal changes after major storms such as Hurricane Sandy. Since 1995, USGS has collected more than 140,000 aerial photographs before and after storms, but the data is expensive, and it's not used much, Liu said.

Crowdsourcing imagery annotation, she said, may change this. Using data collected by citizen scientists, especially those with coastal expertise, as well as making better use of the existing photographs, will help USGS more efficiently and effectively improve predictive models of coastal change.

Pete Doucette, from Integrity Applications Inc., and John Lambert of Unmanned Systems Research and Consulting, discussed maritime geospatial intelligence to support safe navigation and commerce in the Arctic.

As the polar ice recedes and opens more navigable water for longer periods of time, there is a new interest in these waters from oil and shipping companies, fisheries, and scientists. Doucette and Lambert said using the Arctic shipping route could save millions of dollars per voyage. But surveying the previously ice-covered areas is critical for safe navigation.

The question is, how can we apply what we already know works on land to these newly accessible waters? As unmanned air, ground, and undersea vehicles become more reliable, they can help collect important data in this harsh environment. In addition, new autonomous systems technologies are available to conduct bathymetric, hydrographic, and ocean environment surveys. ∎

USGIf Releases Human Geography Monograph
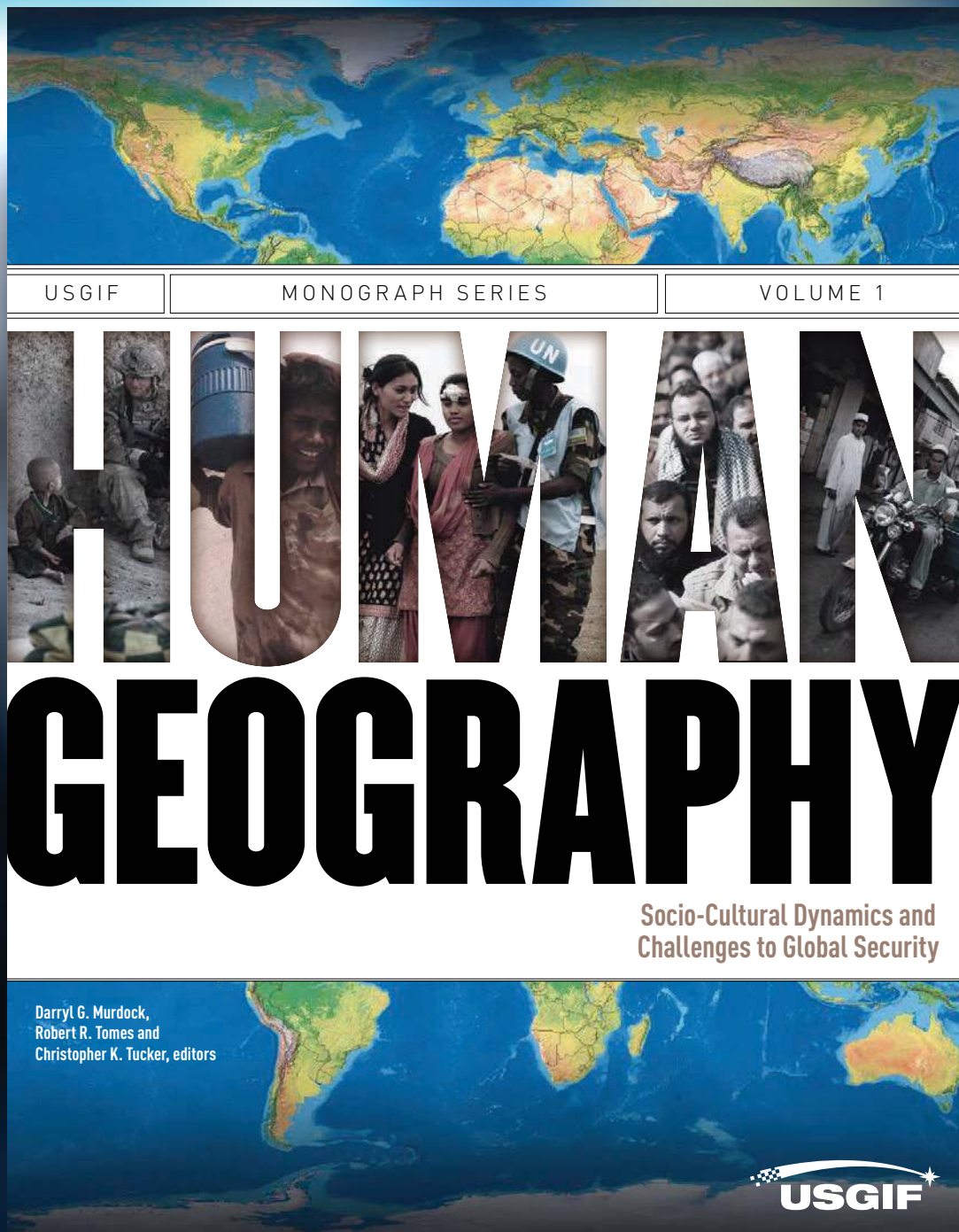
GEOINT SYMPOSIUM: ALL GROWN UP CONTINUED

and redo it in the spring, but actually bring it back even better, stronger, and more valuable, perhaps, than it would've been in the fall.

This year USGIF is calling the event the GEOINT 2013* Symposium (emphasis on the asterisk). Can you explain this decision?
There are a few reasons. First, a Symposium was not held in calendar year 2013, and much of the great programming originally planned for October was retained. Second, it's a tongue-in-cheek way to poke a little fun at an otherwise very challenging time for us all. Third, given that we had already printed a considerable amount of signage before the decision was made to postpone the October event, we didn't want to unnecessarily waste money or resources. So, to all of our GEOINT 2013* attendees: Embrace the asterisk!

You've participated in the GEOINT Symposium over the last 10 years as an attendee, speaker, and now as CEO of USGIF. How have these various points of view helped you shape the event?
When I look back to the beginnings of the event in New Orleans, the goal was to begin a dialogue regarding this new discipline called GEOINT. Today, GEOINT is firmly established with a legacy of critically important contributions to national security, and that's really gratifying. Having been an attendee and a speaker, it informs every decision I make as CEO about the production of the Symposium. I never forget exactly why we're doing this and what I needed to get out of it as an attendee for the time and travel dollars invested.

As GEOINT 2013* kicks off, what are you most looking forward to this year?
I'm excited about the opportunity to finally get together. As I go around the Community, the sentiment people are expressing is there's a pent up demand given the cancellation of many other events. The Community has a need to get together to talk and create trust. People have expressed concern about a breakdown in communication to a certain extent among government, industry, and academia. The Symposium creates a unique opportunity for these discussions to take place. There's never been a more important time to create the venue to have these discussions. Emails and teleconferences are insufficient to create and sustain the professional relationships and the trust necessary to sustain those relationships long term. There's an enduring human need for people to meet face to face.

This year will be the first GEOINT Symposium to include a robust schedule of training and education opportunities. Why is this important?
We're an educational Foundation, and while we have always provided training and education opportunities, it has become a natural fit to embed these offerings into our larger events. Moreover, there was significant feedback from attendees at all levels that there would be more value for them in attending the Symposium if we could create more professional development opportunities.

This is also the first time the Symposium includes a National Security Workshop. Tell us about that decision.
There is absolutely an interest in the Community in making sure that local, state, and federal links are strengthened. Events like the Boston Marathon bombing remind us that seamless, vertical integration among law enforcement and intelligence is increasingly important. And while history shows we can ramp up pretty effectively for national security special events like the Super Bowl or political party conventions, that vertical integration has to be as natural as breathing if we're going to do an effective job at securing the homeland.

How is this year's location in Tampa going to influence the Symposium?
The opportunity to be in Tampa is remarkable because of the proximity to USCENTCOM and USSOCOM, two U.S. combatant commands that have been at war for 13 years. The tremendous span of responsibility those commands have, as well as the professionals who have managed operations for more than a decade, provide an incredible perspective for people in the ISR field. They can help the Community better understand what their needs and requirements are both today and in the future. Additionally, their ability to share lessons learned from years of being operationally engaged is important to make sure we get it right going forward. Operational integration of intelligence is critical.

The GEOINT Symposium is going to be held in D.C. for the first time in 2015. How will that benefit attendees in new ways?
In response to feedback from government and industry alike, the Foundation will bring the Symposium to Washington, D.C., in 2015, and we're really excited about it. We think it's going to in some ways change the nature of the event but we're intrigued by the possibilities of being right in downtown D.C. with proximity to Capitol Hill and other government agencies who have probably not had the same opportunities to get personnel to the event over time. In particular, this venue will allow a broader cross section of government attendees to get to the event because there won't be any travel and lodging costs associated for those in the greater D.C. area.

AIMEE MCGRANAHAN, USGIF COO

How did the postponement of the Symposium affect USGIF operationally?
Operationally, this has been a huge change in cycle for the staff. We were days away from our "Super Bowl," then had to rework and redo projects that staff had already been working on for a year—from contracts to content. It has been an adjustment to plan for the spring timeframe but one the staff has met with talent and grace.

What were some lessons learned for the Foundation as a result of the postponement?
We found out what great partnerships the Foundation really has, because our partners did stand by us. The vast majority of exhibitors and attendees carried over their reservations, and we have since gained many new registrations. For me, one of the most memorable parts of this experience will always be our keynote speakers and other government leadership lending their support even while there was turmoil inside the U.S. government. We were amazed and humbled by the support we received based on the relationships we've built over the years, and we will continue to cherish those moving forward.

As "Employee No. 1" of USGIF, how does it feel to have reached the 10th Symposium?

It feels great. The Symposium never gets old—each one is equally as exciting. Every year leading up to the event I get butterflies about what a great week it's going to be, and I definitely have that feeling now. Each year is an improvement from the year before, and I love the challenge of how can we make next year even better and add that extra-special element to keep improving upon what we've built.

How has the vision for the event changed since you were planning the first GEOINT Symposium?

We've gone from being a main stage, general session-only event to include breakouts, professional development, and many other activities. In 2004, the event was in a hotel. Now, we're in an exhibit hall with nearly 270 vendors. And the exhibit hall has come into its own as well. This year it will feature a Government Pavilion Stage with speakers sharing the work they are doing based on the visions laid out by their leadership who are speaking in the general session. Even with all these extra offerings, we have maintained that quality, core main-stage presence. And as our audience has broadened we've grown with them and brought in new speakers and discussions.

What would you say has contributed most to the GEOINT Symposium's growth and success over the last decade?

It's the relationships, the support, and the respect the GEOINT Community has for our brand and our ability to listen to what the needs are and deliver a quality program.

STU SHEA, USGIF FOUNDER AND CHAIRMAN OF THE BOARD

When you were planning the first GEOINT Symposium, did you imagine it would grow to what it is today?

I'd like to say yes and no. When we set out to create USGIF, and specifically the GEOINT Symposium, we knew we were on to something very special. I look back on those early planning sessions and there was this group of us that were really frustrated with a lack of a GEOINT Community spirit. We wondered if there was a common theme, and in our view it was clear. There were men and women who risked their lives every day to protect our families, our communities, our nation, our values, and our way of life, and the underlying foundation for all of that security was geospatial intelligence. So, GEOINT was where our national security began. We realized whether we're fighting the global war on terror, supporting coalition forces in theater, or reacting to worldwide natural disasters, there was always this growing need for actionable geospatial intelligence. That's the reason we created USGIF, and that's why we started bringing people together at the GEOINT Symposium. The short answer is yes, we knew the Symposium should be important, but I can't say we ever imagined it would have the impact it did on the development of this Community.

What stands out as some aspects of the Symposium that have remained consistent over the last decade?

One of the really important things the Symposium has done is gain respect in the broader GEOINT Community. It's really the only place that you can consistently go to hear from top national security leadership in one place. That has been consistent. We've also become a tremendous technology showcase. I often talk about our humble beginnings in New Orleans, where we had a conference room with some folding chairs and some simple projection screens, and we stuffed all of our exhibits into three small conference rooms at the Sheraton hotel. Today, we have 240 member organizations, even more exhibitors, and a venue that has scaled to 250,000 square feet of exhibit space. We also have unparalleled networking. We have a place where GEOINT can be discussed, and it's not just true for our members, but at each event we have soldiers, sailors, airmen, and Marines from various points around the globe. They can all get together and talk about what's happening in the GEOINT enterprise throughout the world.

And what has changed?

The biggest change has been our ability to respond to the dynamics of the day, rather than the structure and the way we run the Symposium. We are always consistent in the quality, but we change the dialogue by choosing a theme for each Symposium. This year, our theme is "Operationalizing Intelligence for Global Missions." It really takes on a much broader scale, global in nature, mission-focused on national security, defense, homeland security, and handling natural disasters.

How was the GEOINT Community overall evolved since the first Symposium?

The GEOINT industry has seen tremendous growth. University programs are more prevalent, technology has been evolving at a rapid pace, and there isn't a day that goes by without a reference to GEOINT in mainstream media. We're all grown up. That's what really exciting about the GEOINT Symposium. We are a force to be reckoned with. GEOINT is now a legitimate intelligence discipline that underpins much of what happens in the other intelligence disciplines. And the level of respect for GEOINT has really been a catalyst for that growth. ∎

THE GEOINT OF TOMORROW, TODAY

Human Geography Takes Center Stage at GEOINT Foreword

"Lighting the Path to Improved Interoperability" breakout session panelists fielded comments from the crowd. (L to R): Scott Stafford, Senior Consultant, MarkLogic; Sam Torrey, Technology Liaison, Urban Robotics; John Teufert, Geo-Officer, NATO Communications & Information Agency; LTC Chris Quaid, NRO; David Graham, Senior Technical Fellow, CAE.

Geospatial technology is no longer considered the future of intelligence. It's here today. And it's really, really cool.

That was the overwhelming message Monday during the GEOINT 2013* Symposium's pre-conference event, GEOINT Foreword, which included eight afternoon breakout sessions focused on innovation and ingenuity in geospatial technology.

Building upon the day's keynote address—delivered by Dave Snowden, founder and chief scientific officer of international consultancy Cognitive Edge—the breakouts celebrated "exaptive" technologies in geospatial intelligence: game-changing solutions that have evolved not incrementally, but rapidly to help solve new, exciting problem sets.

"There's more creativity and innovation happening today than happened throughout all of human history," said Brent Britton, an adjunct professor at the University of South Florida and chair of the Emerging Business and Technology Law group at the GrayRobinson law firm in Tampa.

Britton opened one of the breakouts, "Defining Human Geography," with an exercise and discussion on creative thinking.

Innovation has been especially fast-paced in the GEOINT Community, driven in large part by developments in human geography, a panel of three GEOINT experts illustrated during Britton's session. Among them was Morgan Flom, senior analyst and product owner with HumanGeo.

"Twitter alone provides 15 billion communication links a day. Combine that with Foursquare and Facebook and Flickr and you've got a lot of data on the ground," Flom said. "But how do we get from that huge amount of data down to who, what, where, when, why?"

The answer was evident throughout the afternoon. Flom, for instance, discussed how his company analyzed geo-tagged social media to cultivate intelligence about the 2013 terrorist attack on Westgate Mall in Nairobi, Kenya.

Concurrently, during "Chaos Management in a Disconnected World," U.S. Military Academy Assistant Professor Lt. Col. Chris Oxendine shared evidence of how social media improves situational awareness during emergencies, when traditional communications infrastructure is down.

Mike Stevens, a research associate at the Naval Postgraduate School's CORE Lab, continued that thread in "Enabling SOF Operators to Influence the Human Domain," taking attendees on a tour of CORE Lab's Lighthouse project, which leverages mobile devices to turn Special Operations Forces into data collectors.

"Illuminating social networks to help navigate the human terrain is our mantra," Stevens said during his session.

Human geography embodies GEOINT's evolution on the ground. But the GEOINT Community likewise is evolving in the air. There, commercial spaceborne imagery is the key to innovation, according to a panel of experts who addressed a packed room during "SmallSat Remote Sensing Innovations."

Consider, for example, weather satellites.

"The U.S. weather infrastructure … is in shambles," remarked Anne Miglarese, president and CEO of PlanetiQ, who emphasized the important role small commercial satellites will play in repairing the gap between spaceborne capabilities and spaceborne realities.

Whether the discussion centered on human geography or small satellites, Big Data or open standards, the message of the day was loud and clear: By understanding not only space—but also the characteristics and behaviors of people within and across it—analysts and warfighters alike can discover relevant relationships that shed new light on mission objectives.

It's powerful, and it's already happening. ∎

ALLDER GOLF CLASSIC BENEFITS USGIF SCHOLARSHIP FUND

Nearly 150 golf enthusiasts participated in the Allder Golf Classic at the TPC Tampa Bay on Monday, raising $25,000 for the USGIF Scholarship Program. Since 2004, USGIF has awarded $691,000 in scholarships to students pursuing the geospatial sciences or a related field.

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General Dynamics Advanced Information Systems demonstrates how we put the power of GEOINT into the hands of the user.

GENERAL DYNAMICS
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TUESDAY TRAINING SNAPSHOT

This year, the GEOINT Symposium offers more than 30 hours of dedicated professional development with certificates of attendance. Trainings are held each afternoon from 2 to 4 p.m. Here is a preview of today's sessions:

A Vision of Virtual and Mobile GEOINT
Room 18
In a world where speed, efficiency, and security are top of mind and GEOINT users want to consume data digitally, we are all looking for better ways to adapt and transform. This session explores virtual and mobile technologies that can enhance how we access and process our data.

Socialytics: Discovering Powerful New Intelligence Insights Through Advanced Open Source Intelligence Operations
Room 19
Billions of pieces of social media data are being created each and every day across the world. This course introduces and certifies users on advanced Open Source Intelligence (OSINT) services, specifically how we collect, monitor, analyze, and share.

Introduction to Hyperspectral Target Detection & Material Identification
Room 20
Learn how to analyze airborne hyperspectral products created as part of a typical Processing, Exploitation, and Dissemination (PED) cell. This course is for current literal image analysts or others with limited hyperspectral data experiences interested in learning more about HSI interpretation.

Commercial SAR Training
Room 21
Learn the basics of Synthetic Aperture Radar (SAR) imaging and see why commercial spaceborne SAR can guarantee collection of open, shareable GEOINT products anywhere in the world.
• Intro to Commercial SAR Space Systems
• Maritime Domain Awareness from Space Based Commercial SAR: Learn how Commercial Synthetic Aperture Radar can help address your Maritime Domain Awareness challenges, including finding non-emitting "dark" targets.
• Emergency Response: Disaster Management
• TerraSAR-X: New Beam Modes

Interpreter Utilization & Cross Cultural Negotiations
Room 22-23
In today's modern battlefield, ability to successfully navigate the cross-cultural communication trap is a giant force multiplier in respect to human terrain. This training module will provide a discussion of the basic processes required to effectively achieve results in cross-cultural negotiations and discussions.

FREE STREETCAR RIDES TO YBOR CITY

Rather than hailing a taxi, try Tampa's streetcar system—the TECO Line Streetcar, which travels to and from downtown, Channelside, and Ybor City. The streetcar is free for anyone wearing a GEOINT 2013* Symposium badge. Additionally, the Tampa Bay Defense Alliance and the Tampa-Hillsborough Economic Development Corporation will sponsor the TECO Line Streetcar for extended evening service until midnight on Tuesday and Wednesday. The streetcar stop is located directly across the street from the Tampa Convention Center, in between the Marriott and Embassy Suites.

Known as Tampa's Latin Quarter for more than a century, Ybor City is an exciting area to visit during your stay. Founded by Vicente Martinez-Ybor as a cigar-manufacturing center, the area is now one of two National Historic Landmark Districts in Florida. Enjoy Spanish, Cuban, Italian, Greek, and French cuisines, as well as eclectic shops, ghost tours, nightlife, and live jazz, blues, salsa, and reggae music in this unique spot.

THE TRAJECTORY MAGAZINE IPAD APP IS NOW AVAILABLE IN NEWSSTAND!

Trajectory is now in Newsstand and offers unique tools such as the ability to save your favorite articles, share stories via social media, and more. If you have already downloaded the *trajectory* app to your iPad and have automatic updates turned on, your app migrated to Newsstand automatically. If you have the iPad app but do not allow automatic updates, manually update the app to begin taking advantage of the new features.

Also, be sure to stop by the **USGIF booth 4045** in the exhibit hall to view the *trajectory* app on a 55-inch Perceptive Pixel by Microsoft Touch Device provided by **TouchShare**.

The free *trajectory* magazine tablet app is available for download via the Apple and Android marketplaces.

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What if your command staff could discover exactly what they need, when they need it?

See how they can in
Exelis booth #3035

TEST YOUR SKILLS IN BOOTH #3035

Carry out a mission, win a prize, and help support service members, veterans, and their families!

Jagwire™

See the Jagwire GEOINT content management system along with ENVI image analytics in Exelis **booth #3035. Come by and play** interactive touch screen games to see how Exelis enables your entire mission – from command to the tip of spear – with timely, accurate, actionable intelligence. The games are fun! And, we'll donate $5 to our volunteer service program, Exelis Action Corps, for every game you play in our booth.

0800-0815
PRESENTATION AND POSTING OF COLORS: JOINT SERVICE COLOR GUARD OF THE UNITED STATES SPECIAL OPERATIONS COMMAND (USSOCOM)
Tampa Convention Center Ballroom A-C

0815-0845
WELCOME: K. STUART SHEA, CHAIRMAN OF THE BOARD, UNITED STATES GEOSPATIAL INTELLIGENCE FOUNDATION (USGIF)
Tampa Convention Center Ballroom A-C

0845-0900
MASTER OF CEREMONIES: THE HONORABLE JOAN A. DEMPSEY, EXECUTIVE VICE PRESIDENT, BOOZ ALLEN HAMILTON
Tampa Convention Center Ballroom A-C

0900-0945
KEYNOTE: THE HONORABLE JAMES R. CLAPPER, DIRECTOR OF NATIONAL INTELLIGENCE (DNI)
Tampa Convention Center Ballroom A-C

0945-1030
KEYNOTE: LETITIA A. LONG, DIRECTOR, NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY (NGA)
Tampa Convention Center Ballroom A-C

1030-1100
NETWORKING BREAK
Tampa Convention Center Ballroom Foyer

1100-1145
JOINT KEYNOTE: ROBERT SCOBLE, CO-AUTHOR OF "AGE OF CONTEXT;" AND STARTUP LIAISON FOR RACKSPACE & SHEL ISRAEL, CO-AUTHOR OF "AGE OF CONTEXT;" AND CEO OF SI ASSOCIATES
Tampa Convention Center Ballroom A-C

1145-1230
KEYNOTE: LTG MICHAEL T. FLYNN, U.S. ARMY, DIRECTOR, DEFENSE INTELLIGENCE AGENCY (DIA)
Tampa Convention Center Ballroom A-C

1230-1400
LUNCH & NETWORKING BREAK
Exhibitor lunch in East Hall & Attendee lunch in Ballroom Foyer

1330-1700
NATIONAL SECURITY WORKSHOP
Tampa Marriott Waterside Hotel

- **1330-1340 – Welcome & Introduction:** Maj. Gen. William N. Reddel III, Adjutant General, New Hampshire
- **1340-1410 – Keynote:** "Geospatial Transformation" by Jack Dangermond, President, Esri
- **1410-1440 –"Virtual Port, the Port of Long Beach"** by Eric Apple, Esri; and Carl Walter, Esri

- **1440-1500 –"Securing the Super Bowl"** by Capt. Steve Pollackov, Commanding Officer, GIS Unit, Fire Department City of New York
- **1500-1520 – "City of Tampa & Preparing for the RNC"** by Dr. Robert Austin, Manager, Enterprise Applications Integration, City of Tampa
- **1520-1545 – Networking Break**
- **1545-1610 – "The Exemplar City"** by City of Huntsville Mayor Tommy Battle
- **1610-1630 – Geospatial Policy for Firefighter Safety** by E. Thomas Hicks IV, Chief Programs Officer and Assistant Executive Director, International Association of Fire Chiefs
- **1630-1700 – "DHS, Geo Information Infrastructure & HIFLD"** by David Alexander, Director of the Geospatial Management Office, Department of Homeland Security

1400-1900
EXHIBIT HALL OPEN
(Reception 1700-1900)
Tampa Convention Center East & West Exhibit Halls

1400-1530
Navigating the Global Information Sharing Environment
Tampa Convention Center Ballroom A-C

Moderator: COL Stu Bradin, U.S. Army, Operational Planning Team, U.S. Special Operations Command (USSOCOM)
- RAD Mohamad Abdelaziz, Egyptian Defense Attaché to the United States and to Canada
- Brigadier General Dag Baehr, Commanding General, German Special Forces Command KSK
- Joseph Drummey, Director, International Affairs, Office of International Affairs & Policy, National Geospatial-Intelligence Agency (NGA)
- Rear Admiral Mats Fogelmark, Royal Swedish Navy, Coalition Senior National Representative
- COL Zahid Mahmood, Pakistan Senior Liaison Officer to CENTCOM

1400-1600
Professional Development: Training & Education Sessions
Tampa Convention Center Meeting Rooms 18-23
- Room 18 - A Vision of Virtual and Mobile GEOINT
- Room 19 - Socialytics: Discovering Powerful New Intelligence Insights Through Advanced Open Source Intelligence Operations
- Room 20 - Introduction to Hyperspectral Target Detection & Material Identification
- Room 21 - Intro to Commercial SAR Space Systems; Maritime Domain Awareness from Space Based Commercial SAR; Emergency Response: Disaster Management; and TerraSAR-X: New Beam Modes
- Room 22-23 - Interpreter Utilization & Cross Cultural Negotiations

1400-1630
GEOINT CERTIFICATION TOWN HALL
Tampa Convention Center Meeting Rooms 24-25

1400-1700
GOVERNMENT PAVILION STAGE PRESENTATIONS
Tampa Convention Center Exhibit Hall, Booth 4105

1400-1445 – NGA Strategy and Future Vision
• Ellen McCarthy, Chief Operating Officer, National Geospatial-Intelligence Agency (NGA)
• Geoff Fowler, Director, Xperience Directorate, National Geospatial-Intelligence Agency (NGA)
• Karyn Hayes-Ryan, Director, NSG Program Oversight, IT Services Directorate, National Geospatial-Intelligence Agency (NGA)

1445-1515 – Immersive Intelligence
• Douglas P. McGovern, Director, InnoVision, National Geospatial-Intelligence Agency (NGA)

1515-1615 – Small Business Opportunities in Defense and Intelligence
• Sandra Broadnax, Director, Small Business Program Office, National Geospatial-Intelligence Agency (NGA)
• Nelson Escribano, Small Business Specialist, MacDill AFB, 6th Contracting Squadron, U.S. Air Force
• Christopher Harrington, Director, Office of Small Business Programs, USSOCOM
• D. Scott Jackson, Director, Office of Small Business Programs, National Security Agency (NSA)
• Maria Kersey, Director, Office of Small Business Programs, Defense Intelligence Agency (DIA)

1615-1715 – DIA's IC ITE Migration
• Gus Taveras, Chief Technology Officer, Defense Intelligence Agency (DIA)
• Dan Doney, Chief Innovation Officer, Defense Intelligence Agency (DIA)

1700-1900
EXHIBIT HALL NETWORKING RECEPTION
Tampa Convention Center East & West Exhibit Halls

1900-2100
USGIF CHAIRMAN'S RECEPTION (BY INVITATION ONLY)
Tampa Marriott Waterside Hotel

» WEDNESDAY APRIL 16 AT-A-GLANCE

0800-0830	**USGIF AWARDS PROGRAM PRESENTATIONS** [Tampa Convention Center Ballroom A-C]
0830-0840	**SPECIAL WELCOME: BOB BUCKHORN, MAYOR, CITY OF TAMPA** [Tampa Convention Center Ballroom A-C]
0840-0845	**MASTER OF CEREMONIES: JIM SCIUTTO, CNN** [Tampa Convention Center Ballroom A-C]
0845-0930	**KEYNOTE: GEN LLOYD J. AUSTIN III, U.S. ARMY, COMMANDER, U.S. CENTRAL COMMAND, (CENTCOM)** [Tampa Convention Center Ballroom A-C]
0930-1030	**PANEL: DI2E: A BRIDGE BETWEEN JIE AND IC ITE** [Tampa Convention Center Ballroom A-C]
1100-1800	**EXHIBIT HALL OPEN** [Tampa Convention Center East & West Exhibit Halls]
1100-1145	**KEYNOTE: BETTY J. SAPP, DIRECTOR, NATIONAL RECONNAISSANCE OFFICE (NRO)** [Tampa Convention Center Ballroom A-C]
1145-1230	**KEYNOTE: DR. SUZETTE KIMBALL, ACTING DIRECTOR, U.S. GEOLOGICAL SURVEY (USGS)** [Tampa Convention Center Ballroom A-C]
1230-1400	**WOMEN IN DEFENSE LUNCHEON WITH NGA DIRECTOR LONG (SEPARATE REGISTRATION REQUIRED)** [Tampa Marriott Waterside Grand Ballroom]
1300-1600	**GOVERNMENT PAVILION STAGE PRESENTATIONS** [Tampa Convention Center Exhibit Hall, Booth 4105]
1400-1600	**PRESENTATION: INNOVATING WITH THE DIA** [Tampa Convention Center Ballroom A-C]
1400-1600	**PROFESSIONAL DEVELOPMENT: TRAINING & EDUCATION SESSIONS** [Tampa Convention Center Meeting Rooms 18-23]
1400-1600	**GEOINT CERTIFICATION BLUEPRINT DROP-IN SESSION** [Tampa Convention Center Meeting Rooms 24-25]
1600-1800	**EXHIBIT HALL NETWORKING RECEPTION** [Tampa Convention Center East & West Exhibit Halls]

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TORNADO DAMAGE, MOORE, OKLAHOMA

TUESDAY, APRIL 15

1:00 pm » Predictive analytics for anticipating risk & opportunities: *Human Geography Case Study*

2:00 pm » Analysis of Geospatial Big Data

3:00 pm » GEOINT for timely crisis response

3:45 pm » Geospatial Big Data creates instant insight

WEDNESDAY, APRIL 16

1:00 pm » Real-time access to current, shareable, global high-resolution imagery

2:15 pm » Live Global Enhanced GEOINT Delivery *(USG ONLY)*

3:00 pm » How to use Global Enhanced GEOINT Delivery with US Government mobile apps *(USG ONLY)*

THURSDAY, APRIL 17

1:15 pm » Enabling new insight & information with WorldView-3 & the DigitalGlobe Constellation

2:00 pm » Crisis Monitoring & the power of Crowdsourcing

2:45 pm » Identifying and developing strategic risk factors: *Multi-Dimensional Poverty Index*

VISIT BOOTH
#5019