

## SHOWDAILY

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## Pride and Progress

## DNI James Clapper Celebrates GEOINT, Embraces Transparency

In April 2015, the Office of the Director of National Intelligence (ODNI) celebrated its 10th anniversary. To mark the occasion, President Barack Obama visited ODNI headquarters in McLean, Va., to address the Intelligence Community and thank its members for their contributions to national security. His message, which he repeated several times, was simple yet strong: "You can take pride in your service."

"I'm here today to pass that message on, to reinforce and underline what [the President] said to the Geospatial Intelligence Community," Director of National Intelligence (DNI) James Clapper said Thursday during his GEOINT 2015 keynote address. "You can take pride in your service. GEOINT is a tremendous force for good in our world, with positive impacts felt way beyond the dimensions of the intelligence mission."

The traditional 10th anniversary gift is tin, but in honor of ODNI's decennial, Clapper promised the Intelligence Community and the nation at large a different sort of gift: transparency.

"My dad was in the SIGINT business in World War II and I grew up on intel sites and antenna farms around the world as a consequence ... So for me this kind of transparency that we're now engaged in is genetically antithetical," said Clapper, who noted despite his hard-wired reticence, ODNI has established the IC Transparency Working Group with members from all 17 intelligence agencies.

ODNI has also supported the USA Freedom Act, authorizing increased reporting of IC activities, and has declassified more than 5,000 pages of documents on its Tumblr page, "IC on the Record."

➡ see *Pride and Progress* p.10



DNI James Clapper discussed the growing transparency of the Intelligence Community and shared his pride in the accomplishments of the past decade, including the creation and sustenance of the GEOINT Symposium.

"You can take pride  
in your service."

—DNI James Clapper



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# EPIDEMIOLOGY AND GEOINT

Geospatial Technology Offers Many Potential Uses for Federal Healthcare Workers

**A**s Commander of the Commissioned Corps' Ebola Response in West Africa, Rear Adm.

Scott Giberson used satellite imagery and geospatial information in Liberia to track the spread of the disease, plan transportation routes for health care personnel, and understand weather patterns.

But it wasn't until well after the mission, said Giberson, director of the Division of Corps Personnel and Readiness for the U.S. Department of Health and Human Services (HHS), that he recognized he was using GEOINT.

"I looked up the definition on the web," Giberson told his GEOINT 2015 audience in a discussion titled, "GEOINT and Epidemiology: The Role of Geospatial Intelligence in Health Crisis Analysis and Mission." "And I realized a lot of the decisions I made during the Ebola response were in fact using imagery and the GEOINT we get from our partners."

Giberson, whose team deployed to Liberia in October 2014 as the only U.S. government entity that provided direct patient care, used GEOINT daily to gather and assess data.

Giberson's introduction preceded a panel discussion that began with a question from moderator Melissa Hersh, a fellow with the Truman National Security Project: "What is it, from your perspective, that we need to do in advance before the next incident occurs?"

Karen Walsh, CEO of Blue Glass Development, questioned whether better visualization at the onset of the outbreak could have prompted aid sooner, referring to the six months from the time the World Health Organization reported an outbreak of Ebola in Guinea to when the U.S. government deployed aid.

"Were the maps not good enough?" she asked, referencing the delay. "Was the data not compelling enough?"

Rob Shankman, GIS program manager for HHS, said the department has become "as open source as possible," and more flexible, accessible, and agile. He said they have the ability to track their health care teams every five minutes and monitor data on which teams are still available to deploy. HHS maps can overlay multiple data layers, showing, for example, hospitals and inclement weather.

Justin Poole, director of National Geospatial-Intelligence Agency's Xperience Directorate, said the agency learned that analysts on the ground often just needed to see images, not necessarily download them. It took NGA nearly two weeks to launch its public, unclassified Ebola website, but after the Nepal earthquake this spring, it rolled out a similar page within 24 hours.



Rear Adm. Scott Giberson of the U.S. Department of Health and Human Services gave an introductory keynote Wednesday preceding a breakout discussion on GEOINT and epidemiology.

The panelists discussed the decision points regarding whether to contain an epidemic and when to intervene; how the effort to collect data often gets lost beneath the larger mission; and how the same scenario would have played out in a megacity.

Walsh said it wouldn't be a straightforward task to gather imagery-derived products and infrastructure details for a megacity.

"We do work around the world, and nations don't want to give that information to us," she said, referring to the location of reservoirs and sewers.

Shankman said HHS is working with the U.S. Department of Agriculture to track the H5N2 avian influenza domestically and study migratory patterns. While they had pinpointed the virus as stemming from specific farms, farmers were uncomfortable with that information available at such a precise level.

"So we're reporting at the county level," Shankman said.

Although there are still information-sharing challenges with the practice of pairing geospatial data with other data such as that related to health, agriculture, and infrastructure, some of the panelists indicated that the process will become more widely accepted as the benefits are experienced and publicized over time.

As of mid-May, Liberia is Ebola-free, and Sierra Leone and Guinea are on their way. But history tells us such outbreaks are always a possibility.

"History tells that it's going to happen again," Giberson said. "Hopefully we're better prepared." ■

# FROM THE FLOOR

## EXHIBIT HALL HIGHLIGHTS



PHOTO COURTESY OF ORBITAL ATK

Orbital ATK's RapidStar-1 minisatellite provides precision pointing, superior payload support, and shared launch compatibility.

## DYNAMIC DUO

### Orbital ATK Shows Off Post-Merger Capabilities

Early this year, spacecraft company Orbital Sciences Corp. completed a \$4.5 billion merger with the aerospace and defense groups of Alliant Techsystems Inc. The newly combined company, Orbital ATK, made its debut at the GEOINT 2015 Symposium.

"We [highlighted] the newly merged Orbital ATK as a diverse aerospace and defense company that provides a wide range of satellites, launch vehicles, space components, and services to defense, civil, and commercial customers around the world," said Meredith Wakeley, senior marketing specialist for Orbital ATK's Space Systems Group and Commercial Satellite Division. "We want[ed] to show our customers and potential customers the benefits of the newly formed company."

To illustrate its post-merger capabilities, Orbital ATK showcased its national security spacecraft, its Gemini Mission Extension Vehicle, and its space components that power and enable satellites of all classes.

"We want[ed] to show our customers and potential customers the benefits of the newly formed company."

Placeography is a new way of structuring, relating, and maintaining data by combining an object-based production data model with tradecraft, processes, and workflows.



IMAGE COURTESY OF MARKLOGIC

## TACKLING UNSTRUCTURED DATA

### MarkLogic Applies Placeography to Data Challenges

MarkLogic Corporation's core offering is an enterprise NoSQL database to help customers store structured and unstructured Big Data. The company's biggest customer set comes from the Intelligence Community, which has large amounts of unstructured data. At GEOINT 2015, MarkLogic unveiled its new geospatial intelligence solution, which is designed to enable the fusion of GEOINT information with unstructured multi-INT sources to provide integrated situational awareness.

This innovative approach was implemented at the National Geospatial-Intelligence Agency (NGA) during its Placeography project. Placeography is the future of NGA information storage, and is an entirely new way of structuring, relating, and maintaining data by combining an object-based production data model with tradecraft, processes, and workflows. Placeography is designed to address the data challenges associated with human geography, structured observation management, activity-based intelligence, and enterprise search and discovery. Placeography also focuses on the conflation and association of disparate data and organizes it in a "one object, one time" fashion.

"One of NGA Director Robert Cardillo's top critical priorities as outlined in his keynote at the 31st Annual Space Symposium is combining nontraditional GEOINT such as open source with integrated intelligence in real time in a geospatial context," said Kim Kok, MarkLogic director of national security programs. "MarkLogic and its Placeography project enable NGA to address this critical priority."

# FROM THE FLOOR

## EXHIBIT HALL HIGHLIGHTS



Solers highlighted a wide range of software services at GEOINT 2015.

### AT YOUR SERVICE

Solers Offers a Host of Software Services

Software developer and systems integrator Solers highlighted its variety of products at GEOINT 2015.

“All of our solution areas contribute to the overall GEOINT community and its mission,” said Gregg Morrison, Solers vice president of business development. “Solutions developed include enterprise services, net-centric and service-oriented architecture, mobility, cloud computing, satellite ground systems, cybersecurity, information assurance, identity and access management, cross domain solutions, data visualization, and geospatial applications.”

Solers, which has been employee-owned since its founding in 1999, provides “a unique blend of small-business agility and mature, production-level processes,” Morrison added.

Solers is headquartered in Arlington, Va., and also has offices in Blacksburg, Va.; Chantilly, Va.; Colorado Springs, Colo.; and Greenbelt, Md.

Its clients include the Air Force Research Laboratory, Defense Information Systems Agency, National Oceanic and Atmospheric Administration, National Reconnaissance Office, and Space and Naval Warfare Systems Command.

“All of our solution areas contribute to the overall GEOINT community and its mission.”

ILLUSTRATION COURTESY OF SOLERS



iMMERSE by Riverside Research explores the use of Oculus Rift to support mission planning in a virtual environment.

### VIRTUAL MISSION PLANNING

Riverside Research Demonstrated 3D Immersion

At GEOINT 2015, Riverside Research took a leap into the world of virtual reality and analyst immersion. As an independent nonprofit focused on advancing scientific research, Riverside Research is exploring new ways to contribute to the U.S. government.

One such initiative is iMMERSE, a virtual reality project by the company’s Modeling and Application Development (MAD) Lab. iMMERSE explores the use of Oculus Rift to support mission planning in a virtual environment for the defense and intelligence communities.

Working closely with business partner AGI, Riverside Research creates interactive visual applications for both aircraft and satellites. Under the iMMERSE project, Riverside Research adapted its aircraft mission planning software for the U-2 SYERS 2B and 2C to allow customers to “ride-along” during a mission.

“We formed the MAD Lab and other research labs to dedicate resources and explore new technology that will eventually help the government in new ways,” said John Ploschnitznig, director of the MAD Lab. “Oculus Rift offers a new way to look at and interact with our geospatial data and is worth exploring further.”

Riverside Research also featured its new textbook, *The Phenomenology of Intelligence-focused Remote Sensing*, which can be pre-ordered from the company’s online store. Proceeds from textbook purchases will be donated to the USGIF Scholarship Program.

PHOTO COURTESY OF RIVERSIDE RESEARCH

# A LIFETIME OF DEDICATION TO TRADECRAFT

Air Chief Marshal Sir Stuart Peach Named 2015 Lundahl-Finnie Lifetime Achievement Award Recipient

**A**ir Chief Marshal Sir Stuart Peach, Vice Chief of the Defence Staff for the U.K. Royal Air Force (RAF), was named the 2015 recipient of the USGIF Arthur C. Lundahl–Thomas C. Finnie Lifetime Achievement Award Thursday at GEOINT 2015.

Peach was unable to attend the Symposium, and instead sent a video of his acceptance speech to be played for the audience:

“Thank you so much for honoring me with this award,” said Peach. “It is of course not for me, it is for all of the members of the United Kingdom intelligence services past,



Air Chief Marshal Sir Stuart Peach — pictured here giving a keynote at GEOINT 2015 — is the 2015 recipient of the USGIF Arthur C. Lundahl–Thomas C. Finnie Lifetime Achievement Award.

“I’m proud to be part of the reconnaissance gang, I’m very proud to be part of the Intelligence Community.”

— Air Chief Marshal Sir Stuart Peach

present, and hopefully future who worked so closely in partnership with you for so many years. ... I’m proud to be part of the reconnaissance gang, I’m very proud to be part of the Intelligence Community. I see in so many of my predecessors on this hall of fame great friends and particularly great mentors. I would just simply highlight two—the great intelligencer Johnny Allen and my lifelong friend and mentor Jim Clapper. Both mean a lot to me

and both mean a lot to their friends in the United Kingdom. To join them makes me humble.”

Peach commanded the Air Warfare Centre at RAF Waddington from 2000 to 2003, was Director of General Intelligence Collection with the Ministry of Defence from 2003 to 2006, and served as Chief of Defence Intelligence and Deputy Chairman of the Joint Intelligence Committee from 2006 to 2009. Peach held the appointment of Chief of Joint Operations at PJHQ in the U.K. from March 2009 to December 2011 before becoming the first Commander of the U.K. Joint Forces Command from December 2011 to April 2013. He was appointed Vice Chief of the Defence Staff in May 2013.

The Lundahl-Finnie award recipient is nominated and voted on by the USGIF Board of Directors. This distinguished award is named after Arthur C. Lundahl and Thomas C. Finnie, celebrating their accomplishments—in imagery analysis and mapping, respectively—and their legacy within the GEOINT Community. ■



The GEOINT Community stands and applauds as USGIF CEO Keith Masback and Chairman of the Board the Honorable Jeffrey Harris present the Lundahl-Finnie award to Sir Stuart Peach, whose duties prevented him from receiving the award in person.

# MULTI-INT COLLABORATION FOR LAW ENFORCEMENT

Workshop Participants Urge Knowledge Sharing

The intelligence world has access to a growing abundance of information, but finding the right data at the right time continues to be challenging due to persistent government stovepipes. This underscores the need for analysts from different areas to help each other solve problems, according to participants in the “Law Enforcement/First Responder Tradecraft Challenges and Opportunities Exchange” Wednesday at GEOINT 2015.

Workshop participants suggested intelligence agencies in a particular state, for example, develop lists of their assets, exchange those lists with one another, and organize joint exercises to practice sharing those assets and be better prepared when a real emergency arises. Others recommended similar arrangements between public and private entities.

Robert Tetrault, a South American analyst and global food security liaison with the U.S. Department of Agriculture (USDA), said the USDA Foreign Agricultural Service holds “technical exchange meetings” with the National Geospatial-Intelligence Agency (NGA) to keep up to date on new intelligence methods that might improve its ability to analyze crop production in foreign countries.

“Maybe an air domain analyst has a solution for the maritime domain.”

—Melissa Pacak, NGA

Wednesday’s workshop was organized by the Multi-INT Tradecraft Community of Practice (MINT-T CoP), which was formed about two years ago to discuss common challenges across the Intelligence Community and Department of Defense. For example, “Maybe an air domain analyst has a solution for the maritime domain,” said Melissa Pacak, MINT-T CoP co-lead and chief of tradecraft transformation with NGA’s Analysis Directorate.

The workshop was MINT-T CoP’s first event focused on the perspectives of law enforcement and federal/civil agencies. The GEOINT 2015 session will be followed by a more in-depth exchange Sept. 21 to 25 in Chantilly, Va.

# HUMAN GEOGRAPHY MEETS ANTICIPATORY INTELLIGENCE

DIA Aims to Couple the Two Areas to Predict Potential Unrest



Improving Human Geography Data for Human Security Mapping panel from left to right: Brian Hagan, NGA; Nicole Sponaugle, DIA; Dr. Melinda Laituri, Department of State; Godfrey Takavarasha, UN; Lea Shanley, NASA; Mike Williams, University of South Florida.

The value of human geography in times of crisis is well chronicled. The Defense Intelligence Agency (DIA) hopes applying “anticipatory analysis” to human geography will move the timeline up to help predict crises.

“Socio-economic conditions tend to shift very gradually,” said Nicole Sponaugle, chief of DIA’s operational environmental analysis division, in a Thursday panel of experts from other federal agencies, the United Nations, and academia.

“By the time a crisis erupts, it looks like a very dramatic event,” Sponaugle said. “As a matter of fact, the stage for the crisis has been set in many cases over the course of years, and it’s very difficult to pick up this gradual shift.”

Hence the desire to apply anticipatory analysis.

While identifying catalytic events remains elusive, Sponaugle said, there are conditions that act as fuel in search of a spark. The DIA and others are trying to predict areas in which those conditions exist with the goal to forestall the fire.

The group is working from a hypothetical scenario that begins with a government in which power is concentrated with a few people. And when resources—particularly water—are scarce, competition for them can make the government unstable. Add the level of oppression and corruption in the country, along with urban growth, and it’s upheaval waiting to happen.

The key to coping with the entire scenario is human geography data, which abounds, but isn’t always shared.

“We’re very effective at sharing data in the event of crisis,” Sponaugle said. “I think what we’re missing out on is looking at areas that are teetering on the brink of crisis where there’s still hope for intervention or [where] less drastic measures can be taken to prevent worse developments down the road.”



Watch GEOINT 2015 Symposium videos of keynote speeches and more. Visit [trajectorymagazine.com](http://trajectorymagazine.com) and click on the Trajectory On Location icon.

# IRAN, CYBER, SEQUESTRATION & MORE

Reps. Nunes and Schiff Give Joint GEOINT 2015 Keynote

Reps. Devin Nunes (R-Calif.) and Adam Schiff (D-Calif.) spoke candidly, answering questions from the GEOINT 2015 audience.



Said Schiff, ranking member of HPSCI, “the Iranians will start to split up their centrifuges again. They’ll go (beyond) the 20 percent enriched uranium they already have, and then we’ll be in a race for time.”

“I think we know enough to set back the programs for a period of years with a military strike,” Schiff continued. “You’re not going to be able to set it back permanently unless you periodically were to engage in a military strike, because Iran still has the knowledge about how to enrich uranium and how to weaponize it.”

**W**ill there be more sanctions for Iran, punishments for hackers, continued sequestration?

Reps. Devin Nunes (R-Calif.) and Adam Schiff (D-Calif.) shed some light on these issues Thursday in a joint keynote address at GEOINT 2015.

Negotiations with Iran on its nuclear capability are ongoing, with a June 30 deadline looming.

Nunes, chairman of the House Permanent Select Committee on Intelligence (HPSCI), predicted Congress would pass more sanctions if an agreement is not reached.

“I’m not comfortable with where the talks are now,” Nunes said “... My concern would be that if any sanctions are lifted, and we release large amounts of capital to the regime, that could be a potential problem, plus opening the gates for our partners, Europeans and others, to start to trade with Iran. Over the long run, I think that would be detrimental.”

**“We also need to establish a deterrent. I don’t think the North Koreans feel they suffered any repercussions from the attack on Sony.”**

—Rep. Adam Schiff (D-Calif.)

The extent of the recent data breach at the U.S. Office of Personnel Management is still being determined, with the estimated number

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### IRAN, CYBER, SEQUESTRATION & MORE CONTINUED

of government personnel records compromised ranging from 4.2 to 18 million. Many parties have labeled the Chinese as responsible, though they also say facts have yet to determine whether their responsibility is irrefutable.

However, the Congressmen agreed the U.S. should demonstrate an appropriate reaction to the cyber attack.

"This is a growing problem, and it leads me to suspect that if you're a major, or a minor firm right now, particularly in the defense area, but in just about any area, if you haven't been hacked yet, it's only because you don't know you've been hacked," Schiff said.

He added thoughts on whether the U.S. should play more of an offensive role in cyber conflict.

"I think on this playing field, those on the offense have all of the advantage," Schiff said. "When you're on defense, you've got to protect against any vulnerability. When you're on offense, you just need to exploit the weakest link."

Schiff's congressional district includes Hollywood, and SONY studios was severely impacted by North Korea's hacking of its computer records.

"We can't just be on defense," he said. "We also need to establish a deterrent. I don't think the North Koreans feel they suffered any repercussions from the attack on Sony. I think that's going to tell the North Koreans and others that cyber attacks are essentially 'freebies.'"

Schiff said this underscores the need to take charge of determining clear and appropriate cyber consequences as there are for other domains of war.

"I believe we need to develop the rules of the road—what constitutes an act of what in the cyber world. What constitutes an appropriate response. We're going to have to let our adversaries know that, when they attack us, that there will be repercussions."

On sequestration, Nunes said the U.S. needs to find ways to spur economic growth to "three to four percent, if we're going to grow our way out of this."

Nunes pointed to the potential need for more "austerity measures" without that growth.

"There are no easy answers," he said, then added "I feel comfortable where we are in terms of the Intelligence Community's budget going into next year." ■

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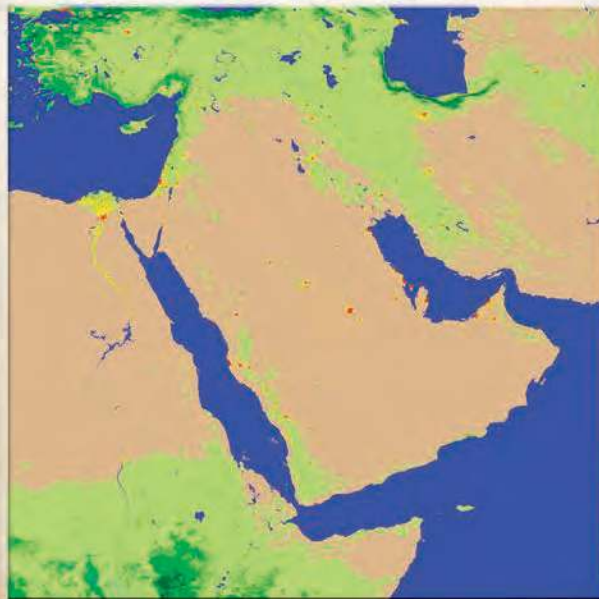
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# SAPP ASKS INDUSTRY, "HOW CAN YOU HELP NRO?"

NRO Director Addresses Misconceptions, Extends Hand to Industry

In her GEOINT 2015 keynote, National Reconnaissance Office (NRO) Director Betty Sapp challenged those working in the commercial sector to rethink conventional wisdom about NRO and help the agency in its mission to provide innovative overhead intelligence systems for national security.

"For all of you in industry, I want you to tell me how you can help with our intelligence challenges—not why I should buy the system you've got ready to sell me," she said.

Sapp said she doesn't feel threatened by industry and the NRO has experienced a great partnership with commercial industry for a long time. She expects the partnerships to only grow in the future by working with the National Geospatial-Intelligence Agency to leverage more existing commercial products and welcomes the challenge of doing so.

"The more commercial can do, the more we can do different than we have in the past," Sapp said. "We're going to see where this goes. We're certainly going to try and go higher, get things we've never been able to do before for the U.S."

Sapp addressed some traditional notions of the NRO, namely that the organization has lost its innovative spirit, that it repeatedly builds the same things, and that it only does one size (big) and one speed (slow). Rather, she emphasized, the organization builds satellites of various

sizes and can keep up with the pace of technology, putting mission payloads on a vehicle at the last minute. She added the NRO is also misunderstood because its innovation is not entirely in space. The ability to adapt spacecraft for flying new missions, for instance, happens on the ground.

Sapp said she didn't

need to remind the GEOINT 2015 audience that the world is a dangerous place and space is a critical component of national security. The intelligence NRO provides the defense community is unique in its global reach and flexibility, enabled by space-based assets, she said.

"Others that operate on the ground or in the air just don't have the perspective offered by space, where I can see one-third of the globe with just one vehicle," Sapp said. "Others in the IC have global presence, but they have to pick the places to put their assets," and might not choose the right spot. NRO's worldwide reach and flexibility are increasingly important as the IC's high-interest areas shift more rapidly and frequently.

In the future, Sapp said NRO's unique role would improve, with a greater focus on resilience, persistence, and sensitivity. Greater persistence can mean implementing the "stare" approach versus the "storm" approach. She used a sporting event as an example of the power of images taken from both high and low—from above for perspective and from down low for detail.

Sapp reiterated that moving forward depends largely on the performance of industry partners.

"We want partners who are as committed to our national security mission as we are," she said. "We have a direct call line to users in the field. We do a lot to combine our imagery with that available from the commercial providers ... It also lets us distribute things we might not be able to otherwise distribute." ■



NRO Director Betty Sapp challenged misconceptions about her agency, while also challenging industry to help it meet future goals, during her GEOINT 2015 keynote.

**"The more commercial can do, the more we can do different than we have in the past."**

— Director Betty Sapp, NRO

# DOD SEEKS BETTER INTEL ON MOBILE TARGETS

GEOINT Community Poised to Support Improvements



Acting Under Secretary of Defense for Intelligence Lettre said persistent GEOINT is key to helping DOD effectively track moving targets.

**"Today, we have good ISR against fixed targets but less so against mobile systems."**

—Marcel Lettre, Acting Under Secretary of Defense for Intelligence

The GEOINT Community stands to play a major role in providing this potential solution.

"Persistent GEOINT is key to effective tracking of mobile systems, be they ballistic missile transporter erector launchers (TELs), air defense units, mobile command-and-control headquarters, or ships at sea," Lettre said.

Lettre also expressed concern about the growing threat from anti-satellite weapons being developed by China and Russia.

DoD, in partnership with the Intelligence Community, "is ensuring that our future space-based ISR capabilities, including GEOINT collectors, are resilient against these threats and continue to provide support even in heavily contested conflicts," Lettre said. "In essence, we believe our future space systems will need to be routinely designed to survive against various threats, just as our other air, naval, and ground systems have traditionally been."

In other comments, Lettre said DoD is working to integrate its Joint Information Environment with the Intelligence Community Information Technology Enterprise. Connecting those two information networks must recognize that DoD and the Intelligence Community have differences in culture, operational climates, and mission requirements, he indicated.

Lettre also said DoD continues to evaluate what resources it must devote to the Arctic region, which is experiencing increasing shipping traffic as sea ice declines.

"It's an emerging area where I think, analytically, the IC can lead us to some insights about the implications for the security posture," he said. "It also ties in a little bit to the discussion we have underway about what is the future relationship the U.S. has with Russia, as we've seen some of the unproductive acts that the Russian government and military have taken in the last couple years." ■



The U.S. Department of Defense needs to dramatically improve its ability to detect, track, and target mobile theater missiles and other moving systems, Marcel Lettre, acting under secretary of defense for intelligence, said Thursday during his GEOINT 2015 keynote.

Precision-guided, mobile theater ballistic and cruise missiles fielded by potential adversaries present a growing danger to American naval forces and overseas bases. But DoD's intelligence, surveillance, and reconnaissance (ISR) capabilities are struggling to keep tabs on such threats, Lettre said.

"Today, we have good ISR against fixed targets but less so against mobile systems," he declared.

DoD tried to address the mobile target problem a decade ago with the Space Radar program, but the satellite effort failed to materialize. So the department has gone back to the drawing board.

"We believe the future solution is an integrated overhead architecture, a system of multiple layers tightly linked with airborne systems," Lettre said. "The ability to stare or to rapidly revisit any region we are interested in could enable a much more effective ISR system for targeting mobile threats."

## PRIDE AND PROGRESS CONTINUED

“That’s been one of the major takeaways for me from the last three years: Yes, we have to protect our secrets, our sources, and methods, but we have to be more transparent about the things we can talk about—and there is more we can talk about.”

The DNI devoted the bulk of his address to nostalgia, highlighting GEOINT’s current opportunities by way of honoring its past achievements—not the least of which, he said, is the GEOINT Symposium itself.

“I became director of NIMA [the National Imagery and Mapping Agency] two days after 9/11 and helped in a small way to usher in what was a lot more than a name change to NGA [the National Geospatial Intelligence Agency] in November 2003,” recalled Clapper. “In 2004, the United States Geospatial Intelligence Foundation [launched the Symposium] and it has grown into what it is today: our nation’s largest gathering of intelligence professionals, a terrific celebration of geospatial intelligence, and a great opportunity to exchange tradecraft and promote intelligence integration.”

The tradecraft has grown and evolved alongside the Symposium, said Clapper, who shared with the audience what he considers some of GEOINT’s most significant milestones, such as its response to Hurricane Katrina in 2005.

“Our response to Katrina [was] ... a watershed moment for the IC and for NGA,” said the DNI, and recalled how NGA assisted the U.S. Coast Guard with situational awareness in the aftermath of the hurricane, as well as

subsequent disasters, such as the BP oil spill in the Gulf of Mexico. “NGA made a tangible difference in the daily lives of Americans in that region.”

When considered alongside its increased transparency, the IC’s contributions during events such as Katrina—as well as more recent disasters like the earthquakes in Nepal, and even major events such as the Olympics and the Super Bowl—have proven that it is “worthy of America’s trust,” according to Clapper.

“In our increasingly transparent world of intelligence work, GEOINT has a distinct advantage [because] it is the most naturally transparent of all the intelligence disciplines,” said Clapper. He also noted the contributions of industry—but with a note of caution regarding competition.

“Commercial imagery is increasingly important to what we do ... Because it’s unclassified we can broadly share commercial imagery” he said. “... [But] I don’t want to see commercial imagery, with NGA as its champion, competing with our NTM (national technical means) capabilities, with the NRO (National Reconnaissance Office) as their champion. NRO is responsible for developing our NTM architecture and needs to play a leading, responsible role in designing the future of GEOINT architectures that are truly an integration of the NTM systems that we must build and the commercial systems that we must leverage.”

Integration within the IC is not only important, Clapper said, but also possible, as evidenced by the progress of the Intelligence



## Q&A WITH THE DNI

During a Q&A session following his keynote, Clapper answered some of the audience members’ most pressing questions. Here are some highlights from his remarks:

### On responding to cyber attacks like the recent data breach at the U.S. Office of Personnel Management (OPM):

“Until such time as we create both the substance and psychology of deterrence, this is going to go on. So what we must do in the meantime is pay more attention to defense.”

### On which represents a bigger cyber threat to the United States—China or Russia:

“The greater cyber threat ... is Russia. They are very sophisticated. We know more about the Chinese because they’re a little noisier [but] I worry much more about the Russians, who are a lot more subtle about this and have tremendous capability.”

### On whether the United States can trust Iran during nuclear negotiations:

“We’re not in the trust business at all. We go into this with eyes open.”

### On UAVs:

“More and more nations are acquiring these, they’ve obviously gone to school on us, and there are still debates about the rules and laws of war as they apply to the use of drones. This to me is another example where policy and international law is behind the technology.”

### On whether sequestration is making the nation less safe:

“Yes.”

### On the President as a consumer of intelligence:

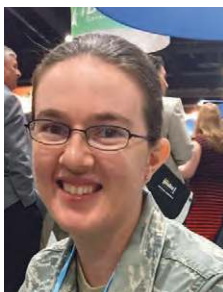
“He’s a tremendous, voracious user of intelligence. He’s very astute about it and asks great questions ... In the five years I’ve been on this job he’s gotten more and more educated ... about how the Intelligence Community operates.”

Community Information Technology Enterprise, including NGA’s push to develop a GEOINT services platform as part of it. “It’s taken us a couple years or so to lay the foundation, but over the last year we’ve been in adoption mode,” he said.

Concluded Clapper, echoing the president’s message one last time: “I couldn’t be prouder of our Intelligence Community and most especially of the Geospatial Intelligence Community. So thank you—all of you—for your service, and for what you accomplish for our nation every day.” ■

# SEEN & HEARD

Photos & Comments from the GEOINT 2015 Symposium



**MASTER  
SERGEANT  
JENNIFER SMITH,  
IMAGERY**

ANALYST,  
NATIONAL  
GEOSPATIAL-  
INTELLIGENCE  
COLLEGE

"I'm pretty impressed with the Symposium so far. The vendors [really stand out]: all the stuff we could be doing. If they integrate it into what intel can do I think there's a lot for the future."



**ISAMU KIKUO**, GROUP LEADER,  
NS SOLUTIONS CORP., TOKYO

"My customer is the Japan Aerospace Exploration Agency and the Ministry of Defense and the Ministry of Foreign Affairs in Japan. My purpose is gathering information and new technologies. I have found many ideas of technologies. My main interest is imagery."



# SEEN & HEARD

Photos & Comments from the GEOINT 2015 Symposium



**TERRY BROWN**, PRESIDENT, BROWN TECHNOLOGY GROUP

"I came expecting a normal conference, and I see robotics, all sorts of large companies expected to support our country. I thought it would be a workshop and that's about it. It's clearly much more than that. Just to walk around, to see the various technologies, has absolutely been an eye opener. I can't wait to share this with my people."



**KATLYN MYERS**, INTERN, IDEEN; STUDENT, ANDERSON UNIVERSITY

"I'm experiencing talking to people, learning what they do. I didn't know much about geospatial intelligence. I'm learning a lot about that, and I'm having a good time. I'm meeting some awesome people."

## SEEN & HEARD

Photos & Comments from the GEOINT 2015 Symposium



**BETH SCHIEBLER,**  
VICE PRESIDENT,  
NAVSTAR

"You meet more people as you go along, and so you learn. Every year we sit down and strategize: 'What do we want to get out of [The GEOINT Symposium?]', because it's a big investment for a small business. We figure out our goals, whom do we want to meet and what do we want to find out? And we're able to do it."



**SCOTT LEE,**  
TERRAGO

"I think it is actually better for everyone on the show floor [to be in Washington]. People are able to get out of their offices. A lot more people from the federal/civilian side of the business. Not just the DOD in the intel space, but the USDA, homeland security, other organizations outside the typical GEOINT crowd."



**LARRY BURGER,**  
TECHNICAL DIRECTOR,  
DECISIVE ANALYTICS

"The networking opportunities are what's really pretty good, especially for a small business like ours ... We're all about making connections."



# FAMILY FUN

The GEOINT Symposium Hosts First-Ever Family Day



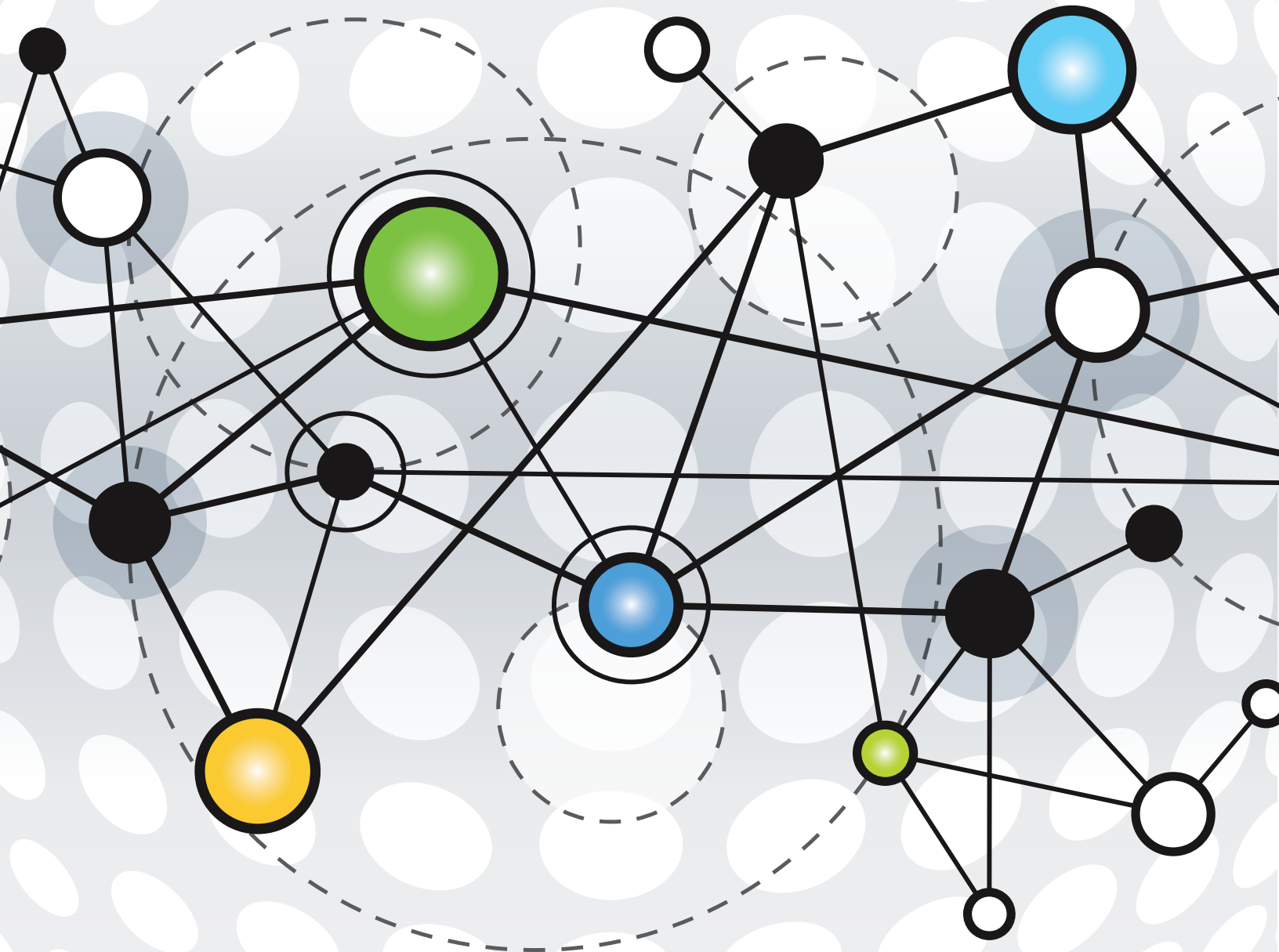


# **USGIF**

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**usgif.org**

A young child with blonde hair, wearing a colorful plaid shirt and blue jeans, stands on a small silver step ladder. They are using white chalk to draw a large rocket ship on a grey, textured concrete wall. The rocket has a pointed nose, a circular window, and a rectangular base. A small black dog sits on the ground to the left of the ladder, looking up at the child. In the bottom right corner, there is a small pile of colorful chalk and a blue bucket.

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