A Quint-Cross Information Sharing and Integration

Slides and Demo: CIA World Factbook

Note: Fix GEOINT 2011 Symposium Tables and extract names for Network Analytics?

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Spotfire Dashboard
Top Secret in America
Spotfire Inverts Bathtub
In the intelligence community, a cosmic shift
GEOINT community hammers out integration strategies
GEOINT 2011 to focus on integrated intelligence
GEOINT 2011 Symposium

October 16, 2011 Pre-Symposium Science & Technology Forum

Introduction & Keynote
Socio-Cultural Dynamics: An Overview from a Diplomacy, Development, Defense and Intelligence Perspective
Fusion in the information spectrum – Multi-INT analytics as an alternative to "All-Source"
The Future of GEOINT Professional Development
WAS/WAPS/WAMI/FMV: Analysis of Video
Socio-Cultural Dynamics: Lessons Learned
Mobile GEOINT Applications
Space-Time Analytics
Socio-Cultural Dynamics: Enabling Technologies
People and Technology: New Sensing Paradigm for Geospatial Data Collection and Integration
Big Data – The Engine for Future GEOINT Analytics

October 16, 2011
October 17, 2011
October 18, 2011
October 19, 2011

Speakers

W. Craig Fugate, Administrator, Federal Emergency Management Agency (FEMA)
The Quint

Defense Intelligence Agency
National Geospatial – Intelligence Agency
National Reconnaissance Office
National Security Agency
Central Intelligence Agency

NSG Expeditionary Architecture

Slide 1 Title
Slide 2 Outline
Slide 3 Big Analytics and Big Data Management
Slide 4 NEA Cloud Objectives
Slide 5 The Multi-Sided Platform
Slide 6 Vision Integration 2.0 and Strategic Initiatives
Slide 7 Proposed NEA Cloud Reference Architecture
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NCOIC Geospatial Interoperability Task Team

Recorded Future

What is Recorded Future?
What isn't Recorded Future?
What do you want to find?

http://semanticommunity.info/A_Quint-Cross_Information_Sharing_and_Integration
Updated: Wed, 23 Sep 2015 06:46:29 GMT
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For some time I have been working on showing information sharing and integration across the Intelligence Community for our readers. I saw two recent articles, In the intelligence community, a cosmic shift and GEOINT community hammers out integration strategies, that mentioned the Quint - the increased cooperation among the five Intelligence...

An impetus for doing that also came from the upcoming Kickoff Meeting for NCOIC-NGIA Geospatial Cloud Computing Pilot and being told recently that the key problem that CIA and IC have is working with unstructured information and structured data. I know how to do that and want to show our readers the architecture, platform, and results from doing that. I enjoy watching Penelope Garcia on Criminal Minds doing that!

I gained added inspiration from meeting NGA Director Letitia Long at the 2011 Geospatial Summit and reading her GEOINT 2011 keynote where she said: "I wanted to fundamentally change the user's experience by putting the power of GEOINT in the hands of the user. So when our content is easily accessible, when it's useable, within an open environment, and we've got a different delivery model, those three are going to help us get to the deeper analytics because we're going to free up the time of our analysts to be focused on the so what, to be focused on adding the context, to be able to experiment with the new sensor data, the new phenomenologies, developing new analytic tools and techniques. Humanitarian assistance and disaster recovery is one of our key mission areas. When a natural disaster is about to occur or has just occurred the first thing we will do is go into production mode and we will produce some very nice disaster atlases, map atlases, for FEMA for the urban search and rescue teams. The big thing on this, a couple of takeaways, was not only the fact that we made FEMA's life so much easier, much more efficient in what they were doing, but we freed up our analysts' time to do some deeper analytics."

So I decided to create a Quint - Cross Information Sharing and Integration App in a Dashboard by mining the site maps for the Quint agencies and using a sample of their best public content (e.g. CIA World Fact Book). In effect I want to reduce the separation between the Quint 5 and the Director of National Intelligence 17, like I described in a recent article on Six Degrees of Separation and Now Even Less. The Dashboard is presented elsewhere.

Lessons learned that are important to the reader and our IC leaders are:

Intelligence information can be integrated with Linked Open Data in Dashboards
Linked Open Data supports cross-information sharing and integration app development
The power of GEOINT can be put in the hands of the user
The bathtub of traditional collection, analysis, and communication can be inverted

We also need patriotic and trustworthy geeks to be Cyber Warriors as I mentioned in another story.

Spotfire Dashboard

For Internet Explorer Users and Those Wanting Full Screen Display Use: Web Player Get Spotfire for iPad App

Media, iframe, embed and object tags are not supported inside of a PDF.
Spotfire Inverts Bathtub

The terms described by the DIA, Collection, Analysis, and Collaboration, were activities during the process of a tasker with a deadline having to spend too much time getting the data and building a beautiful Powerpoint. The problem is that a high amount of the tasker’s time is spent in collection, followed by a low amount of time in analysis (where the actual work is), and then a high amount again in collaboration. This creates a “bathtub” like curve. Hanging on the wall of the CIO’s office at the DIA are posters that address the bathtub problem and the goal of Inverting the Bathtub. This is the problem that Spotfire addresses and, as a result, gives more time to think.

In the intelligence community, a cosmic shift

Intell agencies rethink old ideas about information sharing


By Amber Corrin, Nov 28, 2011

Serious change is afoot in the intelligence community. Some of the most opaque federal organizations are doing what might have sounded crazy five years ago: They’re moving their classified, sensitive information — some of it, at least — off their own servers and into the cloud. Moreover, they will be sharing that information with one another.
"They" are a powerful group formerly known as the Quad: the Defense Intelligence Agency, National Geospatial-Intelligence Agency, National Reconnaissance Office and National Security Agency. Now that the CIA has joined the consortium, they are known as the Quint.

Spurred by financial pressure and an increasingly mobile, tech-oriented workforce, the Quint is trying to break out of the "silos of secrecy" so they can find new ways to achieve their missions.

Much of the change in approach was unveiled at the GEOINT 2012 Symposium in San Antonio in October, where there were ubiquitous examples of how the Quint is using IT to become more efficient, save money and eradicate redundancies. Some top officials, including Gen. Keith Alexander, commander of U.S. Cyber Command and director of NSA, and James Clapper, director of national intelligence, shared the progress on the move to the cloud and their ambitious plans for the future.

To appreciate what a shift this is for intelligence agencies, one must understand where they are coming from.

**A bloated system**

Until now, intelligence agencies have been able to sidestep information-sharing requirements and even fundamental transparencies expected of other agencies, particularly in the wake of the 2001 terrorist attacks. Intelligence officials generally resist discussing the community's inner workings or elaborate on its "unique security requirements," but the Washington Post offered a peek into that world in its three-part exposé in July 2010, "Top Secret America: A Hidden World, Growing Beyond Control" by Dana Priest and William Arkin.

After two years of research, Priest and Arkin highlighted the community's rampant waste and redundancy, noting that “51 federal organizations and military commands, operating in 15 U.S. cities, track the flow of money to and from terrorist networks.”

The reporters go on to describe the 1,271 agencies and 1,931 private companies that work on counterterrorism, homeland security and intelligence programs at about 10,000 U.S. locations. There are also about 854,000 people with top-secret security clearances, many of them working in the 33 complexes that have sprung up in the Washington metro area since the terrorist attacks, accounting for about 17 million square feet of space, according to the report.

So getting those agencies to use the same basic approach to IT as the rest of the government will be pretty remarkable if and when it happens.

**The ascent to the cloud**

Moving intelligence agencies to the cloud will be a huge undertaking, but Alexander said the work is already under way.

“Within NSA and DOD, there are those 7 million pieces of IT infrastructure and systems and 15,000 different enclaves,” he said at GEOINT. "Our intent is to take that and collapse it down into a cloud-like structure."

He added that NSA has already reduced the number of help desks from 900 to 450 and plans to end up with only two. The agency will move all its databases to the cloud by the end of the year.
Alexander and other GEOINT speakers emphasized the community's accelerating use of thin-client technology, virtualization, and consolidated infrastructure and networks. They depicted those activities as solutions to a range of issues, including scarce funding, security, cyber defense and support for mobile forces, which are now driving the ascent to the cloud.

Although Clapper warned that the cloud is not a panacea, he said it is critical to achieving savings and bridging communication gaps.

A source close to the situation who spoke on background said the movement is a sign of progress.

“Policy, operations and technology all have to move together, and not that many people talk to each other across those areas,” the source said. “Now at least we’re getting people to the table to articulate the problems and see what we’re going to do.”

About the Author

Amber Corrin is a staff writer covering defense and national security for Federal Computer Week. Follow her on Twitter: @AmberInsideDOD.

GEOINT community hammers out integration strategies

Source: Defense Systems.com, November 2011. CANNOT FIND ONLINE

The geospatial intelligence community gathered October 17-19 in San Antonio, Texas, for the GEOINT 2011 Symposium. The theme of this year's symposium was "Forging Integrated Intelligence."

Defense Systems produced an online show daily during GEOINT 2011, and the following are highlights of our coverage.

Following a decade of rapid growth fueled by generous budget allocations, the geospatial intelligence community faces budget cuts like other parts of the federal government, James Clapper, director of national intelligence, told attendees.

In this austere environment, technology advances will enable the community to expand, Clapper said. He hopes that up to half the savings will come from advances in IT.

"There's a huge potential for achieving savings and integration through IT - 20 to 25 percent of our activities are coded as IT," he said.

The National Geospatial Intelligence Agency (NGA) and the Director of National Intelligence are working toward integrating a common IT architecture while still allowing for flexibility for unique requirements he said.

New Paradigms

The intelligence community and the Defense Department are increasingly looking for virtualization and the cloud to secure the networks critical to national security, said Army Gen. Keith Alexander, U.S. Syber Command Commander and Director of National Security.
Alexander said when he recently asked his staff how to make these networks a more difficult target, they told him that the answer lies in going virtual and migrating to cloud computing. Such an approach is cheaper, faster, and well suited to support mobile forces, he said.

"When you think about it, there are some tremendous reasons to go to the cloud," he said.

Moving intelligence data to the cloud is a massive undertaking, he said. "Within NSA and DoD there are seven million pieces of IT infrastructure and systems, and 15,000 enclaves. Our intent is to take that and collapse it into cloud-like structure."

Alexander said some key measures are already underway, such as migrating from a thick client to a thin client, reducing the number of enclaves, tagging data and carrying out efficiency initiatives. The NSA is scheduled to move all of its databases to a cloud environment by the end of the year.

Open Environment

The NGA is actively involved in integrating its capabilities by focusing on getting useful applications to users and pushing toward a more open IT environment, said Letitia Long, NGA's director

The increased accessibility of data that results from such an environment also enables the intelligence community to achieve deeper analysis, she said.

NGA's work on open source collaboration is especially useful for military operations, Long said. "I'd like to move from a data-poor environment to a data-rich environment [and] be able to build and provide those apps for our military forces [and] for military operations with secure mobile devices," she said.

An open environment also is a high priority of the National Reconnaissance Office, which is changing its technology architectures so data can be more readily accessed by troops in the field, said Bruce Carlson, NRO director. The agency is moving towards more open architectures, which will be less expensive to administer than the standalone, "stovepiped" programs of years past, he said.

The agency has asked its service providers to help it make more data available to troops at the tactical edge of the battlefield, he said. The troops need quick information that alerts them to a threat; later, they can get more precise details of the threat. "Ninety-five percent of our GEOINT data and 90 percent of our signal intelligence produced for NSA are classified at levels that are easy to distribute to the field - it's not top secret. But only five percent of the soldiers in the field have access to it," he said.

Multi-Input Approach

While geospatial intelligence often is viewed as a primary information asset, it is often used in connection with other types of intelligence data, said Michael Vickers, DoD's under secretary for intelligence. One of [geospatial intelligence's] contributions to integrated intelligence is that it frequently helps us corroborate other types of intelligence, he said.

This multi-input approach will expand further as analysts and others learn how to understand social media. The impact of social media sites became obvious during the Arab spring movement. Vickers said it will get more attention going forward.
"Social media will play a role as we adapt to the changing environment," he said. "Human terrain mapping will become more granular."

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**GEOINT 2011 to focus on integrated intelligence**


By Defense Systems Staff, Oct 14, 2011

The **GEOINT 2011 Symposium** will be held Oct. 16-19 in San Antonio, Texas, and Defense Systems staff will be at the show to provide timely and detailed coverage of speeches and presentations by top military and civilian government geospatial experts.

This year’s theme is Forging Integrated Intelligence. The event will be held at the Henry B. Gonzalez Convention Center in The Alamo City.

Our reporters will cover panels and breakout sessions on a wide variety of topics, including on-demand capabilities, human geography, intelligence integration, open-source geospatial intelligence, crowd-source intelligence, international commercial satellite imagery and intelligence storage in the cloud.

Among the military and civilian government experts scheduled to speak at the event are:

- James Clapper, director of the National Security Agency.
- Craig Fugate, administrator of the Federal Emergency Management Agency.
- Letitia Long, director of the National Geospatial-Intelligence Agency.

Conference exhibits will feature tools and techniques for image processing and analysis, location-based services, mapping and visualization, airborne and reconnaissance capabilities, commercial satellite imaging, geographic information systems, and Global Positioning System hardware and software.

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**GEOINT 2011 Symposium**

**NOTE:** Some Session Details are CUT OFF because they cannot be scraped. Agenda in [PDF]

**October 16, 2011 Pre-Symposium Science & Technology Forum**

Introduction & Keynote

9 – 9:30 a.m. Grand Hyatt – Texas Ballroom, Salon A & B

Introduction: Dr. R. Maxwell Baber, Director of Academic Programs, USGIF
Keynote: Dr. Greg Smith, Chief Scientist and Deputy Director, InnoVision, National Geospatial-Intelligence Agency (NGA)

Socio-Cultural Dynamics: An Overview from a Diplomacy, Development, Defense and Intelligence Perspective

9:40 – 11:30 a.m. Grand Hyatt – Texas Ballroom, Salon C

This session brings together leaders from across the diplomacy, development, defense, and intelligence communities to discuss the challenges and opportunities that GEOINT tradecraft is bringing to socio-cultural analysis in the prosecution of whole of government national security goals. The goal of this overview session is to broaden the audience’s awareness far beyond “the human terrain” and to shine a light on the wide range of national security activities that require a spatio-temporally aware understanding of the socio-cultural dynamics that shape security operations, whether they be CT, COIN, FID, SSTRO, HADR or security operations that fall outside of the established Defense Department categories.

Fusion in the information spectrum – Multi-INT analytics as an alternative to “All-Source”

Grand Hyatt – Texas Ballroom, Salon D

As processing speed and data storage follow Moore’s Law and evolve away from being limiting factors in information gathering and analysis, the amount of data available to an analyst reaches a point of effective saturation. Efforts to take advantage of multiple observables, automatically fused into information, provide opportunities to replace this saturation with new insight. The key will be creating new concepts both for the merging of the data streams, and intuitive, accessible display of the resulting information. There is room for the entire community to contribute to this process, but especially for academia to provide innovative solutions to both the merge and display efforts. Speakers in this session will address technical and research issues associated with creation and display of fusion applications from government, developer, academic, and commercial perspectives.

The Future of GEOINT Professional Development

Grand Hyatt – Texas Ballroom, Salon F

This participatory session explores possible future scenarios for the GEOINT community to appreciate prospective professional development issues through the lens of workers, educators, learners, and administrators. This offers a view to anticipate the future challenges of teaching and learning while generating ideas that might not have arisen from a strictly andragogical and pedagogical perspective. Speakers in this session will provide their vision of the future and a perspective the implications for the tradecraft and the geospatial intelligence professional.

WAS/WAPS/WAMI/FMV: Analysis of Video

11:45 a.m – 1:15 p.m. Lunch Session Grand Hyatt – Texas Ballroom, Salon A & B
Airborne and ground video collections (including collections systems commonly referred to as Wide-Area Surveillance, Wide-Area Persistent Surveillance, Wide-Area Motion Imagery, Full-Motion Video and Immersive Video System) have created a great problem for the intelligence community that inverts the old problem of a lack of data. We now have more video data than we can process and analyze. Turning data into information and subsequently analyzing this information is the focus of this panel discussion. HOW do we analyze all of this data? WHAT do we consider analysis and how much of this analysis can today be automated? During this session we will explore the current state-of-the-art and future trends for analyzing WAS/WAPS/WAMI/FMV/IVS.

**Socio-Cultural Dynamics: Lessons Learned**

1:30 – 3:20 p.m. *Grand Hyatt – Texas Ballroom, Salon C*

This session is designed to let implementers of socio-cultural projects across diplomacy, development, defense and intelligence communities, convey the lessons learned about the challenges of geospatially enabling socio-cultural data. Leaders of operationally focused programs and analytically versed practitioners supporting the operators will capture what works, what does not, and where we should be going as a community in the future as Human Terrain confronts Advanced Analytics. This includes lessons from USSOCOM’s Skope Cell, the Human Terrain System, the Culture Map program, USCENTCOM Human Terrain, and other path breaking programs.

**Mobile GEOINT Applications**

*Grand Hyatt – Texas Ballroom, Salon D*

Mobile devices such as smart phones and tablets have become ubiquitous and are starting to provide powerful new platforms for GEOINT-on-demand. This presents compelling opportunities as well as significant challenges. Speakers in this session will address technical and research issues associated with mobile GEOINT applications from government, developer, academic, and commercial perspectives.

**Space-Time Analytics**

*Grand Hyatt – Texas Ballroom, Salon F*

Space and time provide the basic analytical framework to make connections among observations and knowledge to aid understanding and improve decision making. From natural processes to human activities, the ability to detect patterns and relationships in space and time holds the key to drawing insights from seemingly chaotic and random occurrences. Expanding beyond transactional and time-step analysis of temporal patterns is necessary to leverage time for advancing spatiotemporal integration. This session includes short presentations on current research in space-time analytics and an interactive panel-led discussion on research needs to address various GeoINT related foci, such as D12E, new data sources (crowd sourcing), social-cultural applications, and activity-based intelligence.

**Socio-Cultural Dynamics: Enabling Technologies**

3:30 – 5:20 p.m. *Grand Hyatt – Texas Ballroom, Salon C*

This session is designed to examine practitioners and technology enablers who are pushing the bounds of Human Socio Cultural technologies, from the social science to the technology, from organizing DoD’s big data to enabling open source
technologies to speed the rate of development and understanding of Human Terrain. These panel members are designing and building the Socio Cultural technologies across DoD, and have a unique technical perspective on geospatially- and temporally-enabled technologies being implemented across DoD and the Intelligence Community. These technologists and program managers will discuss what works and how to implement these technologies in the DoD and Intelligence Community.

**People and Technology: New Sensing Paradigm for Geospatial Data Collection and Integration**

*Grand Hyatt – Texas Ballroom, Salon D*

Technologies which are easy to use by individuals not trained in geospatial tools and techniques are now prevalent and have opened up new sources of geospatial data. In addition, they have provided new and emerging ways of collecting not only geospatial data but of integrating location with other types of information. Social media, Smart Phones, and other mobile devices are creating new ways in which data and information is being gathered by individuals and is creating opportunities and challenges for the geospatial community in building effective ways of using these new capabilities to help address public purpose needs in a sustained long-term infrastructure.

**Big Data – The Engine for Future GEOINT Analytics**

*Grand Hyatt – Texas Ballroom, Salon F*

The technology pioneered by Google earlier this century is starting to impact the way conduct GEOINT analytics. There isn’t an online business with the scale of GEOINT that doesn’t use HADOOP to power its success; companies like Facebook, Twitter, Amazon rely on Big Data to provide the online experience that leverage massive amounts of data in a way that makes our lives better. We know the technology is powerful, but there are many questions to answer. How do we get started? How is security impacted? How do I interact with other agencies? Who is responsible for managing the data? Our panel will discuss these questions and more, and we invite your input (#GEOINTBigData).

October 16, 2011


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| 8:00a | **Allder Golf Classic** (8:00a - 4:00p, The Palmer Course La Cantera - Buses depart the Marriott Rivercenter at 6:30 AM)  
Tee up your week at the GEOINT 2011 Symposium with a round of golf and innumerable networking opportunities at the Allder Golf Classic. Named in honor of William R. Allder Jr., the golf tournament proceeds help fund the annual USGIF Scholarship Program, which supports students pursuing education excellence in fields related to the geospatial intelligence tradecraft. |
<p>| 9:00a | Pre-Symposium Science &amp; Technology Forum: Intro &amp; Keynote (9:00a - 9:30a, Grand Hyatt - Texas Ballroom, Salon A&amp;B) |</p>
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<td>• Dr. Curt Davis, Professor of Electrical &amp; Computer Engineering and Director of the Center for Geospatial Intelligence, University of Missouri</td>
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<td>• Dr. Dave Messinger, Associate Research Professor, Center for Imaging Science, Rochester Institute of Technology</td>
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<td>• Dr. Chris Olsen, Professor, Remote</td>
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<td>• CW5 Michael A. Harper, U.S. Army, Chief, Tactical Source and Enterprise Solutions Directorate &amp; Military Deputy to the Director, U.S. Army Geospatial Center (AGC)</td>
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<td>• Elizabeth Lyon, Geographer, Engineer Research and Development Center, U.S. Army Corps of Engineers</td>
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<td>• Dr. Dan Plafcan, Policy Analyst and Portfolio Manager, Office of the Under Secretary of Defense</td>
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<td>Moderators: Dr. Todd S. Bacastow, Professor of Practice for Geospatial Intelligence, Penn State World Campus; and Susan Kalweit, Principal, Booz Allen Hamilton</td>
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<td>• COL Steven D. Fleming, U.S. Army, Academy Professor, United States Military Academy</td>
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<td>• Will Hopkins, Deputy Director, NGA College, National Geospatial-Intelligence Agency (NGA)</td>
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<td>• Dr. Richard G. Johnson, Lead Associate, Booz Allen Hamilton</td>
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http://semanticommunity.info/A_Quint-Cross_Information_Sharing_and_Integration
Updated: Wed, 23 Sep 2015 06:46:29 GMT
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<td>Moderator: Darryl Murdock, Ph.D., Intelligence Community Account Manager, Esri</td>
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<td>John Herring, President and CEO, iMove, Inc</td>
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<td>GEN Brian A. Keller, U.S. Army (Ret.), Vice President and Senior ISR Strategist, Intelligence Systems Business Unit, ISR Group, SAIC</td>
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<td>Stephen W. Long, Director, ISR &amp; BMC2 Integration and Technology, Northrop Grumman</td>
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<td>Charlie Morrison, Director, Business Development, IS&amp;GS Security, Lockheed Martin</td>
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<td>Tom Murdoch, Senior Advanced Programs Manager, Geospatial Intelligence, Government Communications Systems Division, Harris Corp.</td>
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<td>Dr. Paul Runkle, Chief Executive Officer, Signal Innovations Group</td>
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opportunities as well as significant challenges. Speakers in this session will address technical and research issues associated with mobileGEOINT applications from government, developer, academic, and commercial perspectives.

Moderators: Mike Dean, Principal Engineer, Raytheon BBN Technologies; Jack Greenspan, Senior Associate, Booz Allen Hamilton; and Terry Kanka, Software Systems Engineer, Principal Staff, The MITRE Corp.

Panelists:
- Jay Crossler, Principal Systems Engineer, The MITRE Corp.
- George Demmy, Chief Technology Officer, TerraGo Technologies
- COL Mike Hendricks, U.S. Army, Associate Professor of Geospatial Information, United States Military Academy
- Andrew Jenkins, Research Geographer, Data Representation Branch, U.S. Army Geospatial Center (AGC)

...data. Leaders of operationally focused programs and analytically versed practitioners supporting the operators will capture what works, what does not, and where we should be going as a community in the future as Human Terrain confronts Advanced Analytics. This includes lessons from USSOCOM's Skope Cell, the Human Terrain System, the Culture Map program, USCENTCOM Human Terrain, and other path breaking programs.

Moderator: Al Di Leonardo (LTC, U.S. Army, Ret.), President and Chief Executive Officer, The HumanGeo Group

Panelists:
- Douglas E. Batson, Human Geographer, National Geospatial-Intelligence Agency (NGA)
- Julia Bowers, General Manager and Principle Senior Analyst for Human Terrain, SCIA
- Brian Efird, Ph.D., Senior Research Fellow, Center for Complex Operations, National Defense University (NDU)

...data sources (crowd sourcing), social-cultural applications, and activity-based intelligence.

Participants:
- Moderators: Dr. Kitty Hancock Co-director, Center for Geospatial Information Technology and Associate Professor, Department of Civil and Environmental Engineering, Virginia Tech & May Yuan, Edith Kinney Gaylord Presidential Professor; Brandt Professor of Atmospheric and Geographic Sciences; Director, Geoinformatics Program; Director, Center for Spatial Analysis, University of Oklahoma
- Paul Dampier, Multi-Int Solutions Architect, Bit Systems
- Daniel Griffith, University of Texas at Dallas
- Sergio J. Rey, Professor of Geographical Sciences, Arizona State University
- Arnold Boedihardjo, Research Scientist, Engineer Research and Development Center (Topographic Engineering Center),
3:30p

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<th>Time</th>
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<tr>
<td>3:30p</td>
<td>PSST Forum — People and Technology: New Sensing Paradigm for Geospatial Data Collection and Integration (3:30p - 5:20p, Grand Hyatt - Texas Ballroom, Salon D)</td>
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<td>Technologies which are easy to use by individuals not trained in geospatial tools and techniques are now prevalent and have opened up new sources of geospatial data. In addition, they have provided new and emerging ways of collecting not only geospatial data but of integrating location with other types of information. Social media, Smart Phones, and other mobile devices are creating new ways in which data and information is being gathered by individuals and is creating</td>
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<td>PSST Forum — Socio-Cultural Dynamics: Enabling Technologies (3:30p - 5:20p, Grand Hyatt - Texas Ballroom, Salon C)</td>
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<td>This session is designed to examine practitioners and technology enablers who are pushing the bounds of Human Socio-Cultural technologies, from the social science to the technology, from organizing DoD’s big data to enabling open source technologies to speed the rate of development and understanding of Human Terrain. These panel members are designing and building the Socio-Cultural technologies across DoD, and have a unique technical perspective on geospatially- and temporally-enabled technologies being</td>
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<td></td>
<td>PSST Forum — Big Data: The Engine for Future GEOINT Analytics (3:30p - 5:20p, Grand Hyatt - Texas Ballroom, Salon F)</td>
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<td>The technology pioneered by Google earlier this century is starting to impact the way conduct GEOINT analytics. There isn’t an online business with the scale of GEOINT that doesn’t use HADOOP to power its success; companies like Facebook, Twitter, Amazon rely on Big Data to provide the online experience that leverage massive amounts of data in a way that makes our lives better. We know the technology is powerful, but there are many questions to answer. How do we get started? How is security impacted? How do I interact with other</td>
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</table>
opportunities and challenges for the geospatial community in building effective ways of using these new capabilities to help address public purpose needs in a sustained long-term infrastructure.

Panelists:

- Moderators: John Moeller, President, JJ Moeller & Associates & Dr. Anthony Stefanidis Associate Professor, ESGS Department and Director, Center for Geospatial-Intelligence, George Mason University
- Matt Ball, Co-Founder and Editor, Vector1 Media
- Kari Craun, Director, National Geospatial Technical Operations Center, United States Geological Survey (USGS)
- Ben Tuttle, Project Scientist, InnoVision Directorate, National Geospatial-Intelligence Agency (NGA)

implemented across DoD and the Intelligence Community. These technologists and program managers will discuss what works and how to implement these technologies in the DoD and Intelligence Community.

Moderator: Jeff Jonas, Chief Scientist, IBM Entity Analytics IBM Distinguished Engineer, IBM Software Group

Panelists:

- Lt Col Jason Bartolomei, U.S. Air Force, Capitol Hill Fellow
- Dr. Ivy Estabrooke, Assistant Director for Human Social Cultural and Behavioral Technologies, Office of the Secretary of Defense (OSD)
- Terence J. Meyer, Chief Information Officer, Intelligence Directorate, United States Central Command (CENTCOM)
- John A. Marshall, Defense Intelligence Enterprise, Joint Staff Intelligence Directorate, Joint Chiefs of Staff

agencies? Who is responsible for managing the data? Our panel will discuss these questions and more, and we invite your input (#GEOINTBigData).

Participants:

- Moderators: Chris Powell, Director Geospatial Programs, NT Concepts & Dave Crandall, Principal, Booz Allen Hamilton
- Louis Perrochon, Engineering Director, Google
- Elizabeth Mazzella, Director of the Joint Operations Integration Office, Production Directorate, National Geospatial-Intelligence Agency (NGA)
- Bob Gourley, Chief Technology Officer, Crucial Point LLC
- Sri Reddy, Trusted Concepts
7:00p

**Six Flags Over Texas Welcome Reception at Sunset Station - Buses depart the Grand Hyatt at 6:45 p.m. — Casual Attire Recommended (7:00p - 10:00p, Sunset Station)**

Join your colleagues at Sunset Station for the GEOINT 2011 Welcome Reception. Providing the event’s theme, USGIF presents Six Flags Over Texas, a tribute to the unique blend of culture, cuisine and celebration giving Texas its distinct character.

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**October 17, 2011**


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<tr>
<th>Time</th>
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<tr>
<td>8:00a</td>
<td>Presentation and Posting the Colors (8:00a - 8:15a, Ballroom A)</td>
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<tr>
<td>8:15a</td>
<td>Opening Ceremony and Welcome — K. Stuart Shea, CEO &amp; Chairman of the Board, USGIF (8:15a - 8:30a, Ballroom A)</td>
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| 8:30a | Master of Ceremonies - The Honorable Joan A Dempsey (8:30a - 8:45a, Ballroom A)  
Joan Avalyn Dempsey is a senior vice president at Booz Allen Hamilton where she leads the firm’s intelligence business in central Maryland. Previously, she led the firm’s intelligence business in the Department of Homeland Security and the Office of the Director of National Intelligence. During a 25-year career in the federal government, Dempsey held political appointments twice: first, in the Clinton Administration upon Senate Confirmation, she served as the deputy director of Central Intelligence for Community Management; and, in the Bush Administration as the executive director of the President’s Foreign Intelligence Advisory Board. Dempsey also spent 17 years as a senior civilian in the Department of Defense as deputy director of intelligence at the Defense Intelligence Agency, as director of the General Defense Intelligence Program, and as the deputy assistant secretary of defense for intelligence and security. |
<p>| 8:45a | The Honorable James R. Clapper Jr., Director of National Intelligence (8:45a - 9:30a, Ballroom A) |
| 9:30a | Gen. Keith B. Alexander, U.S. Army, Commander, U.S. Cyber Command (USCYBERCOM, and Director, National Security Agency/Chief, Central Security Service (NSA/CSS) (9:30a - 10:15a, Ballroom A) |
| 10:15a | Break (10:15a - 10:45a, Ballroom A Lobby) |</p>
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<tr>
<td>10:45a</td>
<td>Mr. Bruce A. Carlson, Director, National Reconnaissance Office (NRO) (10:45a - 11:30a, Ballroom A)</td>
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<tr>
<td>11:00a</td>
<td>Exhibit Hall Open (11:00a - 6:00p, Henry B. Gonzalez Convention Center Halls A&amp;B) Come see the products, services and solutions the Defense, Intelligence, and Homeland Security has to offer. GEOINT 2011 delivers more than 100,000 square feet of exhibits from over 200 exhibiting organizations</td>
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<tr>
<td>11:30a</td>
<td>Ms. Letitia A. Long, Director, National Geospatial-Intelligence Agency (NGA) (11:30a - 12:15p, Ballroom A)</td>
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<tr>
<td>12:30p</td>
<td>Lunchtime Workshop: GEOINT Support for Crisis Management - Operational Experience, Development Strategy, and Cooperation Perspective for International Actors (12:30p - 2:00p, Room 204) GEOINT has become an essential support tool for crisis management in the global arena. This international panel, chaired by the European Union Satellite Centre (EUSC), will discuss operational experience, strategic lessons-learned and the necessary institutional framework for effective cooperation involving such high-profile GEOINT organizations as the National Geospatial-Intelligence Agency (NGA), the Intelligence Fusion Centre (IFC, tbc) and the United Nations Department of Peacekeeping Operations (DPKO, tbc). The different missions of these key actors, their individual success stories and key leverage points, as well as their views on strategies to meet future challenges are presented. The panelists will discuss the increasing relevance of close and trustful cooperation for effective support to international missions and operations, and the special importance of clear legal frameworks as a necessary precondition. Examples for multilateral coordination of workload and data sharing will be presented. In this context, international cooperation will be addressed. Lunch in Exhibit Hall(12:30p - 2:00p, Exhibit Halls A &amp; B)</td>
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as a not only possible, but in fact necessary to overcome the ever-increasing demand for GEOINT services, as well as a possible answer to the constraining effects of budgetary limitations on operational effectiveness.

Participants:

Adriano Baptista, Head of the Operations Division, European Union Satellite Centre (EUSC)
Robert Lamon, Senior GEOINT Advisor, Office of International Affairs, National Geospatial-Intelligence Agency (NGA)
Tomaž Lovrenčič, Director, European Union Satellite Centre (EUSC)

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<tr>
<td>2:00p</td>
<td>The Future of Commercial Remote Sensing: A CEO Perspective (2:00p - 4:00p, Room 103)</td>
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|       | The commercial remote sensing industry has experienced tremendous growth in the past decade. First considered an innovative way for the U.S. government to shore up its national imaging collection ability, the CRS industry now has a strong international commercial market. What is next for the CRS industry? Will it push technological boundaries and build more sophisticated satellites or expand into other business services? Hear various
|       |                                                                      |
|       | A year after NGA launched its new vision at GEOINT 2010, key NGA leaders will describe significant accomplishments thus far and discuss the way ahead for realizing the vision in the next couple of years. Panel members — who include representatives from the Vision Implementation Team, Analysis and Production, InnoVision, and Acquisition — also will answer audience questions to provide
|       |                                                                      |
|       | The GEOINT Dimension of Socio-Cultural Dynamics (2:00p - 4:00p, Room 001) |
|       | The geospatial dimension of socio-cultural dynamics reaches far beyond “human terrain.” This session sheds light on the wide range of national security activities that require geospatial and temporal comprehension of a deluge of socio-cultural information and data concepts confronting the US Government. Panelists include leaders from the diplomacy/development community, the defense/intelligence community, and others

http://semanticommunity.info/A_Quint-Cross_Information_Sharing_and_Integration
Updated: Wed, 23 Sep 2015 06:46:29 GMT
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greater insight into and context for NGA’s vision.

Introductory Keynote: Michael A. Rodrigue, Director, Vision Integration Team, National Geospatial-Intelligence Agency (NGA)

Moderator: Keith L. Barber, Director, National System for Geospatial-Intelligence Expeditionary Architecture IPO, National Geospatial-Intelligence Agency (NGA)

Participants:
- Ryan Johnson, Chief Executive Officer, RapidEye AG
- Marcello Maranesi, Chief Executive Officer, e-GEOS
- Matthew O’Connell, Chief Executive Officer, President and Director, GeoEye
- John Schumacher, VP SpaceEADS NA & CEO Astrium US
- Herbert F. Satterlee III, Chief Executive Officer, MDAlInformation Systems
- Jeffrey (Jeff) Tarr, President and Chief Executive Officer, DigitalGlobe
- Dr. Ann M. Carbonell, Director, National System for Geospatial-Intelligence Open IT Environment Initiative Office of the Director, National Geospatial-Intelligence Agency (NGA)
- Tonya M. Crawford, Director, Acquisition Contracts, National Geospatial-Intelligence Agency (NGA)
- Daniel M. Cotter, Chief Technology Officer, Office of the Chief Information Officer, Department of Homeland Security (DHS)

experienced with harnessing the geospatial dimension of socio-cultural dynamics to efficiently and effectively drive security outcomes.

Moderator: Richard J. O’Lear, Chief, Intelligence Community Strategic Studies Group (ODNI/CIA)

Participants:
- Dr. Gary Condon, Science & Technology Advisor, ISR Task Force, Office of the Under Secretary of Defense for Intelligence (OUSD)
- Dr. Joseph F. Fontanella, U.S. Army Geospatial Information Officer and Director, Army Geospatial Center (AGC)
- John. P. Goolgasian, Deputy Lead for Online GEOINT Services, National Geospatial-Intelligence Agency (NGA)
- COL Sharon R. Hamilton, U.S. Army, Director, Human Terrain System, Training and Doctrine Command (TRADOC)
- Reginald Dean Hyde, Deputy Under Secretary of Defense (Intelligence & Security), Office of the
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<tr>
<td>4:00p</td>
<td>Exhibit Hall Networking Reception (4:00p - 6:00p, Exhibit Halls A &amp; B)</td>
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**October 18, 2011**


- **8:00a**
  - USGIF Awards Presentation — Keith J. Masback, USGIF President (8:00a - 8:15a, Henry B. Gonzalez Convention Center)
  - **CUT OFF**: recognizes the exceptional work of the geospatial intelligence tradecraft’s brightest minds.

  The Intelligence Achievement Awards recognize outstanding accomplishments in the tradecraft by an individual or team from the military, government and industry. The Academic Achievement Award commends the achievements of a top graduate of a nationally recognized geospatial intelligence academic program. The Academic Research Award commends an organization that demonstrates the top geospatial intelligence program or project.

  Recipients are acknowledged on stage during the general session of the annual GEOINT Symposium.

- **8:15a**
  - Master of Ceremonies - MG John M. Custer, U.S. Army (Ret.) (8:15a - 8:30a, Ballroom A)

- **8:30a**
  - Gen. Douglas Fraser, USAF, Commander, U.S. Southern Command (SOUTHCOM) (8:30a - 9:15a, Ballroom A)
Interoperability Tech Talks (9:00a - 10:15a, Tech Talks Theater, Exhibit Hall B)

CUT OFF: an interoperable environment? Learn from others experience and knowledge by attending the Interoperability Tech Talks at the GEOINT Symposium.

9 a.m.
Harvesting Named Geographic Features from Raster Maps
Craig A. Knoblock, USC

9:15 a.m.
Accessing Massive 3D Image Datasets
Geoffrey Peters, Urban Robotics

9:30 a.m.
Harvesting Open-Source Geospatial Information with Open-Source Tools
Denise Bleakly, Karl Horak, Michael McDaniel, Sandia National Labs

9:45 a.m.
Large Scale Fault Tolerant Preprocessing and Distribution of Map Imagery
Andrew Levine, TASC/TexelTek

10 a.m.
Effectively Managing Tremendous Data Growth with Limited Resources
Pat Thomas, Quantum

Integrating Intelligence (9:15a - 10:15a, Ballroom A)

This idea of Forging Integrated Intelligence isn’t DNI- or even IC-centric but rather applicable and beneficial to all charged with protecting the interests of the United States and its Allies.

Moderator: MG John M Custer, U.S. Army (Ret.)

Participants:
- James G. Clark, Director, Intelligence, Surveillance and Reconnaissance Innovations; Deputy Chief of Staff for ISR, Headquarters U.S. Air Force
- MG Mary A. Legere, U.S. Army, Commanding General, United States Army Intelligence and Security Command (INSCOM)
- Ed Mornston, Director, Joint Intelligence Task Force – Combating Terrorism, Directorate for Analysis, Defense Intelligence Agency (DIA)
- Douglas J. Naquin, Director, DNI Open Source Center
- Kshemendra Paul, Program Manager, Information Sharing Environment, Office of the Director of National Intelligence (ODNI)

10:15a
Networking Break (10:15a - 10:45a, Ballroom A Lobby)
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<tr>
<td>10:45a</td>
<td>The Honorable W. Craig Fugate, Administrator, Federal Emergency Management Agency (FEMA) (10:45a - 11:30a, Ballroom A)</td>
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<tr>
<td>11:00a</td>
<td>Exhibit Hall Open (11:00a - 6:00p, Henry B. Gonzalez Convention Center Halls A&amp;B) Forging Collaboration in the Coalition Environment (11:30a - 12:30p, Ballroom A)</td>
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<tr>
<td>11:30a</td>
<td>Forging intelligence integration is not only an issue for the security of the United States, but also for our coalition and allied partners. Enabling coalition operations is critical to successful operations in every major U.S. Military operation today. Creating a sustainable network and a fully integrated intelligence environment for real time collection and analysis to impact operations is achievable. The concept of “Need to Share” overrides the concept of “Need to Know” in order to create effective partners and successful coalition operations. MG Michael Flynn will lead a panel of senior officers from Canada, Australia and the United Kingdom, as they discuss the challenges faced integrating intelligence in the Afghanistan coalition environment.</td>
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<td>Participants:</td>
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<td>- Moderator – LTG Michael T. Flynn, U.S. Army, Assistant Director of National Intelligence for Partner Engagement, ODNI</td>
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<td>- Brigadier Nick R. Davies, CBE MC, Commander, Intelligence Collection Group, United Kingdom</td>
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<td>- Brigadier David Colin Gillian, CDFLO to U.S. Joint Chiefs of Staff, Australia</td>
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<td>- Major-General Vance J.H., OMM, MSC, CD, Director of Staff, Strategic Joint Staff, Canada</td>
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<tr>
<td>12:30p</td>
<td>Lunchtime Workshop: Commercial SAR Satellite Imagery (12:30p - 2:00p, Room 202) Lunchtime Workshop: Maritime SAR (12:30p - 2:00p, Room 204) Lunch in Exhibit Hall (12:30p - 2:00p, Exhibit Halls A &amp; B)</td>
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<td>USGIF’s Commercial Synthetic Aperture Radar Satellite Working Group (CSARS WG) will present an overview about the latest developments in SAR satellite imaging and natural coherence of radar illumination. The general SAR user will gain an understanding of GEINT trends and opportunities associated with the Maritime domain. Topics will include digital production and distribution of Safety of Navigation and Notice to Mariners data, the Maritime Watch, Intelligence, Surveillance and Reconnaissance in the Maritime and</td>
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how SAR produces images and the generation of sophisticated products such as elevation models, subsidence maps or change detection applications. Attendees will also be presented an integrated overview of the three commercial SAR systems – COSMO-SkyMed, TerraSAR-X and RADARSAT.

Moderator: John Moeller, John Moeller, President, JJ Moeller & Associates

Panelists:
• Dr. Oliver Lang, Senior Application Development Manager, Astrium GEO-Information Services – Infoterra GmbH
• Sam Park, Ph.D., Director, Radar Products & Services, Geospatial Division, MDA Information Systems Inc.
• Luca Pietranera, Head, COSMO-SkyMed Product Innovation and Technical Support, e-GEOS

Expeditionary operations; Tasking, Collection, Exploitation, Processing and Dissemination for warfighters afloat and ashore; and new concepts of operations and the technologies the Maritime Intelligence Community anticipates will address current and future challenges. This panel offers GEOINT 2011 attendees the opportunity to converse with senior US government officials, examine the latest trends in Maritime GEOINT, and interact directly to senior leaders in the Maritime Intelligence Community.

Moderator: Paul Sartorius, Lead, Maritime and Expeditionary Systems Integration, Information Systems & Global Services–National, Advanced Programs, Lockheed Martin

Panelists:
• CAPT Raymond E. Chartier Jr., U.S. Navy, Director, Maritime Safety Office, National Geospatial-Intelligence Agency (NGA)
• CAPT Jose Nieves., U.S. Coast Guard, Deputy Director,
Crowd Sourcing Intelligence: A Look at International Disaster Relief & Recovery (2:00p - 4:00p, Room 001)

The concept of “human sensors” is quickly becoming reality as mobile devices become globally ubiquitous and increasingly enabled with GPS and Internet connectivity. This panel will explore the implications of this rapidly evolving geospatial technology for disaster and humanitarian relief efforts.

Moderator: Terrence Busch, Senior Intelligence Officer, Defense Intelligence Agency (DIA)

Panelists:
- John Crowley, Fellow, Harvard Humanitarian

GEOINT in Support of Homeland Security (2:00p - 4:00p, Room 103)

Coordination between Federal, States, Local, and Commercial organizations for response to domestic issues, such as natural disasters and homeland protection, is still a challenge. Data sharing and cooperation among these organizations has increased; however, the interactions between each agencies systems/databases are still not always defined, data models are not established to promote easy sharing of data, and data is not seamlessly used between applications.

Moderator: Mr. Douglas R. Cavileer, Chair, Interagency Council for Defense Intelligence Information Enterprise (DI2E) (2:00p - 4:00p, Ballroom A)

Mr. Kevin Meiners, Deputy Undersecretary of Defense (Portfolio, Programs and Resources), will introduce a panel to answer the most “frequently asked questions” regarding DI2E and to share insights about the DI2E framework. Panel members will include representatives from OSD, the Military Services, Combat Support Agencies, and the Intelligence Community. The panel will respond to questions such as: What is the DI2E; how do I plug into it; and how will cloud computing be leveraged to build the objective capability?
Initiative’s Crisis Dynamics Program; Analyst, National Defense University (NDU)

- Todd Huffman, Private Consultant
- Carl J. Stuekerjuergen, Senior Technical Advisor, Directorate of Intelligence, Central Intelligence Agency (CIA)
- Nathaniel Wolpert, Disaster Response Team Lead, Domestic Operations East/ Homeland Security Division, National Geospatial-Intelligence Agency (NGA)

Applied Homeland Security Technology (ICAHST)

Participants:
- Dr. Suzette Kimball, Deputy Director, U.S. Geological Survey and Chair, Civil Applications Committee (CAC) (invited)
- Dr. John S. Morgan, Command Science Advisor, U.S. Army Special Operations Command (USASOC)

Participants:
- Edward Lane, Director of the Information Sharing Group, Office of Mission Framework & Services, Ground Enterprise Directorate, National Reconnaissance Office
- Richard E. Matthews, Deputy Director, Exploitation and Collaboration Division, Intelligence, Surveillance and Reconnaissance Task Force
- Richard H. Radcliffe, Director, International Intelligence Technology and Architectures, OUSDI/ISPE
- John A. Snevely Jr., DCGSF Family of Systems, Office of the Under Secretary of Defense (Intelligence)
- Neill Tipton, Director, Information Sharing and Collaboration, Intelligence, Surveillance, and Reconnaissance Task Force
- Kevin L. West, Deputy Director, Intelligence, Surveillance and Reconnaissance Enterprise Programs, Office of the Under Secretary of Defense (Intelligence)
Interoperability Tech Talks (4:00p - 5:15p, Tech Talks Theater, Exhibit Hall B)

Have you battled through developing and implementing interoperable services and solutions? Do you want to hear lessons learned, best practices, or just tips and tricks for standing up capabilities and functioning in an interoperable environment? Learn from others experience and knowledge by attending the Interoperability Tech Talks at the GEOINTSymposium.

4 p.m.
Building an open application framework for the aggregation, analysis and dissemination of spatially referenced data sets
Matt McCue, Woolpert Inc.

4:15 p.m.
Architectures for Decision Making
Aristos Dimitriou and Dr. John Carbone, Raytheon

4:30 p.m.
Harmonizing Data to Meet Requirements forNIEM Data Exchange
Don Murray, Safe Software

4:45 p.m.
A Human Factors Analysis of the National Geospatial-Intelligence Agency’s Web Presence
Maura C. Lohrenz, Michael E. Trenchard and Stephanie A. Myrick, NRL

5 p.m.
U.S. Geological Survey and National Geospatial-Intelligence Agency Data Processing and Delivery Partnership
Terry B. Bobbie, Stinger Ghaffarian Technologies

7:00p
GEOWalk Corporate Hospitality Night (7:00p - 11:00p, San Antonio River Walk)
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| 8:00a | Arthur C. Lundahl Lifetime Achievement Award Presentation — Presented by K. Stuart Shea, CEO and Chairman, USGIF (8:00a - 8:30a, Ballroom A)  
The Arthur C. Lundahl Lifetime Achievement Award, previously called the USGIF Lifetime Achievement Award, is presented annually to someone who has dedicated their career to promoting the training and tradecraft of geospatial intelligence.  
Join USGIF on Wednesday morning to honor the life’s work of this year’s Arthur C. Lundahl Lifetime Achievement Award recipient.  
Past Lifetime Achievement Award Recipients:  
2010 – Mr. Jack Dangermond  
2009 – Mr. Charles E. Allen  
2008 – Mr. R. Evans Hineman  
2006 – The Honorable Jeffrey K. Harris  
2005 – Mr. William R. Alder Jr.  
2004 – Dr. Leo Hazlewood  
Master of Ceremonies — The Honorable Jeffrey K. Harris (8:30a - 8:45a, Ballroom A)  
CUT OFF: consultant.  
He is retired from Lockheed Martin, where he was a corporate officer and served as president of Lockheed Martin Missiles and Space and president of Lockheed Martin Special Programs. Prior to this, he served as president of Space Imaging, the first company to commercially provide high-resolution satellite imagery and information products of the Earth for cost-effective solutions to today’s global business needs. Before entering the private sector, Harris served with distinction in senior national leadership positions, including assistant secretary of the Air Force for Space; director, National Reconnaissance Office and associate executive director of the Intelligence Community Management Staff. In all of these capacities, he provided direct support to both the Secretary of Defense and the Director of Central Intelligence.  
| 8:30a | Dual Keynote — Rep. Mike Rogers, R - MI, Chairman, House Permanent Select Committee on Intelligence (HPSCI); and Rep. C.A. Dutch Ruppersberger, D-MD, Ranking Member, House Permanent Select Committee on Intelligence (HPSCI) (8:45a - 9:45a, Ballroom A)  
The House Permanent Select Committee on Intelligence (HPSCI) is the primary committee in the U.S. House of Representatives charged with the oversight of the United States Intelligence Community. Hear from U.S. Reps. Rogers and...
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<td>Ruppersberger, together on stage at the same time, about their vision for the HPSCI and the IC.</td>
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<td>9:00a</td>
<td>Interoperability Tech Talks (9:00a - 10:30a, Tech Talks Theater, Exhibit Hall B)</td>
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<td>IC Executive CIO Board: An Integrated Intelligence Enterprise (9:45a - 11:15a, Ballroom A)</td>
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<td>CUT OFF: national and homeland security objectives.</td>
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<td>Moderator: Al Tarasiuk, Chief Information Officer, Office of the Director of National Intelligence (ODNI)</td>
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<td>Participants:</td>
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<tr>
<td>9:45a</td>
<td>• Dave DeVries, Principal Director, Department of Defense Chief Information Officer Office (DoD)</td>
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<td>• Dean Hall, Deputy Chief Information Officer, Federal Bureau of Investigation (FBI)</td>
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<td>• Keith Littlefield, Chief Information Officer, National Geospatial-Intelligence Agency (NGA)</td>
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<td>• Kelly Miller, Deputy Chief Information Officer, National Security Agency (NSA)</td>
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<td>• Grant M. Schneider, Deputy Director for Information Management and Chief Information Officer, Defense Intelligence Agency (DIA)</td>
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<td>• Jeanne, Tisinger, Chief Information Officer, Central Intelligence Agency (CIA)</td>
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<td>• Jill Singer, Chief Information Officer, National Reconnaissance Office (NRO)</td>
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<td>11:00a</td>
<td>Exhibit Hall Open (11:00a - 5:00p, Henry B. Gonzalez Convention Center Halls A&amp;B)</td>
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<td>Come see the products, services and solutions the Defense, Intelligence, and Homeland Security has to offer. GEOINT 2011 delivers more than 100,000 square feet of exhibits from over 200 exhibiting organizations</td>
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<td>11:15a</td>
<td>Gen. C. Robert &quot;Bob&quot; Kehler, Commander, U.S. Strategic Command (STRATCOM) (11:15a - 12:00p, Ballroom A)</td>
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<tr>
<td>12:00p</td>
<td>The Honorable Michael G. “Mike” Vickers, Under Secretary of Defense for Intelligence (USDI) (12:00p - 12:45p, Ballroom A)</td>
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<td>12:30p</td>
<td>Lunch in Exhibit Hall (12:30p - 2:00p, Exhibit Halls A &amp; B)</td>
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<td>2:00p</td>
<td>Demonstration of Military Relevant Open Source Geospatial Software (2:00p - 3:30p, Ballroom A)</td>
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<td>Hosted by the Open Source Geospatial</td>
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<td>Open Source GEOINT: We’ve Got Apps for That! (2:00p - 4:00p, Room 001)</td>
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<td>This panel explores four examples of Open Cloud Computing and the Intelligence Mission (2:00p - 4:00p, Room 103)</td>
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<td>Over the past year, cloud computing has been</td>
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http://semanticommunity.info/A_Quint-Cross_Information_Sharing_and_Integration
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<td>Foundation (OpenGEO), Military Open Source Software Working Group (MIL-OSS), and the USGIF Tradecraft Subcommittee, this session showcases open source geospatial software programs and highlights use by government, military and intelligence agencies. The discussion provides the opportunity for attendees to interact with government users and representatives and all tools showcased are available for download at no charge for conference attendees.</td>
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<td>Source GEOINT information services that are leading the way in enabling integrated intelligence. Join your community of practice peers in discovering what already is underway and in contributing to the conversation about where we collectively and individually need to go. Help steer the direction of future integrated, interoperable activities!</td>
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<td>Moderators: John Scott, Senior Systems Engineer &amp; Open Technology Lead, RadiantBlue; Co-Chairman, Open Source for America; and Chris Tucker, Principal, Yale House Ventures</td>
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<td>Participants:</td>
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<td>• Dr. Ann M. Carbonell, Director, National System for Geospatial-Intelligence Open IT Environment Initiative Office of the Director, National Geospatial-Intelligence Agency (NGA)</td>
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<td>• Dr. Joe Fontanella, U.S. Army Geospatial Information Officer, and Director, U.S. Army Geospatial Center (AGC)</td>
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<td>• Jane Kuhar, Program Manager, DNI Open Source Center (OSC)</td>
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<td>desribed as the next wave in information technology, the answer to all budget shortfalls and a throwback to circa 1960 timesharing computer services. Since this broad range of viewpoints confuses us all, this session will feature a panel of leading IC technologist who will help us understand cloud computing from the viewpoint of those focused on meeting today's dynamic information access requirements. Private, public and hybrid cloud approaches from both government and commercial providers will be discussed and debated.&quot;</td>
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<td>Moderator: Becky S. Aiken, Functional Management Executive for Research and Development, National Geospatial-Intelligence Agency (NGA)</td>
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<td>• Bob Gourley, Founder &amp; Chief Technology Officer, Crucial Point LLC; Editor, CTOVision.com</td>
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<td>• Dr. Robert C. Norris, Director, Enterprise Architecture and Standards, Office of the Chief Information</td>
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<td>Moderator: Kevin L. Jackson, General Manager, Cloud Services, NJVC</td>
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<td>3:00p</td>
<td>Exhibit Hall Networking Reception <em>(3:00p - 5:00p, Exhibit Halls A &amp; B)</em></td>
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<td>7:00p</td>
<td><strong>That ’70s Closing Celebration with The Boogie Knights</strong> — Casual attire is recommended for this event. <em>(7:00p - 10:00p, Henry B. Gonzalez Convention Center, Ballroom A)</em></td>
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The Boogie Knights have inherited a worldwide reputation, performing on various MTV programs and major sporting events, live shows across the nation and overseas, as well as appearances on network television shows and films. Complete with choreography, polyester, afro’s and bell bottoms the Boogie Knights are heralded as “The greatest disco revival show in the world.”

Make sure to book your return flights for Thursday, as you won’t want to miss this incredibly unique event!

### Speakers

W. Craig Fugate, Administrator, Federal Emergency Management Agency (FEMA)


Gen. Bruce A. Carlson, U.S. Air Force (Ret.), Director, National Reconnaissance Office (NRO)
The Honorable James R. Clapper Jr., Director of National Intelligence (DNI)


Ms. Letitia A. Long, Director, National Geospatial-Intelligence Agency (NGA)

NGA Public Affairs Office
For Immediate Release October 17, 2011
Director Letitia A. Long’s Keynote Speech (PDF)
GEOINT 2011 Symposium
San Antonio, Texas

Director Long: I will tell you, it is great to be here in San Antonio and back at GEOINT. We are off to a great start here this morning. DNI Clapper, General Alexander, Director Carlson – I've actually had three pretty good warm-up acts! I think those three really deserve a round of applause, not just for their presentations here this morning but for their collective service to our nation. (Applause.)

Director Long: And a big thanks to Stu Shea and Keith Masback for once again surpassing all expectations. More attendees, more exhibitors, more members of USGIF. We are so very fortunate that they are at the leadership of the U.S. Geospatial Intelligence Foundation. I will tell you, we at NGA are very thankful to have a foundation such as this that is working towards the furtherance of our very business. So we’re pretty darn lucky, and we know that.

This symposium follows on the heels of a number of very important events at NG and Director Clapper talked about Family Day. That was actually the culmination of a week of Celebration 2011 events. We started actually with Family Day in St. Louis, and then we had the formal dedication and ribbon cutting on our new headquarters, NGA Campus East. It is an outstanding facility. Again, we are so very fortunate. I don't think we'll have a BRAC like that one again anytime soon.

A facility that is purpose-built for our business; that encourages collaboration; that really helps us with forging integrated GEOINT and, therefore, forging integrated intelligence.

We also paid tribute to our former leaders. We had all four of the former directors there, all three of the former deputy directors there. Icons in our business.

We inducted five new members into our Hall of Fame, and hosting that ceremony and listening to what those individuals had done over their careers reminded me that the men and women of NGA are innovators, that they are truly there for service to our country just as you all in this audience are innovators and all about service to our country. So I know that our collective future is in very good hands.

This year's theme underscores how we meet our mission priorities – 4-D integrated intelligence. And you've heard a couple of folks, and even I mentioned it in the opening video that the Osama bin Laden operation was a prime example of integrated intelligence. Each agency brought its unique and complementary expertise to bear without regard to turf.
You heard Robert Cardillo mention when we can work without boundaries, when we can work as an integrated whole without even thinking about it, that's when we know we will have arrived, and I will tell you when we are operating that way, that's when we are at our best.

GEOINT as DNI Clapper said, is the very foundation. It's the lynchpin to integrated intelligence, at least I believe that. Why do I say that?

Because not only do we generate the means to visualize the environment and provide the basis for all to see the integrated intelligence, our core competency, the ability to think spatially and depict visually gives us that edge. It gives us an edge in analyzing data in spatial and temporal terms. It allows us to contribute to the larger intelligence picture by analyzing all types of GEOINT sources to anticipate what may happen, where it may happen, and why. And a key outcome of this integrated intelligence gives the policymaker, the warfighter, and the first responder more time to figure out what they may need to do to work on their responses.

Last year I told you that I wanted to fundamentally change the user's experience by putting the power of GEOINT in the hands of the user. Before I give you an update on our progress over the past year, I'd like to spend a few minutes and talk about the framework in which I think about the progress that we make, or put in other words, how we measure that progress.

Four areas, as you see up on the screen.

The first is content. What do I mean by content? Quite simply, it's all of our source material. It is national technical means that the NRO does such a superb job in providing to us. It is our commercial satellite imagery. It is airborne, both manned and unmanned. It is handheld imagery. It is foundation data. So it's all of that source material, but it's even more than that. It's what's in the analyst's shoebox. It's their Excel spreadsheet. It's a finished product that's hosted on one of our many many web sites or URLs. It's work that's in progress. What's the goal? The goal is to expose 100 percent of that content. Make it discoverable, make it accessible, and make it useable, so that's the first measure.

The second is an open IT environment and you've already heard the first three speakers talk to this. So providing an open IT environment where users can contribute information to that content I just talked about. Where applications easily reside and can be used against that content. An environment where you can bring your applications and operate on our content or someone else's. So an open environment, and oh by the way that's in all of our security classification domains. So extremely important, obviously, with the right controls, the [CION's] ability you heard about earlier, the identity management, the strong security layer, but nonetheless an open environment.

Third is customer service. It is all about the customer. It is all about the user's experience. Today we are very much a full service organization. We are embedded in our mission partner's footprint, we understand the priorities, we understand their concept of operations, we can often anticipate what they might need before they know they even need it. That's a good thing. It's also very manpower intensive.

It's also point-to-point. You ask a question, I provide the answer. You may not know that person over here has asked the same question and I've got an analyst over here who's answering it, and they're not necessarily collaborating. Am I exaggerating? Of course I am. We have a pretty good RFI tracking system. Our analysts do collaborate and we do post, we do push. But when analysts across the enterprise, not just NGA, but the NSG, the National System for Geospatial-Intelligence, the ASG, the Allied System for Geospatial-Intelligence, are working on a problem set, they may not know what everyone else is doing. We need that open IT environment to be able to expose all of that content.

What I want to do is take our customer service delivery model and turn it on its head and have a three-tiered delivery model. Self-service, assisted service, and full service. We will always be embedded with our mission partner. We will always be providing that full service experience to those who need it. But increasingly our mission partners, our customers, our users, whatever term you want to use, are increasingly GIS savvy. They want to be able to serve themselves. If they have easy access to our content and can work in an open environment where they can pull down an app and work a product for themselves, why wouldn't we encourage that?
For those of you who are over 30 in this audience, you remember the old AAA Trip-Tiks. You used to call AAA, or better yet you'd go to the office, sit down, you'd plan out your vacation. You'd get Point A to Point B. They'd take that nice big magic marker and map out all those routes. They'd tell you where the construction was going on and give you a detour. They'd show you where the rest stops are, where the good places were to spend the night, where you didn't want to stay. Kind of quaint, isn't it? When’s the last time anyone’s been to a AAA office to get a Trip-Tik? Well, okay, you can do it on-line now which is exactly what we do. We serve ourselves. We use Mapquest, we use Google Maps, we use our iPhone – hopefully when we’re not driving, or we use our GPS system. So that's what I’m referring to. The ability to serve ourselves for those things that make sense, for those things where content is easily available, the application has been developed.

Assisted service. Maybe you can reach in and find some of the content, even do a basic product but you need a little more help. So you enter into a chat with an NGA analyst, they are right there with a proactive assisted service, helping you find what you need. Helping you find a similar product. Like when you’re on Amazon.com, you pull down a book and the little bubble comes up and says, “Oh, you like that author? You might like these over here.” “Oh, that product worked for you? We’ve got a whole new suite of products that you may not know about.” So proactive assisted service. And as I said, we will always have that full service.

So when we’ve accomplished those first three, when our content is easily accessible, when it's useable, within an open environment, and we've got a different delivery model, those three are going to help us get to the deeper analytics because we're going to free up the time of our analysts to be focused on the so what, to be focused on adding the context, to be able to experiment with the new sensor data, the new phenomenologies, developing new analytic tools and techniques.

So that's the framework within which I have been measuring our progress over the last year. So why don't I tell you what we've been doing over the last year, or better yet, why don't I show you?

**Humanitarian assistance and disaster recovery is one of our key mission areas.** When a natural disaster is about to occur or has just occurred the first thing we will do is go into production mode and we will produce some very nice disaster atlases, map atlases, for FEMA for the urban search and rescue teams. They can show base maps and imagery, it might be before and after imagery. It just depends on what FEMA is looking for at the time. Our analysts can produce about 200 pages an hour. We produce those, we print, we bind, we ship or more than likely we take them with us because we deploy with the urban search and rescue teams or USAR teams.

A typical disaster is about 200,000 pages. You can do the math. We can sometimes be bottlenecked. So we started working on a suite of applications for our FEMA mission partner as Hurricane Irene was bearing down on the East Coast, and we thought what better way to beta test our apps then to just deploy with a bunch of mobile devices and so that's exactly what we did.

I am not a USAR team member and I have just been told that I am deploying to the Cape Hatteras area. So I've got my nice mobile device. And oh by the way, we did not print map atlases for Hurricane Irene. We went totally mobile.

So the first thing I'm going to do is pull up the disaster atlas. For purposes of this demo I have Cape Hatteras loaded in. We can do 6,000 pages an hour, the equivalent of 6,000 pages an hour on the mobile device once the information, of course, is loaded in.

So what I’m doing is expanding to the area of interest that I know I’m going. And oh by the way, with the static atlases, the team members would typically go to their two or three or five pages of interest and rip those out and go. The rest of the book, not used by anyone, and there are six or seven members on a team, so six or seven books for two or three or five pages.

In this event we uploaded, and what we did for Hurricane Irene is both pre and post. I'll just pull up the post. We'll immediately get the graded reference graphic, the map graphic, along with the imagery.
I will tell you what we would normally have done in an atlas is the coastline and about three miles in. If the weather guessers get the route of the hurricane wrong, we've got to go back to production. Not so here. I just go and pick up the different grid. So there you can see on the screen the base map along with the imagery. I can zoom in on the imagery. You can't do that with the static atlas.

Simple but very powerful.

The second application that I'd like to demonstrate is one we wish we had had when the tornado went through Joplin, Missouri, because in fact the devastation was so total that as the USAR teams got there, they actually couldn't find their way around. This is a picture of Joplin. Not only were whole areas just leveled, there were no street signs.

In this case my task is to find the nursing homes west of town and make sure they're okay, make sure they have basic facilities, or if they don't, vector the teams to that location. I know I'm going west of town, so I can easily key in on one of those. As I said, I'm headed in that direction, but there are no street signs. So I really don't know where I'm going. What we did, this uses the homeland security infrastructure program data that NGA hosts for the federal government working with a number of our mission partners – 451 layers of infrastructure. Information on medical facilities, schools, power plants, you name it. Anything that a first responder would need to know is loaded in here. We've geospatially enabled it and in this case we have just added a compass. So if I don't know where I'm going I just take my handy little device. I can use it in a car. I can use it if I need to get out and walk.

Again, simple but powerful. This will take me right to where I need to go.

If I didn't know the location on the map but I had the name of the facility, we have the information loaded in that way also.

Simple, powerful, up to date.

So speaking about up to date, as the teams are out in the field they need a way to get information back to the command post. The way the teams were working when we deployed with them into New York, you may recall the inland flooding that took place with Hurricane Irene. The teams that they were out surveying the landscape to update infrastructure for the first responders were actually using hand-held GPS devices, writing down the lat/long, writing down what they were observing. After several hours going back to the command post, handing that piece of paper over to the NGA analyst who deployed with them who would then type everything in, put it on a base map, pull some imagery, make copies, send that back out to the teams. You got that? Time intensive, not very efficient.

So on the fly while we were deployed with the FEMA teams we came up with a very simple application to allow entry of data from the field. So you put in your lat/long, you put in the date, time, you put in the key attributes that you want to get back to command central. I've got some things pre-loaded. We're in Texas so I'll be Task Force 1. I will add that event in that quickly. It's now entered in and everyone has access to it. You don't have to worry about driving back to the command post to get that information back in. And of course it shows up right back on the base map at the same time. You don't have to go through a whole database of things, but you can actually just see that the information has been entered in, or you can trust and believe it.

It really is that easy.

Okay, trust me. (Laughter.).

The big thing on this, a couple of takeaways. It was not only the fact that we made FEMA's life so much easier, much more efficient in what they were doing, but we freed up our analysts' time to do some deeper analytics. As the hurricane actually did take a path that wasn't predicted, we didn't have to go back into production mode. As we developed the app for data entry from the field, we didn't have to be doing all of that manual input and generation of maps. So our analysts were able to go to some of those 451 layers of the infrastructure program and actually pull up some information we've never looked at before. Swine lagoons. I didn't even know what a swine lagoon was until I was
getting an update from the folks who came back from the deployment and they were able to do some very, again, simple but elegant analysis on the location of the swine lagoons, looking at how the waters were rising and whether or not the water supply would be contaminated. That's a big deal to FEMA. And again, one of the layers in the [HSIP].

Another piece of analysis that we did was looking at mobile home communities. Where were they? Were they in the path of the hurricane? And so something clearly that FEMA would want to know so they could get there and evacuate the folks before the hurricane came through so it would give them a range of options instead of responding to a crisis afterwards. I think you'll hear from Ambassador Fugate tomorrow that while he is very pleased with the direction that we're headed in giving all of these mobile apps to his folks, he's really looking to us for that deeper analytics and that is, of course, where we really do create new value. So we're pretty excited about this.

So support to the first responders. The next thing I'd like to talk about is support to our military forces.

I'm a pilot now, and I have just been given the assignment to fly a DV from D.C. to San Antonio. That in fact happened yesterday when I had the good fortune to ride with Director Clapper from National [Washington-Reagan Airport] down here. Now I wasn't flying the plane but I did talk to the pilots. I will tell you, the first thing they do when they get their assignment is to load their FLIP kit – Flight Information Procedure Kit. A statutory mission for NGA is to provide safety and navigation materials for the safe flight – takeoff, landing – for all of our military aircraft as well as for our maritime forces. A worldwide FLIP Kit, if you are a cargo pilot or a refueler is 90 pounds of books and charts. Okay, a fighter jet doesn't take as much, but this one book is one-third of Texas. So you need more than one book. You need a bunch of stuff. That's how it is done today. We print those every 28 days so that our pilots have the most up-to-date information. Okay, some of it's printed maybe every 40 to 50 days, but the bulk of it is every 28 days.

In 2010 we published in hard copy ten million books and charts – $20 million. I think I have a better, cheaper, faster way of doing that.

So I'm a pilot. The first thing I'm going to do is do my flight planning. So D.C. to GEOINT and there we go. I've already got Ronald Reagan, Washington National and San Antonio loaded in, but if I was going to get diverted say to Randolph [Air Force Base], all I need to do is quickly enter that in, if I can type, and if I can see. I can find it and add it in that quickly.

So I've done my flight planning. I'm now in flight, or getting ready to take off. So the first thing that I need of course is just general info on the airport. And even though I landed at Ronald Reagan yesterday I need to refresh myself on the lat/long, the airport communications frequencies, information about the runways. All right there at my fingertips as well as a diagram of the airport.

That's something I can't do with those books. I can't zoom in. So very easily, all at the touch of your finger.

Now the departure procedures. Same thing. The ability to just have that right there. I think you kind of get the general idea. I mentioned charts. So when we were actually en-route yesterday I noticed the pilot in the cockpit unfolding this big old chart, trying to spread it out. I got a little nervous for a while. I didn't tell the DNI that that was actually going on up there, but I think they were fine. Obviously we landed okay. But you don't have to do that. You could just pull up a chart and have it, again, right at your fingertips and the ability to just see all of that all in one place. You can understand the importance.

And of course approaching San Antonio, the tower has just informed us that we will be, the arrival procedure that we will be using Runway 12R and again, all there, right at our fingertips.

It's going to save us a lot of time. No more printing. Save us a lot of money. It's going to save military services a lot of time and money also. Working with multiple pieces of paper there, books, charts.
Lloyd Rowland my Deputy, former F-4 pilot, likes to regale us with the stories of every 28 days when you got that new shipment in, you’d have to roll up the 55 gallon trash barrel to get rid of all the old stuff. It’s also going to be a lot better for the environment.

We are pretty excited about this. We're actually starting beta testing with Air Mobility Command today. Again, I talked to our pilots and they were – the pilots from yesterday – and they said bring it on. We're ready. It's about time. Why haven't we done that already?

Simple, but very powerful.

The next thing I'd like to show you is actually a video. This is a video of a demo, it's an app that we're working on right now. I'm now mission planner and I am working on where to place an internally displaced person camp. So I've got to think about ingress/egress routes, I've got to think about that helicopter landing zone that I talked about last year, I've got to think about flood plains, mud flies, what are all the things that we need to take into account as we're trying to identify a good place to put an IDP camp?

If we can have the video, please.

This video will start off with some LIDAR data, Light Detection and Ranging information which is a much better resolution than just using base maps. So this is LIDAR data that was collected from over Haiti. We used this along with the apps. I'll tell you, the app is actually operating on a number of disparate databases to pull in the various layers of information to display what we need. So here you will see the optimum place for the helicopter landing zone. Next you will see the max distance, how far do you need or want to be able to travel to the camp? What are the areas that are safe from mud slides? What are the areas that are safe from flooding?

The value here, previously you'd have to go to six different databases to get all of that information to come up with a candidate camp site, and there we did that in less than a minute. So we are in the process of appifying that and it should be ready in the next couple of months.

I've just given you a couple of examples of support to disaster operations and support to our military forces. We are also a national intelligence agency and we have a strategic mission.

This next short vignette is to talk about water. Water is a strategic issue. It is a resource obviously that we all need.

Yemen happens to be the most water-scarce country in the Middle East. This could be anywhere, but we have starting with well data, some well data that actually the Army Corps of Engineers has collected over Yemen. I'm sure the layers will come up in a minute. What we've done, and it's a number of layers of open source information. It's well data, and the Yemenis are actually depleting their well water at a rate higher than it is being replenished. There's a layer to look at waterfall, where the concentration of waterfall is. Where the concentration of water scarce areas are. As well, we overlay vegetation, vegetation uses 90 percent of the well water. And then overlay population. Where are the most populous areas of Yemen? It doesn't appear to be coming up today.

You're probably sitting out there thinking okay, I get it, I know what she was going to show, a bunch of density maps. I was actually going to show you how it changed over time. So there you go. There's the scarce or lacking groundwater area. So each of those layers we put over there and you’re saying again. Okay, pretty easy, it's all open source information, readily available. If I've got a GIS program, I can do that.

This is an unclassified forum so that's about all I can show you. The value that NGA brings, again, our ability to think spatially, depict visually, when we overlay our classified information, and I'm not talking about Yemen now, I'm talking about anywhere in the world, giving our all-source analysts a different way of viewing things, a different approach. Giving our national security consumers the ability to look at things ahead of time, that's the anticipatory or predictive analysis. And so this is an area that, again, as I talk about deeper analytics we are very much focused on, and I think you can see the final overlay there with all of the layers.
That's what I wanted to show you. This is just a small sampling of what we have done over the last year. There is a panel later today that will talk to the implementation of the NGA vision. There are also a number of breakout sessions throughout the week. So you'll have the opportunity to hear a lot more about what we're doing.

I'd also encourage you to visit our booth where you can see these apps along with a number of others and you'll have the real experts out there who can answer your detailed questions.

That's what we've been doing. What can you expect next year? Where are we headed?

I'd like to talk about that in customer-centric or mission-centric terms.

**Disaster support.** We'd really like to drive out the art of the possible using FEMA as our mission partner. I don't know how many apps, but apps that are readily available, apps that we build, apps that you build and bring to the environment so that FEMA can do what they need to do when they need to do it. They work in a very mobile environment. So the ability for them to have at their fingertips what they need, the ability for them to contribute content. You saw that by just a simple application that I demonstrated today. And the ability for us to provide the analytic support before, again, they can anticipate what they need. So it's really the ability for us to do things that we cannot even imagine here today. That's the disaster support arena.

In the support to military planning and ops, I'd really like to move from a data poor to a data rich environment. I'd like to be able to build and provide those apps for our military forces for military operations with secure mobile devices. You heard General Alexander talking to that earlier today. And experiment and use different types of information.

For integrated GEOINT analysis, it really is the continuation of using all of our traditional and non-traditional sources so that we are creating new value, so that we are focusing on the key intelligence questions. And we will do all of this while we are focused on gaining efficiencies. We will do all of this while we are still embedded in our mission partners footprint forward with our fighting forces. We will continue to partner with all of you. With our industry partners, our academic partners, the NSG, the ASG, all of our international partners.

I really believe we have irreversible momentum in what we have started here. You heard that this morning in a video from General McCrystal also. The demand for GEOINT is rising and it will continue to rise. We are delivering and we will continue to deliver. I hope you see that we can’t do this without you. This is an outstanding forum that brings together so many folks who are interested in our business.

So I thank you all for being here, and I thank you for giving me the opportunity to talk with you this morning and to show you what we are trying to do for all GEOINT users is to know the earth, show the way, and understand the world. Thank you all very much. (Applause.).

Moderator: Thank you, Director Long.

Continuing the questions on reductions. There is a possibly outmoded idea around duplication that certain agencies should do all-source analysis and certain shouldn't. How do you respond to the criticism about NGA as an all-source analysis producer? Are you doing all-source analysis or is that definition outdated?

Director Long: I guess I'll follow on to what DNI Clapper said this morning in that I don't really worry about what some would try to define as very hard lanes in the road.

We need to be pushing the boundaries each and every day. We do GEOINT in an all-source environment. We start with GEOINT, we end with GEOINT. But we are in an all-source environment. I want our analysts focused on the key intelligence questions. **It is not simply about reading out imagery and putting remarks in a database.** That's important and we will always do that. But why is more important. Why is more interesting. Why is something on
imagery? Why is something not there? What are the other associated information that I could add to that to provide more context so our all-source analysis mission partners can use that and again add their information to it.

So I don't really get hung up on that, although I will tell you, and Lisa Spuria is here and she knows, she gets the phone calls. When I read an NGA report and there is an assessment that in no way, shape or form [it] came from GEOINT, I do question how we got that assessment. We are doing GEOINT in an all-source environment and I think our all-source brethren really want us pushing that envelope every single day.

Moderator: You've laid out a vision that includes a transition to soft copy. Are the military services and our allied partners ready for you to go away from hard copy products to soft copy?

Director Long: I like to do informal surveys. I was doing more of that yesterday as I visited with our pilots in the cockpit. The answer is a resounding yes. Why would you not want to be able to have everything at your fingertips? The ability to add in the latest and greatest on demand? The ability to zoom in? All the many attributes that having digital or soft copy or on-line/on-demand brings you.

Do we need to be mindful of the timeline on which we do that, and do we need to work with the military services and our international partners? Of course we do. That's exactly what we're doing.

I'll answer a question you haven't asked yet which is the efficiencies piece. This is an area where we are going to find savings. Just the FLIP Kit alone – $20 million on printing paper. I don't know exactly what it's going to cost to do it on-line, but it's going to be a lot cheaper.

Moderator: In line with that, how do you ensure that the end user who now is tailoring their own information for their purposes understands that information, how to use it, and is protected from making mistakes based on it?

Director Long: Thank you for that question. Our job is to make the data available, to make it accessible, and as we are providing the apps hopefully in such a way that it is easy to create and therefore so we not go astray. Now DNI Clapper and I, I was actually surprised there wasn't a follow-on when he answered a question and talked about the ability to manipulate the data. [Inaudible] understand as they are working with the data, it is as good as what they are doing with it. We need to ensure the efficacy of it. We need to ensure when folks are contributing to our data sets that we have a way of auditing, that we have a way of showing who touched it last, and who did something with it last.

Just as when you look at some of our products today and there's that big banner across it that says not for targeting purposes. You need to know what you want to use that information for and therefore what is the pedigree of it.

Moderator: Along those lines, your apps are going to require a lot of bandwidth and connectivity. You provide the data and the apps, but how do you ensure the connectivity is there?

Director Long: I'm not sure it's going to require a lot of bandwidth. One of the things that we have been doing with Google is working the globes. Once that globe is out there you are often only transmitting the changes to it. The same with the FLIP kits. Once the baseline is out there, you may only be transmitting changes to it.

So I do think it's tailorable. Obviously we need to be mindful of the mission partner and the environment that they're working in. One of the examples this morning was a ship at sea. So we need to be mindful of looking at the best way, which is often make sure when that unit departs they have the most up-to-date baseline information and then what we’re doing is transmitting changes.

Moderator: Along those lines is there a plan to incorporate a GPS into those apps and their dynamic?

Director Long: A couple of them actually had it. I didn't mention that on the HSIP compass. We actually developed that so that it could either work with terrestrial coms or satellite communications because in the case of Joplin, terrestrial
coms, the towers were even taken out. So we designed that to be able to work either way, and we'll do that to the extent it makes sense in all of our apps.

Moderator: One of the take-aways from yesterday’s GEOINT socio-cultural sessions, was that funding seems tool-focused. What’s your vision for collecting and standardizing the right data for accomplishing the human geography mission?

Director Long: I will tell you it is all about the data. That is certainly a part of our value proposition.

As far as the human geography piece, we have just put in place a 12 layer standard around which folks are identifying human geography information. So the setting of standards, which I talked to last year and didn’t talk about it here today, is extremely important and one of the things that I certainly am responsible for in my role as the functional manager. So the setting of standards, the enforcing of standards is key.

Moderator: As you focus on teaming with industry to bring apps and solutions to NGA, what changes are required for flexible acquisition and how can you drive towards a more flexible acquisition approach?

Director Long: We talked about the four measures of progress, the framework in which I’m looking at our progress. We actually have eight strategic initiatives that we’re using to kind of test things out. On the eight strategic initiatives, a couple are regional-based, a couple are functional-based, and then there’s one for leadership because there is a whole cultural change that we’re talking about here. And Joan you mentioned earlier leading through a time of declining resources is a challenge.

The eighth initiative is agile acquisition. A lot of folks wouldn’t put those two words together. I did that on purpose because we do need to drive out a more agile acquisition system. We're taking a hard look at ourselves internally. We're finding some things that aren't real pretty on the way we do business. Another one of my informal polls, every time I meet with industry I ask, what's it like doing business with NGA?

Most of you are pretty honest and I appreciate that, and I hope you're seeing some changes as we've been working our industry interaction program.

We're also trying to collect what we need to to work with the DNI's office and OSD because we do have federal acquisition regulations that we need to follow. But just as we talk about general policy, policies can be implemented, regulations can be implemented in many different ways. What we’re finding within NGA is we kind of do a one size fits all. There's got to be a one size fits many. So agile acquisition is actually one of our strategic initiatives so that we can really put a focus on how we are buying things.

I don't know how to do an RFP for an app that I don't even know I need yet. So we are, again, another area we're working. We're pushing the envelope on how we acquire things.

Moderator: Is there a role for GEOINT in cyber?

Director Long: There absolutely is a role for GEOINT in cyber, and I thought General Alexander did a good job of talking to that earlier. There's the physical instantiation, where is perhaps the cyber attack emanating from and being able to show that, or helping on the collection with the pointing of an antenna or something such as that. But there's also the metadata. And this is an area that we are just beginning to explore with Cyber Command on geospatial enabling the metadata. I think that's where we’re going to find some real value in the future.

So it is a growing business area for us. But it's one that we are very much focused on. So if there's an area where we may actually put more resources against, I believe it will be cyber.
Moderator: As an analyst – we had a question from an analyst in the audience – I have a lot more information to me available on the unclassified side through Google Earth than on the classified side. What efforts are underway to integrate unclassified open source information on the classified side?

Director Long: We've actually been working on this for a number of years, even before I arrived at NGA. The demos that I showed you this morning obviously are unclassified and they're operating on unclassified information. We need to do that in all of our security domains, as I talked about. Today we have commercial imagery integrated into our top secret domain, all of the tools available for that are available right there. That's a huge change from just a couple of years ago.

So we have been systematically incorporating open source and unclassified information into all of our security domains and we will continue to do that.

Moderator: There were a lot of questions on the workforce and particularly how in a period of budget decline do you incentivize and provide the skills for a workforce to embrace this new vision? Also is there the opportunity for a technical track for promotion rather than a managerial track, which your workforce is very interested in. In closing, can you speak to the future of the NGA/NGO workforce?

Director Long: Absolutely. I'll kind of take the second part of your question first. We do have a technical track, and we in fact have that across the whole intelligence community. So we recognized some years ago that we needed to provide a track to enable our folks who were very technically focused, whether it's from an R&D perspective or from the GEOINT analytical perspective, to be able to rise to the senior ranks. So we have that ability and we continue to encourage that. You need those experts.

As the DNI said, we don't want to repeat what we did in the '90s where we stopped hiring and we stopped investing in our workforce. So we are very carefully managing our hire rates and our attrition rates, but also ensuring that we continue to invest in the training and the education that is so vitally important for our workforce. As new employees, new hires come in, they have amazing skills that are just second-nature to them because they are digital natives as opposed to someone like me who is a digital transplant. So we are also seeing mentoring happening in a reverse way across our workforce where our younger folks, you should have seen not only my driver yesterday, doing a live demo, it is brave, as the DNI said, and they were all 20-something. They were all, do this, do that, [inaudible], slow down a little bit, like Keith Alexander said earlier, slow down.

There is reverse mentoring going on. Our NGA College is as busy as ever training and educating not only the new hires but we have completely revamped in the last year our GEOINT training and have broken out a number of tracks. We've infused what we are now calling full-spectrum GEOINT, formerly known as AGI, Advanced Geospatial Intelligence, so that we can take advantage of the full-spectrum, that all of our folks can and we're not just working in niche areas on some of the full spectrum-sensor capabilities. So we're putting a big focus on training and education within the college, with the military services, to ensure we've got a good leveling between our work forces. So it's a big area of focus for me and will continue to be.

Moderator: We are at the end of our time this morning. As I said at the outset, we have the strongest leadership team in the IC in my experience in the community, and I think you've seen that here today.

## ##
Rep. Mike Rogers, Mich-8, Chairman, House Permanent Select Committee on Intelligence (HPSCI)

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Rep. C.A. Dutch Ruppersberger, Md-2, Ranking Member, House Permanent Select Committee on Intelligence (HPSCI)

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The Honorable Michael G. "Mike" Vickers, Under Secretary of Defense for Intelligence (USDI)

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The Quint

Defense Intelligence Agency

–http://www.dia.mil/
Todd G. Myers is the Technology Advisor to the Director of NEA Integrated Program Office (NEA IPO) and provides strategic support to the Office of Chief Information Officer (OCIO), the Chief Information Officer (CIO), and planning across the Intelligence Community (IC) for NEA.

Mr. Myers work on Cloud Computing Reference Architecture (CC-RA) and concepts for compute, storage and transport virtualization are currently being leverage for the development of NEA Cloud and IC in planning of data centers and mobile deployment capabilities. His Global Compute Enterprise (GCE) White Paper outlines the transformational activities for organizations to deliver a fabric of utility computing that scales on-demand and enables self-discovery and self-service access to timely and relevant information.

Before coming to the NGA, Mr. Myers was the IT Program Manager for a primary multi-million-dollar DoD classified contract where he led, together with the Joint Spectrum Center and Defense Information Systems Agency (DISA) supporting the C&A program. Mr. Myers has served as an IT professional since 1997, and has held many positions across both the Public and Private Sector.
Slide 1 Title

Slide 2 Outline

Note: I like this slide!

Slide 3 Big Analytics and Big Data Management

Note: This is what Director Leticia Lang asked for at the Geospatial Summit 2011 and I responded!
Slide 4 NEA Cloud Objectives

NEA Cloud Objectives

Provide GEOINT services similar to commercial cloud models (e.g. Salesforce.com) to enable on-line, on-demand GEOINT Cloud services and content delivery.

Implement GEOINT Cloud framework and platform API solution (e.g. Amazon Cloud)
- Agility & Coherence of Mission Applications & Warfighter Interactions

Establish Distributed Global Namespace to deliver unified storage content architecture to geospatially query across all content providers
- Establish an Ultra-Large Scale (ULS) systems infrastructure for data intensive computing
Slide 5 The Multi-Sided Platform

The Multi-Sided Platform
Provides the fabric on which users and Content Data providers can play, interact, and grow. Creating utility in a flexible and manageable way.

Slide 6 Vision Integration 2.0 and Strategic Initiatives

Vision Integration 2.0
- Open content increases partner responsiveness, amount of content that is available, and the overall value of the data
- Content, applications, and services do not have to reengineer with NSD. The V2S creates a framework that allows others to build upon
- Operating in the unclassified domain is a central piece of the Vision implementation enterprise

Strategic Initiatives
- Online GEOINT Services (OGS)
  Configurable portfolio/services, accessed from anywhere within the cloud
- Geospatial Data Architecture and Management (GDAM)
  Data and products are accessed seamlessly across physical/nodex storage nodes. Global namespace provides a single ID and path to every data entity residing in the cloud
- Open Information Technology Environment (OITE)
  Virtualization and resource pooling technologies provide seamless environments for users
  Facilitates increased access and availability of the entire GEOINT application suite
  Data management: Global Resource Storages is consistent across all NODX nodes to ensure proper management, monitoring, and enforcement of standards and policies
Slide 7 Proposed NEA Cloud Reference Architecture

- Enabling convenient on-demand network access and virtualization of configurable physical resources (e.g., applications, storage, networks, servers)
- Rapidly provisioned and released depending on user requirements with minimal management effort

Slide 8 NSG Cloud User Scenario

- User's web access into NAT
  - Cloud Resources
    - Applications
    - Services
Slide 9 Operational View

Slide 10 Implementing the Cloud
Slide 11 NEA Cloud Framework (NCF) Management Layers

Slide 12 Bulk Ingest / Generalized Ingest & Unstructured Content Management (U-SCM)

Note: Integrate Unstructured and Structured Data - I Know How to Do That! Doing It Here!
**Slide 13 Impacts**

- **Mobile Computing**
  - Captures the power of every user's data and observations and adds utility
  - Enables distributed content structures
  - Extends network to mobile users

- **Social Networking**
  - Connects users and data and frameworks the power of already established associations

---

**Slide 14 (U) Summary**

Note: More time analyzing - See Invert Your Bathtub with Spotfire

- Content discovery of GEOINT and information... More time analyzing
  - Less time data mining

- Infrastructure transparent through common frameworks - NEA migrating to simple data structures (Big Tables) separation of Metadata from data

- Strategy to deliver unified cloud framework model with defined SLAs, standard technical baselines and security policies that enable analytics and data to cross organizational boundaries

- GEOINT Cloud services
  - Self-Service, On-Demand... "GEOINT in the Hands of the User"
NCOIC Geospatial Interoperability Task Team

Source: https://www.ncoic.org/apps/org/workgroup/geospatial_inter_task_team/documents.php
NOTE: These links require a password. Download as ZIP file 30MB
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Proposed Timeline for development of NCOIC proposal for NGA.

- **Member Suggestion Tips 20101110.ppt**
  - Draft
  - Carney, Ginger
  - 2010-11-10
  - [Actions](#)

This document is a compilation of slides from longer briefings and is provided to help give more specific guidance on your contributions and suggestions to the NCOIC-NGA Geospatial Interoperability work.

- **NGA GeospatialWebexMinutes20101110.doc**
  - Draft
  - Carney, Ginger
  - 2010-11-10
  - [Actions](#)

Minutes from the Q&A webex of 10 Nov 2010

- **NCOIC Geospatial Interoperability Cloud - MilSOFT ICT Task Recommendation**
  - Final
  - Tayfun, Basat
  - 2010-11-12
  - [Actions](#)

MiSOFT ICT task/activity recommendation(s) for the Geospatial Community Cloud project opportunity.

- **NGA Proposal Input Template**
  - Final
  - Carney, Ginger
  - 2010-11-12
  - [Actions](#)

Optional template for providing input on tasks and activities for the NGA Proposal. Rev B posted 11/12 - removed marking, so that company's inputs do not have inadvertently marked (yet not reviewed) suggestions. Companies/contributors must review their inputs for releasability prior to submitting to NCOIC.

- **NCOIC NGA Proposal-Lee-Aerospace.ppt**
  - Final
  - Lee, Craig
  - 2010-11-12
  - [Actions](#)

These area DRAFT recommendations for a Geospatial Community Cloud and do not commit The Aerospace Corporation to any specific deliverables or period of performance at this time.

- **NCOIC NGA Proposal - Cisco**
  - Final
  - McCloud, Joshua
  - 2010-11-13
  - [Actions](#)

Proposals for work activities. Any comments are welcome.
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Harris offers the following draft task recommendations for leveraging and extending some existing, little-known NGA capabilities.

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For discussions with NGA
This link will take you to a WebEx recording of the NGA Proposal Draft review meeting held on 21 December 2010.

Comments submitted by Dr. Craig Lee, The Aerospace Corporation on the draft proposal. These comments were submitted via email, and are re-captured here for team review.

Description of OGC Central node Cloud capabilities

Link to the recorded WebEx session from the Geospatial Interoperability Task Team meeting on 14 January 2011.

A proposed revision of the NGA proposal.
### Comments from Mary Ellen Miller (Mosaic) on the 26 Jan 2011 version of the NGA proposal.

[OGC_Proposal_Comments_2011_01_27.pdf](#) Final Thomas, Tim 2011-01-30 • Actions

### Comments from Luis Bermudez (OGC) on the 26 Jan 2011 version of the NGA proposal.

[NCOIC_NGA_Proposal_DRAFT_20110130_Luciad.doc](#) Final Thomas, Tim 2011-01-31 • Actions

### Comments from Luciad on the draft NGA proposal dated 30 Jan 2011.

[Draft NGA Proposal](#) Final Thomas, Tim 2011-02-15 • Actions

Draft of the NGA proposal Updated on 17 Jan 2011 Updated on 26 Jan 2011: Includes edits by Todd Schneider (accepted) and some other clean up items. There are still a few additional items that need to be resolved, but this draft is very close to being final. Updated on 30 Jan 2011 to address additional comments from Raytheon, Mosaic, and OGC. Updated on 2 Feb 2011 with the version that is proposed for TC approval for submission to NGA. This version contains all the edits to address comments to date. Updated on 9 February - this is the final Microsoft Word version of the proposal as submitted to NGA.

[Final Signed NGA proposal_20110209](#) Final Thomas, Tim 2011-02-15 • Actions

Final signed PDF version of the NGA proposal.

[GIIT Minutes - 20110218.doc](#) Final Thomas, Tim 2011-02-18 • Actions

[GIIT_TaskOrder1_Mtg_20110218.ppt](#) Final Thomas, Tim 2011-02-18 • Actions

[GIIT_MtgNotes_20110311.ppt](#) Final Thomas, Tim 2011-03-13 • Actions

[GIIT_MtgNotes_20110311.ppt](#) Final Thomas, Tim 2011-03-17 • Actions
Briefing given by Mr. Doug Nebert (USGS/FGDC) during a March 2011 meeting on the GeoCloud initiative. GeoCloud is an initiative between the Federal Geographic Data Committee (FGDC) and GSA to create a Geospatial Services Sandbox.

GeoCloud Initiative Information (link)

Link provided by Brand Niemann during the 11 March 2011 GITT meeting. This link provides additional information on a GeoSpatial Platform being designed and hosted as part of the Data.gov initiative.

GITT Minutes20110325.doc

Marked version of 25 March 2011 minutes

Task Order Template

Draft template for use in developing Task Orders under the NGA Proposal - comments are needed from the GITT 15 April 2011 update - includes comments from Todd Schneider and edits made during the GITT meeting on this date.

OASIS Cloud Computing Use Cases

These use cases were discussed during the 22 April 2011 GITT meeting. They have been proposed to OASIS by NGA. These use cases should be considered for the NCOIC NGA Demonstrations.

GITT Minutes - 20110429.doc

Draft Task Order #1 for the Central Node and overall proposal management tasks.
Email string of 25 July 2011, saved as Word doc in order to record the exchange. Follow-up white paper on the topic is posted separately.

NCOIC Geospatial Community Cloud ITAR Point Paper20110728_Final.doc
Final Carney, Ginger 2011-08-01

Recorded Future

Source: https://recordedfuture.tenderapp.com/kb/documentation/full-documentation-and-help

Full Documentation and Help

This document gives you an introduction to the Recorded Future Premium user interface and provides some tips for troubleshooting. At the end of this document, you'll find a step-by-step description of how to build a query, create a Future and use the Workbook.

What is Recorded Future?

Quite simply, Recorded Future gives you the power to explore and analyze temporal information from around the web about people, places, and things as well as the events that take place in relation to them.

We index tens of thousands of sources from government websites and SEC filings to mainstream and niche media to blogs, Twitter feeds and more. We take the unstructured text as it's published online and break it down into various data points before organizing, compiling and storing the newly structured data into one massive, carefully organized and ranked stream of time-oriented information. You can search and explore this data to find patterns, clusters, outliers, and anomalies.

Interested in what led up to the General Motors bankruptcy or what will happen to Apple next month? Or perhaps you want to know where Hu Jintao traveled recently, and where it's been reported he's planning to travel in the future. Perhaps you'd like to generate data sets to map, visualize, and put to use in statistical analysis. We'd like to think that the opportunities are endless.
What isn't Recorded Future?

Recorded Future isn't a search engine. At this point, everyone has used keyword search engines like Google, Bing, or Yahoo! Search. You might even use a computational search engine like WolframAlpha. But Recorded Future isn't like any of these.

If you type Pfizer into Recorded Future in hopes of finding the Pfizer website, you'll be disappointed. However, if you want to find out about the expected completion date of Pfizer's clinical trials or what the company's CEO has recently said about the FDA then you've come to the right place.

What do you want to find?

Recorded Future carefully organizes and ranks a massive stream of time-oriented information from online content so you can find patterns, clusters, outliers, and anomalies using our web application tools or use our API to generate data sets that you want to map, visualize, and use in statistical analysis.

The crux of our work relies on organization extraction of several different types of data.

**Entities**

The main search field in our web user interface centers on entities: people, places, companies and more (think, nouns). Just start typing and Recorded Future automatically makes suggestions. For example, if you type Stockholm, Recorded Future offers entities that contain Stockholm.

**Events**

Recorded Future identifies and catalogs the occurrence of different event types ranging from financial to commercial to political. In the web user interface, select the "Events" link to view all the structured event types indexed by Recorded Future.

You can choose several events at once by ticking the check marks or remove an event by clicking the cross mark in the event name.

Keep in mind that the event selected in the isn't asking for an exact phrase match. We identify event occurrence through linguistic analysis, so "Company Layoffs" might return text that reads, "Cutting its workforce..."

Some events let you add additional context to focus results. For example, if you pick Quotation or Natural Disaster, you can specify your quote or location/type of the natural disaster in the search boxes with quotation marks ("").


**When**

When is a time – past, present, or future – during which a reference, event or action associated related to an entity occurred or is expected. Click the arrow at the end of the "When" tag to select a timeframe or specify the event time by using the calendar icon and selecting start/stop dates.

EventTime.png

Recorded Future also tags publish time on all content and event instances. You can find the filter under the "More" tag in the Premium user interface.

PubTime.png

**Viewing results**

Recorded Future lets you interact with your results in three different views: Overview, Timeline, and Network. Overview is the default view, but you can change the default to Timeline or Network on your User Settings page located at the upper right corner of the user interface.

**Timeline**

The Timeline view displays events tied to the entity in main search field. Each icon depicts a reference based on event time, which allows for viewing historical, current or future mentions.

Timeline_View_Description_2.png

Event details are also available in the Overview. These provide statistics about the event results for any query related to the sources, media type, and entities (people, places, companies) present in the event results.

Tabs_Detail.png

**Network**

The Network view allows you to see how two or more entities and their events relate to each other. The types of entities are described in the legend by color, and the ties shown are explicit connections made in text that Recorded Future analyzes.

Network_Description_2.png

**Source Map**

The "Source Map" view displays hierarchical data about sources as a set of nested rectangles. This view allows you to see the most prominent sources returning results for your search based on several criteria: source country of publication, topic (business, energy, etc...), and media type (blog, mainstream, etc...).
Exporting Options

Currently, the only export format available is KML. To export a visualization to a KML file that you can use with an Earth browser like Google Earth or Google Maps, click the KML link below the visualization.

You can also share the live details of any event result or visualization. See our section on sharing for full details.

Sample Query

Here is an example to get you started querying Recorded Future and give you a sense of what kind of results it can produce.

Let's start by taking a look at Company Expansion events related to India over the next 12 months.

To complete this query, select India in the main search box, "Company Expansion" in the "Event" list, and "Next 12 Months" in the "Time" list.

Creating Email Alerts

Email alerts are available so that you're updated when we've indexed new information that matches a query you're tracking. After you've completed a search, click the "Create alert" link to store your search.

Tell us how often you'd like to receive the alerts -- as it happens, daily, or weekly. To temporarily stop receiving a future, select Stopped. To completely unsubscribe from a future, click Remove.

Sharing Results

Workbook

By using the Workbook you can save queries or event instances. Just click "Add to Workbook" at the top of any result set or use the star icon next to a reference.

You can edit the content in your Workbook and share your query with other Recorded Future users by using the Workbook menu in the bottom right. See the full details here.
**Watchlists**

The Watchlist tool allows you to define a custom set of entities for use in query building or setting up alerts (for example, all Chinese automakers). Watchlists can be found as a link in the Workbooks tab at the bottom right of your account.

WatchlistsLink.png

Why create a watchlist? Watchlists are powerful because they allow an analyst to define custom groups of entities. This can be used to account for synonyms, aliases or just groups of entities with commonalities that need to be analyzed as a whole.

Once created, Watchlists can be used in query building or setting up alerts (for example, all Chinese automakers). Watchlists can be found as a link in the Workbooks tab at the bottom right of your account or simply entered into the main search box.

Watchlists_in_Dropdown.png

For tutorial of building a watchlist, click [here](http://semanticommunity.info/A_Quint-Cross_Information_Sharing_and_Integration) or watch this video.

**Questions? Comments?**

Find all the details or contact our team through our support community.

**SECTION:**

Documentation

**LAST UPDATED:**

November 30, 2011

- Full Documentation and Help

**FAQ**

- What is a momentum curve?
- How can I use Recorded Future?
- How does Recorded Future generate its data?
- What is Recorded Future?
- Login and passwords.
- View all (25 more)

**Documentation**

- Full Documentation and Help
- View all
Training
- Live training
- View all

Price and terms of use
- How much does it cost?
- What do I get with a Premium subscription over free Futures email alerts?
- Is there a long term commitment required?
- How do I cancel my Premium account?
- How Do I Change My Billing Information?
- View all (1 more)

Email alerts: Futures
- How do I modify, stop or delete Futures email alerts?
- What are Futures email alerts?
- What is the content of Futures email alerts?
- View all

What, Who/Where and When
- Free text search
- Event Categories in the "What" Field
- Searching or Filtering with Multiple Event Types
- Using Free Text Queries
- Using the Quotation Event
- View all

Visualization and results
- How do I use the Source Map?
- Understanding the Overview
- Can I customize visualization titles or event details?
- Details of the Timeline View
- How do I edit and add annotations to events in the Timeline view?
- View all (9 more)
Tools

- Build a Watchlist from Twitter
- View all