

Corporate Information Reconnaissance Cell November 3, 2010



Berico Technologies, LLC 1501 Lee Highway, Suite 303 Arlington, VA 22209 Phone: 703-224-8300 Attn: Patrick Ryan Deputy Director, Analysis pryan@bericotech.com Veteran Owned Small Business (VOSB)



HBGary Federal, LLC 3604 Fair Oaks Blvd, Suite 250 Sacramento, CA Phone: 301-652-8885 x117

Attn: Aaron Barr Chief Executive Officer <u>aaron@hbgary.com</u>

Q Palantir

Palantir Technologies, Inc. 100 Hamilton Ave. Suite 300 Palo Alto, CA 94301 Phone: 650-494-1574 Attn: Matthew Steckman Forward-Deployed Engineer msteckman@palantir.com

Submitted to: Hunton and Williams, LLP 1900 K Street, NW Washington, DC 20006-1109 Attn: Mr. John Woods, Esq.

Partner

Phone: (202) 955-1500 Fax: (202) 778-2201 jwoods@hunton.com



Background

Internet based communications, most predominately the growing spectrum of social media platforms, allow people to coordinate and communicate in a highly efficient and collaborative manner, even when vastly geographically distributed. These same services and technologies can also make it difficult to attribute information to specific entities. Anonymizing and misattribution technologies used to mask location and identity have become commonplace. In many cases, people and/or organizations use the inherent insecurity in Internet communications to conduct criminal or unethical activities. This represents a paradigm shift in the capability of individuals and small groups to conduct effective planning and execution of asymmetric operations and campaigns that can have major impacts on large organizations or corporations.

Despite the increased capability and anonymity that these new communications technologies provide, it is still possible to counter individuals and groups who are leveraging networks, platforms, and/or applications to conduct criminal and/or unethical activities. In such cases, it is necessary to develop a more forward leaning investigative capability to collect, analyze, and identify people or organizations conducting such activities. In order to effectively track and understand the complex, interconnected networks involved in these actions, it becomes critical to utilize proven, cutting-edge tools and analytical processes; applying them in a deliberate, iterative manner against those involved in illicit activities. The most effective way to limit the capability of individuals and/or groups is to develop a comprehensive picture of the entities involved through focused collection, conduct rapid analysis to identify key nodes within the network, and determine the most effective method for influencing/limiting these entities.

Developing such a capability requires expertise in:

- Threat Intelligence
- Social Media Exploitation
- Influence Operations
- Traditional Exploit Development
- Open Source Analysis
- Digital Forensics and Malware Analysis
- Network Incident Response
- All-Source Intelligence Fusion
- Targeting/Intelligence Cycle
- Intelligence, Surveillance, and Reconnaissance (ISR)
- Data Integration (Oracle, SQL)
- Custom Software Development

Team Themis

Built around several leading companies who are trusted within the Intelligence Community (IC), Team Themis provides the agility and commitment to the mission and a dynamically efficient approach that delivers tangible results. Our team provides the following strengths:

- **Extensive experience** conducting Information Operations (IO) campaigns; successfully managing Intelligence, Reconnaissance, and Surveillance (ISR) lifecycles.
- Cutting-edge collection and analytic technologies and methodologies to providing timely and accurate intelligence on individuals and groups of interest.
- **Strategic impact** to the capabilities of organizations across the IC by leveraging the latest commercial and government technologies and developing customized tools based on a deep understanding of the mission.

Team Themis is ideally suited to provide Hunton & Williams LLP this critical capability, delivering an innovative and highly effective solution grounded in a deep understanding of the problem set and extensive experience in providing game-changing results across the Intelligence Community and defense/government sector. Team Themis is poised to apply our knowledge and skills to provide Hunton & Williams LLP rapid, effective results that impact the organization's operations and support clients across the space.



Palantir Technologies

Palantir is the extensible enterprise targeting and analytical intelligence platform used at the strategic, operational, and tactical levels by the US government and allies. Our clients span the Intelligence, Defense, Oversight, and Law Enforcement Communities. By combining a powerful backend database and server architecture with an intuitive frontend user interface, Palantir enables you to store, search and share knowledge and information gained in the field or on the battlefield and execute your counter-terrorism, counter-narcotics, counter-intelligence, countergang, and other national security, oversight, and anti-crime missions with greater speed and fewer resources. Palantir's powerful and rich analysis capabilities can be leveraged simultaneously against structured, semi-structured, and unstructured data from multiple disparate data repositories and sources all at once. Palantir's integrated platform is deployable today and at a fraction of the costs and none of the risks required for a comparable capability suite.

Berico Technologies

Berico Technologies, LLC is a Veteran Owned Small Business (VOSB) providing analytical and information technology development services to the US intelligence community, Department of Defense and Homeland Security. Berico's mission is to leverage the greatest industry talent in the form of developers, engineers, integrators, and analysts to identify and resolve highly complex national security challenges that require innovative solutions. We offer a full spectrum of services from policy and planning through design, development and delivery directed at improving operational and oversight capabilities, reducing costs and increasing efficiencies. Much of Berico's success results from our unique and respected viewpoint – we understand the battlespace. Through direct support of National, Tactical and Sanctuary organizations, Berico has participated intimately in highly successful projects that have delivered measurable improvements to the operator and senior level decision makers around the globe. Berico's unique ability to combine streamlined organizational business processes with operationally relevant experience and technical innovation has earned the company a reputation in the space as a leader and proven difference maker. Our versatile and experienced employees work to ensure that our clients' expectations are met or exceeded.

HBGary Federal

HBGary Federal is an information security services company providing lifecycle support for enterprise incident response, malware analysis, and information operations. HBGary Federal's mission is to provide the best Cyber security and Information Operations specialists, threat and malware analysts to assist our customers in advancing the nations capabilities in securing cyberspace and combating evolving threats. Our focus is bringing together creative, technical talent, experienced threat and intelligence analysts, and mission and cultural experts to develop unconventional and innovative cyber security capabilities. As a core strength HBGary Federal leverages HBGary's incident response and malware reverse engineering and analysis tools, and brings extensive experience in information operations and cyber security at the national level. Specific to this effort HBGary Federal brings extensive experience in the following areas: 1) Influence Operations; 2) Social Media Exploitation; 3) Threat Intelligence and Open Source Analysis; 4) Vulnerability Research and Exploit Development; 5) Digital Forensics and Malware Analysis; and 6) Incident Response.



Team Themis Solution

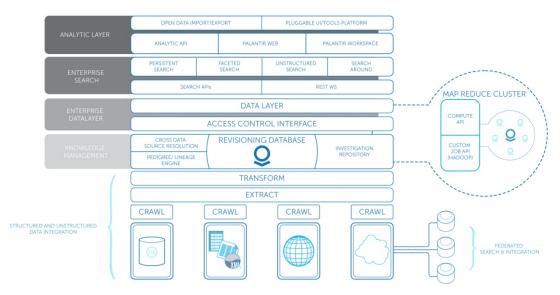
New challenges demand new innovative solutions. The establishment of a Corporate Information Reconnaissance Cell (CIRC) will provide Hunton & Williams LLP with a full spectrum capability set to collect, analyze, and affect adversarial entities and networks of interest. The Themis solution includes systematic and synchronized lines of effort, including:

- Establishment of a *robust network architecture* (and supporting infrastructure)
- Identification and collection of all relevant, critical data
- Seamless integration of disparate data into a single analytical platform
- Stand-up/operation of a *team of expert analysts* to drive rapid, iterative intelligence cycles
- Production of tailored deliverables briefings, reports, assessments, etc.

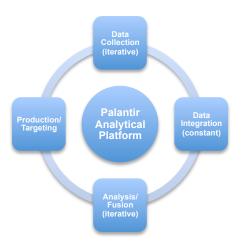
Architecture/Organization

Team Themis will establish a streamlined, powerful network architecture that will serve as the foundation for all of the data collection, integration, analysis, and production efforts within the CIRC. Additionally, we will develop a complementary physical infrastructure and workspace that will enable rapid, continuous analysis in a secure environment.

INTELLIGENCE INFRASTRUCTURE



Team Themis recommends the establishment of a "hosted solution" for the CIRC, which would provide analysts and decision-makers with all of the capabilities and functionality of the Palantir platform from a secure, remotely hosted server instance. This virtualized solution harnesses the ability of Palantir to be leveraged using your existing network architecture and hardware,





providing significant savings in up-front hardware costs. As part of the Team Themis solution, Hunton & Williams would gain access to their own customized Palantir instance, which would be hosted in a secure location by Palantir. Team Themis would work closely with the network/information systems team at Hunton & Williams to develop a hardware purchase and fielding plan that would utilize a combination of existing hardware within the company (if available) and determine what additional hardware is required (workstations, monitors, network components, etc.). Utilizing this methodology will provide the most cost-effective solution while still delivering all necessary capability to establish a fully functional CIRC.

Once the infrastructure environment is established, Team Themis will work hand-in-hand with Hunton & Williams LLP personnel to develop a physical layout plan that will facilitate rapid collaboration and analytical discovery. Based on our extensive experience in intelligence analysis and targeting, we will utilize the industry-proven, ideal model of the "fusion cell" developed and employed by Joint Special Operations Command (JSOC) elements in partnership with Other Government Agency (OGA) analysis elements. One of the key principles of the fusion cell model is the *creation and maintenance of true "situational awareness" among all stakeholders and decision-makers*, facilitated by sharing a common workspace and developing multiple methods to visually display user knowledge and analytical findings. This environment is recognized by operators and analysts as an essential aspect to creating a collaborative and functional analytical cell that incentivizes users and drives results for stakeholders. However, Team Themis is also prepared to establish a "virtual fusion cell," which could provide a similar collaborative environment through the use of internet-based collaboration tools, video-teleconference (VTC) technologies, and the collaboration capabilities built into the Palantir platform, while allowing analysts and leaders to operate from geographically dispersed offices.

Data Collection

Team Themis consistently uses a combination of open source tools and data subscriptions combined with custom data collectors and pre-processors. Our unique methodology for collection is tailored for the social media environment; an iterative process of traditional data collection and social media link and artifact collection and analysis that allows us to link information correlations that would not otherwise be apparent. Collectively, our use of a variety of creative techniques continues to gain access to vital information, including the creation of new media content tailored for target audiences. The rigor and tenacity with which our Team pursues this comprehensive process is what enables us to more fully enumerate points of information exposure for our customers and identify digital artifacts of interest on individuals and organizations. Team Themis will complete the first iteration by developing both organization— and individual—focused profiles that dissect each entity's digital characteristics and social relationships as they connect back to the overall objectives.

Primary information resources:

- 1. Background Checks
- 2. LexisNexis
- 3. LinkedIn
- 4. Facebook
- 5. Twitter
- 7. Other social media and location services
- 6. Subject specific sites, blogs, and forums
- 7. Well crafted search queries to search for digital artifacts
- 8. Other digital information discovered or given access to during the investigation

Social media encompasses vast amounts of information, much of it potentially ambiguous, so comparative analysis between information sources is key to derive accurate intelligence. The key to successful open source Intelligence, Surveillance, and Reconnaissance (ISR) is to iterate

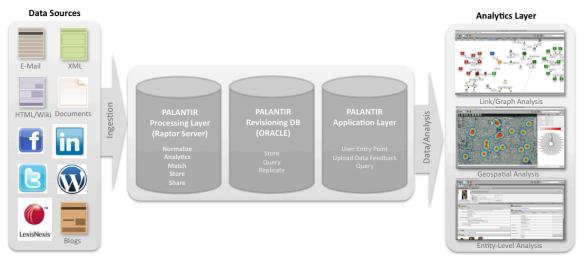


through the lifecycle quickly and accurately for as much complete data collection as possible. We have significant experience in this type of analysis and our methodology has proven out in real operations.

If/when Hunston & Williams LLP needs or desires web-content production, Team Themis will create realistic, useable web content to engage specific audiences for the purpose of gathering relevant, in-depth information. Direct target engagement can provide valuable information that cannot be acquired through other means: the detailed, focused task encompasses persona creation, landing pages, and other development of new media content. Team Themis understands that in order for direct marketing to be successful it requires a strong understanding of the target as well as a solid awareness of how to use such techniques in operations.

Data Integration

Team Themis developers and engineers will leverage their extensive knowledge of Palantir's development and data integration environments to integrate all relevant data in one single, robust analytics layer. All of the data collected will be integrated seamlessly into the Palantir analysis framework to enhance link and artifact analysis. The platform's powerful approach to data integration will enable enterprises to unify data schemas, thus allowing analysts to depict and query otherwise disparate pieces of information in a secure and collaborative environment. Thanks to Palantir's sophisticated data integration capabilities, analysts within the CIRC will also be able to ingest both structured and unstructured data and perform real-time entity resolution against user-defined criteria on the fly, culminating with the fusion of multiple data sources and enrichment of single-source data feeds.



Palantir's open and dynamic ontology capability will provide Hunton & Williams LLP the flexibility to store and contextualize all types of data for analysis. Team Themis will work closely with the customer to conceptualize and implement a tailored ontology that considers the specific problem set and maps data into human-oriented models – this approach will drive effective decision-making grounded in deep understanding. By providing high-value context and data enrichment, analysts will be empowered to develop robust link analysis between people, organizations, and/or other digital artifacts that will begin to form trends and allow statistical analysis.

Team Themis will also develop specific helpers to further automate some data ingestion from commercial data sources as well as social media services and Google queries. Our developer/engineers have extensive experience developing against Palantir's open API, allowing us to create customized helpers and applications designed to integrate specific data sources or



support common analyst workflows. The development of these tailored applications within the Palantir platform will greatly improve our ability to conduct rapid iterations of the targeting cycle in order to better understand the adversary network(s). In addition, Team Themis has extensive experience in the integration of other existing helpers and tools with Palantir in order to provide capabilities including entity extraction, social network analysis, natural language processing (NLP), custom visualizations, alerting, and thematic mapping.

Analysis/Fusion

Team Themis will also provide an agile team of intelligence experts trained to leverage the robust capabilities of Palantir to conduct rapid, iterative intelligence/ targeting cycles in order to understand and affect identified adversaries. The powerful combination of the Palantir analytical platform and Team Themis collector/analysts will deliver a comprehensive capability allowing Hunton and Williams LLP to truly understand and eliminate emerging threats that could cause harm to their clients.



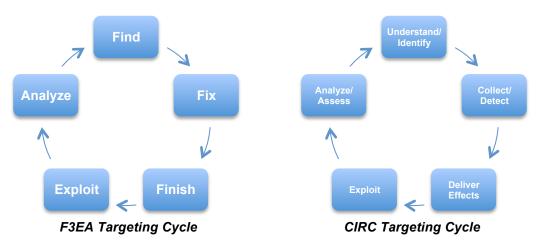
The Palantir platform delivers best-in-breed capability in terms of data integration, search and discovery, collaboration, and knowledge management.

Leverage the leading analytical platform. Team Themis will utilize the powerful Palantir platform as the centerpiece of the CIRC – empowering our collector/analysts with a cutting-edge analytical capability that enables rapid search and discovery, effective collaboration, and intuitive knowledge management. Palantir is recognized as the market-leading analytical platform for counter-intelligence (CI), counter-terrorism (CT), counter-narcotics (CN), and counter-proliferation (CP), currently deployed across elements of the intelligence, defense, and law enforcement communities that include SOCOM, DIA, CIA, and JIEDDO. The platform's proven record of success is grounded in the Palantir philosophy of augmenting and empowering analysts with a flexible, intuitive set of tools and capabilities that allow for analysis of data across relational, temporal, and geospatial domains.

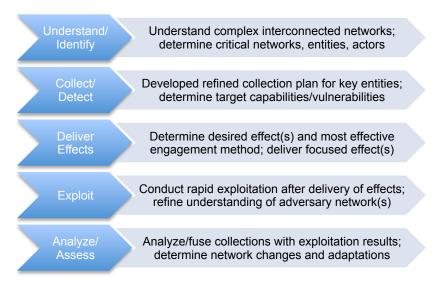
Using the core tools and features in the platform combined with customized helpers and apps (developed by our expert engineers), Team Themis will build a comprehensive picture of threat networks and entities. Through the deliberate application of link analysis and social network analysis (SNA) methodologies, we will gain an understanding of which groups and individuals are working together, what their intentions/plans are, and how to best stop them. Using the realtime, integrated search capability built into Palantir, Team Themis will explore networks conceptually to discover how entities are related and connected as well as set/save search parameters to proactively tip analysts to new information as it becomes available. Additionally, we will utilize the temporal and geospatial functionality within the platform to identify and leverage patterns for predictive analysis, allowing our team to essentially "get inside the decision cycle(s)" of our adversaries. Team Themis will also leverage the collaborative features of the platform to allow our team of collectors and analysts to bring together relevant threat streams and provide fused, multi-INT assessments of relevant entities and adversaries. Finally, we will carefully track and audit our analytical efforts using Palantir's access control model, enabling our team to create and audit trail of who and when made particular changes to objects and their properties. This is particularly important for protecting civil liberties and privacy control.



Apply the most effective analytical processes and methodologies. Team Themis will draw on our extensive operational and intelligence experience to rapidly make sense of the volumes of data we've collected through the application of proven analytical/targeting methodologies. Drawing on the principles and processes developed and refined by JSOC in the "Find, Fix, Finish, Exploit, Analyze" (F3EA) targeting cycle, we will develop and execute a tailored CIRC intelligence cycle suited to enable rapid identification/understanding, refined collection/detection, focused application of effects, exploitation, and analysis/assessment.



Team Themis will aggressively drive and manage the CIRC targeting cycle to develop a comprehensive threat picture and determine the best method to affect/degrade adversaries based on a nuanced understanding of their capabilities and vulnerabilities. Based on the complex, interconnected nature of the threat environment, we will develop the capability to manage a series of iterative, inter-related targeting cycles against multiple groups and entities in order to achieve enduring effects against networked adversaries. Cycles will move at differing rates and be timed and de-conflicted to maximize impact and limit the adversary's ability to detect or predict our activities. The key phases of the CIRC targeting cycle are:





Production/Targeting

Team Themis will provide full production and planning support throughout the entire targeting cycle in order to ensure that Hunton & Williams LLP has a clear, comprehensive understanding of the intelligence picture. We will work closely with the key leaders and decision-makers from Hunton & Williams to develop production requirements that meet their diverse needs. Given our experience in all-source analysis and production, we have the ability to produce detailed, customized products, briefs, and reports that will enable situational understanding and (if desired) drive the decision-making process for key leaders within the organization.

Given the unique nature of this problem set, we recommend the following products:

Written Assessments Visualization -Daily Intelligence Summary -Weekly Assessment Network Visualization -Link Diagrams -Social Network Analysis

Target Folders Target Folders Briefs/Meetings



- -Target Lists
 -Recommended
- -Target Impact Analysis

-Detailed Dossiers

-Pattern of Life

Actions
-Network Effects

Timeline

-Special Assessments

Team Themis will conduct this effort in Three Phases:



Phase I - Problem Definition/Establish Infrastructure

In this phase, Team Themis will conduct a rapid assessment of the problem and establish the necessary network architecture and infrastructure to bring the CIRC to "Initial Operational Capability" (IOC) status. We will work closely with the key leaders from Hunton & Williams to determine key tasks and functions and ensure we adjust our plan based on refined customer needs. Our team of expert analysts and engineers will also begin identification of all critical data sources as well as initial design and development of custom bots and helpers. This phase will end with the establishment of the CIRC in a physical (or virtual) location and stand-up of the necessary support staff.

Phase I is estimated to conclude 30 days following contract award and will require:

- 1 x Project Manager
- 1 x Forward-Deployed Engineer
- 2 x Software Engineer

Phase II - Data Collection/Integration

This phase begins once the CIRC reaches IOC status and is fully staffed. In this phase, Team Themis will focus on conducting initial collection of critical data sources and ensuring seamless integration of persistent data sources. Our engineer/developers will begin rapid development cycles to build customized bots and helpers based on analyst feedback and refined mission



requirements. Our team of analysts (led by the Senior Analyst/PM) will develop and refine analytical processes and production requirements (based on both customer feedback and rapidly changing data that is collected). This phase will end when the CIRC reaches "Full Operational Capability" (FOC) status – with all key data sources collected and integrated, a fully trained and ready analytical staff, and multiple bots/helpers developed for tailored workflows.

Phase II is estimated to conclude 30 days following conclusion of Phase I and will require:

- 1 x Project Manager/Senior Analyst
- 1 x Forward-Deployed Engineer
- 2 x Software Engineer
- 2-3 x Embedded Collector/Analyst

Phase III - Analytical Capability

This phase begins once the CIRC reaches FOC status and is fully prepared to conduct intelligence collection, analysis, and production operations. Throughout this phase, Team Themis will continue to aggressively seek out and integrate relevant data sources as well as develop customized bots and helpers as needed. The main effort will be conducting iterative targeting cycle based on prioritized requirements from the customer and conducting regular production requirements (as outlined above).

Phase III represents enduring, steady-state operations and will require:

- 1 x Senior Analyst/Program Manager
- ½ x Forward-Deployed Engineer (as needed)
- 2 x Software Engineer
- 3-4 x Embedded Collector/Analyst

Roles and Key Personnel

Berico Technologies has established an industry high retention rate of 98% for the past three years.

Team Themis places a great deal of emphasis on finding the most talented people, offering them the most competitive compensation and benefits package and employing them on dynamic, high-profile and challenging projects anywhere in the world. The model member of our Team's culture is someone who has a strong technical background, extensive analytical experience, is a motivated self-starter, and has a passion for

solving the toughest problems with the highest quality solutions. Every Team employee is an intelligent, creative and innovative professional who is able to leverage their considerable talents to solve our clients most difficult and high-visibility problems. Team Themis is able to provide our clients with premier service and solutions because of the work ethic and relevant expertise of our employees. For this unique project, we recommend the following roles and responsibilities:

Senior Analyst/Program Manager	- Responsible for overall project management
	duties; primary interface with H&W leaders
	- Responsible for synchronizing collection,
	integration, analysis, and development efforts
	- Responsible for focusing collection and
	leading intelligence/targeting cycle(s)
	- Responsible for ensuring highest quality
	assessments and products



Forward Deployed Engineer	Responsible for stand-up and customization of Palantir instance for specific mission needs Assist in major data integration efforts and initial development efforts Be available as needed to provide additional support (during Phase III)
Software Engineer	Responsible for stand-up, maintenance, and technical support of Palantir instance Responsible for design and development of custom bots, helpers, and other tools Responsible for ensuring seamless data integration of all critical data
Embedded Collector/Analyst	Responsible for conducting collection and analysis in support of targeting cycle Responsible for production of all required assessments, reports, briefs, etc.

Recognizing the importance of having the most highly qualified and experienced team members working to provide winning solutions, Team Themis would like to highlight the following key personnel as representative of the outstanding talent within our organizations:

Guy Filippelli, CEO, Berico Technologies

Guy Filippelli is a former U.S. Army Military Intelligence officer with service in Germany, Korea, Iraq and Afghanistan, and as a civilian Special Assistant to the Director of the NSA. He was recognized as one of four recipients in 2008 of the National Intelligence Medallion from the Director of National Intelligence – the highest award for civilians working within the intelligence community. Mr. Filippelli is a Center for a New American Security (CNAS) Next Generation National Security Leader and an Associate of the West Point Combating Terrorism Center. He most recently returned from several weeks in Afghanistan in June 2010, conducting a comprehensive assessment for senior defense and intelligence officials.

Doug Philippone, DOD Lead, Palantir Technologies

Doug Philippone leads the Department of Defense program for Palantir Technologies Inc. Prior to Palantir, Doug deployed to Afghanistan, Iraq and Pakistan for a total of 6 deployments from 2003-2007. He commanded multiple Joint Special Operations Command outstations in support of the global war on terror. Doug ran the foreign fighter campaign on the Syrian border in 2005 to stop the flow of suicide bombers into Baghdad and helped to ensure a successful Iraqi election. As a commander. Doug ran the entire intelligence cycle: identified high-level terrorists, planned missions to kill or capture them, led the missions personally, then exploited the intelligence and evidence gathered on target to defeat broader enemy networks. He collaborated with other agencies, NGO's, local government and law enforcement to ensure that places such as Ramadi, Iraq, turned from one of the most dangerous areas in the country to an example of progress. Doug also rebuilt schools, helped support hospitals and medical aid missions, worked with key tribal and governmental leaders to gain local consensus, and help move Iraq to self government. Doug was awarded three bronze stars with two valor awards, the joint commendation medal with valor award, as well as many other commendations for his service to the nation. Doug earned a Bachelor of Science degree in Mathematics from the United States Military Academy at West Point, where he also served as class president for two years, and received his Masters Degree in Terrorism Operations and Finance from the Naval Post Graduate School. In his personal time, Doug is also a State Champion competitive cyclist.



Aaron Barr, CEO, HBGary Federal

Previously, Aaron Barr served as the Director of Technology for the Cyber security and SIGINT Business Unit within Northrop Grumman's Intelligence Systems Division, and as the Chief Engineer for Northrop Grumman's Cyber Campaign. As Technical Director, he was responsible for developing technical strategies and roadmaps for a \$750 million organization as well as managing approximately \$20 million in Research and Development projects. Prior to joining Northrop Grumman, Mr. Barr served 12 years in the United States Navy as an enlisted cryptologist, senior signals analyst, software programmer, and system administrator. As a senior signals analyst Mr. Barr deployed with the 22nd Marine Expeditionary Unit in Kosovo to conduct key tactical signals intelligence collection and analysis in support of operation Enduring Freedom. Mr. Barr has pioneered many uses of the Internet and new media for the purposes of conduction broad information operations campaigns for key intelligence customers.

Conclusion

In this new environment dominated by constant communication, interactivity, and pervasive content production, those organizations that build capability to harness this new communications space, developing actionable intelligence from a sea of information will be well positioned to most effectively dominate their market as well as have a new service capability that could be offered to others. In the end those individuals or organizations that take advantage of the vulnerabilities created by this new space are themselves more vulnerable to being exposed by their use of it. It's a matter of who has greater capability, and who better to develop a corporate information reconnaissance capability than companies that have been market leaders within the DoD and Intelligence Community.