



CyberSci

symposium 2016

Thursday, October 27
ICF Conference Center, Fairfax, VA

Agenda

8:00 a.m.–8:45 a.m.

Registration/Breakfast

8:45 a.m.–9:00 a.m.

Opening Remarks

Sudhakar Kesavan, ICF Chairman and Chief Executive Officer

9:00 a.m.–9:30 a.m.

Morning Keynote Address

Congressman Ruben Gallego Arizona (D) House of Representatives, member of the House Armed Services Committee

9:30 a.m.–10:30 a.m.

Panel: Cybersecurity and Privacy

Panelists:

Mark Weatherford, former Department of Homeland Security Deputy Under Secretary for Cybersecurity

The Honorable Patricia Hoffman, Assistant Secretary of Energy for Electricity Delivery and Energy Reliability

Dr. Peter Eckersley, Chief Computer Scientist, Electronic Frontier Foundation

Moderator: Samuel S. Visner, ICF Senior Vice President/General Manager for Cybersecurity and Resilience

This panel will highlight the R&D challenges associated with enhancing and sustaining cybersecurity in support of national policy objectives while respecting privacy and civil liberty concerns. Discussions will include civil liberties protection and the Fourth Amendment of the U.S. Constitution, encryption as it relates to civil liberties and national security, and the evolution of U.S. policy regarding the cybersecurity and privacy of the global information commons.

10:35 a.m.–10:45 a.m.

Networking Break

10:45 a.m.–11:45 a.m.

Panel: The Future of Cyber Operations and Technologies

Panelists:

Lieutenant Colonel Paul Rozumski, U.S. Air Force

Christian Thomasson, U.S. Air Force

First Lieutenant Francis V Adkins, U.S. Air Force

Captain Val Red, U.S. Air Force

Moderator: Captain Daniel Stambovsky, U.S. Air Force

Based on the recently released book entitled *Evolution of Cyber Technologies and Operations to 2035*, this panel will explore the future of cyber technologies and cyber operations which will influence advances in social media, cybersecurity, cyber physical systems, ethics, law, media, economics, infrastructure, military operations, and other elements of societal interaction in the upcoming decades.

11:45 a.m.–12:15 p.m.	Session Introductions: Dr. Alexander Kott , Network Science Division Chief, U.S. Army Research Laboratory		
12:15 p.m.–1:00 p.m.	Networking Lunch		
1:00 p.m.–1:30 p.m.	Afternoon Keynote Address: General Michael Hayden , retired four-star general, former Director of the CIA and National Security Agency		
1:40 p.m.–2:10 p.m.	Recent Developments in Linkography Based Cybersecurity Dr. Robert Mitchell , Sandia National Laboratories <i>Track: Securing the Emerging National Smart Infrastructure</i>	Cybersecurity Risks in the Industrial Internet of Things Dan Sullivan , Raytheon Dr. Ed Colbert , U.S. Army Research Laboratory <i>Track: Securing the Emerging National Smart Infrastructure</i>	Value-of-Information (Vol) Sensitive Cyber Sensor Steven Hutchinson , ICF Jason Ellis , ICF <i>Track: Cybersecurity in the Service of National Security</i>
2:15 p.m.–2:45 p.m.	The Use of Entropy in Lossy Network Traffic Compression for Network Intrusion Detection Applications Sidney "Chuck" Smith , U.S. Army Research Laboratory <i>Track: Cybersecurity in the Service of National Security</i>	Securing Cyber-Physical Systems Dr. Dhananjay Phatak , University of Maryland, Baltimore County <i>Track: Securing the Emerging National Smart Infrastructure</i>	Cyber and Intelligence Research and Development Funding Strategy Dr. Edmund Mitchell , CSIOS Corporation <i>Track: Cybersecurity in the Service of National Security</i>
2:45 p.m.–3:00 p.m.	Networking Break		
3:00 p.m.–3:30 p.m.	Ransomware Over the Past 5 Years: Overview and Best Practices Timothy Obenshain , ICF <i>Track: Cybersecurity in the Service of National Security</i>	Social Networking Tools May Accidentally Increase Insider Threat: The Unintended Psycho-Social Effects on False Positive Indicators of Insider Threat Dr. Jennifer Cowley , CERT/Software Engineering Institute/Carnegie Mellon University <i>Track: Cybersecurity and the Social Network</i>	A Data-Stream Classification System for the Investigation of Terrorist Threats Era Vuksani , Massachusetts Institute of Technology Lincoln Laboratory <i>Track: Cybersecurity in the Service of National Security</i>
3:35 p.m.–4:05 p.m.	Collateral Effect Potential Metric for Computer Exploits Giorgio Bertoli , Aberdeen Proving Ground, Maryland <i>Track: Cybersecurity in the Service of National Security</i>	Modeling, Simulation, and Analysis of a Social Media Propaganda Network: The Case of ISIS/ISIL/Daesh Joseph Shaheen , NATO STRATCOM COE and George Mason University <i>Track: Cybersecurity and the Social Network</i>	Protecting the US Infrastructure from Attacks via EED Tim Cash and John Link , The Lever Group <i>Track: Cybersecurity in the Service of National Security</i>
4:10 p.m.–5:10 p.m.	Panel: Beyond the Government: Mobilizing Industry and Academia Panelists: Dr. David Honey , Director, Science and Technology, and Assistant Deputy Director of National Intelligence for Science and Technology Dr. Misty Blowers , ICF Vice President, Cybersecurity Research Programs Dr. Alexander Kott , Network Science Division Chief, U.S. Army Research Laboratory Facilitator: John Paczkowski , ICF Senior Vice President This panel will examine ways to build a national cybersecurity research and development community, establish cybersecurity research and development priorities, and mobilize resources throughout the private sector and academia in support of national cybersecurity needs and policy requirements.		
5:10 p.m.–5:45 p.m.	Presentation and Closing Remarks: The Cybersecurity Storm Front—Forces Shaping the Cybersecurity Landscape Samuel S. Visner , ICF Senior Vice President/General Manager for Cybersecurity and Resilience		
5:45 p.m.–7:00 p.m.	Networking Happy Hour		