

Welcome to the InfraGard EMP SIG Summit December 7, 2018 Sponsors



AGENDA

- 8:30 Arrival
- 8:45 Welcomes
Mary Lasky, Chair EMP SIG, Gary Gardner, Chairman, InfraGard National, Stephanie Shark, FBI
- 9:00 Congressman David Price (D-NC), House Intelligence Committee – introduced by Steve Volandt, Vice Chair EMP SIG and Vice President Auroros
- 9:15 Caitlin Durkovich, Director Toffler Associates introduced by Gary Gardner
- 9:45 Director Bob Kolasky, DHS National Protection and Program Directorate's (NPPD) National Risk Management Center Department of Homeland Security -- introduced by Gary Gardner
- 10:15 Break
- 10:30 Highlights from Spartacus by Ambassador James Woolsey, former Director of Central Intelligence, and Major David Stuckenberg, Aide-de-camp to the Commander of Air Education & Training Command
- 10:40 Highlights from Microgrids at the Crossroads by Dr. George Baker, Director, Foundation for Resilient Societies
- 10:50 Elections Lessons Learned – Steve Volandt, Vice Chair EMP SIG
- 11:00 Recent Actions in the States -- David Winks, Managing Director Acquisight, Moderator
General Luke Reiner, National Guard TAG, Wyoming
Texas Senator Bob Hall
Eli Owen, Director California State Threat Assessment Center (STAC) on their recent legislation
- 12:00 Curtis Birnbach, Advanced Fusion
- 12:15 Lunch
- 1:15 Gale Nordling, Emprimus
- 1:30 Actions in DOD – Lucian Niemeyer, Under Secretary of Defense for Acquisition and Sustainment, introduced by Dr. George Baker, Director, Foundation for Resilient Societies

- 2:00 Discussion on Emergency Action including FAST Act Emergency Orders – Paul Stockton, former Assistant Secretary of Defense, with Ambassador Jim Woolsey, former Director of Central Intelligence
- 2:30 EMP & GMD Cost Study by Tom Popik, Foundation for Resilient Societies
- 2:45 Cost Recovery Methods by Bill Harris, EMP SIG Vice Chair
- 3:00 EMP Challenges and Opportunities: Summing It Up -- Major General Julie A. Bentz, Director for Nuclear Defense Policy USA National Security Council Staff introduced by Mary Lasky
- 3:30 Pat Carrick, Chief Scientist, DHS Science and Technology Division introduced by Mary Lasky
- 4:00 Technology and Investment Review
Karlos Bruce, Armag Corporation

Andrew Whitney, Energy Investment Partners (EIP) and VelociFoam

Joel Coulter, Agile Fractal Grid Alliance

Jeff Weiss, Distributed Sun
- 4:50 Remarks by Chuck Manto
- 5:00 Closing Remarks – Lasky

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Dr. George Baker is emeritus professor of applied science at James Madison University (JMU). In addition to teaching graduate and undergraduate courses from 2000-2012, he organized and directed the university's Institute for Infrastructure and Information Assurance (IIIA). From 1987-1994 Baker led the Defense Nuclear Agency's electromagnetic pulse (EMP) R&D program to protect strategic systems against EMP effects and develop DoD's EMP guidelines and standards. From 1994-1996 Baker directed DNA's Innovative Concepts Division, managing advanced technology development including electric guns, high density energy storage, radio-frequency directed energy weapon technology, and space nuclear power. He was Director of DTRA's Springfield Research Facility from 1996-99, a national center for critical system vulnerability assessment and protection guidance. His organization was responsible for developing the JCS Force Protection assessment program. From 1999-2000 he served as a senior scientist at Northrop-Grumman, advising DTRA nuclear effects R&D programs. He now applies lessons-learned from DoD experience to critical national infrastructure assurance and community resilience. He consults in the areas of critical infrastructure protection, EMP and geomagnetic disturbance (GMD) protection, nuclear and directed energy weapon effects, and risk assessment for customers including DoD, DOE, DHS, the White House, National Guard units, the National Park Service, SAIC, and Defense Group Inc. During 2001-2008 and 2016-2017 he served as senior advisor to the Congressional EMP Commission. He is a member the Board of Directors of the Foundation for Resilient Societies, the Board of Advisors for the Congressional Task Force on National and Homeland Security and the JMU Research and Public Service Advisory Board. Degrees include M.S., Physics (University of Virginia) and Ph.D., Engineering Physics (U.S. Air Force Institute of Technology).

Major General (MG) Julie A. Bentz is the Senior Policy Advisor for Emerging Technologies on the National Security Council. In this capacity, she coordinates the development of national policies and programs in support of the 2017 National Security Strategy. MG Bentz most recently served as Vice Director for Plans & Programs for the Defense Threat Reduction Agency (DTRA) as the executive charged with synchronizing DTRA programs with strategic requirements from across the Department of Defense and the U.S. Government to combat WMD and emerging improvised threats. General Bentz has served in a variety of active, reserve and National Guard assignments regarding nuclear defense, homeland security, health physics, and environmental sciences. Her previous positions include Vice Director, Joint Improvised-Threat Defeat Agency; Director for Nuclear Defense Policy, National Security Council; Principal Deputy for Nuclear Defense, Office of the Secretary of Defense for Nuclear Matters; and Director for Response Operations Policy, Homeland Security Council. General Bentz holds a Doctorate in Nuclear Engineering and a Master of Science in Nuclear Engineering from the University of Missouri in Columbia, and a Master of Science in National Security Strategy from the National War College, Fort McNair, Washington, D.C. Her other achievements include the National Science Foundation doctoral fellow, Particulate Systems Research Center, Columbia, Missouri; American Nuclear Society Exchange, Forschungszentrum, Germany; National Science Foundation primary investigator, La Selva Biological Station, Costa Rica; research fellow, National Defense University, Fort Lesley J. McNair, Washington, D.C; and an honorary doctorate in radiological health science from Oregon State University.

Karlos Bruce is Vice-president of Armag Corporation, a Division of Haydon Holdings, LLC, in Bardstown, Kentucky. Armag Corporation has been working in coordination with customers for fifty years designing and manufacturing secure facilities for a broad spectrum of physical security requirements. He has been active in the development, sales, and marketing of secure facilities including Weapons Vaults, Explosive Storage Magazines, COMSEC Vaults, SCIF's, SAPF's, and RF Shielded products for commercial, US Government, and US Military customers. He has over thirty years of experience in sales, marketing, and management of construction and mining equipment, and construction aggregates. Mr. Bruce has been active and participated in many industry associations throughout his career. He received his undergraduate degree from the University of Kentucky.

George Cotter retired from the National Security Agency in November 2009, with 60 years of cryptologic service as an analyst, technical leader, manager and senior executive. He served two active duty tours with the Naval Security Group prior to joining NSA in 1952. He served two tours abroad, with NSA's UK counterpart GCHQ and as Deputy Chief, NSA Europe. He headed the NSA S&T Intelligence Group, was founding Director of the DoD Computer Security Center and subsequently served as NSA Chief Scientist for over ten years. In 2004, Mr. Cotter took on the reestablishment of an Information Technology Directorate while also assuming the role of NSA CIO. This effort involved reconstitution of NSA's High Performance Computing Program, modernization of the NSA global networks, implementation of NSA's digital network intelligence program, and related cyber security efforts. Mr. Cotter holds a BA (Management) from George Washington University and MS (Numerical Science) degree from Johns Hopkins University and is a graduate of the Harvard International Security Program. He is a recipient of the NSA Meritorious and Exceptional Service Awards, Presidential Rank Award, and the Defense Exceptional Service Award. He is a Life member of the IEEE, a member of the Armed Forces Communications and Electronics Association, and the Association of Old Crows. Mr. Cotter is also the only NSA employee elected to membership in the National Academy of Engineering. In September 2010, Mr. Cotter was presented with the National Intelligence Distinguished Service Medal, the highest award in the Intelligence Community. Mr. Cotter served on the NSA Advisory Board through 2017.

Senator Bob Hall is an electrical engineer whose experience in protecting electrical and electronic equipment against the Electro Magnetic Pulse (EMP) threat began soon after the phenomenon was identified as a threat to the US Minuteman II Strategic Missile System during the cold war in the 1960s. Senator Hall graduated from The Citadel in Charleston, South Carolina with a degree in Electrical Engineering and received a Regular Commission as a 2nd Lieutenant in the US Air Force. While a cadet at the Citadel, he received numerous awards for his leadership. He was the only Air Force Cadet selected to be a Battalion Commander and was awarded the coveted Wade Hampton saber as the graduating cadet who had contributed the most to the Citadel during the four years he was a cadet. He was also listed in "Who's Who In American Colleges" his Senior year. Upon graduation, Senator Hall began his active duty as a Systems Engineer working to develop the Minuteman Missile System during the Cold War at Norton AFB in California. Here is where he achieved the rank of Captain. It was during his service at Norton AFB that Senator Hall led a project team of engineers to harden the Minuteman Missile System II from the Soviet Union's nuclear based electromagnetic Pulse (EMP) first strike capability, known as the "pin-down" threat. In addition to working to hardening the minuteman missile system, Senator Hall was

instrumental in the successful development of the military's air and ground based EMP detection devices. Following Senator Hall's military service, he transitioned to the private sector where he worked in the Aerospace industry as a systems engineer and business development manager. In 1982, he left the corporate world and began working as an independent proposal consultant to aerospace and defense corporations. Following this in 1984, he had developed his own company, Professional Proposal Management, Inc. Senator Hall designated electric grid security as a top legislative priority during his first legislative session and authored the first ever grid security bill in Texas legislative history. His bill, required the state to conduct a vulnerability assessment on the EMP threat to the electric grid infrastructure in Texas and report its findings. Unfortunately, while the bill successfully passed in the senate, it later died in the Texas House Calendars Committee. Senator Hall will be introducing a very aggressive bill to immediately begin protecting the Texas electric grid against the EMP threat in the next legislative session. Finally, Bob and his wonderful wife Kay reside in Edgewood, Texas. His compelling sense of duty shaped by his military service, business experience, and love for this country, drives him to leave behind for his children and grandchildren the legacy of a patriotic servant.

Bill Harris is an international lawyer, now in his seventh year participating in regulatory rulemakings and initiatives to strengthen financial incentives for critical infrastructure protection. He is a Member of the Board, Secretary, and a Co-Principal Investigator for the non-profit Foundation for Resilient Societies. He formerly was a Senior Member of the research staff at the RAND Corporation, and was a designer of Nuclear Risk Reduction Centers in 1982-84, and a co-drafter of elements of the INF Treaty of 1987, the START I Treaty of 1991 and the START II Treaty of 1993. He also served as a space operations lawyer for reconnaissance and communication systems of the United States government. Mr. Harris was a Senior (Legal) Advisor to the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack in January-December 2017. Since September 2017 he has been a Vice Chair of the EMP Special Interest Group of InfraGard, a non-profit committed to protection of critical infrastructures. He is one of three co-editors of the InfraGard book, *Powering Through: From Fragile Infrastructures to Community Resilience* (2016). Mr. Harris holds a B.A. from Harvard College and a J.D. from Harvard Law School. He is a member of the California State Bar.

Bob Kolasky was selected to lead the Cybersecurity and Infrastructure Security Agency's (CISA) National Risk Management Center in 2018, at the Department of Homeland Security (DHS). As Director, he oversees the Center's efforts to facilitate a strategic, cross-sector risk management approach to cyber and physical threats to critical infrastructure. The Center provides a central venue for government and industry to combine their knowledge and capabilities in a uniquely collaborative and forward-looking environment. Center activities support both operational and strategic unified risk management efforts. Mr. Kolasky's current position is the culmination of years of risk and resilience experience. He most recently served as the Deputy Assistant Secretary and Acting Assistant Secretary for CISA's (then the National Protection and Programs Directorate) Office of Infrastructure Protection (IP), where he led the coordinated national effort to reduce the risk posed by acts of terrorism and other cyber or physical threats to the nation's critical infrastructure, including soft targets and crowded spaces. Mr. Kolasky has served in a number of other senior leadership roles, including acting Deputy Under Secretary for CISA (then NPPD). In that position he helped to oversee CISA's efforts to secure the nation's physical and

cyber infrastructure. He has also held a position as the Director of Strategy and Policy for IP, where he led strategic planning, performance management and budgeting for the organization, and served as Director of the DHS Cyber-Physical Critical Infrastructure Integrated Task Force to implement Presidential Policy Directive 21 on Critical Infrastructure Security and Resilience, as well as Executive Order 13636 on Critical Infrastructure Cybersecurity. He is also the former Assistant Director for the Office of Risk Management Analysis at DHS where he was responsible for developing policies and processes to enable risk-informed strategic decisions by DHS. Prior to joining DHS, he was a journalist and an entrepreneur. He helped start two of the first public policy web sites and served as the Managing Editor for IntellectualCapital.com. Mr. Kolasky joined the Federal government in 2008 after six years as a management consultant. He graduated from Dartmouth College in 1994 and from the Harvard Kennedy School in 2002.

Mary D. Lasky is the Chairman of the InfraGard Electromagnet Pulse Special Interest Group (EMP SIG). She is the lead editor and author of “Powering Through: From Fragile Infrastructure to Community Resilience” an action guide on being prepared if there is grid failure. Mary Lasky is a Certified Business Continuity Professional (CBCP). She is a member the Board of Directors of the Foundation for Resilient Societies. Mary has been the Program Manager for Business Continuity Planning for the Johns Hopkins University Applied Physics Laboratory (JHU/APL). She is a past president of the Community Emergency Response Network Inc. (CERN) in Howard County, Maryland. While she was president, CERN received two FEMA grants on being prepared for a nuclear attack. She is a Past President of the Central Maryland Chapter of the Association of Contingency Planners (ACP). At APL, Mary has held a variety of supervisory positions in Information Technology and in business services. For many years, she was adjunct faculty of the Johns Hopkins University Whiting School of Engineering, teaching in the graduate degree program in Technical Management.

Nick Laws is currently researching control strategies for integrating distributed energy resources, including smart buildings and electric vehicles, into the U.S. electrical grid, with a focus on designs that increase system resilience as well as provide economic benefit for system owners. Mr. Laws is a Research Engineer at the National Renewable Energy Laboratory, where his primary work revolves around REopt – a techno-economic optimization model for determining the best mix of renewable energy and fossil fuel resources required to meet a wide range of goals, including cost savings, pollution reductions, and serving critical loads during grid outages. Other recent projects include: developing a predictive model for over-voltage events in a residential distribution network with high-penetration solar PV to schedule flexible loads and prevent PV curtailment; incorporating the value of resilience into decision making tools for microgrid design; and standing up NREL’s Intelligent Campus platform for integrated energy informatics, advanced analytics, and actionable insights. Mr. Laws holds a bachelor's degree in Aerospace Engineering from Boston University, a master's degree in Engineering Sciences from Dartmouth College, and is currently pursuing a PhD in Mechanical Engineering at UT Austin.

Lucian Niemeyer currently serves the Under Secretary of Defense for Acquisition and Sustainment as a Strategic Advisor for Defense energy resilience programs. From August 2017 to November 2018, he also served as the Assistant Secretary of Defense for Energy, Installations, and Environment. He is

responsible for enhancing the Department's planning, programs, and military capabilities to provide mission assurance through installation and operational energy resilience policy development and execution of initiatives for domestic and overseas installations. Prior to his appointment by the President, Mr. Niemeyer worked in the private sector as the founder of The Niemeyer Group, LLC. He also served from 2003 to 2014 on the professional staff of the United States Senate Committee on Armed Services where he was responsible for a wide portfolio of national security programs. Mr. Niemeyer is an Air Force veteran, retiring in 2008 at the rank of Lieutenant Colonel with 15 years of active and 5 years of Virginia Air National Guard service working within the installation engineering and military plans community. Mr. Niemeyer holds a Bachelor of Architecture, from the University of Notre Dame, a Master of Business Administration from The George Washington University, and a Master of National Security and Strategic Studies from the Naval War College.

Eli Owen -- In 2018, Eli Owen was appointed by California Governor Jerry Brown as Commander of the California State Threat Assessment Center (STAC) in the Governor's Office of Emergency Services (Cal OES). The STAC is the primary fusion center for the State of California as recognized by the Governor and DHS. Mr. Owen manages the day-to-day operations of the Center's activities and also serves as a top security advisor to the Director of Cal OES, who is the Governor's Homeland Security Advisor. Prior to joining Cal OES, Mr. Owen served for over eight years in the CIA, where he worked counterterrorism and cybersecurity matters. Mr. Owen has been recognized with several awards from the US Intelligence Community for his leadership and professional achievements, both in the US and abroad. He has traveled to over a dozen countries in Asia, Europe, Africa and the Middle East. Born in Lake Tahoe and raised in Sacramento, California, Mr. Owen completed a Master's in Public Administration at the University of Southern California, in Los Angeles, California in 2016. Mr. Owen was also named to the 40-Under-40 List by the Sacramento Business Journal in 2016.

Thomas Popik is Chairman of the Foundation for Resilient Societies, a nonprofit group dedicated to the protection of critical infrastructure against infrequently occurring natural and manmade disasters. He is principal author of a Petition for Rulemaking submitted to the Nuclear Regulatory Commission that would require backup power sources for spent fuel pools at nuclear power plants. Previously, as a U.S. Air Force officer, Mr. Popik investigated unattended power systems for remote military installations. Mr. Popik graduated from MIT with a B.S. in mechanical engineering and from Harvard Business School with an M.B.A.

Major General Luke Reiner is the Adjutant General for Wyoming. As such, he directs the Wyoming Military Department, located in Cheyenne. He is responsible for more than 3,000 Army and Air National Guard members in Wyoming. He is also responsible for the Wyoming Veterans' Affairs Commission, the Oregon Trail State Veterans' Cemetery in Casper, the Wyoming Cowboy Challenge Academy at Camp Guernsey and Starbase in Cheyenne. General Reiner began his military career as an enlisted soldier in the Nebraska Army National Guard in 1982. After receiving his commission from the University of Nebraska's Reserve Officer Training Corp program in December of 1986, he transferred to the Wyoming Army National Guard where he served in various command and staff positions to include command of Camp New York, Kuwait during Operation Iraqi Freedom II, command of the Wyoming Army National

Guard's 115th Fires Brigade and Chief of the Wyoming National Guard Joint Staff. He was appointed as the states 26th Adjutant General by Governor Mead on 1 April, 2011.

Paul Stockton is the Managing Director of Sonecon LLC, a security and economic advisory firm in Washington, DC. Before joining Sonecon, Dr. Stockton served as the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs from May 2009 until January 2013. In that position, he was responsible for Defense Critical Infrastructure Protection and led the creation of the Department's first-ever Mission Assurance Strategy. Dr. Stockton was the principal civilian advisor to the Secretary of Defense for providing Defense support to FEMA and DHS in Superstorm Sandy and other disasters. Prior to being confirmed as Assistant Secretary, Dr. Stockton served as a Senior Research Scholar at Stanford University's Center for International Security and Cooperation, and as Associate Provost of the Naval Postgraduate School (NPS). While at NPS, Dr. Stockton also founded and led its School of International Graduate Studies, the Center for Homeland Defense and Security, and the Center for Civil-Military Relations. Dr. Stockton was twice awarded the Department of Defense Medal for Distinguished Public Service, DOD's highest civilian award. Dr. Stockton holds a Ph.D. from Harvard University and a BA from Dartmouth College. His recent publications include the [Resilience for Grid Security Emergencies: Opportunities for Industry-Government Collaboration](#), August 2018 from the Johns Hopkins University Applied Physics Laboratory (APL) and numerous other public and private sector boards.

Maj David Stuckenberg is Aide-de-camp to the Commander of Air Education & Training Command (AETC). In this capacity, he also serves as a strategist, subject matter expert, and command liaison on emerging doctrines and technologies of interest to USAF, DOD, and industry. Previous to his current assignment, Maj Stuckenberg served as Director of the 6th Air Mobility Wing Commanders Action Group (CAG) and a KC-135 Stratotanker Pilot at MacDill AFB, FL. As Director of the CAG, Maj Stuckenberg oversaw and executed the Wing Commander's strategic level programs and initiatives to ensure mission optimization and support across 33 organizations including United States Special Operations Command, United States Central Command, and the National Airborne Operations Center. Maj Stuckenberg has a diverse background in special operations, intelligence and surveillance; nuclear threat reduction, and military & defense strategy. As a strategist, has advised senior government and military leaders both nationally and internationally including National Security Council, Congress, NATO, and the Royal Institute of International Affairs. His novel research is frequently featured by the national press and briefed to educate and provide solutions to Congress and state legislatures. In 2016, Stuckenberg was selected to serve as a member of the Tanker Nuclear Action Counsel, an advisory group to HQ AMC. As an innovator, he founded both the American Leadership & Policy Foundation, a non-profit civic leadership and policy foundation, and a global start-up working to engineer clean-tech solutions for water scarcity. He currently serves as Chairman of the Board at ALPF and CEO of his company and is completing a PhD in defense studies at King's College London. Major Stuckenberg entered the Air Force in 2003 as an enlisted Crew Chief on the A-10 Thunderbolt and U-2. In 2007, he graduated from the University of Central Missouri earning his commission through the USAF-ROTC. During previous assignments Maj Stuckenberg has served as Chief of Conventional Plans and Programs, 6th Air Mobility Wing; Executive Officer, 91st Air Refueling Squadron; Section Commander, 509th Operations Support

Squadron, home of the B-2 Spirit; Assistant Weapons Officer for the 20th Reconnaissance Squadron; and Chief of Standards and Evaluations, 414th Expeditionary Reconnaissance Squadron, United States Air Forces Europe. He has flown combat missions in every major theater of war since 9/11. He currently calls Missouri home and is married with five children.

Stephen Vollandt is the Vice President for Auroros, Incorporated. He specializes in aligning strategic and operational requirements with technology portfolio solutions. After an early career in the construction, civil engineering and environmental cleanup sector, Mr. Vollandt transitioned into technology and infrastructure. His current passion is the design, funding, and creation of resilient facilities and communities. During much of his career, he also served in the US Marine Corps Reserves, providing a parallel and complementary career track. He served at the infantry battalion, brigade, expeditionary force, and headquarters levels; specializing in readiness, decision support, operations management, logistics, sustainment, and leading global operations in austere remote environments. His areas of expertise include contract and program management, programmatic estimating, budgeting, project performance assessments, industrial facility assessments, construction and construction inspection, cyber business-risk assessments, disaster recovery planning and operations, contamination assessments/remediation, and military operations to include nuclear weapon terrorism, global WMD neutralization, and expeditionary camp and facility planning and management. He has served clients such as the NC Board of Elections and Ethics Enforcement, DoD CIO, HQ Army CIO/G6, the Marine Corps Business Enterprise, Marine Corps CIO, and the FBI's Criminal Justice Information System division. He currently volunteers as an FBI-InfraGard Infrastructure Resilience Special Interest Group (EMP-SIG) Vice-Chair. He is a co-editor and co-author of the EMP-SIG's "Powering Through: from Fragile Infrastructure to Community Resilience" book, available on Amazon. Mr. Vollandt leveraged his readiness planning and recovery background to create the book's Resilience Maturity Model, which orients planners to five successive transformation maturity levels and considers key interdependencies and shared vulnerabilities. This Maturity Model is particularly helpful when designing resilient communities or facilities.

Andrew Whitney is a Cambridge postgraduate-educated energy and strategy specialist with experience at senior executive level in multiple technology sectors. Ex-Bain & Co consulting, ex-Bain Leveraged Buyout practice, and with private equity turnaround experience at management board level. He has 19 years' experience as an entrepreneur, often as CEO/Founder. Andrew has been active in the energy space since 1989 when he worked as a market maker for FTSE energy stocks on the London market. Andrew wrote his Masters and PhD dissertations on the topic of the post-Soviet Russian energy sector at Cambridge University and has since advised, run or owned multiple concerns in the energy and renewables spaces, from oil E&P to pipelines to waste to energy and hydropower renewables across multiple international markets. His three decades of experience in every aspect of the sector from materials and engineering to commerce and finance give him a uniquely broad understanding of the core issues. Andrew is currently active in the private equity space across a series of technology-driven deals, with an emphasis on energy and resiliency. He is the CEO of Energy Investment Partners, an innovative energy technology and project investment entity, and the CEO of VelociFoam Limited, a pioneer in pipeline installation and protection technology. Andrew served in two branches of the UK

military reserve component before moving to the US in 2004. He now lives in North Carolina with his wife and daughter.

Ambassador R. James Woolsey is Chairman of the Foundation for Defense of Democracies Venture Partner with Lux Capital. He is the former Director Central Intelligence. Mr. Woolsey previously served in the U.S. Government on five different occasions, where he held Presidential appointments in two Republican and two Democratic administrations, most recently (1993-1995) as Director of Central Intelligence. From July 2002 to March 2008. Mr. Woolsey was a Vice President and officer of Booz Allen Hamilton, and then a Venture Partner with Vantage Point Venture Partners of San Bruno, California until January 2011. He was also previously a partner at the law firm of Shea & Gardner in Washington, DC, now Goodwin Procter, where he practiced for 22 years in the fields of civil litigation, arbitration, and mediation. During his 12 years of government service, in addition to heading the CIA and the Intelligence Community, Mr. Woolsey was: Ambassador to the Negotiation on Conventional Armed Forces in Europe (CFE), Vienna, 1989–1991; Under Secretary of the Navy, 1977–1979; and General Counsel to the U.S. Senate Committee on Armed Services, 1970–1973. He was also appointed by the President to serve on a part-time basis in Geneva, Switzerland, 1983–1986, as Delegate at Large to the U.S.–Soviet Strategic Arms Reduction Talks (START) and Nuclear and Space Arms Talks (NST). As an officer in the U.S. Army, he was an adviser on the U.S. Delegation to the Strategic Arms Limitation Talks (SALT I), Helsinki and Vienna, 1969–1970. Mr. Woolsey serves on a range of government, corporate, and non-profit advisory boards and chairs several, including that of the Washington firm, Executive Action LLC. He serves on the National Commission on Energy Policy. He is currently Co-Chairman of the Committee on the Present Danger. He is Chairman of the Advisory Boards of the Clean Fuels Foundation and the New Uses Council, and a Trustee of the Center for Strategic & Budgetary Assessments. Previously he was Chairman of the Executive Committee of the Board of Regents of The Smithsonian Institution, and a trustee of Stanford University. He has also been a member of The National Commission on Terrorism, 1999–2000; The Commission to Assess the Ballistic Missile Threat to the U.S. (Rumsfeld Commission), 1998; The President's Commission on Federal Ethics Law Reform, 1989; The President's Blue Ribbon Commission on Defense Management (Packard Commission), 1985–1986; and The President's Commission on Strategic Forces (Scowcroft Commission), 1983. Mr. Woolsey has served in the past as a member of boards of directors of a number of publicly and privately held companies, generally in fields related to technology and security, including Martin Marietta; British Aerospace, Inc.; Fairchild Industries; and Yuric Systems, Inc. In 2009, he was the Annenberg Distinguished Visiting Fellow at the Hoover Institution at Stanford University and in 2010–2011 he was a Senior Fellow at Yale University's Jackson Institute for Global Affairs. Mr. Woolsey was born in Tulsa, Oklahoma, and attended Tulsa public schools, graduating from Tulsa Central High School. He received his B.A. degree from Stanford University (1963, With Great Distinction, Phi Beta Kappa), an M.A. from Oxford University (Rhodes Scholar 1963–1965), and an LL.B from Yale Law School (1968, Managing Editor of the Yale Law Journal). Mr. Woolsey is a frequent contributor of articles to major publications, and from time to time gives public speeches and media interviews on the subjects of energy, foreign affairs, defense, and intelligence. He is married to Suzanne Haley Woolsey and they have three sons, Robert, Daniel, and Benjamin.