

EXPERIENCE

Senior Advisor and Program Director

New America, Washington, DC

May 2014-present

Directs a research program to look at security building in the 21st century, with a focus on the intersection of natural resources and national security. Major projects include:

- Phase Zero: new data tools and partnerships to examine root causes of conflict, including water, energy, and climate change.
- Weather Eye: data visualization and research of community impacts of severe weather in the United States, including best practices and resilience gaps.
- Electric Shock: a research initiative looking at changing threats and risks to the electric grid.
- Things of the Internet: a research project on the geopolitics of information age critical minerals.
- The Energy of War: a research project examining how America's relentless need for energy has influenced both the causes and the conduct of modern warfare.
- Civic Resilience to Terrorism: a project looking at the potential consequences for civic resilience of a terrorist attack.
- Future of War: advisor to partnership with Arizona State University bringing together thinkers and practitioners from the worlds of technology, the academy, policy, the military, and the media to address the changing nature of war.

Assistant Secretary of Defense for Operational Energy Plans and Programs

U.S. Department of Defense, Washington, DC

May 2010-May 2014

Top U.S. government official for improving energy security at the Department of Defense (DoD), focusing on the \$15 billion in fuel consumed annually in military operations.

Extensive speaking, press, and social media experience.

- Created and managed a new office, including organizational design, recruitment of staff of technical and military experts, and business plan for \$30 million annual budget.
- Provided strategic energy vision for DoD, including Army, Navy, Marine Corps, Air Force, Office of the Secretary of Defense, Joint Staff, and Combatant Commands. Pioneered approach focused on energy performance, reducing risks, and saving money.
- Served as Senate-confirmed, principal energy advisor to the Secretary of Defense.
- Provided advice and oversight on energy in strategic planning, acquisition, and procurement as an advisor to the Defense Acquisition Board, the Joint Requirements Oversight Council, and the Senior Sustainability Council.

- Instigated partnerships with military organizations, other Federal agencies, national laboratories, and industry to promote DoD's adoption of energy efficiency and renewable energy technologies. Focused on rapid fielding of energy improvements to military forces in Afghanistan and other locations.
- Exercised oversight of approximately \$17 billion in DoD annual programming and budgeting for energy as one of only two DoD officials with budget certification authority.
- Directed inter-agency energy security futures games focused on the Persian Gulf, Africa, South America, and South China Seas.

Vice President and Senior Fellow

Center for a New American Security, Washington, DC

2007- 2010

Principal officer and researcher for non-partisan national security think tank.

- Created the Natural Security Program, a novel effort to examine the national security dimensions of natural resources challenges. The project looked at the strategic implications of new demands for resources, such as critical minerals and energy, as well as consequences, such as biodiversity loss and climate change.
- Managed and raised funds for energy security and climate change projects.
- Directed an international climate change war game, designing complex futures scenarios that incorporated unique climate model runs, in partnership with Oak Ridge National Laboratory. The game was featured in *Earth 2100*, a documentary that aired on ABC on June 2, 2009.
- Published numerous reports and articles on natural security topics.

Director, National Security Project

Third Way, Washington, DC

2006-2007

Manager of program supporting public office holders and candidates for office with policy positions and communications strategies on national security issues.

- Facilitated and designed national security trainings for candidates and for Members of Congress.
- Co-authored numerous reports and position papers on military transformation, Iran, Iraq, China, weapons of mass destruction, terrorism and Latin America.

Independent Consultant, Washington, DC

2005-2010

- Advised high-level clients on strategic communications, including a Governor, a former Cabinet Secretary, and a U.S. Senator.

Member, Policy Planning Staff, U.S. Department of State, Washington, DC

2002-2005

Advisor and chief speechwriter to Hon. Richard Armitage, Deputy Secretary of State.

- Authored more than 150 speeches and articles, including major policy addresses and testimony on U.S. foreign policy, Asia, the Middle East, and leadership.

Advocacy Director for the Middle East and North Africa

Amnesty International, Washington, DC

2001-2002

Lead on crisis response, lobbying, and communications on human rights in Middle East.

- Served as spokesperson on Middle East issues and authored reports on Middle East and U.S. military.

Country Director for South Asia; Speechwriter to the Secretary of Defense

U.S. Department of Defense, Washington, DC

1994-2001

Served as career civil servant in the Office of the Secretary of Defense and political appointee for the Secretary of Defense.

- Authored major speeches for two Secretaries of Defense on a range of defense policy subjects, including military operations in the Balkans.
- Served as chief policy advisor for Office of the Secretary of Defense on South Asia and North Africa and managed bilateral defense relations with the regions.
- Led DoD response to 1998 South Asian nuclear tests.
- Selected for prestigious management training program (Office of the Secretary of Defense Presidential Management Intern Program).

Research Analyst

U.S. Congress, Office of Technology Assessment, Washington, DC

1989-1992

- Conducted research and supported events for the Energy and Transportation Programs.
- Authored and edited chapters in reports on energy in developing countries and U.S. domestic public works for agency of U.S. Congress.

EDUCATION

Master of International Affairs and Certificate of Middle Eastern Studies

Columbia University, New York City, NY

1992-1994

- Concentration in International Energy Policy.
- Selected for small, elite program with full tuition and stipend.

Bachelor of Arts, Williams College, Williamstown, MA

1984-1988

- Majors in English and History.
- Concentration in Middle Eastern and African Studies.
- Semester abroad in Kenya through St. Lawrence University

RECOGNITION

- Member, Advisory Committee for Environmental Research and Education, National Science Foundation (2018-2019)
- Technical Review Panel, Energy Systems Integration, National Renewable Energy Laboratory (2018-2019)
- Sasakawa USA Alumni Fellow (2018)
- Member, Scientific Advisory Committee, Energy and Environmental Sciences Directorate, Oak Ridge National Laboratory (2016-2017)
- World Economic Forum, Decarbonizing Energy Global Agenda Council (2015-2016)
- Department of Defense Distinguished Civilian Service Award (2014)
- Aspen Atlantic Group Participant (2008-2009)
- Leadership Team, Next Generation Project, American Assembly (2006-2007)
- Department of State Superior Honor Award (2004)
- Department of Defense Exceptional Public Service Award (2001)
- Department of Defense Meritorious Service Group Award (1995)
- Presidential Management Intern, Office of the Secretary of Defense, U.S. Department of Defense (1994-96)
- Foreign Language and Areas Studies Fellow for Arabic (1993)
- International Fellow, Columbia University (1993)
- Zuckerman Fellow, Columbia University (1992-1994)
- Dean's List, Williams College and St. Lawrence University

PUBLICATIONS

Books & Reports

Strategic Distraction: America, China, and Japan in the 21st Century Competitive Space, New America, Washington, DC, October 2018.

With Emily Gallagher, *Weather Eye: Stories from the Front*, New America, Washington, DC, November 2017.

With Alyssa Sims and David Sterman, *War and Tweets: Terrorism in America in the Digital Age*, New America, Washington, DC, October 2016.

Natural Security, Center for a New American Security, Washington, DC, June 2009.

"Catastrophic Climate Change over the Next 100 Years," *Climatic Cataclysm The Foreign Policy and National Security Implications of Climate Change*, Kurt M. Campbell ed., Brookings Institution Press, Washington, DC, June 2008.

With Jay Gulledge et al., *Uncharted Waters: The U.S. Navy and Navigating Climate Change*, Center for a New American Security, December 2008.

With Christine Parthemore, *Remodeling the U.S. Government for Energy Security: Initial Findings from the Big Energy Map*, Center for a New American Security, Washington, DC, December 2008.

With Christine Parthemore, *A Strategy for American Power: Energy, Climate, and National Security*, Center for a New American Security, Washington, DC, June 2008.

With Joy Dunkerley et al., *Fueling Development: Energy Technologies for Developing Countries*, Office of Technology Assessment of the U.S. Congress, OTA-E-526, Washington, DC, April 1992.

Journal Articles

"No Such Thing as a Green War or a Bad Peace," *Environmental Law and Policy Annual Review Annual Review*, 2014-2015.

"Enemy Number One for the Electric Grid: Mother Nature," *The SAIS Journal of International Affairs*, Spring 2015 issue.

"Powering the Pentagon: Creating a Lean, Clean Fighting Machine," *Foreign Affairs*, May/June 2014 issue.

With Sam Baldwin et al., "Energy Technologies for Developing Countries: U.S. Policies and Programs for Trade and Investment," *Annual Review of Energy and the Environment*, Vol. 17:327-258, November 1992.

Articles

With Rachel Zimmerman, "This is the Dawning of the Age of...Niobium?" *Slate*, December 6, 2018, <https://slate.com/technology/2018/12/united-states-china-competition-strategy-critical-minerals.html>

"New House Majority Needs to Prioritize Security over Snipe Hunts," *The Hill*, November 30, 2018 <https://thehill.com/opinion/national-security/418920-security-over-snipe-hunts-for-the-new-house-majority>

"Solar Energy in the Competitive Space," September 27, 2018, <https://www.newamerica.org/resource-security/phase-zero-blog/solar-energy-competitive-space/>

“Arenas of Destruction: Phase Zero and the Future of War,” Remarks at the Launch of the ASU Washington, DC Office, March 12, 2018 <https://www.newamerica.org/resource-security/natural-security/arenas-destruction-phase-zero-and-future-war/>

“What City Has the Power to Woo Amazon?” *Slate*, January 26, 2018, <https://slate.com/technology/2018/01/what-city-has-the-best-energy-policies-for-amazons-headquarters-search.html>

“Conspiracy Theorists are Electrified about a Rumored National Power Outage,” *Slate*, November 4, 2017 http://www.slate.com/authors.sharon_e_burke.html

“A Climate for Conflict: Stories from Somalia,” *Natural Security Blog*, June 1, 2017, <https://www.newamerica.org/resource-security/natural-security/climate-conflict-stories-somalia/>

“The Pentagon’s Fuel Fiefdom,” *Natural Security Blog*, May 26, 2017, <https://www.newamerica.org/resource-security/natural-security/pentagons-fuel-fiefdom/>

“Climate Security Work Must Continue in the Trump Administration,” *The Bulletin of Atomic Scientists*, April 4, 2017, <http://thebulletin.org/commentary/climate-security-work-must-continue-trump-era10669>

“Fight or Flight: Should State Department Employees Undermine Trump or Just Quit?” *Foreign Policy*, January 31, 2017. <http://foreignpolicy.com/2017/01/31/fight-or-flight-should-state-department-employees-undermine-trump-or-just-quit/>

“Mattis on Military Energy Security,” *Natural Security Blog*, New America, January 13, 2017. <https://www.newamerica.org/resource-security/natural-security/mattis-military-energy-security/>

“General Jim Mattis Goes Green?” *Natural Security Blog*, New America, December 21, 2016. <https://www.newamerica.org/resource-security/natural-security/general-jim-mattis-goes-green/>

With Barry Lynn and Zheng Wang, “With UN Decision Looming, US, China Need Real Talks on South China Sea,” June 3, 2016, <http://www.defenseone.com/ideas/2016/06/china-us-need-real-talks/128798/?oref=d-river>

“Despite What General Scales Said, Military Leaders are Taking Icecap Melting Seriously,” *Foreign Policy*, April 14, 2016 <https://www.newamerica.org/new-america/in-the-news/despite-what-general-scales-said-us-military-leaders-are-taking-icecap-melting-seriously/>

“Why You Should Pay Attention to the Cryosphere,” *Foreign Policy*, April 7, 2016, <http://foreignpolicy.com/2016/04/07/natural-security-why-you-should-pay-attention-to-the-cryosphere-dammit/>

“Now Streaming on Netflix: A Fantastic Political Thriller about Climate Change,” February 2, 2016, http://www.slate.com/blogs/future_tense/2016/02/02/occupied_a_political_thriller_on_climate_change_now_on_netflix_reviewed.html

“Is Energy Independence Really a Good Thing?” *Foreign Policy*, October 22, 2015, <http://foreignpolicy.com/2015/10/22/the-natural-security-column-hey-is-energy-independence-really-a-good-thing/>

“Oklahoma is Not OK,” *Foreign Policy*, October 16, 2016, <http://foreignpolicy.com/2015/10/16/natural-security-oklahoma-is-not-okay/>

"Who's Afraid of the Big Bad Pulse?" *Slate*, July 2, 2015, http://www.slate.com/articles/technology/future_tense/2015/07/emp_threats_could_an_electro_magnetic_pulse_weapon_wipe_out_the_power_grid.html

"China's Big Bet: The World's Future Depends on China's Energy Use," *Slate*, May 15, 2015, http://www.slate.com/articles/technology/future_tense/2015/05/the_world_s_future_depends_on_china_s_energy_use.html.

“No Illusions about Iran,” *Foreign Policy*, March 6, 2015, <http://foreignpolicy.com/2015/03/06/the-pentagoner-no-illusions-about-iran/>.

"The Long Slow Death of Capabilities-Based Planning,” *Foreign Policy Online*, January 5, 2015, <http://foreignpolicy.com/2015/01/05/the-pentagoner-the-long-slow-death-of-capabilities-based-planning/>.

With Sharon Squassoni, "Why Climate Change Isn't Sputnik," *Slate*, December 22, 2014, http://www.slate.com/articles/technology/future_tense/2014/12/climate_change_isn_t_a_sputnik_moment_why.html.

"Root for Oil Prices to Go Back Up?" *CNN.com*, November 7, 2014, <http://www.cnn.com/2014/11/07/opinion/burke-low-oil-prices-instability/index.html>.

"The Pentagon's Climate Change Plan is Great, but Will it Be Easy to Ignore?" *Slate*, October 17, 2014, http://www.slate.com/blogs/future_tense/2014/10/17/the_pentagon_s_climate_change_plan_is_great_but_will_it_be_easy_to_ignore.html.

"Is Santa Claus in a New War Zone or a Growth Market?" *Weekly Wonk*, October 2, 2014, <http://www.newamerica.org/new-america/is-santa-claus-in-a-new-war-zone-or-a-growth-market/>.

"The U.S. Military's New Foe is Climate Change," *CNN.com*, July 21, 2014, <http://www.cnn.com/2014/07/21/opinion/burke-climate-change-u-s-military-foe/>.

"South by West Point," *Weekly Wonk*, May 29, 2014, <http://weeklywonk.newamerica.net/articles/south-west-point/>.

Tim Ash and Andrew Erdmann, "Powering the U.S. Military: An Interview with the Pentagon's Sharon Burke," *McKinsey Quarterly*, April 2013, www.mckinsey.com/insights/energy_resources_materials/powering_the_us_military.