

CSF

Current Strategy Forum

Energy and U.S. National Security
Vulnerability and Opportunity

June 7–8, 2011



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CONFERENCE PRECEPTS

The Current Strategy Forum has its origins in the *Round Table Discussions* first held at the Naval War College in May 1949. Their purpose was to bring together a small number of prominent civilian and military guests to discuss future U.S. strategy with senior officers attending the Naval War College.

In 1951 Vice Admiral Richard L. Conolly, President of the Naval War College, gained Secretary of the Navy sponsorship of this annual event under the title *Global Strategy Discussions*. The program was expanded to include a broader cross-section of America's civilian leadership and to encourage a free and open exchange of views on major national and international issues.

In 1973 the title was changed to *Current Strategy Forum* (CSF) and the program focus narrowed to examination of one issue of strategic national importance each year. The Current Strategy Forum has thus evolved, despite shifts in title and scope, in consonance with the original objective of providing a forum for the open exchange of viewpoints on important national issues.

This year marks the 62nd annual Current Strategy Forum at the Naval War College in Newport, RI and will examine the theme:

Energy and U.S. National Security *Vulnerability and Opportunity*

The viability of our economy relies heavily on the continuing supply of energy resources. Increasingly, the United States' national security initiatives have been concerned with challenges and trends associated with the need for continued access to natural resources. In the naval realm, continuing debates over the legitimacy of overlapping sovereign claims to undersea resources remain a potential source of conflict.

One prominent theme of the Maritime Strategy is that the expansion of the global economic system currently underway will create increasing competition for these energy resources and may encourage nations to exert wider claims of sovereignty over greater expanses of ocean, waterways, and natural resources, potentially causing stress to the international system. Our nation's challenge will be to support a secure global maritime system that facilitates the unhindered flow of these vital energy commodities as well as ensuring access to the global commons for other economic components such as exploration and undersea infrastructure while seeking new solutions that reduce dependency on these limited resources.

This year's Current Strategy Forum will explore:

- The critical role of energy in international security,
- The current and future impact of increasing global demands on natural resources, and
- The related vulnerabilities and opportunities for the nation and the maritime services in a more energy constrained environment.

PROGRAM OF EVENTS

TUESDAY, JUNE 7 (Civilian–business attire/Military–summer white or service equivalent)

6:30 a.m. Guest Registration – Continental Breakfast available in Spruance Lobby

8:00 Administrative Announcements

8:05 Welcome and Introduction

Rear Admiral John N. Christenson, U.S. Navy, President, U.S. Naval War College

8:10 Keynote Address

Amory B. Lovins, Rocky Mountain Institute

9:10 Break

9:30 Panel 1: **Energy and International Security**

As both an important consumer of energy and guarantor of secure international commerce, our nation plays a significant role in the global demand for energy. Countries with large oil reserves include nations in unstable regions of the world, as well as nations disinclined to support free trade, open markets, or the rule of law. Rising demands on the world energy supply from global competitors and developing powers are certain to add considerably to these pressures. This panel will explore the geostrategic environment that will shape international behavior, seek to understand the implications for United States foreign policy and help define the role for the Department of Defense and the Navy in preparing for a future in a world of scarce resources.

Sarah A. Emerson, President, Energy Security Analysis, Inc.

David S. Painter, Georgetown University

Catherine M. Kelleher, University of Maryland

Moderator: Peter Dombrowski, U.S. Naval War College

11:00 Keynote Address

Lieutenant General George J. Flynn, U.S. Marine Corps

Commanding General, Marine Corps Combat Development Command

12:00 p.m. Lunch

Commissioned Officers' Club

1:30 Keynote Address

Admiral Gary Roughead, U.S. Navy, Chief of Naval Operations

2:30 Break

2:45 Panel 2: **Sovereignty, Energy, and the Global Commons**

A prominent theme of the Maritime Strategy is that expansion of the global economic system may encourage nations to exert wider claims of sovereignty over greater expanses of ocean – potentially resulting in conflict. This fact is well appreciated by the world's major economic powers, leading to continuing competition over potential future sources of natural resources. The political upheavals in the Middle East may well lead to increased political and strategic challenges to American and international efforts to secure access to energy and other resources from sovereign states in the region. And the recent Gulf of Mexico oil spill vividly illustrates another challenge to the global system, namely the extent of national responsibility for the environmental consequences of resource exploitation. This panel will

TUESDAY, JUNE 7 (Continued)

seek to illuminate the continuing, and potentially conflict-generating, issues related to access to natural resources, in particular undersea resources, which straddle the ill-defined border between sovereign possessions and the global commons.

Geoffrey Kemp, The Center for the National Interest

Peter Dutton, U.S. Naval War College

Meredith Miller, The National Bureau of Asian Research

Moderator: John H. Maurer, U.S. Naval War College

6:30 Secretary of the Navy Reception
Commissioned Officers' Club

WEDNESDAY, JUNE 8 (Civilian–business attire/Military–summer white or service equivalent)

6:30 a.m. Continental Breakfast available in Spruance Lobby

8:00 Move to seminar locations

8:10 Seminars

10:00 Return to Spruance Lobby for refreshments

10:30 Keynote Address
The Honorable Raymond “Ray” Mabus, Secretary of the Navy

11:30 Lunch
Commissioned Officers' Club

1:00 p.m. Keynote Address
Stephen M. Walt, Harvard University

2:00 Panel 3: **Seapower, Energy, and Adapting to Future Constraints**
Forward postured naval forces' need for fuel creates a long and vulnerable logistics tail, the protection of which necessarily draws forces from the fight. Exacerbating this concern are fiscal pressures on the United States defense budget, which, combined with the increasing costs associated with fossil fuels, will spur demand for improvements in energy efficiency for the American military. Increasing the Navy's operational energy efficiency will be essential for maintaining forward presence and power projection capabilities. Recent developments, such as Small Modular Reactors (SMR) and advances in renewable energy resources, offer potential avenues for reducing the Navy's energy demands. This panel will explore the future of operational energy efficiency, and the cultural and behavioral changes within the U.S. Navy that can help address this concern.

Vice Admiral William R. Burke, U.S. Navy

Deputy Chief of Naval Operations for Fleet Readiness and Logistics (N4)

Jonathan S. Wolfson, CEO Solazyme

Jackalyne Pfannenstiel

Assistant Secretary of the Navy (Energy, Installations and Environment)

Moderator: Nikolas K. Gvosdev, U.S. Naval War College

3:30 Closing Remarks

3:45 Adjourn



The Honorable Ray Mabus

United States Secretary of the Navy

Ray Mabus is the 75th United States Secretary of the Navy. As Secretary, he leads America's Navy and Marine Corps and is responsible for an annual budget in excess of \$150 billion and almost 900,000 people.

The Secretary of the Navy is responsible for conducting all the affairs of the Department of the Navy, including recruiting, organizing, supplying, equipping, training, and mobilizing. Additionally, he oversees the construction, outfitting, and repair of naval ships, equipment and facilities, and is responsible for the formulation and implementation of policies and programs that are consistent with the national security policies and objectives established by the President and the Secretary of Defense.

Prior to joining the administration of President Barack Obama, Mabus served in a variety of top posts in government and the private sector. In 1988, Mabus was elected Governor of Mississippi. As the youngest governor of Mississippi in more than 100 years at the time of his election, he stressed education and job creation. He passed B.E.S.T. (Better Education for Success Tomorrow), one of the most comprehensive education reform programs in America, and was named one of Fortune Magazine's top ten education governors. He was appointed Ambassador to the Kingdom of Saudi Arabia for the Clinton Administration in 1994. During his tenure as Ambassador, a crisis with Iraq was successfully averted and Saudi Arabia officially abandoned the boycott of United States businesses that trade with Israel. He also was Chairman and CEO of Foamex, a large manufacturing company, which he led out of bankruptcy in less than nine months paying all creditors in full and saving equity. Prior to becoming Governor, he was elected State Auditor of Mississippi and served as a Surface Warfare Officer in the U.S. Navy aboard the cruiser USS *Little Rock*.

In June 2010, President Obama asked Secretary Mabus to prepare a long-term recovery plan for the Gulf of Mexico in the aftermath of the Deepwater Horizon oil spill. After extensive travel and many meetings, his report "America's Gulf Coast: A Long-Term Recovery Plan After the Deepwater Horizon Oil Spill" was released in September 2010. The report was met with broad bi-partisan support.

Secretary Mabus is a native of Ackerman, Mississippi, and received a Bachelor's Degree from the University of Mississippi, a Master's Degree from Johns Hopkins University, and a Law Degree from Harvard Law School. He has been awarded the U.S. Department of Defense Distinguished Public Service Award, the U.S. Army's distinguished Civilian Service Award, the Martin Luther King Social Responsibility Award from the King Center in Atlanta, the National Wildlife Federation Conservation Achievement Award, the King Abdul Aziz Award from the Kingdom of Saudi Arabia, and the Mississippi Association of Educators' Friend of Education Award.



Admiral Gary Roughead

Chief of Naval Operations

Admiral Roughead is a 1973 graduate of the United States Naval Academy.

Among his six operational commands, Admiral Roughead was the first officer to command both classes of Aegis ships, having commanded USS *Barry* (DDG 52) and USS *Port Royal* (CG 73).

As a flag officer, he commanded Cruiser Destroyer Group 2, the *George Washington* Battle Group; and U.S. 2nd Fleet/NATO Striking Fleet Atlantic and Naval Forces North Fleet East.

Ashore, he served as Commandant, United States Naval Academy, the Department of the Navy's Chief of Legislative Affairs, and as Deputy Commander, U.S. Pacific Command.

Admiral Roughead is one of only two officers to have commanded the fleets in the Pacific and Atlantic, commanding the U.S. Pacific Fleet and Joint Task Force 519, as well as U.S. Fleet Forces Command, where he was responsible for ensuring Navy forces were trained, ready, equipped and prepared to operate around the world, where and when needed.

Admiral Roughead's awards include the Defense Distinguished Service Medal, Navy Distinguished Service Medal, Defense Superior Service Medal, Legion of Merit, Meritorious Service Medal, Navy Commendation Medal, Navy Achievement Medal, and various unit and service awards.

Admiral Roughead became the 29th Chief of Naval Operations Sep. 29, 2007. He and his wife, Ellen, have an adult daughter, Elizabeth.



Rear Admiral John N. Christenson President, U.S. Naval War College

Rear Adm. Christenson became the 53rd president of the U.S. Naval War College, March 30, 2011. The fourth of six sons of a Navy Skyraider pilot and a Navy nurse, he graduated from the U.S. Naval Academy in 1981.

At sea, he commanded USS *McClusky* (FFG 41); Destroyer Squadron 21 in USS *John C. Stennis* (CVN 74); and Carrier Strike Group 12, the USS *Enterprise* (CVN 65) Strike Group and most recently served as president, Board of Inspection and Survey. He also served as the anti-submarine warfare officer and main propulsion assistant aboard USS *Cook* (FF 1083); aide to commander, Cruiser Destroyer Group 1 in USS *Long Beach* (CGN 9); weapons officer aboard USS *Downes* (FF 1070);

Destroyer Squadron 21 combat systems officer in USS *Nimitz* (CVN 68); and, as executive officer aboard USS *Harry W. Hill* (DD 986). He deployed eight times on seven ships and twice in command of *McClusky*.

Ashore, he commanded the Surface Warfare Officers School in Newport, and as a new flag officer he served as commander, Naval Mine and Anti-submarine Warfare Command, Corpus Christi, Texas. He also served at the U.S. Naval Academy as a company officer, celestial navigation instructor, assistant varsity soccer coach and member of the admissions board; at Headquarters, United States Marine Corps in the Strategic Initiatives Group; on the Joint Staff, J5 and as executive assistant to the assistant chairman.

He graduated with distinction, and first in his class from the Naval War College, earning his Master's degree in National Security and Strategic Studies. He was also a Navy Federal Executive Fellow at the Fletcher School of Law and Diplomacy.

Christenson has been awarded the Defense Superior Service Medal, the Legion of Merit (five awards), the Meritorious Service Medal (two awards), the Navy and Marine Corps Commendation Medal (five awards) and the Navy and Marine Corps Achievement Medal.



Ambassador (Ret.) Mary Ann Peters Provost, U.S. Naval War College

Ambassador Mary Ann Peters became the fourth provost of the U.S. Naval War College on September 18, 2008. Previously, she was dean of academics of the College of International and Security Studies at the George C. Marshall European Center for Security Studies in Garmisch – Partenkirchen, Germany. Prior to becoming the dean of the college, Ambassador Peters served as associate director for international liaison at the Marshall Center.

Ambassador Peters spent more than 30 years as a career diplomat with the U.S. Department of State. From 2000 to 2003, Ambassador Peters served as the U.S. Ambassador to Bangladesh, leading the mission's efforts in support of the war on terrorism and other key U.S. foreign policy goals. She received a Presidential Meritorious Service Award in 2003 for her work in Bangladesh. Prior to her posting in Dhaka, Ambassador Peters was the deputy chief of mission at the United States Embassy in Ottawa, Canada, responsible for the management of the embassy and supervision of the six U.S. consulates general in Canada.

From 1995 to 1997, Ambassador Peters served in the White House as Director for European and Canadian Affairs at the National Security Council. Among other portfolios in this position, Ambassador Peters worked on the diplomatic and security aspects of the search for peace in Northern Ireland. From 1993 to 1994, Ambassador Peters served as deputy assistant secretary of state with oversight responsibility for U.S. relations with 19 Western European countries and Canada. In this capacity she acted as the U.S. chair of the U.S. – Canada military coordination body, the Permanent Joint Board on Defense. A senior diplomat, fluent in six foreign languages, Ambassador Peters has also served in Sofia, Bulgaria, as deputy chief of mission; in Moscow as economic counselor; and in Mandalay, Burma as principal officer. From 1988 to 1990, Ambassador Peters was the deputy director of the Office of Pakistan, Afghanistan and Bangladesh Affairs in the State Department. She began her career as a vice-consul in Frankfurt in 1975.

Ambassador Peters holds a Bachelor of Arts degree from Santa Clara University and a Master's in International Studies from the Johns Hopkins School of Advanced International Studies. Her formal education also included courses at the Institut d'Etudes Politiques in Paris. She is married to Timothy McMahon, a teacher. They have two children: Maggie and Blaise.

Ambassador Peters is a member of the Council on Foreign Relations and Women in International Security.



Amory B. Lovins

AMORY B. LOVINS, 63, has been active in ~50 countries for nearly 40 years as an innovator and practitioner in energy and its links to security, development, environment, and economy. He is cofounder (1982), Chairman, and Chief Scientist of Rocky Mountain Institute—an independent, entrepreneurial, nonprofit think-and-do tank that drives the efficient and restorative use of resources (www.rmi.org). Originally a consultant experimental physicist, and author of 31 books and hundreds of papers, he has received MacArthur and Ashoka Fellowships, the “Alternative Nobel,” Zayed, Blue Planet, Onassis, Volvo, Nissan, Shingo, and Mitchell Prizes, the Benjamin Franklin and Hapgood Medals, 11 honorary doctorates, an Hon. AIA and FRSA, Foreign Membership of the Royal Swedish Academy of Engineering Sciences, and the National Design, Heinz, Lindbergh, *Time* Hero for the Planet, Jean Mayer, and World Technology Awards. In 2009, *Time* named him one of the 100 most influential people in the world, and *Foreign Policy*, one of the 100 top global thinkers. Mr. Lovins advises industries and governments worldwide (as well as DoD and DOE), chiefly on advanced energy and resource efficiency, has led the superefficient redesign of >\$30 billion worth of facilities in 29 sectors, and has briefed 21 heads of state. For the past 20 years, he has also led the development of quintupled-efficiency, uncompromised, cost-effective automobiles¹, low-cost advanced-composite manufacturing technology to make them (www.fiberforge.com), and, optionally, a profitable hydrogen transition strategy to fuel them.² Much of his wider work is synthesized in *Natural Capitalism* (www.natcap.org). His *Small Is Profitable* was an *Economist* 02 book of the year (www.smallisprofitable.org). In Sep 04, RMI published his OSD- and ONR-cosponsored synthesis *Winning the Oil Endgame*³, a roadmap for eliminating U.S. oil use by the 2040s and revitalizing the economy, led by business for profit (the average cost is just \$15/bbl) and catalyzed by military S&T; implementation is underway (www.rmi.org/sitepages/pid469.php). His “grand synthesis” *Reinventing Fire* (autumn 2011) extends this logic to include coal as well.

Dr. Lovins’s security background includes devising the first logically consistent approach to nuclear nonproliferation (technical papers⁴ and two books, 1979–1983); performing for DoD the definitive unclassified study of domestic energy vulnerability and resilience⁵; co-developing a “new security triad” of conflict prevention, conflict resolution, and nonprovocative defense⁶; lecturing at NDU, DAU, USMA, USNA, NWC, NPS, STRATCOM, etc. on least-cost security and on how new technologies will transform missions and force structures; leading for VADM Lopez the 95–98 overhaul of NAVFAC’s design process; leading a 00–01 analysis for SECNAV of how to save up to half the hotel-load electricity aboard USS *Princeton* CG-59⁷; supporting QDR10; addressing ASNE 10 and the USMC Commandant’s 10 expeditionary energy symposium; and serving on 99–01 and 06–08 Defense Science Board panels. These studies⁸ identified cost-effective DoD fuel-saving potential later estimated by RMI’s platform-by-platform analysis to total ~66%, excluding consequent lift savings. Dr. Lovins continues to help DoD with energy strategy⁹ and platform efficiency, and hopes to help design FOBs with no fuel or water logistics.

¹ A.B. Lovins & D.R. Cramer, “Hypercars”, Hydrogen, and the Automotive Transition,” *Intl. J. Veh. Design* **35**(1/2):50–85 (2004), www.rmi.org/sitepages/pid175.php#T0401.

² Summarized in “Twenty Hydrogen Myths,” www.rmi.org/images/other/Energy/E03-05_20HydrogenMyths.pdf.

³ Downloadable free from move.rmi.org/oilendgame, where technical backup and reviews are also posted. The study was reviewed for OFT in D. Berkey *et al.*, “Energy Independence Assessment: Draft Final Briefing for Office of Force Transformation,” Logistics Management Institute, 12 Jan 05, which strongly recommended DoD implementation of major gains in platform fuel efficiency as essential to transformational goals.

⁴ Summary in *Foreign Affairs* **58**:1137–1177 (1980); typical unclassified support in *Nature* **283**:817–823 (1980).

⁵ A.B. & L.H. Lovins, *Brittle Power: Energy Strategy for National Security*, 1981 report to DoD, 436 pp., 1,200 refs., Brick House (Andover MA), 1982, out of print but reposted in 2002 at www.rmi.org/sitepages/pid533.php. Foreword by ex-CJCS ADM (Ret.) Tom Moorer and ex-USECNAV, later DCI, Jim Woolsey.

⁶ H. Harvey & M. Shuman, *Security Without War*, 1990–93, Westview, www.rmi.org/sitepages/pid618.php.

⁷ RMI report under ONR Grant #N00014-01-1-0252, 2001, summarized at www.rmi.org/sitepages/art7057.php.

⁸ At www.acq.osd.mil/dsb/reports/ADA392666.pdf, summarized at www.rmi.org/sitepages/art7049.php, and www.acq.osd.mil/ddb/reports/ADA477619.pdf.

⁹ Lovins, “DoD’s Energy Challenge as Strategic Opportunity,” www.ndu.edu/press/ifa_pages/editions/i57/lovins.pdf.



Sarah A. Emerson

Sarah A. Emerson is the president of Energy Security Analysis, Inc (ESAI), an independent energy research and forecasting firm located just outside of Boston, Massachusetts. Ms. Emerson joined ESAI when the petroleum consulting practice was launched in 1986. She is also a principal in ESAI Energy, LLC, which conducts research and consulting on global petroleum and liquid fuels markets

As director of ESAI's petroleum and alternative fuels practice, Ms. Emerson has developed many of ESAI's unique analytical tools for assessing the oil market and forecasting oil prices. In addition, she has supervised the development of an empirical source database of monthly oil data that cover the period January 1978 to present for every country in the world with particular focus on non-OECD countries. More broadly, she has conducted several industry studies

on a diverse range of topics, such as the transfer of pollution in energy trade, the profitability of Asian refining, the future of the Asian bitumen market, petroleum product markets in the Indian Ocean, Strategic Petroleum Reserves, the outlook for global automotive fuel markets, GHG Emissions from gasoline and diesel production, and the future of the Russian refining industry. In 1992, she published the first description ever available in the West of the Russian refining sector.

In addition to her market analysis and forecasting activities, Ms. Emerson is an expert witness in energy sector litigation, an adviser to the U.S. and Japanese governments on energy security issues, and a reader/commenter for the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report. She regularly publishes articles in the energy trade press, and is frequently quoted in the press and interviewed on television.

Ms. Emerson was a 2004 Key Women in Energy Honoree. In 2004 and 2005, she was the Repsol-YPF Senior Fellow at the Center of Business and Government at Harvard University where she conducted research on the oil markets and energy policy. She received her B.A. from Cornell University and her M.A. from the Johns Hopkins University Nitze School of Advanced International Studies.



David S. Painter

David S. Painter teaches international history at Georgetown University. His publications include *Oil and the American Century*, *The Cold War*, and *Origins of the Cold War* (co-editor), and articles on US policy toward the Third World, US oil policies, and the Cold War. He is currently working on a study of oil and world power in the 20th century.



Catherine M. Kelleher

Catherine McArdle Kelleher has had a distinguished career both in academia and in government. She is a College Park Professor, University of Maryland at College Park and also holds both a research appointment as Senior Fellow at the Watson Institute, Brown University, Providence, Rhode Island and the honorary title of Research Professor Emeritus, U.S.

Naval War College, Newport, Rhode Island. She is a member of the Naval Studies Board of the National Academies of Sciences

She was also named an honorary professor at the Free University of Berlin, and is a Senior Faculty Associate for 2004-2009 at the Geneva Center for Security Policy in Geneva, Switzerland. She serves as a Senior Fellow at the Center for Naval Analysis in Washington. Her areas of policy analysis have included the development of cooperative European security, American-Russian relations, the evolution of NATO, the acquisition of theater nuclear forces, the verification of a comprehensive nuclear test ban, and European defense and security policies, both at the level of the Union and Paris, Berlin, and London.

In the Clinton Administration she was the Personal Representative of the Secretary of Defense in Europe and Deputy Assistant Secretary of Defense for Russia, Ukraine and Eurasia. Professor Kelleher's other governmental experience includes a position on the National Security Council staff during the Carter Administration and a series of consulting assignments under Republican and Democratic administrations in the Office of the Secretary of Defense, the Arms Control and Disarmament Agency, and the Department of the Army. She was Professor of Military Strategy at the National War College.

Professor Kelleher has had a wide range of academic involvement in the field of national security studies. She has taught at Columbia, Illinois-Chicago, Michigan, the Graduate School of International Studies at Denver and was founding Director of the Center for International Security Studies at Maryland (CISSM), as well as a Professor in the School of Public Affairs at the University of Maryland. She has been a research fellow at the Institute of Strategic Studies in London, and a Kistiakowsky fellow of the American Academy of Arts and Sciences; and has received individual research grants from NATO, the Council on Foreign Relations, the German Marshall Fund, the Carnegie Corporation, and the Ford Foundation. She is the author of more than seventy books, monographs and articles.

Professor Kelleher has also been active in the design and implementation of programs to broaden education in security studies, both nationally and internationally, in universities and think tanks, and within the military. She is the founder of Women in International Security program (wiis.org), dedicated to developing career opportunities for women in this field. She has served on many international research boards, including those of the SIPRI and the IISS, as well as the Carnegie Commission for a European Security Initiative (EASI).

Professor Kelleher holds degrees from Mt. Holyoke College (A.B. and D.Litt) and from the Massachusetts Institute of Technology (Ph.D.). She is the recipient of the Medal for Distinguished Public Service of the Department of Defense, the Director's Medal from the Defense Intelligence Agency, and the Cross of Honor in Gold of the Federal Armed Forces of Germany. In 2004, she was awarded the Manfred Woerner Medal by the German Ministry of Defense for her contributions to peace and security in Europe.



Peter Dombrowski

Dr. Peter Dombrowski is a professor of strategy at the Naval War College where he serves as the chair of the Strategic Research Department. Previous positions include director of the Naval War College Press, editor of the *Naval War College Review*, co-editor of *International Studies Quarterly*, Associate Professor of Political Science at Iowa State University and defense analyst at ANSER, Inc. He has also been affiliated with research institutions including the East-West Center, The Brookings Institution, the Friedrich Ebert Foundation, and the Watson Institute for International Studies at Brown University among others.

Dr. Dombrowski is the author of over forty articles, monographs, book chapters and government reports. In June 2009, Stanford University Press published his volume edited with John Duffield, *Balance Sheet: The Iraq War and U.S. National Security*. His last book, co-authored with Eugene Gholz, is *Buying Military Transformation: Technological Innovation and the Defense Industry* (Columbia University Press, 2006). In 2005 he edited two volumes, *Guns and Butter: the Political Economy of the New International Security Environment* (Lynne Reinner, 2005) and *Naval Power in the Twenty-first Century: a Naval War College Review Reader* (Naval War College Press, 2005). Earlier books include *Policy Responses to the Globalization of American Banking* (University of Pittsburgh Press, 1996) and with Andrew Ross and Eugene Gholz, *Military Transformation and the Defense Industry After Next: The Defense Industrial Implications of Network-Centric Warfare* (Naval War College Press 2002).

Awards include a Chancellor's Scholarship for Prospective Leaders from the Alexander von Humboldt Foundation in 1994 and the Navy Meritorious Civilian Service Medal in 2007 for his role in the development of *A Cooperative Strategy for 21st Century Seapower*. He received his B.A. from Williams College and an M.A. and Ph.D. from the University of Maryland.



Lieutenant General George J. Flynn

Commanding General, Marine Corps Combat Development Command

Lieutenant General Flynn graduated from the United States Naval Academy in 1975. He holds a Master of Arts Degree in International Relations from Salve Regina College, a Master of Arts Degree in National Security and Strategic Studies from the Naval War College, and a Master of Science Degree in National Security and Strategy from the National War College. He is a Distinguished Graduate of the College of Naval Command and Staff and the National War College.

Lieutenant General Flynn's command assignments include: Commanding Officer, HQ Battery, 2nd Battalion, 12th Marines; (1979-1980); Commanding Officer, L Battery, 2nd Battalion, 12th Marines (1980); Commanding Officer, P Battery, 5th Battalion, 10th Marines (1984-1985); Commanding Officer, 5th Battalion, 10th Marines (1992-1993); Commanding Officer, Officer Candidates School (1999-2001), Commanding General, Training Command (2002-2004), Commanding General, Training and Education Command (2006-2007). Commanding General, Marine Corps Combat Development Command (2008-).

Lieutenant General Flynn's staff assignments include: Forward Observer, Fire Direction Officer, Battery Executive Officer and S-4 A, 2nd Battalion, 11th Marines (1976-1979); Officer Selection Officer, Manchester, New Hampshire, (1981-1984), Operations Officer, 5th Battalion, 10th Marines (1985-1986), Plans Officer, Plans Policies and Operations Department, Headquarters Marine Corps (1987-1989); Junior Aide-de-Camp to the Commandant of the Marine Corps (1989-1991); Assistant Fire Support Coordinator, 2d Marine Division (1991-1992); Future Operations Officer, III Marine Expeditionary Force (1994-1995); Military Assistant to the Executive Secretary to the Secretary of Defense (1995-1997); Military Fellow, Council on Foreign Relations (1997-1998); Head, Strategic Initiatives Group, Headquarters Marine Corps (1998-1999); Military Secretary to the Commandant of the Marine Corps (2001-2002); Deputy Commanding General, Training and Education Command (2002-2004). Chief of Staff and Director, Command Support Center, United States Special Operations Command (2004-2006); Deputy Commanding General, Multi-National Corps-Iraq (2008).



Geoffrey Kemp

Geoffrey Kemp is Director of Regional Security Programs at the Center for the National Interest. He served in the White House during the first Reagan administration as Special Assistant to the President for National Security Affairs and Senior Director for Near East and South Asian Affairs on the National Security Council Staff. Dr. Kemp received his Ph.D. in Political Science at M.I.T. and his M.A. and B.A. degrees from Oxford University.

His current areas of interest focus on U.S. policy in the greater Middle East including the geopolitics of energy in the Caspian Basin and Persian Gulf, the Arab-Israeli peace process, and U.S. relations with Iraq and Iran. He received his Ph.D. in political science at M.I.T. and his M.A. and B.A. degrees from Oxford University. He served in the White House during the first Reagan administration and was Special Assistant to the President for National Security Affairs and Senior Director for Near East and South Asia on the National Security Council Staff.

Prior to his current position, he was a Senior Associate at the Carnegie Endowment for International Peace where he was Director of the Middle East Arms Control Project. In the 1970s he worked in the Defense Department in the Policy Planning and Program Analysis and Evaluation Offices and made major contributions to studies on U.S. security policy and options for South West Asia.

From 1970 to 1980, he was a tenured member of the faculty of the Fletcher School of Law and Diplomacy, Tufts University. He presently teaches a seminar on U.S. Middle East policy with Professor Fouad Ajami at Johns Hopkins School of Advanced International Studies. He frequently comments and writes on US foreign policy in the US, European, Middle East, and East Asian media.

He is the author or co-author of many books and monographs on regional security, including *Strategic Geography and the Changing Middle East*, 1997. His current work is focused on the growing role of the major Asian countries in the Middle East and Indian Ocean and what this means for American foreign policy. His book on the topic, *The East Moves West: India, China, and Asia's Growing Presence in the Middle East* was published by the Brookings Institution Press in April 2010.



Peter Dutton

Prof. Peter Dutton is a research professor in the China Maritime Studies Institute in the Strategic Research Department at the U.S. Naval War College. He also became the Institute's director in May 2011. Professor Dutton's current research focuses on American and Chinese views of sovereignty and international law of the sea and the strategic implications to the United States and the United States Navy of related Chinese legal and policy choices. Selected recent publications include: "Military Activities in the EEZ: A U.S.-China Dialogue on Security and International Law in the Maritime Commons," (*China Maritime Studies Monograph*, December 2010), "Through a Chinese Lens," (U.S. Naval Institute *Proceedings*, April 2010), "Caelum Libera: Air Defense Identification Zones Outside Sovereign Airspace" (*American Journal of International Law*, October 2009), and "Charting a Course: US-China Cooperation at Sea" (*China Security*, April 2009). A new publication entitled "Three Disputes and Three Objectives: China and the South China Sea, which analyzes the dynamics of the disputes between China and Southeast Asian states over sovereignty and resources in the South China Sea, will be published in the Autumn 2011 *Naval War College Review*. Additionally, Professor Dutton has testified before the U.S. China Economic and Security Review Commission on Chinese Perspectives on Sovereignty and Access Control (February 2008) and on the Implications of Chinese Naval Modernization (June 2009). He also testified before the Senate Foreign Relations Committee on Maritime Disputes and Sovereignty Issues in East Asia (July 2009). Professor Dutton also researches and lectures on topics related to international law of the sea issues in the East and South China Seas, East and Southeast Asia, the Arctic, the Proliferation Security Initiative, and Maritime Strategy. He is a retired Navy judge advocate and holds a Juris Doctor from the College of William and Mary, a Master of Arts (with distinction) from the U.S. Naval War College, and a Bachelor of Science (cum laude) from Boston University.



Meredith Miller

Meredith Miller is Vice President of Trade, Economic, and Energy Affairs & Outreach and Director of the Washington, D.C., office at The National Bureau of Asian Research (NBR).

Ms. Miller leads NBR research programs on economic, energy, and trade issues in Asia and guides engagement with Congress as NBR leverages its network of experts to bring objective, detailed analysis of strategic developments in Asia to policymakers. She also leads NBR's media and online outreach programs.

Ms. Miller has experience in both the public and nonprofit sectors. She served at the U.S. Department of State as the Deputy Director for the Office of Economic Policy in the Bureau of East Asia and Pacific Affairs and as an analyst in the Bureau of Intelligence and Research. Prior to joining the State Department, Ms. Miller worked at the U.S.-Vietnam Trade Council on a technical assistance program to support completion of a bilateral trade agreement between the United States and Vietnam as the last step toward full normalization of relations between the two countries.

Ms. Miller holds an MA in International Relations from the Paul H. Nitze School of Advanced International Studies (SAIS) at Johns Hopkins University and a BA in Anthropology from the University of Michigan. She is a specialist in Southeast Asia and speaks Indonesian.



John H. Maurer

Professor John H. Maurer serves as the Chair of the Strategy and Policy Department at the Naval War College in Newport, Rhode Island. He is a graduate of Yale University and holds an M.A.L.D. and Ph.D. in International Relations from the Fletcher School of Law and Diplomacy, Tufts University. Before joining the faculty of the Naval War College, he served as executive editor of *Orbis: A Journal of World Affairs*, and held the position of senior research fellow at the Foreign Policy Research Institute. He served on the Secretary of the Navy's advisory committee on naval history. In addition, he is the author or editor of books examining the outbreak of the First World War, military interventions in the developing world, naval arms

control between the two world wars, and a study about Winston Churchill's views on British foreign policy and strategy. His current research includes work on Winston Churchill and Great Britain's decline as a world power, and great power arms competitions. In June 2001, he received the U.S. Navy's Meritorious Civilian Service Award.



Stephen M. Walt

Stephen M. Walt is the Robert and Renée Belfer professor of international affairs at Harvard University's Kennedy School of Government, where he served as academic dean from 2002-2006. He previously taught at Princeton University and the University of Chicago, where he served as master of the social science collegiate division and deputy dean of social sciences.

He has been a resident associate of the Carnegie Endowment for Peace and a guest scholar at the Brookings Institution, and he has also been a consultant for the Institute of Defense Analyses, the Center for Naval Analyses, and Singapore's S. Rajaratnam School of International Studies.

Professor Walt is the author of *Taming American Power: The Global Response to U.S. Primacy* (W. W. Norton, 2005), and, with coauthor J.J. Mearsheimer, *The Israel Lobby* (Farrar, Straus and Giroux, 2007).

He presently serves as faculty chair of the international security program at the Belfer Center for Science and International Affairs and as co-chair of the editorial board of the journal *International Security*. He is also a member of the editorial boards of *Foreign Policy*, *Security Studies*, *International Relations*, and *Journal of Cold War Studies*, and coeditor of the *Cornell Studies in Security Affairs*, published by Cornell University Press. He was elected as a fellow in the American academy of arts and sciences in May 2005.



Vice Admiral William R. Burke

Deputy Chief of Naval Operations for Fleet Readiness and Logistics (N4)

Vice Admiral Burke, a native of Hornell, N.Y., graduated from the United States Naval Academy in 1978 with a Bachelor of Science in Systems Engineering. In 1985, he completed an MBA at Marymount University. In 1999, he earned an MS in National Security Strategy at the National War College in Washington, D.C. He is a graduate of MIT Seminar 21 Program in International Politics.

His submarine assignments include USS *Lafayette* (SSBN 616), USS *Key West* (SSN 722), USS *Omaha* (SSN 692), USS *Cavalla* (SSN 684), and command of USS *Toledo* (SSN 769). He commanded Submarine Squadron 2 from July 2001 to July 2003.

His Washington D.C. shore assignments include a tour in chief of naval operations' Attack Submarine Division, assistant deputy for House Liaison in the Navy Office of Legislative Affairs, chief of Training, Doctrine, and Assessment and assistant deputy director for Combating Terrorism (JCS J34), and head of Warfighting Assessments Branch (N812) followed by a tour as the executive assistant to the vice chief of naval operations.

Promoted to rear admiral in September 2005, his flag assignments include commander, Logistics Group Western Pacific / commander, Task Force 73 / commander Navy Region Singapore; director, Assessment Division (N81/N00X) and the director, Quadrennial Defense Review (QDR/N00X).

In April 2010 he was promoted to vice admiral and reported for duty as deputy chief of naval operations for Fleet Readiness and Logistics (N4).

Burke wears the Defense Superior Service Medal, Legion of Merit (three awards), Meritorious Service Medals (three awards), the Navy Commendation Medal (four awards), and the Navy Achievement Medal (two awards). While on board *Cavalla*, he received the Admiral Chick Clarey Award for the 1992 Outstanding Navy Officer Afloat from the Honolulu Council of the Navy League.



Jonathan S. Wolfson

Jonathan Wolfson is the Chief Executive Officer and co-founder of Solazyme, a renewable oil and bioproducts production company where he oversees the management and strategic direction of the company. Prior to Solazyme, Mr. Wolfson held a variety of positions in finance, business and law. He was most recently the Vice President of Finance and Business Development for 7thOnline, a venture-backed supply chain software company where he was responsible for overseeing partnering, finance and the development and implementation of corporate strategy, which resulted in annualized revenue growth of over 100% during his tenure.

Prior to that, Mr. Wolfson was co-founder, President and Chief Operating Officer of InvestorTree, a financial software and services firm. He has also worked as an investment banker for Morgan Stanley and as a business/legal analyst for Triarc Companies.

Beyond his responsibilities for Solazyme, Mr. Wolfson is dedicated to enabling the adoption of a low carbon energy future. He sits on the board of the Clean Economy Network, a green business advocacy association. He provides additional insight as an advisory board member to the Next Generation Bio-Based Chemicals Summit, a cross-sector of oil and alternative fuel resources. In addition, Mr. Wolfson is a member of the board of directors of the Biotechnology Industry Organization (BIO) and is on the governing board of BIO's Industrial and Environmental Section. In September of 2009, Mr. Wolfson also accepted the "Green Leap" award from the Clinton Global Initiative for his commitment to commercializing Solazyme's breakthrough technology for renewable oil production for fuel and for food. It is through these commitments and board memberships that Mr. Wolfson furthers the evolution of the advanced biofuels and biomaterials industries and continues his commitment to clean, renewable energy and carbon pollution reduction.

Mr. Wolfson holds J.D. and M.B.A. degrees from the NYU School of Law and the NYU Stern School of Business. Additionally, he spent several years as an Adjunct Assistant Professor of Economics at Hunter College of the City University of New York.



The Honorable Jackalyne Pfannenstiel Assistant Secretary of the Navy (Energy, Installations and Environment)

Jackalyne Pfannenstiel was appointed Assistant Secretary of the Navy (Energy, Installations and Environment) on March 5, 2010. In this position, Pfannenstiel is responsible for formulating department-wide policies, procedures, advocacy and strategic plans, as well as overseeing all DON functions and programs related to installations, safety, energy and environment. This includes effective management of Navy and Marine Corps real property, housing, and other facilities; environmental, natural, cultural and marine resource protection, planning, conservation and compliance, both ashore and afloat; safety and occupational health for both military and civilian personnel; timely completion of closures and realignments of installations under base closure laws; the U.S. – Japan agreement to realign U.S. forces in Japan and relocate 8000 Marines and their families from Okinawa to Guam; and the development of the department’s energy strategy, policies and guidance.

Pfannenstiel is a former chairman of the State of California Energy Commission, a state regulatory body with authority over power plant licensing, building and appliance efficiency standards, and energy policy development. Pfannenstiel was appointed by Governor Arnold Schwarzenegger to a five-year term on the commission in 2004 and served until January 2009. Her responsibilities included licensing new generating facilities and development of California’s integrated energy policies. She chaired the Governor’s Climate Action Team subgroup on energy and land use and worked on the creation of California’s low carbon fuel standards.

Prior to her role at the Energy Commission, Pfannenstiel served as an independent energy consultant, providing assistance to wind energy development projects, as well as helping local housing authorities manage energy costs in public housing facilities.

Previously, Pfannenstiel spent 20 years at Pacific Gas and Electric Company and its parent, PG&E Corporation. She joined the company in 1980 and, in 1987, she was promoted to vice president of Corporate Planning, the first woman to become a corporate officer. At PG&E, she led the company’s participation in a multi-party collaborative proceeding which produced many of California’s innovative regulatory policies promoting energy efficiency. She also directed the development of PG&E’s strategies for responding to electric industry restructuring.

Pfannenstiel is a past member of the Board of Trustees of Clark University. She was also on the Board of Directors of the Alliance to Save Energy and a Director of Energy Recovery, Inc., a company manufacturing high-efficiency components for seawater desalination. Pfannenstiel graduated from Clark University with a B.A. in Economics and the University of Hartford with an M.A. in Economics.



Nikolas K. Gvosdev

Nikolas K. Gvosdev is a professor of national security affairs at the U.S. Naval War College.

He was the Editor of *The National Interest* magazine and a Senior Fellow of Strategic Studies at The Nixon Center in Washington, DC. He is currently a senior editor at *The Atlantic Council* and at *The National Interest* and is a weekly columnist for *World Politics Review*.

Dr. Gvosdev is a frequent commentator on U.S. foreign policy and international relations, Russian and Eurasian affairs, developments in the Middle East, and the role of religion in politics. He received his doctorate from St Antony's College, Oxford University, where he studied on a Rhodes Scholarship. He was also associate director of the J.M. Dawson Institute of Church-State Studies at Baylor University.

Dr. Gvosdev is the author or editor of a number of books and monographs, including *Parting with Illusions: Developing a Realistic Approach to Relations with Russia, Imperial Perspectives and Policies Towards Georgia, 1763-1819* and the co-author of *The Receding Shadow of the Prophet: The Rise and Fall of Political Islam*. He also co-edited the 12th edition of the Naval War College's *Case Studies in Policy Making* and authored several of the cases in it. He has published extensively on a variety of foreign policy topics including on democratization and human rights; energy policy; foreign policy of Russia and the Eurasian states; U.S. foreign policy and the Middle East; politics and culture of the Eurasian states; and religion and politics. His work has appeared in outlets such as *Foreign Affairs*, *The Financial Times*, *The Los Angeles Times*, *National Review*, *Religion State and Society*, *The National Interest*, *Orbis*, *The Washington Quarterly*, *Problems of Post-Communism*, and *World Policy Journal*.

He has been quoted or cited as an expert in articles appearing in *The Los Angeles Times*, *The Washington Times*, *The Washington Post*, *Christian Science Monitor*, *The Boston Globe*, *United Press International*, *Wall Street Journal Europe*, *Business Week*, *Newsday*, *National Post* (Canada), *Vedomosti* (Russia), and *El Mercurio* (Chile).

He has appeared as a commentator and analyst on television and radio including CNN, Fox News, MSNBC, National Public Radio, BBC, C-SPAN's *Washington Journal*, CBC, and Voice of America.

NOTES

TRANSPORTATION SCHEDULE

To: Naval War College
Newport, RI

On: Tuesday morning
June 7, 2011

**Shuttles depart for NWC
as follows:**

- **Holiday Inn Express**
6:05 and 6:50 a.m.
- **Hotel Viking**
6:15 and 7:10 a.m.
- **Residence Inn**
6:15 and 7:00 a.m.
- **Howard Johnson**
6:15 and 7:00 a.m.
- **Hampton Inn**
6:15 and 7:00 a.m.
- **Courtyard by Marriott**
6:20 and 7:05 a.m.
- **Mainstay Inn/Best Western**
6:20 and 6:50 a.m.
- **Newport Harbor Hotel**
6:15 and 7:00 a.m.
- **Newport Marriott**
6:35, 7:15 and 7:30 a.m.
- **CBH/Newport Chalet/
Navy Lodge**
6:30, 6:55 and 7:25 a.m.

Shuttles depart Naval War College
for hotels immediately following
completion of afternoon session.

To: Secretary of the Navy Reception
Officers' Club

On: Tuesday evening
June 7, 2011

**Shuttles depart for the
Officers' Club as follows:**

- **Holiday Inn Express**
5:50 and 6:35 p.m.
- **Hotel Viking**
5:50 and 6:45 p.m.
- **Residence Inn**
5:50 and 6:30 p.m.
- **Howard Johnson**
5:50 and 6:30 p.m.
- **Hampton Inn**
5:50 and 6:30 p.m.
- **Courtyard by Marriott**
6:05 and 6:50 p.m.
- **Mainstay Inn/Best Western**
6:00 and 6:30 p.m.
- **Newport Harbor Hotel**
6:00 and 6:45 p.m.
- **Newport Marriott**
6:10, 6:50 and 7:05 p.m.
- **CBH/Newport Chalet/
Navy Lodge**
6:00 and 6:20 p.m.

Shuttles will be available from
7:00-9:00 p.m. between the
Officers' Club and hotels.

To: Naval War College
Newport, RI

On: Wednesday morning
June 8, 2011

**Shuttles depart for NWC
as follows:**

- **Holiday Inn Express**
6:05 and 6:50 a.m.
- **Hotel Viking**
6:15 and 7:10 a.m.
- **Residence Inn**
6:15 and 7:00 a.m.
- **Howard Johnson**
6:15 and 7:00 a.m.
- **Hampton Inn**
6:15 and 7:00 a.m.
- **Courtyard by Marriott**
6:20 and 7:05 a.m.
- **Mainstay Inn/Best Western**
6:20 and 6:50 a.m.
- **Newport Harbor Hotel**
6:15 and 7:00 a.m.
- **Newport Marriott**
6:35, 7:15 and 7:30 a.m.
- **CBH/Newport Chalet/
Navy Lodge**
6:30, 6:55 and 7:25 a.m.

Shuttles depart Naval War College
for hotels immediately following
completion of afternoon session.

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