

Strategies for Defeating Advanced Anti-Access/Area Denial Capabilities

**November 15, 2011
Lincoln Hall Auditorium
National Defense University
Fort Lesley J. McNair**





Strategies for Defeating Advanced Anti-Access/Area Denial Capabilities



A Center for Technology and National Security Policy Event
Lincoln Hall Auditorium, Fort Lesley J. McNair, Washington, DC
November 15, 2011

Tuesday, November 15th

0800-0815 Welcome

- **Dr. James M. Keagle**, Director, Transforming National Security Seminar Series, Center for Technology and National Security Policy, NDU

0815-0900 The Access Paradox: Leveraging the Tools of War for Peace

Theme: How do concerns about access historically affect operational flexibility in all theaters of operation? What strategies do military forces employ under an A2/AD threat? What are some examples of the “access challenge” changing over time? How will the proliferation of A2AD technologies affect U.S. force structure and planning? What new opportunities will this evolving force structure create for strategic stability?

- **Lieutenant General Christopher D. Miller**, Deputy Chief of Staff, Strategic Plans and Programs, U.S. Department of the Air Force

0900-0915 Break

0915-1000 Strategic Overview

Theme: In an age of constricting budgets, why is “assured access” still relevant to U.S. security interests, and how has the concept changed over time? Overview of emerging A2/AD capabilities around the world and the likelihood of proliferation over the next decade. How important is the emerging A2/AD threat to the separate services, and what new systems and operational concepts are shaping their investment, acquisition, and R&D decisions?

- **Rear Admiral Michael McDevitt, USN (Ret)**, Senior Fellow Center for Naval Analyses

1000-1015 Break

1015-1130 Anti-Access/Area Denial (A2/AD): Objectives and Vulnerabilities

Theme: What are the basic objectives (at the tactical, operational, and strategic level) of an A2/AD strategy? What are the operating tenets? What special vulnerabilities do A2/AD systems introduce to friendly, hostile, and neutral forces? How resilient are A2/AD architectures? When they fail, do A2/AD capabilities disappear suddenly, or degrade over time? How quickly can these capabilities be replaced or augmented, and what other systems are likely to be affected by a potential ‘blackout’?

- **Mr. Jay Finch**, Director, Space Policy and Strategy Development, OSD/Policy
- **Mr. Ronald O'Rourke**, Specialist, Naval Affairs, Foreign Affairs, Defense, and Trade Division, Congressional Research Service
- **Mr. George Root**, Maritime Systems Consultant, GRROOT Technologies

1130-1230 Lunch Break

1230-1300 Countering A2/AD in a Time of Austerity

- **Mr. Abraham Denmark**, Asia-Pacific Security Adviser, Center for a New American Security Strategic Studies Program

1300-1330 Cyber War as an Anti-Access Strategy: Case Studies and Effects

- **Dr. James Mulvenon**, Director, Defense Group Inc., Center for Intelligence Research and Analysis

1330-1400 A2/AD Issues for NATO and in the Persian Gulf

- **Colonel Sam Gardiner, USAF (Ret)**, Contract Faculty, Center for Applied Strategic Learning, National Defense University

1400-1415 Break

1415-1530 Current and Future Weapons Systems

Theme: Important innovations in weapons technology will be examined with the understanding speakers are in an unclassified venue. Mobility, stealth, survivability, stand-off distance, surveillance technologies and information networks will be discussed, as well as the growing importance of automation and unmanned platforms.

- **Dr. Bernard Cole**, Professor of International History, National War College
- **Richard D. Fisher, Jr.**, Senior Fellow, International Assessment and Strategy Center
- **Dr. Larry Schuette**, Director of Innovation, Office of Naval Research

1530-1630 U.S. Policy Considerations & Wrap-Up

Theme: How should policy-makers manage the spread of A2/AD technologies over the next decade? What impact will these capabilities pose to regional stability? How will tightening budgetary restrictions affect U.S. R&D partnerships and foreign sales? How widely are competing states likely to distribute A2/AD weapons systems and technical assistance? What other policy considerations are decision-makers likely to encounter when negotiating agreements with states that pursue advanced A2/AD capabilities?

- **Mr. Daniel A. Blumenthal**, Commissioner, U.S.-China Economic and Security Review Commission

1630 End



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Mr. Dan Blumenthal

Dan Blumenthal joined AEI in November 2004 as a resident fellow in Asian studies. He has served on the U.S.-China Economic and Security Commission since 2005, serving as vice chairman in 2007, and as a member of the Academic Advisory Board for the Congressional U.S.-China Working Group. Previously, Mr. Blumenthal was senior director for China, Taiwan, and Mongolia in the Office of the Secretary of Defense for International Security Affairs during the first George W. Bush administration. In addition to writing for AEI's Asian Outlook series, he has written articles and op-eds for the Washington Post, the Wall Street Journal, The Weekly Standard, National Review, and numerous edited volumes. He is currently co-writing a book on China.

Dr. Bernard "Bud" Cole

Dr. Bernard D. Cole (Captain, USN, Ret.) is Professor of International History at the National War College in Washington, D.C., where he concentrates on the Chinese military and Asian energy issues. He previously served 30 years as a Surface Warfare Officer in the Navy, all in the Pacific. Dr. Cole commanded a frigate, USS RATHBURNE, and Destroyer Squadron 35. He served as a Naval Gunfire Liaison Officer with the THIRD Marine Division in Vietnam, and as Special Assistant to the CNO for Expeditionary Warfare. Dr. Cole has written numerous articles and five books: *Gunboats and Marines: The U.S. Navy in China*; *The Great Wall at Sea: China's Navy Enters the 21st Century*; *Oil for the Lamps of China: Beijing's 21st Century Search for Energy*; *Taiwan's Security: History and Prospects*, and *Sealanes and Pipelines: Energy Security in Asia*. Dr. Cole earned an A.B. in History from the University of North Carolina, an M.P.A. (National Security Affairs) from the University of Washington, and a Ph.D. in History from Auburn University.

Mr. Abraham Denmark

Abraham M. Denmark is an Asia-Pacific Security Adviser for CNA Strategic Studies, and a SPF Nonresident Fellow at CSIS-Pacific Forum. He previously served as a Fellow at the Center for a New American Security and Country Director for China Affairs in the Office of the Secretary of Defense. Denmark has authored dozens of book chapters, reports, and articles on U.S. strategy and policy throughout the Asia-Pacific region. He has received numerous government honors and awards, and was named a 21st Century Leader by the National Committee on American Foreign Policy.

Mr. James "Jay" Finch

Mr. James Finch is responsible for developing, promulgating, and advocating space policies and strategies that preserve strategic advantage derived from space in support of U.S. national security interests. Mr. Finch was formerly the Deputy Chief of the Space and Cyberspace Division, Office of the Deputy Under Secretary of the Air Force, International



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Affairs. In this position, Mr. Finch built, sustained, and expanded international relationships enabling space and cyberspace cooperation through the development of international engagement strategies, specific cooperative concepts, and the negotiation of international agreements in support of national security objectives. He is a 2010 Distinguished Graduate of the Industrial College of the Armed Forces.

Mr. Richard Fisher, Jr.

Mr. Richard D. Fisher, Jr. is a Senior Fellow with the International Assessment and Strategy Center. He has previously served as a Senior Fellow with the Center for Security Policy, Editor of the Jamestown Foundation China Brief, Senior Fellow with the House Republican Policy Committee, and Director of the Asian Studies Center of The Heritage Foundation. He is the author of *China's Military Modernization, Building for Regional and Global Reach* (Praeger, 2008, and paperback, Stanford University Press, 2010), and contributed the chapter on foreign influences in *China's Future Submarine Force* (Naval Institute Press, 2007) and on unmanned systems for *Chinese Aerospace Power* (Naval Institute Press, 2011). His articles have been published in the *Jane's Intelligence Review*, *Jane's Defence Weekly*, *Defense Technology International*, *Armed Forces Journal*, *Far Eastern Economic Review*, *Asian Wall Street Journal*, *The Washington Times*, *The Sankei Shimbun*, *World Airpower Review* and *Air Forces Monthly*. He received a B.A. (Honors) in 1981 from Eisenhower College and has pursued graduate studies at Georgetown University.

Colonel USAF (retired) Samuel Gardiner

Colonel Sam Gardiner, US Air Force (retired), works strategic issues. He has taught a course on strategy at the National War College for 20 years. He has taught strategy at the Air War College, Army War College and Naval War College. He was a visiting scholar at the Swedish Defense College. He has been involved with and facilitated State Department strategy reviews. He designs and conducts war games. His last duty assignment when he was in the Air Force was Chairman of the Department of Joint and Combined Operations at the National War College.

Dr. Martin Libicki

Martin Libicki (Ph.D., U.C. Berkeley) has been a senior management scientist at RAND since 1998, focusing on the impacts of information technology on domestic and national security. This work is documented in commercially published books, *Conquest in Cyberspace: National Security and Information Warfare*, and *Information Technology Standards: Quest for the Common Byte* as well as in numerous monographs, notably *Cyber-Deterrence and Cyber-War*, *What is Information Warfare*, *The Mesh and the Net: Speculations on Armed Conflict in a Time of Free Silicon*, and *Who Runs What in the Global Information Grid*. He was also the editor of the RAND textbook, *New Challenges*



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New Tools for Defense Decisionmaking. His most recent assignments were on the subjects of organizing the Air Force for cyber-war, exploiting cell phones in counter-insurgency, developing a post-9/11 information technology strategy for the U.S. Department of Justice, using biometrics for identity management, assessing DARPA's Terrorist Information Awareness program, conducting information security analysis for the FBI, and evaluating In-Q-Tel. Prior employment includes 12 years at the National Defense University, three years on the Navy Staff as program sponsor for industrial preparedness, and three years as a policy analyst for the GAO's Energy and Minerals Division. He has also received a master's degree in city planning from U.C. Berkeley (1974).

RADM Michael McDevitt

RADM (ret) Michael McDevitt is a Vice President at CNA, a Washington DC area non-profit research and analysis company. He heads the division CNA-Strategic Studies. He has been involved in US security policy and strategy in the Asia-Pacific for the last 20 years, in both government policy positions and, following his retirement from the US Navy, for the last decade as an analyst and commentator. He is a graduate of the University of Southern California, Georgetown University where he focused on US East Asian diplomatic history, and the National War College.

Lt Gen. Christopher Miller

Lt. Gen. Christopher D. Miller is Deputy Chief of Staff for Strategic Plans and Programs, Headquarters U.S. Air Force, Washington, D.C. In support of the Chief of Staff and Secretary of the Air Force, General Miller leads the development and integration of the Air Force's long-range plans and the five-year, \$635 billion U.S. Air Force Future Years Defense Program to ensure Air Force ability to build and employ effective air, space and cyber forces to achieve national defense objectives. General Miller entered Air Force service as a distinguished graduate of the U.S. Air Force Academy in 1980, subsequently earning a master's degree from Oxford University. His staff assignments include two previous tours at Headquarters U.S. Air Force in international affairs and plans and policy positions; and duty as policy adviser to the U.S. Ambassador to NATO. He was a Military Fellow at the Council on Foreign Relations; the Director of Assignments at the Air Force Personnel Center; and Director of Plans, Policy and Strategy for North American Aerospace Defense Command and U.S. Northern Command. The general is a command pilot with more than 2,700 flying hours in B-2, B-1 and T-38 aircraft. General Miller's operational assignments include two wing commands, serving as the senior Air Force commander in Afghanistan, responsible for Airmen and aircraft conducting joint and coalition reconstruction and combat operations; and command of America's only B-2 wing at Whiteman AFB, Mo. He was part of the B-1B initial cadre, and commanded at both squadron and group levels during maturation of the B-1's global conventional strike capability.



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Dr. James Mulvenon

James Mulvenon is Vice-President of DGI's Intelligence Division, as well as co-founder and Director of its Center for Intelligence Research and Analysis, where he has recruited and trained a team of nearly fifty Chinese, Arabic, Farsi, Dari, Pashto, Urdu, Russian, and Korean linguist-analysts performing cutting-edge contract research and analysis for the US intelligence community. A Chinese linguist and a specialist on the Chinese military, he is a leading expert on Chinese cyber issues, including the military and civilian implications of the information revolution in China. Dr. Mulvenon is also Chairman of the Board of the non-profit Cyber Conflict Studies Association, which is dedicated to fostering the development of the field of cyber conflict studies in the United States. Dr. Mulvenon received his Ph.D. in political science from the University of California, Los Angeles.

Mr. Ronald O'Rourke

Mr. O'Rourke is a Phi Beta Kappa graduate of the Johns Hopkins University, from which he received his B.A. in international studies, and a valedictorian graduate of the University's Paul Nitze School of Advanced International Studies, where he received his M.A. in the same field. Since 1984, Mr. O'Rourke has worked as a naval analyst for the Congressional Research Service of the Library of Congress. He has written numerous reports for Congress on various issues relating to the Navy. He regularly briefs Members of Congress and Congressional staffers, and has testified before Congressional committees on several occasions. In 1996, Mr. O'Rourke received a Distinguished Service Award from the Library of Congress for his service to Congress on naval issues. Mr. O'Rourke is the author of several journal articles on naval issues, and is a past winner of the U.S. Naval Institute's Arleigh Burke essay contest. He has given presentations on Navy-related issues to a variety of audiences in government, industry and academia.

Mr. George Root, Jr.

Mr. George Root is currently a Maritime Systems Consultant supporting the identification and maturation of new technologies associated with the combat systems installed in naval aircraft and ships. In May of 2011, Mr. Root completed a Program Manager assignment at the Defense Advanced Research Projects Agency (DARPA) in the Tactical Technology Office (TTO) where his programs focused on developing manned and un-manned off-board naval platforms, sensors, and munitions capable of providing enhanced protection against irregular maritime warfare threats. Prior to DARPA, Mr. Root served 9 years as the Director of the Advanced Programs with the Maritime Systems & Sensors Division of Lockheed Martin and 5 years as an engineering manager with TRW where he led several efforts involving the development and testing of Ballistic Missile Defense systems and the combat systems of the New Attack Submarine. In addition to his management and consulting roles in private industry, Mr. Root completed a career in the United States Navy



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as a Light Attack Naval Aviator where he logged over 4,400 flight hours and 500 carrier landings. He completed his Navy career as an Aeronautical Engineering Duty Officer serving as the Navy's Chief Engineer (Assistant Program Manager, Systems & Engineering) for the T-45 Advance Jet Training Aircraft and then as the Advanced Avionics Resource Sponsor for the Assistant Chief of Naval Operations, Air Warfare, in the Pentagon. Mr. Root holds an M.S. in Aeronautical Systems Engineering, a B.S. in Mechanical Engineering, and has been awarded nine U.S. patents.

Dr. Lawrence Schuette

Dr. Schuette entered the Senior Executive Service in July 2007 and is currently the senior civilian responsible for Innovation at the Office of Naval Research. This portfolio includes the Innovative Naval Prototypes and Swampworks projects. These are high risk/high payoff technology investments that are potentially “game changing” or “disruptive” in nature. From September 2006 to July 2007, he served as a Special Assistant to the Assistant Secretary of the Navy for Research Development and Acquisition. As a Special Assistant, Dr. Schuette focused on in-house RDT&E workforce issues. Dr. Schuette served as the Deputy Chairman of the Joint IED Defeat Organization (JIEDDO) Laboratory Board from March 2006 to September 2006. In this capacity, Dr. Schuette created the Science and Technology strategy used by JIEDDO to combat improvised explosive devices. Dr. Schuette headed the Innovative Systems Subgroup of the OSD Technical Joint Cross Service Group during Base Realignment and Closure 2005 from August 2003 to August 2005. Dr. Schuette was responsible for assessing and recommending for potential consolidation and closure of the research activities of the Department of Defense. He started his 20 years of civilian service in 1987 and until 2007 performed research in underwater acoustics, high performance computing, distributed gaming technology, unmanned vehicles and electronic warfare. He attended The Catholic University of America and graduated in 1983 with a bachelor's degree in electrical engineering. Dr. Schuette completed his master's degree in electrical engineering at The Catholic University of America in 1985. In 1995, Dr. Schuette received his Ph.D. from The Catholic University of America in electrical engineering. Dr. Schuette's awards include the Secretary of Defense's award for Exceptional Civilian Service, the Naval Unit Commendation and the Naval Meritorious Unit Commendation. He is a member of the National Defense Industry Association and the United States Naval Institute.