DR. BRAD ROBERTS

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Director designate, Center for Global Security Research, Livermore National Laboratory (will assume position on April 27, 2015)

Continuing responsibilities:

- Consultant, Office of the Secretary of Defense
- Consultant, Department of Energy (LLNL)
- Consultant, Institute for Defense Analyses
- Academic affiliate, Center for International Security and Cooperation, Stanford University
- Member, Strategic Command Senior Advisory Group (SAG)

Consulting professor and William Perry fellow, Center for International Security and Cooperation, Stanford University (from September 9, 2013 to December 31, 2014)

- Prepare book manuscript: "the case for U.S. nuclear weapons in the 21st century" (now in editorial review)
- Organize and chair weekly policy workshop for graduate research fellows
- Give CISAC seminar presentation on changing requirements of extended deterrence
- Guest lecture at Stanford and elsewhere on nuclear deterrence policy
- Direct project on extended deterrence and strategic stability sponsored by LLNL and LANL, convene 4 quarterly workshops, summarize and distribute results; process designed to deepen stakeholder interest in emerging security challenges and new technical requirements

Visiting Fellow, National Institute for Defense Studies, Tokyo, Japan (6 weeks in spring 2013)

- Prepared paper on extended deterrence and strategic stability in Northeast Asia published in both English and Japanese
- Widely briefed senior levels of Japanese government on U.S. nuclear deterrence policy
- Mentored younger generation scholars at NIDS

Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy Office of the Secretary of Defense (April 2009 to March 2013)

- Served as Policy director of the Obama administration's Nuclear Posture Review and Ballistic Missile Defense Review
- Primary responsibility in follow up was to lead the implementation process

Member, Research Staff, Institute for Defense Analyses, Alexandria, VA (1995 to 2009)

- Developed analytical products for the Department of Defense on policy and strategy for countering the proliferation of weapons of mass destruction; required close integration with IDA technical teams
- Provided project and program leadership, including project development, design, management, and ongoing communication with DoD sponsors
- Expanded IDA partnerships with many new organizations in US and abraod
- Participated in advisory activities for the Departments of Defense and Energy (as further specified below)

Research fellow, Center for Strategic and International Studies (1983-1995)

- Designed and implemented research projects on the proliferation and control of chemical and biological weapons
- Contributed to center-wide research projects on international security policy
- Chaired congressional study group on chemical warfare issues (1987-1990)
- Supported Zbigniew Brzezinski on International Leadership Forum (1986-1991)
- Served as editor of the *Washington Quarterly* (1988-1995)
- Served as executive assistant to the president (1984-1987)

Other responsibilities in years prior to entry into government service in 2009:

- Professorial Lecturer in International Affairs, Elliott School of International Studies, George Washington University—taught annual graduate division course on proliferation and control of weapons of mass destruction, with significant theoretical component (1994-2009)
- Vice chair, US Committee of the Council for Security Cooperation in the Asia Pacific—provided strategic direction for regional policy development (2003-2009)
- Chairman, research advisory council, and member, board of trustees, Chemical and Biological Arms Control Institute—led development of research programs and expanded partnership among technical, defense, and policy decision-makers (1994-2005)
- Member, DoD Threat Reduction Advisory Committee (2001-2009)
 - chair, TRAC panel on Combating WMD
 - member, TRAC panel on Nuclear Deterrence Transformation
 - provided advice to DoD on strategic direction with significant technical component
- Member and founding chairman, Threat Reduction Program Review Committee, Los Alamos National Laboratories—led committee in developing technically-informed planning and programming advice (2003-2006)
- Special advisor, Strategic Advisory Group, U.S. Strategic Command
- Member of the Council on Foreign Relations, International Institute for Strategic Studies (London), and Arms Control Association
- Member, editorial board, *The Nonproliferation Review*
- research associate, International Institute for Strategic Studies, 1990
- analyst, defense policy and arms control, Congressional Research Service (1982)

Education:

- Doctorate, Political Science, 1996, Erasmus University Rotterdam, The Netherlands
- M.Sc. International Relations, 1981, London School of Economics and Political Science

•	Studies) B.A. International Relations, 1976, Stanford University (also completed B.A., German Studies)	

Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy Office of the Secretary of Defense (April 2009 to March 2013)

Responsibilities:

Prepared technically-informed analysis and recommendations for leadership decision and action in the following substantive areas:

- Adapting deterrence strategies for 21st century requirements
- Ensuring a safe, secure, and effective nuclear deterrent for the long term
- Implementing nuclear arms control agreements with Russia and identifying future arms control strategies
- Strengthening extended deterrence and assurance of allies
- Ensuring long-term protection of the U.S. homeland from limited ballistic missile strikes
- Improving missile defense protection of U.S. forces deployed abroad and U.S. allies
- Tailoring other capabilities for 21st century deterrence requirements (such as command and control and conventional strike)
- Integrating nuclear and missile defense capabilities with other U.S. assets, both military and other, to support U.S. national objectives.

Served as lead within OSD(P) for the 2009 Nuclear Posture Review and Ballistic Missile Defense Review.

- Provided needed technical expertise and leadership of innovative interagency process.
- Enabled the needed integration with parallel reviews such as the Quadrennial Defense Review and other national level strategy reviews.
- In follow up, had primary responsibility to advocate for implementation of the reviews within and outside DoD, and within and outside the USG; worked with existing networks where possible and built new ones where necessary.

Advocated for Policy interests in the issues identified above in DoD internal processes.

- These included but were not limited to the joint requirements process, the annual programming process, periodic updates to guidance documents, and the on-going process of reviewing war plans developed by the Combatant Commanders.
- Represented OSD(P) on the Nuclear Weapons Council Standing and Safety Committee

Advocated for Policy and DoD interests in the issues identified above in the interagency process.

- Represented OSD as required in Interagency Policy Committee (IPC) meetings
- Otherwise supported the National Security Staff in exercising technically informed and politically sound leadership on these topics.

Advocated for DoD interests with congressional oversight committees.

- Provided annual testimony to both Senate and House Armed Services Committees.
- Provided briefings to Members of Congress and their committees and staffs on select and sensitive technical matters.
- Served as a focal point for congressional interest in the issues identified above.

Served as departmental lead in working with allies and partners to strengthen extended deterrence and assurance:

- Led DoD delegations in nuclear staff talks with the U.K.
- Served as head of the U.S. delegation to the NATO High Level Group; played key role in brokering the results of the 2012 Deterrence and Defense Posture Review.
- Founded and served as cochair of the Extended Deterrence Dialogue with Japan and the Extended Deterrence Policy Committee with the Republic of Korea; in this capacity, led interagency teams to work with allies in close consultation with NSC.
- Founded and served as chair of nuclear staff talks with France.
- Supported other bilateral dialogues on the required ad hoc basis (including for example with Russia, China, Poland, and Turkey, among others).

Helped to ensure effective strategic communication with key external stakeholders in the United States and abroad in support of administration objectives:

- Regular engagements with public and private conferences and seminars, influential individuals, and the media.
- Commissioned analytical support from key nongovernmental organizations to shape public and congressional debate.

Maintained sufficient cognizance of on-going departmental operations in support of nuclear deterrence and missile defense to be able to alert OSD leadership to issues requiring Policy attention.

Led and managed the functions of the Nuclear and Missile Defense organization in a manner consistent with the principles and objectives of OSD's human capital strategy.

- Ensured high quality customer care
- Promoted accountability, diversity, work/life balance, hiring reform, and employee development.
- Articulated a clear leadership model and led by example.
- Ensured the needed efficiency in resource management.
- Oversaw accelerated implementation of FOIA reviews.

Project Activity at the Institute for Defense Analyses in 2008/2009 (as an illustration of the varied analytical, managerial, and leadership activities in which I was engaged from 1995 to 2009)

With sponsorship of the United States Institute of Peace:

- Provided analytical and other support to the Perry-Schlesinger Congressional Commission on the Future of the Strategic Posture of the United States.
 - Helped coordinate commission's use of classified information to better understand key technical and scientific topics.
 - Served as lead drafter.

With sponsorship of the Defense Threat Reduction Agency:

- Contributed to a multidisciplinary examination of strategic stability with papers, workshops, and commissioned contributions on the following topics:
- 1. Nuclear Stability in Asia:
 - a. What are the potential new sources of instability in the relationships of strategic military power among Asia's major powers?
 - b. How does China's nuclear policy community understand the requirements of nuclear stability and security? How should this inform the China-US nuclear dialogue?
 - Note: a key project responsibility was to serve as codirector of a Track 1.5 nuclear dialogue with China in partnership with RAND and CSIS (we partnered for 4 such annual meetings)
- 2. The Evolving Requirements of Extended Deterrence:
 - a. What are the new challenges of extended assurance and deterrence in the emerging security environment (a series of case studies)?
- 3. Regional Threat Reduction Strategies:
 - a. What are the lessons of past successes in preventing nuclear tipping points from being crossed in the global sub-regions?
 - b. How can those lessons be adapted to inhibit the next wave of potential proliferators?
- 4. The Changing International Political Order and its Implications for Nuclear Order:
 - a. How is the changing cast of rising, falling, and stagnating powers affecting the quest for stable international nuclear order?

With IDA central research support:

- A joint, multi-institutional project on East Asia Security Strategy:
 - o Four times in the 1990s, the USG issued statements of East Asia Security Strategy, but none has been issued since 1998.
 - This project was a joint activity of IDA, the Center for Naval Analyses, NDU's
 Institute for National Security Studies, Pacific Forum CSIS, and the Center for a
 New American Security, aimed at drafting a new USG strategy statement.
 - o IDA's key contributions: elaboration of strategies to manage China's rise and to reduce WMD threats and risks.
 - o Resulting publication was issued on behalf of the participants by the Center for a New American Security.

Papers Published by the Institute for Defense Analyses:

2009

• "Asia's Major Powers and the Emerging Challenges to Nuclear Stability among Them"

2008

• "Beyond the Moscow Treaty: Alternative Perspectives on the Future Rules and Utility of Nuclear Weapons" (coauthored with Victor Utgoff)

2007

- "Nuclear Dialogue With China: Crafting an Approach"
- "Deterrence and WMD Terrorism: Calibrating its Potential Contributions to Risk Reduction"

2006

"Instability in the DPRK: Toward 'More Anticipatory' Strategic Warning"

2005

• "Operationalizing Dissuasion of China: Practicalities and Pitfalls"

2004

- "The 'Nexus:' A Summary Review of Administration Statements on the Threats Posed by Terrorism, Rogue States, and WMD"
- "China's Perceptions of the U.S. Nuclear Threat: A Post-NPR Survey"
- "Strategic Options: Understanding the New Long War" in *Strategies for the 21st Century:* A Study of Strategy and Technology, Final Report (DARPA, May 2004)

2003

- "China and Ballistic Missile Defense: 1955 to 2002 and Beyond"
- "Dissuasion, China, and the New Triad"
- "Defining the Challenges of Campaign-level Responses to Campaign-type Terrorism"
- "A Strategy for the New Long War"

2002

- "American Primacy and Major Power Concert: A Critique of the 2002 National Security Strategy"
- "Tri-polar Stability: The Future of Nuclear Relations among the US, Russia, and China"
- "Deterring Terrorism: Terrorist Campaigns and Prolonged Wars of Mutual Coercion"

2001

- "China-U.S. Nuclear Relations: What Relationship Best Serves U.S. Interests?"
- "East Asia's Nuclear Future: A Long-Term View of Threat Reduction"

2000

- "Nuclear Multipolarity and Stability"
- "Asymmetric Conflict 2010"
- "China and Asymmetric Warfare"
- "Asymmetric Counters to JV2020"
- coauthor with James Silk and Victor Utgoff, "The Comprehensive Test Ban Treaty, Foreign Nuclear Weapons Programs, and US Security: An Assessment"
- "A Framework for Speculating About When and How Biological Weapons Might be Used in the Middle East"
- "NATO and Biological Warfare: An Overview of Key Issues"

1999

- "Geopolitics and Nuclear Order: The Nuclear Planning Environment in 2015"
- "Global Nuclear Futures: Evolution or Revolution?"
- "China's Nuclear Strategy"
- coauthor with Michael Nacht, "What Can Defense Threat Reduction Accomplish?"
- "A Scenario for the Use of Smallpox to Cause Strategic Collapse of the USA"

1998

- "Biological Weapons in Major Theater War"
- "Counterproliferation and The Spectrum of Conflict"
- "Multilateralism and Security in East Asia"
- "The Future of Nuclear Weapons in Asia"
- "Biological Weapons Proliferation in Asia"

1997

- coauthor with Victor Utgoff, "Counterproliferation: A Mid-Term Assessment"
- coauthor with Utgoff, "Coalitions Against NBC-Armed Regional Adversaries: How Are They Formed, Maintained, and Led?"
- coauthor with Utgoff, "Fundamental Questions Raised by Far Deeper Negotiated Nuclear Arms Reductions"
- contributor, "A Top-Down Examination of the Nuclear Forces Sustainment Problem"
- coauthor with Karl Lowe, "Biological Warfare Decision Points: A Framework for Analysis"
- "Chem-Bio Terrorism: Calibrating Risks and Responses"

1996

- "Rethinking How Wars Must End: NBC War Termination Issues and Major Regional Contingencies," in Victor Utgoff, ed., *The Coming Crisis: Nuclear Proliferation, U.S. Interests, and World Order* (Cambridge, Mass.: MIT Press)
- coauthor with Karl Lowe, "Biological Weapons and U.S. Security"
- "BW Defense in Coalition Wars: Assessing the Capabilities of U.S. Allies and Potential Coalition Members"
- "World Order in the *Post*-Post Cold War Era: Beyond the Rogue State Problem"
- "Biological Weapons Proliferation and U.S. Security"

- "Authorizing NBC Counterforce: Deliberating U.S. Interests and Choices"
- "Military Strikes Against NBC-Armed Rogue States: Is There a Moral Case for Preemption?"
- "Arms Control in the Emerging Strategic Environment"
- "Technology Diffusion and International Security"

OTHER PUBLICATIONS

authored book:

- *The Case for U.S. Nuclear Weapons in the 21st Century* (Stanford, Calif.: Stanford University Press, forthcoming)
- Weapons Proliferation and World Order After the Cold War (The Hague, The Netherlands: Kluwer Law International, 1996).

authored monograph:

• "Chemical Disarmament and International Security," *Adelphi Paper* 267 (London: Brassey's for IISS, 1992).

coauthored monograph:

• with Robert Manning and Ronald Montaperto, *China, Nuclear Weapons, and Arms Control* (Council on Foreign Relations, 2000).

edited books:

- Weapons Proliferation in the 1990s (Cambridge, Mass.: MIT Press, 1995).
- *Order and Disorder After the Cold War* (MIT Press, 1995).
- *New Forces in the World Economy* (MIT Press, 1995).
- *U.S. Security in an Uncertain Era* (MIT Press, 1993).
- U.S. Foreign Policy After the Cold War (MIT Press, 1992).
- *The New Democracies: Global Change and U.S. Policy* (MIT Press, 1990).
- Coeditor with Walter Laqueur, *America in the World 1962-1987: A Strategic and Political Reader* (New York: St. Martin's Press, 1987).
- Hype or Reality: Assessing the Risks of Mass Casualty Terrorism (Alexandria, Va.: Chemical and Biological Arms Control Institute, 2000).
- Terrorism With Chemical and Biological Weapons: Calibrating Risks and Responses (Alexandria, Va.: Chemical and Biological Arms Control Institute, 1997).
- Ratifying the Chemical Weapons Convention (Washington, D.C.: CSIS, 1994).
- Biological Weapons in the 1990s: Weapons of the Future? (CSIS, 1993).
- *The Chemical Weapons Convention: Implementation Issues* (CSIS, 1992).
- Chemical Disarmament and U.S. Security (Boulder, Colo.: Westview Press, 1992).
- Chemical Warfare Policy: Beyond the Binary Production Decision (CSIS, 1987).

Book chapters, journal articles, other short published items

Topical areas:

- Arms Control
- General Weapons Proliferation Issues
- Asian Security
- General topics
- Biological weapons: proliferation and control
- Chemical weapons: proliferation and control
- Democratization and human rights

(some items are double-listed under different topical subheads)

I. Arms Control

"Order, Stability, and Nuclear Abolition: A Comment" in George Perkovich and James Acton, eds., *Abolishing Nuclear Weapons: A Debate* (Carnegie Endowment, 2009).

"Book Review: The Minimum Means of Reprisal: China's Search for Nuclear Security," *Arms Control Today*, May 2007.

"Arms Control and Sino-US Strategic Stability," discussion paper prepared for a US-China Strategic Dialogue cohosted by the Naval Postgraduate School and Pacific Forum CSIS Honolulu, Hawaii, August 1-3, 2005

Coauthor with Michael Moodie, A Decade of Change, a Decade of Challenge: A Once-and-Future Intellectual History of the Chemical and Biological Arms Control Institute (Washington, D.C., 2005)

"Are Regimes Relevant?" A commentary on panel presentations by Jayantha Dhanapala, Under-Secretary General of the United Nations for Disarmament, and John Wolf, Assistant Secretary of State for Nonproliferation, Carnegie International Nonproliferation Conference, November 15, 2002, posted at www.ceip.org.

"East Asia," in Jeffrey Larsen, ed., *Arms Control: Cooperative Security in a Changing Environment* (Boulder, Colo.: Lynne Rienner, 2002).

"Revisiting Fred Iklé's 1961 Question: 'After Detection, What?'," *Nonproliferation Review* (Spring 2001).

Coauthor with Robert Manning and Ronald Montaperto, *China, Nuclear Weapons, and Arms Control* (New York: Council on Foreign Relations, 2000) and as digested in *Foreign Affairs* (July/August 2000).

- "Arms Control in the Decade Ahead," in Catherine Kelleher, ed., *Transatlantic Relations in a New Era* (Berlin, Germany: Aspen Institute and Free University, 2000).
- "The Road Ahead for Arms Control," *Washington Quarterly*, Vol. 23, No. 2 (Spring 2000). Republished in Alexander Lennon, editor, *Contemporary Nuclear Debates: Missile Defenses, Arms Control, and Arms Races in the twenty-first century* (Cambridge, Mass.: MIT Press, 2002).
- "Preventing the Proliferation of Weapons of Mass Destruction: What Role for Arms Control?" in Oliver Thraenert, ed., *A German-American Dialogue on Arms Control* (Bonn: Ebert Stiftung, 1999).
- "Arms Control in 2000-2010: Forks in the Road Ahead," in James Brown, ed., *Entering the New Millennium: Dilemmas in Arms Control* (Albuquerque, N.M.: Sandia National Laboratories, 1999).
- "An American Perspective on Arms Control in the Asia-Pacific," in Jeffrey A. Larsen and Thomas Miller, eds., *Arms Control in the Asia-Pacific Region* (Colorado Spring: Institute for National Security Studies, 1999).
- "Strategies of Denial," in Peter L. Hays et al, eds., Countering the Proliferation and Use of Weapons of Mass Destruction (Boston: McGraw Hill, 1998).
- "Arms Control in the Emerging Strategic Environment," *Contemporary Security Policy*, Vol. 18, No. 1 (April 1997).
- "Arms Control and the Future of International Security," in J. Marshall Beier and Steven Mataija, eds., Cyberspace and Outer Space: Transitional Challenges for Multilateral Verification in the 21st Century (Toronto: York University, 1997).
- "Rethinking Chemical and Biological Export Controls," *The Monitor* [on Nonproliferation, Demilitarization, and Arms Control], Center for International Trade and Security, University of Georgia, Winter 1997, pp. 9-11.
- "The Post-1995 Nuclear Verification Challenge," in Steven Mataija, ed., *Proliferation in all its Aspects Post-1995: The Verification Challenge and Response* (Toronto: Centre for International and Strategic Studies at York University, 1995).
- "Does Arms Control Have a Future?" in *Proceedings*, Defense Nuclear Agency's Fourth Annual International Conference on Controlling Arms, June 1995.
- "Rethinking Export Controls on Dual-Use Materials and Technologies: From Trade Restraints to Trade Enablers," *Arena* (Alexandria, Va.: CBACI, 1995).
- "NPT Extension, International Security, and the End of the Cold War," in Marianne van Leeuwen, ed., *The Future of the Nuclear Non-Proliferation Treaty* (Dordrecht, The Netherlands: Martinus Nijhoff Publishers with the Netherlands Institute of International Relations, 1995).

"Arms Control and the End of the Cold War," *The Washington Quarterly* 15 (Autumn 1992).

"UN Roles in South-South and North-South Arms Control," in William H. Lewis, ed., *The Security Roles of the United Nations* (Washington, D.C.: National Defense University, conference proceedings, October 9-10, 1991).

"The Other Arms Control Agenda," CSIS Contingency Paper, September 1986.

"Strategic Arms Reduction Talks (START)," issue brief, Congressional Research Service, November 1982.

II. General Weapons Proliferation Issues

On the Strategic Value of Ballistic Missile Defense, Proliferation Papers (Paris: IFRI, 2014).

- "'All the King's Men?' Refashioning Global Nuclear Order," *International Affairs* (Chatham House), May 2007.
- "Nonproliferation: Challenges Old and New," in James Davis, Barry Schneider, and Peter Lavoy, eds., *Avoiding the Abyss: Progress, Shortfalls, and the Way Ahead in Combating the WMD Threat* (Montgomery, Ala.: Air War College, 2005). Reprinted separately as Counterproliferation Papers, Future Warfare Series, No. 24.
- "The Nuclear Balance of Terror and 9/11," in Bruno Tertrais, editor, *Nuclear Issues in the Post-9/11 World* (Paris, France, 2003).
- "Major Power Relations and Nonproliferation: The Impact of September 11," in Michael Barletta, editor, *After 9/11: Preventing Mass-Destruction Terrorism and Weapons Proliferation*, Occasional Paper No. 8 (Monterey, Calif.: Monterey Institute of International Studies, 2002).
- "Proliferation and Nonproliferation in the 1990s: Looking for the Right Lessons," *Nonproliferation Review*, Vol. 6, No. 4 (Fall 1999).
- "Rethinking the N-Plus-One Proposition," *National Interest* (Spring 1998).
- "VNAs [Virtual Nuclear Arsenals] and the Latent Weapon State," in Michael Mazarr, ed., *Nuclear Weapons in a Transformed World: The Challenge of Virtual Nuclear Arsenals* (New York: St. Martin's Press, 1998).
- "Managing Proliferation: A View from the United States," in Fran Burwell and Ivo Daalder, eds., *The United States and Europe in the Global Arena* (New York: Macmillan Press and St. Martin's Press, 1999).
- "Technology Diffusion and International Politics" in James Brown, ed., *Arms Control in a Multipolar World* (Amsterdam: VU University Press, 1996).
- "Technology Diffusion and Military Outcomes: Factors Conditioning the Successful Application of Newly Available Weapons and Weapons Technologies in the Developing World," in Daniel Gouré, ed., *Global Technology Diffusion* (1996).
- "The Case for Nuclear Deterrence of Biological Warfare," Henry L Stimson Center Internet security dialogue forum, autumn 1995.
- "Commentary" on Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: A Debate*, in *Security Studies* (Summer 1995).

"Beyond Parochialism: Rethinking the Proliferation Agenda After the Cold War," in Thomas B. Wander, ed., *The Diffusion of Advanced Weaponry: Technologies, Regional Implications, and Possible Responses* (Washington, D.C.: American Association for the Advancement of Science, 1994).

"From Nonproliferation to Antiproliferation," International Security 18 (Summer 1993).

"Proliferating Military Technologies and U.S. Power Projection Forces," in Eric H. Arnett, ed., *Science and International Security: Responding to a Changing World* (Washington, D.C.: American Association for the Advancement of Science, 1990).

"Proliferation and Deterrence: Third-Country Strategic Capabilities and U.S. Strategic Policy," in Andrew Goldberg, ed., *The Future of Strategic Systems* (Washington, D.C.: CSIS, 1987).

"NATO and Small Nuclear Forces Proliferation: A Speculative Inquiry," in Rodney W. Jones, ed., *Small Nuclear Forces and U.S. Security Policy* (Lexington, Mass.: Lexington Books, 1984).

III. Asian Security

Extended Deterrence and Strategic Stability in Northeast Asia (Tokyo: National Institute for Defense Studies, 2013). In both English and Japanese.

"Asia's Major Powers and the Emerging Challenges to Nuclear Stability among Them," IDA Paper (2009).

"China's Strategic Deterrent in Asia," in *PLA Missions Beyond Taiwan* (a book project of the National Bureau of Asian Research, the Strategic Studies Institute of the US Army War College, and the George Bush School at Texas A&M University), 2009.

Nuclear Dialogue with China: Crafting an Approach, IDA Paper P-4230 (Alexandria, Va.: Institute for Defense Analyses, June 2007).

"The Nuclear Dimension: How Likely? How Stable?" in Evan Medeiros, Michael D. Swaine, and Andrew Yang, editors, *Assessing the Threat: The Chinese Military and Taiwan Security* (Washington, DC: Carnegie Endowment, 2007).

"Alternative Futures," in Albert S. Willner and Paul J. Bolt, editors, *China's Nuclear Future* (Boulder, Colo.: Lynne Rienner Publishers, 2005).

"From Deterrence to Dissuasion: Bush Administration Strategies for Strategic Stability," *International Review (China)*, No. 6, 2004. In Mandarin.

"China-U.S. Nuclear Relations: What Relationship Best Serves U.S. Interests?" (IDA, 2001).

"East Asia's Nuclear Future: A Long-Term View of Threat Reduction" (IDA 2001).

"Ballistic Missile Defense and Asian Stability," Jasjit Singh, ed., *Reshaping Asian Security* (Delhi, India: Institute for Defense Studies and Analyses, 2001).

"China," in James J. Wirtz and Jeffrey A. Larsen, editors, *Rockets' Red Glare: Missile Defenses and the Future of World Politics* (Boulder, Colo.: Westview Press, 2001).

"China and Nonproliferation: The Changing Context," in Michael Barletta, ed., *WMD Threats 2001: Critical Choices for the Bush Administration* (Monterey, Calif.: Monterey Institute of International Studies, 2001), Occasional Paper No. 6.

coauthor with Shen Dingli, "The Nuclear Equation in Asia," in Burkhard Schmitt, ed., *Nuclear Weapons: A New Great Debate*, Chaillot Paper 48 (Paris: Institute for Security Studies of the Western European Union, 2001)

"An American Perspective on Arms Control in the Asia-Pacific," in Jeffrey Larsen and Thomas Miller, *Implications of Arms Control in the Asia-Pacific Region* (Colorado Spring: Institute for National Security Studies, 1999).

"Biological Weapons Proliferation in Asia," IDA, October 1998

"Multilateralism and Security in East Asia: Reassessing U.S. Interests in Light of Recent Experiences," IDA, August 1998.

"The Future of Nuclear Weapons in Asia," IDA paper, September 1998.

"Evaluating Global Nonproliferation Instruments," in Ramesh Thakur, ed., *Keeping Proliferation At Bay* (Jakarta, Indonesia: Centre for Strategic and International Studies, 1998).

"Transparency in the Asia Pacific," in James Brown, ed., *Arms Control Issues for the Twenty-First Century* (Albuquerque, N.M.: Sandia National Laboratory, 1997).

coauthor with Zachary Davis, "Nuclear Energy Cooperation in East Asia: A Survey of Current Proposals," in Ralph Cossa, ed., *Asia Pacific Multilateral Nuclear Safety and Non-Proliferation: Exploring the Possibilities* (Honolulu, Hi.: Pacific Forum/CSIS, 1996), a CSCAP Working Group Special Report.

"The Asia-Pacific and the Global Treaty Regime: The Agenda After NPT Extension," report of the task force on Confidence and Security Building in the Asia-Pacific, United States Committee of the Council for Security Cooperation in the Asia Pacific, June 1995.

"Confidence and Security Building Measures: the Agenda," in Ralph Cossa, ed., *Confidence and Security Building in the Asia-Pacific* (Washington, D.C.: CSIS for the United States Committee of the Council for Security Cooperation in the Asia Pacific, 1995).

Coauthor, "Pakistan and Regional Security," *Journal of South Asian and Middle Eastern Studies* 6:3 (March 1983).

IV. General Topics

"Great Power Deterrence Relationships in the Early 21st Century," in David Yost, editor, *NATO* and 21st Century Deterrence: New Concepts, Capabilities, and Challenges for Deterrence (Rome, Italy: NATO Defense College, 2009).

Deterrence and WMD Terrorism: Calibrating its Potential Contributions to Risk Reduction, IDA Paper P-4231, June 2007; republished as a chapter in Gary Ackerman and Jeremy Tansett, eds., *Jihadists and Weapons of Mass Destruction* (Taylor and Francis with the University of Maryland, 2009).

"Bioterrorism: Calibrating Threats and Responses," Pacific Forum/CSIS, Issues and Insights (Vol. 3, No. 3), May 2003.

"American Primacy and Major Power concert: A Critique of the 2002 National Security Strategy," IDA (2002).

"U.S. National Security in the 21st Century," Cate Bulletin (2002).

"Deterring Terrorism: Terrorist Campaigns and Prolonged Wars of Mutual Coercion," IDA, August 2002.

"Motivations for Terrorists to Use Weapons of Mass Destruction," in M.R. Perez and R. Gupta, eds., *Confronting Terrorism*, Proceedings, Workshop held at Los Alamos National Laboratory, March 25-29, 2002.

Editor, *Hype or Reality: Assessing the Risks of Mass Casualty Terrorism* (Alexandria, Va.: CBACI, 2000). Plus chapter on "Terrorism and Asymmetric Conflict," in *Hype or Reality*.

Review of Bruce Hoffman, *Inside Terrorism* (London: Victor Gollancz, 1998) and Richard A. Falkenrath et al., *America's Achilles' Heel: Nuclear, Biological, and Chemical Terrorism and Covert Attack* (Cambridge, Mass.: MIT Press, 1998) in *Bulletin of the Atomic Scientists* (1998).

Coauthor with Michael Moodie, Combating NBC Terrorism: An Agenda for Enhanced International Cooperation (Alexandria, Va.: CBACI, 1998).

"Military Strikes Against NBC-Armed Rogue States: Is There a Moral Case for Preemption?" in Elliot Abrams, ed., *Close Calls: Intervention, Terrorism, Missile Defense, and 'Just War' Today* (Washington, D.C.: Ethics and Public Policy Center, 1998). Reprinted in Russell Howard and Reid Sawyer, eds., *Terrorism and Counterterrorism: Understanding the New Security Environment* (Guilford, Ct.: McGraw Hill, 2002).

"1995 and the End of the Post-Cold War Era," The Washington Quarterly 18 (Winter 1995).

Coauthor with Stanton H. Burnett and Murray Weidenbaum, "Think Tanks in a New World," *The Washington Quarterly* 16 (Winter 1993).

"New Thinking and American Education," The Cate Bulletin (Winter 1989).

Coauthor, "Introduction," *Military Lessons of the Falkland Islands Conflict: Views from the U.S.* (Boulder, Colo.: Westview Press, 1984).

"The Media and Foreign Policy," CSIS Alert, June 1984.

"U.S. Ground Force Modernization: Updates, Problems, Prospects," *The Journal of Defense and Diplomacy* 1:1 (May 1983).

"Primer on the Countries of Central America," Congressional Research Service, March 1982.

"Primer on the Countries and Dependencies of the Caribbean Basin," report, Congressional Research Service, April 1982.

"Military Implications of the Falkland/Malvinas Conflict," report, Congressional Research Service, August 1982.

"U.S. Interests in Military Aspects of the Lebanon Conflict," report, Congressional Research Service, August 1982.

"The Enigmatic Trilateral Commission: Boon or Bane?" *Millennium* (London) 11:3 (August 1982).

V. Biological Weapons—Proliferation and Control

"The Biological Weapons Programs of the Soviet Union/Russia: Policy Implications," discussion paper, Institut Français Relations Internationales, Paris, November 2004). Published as "Armes biologiques: lecons sovietiques, realites russes," *Politique Etrangere* (No. 1, 2005).

"The Prospects for Biological Warfare in the Middle East," in Barry R. Schneider and Jim A. Davis, eds., *The Gathering Biological Warfare Storm* (Maxwell Air Force Base, Ala.: USAF Counterproliferation Center, 2002). Reprint published by Praeger 2004.

coauthor with Michael Moodie, "Biological Weapons: Defining the Threat and a Long-Term Threat Reduction Strategy" (Washington, D.C.: National Defense University, 2003).

coauthor with Graham Pearson, "Defending Against Biological Attack: The Importance of Biotechnology in Preparedness," *Indian Defence Journal*, Vol. 51, No. 4 (October 2001).

"Biological Weapons Proliferation," in Joseph Cirincione, ed., *Repairing the Regime: Preventing the Spread of Weapons of Mass Destruction* (Washington, D.C.: Carnegie Endowment, 2000).

"Biological Weapons: New Challenges, New Strategies?" in Michael Barletta and Amy Sands, eds., *Nonproliferation Regimes At Risk*, Occasional Paper No. 3, Center for Nonproliferation Studies (Monterey, Calif.: Monterey Institute of International Studies, 1999).

"Biological Weapons Proliferation in Asia," IDA, October 1998.

coauthor with Graham Pearson, "Defending Against Biological Attack: How Ready Are Potential Coalition Members?" *International Defense Review* (April 1998).

"The Proliferation of Biological Weapons: Trends and Consequences," in Oliver Thränert, *Enhancing the Biological Weapons Convention* (Bonn: Ebert Stiftung, 1997).

"Export Controls and Biological Weapons: New Roles, New Challenges," *Critical Reviews in Microbiology*, Vol. 24, No. 3 (1998), pp. 235-254.

"Biological Weapons and Coalition Warfare," research paper prepared for the Center for European Strategy Research, Munich, Germany, 1997.

"Article III, a review" in Graham S. Pearson and Malcolm R. Dando, eds., *Strengthening the Biological Weapons Convention: Key Points for the Fourth Review Conference* (Bradford, U.K.: Department of Peace Studies, University of Bradford, September 1996).

"Between Complacency and Panic: Calibrating the Biological Warfare Threat," in Stuart Johnson, ed., *The Niche Threat: Deterring the Use of Chemical and Biological Weapons* (Washington, D.C.: National Defense University, 1995).

"There Are More Dark Spots than True Information on Biological Weapons" [in Russian], *Yaderny Kontrol* (Moscow, April 1995).

"The Emerging Biological Warfare Threat," research paper prepared for National Defense University, March 1995.

"Controlling the Proliferation of Biological Weapons," *The Nonproliferation Review* (Fall 1994).

"Biological Weapons: New Challenges and New Policy Priorities for the 1990s," in Brad Roberts, ed., *Biological Weapons in the 1990s: Weapons of the Future?*

"Implementing the Biological Weapons Convention: Looking Beyond the Verification Issue," in Oliver Thraenert, ed., *The Verification of the Biological Weapons Convention* (Bonn: Friedrich Ebert Foundation, 1992).

Foreword, Barend ter Haar, *The Future of Biological Weapons* (New York: Praeger for the Center for Strategic and International Studies, 1991).

VI. Chemical Weapons--Proliferation and Control

Review of Edward M. Spiers, *Chemical and Biological Weapons: A Study of Proliferation* (New York: St. Martin's Press, 1994), *Politics and the Life Sciences* (March 1997).

"Has the Taboo Been Broken?" in Terrorism With Chemical and Biological Weapons.

"Terrorism With NBC Weapons: Is the Taboo Broken?" *Politics and the Life Sciences*, symposium on chemical and biological terrorism (September 1996).

coauthor with Michael Moodie, "The CWC Ratification Debate: Defining the National Interest," *Arena* (Alexandria, Va.: Chemical and Biological Arms Control Institute, 1995).

"The Chemical Weapons Convention: Navigating the Passage from Opening-for-Signature to Entry-Into-Force," in James Brown, ed., *Concerns, Opportunities, and New Horizons and Challenges in Arms Control and Verification* (Amsterdam: VU Free Press, 1994).

"The Chemical Weapons Convention and World Order," in Kyle Olson and Benoit Morel, eds., *The Chemical Convention: The Shadow and the Substance* (Boulder, Colo.: Westview Press, 1993).

Coauthor with Charles C. Flowerree, "Chemical Arms Control in the Middle East," in Alan Platt, ed., *Arms Control and Confidence Building in the Middle East* (Washington, D.C.: United States Institute of Peace, 1992).

"Controlling Chemical Weapons," *Transnational Law and Contemporary Problems* 2 (Fall 1992), special edition, "World Security and Weapons Proliferation," coedited by Jonathan Dean and David Koplow.

"It's a Gas: Russia's CBW Inheritance," *Post-Soviet Prospects* (Washington, D.C.: CSIS, August 1992).

Ratifying the Chemical Weapons Convention, options memorandum prepared for a private transition project on nonproliferation issues, December 1992.

"The Strategic Implications of Chemical Weapons Proliferation" and "Chemical and Biological Weapons and Regional Arms Control," in Geoffrey Kemp and Shelley Stahl, eds., *The Arms Race in the Middle East and South Asia* (New York: St. Martin's, 1992).

"The Security Implications for Third World Regions of a Chemical Weapons Ban," in Joachim Krause, ed., *The Security Implications of a Chemical Weapons Ban* (Boulder, Colo.: Westview Press, 1991).

"Iraqi Chemical Weapons, as Overrated as Scuds," Wall Street Journal, February 8, 1991.

"Linking U.S. Aid to a Recipient's Chemical Weapons Programs," Statement to the House Budget Committee, Task Force on Defense, Foreign Policy, and Space, Hearings, May 30, 1991.

"Chemical and Biological Weapons: New Technologies and the Prospects for Negotiations," in Kenneth Moss, ed., *Technology and the Future Strategic Environment* (Washington, D.C.: Wilson Center Press, 1990).

"Iraqi Chemical and Biological Weapons: Embargo vs. War," Statement to the House Armed Services Committee, Hearings on Iraq, December 6, 1990.

Review of Valerie Adams, *Chemical Warfare, Chemical Disarmament: Beyond Gethsemane* (Basingstoke, U.K.: Macmillan, 1989), *Survival* 23:4 (July/August 1990).

"The Outpacing of Negotiations by Circumstance," in Kenneth M. Jensen and David Wurmser, eds., *Is It Feasible to Negotiate Chemical and Biological Weapons Control?* (Washington, D.C.: United States Institute of Peace, 1990).

"Chemical Weapons Proliferation and Control: An Alliance Issue," *Studia Diplomatica* (Brussels) 42:2 (1989).

"The United States and Chemical Arms Control," in Eric H. Arnett, ed., *New Technologies for Security and Arms Control* (Washington, D.C.: American Association for the Advancement of Science, 1989).

Review of Edward M. Spiers, *Chemical Warfare* (Urbana: University of Illinois Press, 1986); Hugh Stringer, *Deterring Chemical Warfare: U.S. Policy Options for the 1990s* (Washington, D.C.: Pergamon-Brassey's, 1986); and L. F. Haber, *The Poisonous Cloud: Chemical Warfare in the First World War* (Oxford: Clarendon Press, 1986), *The Washington Quarterly* 10:1 (Winter 1987).

"Developing Nations Can Torpedo Chemical Weapons Disarmament," op-ed, *Atlanta Constitution*, December 9, 1987.

"Chemical Weapons and Western Security in a Post-INF Environment: An Assessment," background paper for a CSIS study of NATO, December 20, 1987.

"Chemical Weapons: A Policy Overview," *Issues in Science and Technology* (National Academy of Sciences) 2 (Spring 1986).

"Chemical Proliferation and Policy," *The Washington Quarterly* 8:1 (Winter 1985).

"Chemical and Biological Weapons: Threat and Response," in William J. Taylor, Jr., Steven A. Maaranen, and Gerrit W. Gong, eds., *Strategic Responses to Conflict* (Lexington, Mass.: Lexington Books, 1984).

Coauthor, "Binary Weapons: Implications of the U.S. Chemical Stockpile Modernization Program for Chemical Weapons Proliferation," report prepared for the Subcommittee on International Security and Scientific Affairs of the Committee on Foreign Relations of the House of Representatives, April 24, 1984.

Coauthor with Joe Pilat, "The Once and Future Threat: Chemical Weapons Proliferation and Terrorism," conference paper, June 1984.

Coauthor, "Chemical Weapons: A Promising and Overlooked Arms Control Prospect," op-ed, *Christian Science Monitor*, April 7, 1983.

"Chemical and Biological Warfare Proliferation and the Future of Conflict," conference paper, Los Alamos Scientific Labs/CSIS, October 1983.

"U.S. Chemical Warfare Preparedness Program," issue brief, Congressional Research Service, December 1982.

VII. Democratization and Human Rights Issues

Coeditor with Nina Belyaeva, *After Perestroika: Democracy in the Soviet Union* (Washington, D.C.: CSIS, 1991).

"Democracy and World Order in the 1990s," Fletcher Forum (Spring 1991).

"Human Rights, International Security, and the Crisis of Communism," in Vojtech Mastny and Jan Zielonka, eds., *Human Rights and Security: Europe on the Eve of a New Era* (Boulder, Colo.: Westview Press for the Netherlands Institute of International Studies, 1991).

"Human Rights and International Security," paper prepared for Department of State, conference on "Human Rights in an Era of Democratic Change," December 7, 1989, published in *The Washington Quarterly* 13:2 (Spring 1990).

Securing Democratic Transitions (Washington, D.C.: CSIS, 1990).

The World Democratic Revolution (Washington, D.C.: CSIS, 1989).

Participation: A Pragmatic Agenda for the 1990s (Washington, D.C.: CSIS, 1987).

Slow and Uneven Global Economic Growth: Implications and Prescriptions (Washington, D.C.: CSIS, 1986).

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