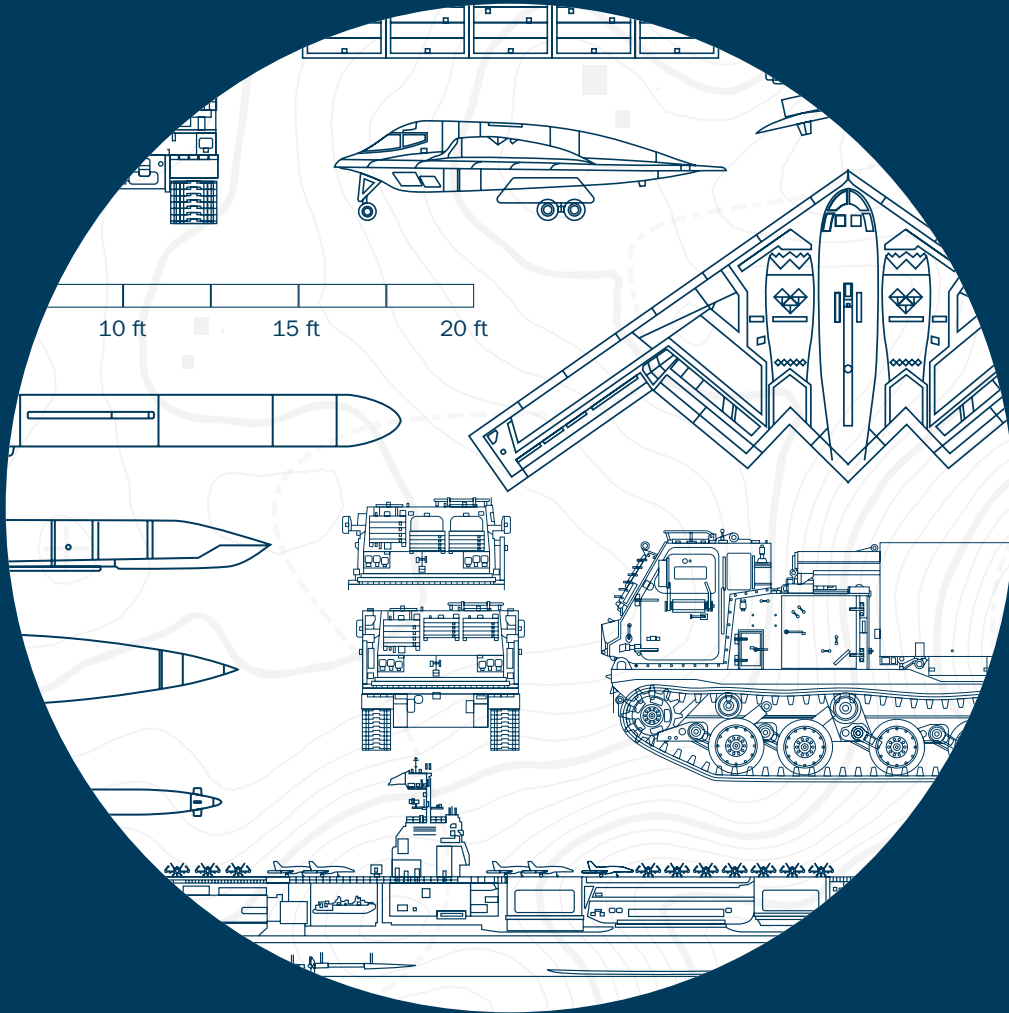


CSBA

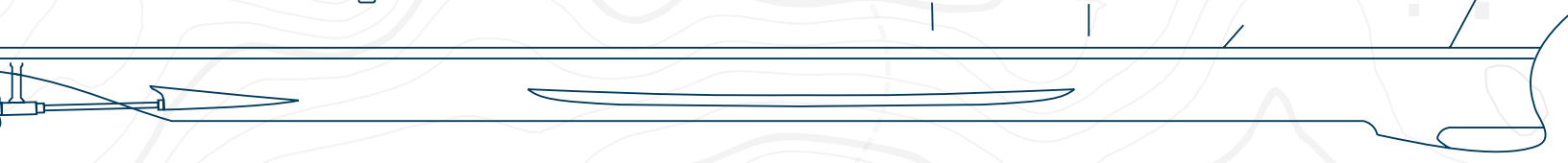
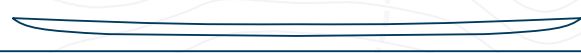
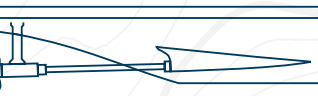
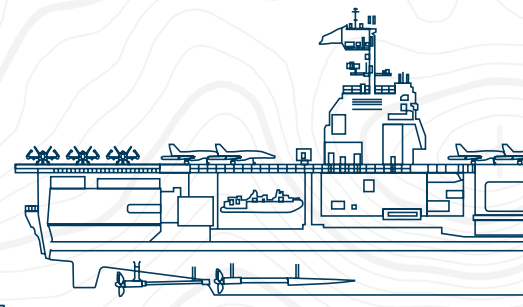
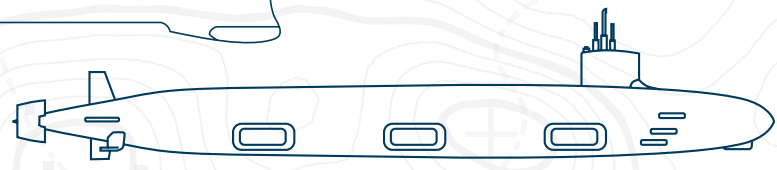
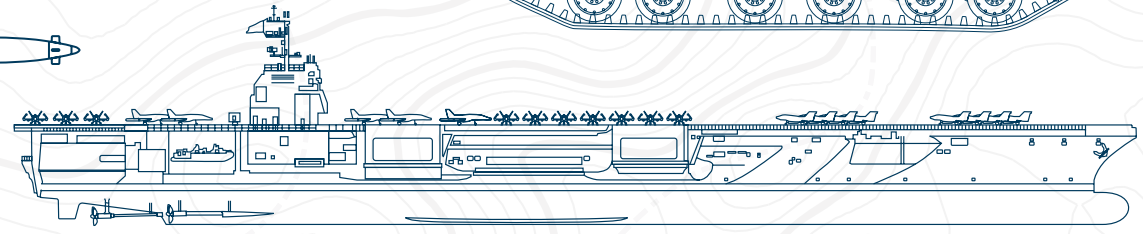
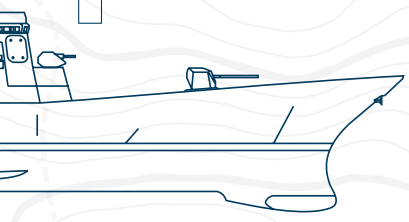
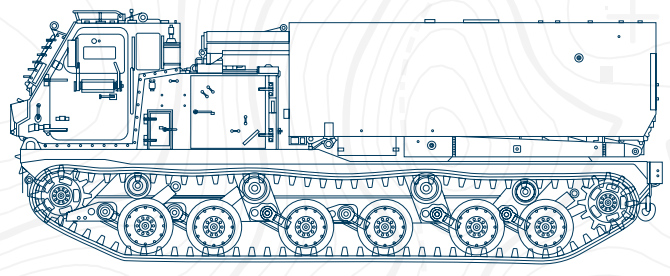
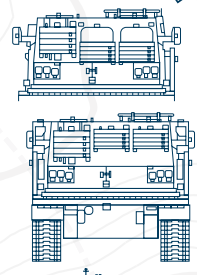
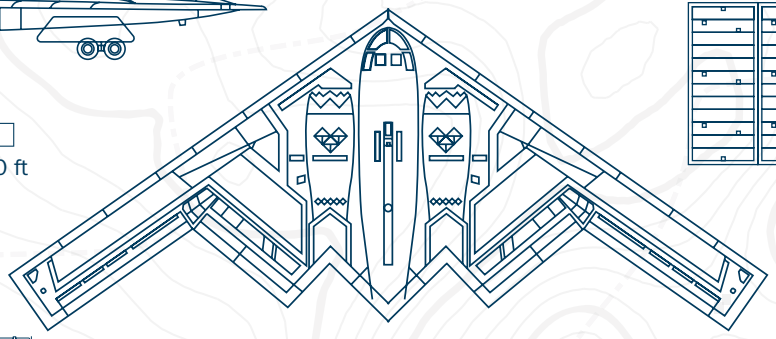
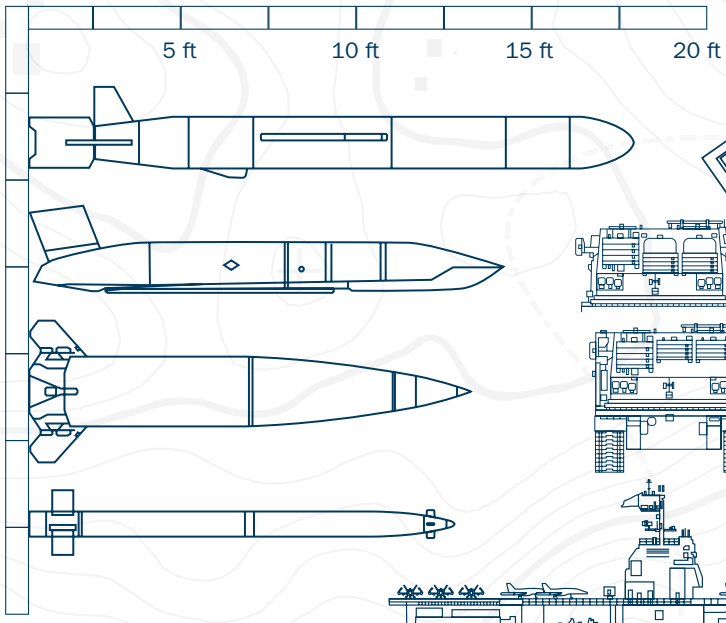
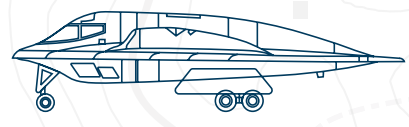
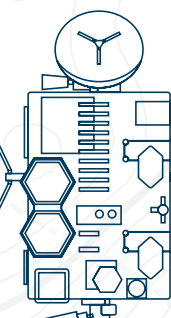
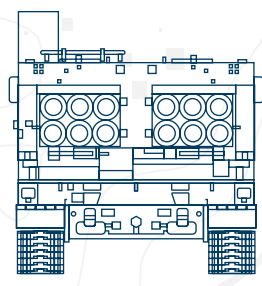
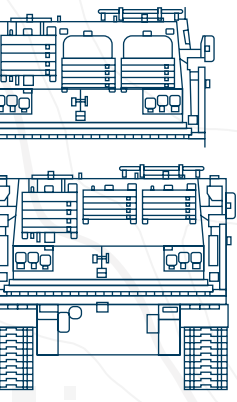
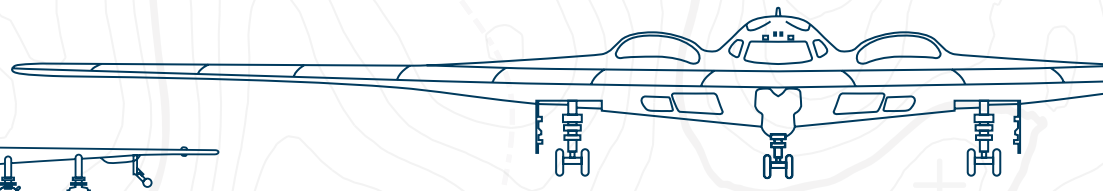
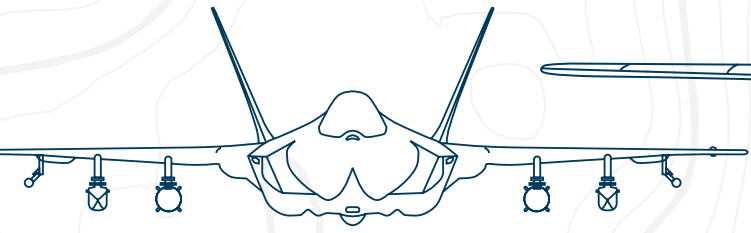
Center for Strategic and Budgetary Assessments



2016

ANNUAL REPORT

STRATEGY | POLICY | BUDGET



MESSAGE FROM THE CHAIRMAN OF THE BOARD



LAST YEAR PRESENTED A VERY dynamic national security environment. China challenged regional security with their controversial and illegal expansion into the South China Sea, policy makers refocused their attention on the costs of modernizing our country's strategic arsenal and the implications of extended strategic deterrence, the Navy wrestled with the size and scope of its future force, and a new presidential administration searched for a defense grand strategy to ensure we are prepared for great power competition and conflict.

The CSBA team was on the leading edge of each of these conversations with timely, thoughtful, and

authoritative analyses that informed the decisions of this country's senior leaders in both the executive and legislative branches. One example reaffirming CSBA's important contributions is that Secretary of Defense Mattis read *Preserving the Balance: A U.S. Eurasia Defense Strategy* on the first official trip of his tenure. We continue to be involved both at home and abroad in informing the policy discussion, framing alternative policy directions

and providing expert assessments of the current situation. This is CSBA's core competency, and our growth in the past year has added depth to our extraordinary team.

We are also blessed with an extraordinary Board, and we take great pleasure in welcoming Randy Forbes, Adam Frankel, and Barbara Humpton to our ranks in 2017.

The Honorable Randy Forbes, former U.S. Representative and Chairman of the House Armed Services' Seapower and Projection Forces Subcommittee, is the current Naval War College Foundation Senior Distinguished Fellow at the U.S. Naval War College in Newport, Rhode Island. Mr. Adam Frankel is a Senior Managing Director and

the General Counsel for Evercore, a premier independent investment banking advisory firm in New York City. Ms. Barbara Humpton serves as the President and Chief Executive Officer of Siemens Government Technologies, Inc., a leading integrator of Siemens' innovative products, technologies, and services for programs and requirements at federal government agencies and departments. These individuals have such a varied background and a reputation for making significant contributions to securing this country's national interests. There is no doubt that their interests and involvement will help strengthen CSBA's reputation as a leading center for national security thought.

We hope that you will find CSBA's Annual Report illuminating. Please give us a call if you want to explore anything in it.

Sincerely,

NELSON M. FORD
Board Chair

2016 WAS AN IMPORTANT YEAR for CSBA, which has long been a leading voice in the public debate surrounding strategy, the changing character of war, and the defense budget. CSBA provided timely, independent, and non-partisan analysis to the nation's senior leaders in both the Executive and Legislative branches in a crucial election year. As always, the most important ingredient in our success was the talented and dedicated members of the CSBA team and their commitment to help inform the national security debate.

At a time when few have been thinking about the main challenges to U.S. extended deterrence in Europe, East Asia, and the Middle East, CSBA released two thought-provoking monographs on the subject. *Rethinking Armageddon: Planning Scenarios for the Second Nuclear Age* examined scenario-based assessments of the competitive dynamics surrounding the evolving nuclear landscape. *Extended Deterrence in the Second Nuclear Age: Geopolitics, Proliferation, and the Future of U.S. Security Commitments* furthered this conversation by describing the main challenges to extended nuclear deterrence in Europe, East Asia, and the Middle East and sketching out what updated extended nuclear deterrence postures might look like across all three regions.

The presidential election and the resulting change in administration offered CSBA a unique opportunity to stimulate a debate over the strategic choices that will shape defense strategy in the Trump Administration. With *How Much is Enough? Alternative Defense Strategies* CSBA convened groups

of experts from The American Enterprise Institute, The Cato Institute, The Center for a New American Security, The Center for Strategic and International Studies, and CSBA to explore alternative defense strategies for a post-Budget Control Act world.

CSBA did not limit its research to the defense budget.

Preserving the Balance: A U.S. Eurasia Defense Strategy offered a fiscally-informed defense strategy focused on the long-standing U.S. interest in preventing the rise of a hegemonic power on the Eurasian land mass, a development that would represent a major threat to U.S. national security. The overarching strategy contained in that report was supported by three regional strategies. *U.S. Strategy for Maintaining a Europe Whole and Free* outlines a number of options the United States has for countering and limiting Russian political-military moves. *Reinforcing the Front Line: U.S. Defense Strategy and the Rise of China* discusses an enduring strategy of global leadership and engagement, but also recognizes the new challenges posed by China's growing military power. *Contain, Degrade, and Defeat: A Defense Strategy for a Troubled Middle East* looked at the histories, cultures, and foreign policies that have brought the United States to its current juncture in the Middle East.

CSBA also continued its long-standing work on future capabilities and operational concepts. *Restoring American Seapower: A New Fleet Architecture for the United States Navy* recognized that gaining an advantage in great power competitions, deterring




aggression, and reassuring allies will require changes to the ships, aircraft, weapons, sensors, basing, and readiness processes of U.S. naval forces, which essentially operated unopposed since the Berlin Wall fell. *Countering China's Adventurism in the South China Sea* offered options to the Trump administration and the closest U.S. allies for thinking about and dealing with China's expansion in the South China Sea.

2017 looks to be an equally important year as CSBA explores how the United States needs to think about great power competition and conflict.

Thank you for your continued interest in and support of our research agenda, without which we would not be able to do the quality research and analysis that policy makers have come to expect from us.

Sincerely,

THOMAS G. MAHNKEN
President and Chief Executive Officer



“I found the discussion with your [CSBA] team extremely interesting, and this helped provide me with a better understanding not only of your perception of the challenges that we face but also of the action necessary to strengthen our collective security.”

– General Sir Chris Deverell, Commander, Joint Forces Command, UK

THE FUTURE OF NATIONAL SECURITY

The Center for Strategic and Budgetary Assessments (CSBA) is an independent, non-partisan, non-profit public policy research institute established to promote innovative thinking and debate about national security strategy, defense planning, and military investment options for the 21st century.

The Center for Strategic and Budgetary Assessments began its analytic work in 1983 as the Defense Budget Project at the Center on Budget and Policy Priorities. Founded and directed by respected national security and budget expert Gordon Adams, its mission was to fulfill an urgent need for research and information on defense policy and budget issues during the defense buildup of the Reagan Administration. Within a decade it was recognized as a leading authority on the analysis of defense policies and budgets. The shrinking defense budgets and resources of the early 1990s only increased the importance of exploring long-term investments and strategies. Former Army Lieutenant Colonel Dr. Andrew F. Krepinevich became president in 1993, and in May 1995 he incorporated the research group as the Center for Strategic and Budgetary Assessments. For nearly two decades, CSBA has provided consistent, high-quality, and innovative research on defense strategy, budgets, and the security environment. With notable alumni including Michael Vickers,

Robert Work, and Todd Harrison, CSBA experts have worked to analyze U.S. defense strategy, force structure and planning, and defense budgets in the effort to reconcile these interrelated subjects, contributing extensively to the Revolution in Military Affairs debate, the development of an AirSea battle concept, and discussions on the strategic choices necessary for the transformation and modernization of the U.S. military in the face of sequestration. CSBA remains instrumental in guiding the nation's most critical defense policy debates as a small but powerful group comprising experts with extensive experience in the field of national security—many of them military veterans and former senior level policy makers from the Department of Defense, State Department, and the National Security Council—supported by a dedicated staff of accomplished executives and scholars.

CSBA's mission today is to promote innovative thinking and debate about national security strategy, defense planning, and military investments, as well as to provide timely, impartial, and insightful analyses to senior members of the executive and legislative branches, the media, and the broader national security establishment to make informed decisions regarding strategy, security policy, and resource allocation.

Research Themes

Strategy & Policy research informs the formation of U.S. strategy by developing innovative options to reconcile ends and means and identifying strategic priorities. It highlights sources of enduring advantage for the United States in sustaining its position and meeting 21st century challenges.

Budget & Resources research provides an independent source of analysis to understand budgetary trends; the near-and long-term implications of prospective trade-offs; the second-order consequences of changes to the defense program; and how budgetary policy fits within the overall context of U.S. defense policy and strategy. It informs the budget-making process and explores policies to optimize essential resources.

Future Warfare & Concepts research considers possible developments in the realm of national security and their implications for regional and global security. CSBA specializes in thinking about the future of warfare, which is essential to formulating concepts and strategies that will be effective across the widest range of contingencies and executable within projected resource limitations. CSBA utilizes scenario planning and wargaming to identify future trends and candidate operational concepts, understand emerging warfare regimes, and challenge preconceived notions of the future.

CSBA STRENGTHS

- CSBA analyses derive value from an integrated strategic and budgetary approach.
- CSBA's mature scenario planning and wargaming methodology helps experts think in new ways about operational planning problems and solutions.
- CSBA experts and strategists bring the benefit of diverse backgrounds and experiences to our research.
- CSBA's freedom to challenge prevailing views and planning assumptions allows us to look at the greater realm of possibility beyond doctrine.
- CSBA's extensive contacts among political and military leaders, on Capitol Hill, in the press and academia, and in industry enable us to hold the right conversations with important stakeholders.
- CSBA's solid reputation as an independent, non-partisan voice of authority with a proven track record as a driving force in decades of defense debate validates the quality and impact of our work.

Forces & Capabilities research explores the utility of various military capabilities in a variety of plausible future contingencies to inform U.S., ally, and partner force planning, doctrine, and procurement decisions. CSBA's force planning research determines needed changes in force structure, operational concepts, and system performance characteristics by taking into account the future security environment, identifying critical gaps and seams in the current defense program, and providing options for improving the U.S. military's organization, training, equipment, and doctrine for meeting future security challenges.

Nuclear Strategy & Forces research examines the culture of the current nuclear age and the implications of increased proliferation. CSBA has conducted in-depth research on topics such as the dynamics of the second nuclear age, the costs of America's nuclear arsenal, the consequences of nuclear proliferation, and the importance of a credible nuclear deterrent.

Research Methods

ANALYTIC STUDIES

CSBA's analytic studies look 20–30 years forward and are informed by history. They frame security developments in a broader context of strategic competition and identify critical areas of competition, particularly with regards to technological development, as well as the competitive advantages and disadvantages of the United States and potential adversaries. They take into account bureaucratic considerations and their influence on policy.

CONCEPT DEVELOPMENT

CSBA's operational concepts link strategies and capabilities to achieve strategic objectives. They consider future technological and political developments and explore the utility of elements of the program of record, including potential additions, enhancements, or necessary alterations. Promising operational concepts may be validated by wargaming.

SCENARIO DEVELOPMENT

CSBA employs an “alternate futures” scenario development methodology. The future cannot be predicted, but scenario development understands the value of thinking through various potential challenges. Our scenario development has been successfully employed by a variety of U.S. and allied government sponsors.



U.S. Navy photo by Petty Officer 3rd Class Anderson W. Branch

WARGAMING

CSBA's wargaming methodology is designed to elicit the insights of a well-informed community of subject-matter experts on important, evolving issues instead of generate predetermined outcomes. CSBA wargames are intended to question prevailing assumptions underlying current and potential U.S. military concepts of operations, discover essential U.S. and adversary capabilities, identify capability and capacity shortfalls, and highlight potential areas of strategic advantage or disadvantage.

WORKSHOPS AND SEMINARS

CSBA workshops and seminars expose participants to new issues and concepts. They explore different approaches to thinking about strategic challenges designed to elicit non-obvious ideas and insights and provide a forum for discussion. They are also a way to critically review ideas and concepts in development.

BUDGETARY ANALYSIS

CSBA provides trusted insight on current defense spending and resource allocation, acquisition issues and reform, extraordinary funding for ongoing military operations, Department of Defense efficiency initiatives, historical spending trends, and future defense spending levels.

SPECIAL PROJECTS

CSBA is a flexible organization with a broad base of expertise, well-suited to conduct or participate in a variety of additional work that may not fall into any specific category. Special projects in the past have included QDR “Red Team” efforts such as the 2005 “Downing Report” on SOF, congressional studies, and consulting for allied governments.

HIGHLIGHTS

Developing Alternative Defense Strategies

The Center for Strategic and Budgetary Assessments joined with teams of experts from four other prominent think tanks—the American Enterprise Institute, Cato Institute, the Center for a New American Security, and the Center for Strategic and International Studies—to offer alternative defense strategies for the United States. Each team developed its own defense strategy and rebalanced the Department of Defense’s major capabilities in light of projected security challenges. Using CSBA’s Strategic Choices Tool and methodology, the teams chose from over 1200 pre-costed options to add or cut from the projected defense program over the next ten years (FY18–27). Each team then synthesized what it viewed to be the rough resources and capabilities necessary to implement their strategic vision for the United States. CSBA published these findings in an edited volume with additional budgeting insights and resources.



On October 18, 2016, the Center for Strategic and Budgetary Assessments hosted a rollout and discussion of the findings of the multi-think tank Strategic Choices exercise at the Newseum in Washington, DC. The discussion was moderated by Breaking Defense Deputy Editor Sydney J. Freedberg, Jr.



Report

HOW MUCH IS ENOUGH? ALTERNATIVE DEFENSE STRATEGIES

Jacob Cohn and Ryan Boone [editors] with Foreword by Thomas G. Mahnken (November 2016)

Twenty-five years after the end of the Cold War, the United States once again faces the need to prepare for great power competition and confrontation. Both Russia and China are disrupting an international order that has long provided relative peace and prosperity for the United States, its allies and partners, and much of the rest of the world. With this context, CSBA experts convened with groups of specialists from the American Enterprise Institute, the Cato Institute, the Center for a New American Security, and the Center for Strategic and International Studies to explore alternative defense strategies for a post-BCA world. CSBA asked the teams to answer three core questions without the burden of artificial constraints on defense spending: What should American defense strategy be? What capabilities, investments, and force structure might that strategy require? And what would such a military cost?

Authored Opinions

March 28, 2017

HOW MUCH IS ENOUGH: SETTING A TOPLINE FOR DEFENSE SPENDING

Jacob Cohn, The Cipher Brief

December 12, 2016

REVITALIZING OUR MILITARY: SUGGESTIONS FOR PRESIDENT-ELECT DONALD TRUMP

Jacob Cohn and Ryan Boone, The National Interest

October 18, 2016

CREATING NEW ADVANTAGES FOR AMERICA'S MILITARY

Mark Gunzinger, Jacob Cohn, Timothy Walton, and Ryan Boone, Real Clear Defense



CSBA experts Jacob Cohn and Mark Gunzinger explain the study parameters and present the CSBA team's findings at the Newseum event on October 18, 2016.



Fleet Architecture Study

STATEMENT BY SASC CHAIRMAN JOHN MCCAIN ON U.S. NAVY FLEET ARCHITECTURE STUDIES

February 10, 2017

“Nearly two years ago, I called for studies of U.S. Navy future fleet platform architectures in the *National Defense Authorization Act for Fiscal Year 2016* for three primary reasons. First, 11 Navy combatant ship classes begin to retire in large numbers between 2020 and 2035. Second, other world powers are challenging our Navy’s ability to conduct sea control and project power. Third, as the *Columbia*-class submarine program proceeds, it is projected to consume the equivalent of one-third to one-half of the historical shipbuilding budget, which is already insufficient to meet the Navy’s desired force levels. Given the confluence of these three trends, now is the time for Navy leaders to consider a broad range of future fleet architecture options and set the Navy on the proper course for decades to come.”

“I am particularly impressed with the comprehensiveness of the CSBA study, which should serve as the starting point for the new administration’s review of naval forces. The study clearly recognizes the great power competitions at hand and the imperative to deter great power conflict. It proposes necessary new strategic, operational, basing, and force structure recommendations that deserve immediate consideration by Navy leaders.”

Report

RESTORING AMERICAN SEAPOWER: A NEW FLEET ARCHITECTURE FOR THE UNITED STATES NAVY

Bryan Clark, Peter Haynes, Bryan McGrath, Craig Hooper, Jesse Sloman, and Timothy A. Walton (February 2017)

CSBA’s Restoring American Seapower: A New Fleet Architecture for the United States Navy proposes a new fleet construct for the U.S. Navy to pursue over the next two decades. The Navy will need to take a different approach to deterring great power competitors than it did against regional powers such as Iraq. This new approach will also require innovative operating concepts, adaptive force packages, and a more distributed and robust naval posture that emphasizes effectiveness over efficiency. Together, new ways of operating, new deployment approaches, and new force packages require a larger and more diverse fleet of ships, aircraft, and unmanned systems. If the U.S. Navy does not pursue such a new architecture, by the 2030s the United States may not be able to compete effectively with great powers such as China and Russia or even regional powers such as Iran. This will undermine its alliance relationships, its economic health, and ultimately its place as an exceptional country.

Congressional Testimony

March 8, 2017

FUTURE FLEET ARCHITECTURE STUDIES

Bryan Clark, House Armed Services Committee

The U.S. Navy is at a crossroads, with each major ship type undergoing a transition over the next several years. These changes come as the United States faces security challenges it has not encountered since the end of the Cold War. Great power competitors such as China and Russia improved their military capabilities over the last two decades and now appear willing to challenge the international order. They will likely replace transnational terrorism as the primary concern of U.S. military planners. At the same time, regional powers Iran and North Korea will continue to field capabilities acquired from great powers and exploit their advantageous locations to cause outsized effects. The Navy should reevaluate the fleet's configuration before it misses the opportunities associated with this time of transition. Deterring increasingly capable great powers and countering more aggressive regional adversaries will take more than simply recapitalizing today's ships when they reach the end of their service lives. It will require new operational concepts, force packages, posture and basing, readiness cycles, and manned and unmanned platforms, as well as updated sensors and weapons. The fleet architecture studies directed by the Congress in the 2016 NDAA were intended to address these needs for the fleet of 2030.

Authored Opinions

February 10, 2017

A GUIDE TO THE FLEET THE UNITED STATES NEEDS

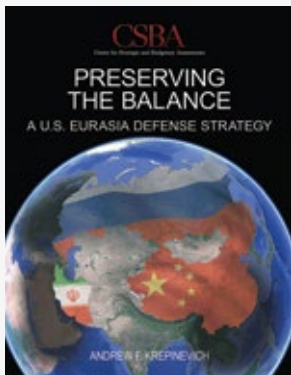
Bryan Clark and Bryan McGrath, War on the Rocks



Eurasian Defense Strategy

In this study, CSBA international security experts discuss the need for a U.S. defense strategy in Eurasia for the purpose of sustaining an unprecedented era of security and prosperity for the United States and like-minded nations. This strategy focuses on preventing the rise of a hegemonic power on the Eurasian landmass capable of dominating its human, technical, and material resources. It calls for major changes in the U.S. defense posture including shifting to a more forward defense posture; according top priority to the Western Pacific theater; taking on greater risk in the European and Middle Eastern theaters; developing a competency in time-based competition; establishing new concepts of operation and divisions of labor between the United States and its allies; and, finally, according high priority to the social dimension of strategy, which includes developing and advancing persuasive strategic narratives to the American people, allied populations, prospective strategic partners, and the populations of revisionist powers.

The study includes a capstone report as well as in-depth studies of each crucial strategic region: the Asia-Pacific, Eastern Europe, and the Middle East.



PRESERVING THE BALANCE: A U.S. EURASIA DEFENSE STRATEGY

Andrew F. Krepinevich (January 2017)

Now more than ever, the United States needs to formulate an effective defense strategy to preserve U.S. interests in a strategic environment characterized by looming international and domestic challenges. This report focuses on the United States' long-standing interest in preventing the rise of a hegemonic power on the Eurasian land mass capable of dominating its human, technical, and material resources. Such a development would represent a major threat to U.S. national security. With this core interest in mind, the strategy presented in this paper calls for major changes in U.S. defense posture. This paper is the first in a series; subsequent reports include strategies tailored to Europe, Asia, and the Middle East.

“They [CSBA] use a scenario-based approach to help us understand. That is a very fruitful way to think. I encourage other groups to try to use that—to help enlarge our imaginations.”

– Congressman Jim Cooper



Preserving the Balance report briefing by Dr. Andrew Krepinevich, Distinguished Senior Fellow and President Emeritus, on January 19, 2017 (left). Vago Muradian, Editor of *Defense & Aerospace Report*, takes notes (right).



REINFORCING THE FRONT LINE: U.S. DEFENSE STRATEGY AND THE RISE OF CHINA

Evan Braden Montgomery (February 2017)

In *Reinforcing the Front Line: U.S. Defense Strategy and the Rise of China*, Evan Montgomery outlines the key elements of a U.S. defense strategy for the Asia-Pacific region—one that is based on the enduring grand strategy of global leadership and engagement, but also recognizes the new challenges posed by China’s growing military power. To date, Washington’s preferred option in critical regions like East Asia can be described broadly as “forward defense”: preparing to counter threats when and where they materialize rather than responding either directly long after aggression has occurred or indirectly by imposing costs in other theaters. By clearly and credibly signaling that the United States will oppose an adversary’s aims and come to the assistance of its allies, forward defense has underpinned both deterrence and assurance—and, as a result, has underwritten stability in the regions where it matters most.

HIGHLIGHTS



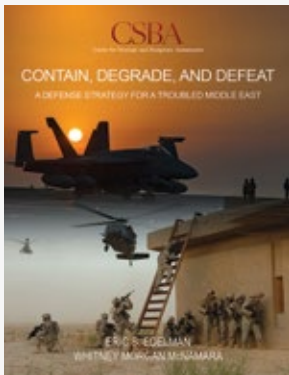
U.S. STRATEGY FOR MAINTAINING A EUROPE WHOLE AND FREE

Eric S. Edelman and Whitney Morgan McNamara (February 2017)

In this report, authors Eric S. Edelman and Whitney Morgan McNamara outline a number of options the United States has for countering and limiting Russian political-military moves. Absent steps in this direction, the United States will find it difficult to meet the challenges that Russia has managed to present to European security. The result might well be a European security order that is less stable and less conducive to national prosperity than what we have experienced since the end of the Cold War.



Panel discussion for the release of the *U.S. Strategy for Maintaining a Europe Whole and Free* report with Ambassador Eric Edelman, Hal Brands, and Whitney McNamara on February 23, 2017.



CONTAIN, DEGRADE, AND DEFEAT: A DEFENSE STRATEGY FOR A TROUBLED MIDDLE EAST

Eric S. Edelman and Whitney Morgan McNamara (March 2017)

In this CSBA report, Eric Edelman and Whitney McNamara expand upon the histories, cultures, and foreign policies that have brought the United States to its current juncture in the Middle East. It seems almost certain that the dual challenges of Iran's regional rise and the persistent threat of violent jihadists will continue to demand the time, attention, and resources of national security decision-makers. The Middle East presents an enormous set of difficulties for policymakers against a backdrop of long-lived conflict and turmoil that is likely to persist for a generation—or perhaps longer. The United States has historically been successful in accomplishing its strategic objectives in the region, and it can be again if it develops a clear strategy that aligns ways, means, and ends and builds up capable partners in the region to contain Iran's ambitions and defeat violent jihadists. Without such a strategy, both challenges will otherwise threaten the governments of America and its partners.



Panel Discussion for the release of the *Contain, Degrade, and Defeat* report with Ambassador Eric Edelman, Hal Brands, and Whitney McNamara on March 15, 2017.

HIGHLIGHTS



C-SPAN films the *Reinforcing the Front Line* report briefing by CSBA President and CEO Tom Mahnken on February 10, 2017.

Authored Opinions

March 15, 2017

CONTAIN, DEGRADE, AND DEFEAT

Eric Edelman and Whitney McNamara, Real Clear Defense

March 8, 2017

US MUST COUNTER PUTIN, PUSH NATO TO REARM

Eric Edelman and Whitney McNamara, Breaking Defense

February 17, 2017

U.S. STRATEGY FOR MAINTAINING A EUROPE WHOLE AND FREE

Eric Edelman and Whitney McNamara, Real Clear Defense

January 23, 2017

PRESERVING THE BALANCE: A U.S. EURASIA DEFENSE STRATEGY

Andrew Krepinevich, Real Clear Defense

U.S. Strategy in the South China Sea

December 2016

COUNTERING CHINA'S ADVENTURISM IN THE SOUTH CHINA SEA

Ross Babbage



What should the U.S. and its close allies do about China's strategic expansion into the South China Sea? The rapidly changing strategic balance in Southeast Asia and the Western allies' flat-footed response is encouraging several regional states to re-evaluate their long-standing security relationships. This report argues that it is time for the U.S. and its close allies to clarify their goals in this theater and develop a coherent strategy to counter China's expansionist operations. It describes a surprisingly broad range of strategy and operational options that are potentially available for the Trump administration to pressure Beijing to moderate its behavior, retrace some of its steps, and deter Chinese leadership from embarking on new, potentially more dangerous adventures.

Authored Opinions

December 20, 2016

HOW DONALD TRUMP CAN STAVE OFF DEFEAT IN THE SOUTH CHINA SEA

Ross Babbage, The National Interest

December 16, 2016

COUNTERING CHINA'S ADVENTURISM IN THE SOUTH CHINA SEA

Ross Babbage, Real Clear Defense



U.S. Marine Corps photo by Staff Sgt. Christopher Giannetti



“Winning the Salvo Competition: Rebalancing America’s Air and Missile Defenses provides important insight and a valuable, independent perspective on the serious challenge of countering large salvos of ballistic missiles, cruise missiles, and other precision-guided munitions.”

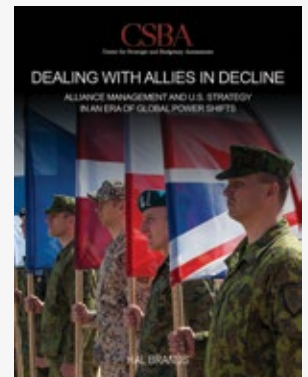
– General Mark Welsh III, USAF (Ret.), former Chief of Staff of the U.S. Air Force

April 2017

Dealing with Allies in Decline: Alliance Management and U.S. Strategy in an Era of Global Power Shifts

Hal Brands

Alliances have been a central pillar of American grand strategy for decades, and the geopolitical and economic strengths of U.S. allies have contributed enormously to the effectiveness of American policies. Yet over the past two decades, many American allies have been in sharp relative decline as their shares of global economic and military power have decreased significantly. This report considers the challenges that allied decline has begun to pose for American strategy and offers recommendations for how U.S. policymakers can still compete effectively in a world in which their allies are not as strong as they once were.



March 2017

Critical Assumptions and American Grand Strategy

Hal Brands, Peter Feaver, William Inboden, and Paul D. Miller

Every grand strategy rests on a set of critical assumptions about how the world works. Today, the assumptions underpinning American grand strategy are becoming more contested and uncertain than at any time in a generation. This report examines America's grand strategy in the post-Cold War era, explores the global and regional assumptions that are now coming under strain, and offers suggestions for how U.S. planners can best adapt to a more competitive and uncertain world.



March 2017

Avoiding a Strategy of Bluff: The Crisis of American Military Primacy

Hal Brands and Eric S. Edelman

If strategy is the calculated relation of means to ends, then today America is careening toward strategic insolvency. Following the Cold War, the United States possessed unrivaled military primacy, both globally and in all the world’s key strategic theaters. Yet today, Washington faces military challenges that are both more severe and more numerous than at any time in decades, precisely as its own defense cutbacks have significantly reduced U.S. military capabilities. The United States confronts challenges from revisionist great powers such as China and Russia, aggressive rogue states such as Iran and North Korea, and international terrorist organizations such as al-Qaeda and the Islamic State. At the same time, constant-dollar defense spending fell from \$768 billion in 2010 to \$595 billion in 2015, the fastest drawdown—in percentage terms—since the Korean War. The result has been a creeping crisis of American military primacy as the margin of superiority to which the United States has become accustomed has diminished and a growing gap between U.S. commitments and capabilities has emerged. Closing that gap will require a significant, sustained defense buildup in the years to come.

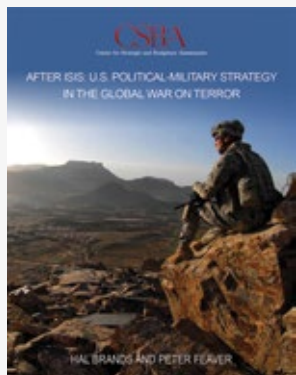


March 2017

After ISIS: U.S. Political-Military Strategy in the Global War on Terror

Hal Brands and Peter Feaver

Sooner or later, and probably within the next few months, the United States and its coalition partners will defeat the Islamic State in Iraq and al-Sham (ISIS) militarily by collapsing its control of key areas in Iraq and Syria. That operational victory, however, will not necessarily prevent remnants of ISIS from reforming at a later date, nor will it bring a larger strategic triumph in the global war on terror. As long as large parts of the greater Middle East remain founts of ideological extremism, the United States will continue to confront a dangerous challenge from jihadist terrorism. In this report, Hal Brands and Peter Feaver assess America’s strategic options after ISIS by examining four political-military strategies for counter-terrorism. They conclude that an enhanced version of the approach that the Obama administration took to defeating ISIS represents the best strategy for waging a dangerous conflict that is likely to endure for many years.



March 2017

Improved Conventional Munitions Policy

David E. Johnson and Ryan Boone

The United States is unilaterally divesting itself of its cluster munitions by 2018. It is doing so based on a 2008 policy decision to comply with the Oslo Treaty, which restricts the use of cluster munitions, even though the United States is not a signatory to this treaty. Much has changed since 2008. Russia is using cluster munitions, also called improved conventional munitions (ICM), in Ukraine and Syria. Furthermore, both Russia and China are proliferating these weapons to other countries. Further removal of ICMs from the U.S. arsenal should be halted, pending a suitable replacement.

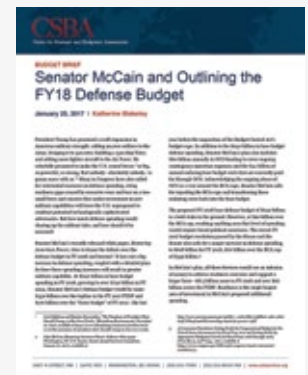


January 2017

Senator McCain and Outlining the FY18 Defense Budget

Katherine Blakeley

President Trump has promised a swift expansion in American military strength; he colorfully promised to make the U.S. armed forces “so big, so powerful, so strong, that nobody—absolutely nobody—is gonna mess with us.” Many in Congress have also called for substantial increases in defense spending, citing readiness gaps caused by excessive wear and tear on a too-small force and concern that under-investment in new military capabilities will leave the U.S. unprepared to confront potential technologically sophisticated adversaries. Senator McCain’s recently released white paper, *Restoring American Power*, tries to frame the debate over the defense budget in FY 2018 and beyond. It lays out a big increase in defense spending, coupled with a detailed plan for how these spending increases will result in greater military capability. Acknowledging the ongoing abuse of OCO funding as a way around the BCA caps, Senator McCain calls for repealing the BCA caps and transitioning these enduring costs back into the base budget.



“I thought How Much is Enough? Alternative Defense Strategies was useful, both as an illustration of the value of the portfolio balancing toolkit, as well as showing a more coherent than usual link between strategy-force structure/capabilities-budget.”

– James Baker, Director, Office of Net Assessment

November 2016

Ten Reasons DoD Needs an Appropriations Bill Now

Katherine Blakeley and Maureen Smolskis

The 2017 fiscal year once again began with an interim continuing resolution—the eighth year in a row that Congress has failed to pass a budget for the federal government by the start of the new fiscal year. DoD might have a fiscal year (FY) 2017 spending bill in February or March if the defense hawks and the deficit hawks within the Republican caucus can come to terms. In the meantime, DoD needs to keep the lights on and will need an extension of the current continuing resolution or another appropriations bill before December 9, 2016 to avoid a government shutdown. Overall, even if additional resources for defense are on the horizon, it looks as though DoD will be without a real appropriations bill for almost half of this fiscal year. Although passing a continuing resolution has allowed Congress to avoid a government shutdown, it is a poor substitute for an actual appropriations bill.



November 2016

Advancing Beyond the Beach: Amphibious Operations in an Era of Precision Weapons

Bryan Clark and Jesse Sloman

The U.S. Navy and Marine Corps have been the world’s most formidable amphibious force for more than seven decades. The competition between amphibious forces and defenders ashore, however, is entering a new, more deadly phase. To continue exploiting the maneuver space of the sea for operations ashore, U.S. naval forces require new operating concepts and capabilities to protect ships and aircraft, distribute amphibious forces to dilute enemy attacks, and gain access to contested areas and deny them to the enemy. Bryan Clark and Jesse Sloman’s study examines the changing environment for amphibious operations, new operating concepts needed to be effective in the emerging environment, and implications for amphibious systems, sensors, communications, and weapons.



“First and foremost, this [Advancing Beyond the Beach] is a well-thought out and well-supported study. I think leaders in the Navy and the Marine Corps support the general conclusions that are derived from this study. I think it’s really good work, and I congratulate the team for putting this together.”

– Brigadier General Roger B. Turner, Jr., USMC

August 2016

Analysis of the FY 2017 Defense Budget and Trends in Defense Spending

Katherine Blakeley

As the last budget request of the Obama administration, the FY 2017 request largely continues the shift towards greater investment in the high-end capabilities necessary in a new strategic era that holds the potential for great power competition. However, the choices made within the FY 2017 budget reflect the tensions between investments in capability and capacity, and between a global “presence” force and a “surge capability” force. Key areas of analysis include: the political fight about base and overseas contingency defense spending; the projected overall defense spending topline; the FY 2017 Overseas Contingency Operations request and the continued role of OCO funding; trends in past and projected procurement spending, with a particular focus on key aviation and shipbuilding programs; priority RDT&E areas of investment, including the Third Offset Strategy, within a planned decline in RDT&E spending; rising O&M costs, which are crowding out procurement spending; growing military personnel costs and declining end-strength; and defense-related spending outside of DOD’s budget. This report also analyzes the services’ budget trends from FY 2001 to the FY 2017 request and historical perspectives on defense budget cycles and defense spending relative to GDP.



August 2016

FY 2017 Weapon Systems Factbook

Jacob Cohn, Jesse Sloman, and Maureen Smolskis

The Weapon Systems Factbook summarizes the program plans and funding for each of the major acquisition programs with a Selected Acquisition Report and four additional programs: the Air Force’s new B-21 bomber; Long Range Standoff Missile (LRSO); and Ground Based Strategic Deterrent (GBSD), the future replacement for the Minuteman III; and the Navy’s Ohio-class replacement program. These four programs do not have public SARs, but enough is known about each program to construct a reasonable cost estimate. The Factbook is divided by categories of weapon systems: aircraft, air and missile defense, communications and electronics, ground systems, missiles and munitions, nuclear forces, shipbuilding, and space systems.



May 2016



Extended Deterrence in the Second Nuclear Age: Geopolitics, Proliferation, and the Future of U.S. Security Commitments

Evan Braden Montgomery, with Foreword by Eric S. Edelman

During the past 25 years, many of the extended deterrence dilemmas that preoccupied U.S. policymakers in the past ceased to be a major source of concern. With the return of great power security competition and the emergence of a second nuclear era, a number of questions have once again become relevant: Is the United States' current approach to extended nuclear deterrence likely to remain adequate? Does it have the right tools in place to prevent competitors from challenging the status quo and to convince allies that they can rely on Washington? If not, how might it adapt its extended nuclear deterrence posture to preserve stability across the regions that concern it most? *Extended Deterrence in the Second Nuclear Age: Geopolitics, Proliferation, and the Future of U.S. Security Commitments* provides an overview of U.S. extended nuclear deterrence commitments and how Washington plans to uphold them.

May 2016



Winning the Salvo Competition: Rebalancing America's Air and Missile Defenses

Mark Gunzinger and Bryan Clark

Over the last fifteen years, the Department of Defense spent more than \$24 billion buying a mix of capabilities to defeat guided missile threats to U.S. and partner naval forces and land installations. This has not resulted, however, in air and missile defenses with sufficient capacity to counter large salvos of ballistic missiles, cruise missiles, and other precision-guided munitions (PGMs) that can now be launched by America's enemies. In future conflicts, America's opponents can be expected to employ large numbers of sea-, air-, and ground-launched guided weapons to overwhelm the limited defenses now protecting the U.S. military's forces and bases. *Winning the Salvo Competition: Rebalancing America's Air and Missile Defenses* includes a discussion of initiatives that could improve our nation's ability to counter guided weapon salvos that threaten its future ability to project power. This analysis also examines the emerging dynamic between militaries that have PGMs and capabilities to counter precision strikes in order to assess promising operational concepts and capabilities for air and missile defense.

March 28, 2017

U.S. Steel and Military Shipbuilding

Bryan Clark, Congressional Steel Caucus Annual State of Steel Hearing

With a new administration in place, Congress will have a wide range of investment and regulatory initiatives to consider. These actions could significantly impact the health and output of the U.S. steel industry, which is an essential contributor to U.S. national security. Military and homeland security programs such as armored vehicles, aircraft, and ships represent only about 3 percent of U.S. steel demand. These capital investments, however, are built with American-made specialty steels not generally used in construction, appliances, or automobiles. Providing the wide range of steels needed by defense manufacturers requires a healthy and diverse American steel industry. Shipbuilding for the U.S. Navy and Coast Guard is the largest single use of American steel for military and homeland defense, with steel making up about half of a warship's weight. The military shipbuilding industry exemplifies the need for a robust steel industry.

March 8, 2017

Future Fleet Architecture Studies

Bryan Clark, House Armed Services Committee

The U.S. Navy is at a crossroads, with each major ship type undergoing a transition over the next several years. These changes come as the United States faces security challenges it has not encountered since the end of the Cold War. Great power competitors such as China and Russia improved their military capabilities over the last two decades and now appear willing to challenge the international order. They will likely replace transnational terrorism as the primary concern of U.S. military planners. At the same time, regional powers Iran and North Korea will continue to field capabilities acquired from great powers and exploit their advantageous locations to cause outsized effects. The Navy should reevaluate the fleet's configuration before it misses the opportunities associated with this time of transition. Deterring increasingly capable great powers and countering more aggressive regional adversaries will take more than simply recapitalizing today's ships when they reach the end of their service lives. It will require new operational concepts, force packages, posture and

basing, readiness cycles, and manned and unmanned platforms, as well as updated sensors and weapons. The fleet architecture studies directed by the Congress in the 2016 NDAA were intended to address these needs for the fleet of 2030.

February 14, 2017

Reshaping the Military

Bryan Clark, Senate Armed Services Committee

The United States is at an inflection point in its national security. After enjoying almost three decades of military superiority, the United States now faces competitors with strategies and capabilities that could circumvent, undermine, or defeat the defense posture and forces of America and its allies. In some regions and mission areas, the U.S. military is already behind those of its potential adversaries. If we fail to reshape our military and implement new ways to deter aggression, respond to provocation, suppress terrorism and insurgency, and protect the homeland, we risk the security assurances upon which our alliances are based and, with them, the security and economic health of the United States. Senator McCain's recent white paper, *Restoring American Power*, recognized the loss of U.S. military overmatch. The paper's recommendations to rebuild U.S. forces would significantly improve America's ability to counter the efforts of its competitors and adversaries.

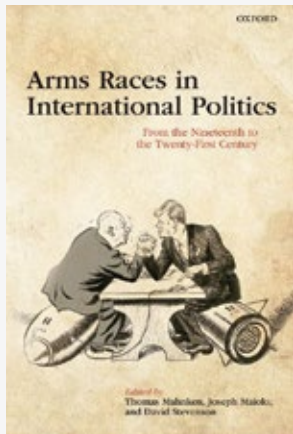
January 24, 2017

U.S. Defense Budget for Fiscal Year 2018

Thomas G. Mahnken, Senate Armed Services Committee

Senator McCain's *Restoring American Power* is a thoughtful and much needed contribution to the debate over defense strategy and resources. CSBA's diagnosis of the situation and recommendations accord with those detailed in the paper in many respects. The bottom line is that the United States requires more resources for defense if we are to continue to safeguard America's national interests in an increasingly competitive environment. Specifically, the United States needs increased investment in both readiness and modernization.

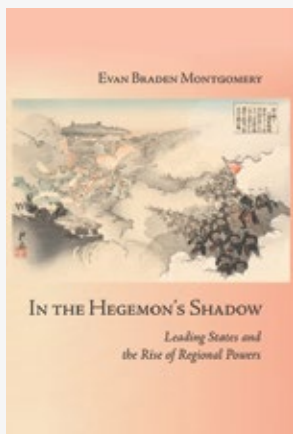
BOOKS PUBLISHED BY CSBA AUTHORS IN 2016



Arms Races in International Politics: From the Nineteenth to the Twenty-First Century

Edited by Thomas Mahnken, Joseph Maiolo, and David Stevenson

This volume provides the first comprehensive history of the arms racing phenomenon in modern international politics, drawing both on theoretical approaches and on the latest historical research. Written by an international team of specialists, it is divided into four sections: before 1914, the inter-war years, the Cold War, and extra-European and post-Cold War arms races. Twelve case studies examine land and naval armaments before the First World War; air, land, and naval competition during the 1920s and 1930s; and nuclear as well as conventional weapons since 1945. Armaments policies are placed within the context of technological development, international politics and diplomacy, and social politics and economics. An extended general introduction and conclusion and introductions to each section provide coherence between the specialized chapters and draw out wider implications for policymakers and for political scientists. *Arms Races in International Politics* addresses two key questions: what causes arms races, and what is the connection between arms races and the outbreak of wars?



In the Hegemon's Shadow: Leading States and the Rise of Regional Powers

Evan Braden Montgomery

The relationship between established powers and emerging powers is one of the most important topics in world affairs. Today, for example, the United States is navigating the rise of nations such as China, India, and Iran, which will shape its grand strategy for years to come. Yet we know surprising little about how global hegemon manage the types of rising powers that Washington now faces, argues CSBA senior fellow Evan Montgomery.

Although many works have explored how leading states respond to new great powers, few have examined how they respond to new regional powers—actors that are not yet and might never become great powers but that are still increasing their strength, extending their influence, and trying to reorder their corner of the world.

In the Hegemon's Shadow fills this gap. Evan Montgomery develops a new framework to explain why leading states accommodate some rising regional powers but oppose others. He illustrates these arguments through a variety of historical case studies, including Great Britain's efforts to manage the rise of Egypt, the Confederacy, and Japan during the nineteenth century, as well as the United States' efforts to manage the emergence of India and Iraq during the twentieth century.

Making the Unipolar Moment: U.S. Foreign Policy and the Rise of the Post-Cold War Order

Hal Brands

In the late 1970s, the United States often seemed to be a superpower in decline. Battered by crises and setbacks around the globe, its post–World War II international leadership appeared to be draining steadily away. Yet just over a decade later, by the early 1990s, America’s global primacy had been reasserted in dramatic fashion. The Cold War had ended with Washington and its allies triumphant; democracy and free markets were spreading like never before. The United States was now enjoying its “unipolar moment”—an era in which Washington faced no near-term rivals for global power and influence, and one in which the defining feature of international politics was American dominance. How did this remarkable turnaround occur, and what role did U.S. foreign policy play in causing it? In this important book, Brands uses recently declassified archival materials to tell the story of American resurgence.

Brands weaves together the key threads of global change and U.S. policy from the late 1970s through the early 1990s, examining the Cold War struggle with Moscow, the rise of a more integrated and globalized world economy, the rapid advance of human rights and democracy, and the emergence of new global challenges like Islamic extremism and international terrorism. Brands reveals how deep structural changes in the international system interacted with strategies pursued by Jimmy Carter, Ronald Reagan, and George H. W. Bush to usher in an era of reinvigorated and in many ways unprecedented American primacy.



U.S. Navy photo by Petty Officer 3rd Class Nathan T. Beard

SELECTED OPINION PIECES BY CSBA FELLOWS

March 1, 2017

The Crisis of American Military Primacy and the Search for Strategic Solvency

Hal Brands and Eric Edelman, Parameters

February 14, 2017

Rebuilding American Military Power

Thomas Mahnken, Washington Times

February 14, 2017

Time for Tough Choices

Andrew Krepinevich, Washington Times

February 14, 2017

Trump and Terrorism: U.S. Strategy After ISIS

Hal Brands and Peter Feaver, Foreign Affairs

January 25, 2017

Thoughts on the McCain White Paper

Bryan Clark and Bryan McGrath, Real Clear Defense

November 17, 2016

Advancing Beyond the Beach: Amphibious Operations in an Era of Precision Weapons

Bryan Clark and Jesse Sloman, Real Clear Defense

November 15, 2016

Amphibious Operations in a Brave New World

Bryan Clark and Jesse Sloman, War on The Rocks



August 3, 2016

How to Secure NATO's Frontline States

Mark Gunzinger and Jacob Cohn, Breaking Defense

June 7, 2016

America's Nuclear-Deterrence Challenge in Asia

Evan Montgomery, Wall Street Journal

May 18, 2016

The Military and the Academy: Overcoming the Divide

Thomas Mahnken, Foreign Affairs

May 17, 2016

America Needs an Air and Missile Defense Revolution

Mark Gunzinger and Bryan Clark, The National Interest

March 16, 2016

Thornberry's 'Bold' Bill May Speed, Improve Buying Weapons

Katherine Blakeley, Breaking Defense

March 8, 2016


Canberra's Evolving Security Policy

Thomas Mahnken, The Cipher Brief

March 1, 2016

Rethinking the Apocalypse: Time for Bold Thinking About the Second Nuclear Age

Andrew Krepinevich and Jacob Cohn, War on The Rocks



“It is certainly true for most members of congress, we don’t think original thoughts on our own. We steal thoughts from others and do try to use those thoughts in a way that makes sense to us to implement policy, and I have benefited tremendously from the work of this organization [CSBA].”

– Congressman Mac Thornberry

CSBA's outreach efforts provide new information and recommendations on defense technology, policy, and budgets based in its research and expertise to members of congress, industry, and the press. They offer a public forum for discussion on new ideas and research.

Advancing Beyond the Beach: Amphibious Operations in an Era of Precision Weapons



CSBA Analyst Jesse Sloman briefed *Advancing Beyond the Beach*, a study examining the changing environment for amphibious operations; the new operating concepts needed to be effective in the emerging environment; and the implications for ships, surface and vertical connectors, naval aviation, unmanned systems, sensors, communications, and weapons.



Brigadier General Rodger Turner Jr., USMC, answered questions from the audience during the November 15, 2016 release of CSBA's *Advancing Beyond the Beach: Amphibious Operations in an Era of Precision Weapons*.

OUTREACH

2016 Directed Energy Summit



“The next weapon is a directed energy weapon.” Lieutenant General Bradley Heithold, USAF, then-Commander of Air Force Special Operations Command at the 2016 Directed Energy Summit on June 23, 2016.



Keynote speaker Admiral Bill Moran, Vice Chief of Naval Operations, spoke to the Navy’s commitment to investing in directed energy systems as a “high-end warfare capability” at the 2016 Directed Energy Summit.



“DE is going to allow us to really lighten the load on the weapons we have to bring. On the ground, on the non-lethal side, we see DE as a major player in active denial systems.” Lieutenant General Robert Walsh, USMC, Commanding General of the Marine Corps Combat Development Command (right) at the 2016 Directed Energy Summit.

“Thank you for hosting our senior military students. They came away from this visit with a much greater appreciation of the complexities of strategy, policy and resourcing decisions facing policymakers and analysts such as yourselves.”

– Dr. David Cooper, Chair of the Department of National Security Affairs, Naval War College.

OUTREACH

Poland-U.S. Crisis Planning Seminar and Strategic Choices Exercise



On July 25, 2016 CSBA Senior Fellow Mark Gunzinger briefed the findings of a Poland–U.S. Crisis Planning Seminar he led to explore initiatives such as increasing NATO’s air and missile defense capacity and creating a complex of long-range, ground-based precision fires.



CSBA Research Fellow Jacob Cohn reviewed the results of a CSBA Strategic Choices Tool exercise run during the Poland–U.S. Crisis Planning Seminar to create a military force that, by 2026, could strengthen NATO’s force posture in the Baltic region.

Extended Deterrence in the Second Nuclear Age



CSBA Counselor Eric Edelman (left) and CSBA Senior Fellow Evan Montgomery, along with Dr. Jakub Grygiel, Dan Blumenthal, and Michael Eisenstadt, discussed the regional implications of extended deterrence at the release of *Extended Deterrence in the Second Nuclear Age* on May 31, 2016.

Winning the Salvo Competition: Rebalancing America's Air and Missile Defenses

CSBA President and CEO Dr. Thomas Mahnken introduced the public release of *Winning the Salvo Competition: Rebalancing America's Air and Missile Defenses*.



CSBA Senior Fellows Mark Gunzinger and Bryan Clark released *Winning the Salvo Competition: Rebalancing America's Air and Missile Defenses* to an audience of congressional staffers and other national security thought leaders on Capitol Hill on May 20, 2016.



Visitors to CSBA

Brigadier Mick Ryan of the Australian Army joined CSBA for a working lunch on **June 3, 2016** comprising a discussion of military doctrine, training, and education.

CSBA hosted General Sir Chris Deverell, Commander of the UK Joint Forces Command for a discussion of future warfare and concepts on **November 18, 2016**.

On **December 21, 2016**, CSBA hosted Brigadier General Gregg P. Olson, USMC, to discuss the upcoming Marine Corps Strategy Review and the future of amphibious warfare.

Lieutenant General H. R. McMaster, Director of the Army Capabilities Integration Center and Deputy Commanding General of Futures, U.S. Army Training and Doctrine Command (and now current National Security Advisor), visited CSBA on **January 31, 2017** to discuss possible areas of collaboration.

CSBA senior staff met with Brigadier General B. Chance Saltzman, USAF, on **March 3, 2017** to discuss multi-domain command and control.

Air Commodore Rocky Rochelle of Royal Air Force Capabilities and Force Development joined CSBA for a discussion of the future development of the RAF on **March 8, 2017**.

“Thank you so much for participating in last week’s Republican Study Committee briefing on Navy force structure. It was one of our most substantive events and gave staff a lot of useful and relevant information going into the NDAA.”

– Nicholas Rodman, Staff Member, House Republican Study Committee



CSBA STAFF



Thomas Mahnken

PRESIDENT AND CEO

Dr. Thomas G. Mahnken is President and Chief Executive Officer of the Center for Strategic and Budgetary Assessments.

He is a Senior Research Professor at the Philip Merrill Center for Strategic Studies at The Johns Hopkins University's Paul H. Nitze School of Advanced International Studies (SAIS) and has served for over 20 years as an officer in the U.S. Navy Reserve, to include tours in Iraq and Kosovo.

His government career includes service as Deputy Assistant Secretary of Defense for Policy Planning from 2006–2009, where he helped craft the 2006 Quadrennial Defense Review and 2008 National Defense Strategy. He served on the staff of the 2014 National Defense Panel, 2010 Quadrennial Defense Review Independent Panel, and the Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction. He served in the Defense Department's Office of Net Assessment and as a member of the Gulf War Air Power Survey. In 2009 he was awarded the Secretary of Defense Medal for Outstanding Public Service.

Dr. Mahnken is the author of *Strategy in Asia: The Past, Present and Future of Regional Security* (Stanford University Press, 2014), *Competitive Strategies for the 21st Century: Theory, History, and Practice* (Stanford University Press, 2012), *Technology and the American Way of War Since 1945* (Columbia University Press, 2008), and *Uncovering Ways of War: U.S. Intelligence and Foreign Military Innovation, 1918–1941* (Cornell University Press, 2002), among other works.

EDUCATION

Dr. Mahnken earned his MA and Ph.D in international affairs from SAIS and was a National Security Fellow at the John M. Olin Institute for Strategic Studies at Harvard University. He was a *summa cum laude* graduate of the University of Southern California with bachelor's degrees in history and international relations (with highest honors) and a certificate in defense and strategic studies.

AREAS OF EXPERTISE

- Strategy
- Intelligence
- Defense Planning
- Future Warfare
- International Strategic Studies



Ilana Esterrich

CHIEF ADMINISTRATIVE OFFICER

Ilana Esterrich is the Chief Administrative Officer at the Center for Strategic and Budgetary Assessments. As part of CSBA's management team, she oversees CSBA's finance, administration, operations, external relations, publications, IT and HR functions. She also serves as Secretary/Treasurer on CSBA's Board of Directors.

Prior to joining CSBA, Ms. Esterrich worked in a variety of executive finance, management and operations roles for Thomson Reuters, General Mills, Inc., T.E. Systems, Inc., The Pillsbury Company and as a senior management consultant for Computer Sciences Corporation and Coopers & Lybrand, LLC.

EDUCATION

Ms. Esterrich earned a B.S. in Economics with concentrations in Multinational Management and Political Science from the Wharton School at the University of Pennsylvania and an M.B.A. with concentrations in Corporate Strategy and Strategic Marketing from the Booth School of Business at the University of Chicago.

AREAS OF EXPERTISE

Finance
Grants and Contracting
Non-Profit Management
Operations



Eric Edelman

COUNSELOR

Ambassador Eric S. Edelman is Counselor at the Center for Strategic and Budgetary Assessments. He retired as a career minister from the U.S. Foreign Service on May 1, 2009. He has served in senior positions at the Departments of State and Defense as well as the White House, where he led organizations providing analysis, strategy, policy development, security services, trade advocacy, public outreach, citizen services, and congressional relations. As undersecretary of defense for policy (August 2005-January 2009), he was DoD's senior policy official, overseeing strategy development with global responsibility for bilateral defense relations, war plans, special operations forces, homeland defense, missile defense, nuclear weapons and arms control policies, counterproliferation, counternarcotics, counterterrorism, arms sales, and defense trade controls.

He served as U.S. ambassador to Finland in the Clinton administration and Turkey in the Bush administration and was Vice President Cheney's principal deputy assistant for national security affairs. He was chief of staff to Deputy Secretary of State Strobe Talbott, special assistant to Undersecretary of State for Political Affairs Robert Kimmitt, and special assistant to Secretary of State George Shultz.

His other assignments included the State Department Operations Center, Prague, Moscow, and Tel Aviv, where he was a member of the U.S. Middle East delegation to the West Bank/Gaza autonomy talks.

Ambassador Edelman has been awarded the Department of Defense Medal for Distinguished Public Service, the Chairman of the Joint Chiefs of Staff Joint Distinguished Civilian Service Award, the Presidential Distinguished Service Award, and several Department of State Superior Honor Awards. In 2010, he was named a knight of the French National Order of the Legion of Honor.

Ambassador Edelman serves on the National Defense Panel, on the bipartisan board of directors of the United States Institute of Peace, and on the board of the Foreign Policy Initiative.

EDUCATION

Ambassador Edelman received a B.A. in history and government from Cornell University and a Ph.D. in U.S. diplomatic history from Yale University. He is a Roger Hertog Distinguished Practitioner-in-Residence at the Philip Merrill Center for Strategic Studies at Johns Hopkins University and a senior associate of the international security program at the Belfer Center for Science and International Affairs at Harvard University.

AREAS OF EXPERTISE

- Diplomatic Practice
- Grand Strategy
- Nuclear Proliferation & Extended Deterrence
- Unipolarity & Anti-Americanism
- Counter-Insurgency & Inter-Agency Operations
- Civil-Military Relations



Katherine Blakeley

RESEARCH FELLOW

As a Research Fellow at the Center for Strategic and Budgetary Assessments, Ms. Blakeley directs the budget program and works to educate and inform policy makers, senior leaders, and the general public about the defense budget and issues pertaining to resourcing national security. Ms. Blakeley has authored publications on trends in the defense budget, defense acquisitions, military personnel, nuclear weapons, and other issues. She frequently contributes to print and broadcast media, and her writing has appeared in *Politico*, *The Hill*, *Newsweek*, and other publications.

Prior to joining CSBA, Ms. Blakeley worked as a defense policy analyst at the Congressional Research Service and the Center for American Progress. She is completing her Ph.D. in Political Science from the University of California, Santa Cruz, where she also received her M.A. Her academic research examines Congressional defense policymaking.

AREAS OF EXPERTISE

Defense Budgets
Defense Resourcing

EDUCATION

Ms. Blakeley graduated from Vassar College with honors.



Ryan Boone

ANALYST

Ryan Boone is an Analyst at the Center for Strategic and Budgetary Assessments. In addition to research, he assists in the design and analysis of CSBA's operational-level wargames and concept development workshops. His work examines competitive strategies, operational planning, trends in U.S. and foreign military force structure and capabilities, and operations research. Prior to joining CSBA, Mr. Boone interned in the office of the Chairman of the House Armed Services Committee's Subcommittee on Seapower and Projection Forces.

EDUCATION

Mr. Boone was a Robertson Scholar at Duke University and graduated with a B.A. in International Relations and Middle Eastern and East Asian history. He also studied at the American University in Cairo in 2012.

AREAS OF EXPERTISE

Strategy Development
U.S. and Foreign
Military Forces
Middle East and Asia-
Pacific Security Trends
Operational Concept
Development and
Wargaming

CSBA STAFF



Hal Brands SENIOR FELLOW

Dr. Hal Brands is a Senior Fellow at the Center for Strategic and Budgetary Assessments and a Henry A. Kissinger Distinguished Professor of Global Affairs at Johns Hopkins University's SAIS. In 2015–2016, he was a Council on Foreign Relations International Affairs Fellow. In that capacity, he served as an adviser to the Secretary of Defense, working on a range of strategic planning and policy issues. He has also consulted with a range of government offices and agencies in the intelligence and national security communities, as well as the RAND Corporation, and provided research and analysis for the Office of Net Assessment in the Department of Defense.

EDUCATION

He received his B.A. from Stanford University (2005) and his Ph.D. from Yale University (2009). He previously worked as an Assistant and Associate Professor at Duke University's Sanford School of Public Policy and as a researcher at the Institute for Defense Analyses.

AREAS OF EXPERTISE

Defense Policy
Grand Strategy
International Relations
Military History
Nuclear Proliferation
Strategic Assessments
& Planning
American Foreign Policy
Nuclear Policy



Sean Cate ANALYST

Sean Cate was an Analyst at the Center for Strategic and Budgetary Assessments in 2016. He specialized in transformational concepts and capabilities for future warfare and helped develop several CSBA wargame series.

EDUCATION

He received a B.A. in Political Science from the University of Florida and an M.A. in Strategic Studies and International Economics (with honors) from Johns Hopkins University's SAIS.

AREAS OF EXPERTISE

Future Warfare Capabilities
U.S. & Foreign Military
Forces



Bryan Clark
SENIOR FELLOW

As a Senior Fellow at the Center for Strategic and Budgetary Assessments, Bryan Clark directs studies and analyses on the future of warfare, the implications of new technologies, and naval strategy and operations. He has led research sponsored by the Department of the Navy, Defense Advanced Research Projects Agency (DARPA), and Office of the Secretary of Defense to help guide decisions on how the U.S. military should organize, train, and equip its forces. Mr. Clark has also published studies on the future of electronic and electromagnetic spectrum warfare, undersea warfare, naval surface warfare, strike operations, and air and missile defense.

Prior to joining CSBA in 2013, Bryan Clark was Special Assistant to the Chief of Naval Operations and Director of his Commander's Action Group, where he led development of Navy strategy and implemented new initiatives in electromagnetic spectrum operations, undersea warfare, expeditionary operations and personnel and readiness management.

Mr. Clark served in the Navy headquarters staff from 2004 to 2011, leading studies in the Assessment Division and participating in the 2006 and 2010 Quadrennial Defense Reviews. His areas of emphasis were modeling and simulation, strategic planning and institutional reform and governance. Prior to retiring from the Navy in 2007, Mr. Clark was an enlisted and officer submariner, serving in afloat and ashore submarine operational and training assignments including tours as Chief Engineer and Operations Officer at the Navy's nuclear power training unit.

He is the recipient of the Department of the Navy Superior Service Medal and the Legion of Merit.

EDUCATION

Mr. Clark holds an M.S. in National Security Studies from the National War College and a B.S. in Chemistry and Philosophy from the University of Idaho.

AREAS OF EXPERTISE

- Strategy Development
- Undersea Warfare
- Electromagnetic Warfare
- Force Planning
- Long-Term Military Competition
- Military Readiness



Jacob Cohn
RESEARCH FELLOW

Jacob Cohn is a Research Fellow at the Center for Strategic and Budgetary Assessments, where he manages the Strategic Choices Tool and conducts research and analysis for both the Strategic Studies and the Budgetary Studies programs. His primary areas of interest concern trends in the overall defense budget and in particular the linkages between resources and strategy. His research also focuses on the utilization of scenarios and wargames to facilitate long-range strategic planning and operational concept development. He contributes to print and broadcast media and is also an adjunct lecturer at the Johns Hopkins SAIS.

Prior to joining CSBA in 2014, Mr. Cohn served as a Peace Corps Volunteer in West Africa, worked in the Special Operations/Low Intensity Conflict office at the Pentagon, and was a grants and budget manager for CARE USA.

EDUCATION

Mr. Cohn holds a B.A. in Economics and Math with Highest Honors from Emory University and an M.A. in Strategic Studies and International Economics from Johns Hopkins University's SAIS.

AREAS OF EXPERTISE

- Strategy Development
- Defense Budgets
- Quantitative Military Operations Analysis
- Operational Concept Development & Wargaming
- Scenario Development



Christopher Dougherty

RESEARCH FELLOW

Christopher Dougherty researches, writes, and conducts wargames in support of the Strategic Studies program at the Center for Strategic and Budgetary Assessments. He has contributed extensively to CSBA monographs, including: *Sustaining America's Strategic Advantage in Long-Range Strike*; *AirSea Battle: A Point of Departure Operational Concept*; *The U.S. Navy: Charting a Course for Tomorrow's Fleet*; *Why AirSea Battle? and Special Operations Forces: Future Challenges and Opportunities*. He has supported numerous CSBA wargames with a particular focus on developing operational concepts and capabilities for countering anti-access/area-denial threats.

Prior to his graduate studies and joining CSBA, Mr. Dougherty served as an airborne infantryman with the 2nd Battalion, 75th Ranger Regiment from 1997 to 2000.

AREAS OF EXPERTISE

Special Operations
Irregular Warfare
Future Military Capabilities
Operational Concept
Development & Wargaming

EDUCATION

Mr. Dougherty graduated summa cum laude with a B.A. in Security Studies from the Henry M. Jackson School of International Studies at the University of Washington and received an M.A. in Strategic Studies with distinction from Johns Hopkins University's School of Advanced International Studies.



Jamie Graybeal

DIRECTOR OF EXTERNAL RELATIONS

Jamie Graybeal is the Center for Strategic and Budgetary Assessments' Director of External Relations. Prior to joining CSBA in 2015, Jamie Graybeal served as the Associate Director for Public Affairs on the Presidential Military Compensation and Retirement Modernization Commission, where he generated broad awareness and understanding of the Commission's efforts, which reviewed all compensation and retirement programs used by the Uniformed Services to compensate their service members and made recommendations for their modernization to the President and Congress.

Mr. Graybeal is a retired U.S. Navy public affairs officer who has led the communication efforts of the U.S. European Command, the U.S. Strategic Command, the U.S. Central Command, and NORAD and U.S. Northern Command. His most recent civilian postings include serving as the Deputy Public Affairs Officer for the International Security Assistance Force in Afghanistan and as the U.S. Navy's Assistant Chief Of Information For Communication Strategy, Integration and Assessment. Early in Mr. Graybeal's naval tenure he had the opportunity to serve as an executive assistant to the Department of Defense's top spokesperson and directly supported the Principal Deputy Assistant Secretary of Defense for Public Affairs. He and his family have spent portions of their military career living overseas in Japan, Germany, and Bahrain.

Mr. Graybeal has received numerous civilian and military awards.

EDUCATION

Mr. Graybeal holds a Master's degree in National Security and Strategic Studies from the Naval War College and a Bachelor's in Business Administration.

AREAS OF EXPERTISE

Strategic Communications
Risk Communications
Crisis Communications
National and International
Media Relations



Kamilla Gunzinger

PRODUCTION MANAGER

Ms. Kamilla Gunzinger is the Production Manager at the Center for Strategic and Budgetary Assessments. She oversees the Center’s publication and production processes, provides logistical and administrative assistance for events and wargames, and contributes to research, editing, and graphic design.

Ms. Gunzinger has extensive international experience, including an internship with Scholastic, Asia in Beijing, China (2008–2010) and studies at Keio University in Tokyo, Japan (2005–2006). She speaks Japanese and Mandarin Chinese, and her areas of interest include East Asian security affairs and international business.

EDUCATION

Ms. Gunzinger received a B.A. from The College of William and Mary in 2007 and an M.A. in International Studies from Concordia University, Irvine in 2010.

AREAS OF EXPERTISE

- Publications
- Copy Editing
- Event Planning
- East Asian Regional Studies
- Japanese and Mandarin Chinese



Mark Gunzinger

SENIOR FELLOW

Mark Gunzinger is a Senior Fellow at the Center for Strategic and Budgetary Assessments. Mr. Mark Gunzinger previously served as the Deputy Assistant Secretary of Defense for Forces Transformation and Resources. He is the principal author or co-author of multiple Defense Planning Guidance directives, key strategic planning documents that shape DoD force planning. A retired Air Force Colonel and Command Pilot, he joined the Office of the Secretary of Defense in 2004. He was appointed to the Senior Executive Service and served as Principal Director of the Department’s central staff for the 2005–2006 QDR. Following the 2006 QDR, he was appointed Director for Defense Transformation, Force Planning and Resources on the National Security Council staff.

Mr. Gunzinger is the recipient of the Department of Defense Distinguished Civilian Service Medal, the Secretary of Defense Medal for Outstanding Public Service, the Defense Superior Service Medal, and the Legion of Merit Medal.

EDUCATION

Mr. Gunzinger holds an M.S. in National Security Strategy from the National War College, a Master of Airpower Art and Science degree from the School of Advanced Air and Space Studies, an M.P.A. from Central Michigan University, and a B.S. in Chemistry from the United States Air Force Academy (Class of 1977).

AREAS OF EXPERTISE

- Strategy Development
- Force Planning
- Long-Term Military Competition
- Defense Transformation
- Air Warfare
- Quadrennial Defense Review



Peter Haynes SENIOR FELLOW

Dr. Peter Haynes is a Senior Fellow at the Center for Strategic and Budgetary Assessments. Prior to retiring from the U.S. Navy in 2016 as a captain, he served as the Deputy Director, Strategy, Plans, and Policy (J5) at U.S. Special Operations Command. He served in other strategy-related positions, which include: Director, Strategy and Plans (J5) for Combined Joint Task Force—Horn of Africa (2012); Branch Chief, Advanced Concepts, (N511), OPNAV (2010-11); Branch Chief, Strategy and Concepts (N513), OPNAV (2006); and Desk Officer, Russia and Ukraine, Joint Staff J5 (2001–2002). Operationally, he flew the E-2C Hawkeye carrier-based command and control aircraft with VAW 116, including deployments to the Western Pacific and Indian Ocean, as well as to the Persian Gulf in support of Operations Desert Storm and Southern Watch. He also flew deployments with VAW-112 as the commanding officer and executive officer to the Western Pacific, as well as to the Persian Gulf in support of Operation Iraqi Freedom. He is the recipient of the Defense Superior Service Medal, the Legion of Merit, the Air Medal with Combat “V” and the Navy/Marine Corps Commendation Medal with Combat “V”, among others, as well as the 2009–2010 Naval History and Heritage Command’s Samuel Eliot Morison Naval History Scholarship.

EDUCATION

Dr. Haynes received B.A.s in History and the Arts and Letters Program for Administrators from the University of Notre Dame. He also earned an M.A. in National Security Affairs (with distinction) and a Ph.D. in Security Studies from the Naval Postgraduate School.

AREAS OF EXPERTISE

- Grand Strategy
- Maritime and Naval Strategy
- Strategy and Operational Concept Development
- Naval and Air Warfare
- Future of Conflict
- Special Operations/Irregular Warfare



David E. Johnson

SENIOR FELLOW

Dr. David E. Johnson is a Senior Fellow at the Center for Strategic and Budgetary Assessments. Dave joined CSBA after eighteen years with the RAND Corporation, where he was a Principal Researcher. Dr. Johnson is also an adjunct professor at Georgetown University where he teaches a course on strategy and military operations and an Adjunct Scholar at the Modern War Institute at West Point. From June 2012 until July 2014, he was on a two-year loan to the United States Army to establish and serve as the first director of the Chief of Staff of the Army Strategic Studies Group. Before joining RAND, he served as a vice president at Science Applications International Corporation (SAIC) following a 24-year career in the U.S. Army, where he served in command and staff positions in the Infantry, Quartermaster Corps, and Field Artillery branches in the continental United States, Korea, Germany, Hawaii, and Belgium. He retired as a Colonel in 1997. His military awards and decorations include the Legion of Merit, Parachutist's Badge, Ranger Tab, Expert Infantryman's Badge, Army Staff Identification Badge, the Ancient Order of Saint Barbara, and the Noble Patron of Armor. His work has been featured on the professional reading lists of the U.S. Army and U.S. Air Force Chiefs of Staff, The U.S. Army Training and Doctrine Commander, the Chief of Staff Royal Air Force (United Kingdom), the Chief of Staff of the British Army, the Royal Australian Air Force Chief of Staff, and the U.S. Army Maneuver Center of Excellence. He has served as a member of the Maneuver and the Fires Centers of Excellence Advisory Boards, and as a consultant to the U.S. Defense Science Board and the U.S. Army Science Board.

AREAS OF EXPERTISE

Military Innovation

Operations

Strategic Assessments & Planning

Strategy Development

Ground Warfare

EDUCATION

He has M.A. and Ph.D. degrees in history from Duke University. He also has an MMAS from the U.S. Command and General Staff College, an M.S. from the Industrial College of the Armed Forces, and a B.A. from Trinity University. He is a member of the Council on Foreign Relations and the International Institute for Strategic Studies.

CSBA STAFF



Andrew F. Krepinevich

PRESIDENT EMERITUS

Dr. Andrew F. Krepinevich, Jr. is President Emeritus at the Center for Strategic and Budgetary Assessments. He assumed this position after having served as CSBA's President since 1995. His service at CSBA was preceded by a 21-year career in the U.S. Army.

Dr. Krepinevich has served in the Department of Defense's Office of Net Assessment, and on the personal staff of three secretaries of defense. He has also served as a member of the National Defense Panel, the Defense Science Board Task Force on Joint Experimentation, and Secretary of Defense Robert Gates' Policy Board. He currently serves as a member of the Chief of Naval Operations Executive Panel and on the Advisory Council of Business Executives for National Security.

Dr. Krepinevich has lectured before a wide range of professional and academic audiences, and has served as a consultant for many senior government officials, including several secretaries of defense, as well as the CIA's National Intelligence Council and all four military services. He has testified frequently before Congress. Dr. Krepinevich has taught on the faculties of West Point, George Mason University, Johns Hopkins University's SAIS, and Georgetown University. Dr. Krepinevich recently published *The Last Warrior: Andrew Marshall and the Shaping of Modern Defense Strategy*, which he co-authored with Barry Watts.

EDUCATION

A graduate of West Point, Dr. Krepinevich holds an M.P.A. and Ph.D. from Harvard University. He has taught on the faculties of West Point, George Mason University, Johns Hopkins University's School of Advanced International Studies, and Georgetown University.

AREAS OF EXPERTISE

Strategic Assessments & Planning

Military Revolutions

Military Transformation

Counterinsurgency



Whitney M. McNamara

ANALYST

Whitney Morgan McNamara is an Analyst at the Center for Strategic and Budgetary Assessments. Ms. McNamara was a National Security Fellow at the Woodrow Wilson Center and worked in the Political-Military Bureau at the Department of State and in the Office of the Secretary of Defense for Middle East Policy. Prior to that, she spent four years working in the Middle East as a project manager and consultant.

EDUCATION

Ms. McNamara received a B.A. in Political Science from the University of Pittsburgh and an M.A. in Strategic Studies and International Economics from SAIS at Johns Hopkins University.

AREAS OF EXPERTISE

Long-Term Military Competition

Middle East & European Security Trends

U.S. Security Assistance



Evan B. Montgomery

SENIOR FELLOW

Evan Montgomery is a Senior Fellow at the Center for Strategic and Budgetary Assessments. His principal research areas include long-term competitions, trends in future warfare, alliance management, and East Asia security issues. He also focuses on U.S. nuclear strategy and force structure, as well as the causes and consequences of nuclear proliferation.

While at CSBA, Dr. Montgomery has authored or coauthored nearly two-dozen monographs on a wide range of defense policy topics, lectured before a variety of audiences, and provided expert testimony to the U.S.–China Economic and Security Review Commission. His commentary and analysis have appeared in *Foreign Affairs*, *The Wall Street Journal*, *The National Interest*, *The Diplomat*, *Defense News*, and *Real Clear Defense*. He has also published articles in academic journals such as *International Security*, *Security Studies*, and the *Journal of Strategic Studies*.

AREAS OF EXPERTISE

- Grand Strategy
- Alliances
- Nuclear Proliferation
- Scenario Development

EDUCATION

Dr. Montgomery graduated summa cum laude from Villanova University with a B.A. in Political Science and Sociology and received his M.A. and Ph.D. in Foreign Affairs from the University of Virginia.



Amber Oar

ANALYST

Amber Oar is an Analyst at the Center for Strategic and Budgetary Assessments, where she conducts research and analysis for both the Strategic Studies and the Budget Studies programs. Prior to joining CSBA, Ms. Oar served as an acquisitions officer in the U.S. Air Force specializing in data analytics and information technology program management.

EDUCATION

Ms. Oar received her B.S. in Political Science and Legal Studies (with Academic Distinction) from the U.S. Air Force Academy. She also earned a Master of Public Policy (specialized in International Security and Economic Policy) degree from University of Maryland, College Park.

AREAS OF EXPERTISE

- Defense Budgets
- Quantitative Military Operations Analysis

CSBA STAFF



Julie H. Pulley
OFFICE MANAGER

Julie Pulley manages CSBA's administrative functions as the Office Manager at the Center for Strategic and Budgetary Assessments. Prior to CSBA, Ms. Pulley worked at Discovery Communications, Inc., where she managed a variety of special projects.

EDUCATION

Ms. Pulley earned a B.S. at Howard University.

AREAS OF EXPERTISE

- Operations
- Logistics
- Non-Profit Management



Michelle Shevin-Coetzee
RESEARCH ASSISTANT

Michelle Shevin-Coetzee is a Research Assistant at the Center for Strategic and Budgetary Assessments. Prior to joining CSBA, Michelle was a researcher with the Center for a New American Security, where she worked with both the Defense Strategies and Assessments and Strategy and Statecraft programs on transatlantic security, NATO, the European Union, and the Baltic and Nordic regions. Previously, she served as a policy intern in the Office of the Secretary of Defense for four years. While at the Pentagon, Michelle worked on issues related to Countering Weapons of Mass Destruction, East Asia, Strategy and Force Development, and Europe and NATO. She serves as the Vice President of the Women in International Security, DC Chapter.

AREAS OF EXPERTISE

- Defense Policy
- Defense Strategy
- Wargaming

EDUCATION

Ms. Shevin-Coetzee received a B.A. in International Affairs, summa cum laude, and a minor in Arabic from George Washington University's Elliott School of International Affairs.



Jesse Sloman

ANALYST

Jesse Sloman is an Analyst at the Center for Strategic and Budgetary Assessments. Prior to joining CSBA, Mr. Sloman worked for the Council on Foreign Relations. He served as an intelligence officer in the Marine Corps from 2009 to 2013 and a civil affairs officer in the Marine Corps Reserve from 2013 to 2016.

He is the recipient of the 2012 Major General Michael E. Ennis Award for Literary Excellence and a winner of the 2016 U.S. Naval Institute Emerging & Disruptive Technologies Essay Contest.

EDUCATION

Mr. Sloman is a 2009 graduate of Tufts University with a B.A. in political science.

AREAS OF EXPERTISE

Amphibious Warfare

Defense Resourcing

Operational Concept

Development & Wargaming



Maureen Smolskis

RESEARCH ASSISTANT

Maureen Smolskis was a Research Assistant at the Center for Strategic and Budgetary Assessments in 2016 before joining the U.S. Coast Guard. She supported senior staff in both the Strategic Studies and Budget Studies programs.

Prior to joining CSBA, Ms. Smolskis worked for CACI as a contractor at the U.S. Attorney's Office for DC.

EDUCATION

She received a B.A. in International Relations from Connecticut College.

AREAS OF EXPERTISE

Defense Budgets

Defense Policy

Wargaming

CSBA STAFF



John Stillion

SENIOR FELLOW

John Stillion is a Senior Fellow at the Center for Strategic and Budgetary Assessments. Dr. Stillion is a former U.S. Air Force officer, instructor navigator, and tactical aviator. He is a Distinguished Graduate of Air Force ROTC, USAF Navigator Training, and RF-4C Tactical Aircrew Training.

He previously worked at the RAND Corporation where he led multi-disciplinary study teams and analyzed a wide range of issues related to airpower and future warfare, including air operations in urban environments and against elusive targets, airbase vulnerability, combat aircrew skill acquisition and retention, tanker and airlift operations, aerial ISR, and fire support to Special Operations Forces. During his time at RAND he received a number of awards for the quality of his research.

Prior to joining CSBA Dr. Stillion was a Senior Analyst in the aerospace industry where he analyzed the cost-effectiveness of existing and possible future products as well as the emerging demand for advanced capabilities and production techniques.

Before that he led a multi-disciplinary team of analysts and engineers at exploring advanced applications of stealthy unmanned aircraft in future conflicts.

EDUCATION

Dr. Stillion holds a Ph.D. and M.Phil. in Public Policy Analysis from the Pardee RAND Graduate School, an M.A. in Political Science from Stanford University, and a B.A. in Political Science from North Carolina State University.

AREAS OF EXPERTISE

Strategy

Future Warfare

Unmanned Aerial Vehicles

Air and Missile Operations

Quantitative Military
Operations Analysis



Jan van Tol

SENIOR FELLOW

Jan van Tol is a Senior Fellow at the Center for Strategic and Budgetary Assessments. Prior to his retirement from the Navy in 2007, Captain van Tol served as special adviser in the Office of the Vice President. He was a military assistant to Andrew W. Marshall, the Secretary of Defense's Principal Advisor for Net Assessment, from 1993–96 and again from 2001–2003. At sea, he commanded three warships, two of which, the USS O'Brien (DD-975) and the USS Essex (LHD-2), were part of the U.S. Navy's Forward Deployed Naval Forces based in Japan.

Captain van Tol's analytic work has focused mainly on long-range strategic planning, naval warfare, military innovation, and wargaming.

EDUCATION

Captain van Tol holds degrees in Philosophy and Logic from the University of Massachusetts, in Operations Research from the Naval Postgraduate School, and he graduated with distinction from the Naval War College.

AREAS OF EXPERTISE

Long-Range Strategic
Planning

Naval Warfare

Military Innovation

Wargaming



Timothy Walton

SENIOR ANALYST

Timothy A. Walton is a Senior Analyst at the Center for Strategic and Budgetary Assessments. His research and analysis focuses on trends in future warfare and Asia-Pacific security dynamics. Prior to joining CSBA, Mr. Walton was a Principal of Alios Consulting Group and an Associate of Delex Consulting, Studies, and Analysis, both defense and business strategy firms.

EDUCATION

Mr. Walton received his Bachelor of Science in International Politics (Security Studies) and Master of Arts in Security Studies from Georgetown University. He also completed a study abroad program for which he received a CIEE Intensive Chinese Language and Culture Certificate for Chinese Studies from Nanjing University.

AREAS OF EXPERTISE

Force Planning
Integrated Air and
Missile Defense
Logistics
Asia-Pacific
Latin America

CSBA NON-RESIDENT FELLOWS



Ross Babbage
NON-RESIDENT SENIOR FELLOW

Dr. Ross Babbage is a non-resident Senior Fellow at the Center for Strategic and Budgetary Assessments. He served for 16 years in the Australian Public Service holding several senior positions, including Head of Strategic Analysis in the Office of National Assessments, and leading the branches in the Department of Defence responsible for ANZUS Policy and Force Development. He also worked as a special advisor to the Minister for Defence during the preparation of the 2009 Australian defense white paper. Through the 1990s, Ross Babbage was a member of the team that reformed the Office of Defense Production with its loss-making, government-owned defense factories. What emerged was a modern, profitable corporation known as ADI Limited that grew to become Australia's largest defense company. Dr. Babbage has served on the Council of the International Institute for Strategic Studies in London, and during 2003–2004 was Head of the Strategic and Defence Studies Centre at the Australian National University.

AREAS OF EXPERTISE

Alliance Relations
Defense Reform
Force Structure Analysis
Future Warfare
Strategy
Western Pacific Security

EDUCATION

Dr. Babbage received a B.A. and an M.A. in Economics from the University of Sydney. He received his Ph.D. in International Relations from Australian National University.



Robert Haffa
NON-RESIDENT SENIOR FELLOW

Bob Haffa is a non-resident Senior Fellow at the Center for Strategic and Budgetary Assessments. Prior to joining CSBA in 2011, Dr. Haffa directed the Northrop Grumman Analysis Center, having joined Northrop after retiring from the U.S. Air Force as a colonel. His Air Force career included a combat tour in Vietnam in RF-4C aircraft, F-4D/E squadron and wing assignments in England and Korea, teaching political science at the U.S. Air Force Academy, and a tour with the Air Staff in the Pentagon as Chief of the Long Range Planning Division and Director of the Operations Group supporting the Air Force Chief of Staff. At Northrop Grumman, Dr. Haffa's work included analyses of U.S. military strategy, force planning, programming, and wargaming for the business sectors of the company, as well as the development of corporate strategic planning scenarios. Dr. Haffa is an adjunct professor at Johns Hopkins University.

AREAS OF EXPERTISE

Campaign Analysis
Conventional and Nuclear Deterrence
Defense Budget
Defense Industry
Force Planning

EDUCATION

Dr. Haffa received a B.S. in International Affairs from the U.S. Air Force Academy, and M.A. in Political Science from Georgetown University, and M.S. in Management from the University of Arkansas, and a Ph.D. in Political Science from the Massachusetts Institute of Technology.



David W. Hamon

NON-RESIDENT SENIOR FELLOW

Mr. Hamon is a Non-Resident Senior Fellow at the Center for Strategic and Budgetary Assessments. He has over 38 years of progressive experience in public service and more than 20 in international affairs specializing in understanding new and emerging international security threats and challenges. His experience and research focuses on solutions to policy and strategy problems for the benefit of government and society by developing future-oriented, strategic research initiatives and teams as well as creating dialogue and engagement opportunities with diverse groups of experts. Mr. Hamon currently serves as Vice President for the Economic Warfare Institute and Director of Strategic Initiatives at Soft Power Solutions Inc. Previously, he was a Distinguished Analyst & Founding Director of Banyan Analytics Institute, Analytic Services Inc.; Director of Strategic Research and Dialogues as well as Deputy Director of Research and Studies of the Defense Threat Reduction Agency, Office of Advanced Systems and Concepts; and Regional Director for Policy and Programs, African Affairs for the Office of the Secretary of Defense. He additionally served with the United Nations Department of Peacekeeping Operations. He is an adjunct faculty member for the University of Montana, the University of Mary Washington, and Webster University. He is a retired U.S. Army Logistician.

AREAS OF EXPERTISE

- International Relations
- Strategic Assessments & Planning
- Strategy Development

EDUCATION

Mr. Hamon received his M.A. in Political Science/International Affairs from Northeastern University.



Benjamin Lambeth

NON-RESIDENT SENIOR FELLOW

Dr. Benjamin S. Lambeth is a Non-Resident Senior Fellow at the Center for Strategic and Budgetary Assessments. He assumed this position in July 2011 after a 37-year career as a Senior Research Associate at the RAND Corporation, where he remains an adjunct associate. Before joining RAND, he served in the Office of National Estimates at the Central Intelligence Agency and worked for both the Center for Strategic and International Studies and the Institute for Defense Analyses. A civil-rated pilot, Dr. Lambeth has flown or flown in more than 40 different types of fighter, attack, and jet trainer aircraft with the U.S. Air Force, Navy, Marine Corps, and with eight foreign air forces worldwide. In 2002, he was elected an honorary member of the Order of Daedalians, the national fraternity of U.S. military pilots. In 2008, Dr. Lambeth was appointed by the Secretary of Defense to serve an eight-year term as a member of the Board of Visitors of Air University. He is a member of the Council on Foreign Relations, the Air Force Association, the U.S. Naval Institute, the Association of Naval Aviation, the Red River Valley Fighter Pilots Association, and the Editorial Advisory Boards of *Air and Space Power Journal* and *Strategic Studies Quarterly*.

AREAS OF EXPERTISE

- Air Warfare
- Air and Space Operations and Training
- Campaign Assessment
- Defense Planning
- Force Development
- Strategy

EDUCATION

Dr. Lambeth received a B.S. in Political Science from the University of North Carolina at Chapel Hill, an M.A. in Government from Georgetown University, and a Ph.D. in Political Science from Harvard University.

CSBA NON-RESIDENT FELLOWS



Julian Snelder NON-RESIDENT SENIOR FELLOW

Julian Snelder is a Non-Resident Senior Fellow at the Center for Strategic and Budgetary Assessments and a New Zealand-Netherlands dual national resident in Asia for more than 25 years. He worked for the management consultancy McKinsey & Company for eight years, then for Morgan Stanley for eight years, the latter role as head of technology investment banking for Asia. Since 2005 he has been director and partner in an emerging market investment fund. Mr. Snelder has worked extensively in China, India, Japan, Korea and Taiwan. He has advised corporate and government clients on mergers and acquisitions, fundraising and capital investment, business planning and budget planning, privatization, and industrial policy. His particular interest is the broad application of commercial information and manufacturing technologies to matters of national security. He writes regularly on this topic and has contributed to publications of the United States Naval War College.

AREAS OF EXPERTISE

Asia-Pacific
Economics and Finance
Industrial and Information
Technologies
Trade Policy and Security

EDUCATION

Mr. Snelder received a Bachelors in Economics from Trinity College Cambridge as well as a Bachelors in Mechanical Engineering from the University of Canterbury.

CSBA BOARD MEMBERS



Devon Cross
PRESIDENT
DONORS' FORUM ON INTERNATIONAL AFFAIRS

Devon Cross is Director of The Policy Forum on International Affairs and has extensive experience in funding research on foreign policy issues having served as Director of Research at Smith Richardson Foundation, President of The Donner Canadian Foundation, and Director of The Gilder Foundation. Ms. Cross serves on the boards of The Peter Munk Charitable Foundation, Intelligence Squared/U.S., and the Advisory Board for Johns Hopkins SAIS National Security Studies Program, and she served on the Pentagon's Defense Policy Board from 2001–2009. Her Washington experience included stints at The Center for Strategic and International Studies, Carnegie Endowment, and the International Security Studies Program at the Woodrow Wilson Center. She studied at Johns Hopkins School of Advanced International Studies and received her B.A. from Bryn Mawr College. She is a member of the Council on Foreign Relations.



Vic H. Fazio
SENIOR ADVISOR
AKIN GUMP STRAUSS
HAUER & FELD LLP

Vic H. Fazio is Senior Advisor at Akin Gump Strauss Hauer & Feld, LLP. Mr. Fazio represented California's 3rd District in the U.S. Congress for twenty years, where he served on the House Appropriations Committee as a subcommittee chairman or ranking member for eighteen years. He was also a member of the Armed Services, Budget, Ethics and House Administration committees. Mr. Fazio was active in the Democratic leadership, serving as vice chair and, later, chair of the Democratic Caucus, chairman of the Democratic Congressional Campaign Committee, majority whip-at-large and regional representative on the Democratic Steering and Policy Committee. Before his election to Congress, Mr. Fazio served in the California State Assembly. After his retirement from Congress in 1998, Mr. Fazio joined strategic communications consulting firm Clark & Weinstock. Mr. Fazio is a graduate of Union College in Schenectady (NY). He is a co-founder of the California Journal, a periodical covering state government and politics. Mr. Fazio serves on boards of the UC Davis Foundation, California Institute, the U.S. Capitol Historical Society, the Campaign Finance Institute, Northrop Grumman Corporation, Ice Energy Corporation, and the National Parks Second Century Commission and Committee for a Responsible Budget.

CSBA BOARD MEMBERS



Nelson M. Ford
PRESIDENT AND CEO
LMI

Nelson M. Ford is President and CEO of LMI, a government consulting firm. Prior to joining LMI in 2009, Mr. Ford was Under Secretary of the Army. Previous to this position, he held a number of positions in the Department of Defense, including Assistant Secretary of the Army for Financial Management and Comptroller. From 1997 to 2000, he was President and CEO of Clinipad, a manufacturer of disposable medical products. During the 1990s, he was Chief Operating Officer of Georgetown University Medical Center. During the 1980s, Mr. Ford was a partner with Coopers & Lybrand, providing strategic and financial consulting services to a wide range of healthcare clients. During the 1970s, he was the Executive Secretary of the Health Care Financing Administration and worked on health policy matters in the Office of Management and Budget. Mr. Ford holds a bachelor's degree in history from Duke University and a master's in education from the University of Delaware.



Jack Keane
SENIOR MANAGING PARTNER
KEANE ADVISORS, LLC

John M. Keane is Senior Managing Director and co-founder of Keane Advisors, LLC. General Keane is a retired four-star general who dedicated four decades of his life to public service, which culminated in his appointment as acting Chief of Staff and Vice Chief of Staff of the U.S. Army. General Keane is a career paratrooper, a combat veteran of Vietnam, decorated for valor, who spent much of his military life in operational commands with his units deployed in Somalia, Haiti, Bosnia and Kosovo. He commanded the famed 101st Airborne Division (Air Assault) and the legendary 18th Airborne Corps, the Army's largest war-fighting organization. General Keane serves as a national security analyst at ABC News. He is a member of the Secretary of Defense's Policy Board, member of the Congressional Commission on the National Guard and Reserves, a member of the Council on Foreign Relations, director of the George C. Marshall Foundation, director of the Knollwood Foundation, a member of the Executive Committee of the Pentagon Memorial Fund, chairman of the Terry Maude Foundation and chairman of Senior Executive Committee of the Army Aviation Association of America. General Keane holds a B.S. in Accounting from Fordham University and an M.A. in Philosophy from Western Kentucky University. He is a graduate of the Army War College and the Command and General Staff College.



Dave McCurdy
PRESIDENT AND CEO
AMERICAN GAS ASSOCIATION

Dave McCurdy is currently President and CEO of the American Gas Association. He most recently served as President and CEO of the Alliance of Automobile Manufacturers, a trade association of car and light truck manufacturers including BMW Group, Chrysler Group LLC, Ford Motor Company, General Motors, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche, Toyota and Volkswagen Group of America.

Mr. McCurdy came to the Alliance in 2007, after serving as President and CEO of the Electronics Industry Alliance (EIA) for eight years. In April of 2001, Mr. McCurdy co-founded the Internet Security Alliance as a non-profit collaboration between EIA and Carnegie Mellon University CyLab to enhance cyber security.

Mr. McCurdy spent 14 years (1981–1995) in the House of Representatives as the Member from the Fourth Congressional District of Oklahoma. He attained numerous leadership positions, including Chairman of the House Intelligence Committee; Chairman of the Military Installations and Facilities Subcommittee of the House Armed Services Committee; and Chairman of the Transportation Aviation and Materials Subcommittee of the Science and Space Committee. As a House Member, Congressman McCurdy played a major role in enacting the 1988 National Superconductivity Competitiveness Act; the 1985 Goldwater-Nichols Act, which reorganized the Department of Defense; the Nunn-McCurdy Amendment in 1982, requiring Congressional notification of Department of Defense cost overruns of 15% or more; and the 1993 National Service Legislation, which originated in a bill introduced by Congressman McCurdy and Senator Nunn.

In 2008, Secretary of Defense Robert Gates appointed Congressman McCurdy to the Defense Policy Board which provides the secretary with independent, informed advice and opinion concerning matters of defense policy. Mr. McCurdy was reappointed to the Defense Policy Board in 2009 by the Obama Administration.



Laurence Zuriff
ZFI CAPITAL

Laurence Zuriff is the founder and CFO of Xometry, an advanced manufacturing company founded in 2013 and has a 20 year career managing money in the U.S. public equity markets.

Mr. Zuriff currently chairs the International Economics Working Group of the John Hay Initiative and is a board member of the Alexander Hamilton Society.

Mr. Zuriff holds a B.A. degree from Brown University and an M.A. from Johns Hopkins School of Advanced International Studies.

Support CSBA

CSBA relies on charitable contributions and grants to support its public education programs. Support for its research is awarded by foundation, government, corporate, and individual sponsors who share our conviction that the best analysis is produced by expert researchers free to identify and explore issues and take a long-term perspective.

Sponsors who support CSBA value and respect its independence and insights. CSBA is a 501(c) 3 tax-exempt organization, and contributions are tax deductible to the extent allowed by law. To make a tax-deductible charitable contribution to CSBA, go to: www.csbaonline.org/about/support.

CSBA would like to thank our supporters. Below is a list of organizations that have contributed to our efforts over the past three years.

Army Strategic Studies Group

Army War College

Austal

BAE

Boeing

Carnegie Corporation of New York

**Defense Advanced Research
Projects Agency**

Department of the Navy

Embassy of Japan

Finantieri/Marinette

General Atomics

Huntington Ingalls

Kongsberg

Lockheed Martin

Metron

Northrop Grumman

**Office of the Secretary of Defense/
Office of Net Assessment**

Raytheon

Sasakawa Peace Foundation

Scaife Foundation

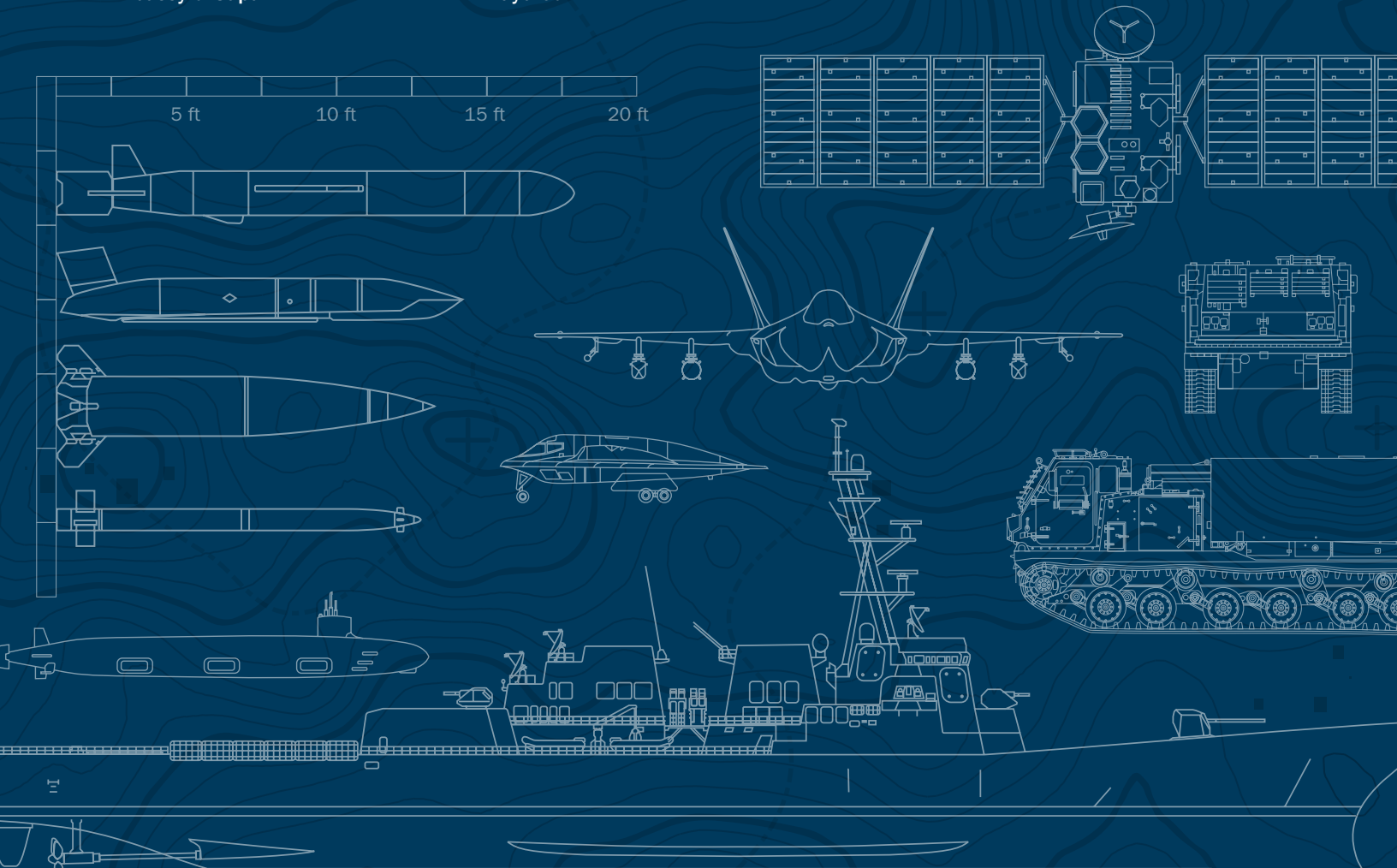
**Secretary of Defense Corporate
Fellows Program**

Smith Richardson Foundation

Submarine Industrial Base Council

Textron

**The Lynde & Harry Bradley
Foundation**





Center for Strategic and Budgetary Assessments

1667 K Street NW | Suite 900 | Washington, DC 20006 | (202) 331-7990 | Fax: (202) 331-8019

www.csbaonline.org