ANNUAL REPORT



Center for Strategic and Budgetary Assessments





MESSAGE FROM THE CHAIR OF THE BOARD



Dear Friends of CSBA,

On behalf of the Board of Directors, I am pleased to introduce this report on the Center for Strategic and Budgetary Assessments (CSBA), its work in 2023, and its future plans. Over the past year, CSBA has continued to provide independent, objective research on national security issues, with a focus on policy and strategy, capabilities and concepts, and budgets and resources. CSBA's research has provided senior leaders in the United States and allied nations in-depth analysis and actionable insights to help them navigate an increasingly challenging geostrategic environment. In addition, CSBA's leaders and staff continue to serve the nation through their participation in Congressionallymandated commissions and advisory boards, testimony before Congress, and efforts to educate the next generation of national security leaders.

The events of 2023 served as a stark reminder of the need for rigorous analysis of defense and national security issues and cleareyed preparation to deter future conflicts. Responding to this challenge, over the past year CSBA produced an impressive volume of studies on a diverse range of topics as well as workshops and discussions with policymakers and other experts to explore and contextualize emerging issues. In addition, CSBA continued its well-received educational programs engaging congressional staff and defense journalists, providing them the opportunity to learn from experts and deepen their understanding of technical and policy issues. We also welcomed a number of new resident and non-resident staff members who continue to enhance CSBA's research capabilities and operational efficiency.

In 2024, CSBA will continue this momentum and produce new work on Chinese warfighting, the prospects of Russian military reform, nuclear force posture, attritable aircraft, national security space architectures, and much more.

CSBA's work to inform current and future U.S. and allied strategic thinking would not be possible without the generous support of our sponsors, donors, and global audience. Your sponsorship allows the team to conduct its research and communicate its findings effectively. I would ask that you continue to engage with CSBA and its work throughout the coming year, whether on social media, by attending in-person and virtual events, or by reading our published reports and briefings. Furthermore, please consider making a financial contribution to help facilitate CSBA's research and education outreach via the "support" link on our web page. We greatly appreciate that assistance, and I am certain that CSBA and its work will continue to warrant your attention and engagement moving forward.

Sincerely,

BARBARA HUMPTON

Chair, Board of Directors Center for Strategic and Budgetary Assessments December 2023



MESSAGE FROM THE PRESIDENT AND CEO

It is my pleasure to introduce this year's Annual Report by highlighting CSBA's accomplishments in 2023 and offering a preview of our work in 2024.

As former Secretary of Defense Robert Gates recently noted, "the United States now confronts graver threats to its security than it has in decades, perhaps ever."1 Russia's bloody occupation of Ukraine, underwritten by Iran and North Korea and abetted by China, combined with Hamas' barbaric attack on Israel and an escalating pattern of aggressive behavior by China, seem to signal a deepening divide between the forces of freedom and authoritarianism. Meanwhile, on battlefields in Europe, the Middle East, and elsewhere, new capabilities, concepts, and organizations provide evidence of the changing character of war.

In 2023, CSBA published a wide range of analytical studies to help American and allied leaders navigate this troubled geopolitical landscape. CSBA monographs have assessed the state of defense innovation in the United States and China and within and among the U.S. armed services; explored the future of the U.S. Air Force; estimated the inventory of munitions needed for a large-scale war in Asia; and examined the role of hypersonic weapons in future conflict. CSBA studies have also documented the extent of defense investment in networking and offered new frameworks for measuring the effectiveness of networked force packages.

This past year, CSBA conducted a wide range of analytical studies to

inform the United States Department of Defense, the uniformed services, and several defense agencies. Our work with America's close allies continued to expand, as did our contact with new sponsors. We also expanded and enriched our talent base of scholars and policy practitioners to enhance further the quality and applicability of our work. Continued outreach from both the Executive and Legislative branches of the U.S. Government and allies ensures that we continue to make substantive contributions to thinking and policymaking on global security issues.

As part of our public education mission, we conducted the most recent iteration of our Congressional Defense Seminar Series, engaging staff members from both houses of Congress, to help them sharpen their thinking on defense and security issues. We also welcomed the most recent class of Defense Journalism Seminar Series fellows, providing them the opportunity to engage directly with subject matter experts and sharpen their understanding of defense issues. Last summer we had the pleasure of hosting the 2023 class of Secretary of Defense Executive Fellows for a week of discussions on topics ranging from U.S. grand strategy to private sector workplace dynamics. This fall we conducted a highly successful Strategic Choices Exercise as part of the Ronald Reagan Institute-Alexander Hamilton Society Peace Through Strength Boot Camp. We look forward to continuing all of these programs in the coming year.

As proud as we are of the work we have done in the past year, CSBA has always been a forward-looking organization seeking to address emerging



problems and answer questions about the future of defense and security. In 2024, we will continue to develop new strategic and operational concepts, explore new ideas about defense planning and acquisition, work with close allies to help them confront a constantly evolving security environment, and prepare the next generation of professionals to pursue and defend American interests around the world.

As always, thank you for supporting CSBA. The interest you have shown in us and our work is essential to our continuing success. Please enjoy this report, and do not hesitate to reach out with your ideas and comments.

Sincerely,

THOMAS G. MAHNKEN, Ph.D

President and Chief Executive Officer Center for Strategic and Budgetary Assessments December 2023

¹ Robert M. Gates, "The Dysfunctional Superpower: Can a Divided America Deter China and Russia?" *Foreign Affairs* (November/December 2023).



ABOUT CSBA

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.

> For nearly three decades, CSBA has provided consistent, high-quality, and innovative research on defense strategy, budgets, and the security environment. With notable alumni, 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, discussions on the strategic choices necessary for the transformation and modernization of the U.S. military in the face of limited resources, and the defense strategy and operational concepts needed for an era marked by rapid technological change, new ways to operationalize capabilities, and acute peer-level challenges to the U.S.-led liberal international order.

Under the leadership of Dr. Thomas G. Mahnken since 2016, 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 policymakers 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 is to develop innovative, resource-informed defense concepts, promote public debate, and spur action to advance U.S. and allied interests. Our vision is to set the terms of debate for the future of national defense and drive change in concept development, force structure, and resources to prepare the US and its allies to compete and win in an era characterized by great power competition and conflict.

CSBA enjoys a highly-regarded reputation cemented in its values that ensures the entire team achieves its mission and lives its vision of Independence, Objectivity, Integrity, Innovation, Expertise, and Quality.

ABOUT CSBA

Research Methodology

ANALYTIC STUDIES

CSBA's analytic studies look 20–30 years into the future 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.

OPERATIONAL CONCEPT DEVELOPMENT

CSBA's operational concepts link strategies and capabilities to achieve strategic objectives and inform requisite future capability investments. 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.

WARGAMING & SCENARIO DEVELOPMENT

CSBA employs an "alternate futures" scenario development methodology. We believe that the future cannot be predicted, but also that scenarios can be used to think through various potential challenges. Our scenario development has been successfully employed by a variety of U.S. and allied government sponsors. CSBA's wargaming methodology is designed to elicit the insights of a well-informed community of subject-matter experts on important, evolving



issues, not to 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.

STRATEGIC CHOICES EXERCISES

CSBA examines the defense capability tradespace within multiple possible budget scenarios to identify the relationship between strategy and investments, including areas of over- and under-investment. The Strategic Choices Exercise is used for both futures games and to educate the public as to the contents of the Defense Program of Record.

SPECIAL PROJECTS

CSBA is a flexible organization with a broad base of expertise, well suited to conduct or participate in a variety of activities, ranging from executive-level policy briefings, on-line reviews of recent research in the field of international relations, congressionally-mandated studies, and consultative analysis for allied and partner governments. Members of our professional staff, many of whom hold university faculty positions, also appear frequently before Congress and the national media.







STRATEGIC FORESIGHT AND DEFENSE PLANNING IN THE 21ST CENTURY

In 2023, CSBA's research focused on the following themes and topics:

ASSESSING THE EVOLVING STRATEGIC LANDSCAPE

Analyzes how emerging opportunities and challenges in both traditional and emerging warfighting domains, as well as shifts in partner and competitor objectives, provide the United States with strategic advantages and potential risks in the near future and in the long term. This research focus included close examination of adversaries' perspectives, emerging technologies, and potential ways of rethinking current policies and practices.

LINKING INNOVATION WITH FUTURE WARFARE CONCEPTS

Explores cutting-edge capabilities such as hypersonics, precision-guided munitions, and the B-21 stealth bomber, as well as new modes of operational thinking, including how the service branches can best integrate new and legacy systems into strategic planning and organization.

A HOLISTIC PERSPECTIVE ON STRATEGIC CHOICES

Identifies key operating concepts, capabilities, and capacity choices for the U.S. military, its key allies, and peer competitors for both current operational objectives and long-term strategic goals. Articulates real-world implications of specific budgetary decisions in both the immediate and over-the-horizon strategic timeline.

PUBLIC AND PROFESSIONAL EDUCATION

Includes outreach campaigns on emerging strategies, new concepts and military technologies, and budget analyses to educate, train, and inform national security decision-makers, including rising leaders in policymaking and journalism.

CSBA'S 2023 PUBLICATIONS



Chinese Lessons from the Pacific War: Implications for PLA Warfighting

Toshi Yoshihara

Senior Fellow Toshi Yoshihara surveys Chinese histories of the Pacific War to discern lessons that mainland analysts have drawn from the ocean-spanning struggle. He examines the extensive Chinese-language literature on the great battles at Midway, Guadalcanal, and Okinawa and pinpoints the operational insights that Chinese strategists have gleaned from them. The selected campaigns involved warfighting that will feature prominently in a future Sino-American conflict: carrier air warfare, contested amphibious landings, expeditionary logistics, and electronic warfare.

Yoshihara finds that Chinese analysts, including those affiliated with the People's Liberation Army (PLA), have scrutinized the Pacific War. Their historical accounts of the war at sea explicitly draw lessons for the future of Chinese warfighting, including warfare in the information age, modern amphibious operations, land-based maritime strike, and expeditionary logistics. Yoshihara uncovers in these analyses tantalizing hints of the PLA's deeply held beliefs about warfare, and of the PLA's enduring weaknesses that it is seeking to reverse. By looking at the Pacific War through Chinese eyes, Yoshihara argues, the policy community can better appraise Beijing's evolving views of potential great power wars in the Indo-Pacific

Innovating for Great Power Competition: An Examination of Service and Joint Innovation Efforts

Thomas G. Mahnken, Evan B. Montgomery, Tyler Hacker

Following nearly two decades of counterinsurgency in the Greater Middle East, the United States Department of Defense finds itself looking to the Cold War for lessons on how to adapt to the operational challenges presented by China and Russia. To modernize its platforms, doctrine, and force structure to compete with and defeat 21st-century great power competitors, the military services and the Department of Defense as a whole are seeking to promote conceptual, organizational, and technological innovation within the U.S. armed forces.

In Innovating for Great Power Competition, authors Thomas G. Mahnken, Evan B. Montgomery, and Tyler Hacker reflect upon the lessons from Cold War era innovation. They find that several factors play a crucial role in innovation, including recognition of the threat environment, senior-leader sponsorship and support, innovators and their advocates and networks, and organizational culture. Additionally, military innovation typically occurs in three stages: speculation, experimentation, and implementation. Should these elements of innovation be missing or insufficient, failure can occur in any of these three stages, as well as during employment on the battlefield. These ingredients and phases combine to yield a framework for diagnosing innovation in historic and contemporary military organizations. The authors then apply this framework to contemporary innovation efforts in both the individual military services and the Department of



Defense as a whole. The study examines the relative success of these innovation efforts and suggests four possible outcomes based on the pace of service-level innovation efforts compared to defense-wide innovation efforts. Finally, the authors offer potential operating options for each outcome.

Air Power Metamorphosis: Rethinking Air Force Combat Force Modernization

Christopher J. Bowie

For the past three decades, Chinese leadership has closely studied the United States' power projection capabilities and concept of operations. Consequently, the People's Liberation Army (PLA) has tailored its anti-access/area denial approach and air defenses to prevent the United States from leveraging its current strengths. A short- or medium-range concept of air power is unlikely to be successful for power projection or deterrence in the Western Pacific, and a change in direction for the U.S. Air Force is likely necessary.

In Air Power Metamorphosis: Rethinking Air Force Combat Force Modernization, Dr. Christopher Bowie proposes a series of shifts to adapt to the changing geostrategic environment. He outlines how to reshape the Air Force over the next 15 years to increase its longrange power projection, even in a scenario where funding levels remain flat. Bowie suggests using the Air Force's newest aircraft, the B-21 stealth bomber, as the focus of power projection, explaining how the B-21 can fulfill a wide variety of missions and offering tradeoffs to increase B-21 production rates. He demonstrates that the plan carries risks, but historically, the Air Force has been able to mitigate those risks and make the most of its platforms. Bowie concludes with a potential path forward and what force structure attributes the Air Force would have in 15 years if it chooses this course of action.

Testimony to the Strategic Forces Subcommittee of the Senate Armed Services Committee on Regional Nuclear Deterrence

Evan B. Montgomery

On March 28, 2023, CSBA Senior Fellow and Director of Research and Studies, Dr. Evan B. Montgomery, testified before the United States Senate Committee on Armed Services' Subcommittee on Strategic Forces regarding regional nuclear deterrence.

For more than a decade, China's conventional military modernization has been upending the balance of power across the Indo-Pacific region. The People's Liberation Army (PLA) has been developing and fielding a variety of capabilities—combat aircraft, surface naval assets, submarines, and ballistic and cruise missiles, among others—that seriously threaten its neighbors and could be used to target U.S. bases, ports, and forward-operating forces. This shift in the balance of power has raised questions about Washington's ability to deter the use of force against its allies and partners, as well as its capacity to defeat an assault if deterrence were to fail.

Until recently, China's nuclear arsenal was a secondary concern. This so-called "minimum deterrent" remained far smaller than either the U.S. or Russian arsenals, appeared to be sized and postured for retaliatory strikes in extreme circumstances, and often received more attention for its apparent vulnerability than its actual strength. That situation, however, is starting to change. It now appears that China is engaged in a significant quantitative and qualitative nuclear buildup. Beijing has been constructing hundreds of new intercontinental ballistic missile (ICBM) silos; it has tested a fractional orbital



bombardment system (FOBS) armed with a hypersonic glide vehicle (HGV); it has introduced a dual-capable intermediate-range ballistic missile (IRBM) capable of precision strikes; and, according to the Department of Defense, it is in the process of expanding its arsenal from more than 400 operational warheads today to 1500 total warheads by 2035.

Assuming this buildup materializes in full, it would be the catalyst for a major change in the security environment. As the 2022 National Security Strategy notes, "By the 2030s, the United States for the first time will need to deter two major nuclear powers, each of whom will field modern and diverse global and regional nuclear forces."

Big Centralization, Small Bets, and the Warfighting Implications of Middling Progress: Three Concerns about JADC2's Trajectory

Travis Sharp, Tyler Hacker

Warfare has always been a contest of incomplete information and imperfect control, with each side straining to find the enemy in an unfavorable position and coordinate his destruction. Although the technologies used to surveil, communicate, and attack have changed throughout history, the advantages gained from scouting and synchronizing more effectively than one's opponent have endured. Stripped of its jargon, the Joint All-Domain Command and Control (JADC2) vision of integrating sensors and shooters comprises merely the latest Pentagon effort to provide U.S. forces with the timeless military advantages of superior information and control. This basic thrust of JADC2 represents a vital objective worth pursuing – even if the idealized outcome, fully integrated C2, likely remains as unattainable today as when the epigram appeared 60 years ago.

Despite JADC2's worthy goal, its programs and governance present great difficulties. Commonly cited problems include ambiguous concepts, disjointed programs, and overemphasis on technology. To spur constructive dialogue, this policy brief raises three additional concerns that have received less attention.

- Although the Pentagon has steadily added centralized controls to focus JADC2 efforts, further centralization risks curtailing the messiness essential to innovation and transforming stakeholders into opponents.
- 2. JADC2's annual funding, which we estimate at \$1.4 billion to \$3.5 billion in the fiscal year 2024 request, appears modest relative to its colossal ambitions, indicating a potentially risky reliance on small bets to produce large payoffs.
- 3. If JADC2 ultimately makes only middling progress, a realistic outcome regardless of how the Pentagon handles centralization and funding, policymakers should ensure that the U.S. military is not meaningfully worse off relative to potential adversaries than it would have been otherwise. Put differently, any changes introduced by JADC2, no matter how piecemeal, should adhere to a "first, do no harm" principle with respect to future warfighting. Modeling, simulation, and wargaming can help policymakers understand the potential consequences of varied levels of JADC2 realization.

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Speeding Toward Instability? Hypersonic Weapons and the Risks of Nuclear Use

Evan Braden Montgomery, Toshi Yoshihara

Today, states are pursuing an array of supposedly "disruptive" or "game-changing" technologies that could alter how they organize, train, equip, and employ their forces, including their nuclear forces. The 2022 National Defense Strategy emphasized the link between some of these technologies and the risk of nuclear use, noting that "a wide range of new or fast-evolving technologies and applications are complicating escalation dynamics and creating new challenges for strategic stability."

One class of emerging military capabilities frequently cited as one such technology is hypersonic weapons: unpowered projectiles and self-propelled vehicles that can travel at greater than five times the speed of sound, follow midcourse trajectories that make detection difficult, and execute complex aerodynamic maneuvers in the terminal phase of their flight, all of which could enable them to reduce defender warning time, penetrate missile defenses, and deliver conventional or nuclear payloads against targets with a high degree of accuracy. Moreover, the United States, Russia, and China are all in various stages of developing, producing, and fielding such platforms. These developments have led to a debate over the utility, cost, and risks of hypersonic weapons.

In Speeding Toward Instability?, authors Evan Braden Montgomery and Toshi Yoshihara examine both the key drivers of nuclear escalation and the broader set of challenges facing both the conventional and nuclear balance to address the critical questions in this debate. In their analysis, they find that hypersonic weapons are not uniformly a threat to stability, and are unlikely to upset strategic stability between the United States and China in the way that critics fear they might. However, their analysis also indicates that there are wider-ranging implications of China's ongoing nuclear buildup that current assessments fail to explore. In discussing these potential escalation pathways, Montgomery and Yoshihara also assess implications for U.S. strategic policy, especially at the theater level.

The Decisive Decade: United States–China Competition in Defense Innovation and Defense Industrial Policy in and Beyond the 2020s

Thomas G. Mahnken, Tai Ming Cheung

In the long-term competition between the United States and China, the competitive edge will be decided not only by who more effectively fields current capabilities and strategies, but also by which state's techno-security system can most effectively develop and field new technologies for strategic, dual-use, and defense applications. Although both states recognize the need to prevail in the techno-security competition, the two have drastically different approaches to defense innovation and defense industrial policy.

In The Decisive Decade, authors Tai Ming Cheung and Thomas G. Mahnken contend that the long-term techno-security competition between the United States and China hinges upon how both states organize, mobilize, and incentivize their respective innovation sectors and industrial economies. Cheung and Mahnken offer a comprehensive analysis of both systems, including a detailed assessment of China's defense industrial transformation in recent years and how recent global events have affected the defense industrial bases in both states. The authors conclude with a diagnostic net assessment of the U.S. and Chinese techno-security systems, judging that although the U.S. system is better





organized and structured for long-term competition than China's to be successful the United States cannot be complacent and must take urgent action to improve the performance of its system.



Beyond Precision: Maintaining America's Strike Advantage in Great Power Conflict

Tyler Hacker

The United States' (U.S.) provision of weapons to Ukraine over the last year has raised critical questions about the overall supply of Western munitions and the ability of the weapon industrial base to meet the munitions demands of contemporary conflict. Although war in Ukraine has focused the world's attention on the munitions issue, a survey of previous U.S. strike operations reveals that the U.S. has struggled to meet PGM demands in nearly every major campaign undertaken since their adoption. Looking to the future, simply producing and procuring more PGMs may not be enough to satisfy the requirements of a near-term great power conflict given current fiscal, industrial, and political constraints.

In Beyond Precision, CSBA Research Fellow Tyler Hacker examines five potential conflict scenarios in the Indo-Pacific region to highlight essential PGM types and identify capability and capacity gaps in the current U.S. PGM portfolio. Finding both insufficient on-hand inventories and inadequate production capacity, Hacker explores several approaches the United States could take to maintain its precision-strike advantage. He also challenges current assumptions about munitions production and consumption and assesses how U.S. strategy may need to adapt depending on conflict duration, operational objectives, and other scenario variables. Finally, Hacker provides near and long-term recommendations to maintain the U.S. precision-strike advantage well into the future.

Extending Deterrence by Detection: The Case for Integrating Unmanned Aircraft Systems into the Indo-Pacific Partnership for Maritime Domain Awareness

Travis Sharp, Thomas G. Mahnken, Tim Sadov

In May 2022, the "Quad" nations — the United States, Australia, Japan, and India — announced the creation of the Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA) to monitor illegal fishing, humanitarian crises, maritime security, marine conservation, and related issues in the region. IPMDA's most significant activity involves disseminating unclassified data collected by commercial satellites to improve the common operating picture of participating nations and bolster information sharing across regional fusion centers, including in India, Singapore, the Solomon Islands, and Vanuatu.

In Extending Deterrence by Detection, authors Travis Sharp, Thomas G. Mahnken, and Tim Sadov argue that providing IPMDA with a small fleet of unmanned aerial systems (UAS) would bolster the quality and quantity of intelligence it produces. Moreover, integrating UAS into IPMDA would improve both peacetime and potential wartime surveillance of the South China Sea, where China has concentrated the bulk of its antagonistic maritime activities.

Crucially, the author's analysis provides a framework for assessing the value of long-endurance UAS operations, including measuring ISR collection importance in the region and optimal flight paths for UAS operating from Guam or the Philippines. This report



includes the methodology used to establish the framework and plot the optimal flight paths, offering applications in the South China Sea and beyond. Using this framework, the authors conclude that in the short term, IPMDA could utilize contractor-owned, contractor-operated (COCO) aircraft to provide significant ISR value relative to its cost, especially if the Quad splits the bill among its member countries and/or with partners in the Indo-Pacific region.

Evaluate Like We Operate: Why DOD Should Evaluate Weapons Systems as Networked Force Packages, Not Individual Platforms

Travis Sharp, Tyler Hacker

Weapons do not conduct military operations in isolation from one another, and yet the U.S. defense community devotes considerable attention each year to individual platforms. The time spent appraising specific weapons is understandable, given the huge investments and cutthroat politics surrounding these projects, not to mention the defense budget boiling everything down to line items, but is misplaced in a strategic context.

In Evaluate Like We Operate, Senior Fellow Travis Sharp and Research Fellow Tyler Hacker propose that the defense community should instead evaluate weapons in terms of networked force packages, or NFPs, a middle layer above individual weapons systems and below battle networks and force structure. As the title indicates, this approach closely mirrors how the U.S. military actually employs these weapons systems and will become crucial as future force structures incorporate attributable drones, loitering weapons, and unmanned munition carriers that blur the lines between platform and weapon. Sharp and Hacker provide two illustrative analyses of the NFP approach, first applying it to the operational advantages of next-generation munitions and then reassessing the cost-effectiveness of advanced fighter aircraft by incorporating mission-level cost avoidance. The authors conclude with possible additional areas where the NFP approach could illuminate operational advantages and cost savings, as well as implementation strategies to overcome organizational and political resistance. By embracing the NFP approach, DoD will leverage an enduring U.S. advantage–openness to rigorous analysis, even if contrarian– to compete more effectively against China and Russia.

Inconsistent Congress: Analysis of the 2024 Defense Budget Request

Travis Sharp

After increasing the Department of Defense (DoD) budget in real terms during seven of the past eight fiscal years, Congress has now pivoted toward restraining spending by passing the Fiscal Responsibility Act of 2023. Approved in early June as part of the debt ceiling deal, the law imposes a liberating limit on defense. It unshackles defense spending from parity with nondefense spending but still caps military budgets at or near current spending levels for the next two fiscal years while brandishing the threat of a lowered defense cap and potential sequestration if Congress delays in passing full-year appropriations for any budget account.

In Inconsistent Congress, CSBA Senior Fellow and Director of Defense Budget Studies Travis Sharp explores two scenarios facing defense planners during these uncertainties. One, "frozen topline," would involve Congress failing to pass full-year appropriations for both fiscal year (FY) 2024 and FY 2025, triggering two years of sequestration. The other,





"abrupt cut," would involve Congress passing full-year appropriations matching the Fiscal Responsibility Act's cap but failing to do so for FY 2025, triggering one year of sequestration. Should either of these scenarios occur, Sharp indicates that sequestration-triggered spending cuts would exceed the savings that could be generated by cutting programs that legislators often identify as likely candidates for cost reduction.

Instead, Sharp analyzes congressional adjustments to the president's defense budget requests dating back to FY 2016. He finds that Congress demonstrates a programmatic orientation towards procurement spending over other purposes, often allocating procurement funds to legacy weapons systems, then assessing the impact of this orientation on innovation and readiness in defense. Moving forward, Sharp provides recommendations for the best path forward for Congress and the Pentagon, looking at both near-term planning and long-term education of defense priorities as they relate to budget.

This report is the 38th in a series of annual budget analyses published since 1983 by CSBA and its predecessor organization, the Defense Budget Project.

Mao's Army Goes to Sea: The Island Campaigns and the Founding of China's Navy

Toshi Yoshihara

From 1949 to 1950, the People's Liberation Army (PLA) made crucial decisions to establish a navy and secure China's periphery. The civil war had been fought with a peasant army, yet in order to capture key offshore islands from the Nationalist rival, Mao Zedong needed to develop maritime capabilities. Mao's Army Goes to Sea is a ground-breaking history of the founding of the Chinese navy and Communist China's earliest islandseizing campaigns.

In this definitive account of a little-known yet critical moment in China's naval history, Toshi Yoshihara shows that Chinese leaders refashioned the stratagems and tactics honed over decades of revolutionary struggle on land for nautical purposes. Despite significant challenges, the PLA ultimately scored important victories over its Nationalist foes as it captured offshore islands to secure its position.

Drawing extensively from newly available Chinese-language sources, this book reveals how the navy-building process, sea battles, and contested offshore landings had a lasting influence on the PLA. Even today, the institution's identity, strategy, doctrine, and structure are conditioned by these early experiences and myths. Mao's Army Goes to Sea will help US policymakers and scholars place China's recent maritime achievements in proper historical context—and provide insight into how its navy may act in the future.

The Japanese edition of *Mao's Army Goes to Sea* was published in December 2023.



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The New Makers of Modern Strategy: From the Ancient World to the Digital Age

Edited by Hal Brands

The New Makers of Modern Strategy is the next generation of the definitive work on strategy and the key figures who have shaped the theory and practice of war and statecraft throughout the centuries. Featuring entirely new entries by a who's who of worldclass scholars, this new edition provides global, comparative perspectives on strategic thought from antiquity to today, surveying both classical and current themes of strategy while devoting greater attention to the Cold War and post-9/11 eras. The volume includes chapters by Thomas G. Mahnken on "Arms Competition, Arms Control, and Strategies of Peacetime Competition from Fisher to Reagan"; Eric S. Edelman on "Nuclear Strategy in Theory and Practice: The Great Divergence"; and Toshi Yoshihara on "Sun Zi and the Search for a Timeless Logic of Strategy."







STRATEGIC CHOICES

CSBA plays an essential role in sparking a more informed debate on defense budgeting and resourcing. CSBA's Budgetary Studies and Strategic Choices program provides an independent source of budgetary analysis to help those both in and out of government 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 they fit within the overall context of U.S. defense policy and strategy.

The U.S. Strategic Choices Tool and Strategic Choices Exercises

CSBA's Strategic Choices Tool (SCT), which has been in use for more than a decade, is continuously updated to address new realities, including a strategic environment that sees the return of conventional warfare in the ongoing Russia-Ukraine war. These realities also promise new platforms and operations. The SCT is designed to illuminate challenges and foster a better understanding between the U.S. defense budget and building a force structure best suited for the years to come It accomplishes this by asking users to conduct long-term defense planning, develop new operational concepts, assess alternative force structures and postures, identify areas for greater investment or divestment, and evaluate the division of labor between the United States and its allies.

The Strategic Choices Tool allows users to explore alternative defense investment priorities and develop strategies for future plans and programs, highlighting how these plans should differ from current ones. Driven by a user's view of current and future threats to national security and the best strategy for addressing them, users rebalance defense force structure and investments over two five-year moves that correspond to consecutive Future Year Defense Programs. The U.S. tool includes over 1,500 force structure and capability options across twelve areas, including air, sea, ground, manpower, readiness, and R&D.

In 2023, CSBA conducted a number of notable exercises, including one that formed the culminating event of the Ronald Reagan Institute-Alexander Hamilton Society Peace Through Strength Boot Camp. In 2024, CSBA looks forward to further expanding its Strategic Choices Tool to include spending options for and exercises with U.S. allies, such as Japan, Finland, and Sweden.

The China Strategic Choices Tool

To advance the policy community's understanding of China's budgetary choices, relative tradeoffs, and constraints on military modernization, in 2022 CSBA created a one-of-a-kind model for exploring Beijing's defense portfolio. The China Strategic Choices Tool is a user-friendly, web-based application that allows participants to step into the shoes of Chinese statesmen and defense planners to make high-level resourcing and force structure decisions regarding the future of China's military. By simulating investments in and divestments from a broad portfolio of PLA capabilities, the tool allows users to generate alternative future force structures within a budgetary constraint. We look forward to applying the tool to a range of analytical tasks in coming months.

In 2023, CSBA used the China SCT as part of a research project for the U.S. Air Force Office of Commercial and Economic Analysis on Beijing's defense modernization priorities. In 2024, we will greatly expand the number of sponsored studies using the tool.





PUBLIC AND PROFESSIONAL EDUCATION

CSBA seeks to educate the leaders of today and tomorrow on strategy, concepts, capabilities, and resources through a variety of public and professional education opportunities sponsored exclusively by CSBA or in conjunction with our academic and corporate sponsors.

Engagement with U.S. Defense Leaders

In 2023, CSBA conducted a series of closed-door workshops with leaders from the U.S. national security community as well as leaders of allied and partner nations from across the globe to discuss defense policy and strategy, capabilities and concepts, and budgets and resources.

CSBA was also able to host a variety of virtual, hybrid, and in-person educational events throughout 2023, including sessions with the Secretary of Defense Executive Fellows Program (SDEFP), George Washington University, U.S. Army War College, U.S. Naval War College, The Johns Hopkins University School of Advanced International Studies (SAIS), Macquarie University, the Ronald Reagan Institute, and the Alexander Hamilton Society.

Congressional Defense Seminar Series

In October 2019, CSBA inaugurated the Congressional Defense Seminar Series (CDSS), an in-depth bipartisan program for Congressional staff members designed to provide staffers with the tools to master the conceptual foundations of defense policy as well as the intricacies of contemporary national security processes.

Following the success of the program in previous years, CSBA welcomed its fourth cohort of CDSS fellows in February 2023 to better accommodate Congressional staffers' schedules around the legislative calendar. Featuring senior CSBA scholars and outside national security experts, the 2023 CDSS included such topics as:

- Defense Strategy and the Threat Environment;
- The People's Liberation Army: Chinese Military Power;
- Nuclear Deterrence in the 21st Century;
- Defense Innovation and the Defense Industrial Base; and
- The Defense Budget: Policy, Process, and Stakeholders.

Defense Journalism Seminar Series

Building on the success of the Congressional Defense Seminar Series, in November 2020, CSBA launched the Defense Journalism Seminar Series (DJSS), a new national security seminar aimed at journalists working the defense beat for both trade and general-interest media outlets. This program aims to bring together reporters and writers for a series of interactive seminars that illuminate the conceptual foundations of defense policy as well as the intricacies of contemporary national security processes. The series features senior CSBA leaders and advisors, independent national security experts, and veterans of defense journalism.

The 2023-24 cohort was able to meet in-person and virtually for seminars as well as a happy hour and other informal engagements. In addition to offering deeply researched assessments of this subject matter, the CSBA Defense Journalism Seminar Series featured insights on the changing nature of defense news coverage and how to cover complex technological and geopolitical issues with credibility. CSBA provides an independent outlet for reporters to build relationships among sources and engage with subject matter experts on emerging trends.



Dave McCurdy

DEFENSE INVESTMENT AND INNOVATION INITIATIVE

a CSBA program



The Dave McCurdy Defense Investment and Innovation Initiative

In 2021, CSBA's longest-serving Director, Dave McCurdy, retired from the CSBA Board after 25 years of service. To recognize his many contributions to U.S. national security, CSBA established the Dave McCurdy Defense Investment & Innovation Initiative. Dave McCurdy served in the U.S. House of Representatives for nearly 15 years and was a leader on defense and intelligence issues. He served as the Chair of the House Intelligence Committee in 1991 and 1992 and was a co-sponsor of the landmark Nunn-McCurdy Amendment to the 1982 Defense Authorization Act, which transformed program management and cost analysis practices in the Department of Defense. He was a thoughtful overseer of CSBA programs and an enthusiastic participant in many projects and events during his tenure on the CSBA Board.

The McCurdy Initiative is designed to strengthen CSBA's established research agenda on strategy, concepts and capabilities, and resources and investments with a particular emphasis on the fiscal elements of defense. It would build on CSBA's existing budget analyses and tools while adding a new focus on enhancing the management of defense resources.

In 2023, the McCurdy Initiative yielded several major reports, including *The Decisive* Decade: United States–China Competition in Defense Innovation and Defense Industrial Policy in and Beyond the 2020s, Big Centralization, Small Bets, and the



Warfighting Implications of Middling Progress: Three Concerns about JADC2's Trajectory, and CSBA's 38th annual defense budget analysis, Inconsistent Congress. The initiative also supported public commentary and expanded applications of CSBA's Strategic Choices Tool.

In 2024, CSBA looks forward to expanding the McCurdy Initiative to include workshops on investment and innovation featuring CSBA experts and Council members.



LOOKING FORWARD: STRATEGIC INNOVATION FOR GLOBAL CHALLENGES

In 2024, CSBA's research will focus on the following issue sets:

SHAPING FUTURE DEFENSE STRATEGY

Assesses how emerging opportunities and threats affect the strategic landscape, potentially realigning priorities and providing for new approaches to international security. A focus here is on what are the most effective coalitions and partnerships for the United States and how best to understand the strategic environment in terms of regional geography and contemporary defense systems.

MAKING STRATEGIC CHOICES

Explores key choices related to force structure, procurement, research and development, modernization, and readiness against both current and future budgetary outlays, stimulating dialogue with decision-makers on how to best manage the United States' resources.

ASSESSING A CHANGING NUCLEAR BALANCE

Examines the current strategic balance, the relevance of existing arms control treaties, declaratory policies regarding nuclear forces, and calls to modernize or reduce the nuclear arsenal. One particular emphasis in this area is on the history of the Intermediate-Range Nuclear Forces (INF) Treaty and preparations for a world where the treaty is no longer in effect.

DIAGNOSING AND PROMOTING INNOVATION

Identifies capabilities and assets where the United States and its allies maintain a competitive advantage over its competitors and where they can seize upon technological advances and emerging strategies to grow those capabilities. This area includes future space architectures, potential game-changing technologies, and the roles these new capabilities play in strategic planning.

ENHANCING STRATEGIC ENGAGEMENT WITH ALLIES AND PARTNERS

Analyzes sovereign and combined operating concepts, capabilities, and capacity strategies and approaches for key U.S. allies and partners and stresses opportunities for strengthening force posture and leveraging the benefits of cooperation.



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). He currently serves as a member of the Congressionally-mandated 2022 National Defense Strategy Commission and as a member of the Army Science Board. His previous 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, in the Office of Net Assessment, and in the

Non-Proliferation Policy Office in the Office of the Secretary of Defense. He served as a member of the 2018 National Defense Strategy Commission and on the Board of Visitors of Marine Corps University. He served on the staff of the 2014 National Defense Panel, 2010 Quadrennial Defense Review Independent Panel, the Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction, and the Gulf War Air Power Survey. He served for 24 years as an officer in the U.S. Navy Reserve, including tours in Iraq and Kosovo.

In 2009 he was awarded the Secretary of Defense Medal for Outstanding Public Service and in 2016 the Department of the Navy Superior Civilian Service Medal.

Dr. Mahnken is the author of *Net Assessment and Military Strategy: Retrospective and Prospective Essays* (Cambria Press, 2020), *Learning the Lessons of Modern War* (Stanford University Press, 2020), *The Gathering Pacific Storm: Emerging U.S.-China Strategic Competition in Defense Technological and Industrial Development* (Cambria Press, 2018), *Arms Races in International Politics from the Nineteenth to the Twenty-First Century* (Oxford University Press, 2016), *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.



Eric Edelman counselor

Ambassador Eric S. Edelman 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.

CSBA STAFF

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 as the Chair of the National Defense Strategy Commission and on the bipartisan board of directors of the United States Institute of Peace.



Roger M. Poor CHIEF FINANCIAL OFFICER

Roger brings to CSBA decades of senior-level expertise in accounting, financial processes, internal controls, and compliance. His work in both the non-profit world as well as with growth-oriented services enterprises greatly enhances CSBA's financial operations in support of its stakeholders.

Prior to joining CSBA, Mr. Poor served in a global strategy consulting firm involved in international development, an aerospace engineering firm, a leading national security IT provider, and a Big Four public accounting firm, among other financial management roles. He has an MBA from the Wharton Business School and a BA from Princeton University.



Evan B. Montgomery

DIRECTOR OF RESEARCH AND STUDIES, AND SENIOR FELLOW

Evan Montgomery is a Senior Fellow and the Director of Research and Studies at the Center for Strategic and Budgetary Assessments.

During more than a decade at CSBA, Dr. Montgomery has written dozens of monographs, reports, journal articles, and book chapters on a wide range of topics, including great power competition, alliance management, East Asia security challenges, and nuclear issues. In 2016-2017 he served as Special Advisor to the Vice Chairman of the Joint Chiefs of Staff, where he worked primarily on defense innovation and nuclear modernization.

Dr. Montgomery is the author of numerous CSBA reports, most recently Reinforcing

the Front Line: U.S. Defense Strategy and the Rise of China and Extended Deterrence in the Second Nuclear Age: Geopolitics, Proliferation, and the Future of U.S. Security Commitments. His commentary and analysis have also appeared in The Wall Street Journal, Foreign Affairs, International Security, Security Studies, and the Journal of Strategic Studies, among other outlets. His book, In the Hegemon's Shadow: Leading States and the Rise of Regional Powers, was published by Cornell University Press.

Dr. Montgomery graduated summa cum laude from Villanova University and received his M.A. and Ph.D. from the University of Virginia. He is a past recipient of the Smith Richardson Foundation Strategy and Policy Fellowship, the Council on Foreign Relations International Affairs Fellowship, and the Department of Defense Joint Civilian Service Commendation Award.



Ross Babbage NON-RESIDENT SENIOR FELLOW

Dr. Ross Babbage 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 defence white paper.

Through the 1990s, Ross Babbage was a member of the team that reformed the Office of Defence Production with its loss-making, government-owned defence factories. What emerged was a modern, profitable corporation known as ADI Limited that grew to become Australia's largest defence 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.

His publications include A Coast Too Long: Defending Australia Beyond the 1990s (Allen & Unwin, Sydney, 1990), Australia's Strategic Edge in 2030 (Kokoda Foundation, Canberra, February 2011), Game Plan: The Case for a New Australian Grand Strategy (Menzies Research Centre, Canberra, 2015) and Countering China's Adventurism in the South China Sea: Strategy Options for the Trump Administration (CSBA, 2016).

Dr. Babbage was appointed a Member of the Order of Australia in 2011.



James "Jeb" Benkowski FELLOW

James "Jeb" Benkowski is a fellow at the Center for Strategic and Budgetary Assessments (CSBA) and a Ph.D. candidate at the Johns Hopkins University's Paul H. Nitze School of Advanced International Studies (SAIS). Before coming to CSBA, he was a predoctoral fellow at the Henry A. Kissinger Center for Global Affairs, where he helped manage the International Policy Scholars Consortium and Network. Jeb has consulted for the Department of Defense and previously worked at the RAND Corporation, Yale-NUS College, and Center for a New American Security. His research foci include force planning, civil-military relations, nuclear strategy, and Chinese defense policy. He holds an M.A. in International Relations and International

Economics from SAIS, where he was a Presidential Management Fellowship finalist, and a B.A. in Global Affairs from Yale University.

CSBA STAFF



David R. Berke NON-RESIDENT SENIOR FELLOW

Mr. Berke is a Non-Resident Senior Fellow at the Center for Strategic and Budgetary Assessments. He has over 23 years of experience as an active-duty U.S. Marine specializing in 5th generation aviation, personnel and manpower, international affairs, and innovation as a tool to respond to new and emerging international security threats and challenges. His experience lies at the intersection of operational expertise and strategy development.

Berke is the founder of BVR Consulting, specializing in 5th generation air warfare and the integration of modern air assets into highly contested three-dimensional battlespace. His professional highlights include two combat carrier deployments in the F/A-18 to Iraq

and Afghanistan, a tour as a TOPGUN Instructor and F-16 pilot, experience as a combat Forward Air Controller, the only Marine to fly the F-22 Raptor while serving as the Division Commander in a USAF operational test squadron, the first operational pilot to fly the F-35B serving as the squadron commander, an academic fellowship at the Johns Hopkins University School of Advanced International Studies, and a tour as a division chief in the Joint Staff J-8 directorate and member of the Vice-Chairman's Joint Staff Innovation Group.

Mr. Berke received a master's degree in International Public Policy from SAIS and a B.A. in Political Science from California State University at Fullerton.



Jack Bianchi

Jack Bianchi focuses on Indo-Pacific strategy and U.S.-China long-term competition, to include the U.S.-China military balance, the defense of regional allies, nuclear strategy, technology issues, and political warfare.

Mr. Bianchi was previously a Research Analyst at Defense Group Inc. where he performed bilingual (Chinese and English) open source research and analysis for U.S. government clients on Chinese cybersecurity issues and China's defense-related science and technology development. His prior experience also includes work at the Federal Bureau of Investigation and in the Office of Investment Security at the Department of the Treasury.

Mr. Bianchi's writing has appeared in War on the Rocks, China Brief, and ORMS Today, as well as in CSBA publications and in Chinese Naval Shipbuilding: An Ambitious and Uncertain Course. He is a term member of the Council on Foreign Relations and a Pacific Forum Young Leader. Mr. Bianchi has working proficiency in Mandarin Chinese.



Christopher J. Bowie NON-RESIDENT SENIOR FELLOW

Trained as a historian, Dr. Bowie joined the RAND Corporation in 1981 as a member of the technical staff, where he worked on nuclear bomber operations, aerial refueling concepts, fighter employment operations, and a variety of air power doctrine and strategy issues.

Dr. Bowie left RAND to serve as a member of the Secretary of the Air Force's personal staff from 1989-1991 and was awarded the Exceptional Civilian Service medal. Following this assignment, Dr. Bowie returned to RAND to serve as Associate Director of the National Security Studies program. In 1994, Dr. Bowie joined Northrop Grumman, where he held a variety of management positions at the B-2 Division, Air Combat Systems,

Integrated Systems, and Corporate.

In 2002, the Air Force selected him for the Senior Executive Service to serve as the Deputy Director for Strategic Planning on the Air Staff. In that capacity, Dr. Bowie helped develop future USAF force structure plans, force structure planning tools, Air Force advocacy and outreach products, divestiture contingency planning, space policy, and a variety of other key long-range planning issues.

Dr. Bowie rejoined Northrop Grumman in 2005 to conduct cost-effectiveness and policy analyses of a wide array of issues, including aerial refueling, long-range strike, unmanned systems, radar technology, aircraft sustainment, and ballistic missiles. In 2010, he was appointed Director of the Corporate Analysis Center, where he and his team provided analytic support to senior management on a variety of key issues.

Dr. Bowie retired from Northrop Grumman in 2021 and continues to write on key air power and national security issues.



Josh Chang

Josh Chang is an analyst at the Center for Strategic and Budgetary Assessments, where he focuses on U.S. defense strategy, great power competition, and foreign military capabilities and doctrines. He previously interned with research organizations such as the Center for Strategic and International Studies, Long Term Strategy Group, Hudson Institute, and the Council on Foreign Relations. Josh regularly writes about Latin American and East Asian security issues for the Georgetown Security Studies Review, where his work won GSSR's Best in Class Award for the 2019-2020 term.

CSBA STAFF



Tai Ming Cheung NON-RESIDENT SENIOR FELLOW

Tai Ming Cheung is director of the University of California-wide Institute on Global Conflict and Cooperation, and a professor in the School of Global Policy and Strategy at the University of California, San Diego. His areas of research focus include China's efforts to become a world-class science and technology power, and the relationship between geo-economics, innovation, and national security. His latest book is *Innovate to Dominate: The Rise of the Chinese Techno-Security* State (Cornell University Press, August 2022). He is also the co-author with CSBA President Tom Mahnken of *The Decisive Decade: United States–China Competition in Defense Innovation and Defense Industrial Policy in and Beyond the 2020s* issued by CSBA in May 2023. Dr. Cheung has

a PhD in War Studies from King's College, London.



Thane C. Clare SENIOR FELLOW

Thane Clare is a Senior Fellow at the Center for Strategic and Budgetary Assessments. His analytical work focuses on naval, air, and space power, strategic war planning, defense planning in an era of great-power competition, and the nexus between operational planning and defense acquisition.

Dr. Clare joined CSBA following a 25-year career in the United States Navy, retiring at the rank of Captain. His final posting was as Branch Head, Navy Analytics, in the Office of the Chief of Naval Operations. Immediately prior to his final tour, Dr. Clare served as a Strategic Plans Advisor in the Office of the Secretary of Defense.

During his Navy career, Dr. Clare served twice in command at sea: first as Commanding Officer (CO) of the coastal patrol ship USS Whirlwind (PC 7), deployed to the Persian Gulf for the defense of critical Iraqi oil infrastructure, and most recently as CO of USS Mustin (DDG 89), forward deployed to Yokosuka, Japan and operating in the East and South China Seas, Philippine Sea, Pacific Ocean, and adjacent waters.



David A. Cooper NON-RESIDENT SENIOR FELLOW

Dr. David A. Cooper is a Non-resident Senior Fellow at the Center for Strategic and Budgetary Assessments. He is a hybrid scholar-practitioner with more than three decades of expertise in nuclear policy, arms control negotiations, nuclear and missile nonproliferation, and foreign and defense policy. He previously held a tenured post as the James V. Forrestal Professor of National Security Affairs at the U.S. Naval War College, also serving for eight years as Chair of the Department of National Security Affairs. He is the author of numerous books, chapters, and articles. His most recent books are Arms Control for the Third Nuclear Age: Between Disarmament and Armageddon (Georgetown University Press, 2021) and, with Nikolas Gvosdev and Jessica Blankshain, Decision-

Making in American Foreign Policy: Translating Theory into Practice (Cambridge University Press, 2019). His articles have appeared in journals including Foreign Policy Analysis, International Studies Perspectives, Nonproliferation Review, Orbis, Journal of Diplomacy and International Relations, and Washington Quarterly. He previously served as a Senior Fellow and Director of Education and Outreach at the Center for the Study of Weapons of Mass Destruction at the National Defense University and he has taught graduate and undergraduate courses at Georgetown University, American University, and Park University.

Prior to becoming an academic, he served for nearly twenty years as a policy official in the Office of the Secretary of Defense (OSD) including as a career tenure member of the Senior Executive Service (SES). In his last SES assignment, he was dual-hatted as the inaugural Director of Strategic Communication and Interim Director of Outreach (J-9) at the then-new U.S. Africa Command. Prior Pentagon roles included as Principal Director for Homeland Security Integration, Director of Nonproliferation Policy, and Director of Strategic Arms Control Policy. He has extensive international negotiating experience in roles such as U.S. Representative to the United Nations Panel of Governmental Experts on Missiles, U.S. Head of Delegation to the Proliferation Security Initiative (PSI) Operational Experts Group, and OSD representative to the Biological Weapons Convention (BWC) Protocol negotiations, Missile Technology Control Regime (MTCR), Organization for Security and Cooperation in Europe (OSCE), the Arms Control and Regional Security (ACRS) talks of the Middle East Peace Process, and in numerous bilateral negotiations including with Russia, China, and North Korea. He has extensive regional security experience with the Indo-Pacific, Europe-NATO, and the Middle East.



Madison Creery RESEARCH FELLOW

RESEARCH FELLOW Madison Creery is a research fell

Madison Creery is a research fellow at the Center for Strategic and Budgetary Assessments. Her work focuses on the defense budget, future warfare, and great power competition. Prior to CSBA, Madison was a Cyber Strategy and Policy Analyst with the U.S. Cyberspace Solarium Commission, where she developed approaches and recommendations for the Department of Defense in the cyber domain. Her prior experience also includes work at the American Enterprise Institute and the Center for Strategic and International Studies, focusing on U.S. military strategy and the defense budget.

CSBA STAFF



Katherine Kjellström Elgin

Dr. Katherine Kjellström Elgin is a fellow at the Center for Strategic and Budgetary Assessments. She brings rigorous research to policy discussions and has held positions in both academic and policy organizations. Prior to joining CSBA, she served as a DAAD Post-Doctoral Fellow at the Foreign Policy Institute of Johns Hopkins School of Advanced International Studies (SAIS), where she wrote and published on grand strategy, great power relations, U.S. defense strategy, European security, and alliance management. Dr. Elgin has also worked at the Brookings Institution and with the Long Term Strategy Group in Washington, D.C. In 2019, she served as a visiting fellow at the Institute for Security & Development Policy in Stockholm, Sweden.

Dr. Elgin earned her Ph.D. in Public Affairs (Security Studies) from Princeton University's School of Public & International Affairs. At Princeton, she served as the director of the Center for International Security Studies' Strategic Education Initiative, leading the university's program for educating and mentoring students with an interest in national and international security.

Dr. Elgin speaks French, Russian, and Swedish.



Tyler Hacker RESEARCH FELLOW

Tyler Hacker is a research fellow at the Center for Strategic and Budgetary Assessments. His work focuses on U.S. defense strategy, future warfare, and great power competition. Prior to joining CSBA, Tyler was an analyst at the Congressional Research Service, where he conducted research on topics in defense logistics. Tyler previously served as a field artillery officer in the United States Army in Germany, where he participated in NATO operations and exercises in Poland, Romania, and the Baltic states. He has also completed internships at the U.S. Army War College and the American Enterprise Institute.



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 where he served as professor and acting department head, 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.
Dr. Haffa received a B.S. in International Affairs from the U.S. Air Force Academy, an M.A. in Political Science from Georgetown University, an 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. His experience and research focus 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. 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.

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



Doyle Hodges NON-RESIDENT SENIOR FELLOW

Doyle Hodges is a scholar of national security and defense, who from 2019-2023 was Executive Editor of the Texas National Security Review (TNSR). From 1992-2013, he served as a naval officer, commanding a salvage ship forward deployed to Sasebo, Japan and the USS Ross (DDG 71), a destroyer homeported in Norfolk, Virginia. His analysis has appeared in Lawfare, War on the Rocks, TNSR, and The Washington Post. He currently teaches at Princeton University and George Mason University and previously taught at the U.S. Naval Academy and the U.S. Naval War College. He holds a doctorate in international security studies from Princeton University, masters' degrees from Princeton, the U.S. Naval War College, and the University of Maryland, College Park, and

an undergraduate degree from the U.S. Naval Academy.

CSBA STAFF



Eleanor S. Hughes RESEARCH ASSISTANT

Eleanor Shiori Hughes is a Research Assistant at the Center for Strategic and Budgetary Assessments. Her research and work focus on U.S. force structure and defense trends in the Indo-Pacific region, particularly in Japan, Taiwan, and Australia.

Prior to joining CSBA, Eleanor was a Defense Analyst at The Asia Group (TAG), where she supported the firm's defense and aerospace practice by researching industry and complex geopolitical dynamics unfolding across various markets. She has also worked at the Asia Society Policy Institute, the Center for Strategic and International Studies' Japan Chair, and the Institute for the Study of Diplomacy at Georgetown University.

Eleanor is a member of the Pacific Forum's Young Leaders Program, the International Institute for Strategic Studies (IISS), the Council on Foreign Relations' Young Professionals Program, and The Australian American Leadership Dialogue's Young Leadership Dialogue.

Eleanor holds an M.A. in Asian Studies from Georgetown University's Walsh School of Foreign Service and a B.A. in History from Saint Mary's College in Notre Dame, IN. She speaks Japanese.



Michael A. Hunzeker NON-RESIDENT SENIOR FELLOW

Michael A. Hunzeker is an assistant professor at George Mason University's Schar School of Policy and Government, where he also serves as the associate director of the Center for Security Policy Studies. His work on deterrence, military adaptation, and war termination has appeared in Security Studies, the Journal of Strategic Studies, PS: Politics and Political Science, Parameters, Defense One, War on the Rocks and the RUSI Journal. Michael recently published a book on wartime learning, Dying to Learn: Wartime Lessons from the Western Front with Cornell University Press. He has also co-authored monographs on conventional deterrence in northeastern Europe and the Taiwan Strait. Michael served in the U.S. Marine Corps from 2000–2006 and holds an A.B. from the

University of California, Berkeley as well as a Ph.D., M.P.A., and A.M. from Princeton University.



Ivan Kanapathy NON-RESIDENT SENIOR FELLOW

From March 2018 to July 2021, Ivan Kanapathy served on the White House's National Security Council staff as Director for China, Taiwan, and Mongolia and Deputy Senior Director for Asian Affairs. In this capacity, he staffed and advised the President and National Security Advisor and led U.S. government interagency policy development and implementation on relations and engagement with China and Taiwan – including shepherding the most comprehensive and significant U.S. policy shift toward the People's Republic of China in four decades. From 2014 to 2017, Ivan worked at the American Institute in Taiwan, representing U.S. interests and advising on military and security issues in Taipei. Earlier in his career, Ivan spent a year studying in Beijing and traveling

throughout China, Taiwan, and Southeast Asia as a US Marine Corps foreign area study fellow; he later led the development and implementation of the service's global security cooperation strategy and policies at the Pentagon. As a Naval Flight Officer, Ivan accumulated 2500 flight hours, served three years as a F/A-18 weapons officer and tactics instructor at the US Navy Fighter Weapons School (better known as TOPGUN), and deployed to the Middle East and Western Pacific five times, earning several combat awards and decorations. He holds a M.A. (with Distinction) in East Asia security studies from the Naval Postgraduate School, a B.S. in Physics and Economics from Carnegie Mellon University, and an A.A. and diploma (with Highest Honors) in Chinese-Mandarin from the Defense Language Institute.



Sameer Lalwani NON-RESIDENT SENIOR FELLOW

Sameer Lalwani is a Senior Expert in the Asia Center at the U.S. Institute of Peace.

Dr. Lalwani's research interests include nuclear deterrence, interstate rivalry, alliances, crisis behavior, counter/insurgency, and Indo-Pacific security. He is a term member with the Council on Foreign Relations, and a Contributing Editor to War on the Rocks. Previously, he was a Senior Fellow for Asia Strategy and the Director of the South Asia Program at the Henry L. Stimson Center. He has also been an Adjunct Professor at GWU's Elliott School of International Affairs and a Stanton Nuclear Security Postdoctoral Fellow at the RAND Corporation. He is the editor of Investigating Crises: South Asia's Lessons, Evolving Dynamics, and Trajectories (Stimson Center, 2018). His

research has also been published in Security Studies, International Studies Quarterly, the Journal of Strategic Studies, Small Wars & Insurgencies, Survival, The Washington Quarterly, Asian Survey, Foreign Affairs, and the New York Times. Lalwani completed his Ph.D. from the Massachusetts Institute of Technology' Department of Political Science and was an affiliate of the MIT Security Studies Program.



Benjamin Lambeth NON-RESIDENT SENIOR FELLOW

Dr. Benjamin S. Lambeth 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. 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*.

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 STAFF



Kimberly Lehn NON-RESIDENT SENIOR FELLOW

Prior to this role, Kim spent nearly 18 years in the U.S. federal government leading intelligence, defense, and foreign policy communities primarily on China and East Asia issues. She spent most of her career in the intelligence community, most recently serving as the chief of staff of the China Mission Center and the East Asia Pacific Mission Center at the Central Intelligence Agency and as a senior analytic manager and analyst. Kim also served assignments to the National Security Council's Directorate of East Asia, the Department of State's Intelligence and Research Bureau, and the U.S. House of Representatives Armed Services Committee (HASC).

At the U.S. Congress, Kim was HASC's lead policy adviser on the China and the Indo-

Pacific portfolio and led the committee's oversight of U.S. Indo-Pacific Command, U.S. European Command, U.S. Northern Command, and later the U.S. Strategic Forces Command. As a professional staff member, Kim focused on the national security challenges facing the United States, particularly strategic competition with China and Russia, and the important role alliances and partnerships play to build collective security. She also led the development of the Pacific Deterrence Initiative, a bipartisan legislative initiative to elevate the Department of Defense's resource priorities on the Indo-Pacific theater, and played a central role in the committee's oversight and implementation of the National Defense Strategy.

She holds an M.A. in International Politics and a B.A. in interdisciplinary studies: Communication, Legal Institutions, Economics, and Government, both from American University. She is a Fulbright scholar and David L. Boren National Security Education Program recipient to South Korea.



Whitney M. McNamara NON-RESIDENT SENIOR FELLOW

Whitney McNamara is an Associate Vice President at Beacon Global Strategies where she supports its National Security and Technology practice.

She previously led the Science and Technology portfolio of the Department of Defense's Defense Innovation Board (DIB), whose mission is to provide the Secretary of Defense, Deputy Secretary of Defense, and other senior leaders across the Department with independent advice and recommendations on emerging technologies and innovative approaches that DoD should adopt to ensure U.S. technological and military dominance. Before that, she served in the Department's Chief information Office as an emerging technologies policy subject matter expert. Prior to that, she was a Senior Analyst at the Center

for Strategic and Budgetary Assessments, focusing on emerging technologies, future operating concepts, and informationized warfare in the context of long term technological and military competition.

Ms. McNamara is a former 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. She received her M.A. in Strategic Studies and International Economics from the Johns Hopkins School of Advanced International Studies where she was a Bradley Fellow and a Presidential Management Fellowship Finalist. Prior to that, she spent four years working in the Middle East as a project manager supporting capacity building in local civil society organizations throughout the Arab Spring. She has written for or been quoted in the Washington Post, Cipher Brief, Real Clear Defense, Breaking Defense, C4ISRNET, Air Force Magazine, The Center for International Maritime Security, Aspen Review, The National Interest, Al-Monitor, and Al Arabiya.



Meredith Meyers

Meredith is CSBA's office manager, bringing with her a comprehensive accounting and managerial skill set. Her background includes a local niche law firm, a large international law firm, and a financial planning office. She manages a broad array of responsibilities for CSBA including accounting functions for payables and receivables, office administration, human resources, contracting and purchasing, and office operations. In her free time, Meredith enjoys gardening and biking.



Casey Nicastro

Casey Nicastro is an intern at the Center for Strategic and Budgetary Assessments. He has a B.A. in Political Science from Villanova University and is currently pursuing an M.A. in International Relations at Johns Hopkins School of Advanced International Studies.



Tate Nurkin NON-RESIDENT SENIOR FELLOW

Tate Nurkin is a Non-Resident Senior Fellow with the Center for Strategic and Budgetary Assessments and the founder of OTH Intelligence Group LLC, a defense consulting and research firm. He is also a Non-Resident Senior Fellow at the Atlantic Council.

He is a frequent author and speaker on defense technology and the future of military capabilities; Indo-Pacific defense, security, and geopolitical issues; and the global defense industry and markets. He also has nearly 25 years of experience in the design and delivery of wargames and scenario planning exercises. His analysis and commentary has appeared in CNN.com, Defense News, Jane's Defence Weekly, Jane's Intelligence Review, The Hill, Deutsche Welle, and The New Atlanticist blog among other publications.

Recently published reports include The Five Revolutions: Examining Defense Innovation in the Indo-Pacific (December 2020) and Emerging Technologies and the Future of US-Japan Defense Collaboration (April 2020). He also served as lead author on China's Advanced Weapons Systems, a Jane's report published in 2018 by the US-China Economic and Security Review Commission. He has provided testimony to the Commission on two occasions. In conjunction with Armasuisse, Tate has authored the bi-monthly DEFTECH Scan, a publicly available global survey of defense technology developments since January 2019.

Prior to establishing OTH Intelligence Group in March 2018, Tate spent 12 years at Janes where he served in a variety of roles, including from 2013 as the Executive Director of Strategic Assessments and Futures Studies.

From 2014 – 2018 he served consecutive two-year terms on the World Economic Forum's Nuclear Security Global Agenda Council and its Future Council on International Security, which was established to explore the implications of Fourth Industrial Revolution technologies on global security and defense.

CSBA STAFF

Tate previously worked for Joint Management Services, the Strategic Assessment Center of SAIC, and the Modeling, Simulation, Wargaming, and Analysis team of Booz Allen Hamilton primarily supporting the U.S. Defense and Intelligence Community. He holds a Master of Science degree in International Affairs from the Sam Nunn School of International Affairs at Georgia Tech and a Bachelor of Arts in history and political science from Duke University. He lives in Charlotte, NC.



Chris Radcliffe

Chris Radcliffe is an intern at the Center for Strategic and Budgetary Assessments. He primarily focuses on great power and strategic space competition, missile defense, and emerging warfare trends. Prior to CSBA, Chris worked at Deloitte and consulted the Department of State's Directorate of Defense Trade Controls. He is currently completing his master's degree at the Johns Hopkins School of Advanced International Studies.

Before moving to Washington, Chris interned for the U.S. Embassy in Warsaw, Poland, and the International Institute for Strategic Studies.



Carl Rehberg NON-RESIDENT SENIOR FELLOW

Dr. Carl Rehberg was founder and director of the Headquarters Air Force Asia-Pacific Cell, which played a pivotal role in the development of Air Force strategy, force development, planning, analysis, and warfighting concepts supporting initiatives related to Asia-Pacific and the DoD Third Offset Strategy. Dr. Rehberg spearheaded the establishment of the China Aerospace Studies Institute (CASI) and led the development of innovative concepts and capability proposals to improve DoD's joint resiliency and integrated air and missile defenses.

Prior to this assignment, he was the Assistant Associate Director for AF Strategic Planning and Director, Analysis Division in the AF QDR organization, leading multiple

assessments of future capabilities and force structure.

During his 26+ year Air Force career, Rehberg served as a command pilot with over 6200 hours flying time in 25+ different aircraft including the KC-135, B-1B, TG-7, and T-3A. He taught Military Art and Science at the USAF Academy, and was instrumental in helping form the USAF Academy Center for Character Development. In the late 1990s, he served in the Pentagon as a strategic planner, programmer, and analyst, leading several studies for the Secretary of Defense on the Total Force. In 2001, Rehberg was selected as a National Security Fellow at Harvard and then spent two years at the National Defense University's Industrial College of the Armed Forces (ICAF) teaching courses in grand strategy, military mobilization, and the aircraft industrial base. As Chief, Long-Range Plans of the Air Staff, Rehberg led the development of future force structure plans and courses of action for numerous AF/defense resource and tradespace analyses.

Dr. Rehberg holds B.S. in Industrial Technology [Aviation Administration] with honors from California State University, Los Angeles; an M.A. in Political Science from the University of South Dakota; and a Ph.D. in Public Administration from the University of Colorado at Denver. He was also a National Security Fellow at Harvard University.



Joseph Ross

Joseph Ross is an analyst at the Center for Strategic and Budgetary Assessments. His research and work focus on the U.S.–Japan alliance, U.S.–Taiwan security policy, future joint warfighting concepts, and developing trends in space. He previously interned at organizations such as the Stimson Center's Japan Program, the Global Taiwan Institute, and the Project 2049 Institute, where he provided writing and research on Japan's joint operational challenges, alliance crisis coordination, and Chinese military operations.



Robert E. Schmidle, Jr. NON-RESIDENT SENIOR FELLOW

Lieutenant General (retired) Schmidle is the University Advisor on Cyber Capabilities and Conflict Studies at Arizona State University. Dr. Schmidle is also a Professor of Practice in the School of Politics and Global Studies. Additionally, he is a Senior Fellow in the Center on the Future of War at Arizona State University.

While on active duty he served as the first Deputy Commander of United States Cyber Command, responsible for standing up the command while concurrently executing full-spectrum cyber operations. Subsequently, he was the head of Marine Aviation and his final assignment on active duty was as the Principal Deputy Director, Cost Assessment and Program Evaluation in the Office of the Secretary of Defense.

He holds degrees from Drew University and American University and earned his doctorate from Georgetown University. His thesis, recognized with distinction, was titled "The Power of Context in Shaping Moral Choices." He is a member of the Council on Foreign Relations and the Defense Science Board. His numerous publications are in the fields of moral philosophy, social psychology, and military history.



Harrison Schramm NON-RESIDENT SENIOR FELLOW

Harrison Schramm has been a leader in the Operations Research community for the past decade. Prior to joining CSBA, he had a successful career in the US Navy, where he served as a Helicopter Pilot, Military Assistant Professor at the Naval Postgraduate School, and as a lead Operations Research Analyst in the Pentagon. His areas of emphasis were large-scale simulation models, statistics, optimization, and applied probability. His current research is at the intersection of data, mathematical models, and policy.

Mr. Schramm enjoys professional accreditation from the Institute for Operations Research and Management Sciences (CAP, INFORMS), the American Statistical Association (PStat, ASA), and the Royal (UK) Statistical Society (CStat, RSS).

His published work has appeared in INTERFACES, J. Applied Meteorology and Climatology, SIGNIFICANCE, J. Mathematical Biosciences, Proceedings of the US Naval Institute, OR/MS Today, and Military Operations Research. He is a past Vice President of the Military Operations Research Society (MORS) and is active in several Committees of INFORMS. Notably, in 2018, he served as a Judge for the prestigious Franz Edelman Award.

He is a recipient of the Richard H. Barchi Prize, Steinmetz Prize, Meritorious Service Medal, Air Medal, and the Naval Helicopter Association's Aircrew of the Year. He is the 2018 recipient of the Clayton Thomas award for distinguished service to the profession of Operations Research.

CSBA STAFF



Travis Sharp

SENIOR FELLOW AND DIRECTOR OF BUDGET STUDIES

Travis Sharp directs the budget program and works to educate and inform policymakers, senior leaders, and the general public about the defense budget and issues pertaining to resourcing national security. He also serves as an officer in the U.S. Navy Reserve while completing his Ph.D. in security studies at Princeton University's Woodrow Wilson School of Public and International Affairs.

Sharp has held positions with academic and policy organizations, including George Washington University's Institute for Security and Conflict Studies, West Point's Modern War Institute, the Office of the Secretary of Defense, the Center for a New American Security, and the Center for Arms Control and Non-Proliferation. He has published

think tank monographs, journal articles, and commentaries on defense spending and strategy, cybersecurity, and military-to-military contacts between great power rivals, the topic of his dissertation.

Sharp is a past recipient of the Sasakawa Young Leaders Fellowship, the A.B. Krongard and John Parker Compton Fellowships at Princeton, the 1LT Bacevich Fellowship at CNAS, the Harold Rosenthal Fellowship in International Relations, and the Herbert Scoville Peace Fellowship.

Sharp holds a B.A. in History and Political Science (*summa cum laude*) from the University of San Francisco, an M.P.A. in International Relations, and an M.A. in Public Affairs from Princeton University, Woodrow Wilson School of Public and International Affairs.



Jan van Tol

Prior to his retirement from the Navy in 2007, Captain van Tol served as a 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.

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



Toshi Yoshihara senior fellow

Before joining CSBA, Toshi Yoshihara held the John A. van Beuren Chair of Asia-Pacific Studies at the U.S. Naval War College where he taught strategy for over a decade. He was also an affiliate member of the China Maritime Studies Institute at the war college.

Dr. Yoshihara has been a visiting professor of international politics at the Fletcher School of Law and Diplomacy, Tufts University since 2012. He has also taught as a visiting professor at the School of Global Policy and Strategy, University of California, San Diego and as a visiting professor in the Strategy Department at the U.S. Air War College. He has served as a research analyst at the Institute for Foreign Policy Analysis, RAND, and the American Enterprise Institute.

Dr. Yoshihara has testified before the Defense Policy Board, the House Foreign Affairs Committee, and the U.S.-China Economic and Security Review Commission. He is the recipient of the Navy Meritorious Civilian Service Award in recognition of his scholarship on maritime and strategic affairs at the Naval War College.

He is co-author of *Red Star over the Pacific: China's Rise and the Challenge to U.S. Maritime Strategy* (Naval Institute Press, 2010 and 2018), which has been listed on the Chief of Naval Operation's Professional Reading Program since 2012. Translations of *Red Star over the Pacific* have been published in China, Germany, Japan, South Korea, and Taiwan.

He has also co-authored Indian Naval Strategy in the Twenty-first Century (Routledge, 2009) and Chinese Naval Strategy in the Twenty-first Century: The Turn to Mahan (Routledge, 2008). He is co-editor of Strategy in the Second Nuclear Age: Power, Ambition, and the Ultimate Weapon (Georgetown University Press, 2012) and Asia Looks Seaward: Power and Maritime Strategy (Praeger, 2008). His articles on Chinese seapower, maritime strategy, and Asian security issues have appeared in Journal of Strategic Studies, Asian Security, Washington Quarterly, Orbis, World Affairs, Comparative Strategy, Strategic Analysis, Journal of the Indian Ocean Region, and Naval War College Review. The Naval War College Review awarded him the Hugh G. Nott Prize for best article of 2010.

He holds a Ph.D. from the Fletcher School of Law and Diplomacy, Tufts University, an M.A. from the School of Advanced International Studies, Johns Hopkins University, and a B.S.F.S. from the School of Foreign Service, Georgetown University.

CSBA BOARD MEMBERS



Barbara Humpton, Chair PRESIDENT & CEO SIEMENS USA

Barbara Humpton serves as President and Chief Executive Officer of Siemens USA, using its global leadership in engineering and technology innovation to meet America's toughest challenges, delivering solutions for industry, hospitals, utilities, cities, and manufacturers: from efficient power generation, to digital factories and oil and gas fields, to medical diagnostics, to locomotives, to next-generation software used in every phase of product development. Prior to joining Siemens, Humpton served as a Vice President at Booz Allen Hamilton where she was responsible for program performance and new business development for technology consulting in the Department of Justice and Department of Homeland Security.

Earlier, Humpton was a Vice President at Lockheed Martin Corporation with responsibility for Biometrics Programs, Border and Transportation Security and Critical Infrastructure Protection, including such critical programs as the FBI's Next Generation Identification and the TSA's Transportation Workers' Identification Credential. Humpton is a graduate of Wake Forest University with a degree in Mathematics. She resides in Washington, DC with her husband David.



Anita Antenucci Founder and managing director 3WIRE PARTNERS

Ms. Antenucci recently founded a merchant banking firm partnering with investors and business owners in the government contracting sector. Until last year, Antenucci was a Senior Managing Director at Houlihan Lokey's Aerospace • Defense • Government practice and was a member of the firm's board of directors prior to its IPO, in August 2015. Antenucci has nearly three decades of investment banking experience, including M&A, financing, and valuation. Prior to that, she served as the Co-President and Managing Director of Quarterdeck Investment Partners, a boutique industry investment bank, and worked on the buyside and sellside for an array of Fortune 500 and international

companies, small-caps, entrepreneurs, and private equity owners. Her clients have included most of the world's leading aerospace/defense contractors. With degrees from Johns Hopkins' School of Advanced International Studies and Northwestern University, Antenucci is the Chair of Board of Trustees of the Shakespeare Theatre Company and a Life Director of the Space Foundation. Antenucci is also a Director of the TSE-listed AirBoss of America Corporation and its defense-focused subsidiary AirBoss Defense Group and is on the Board of Advisors for I2Capital. Anita is a 2009 Henry Crown Fellow of The Aspen Institute and a member of the Aspen Global Leadership Network.



Devon Cross

PRESIDENT POLICY FORUM ON INTERNATIONAL SECURITY 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.



Phil Davidson FOUNDER DAVIDSON STRATEGIES LLC

Admiral Davidson retired from the U.S. Navy in 2021, following a highly distinguished 39-year military career, which culminated in his service as the 25th Commander of United States Indo-Pacific Command (USINDOPACOM) from May 2018 through April 2021. USINDOPACOM is the oldest and largest U.S. combatant command, including 380,000 soldiers, sailors, marines, airmen, coast guardsmen, and Department of Defense civilians.

Admiral Davidson has served as a surface warfare officer in frigates, destroyers, cruisers, and aircraft carriers, and was commander of the Eisenhower Carrier Strike Group. He was previously the commander, U.S. Fleet Forces Command in his first 4-star assign-

ment, the commander of U.S. SIXTH Fleet and commander, Naval Striking and Support Forces NATO as a 3-star, and among other joint, interagency and fleet headquarters assignments, served in the State Department, and in the Office of the Vice President as the Navy's military aide to the Vice President of the United States. Admiral Davidson's decorations include the Defense Distinguished Service Medal, the Navy and Marine Corps Commendation Medal with Combat "V," a Superior Honor Award from the U.S. Department of State, and other personal, service, unit, and campaign awards. He is is a graduate of the United States Naval Academy and holds an M.A. in National Security and Strategic Studies from the U.S. Naval War College.



Rep. J. Randy Forbes (R-VA), Retired

U.S. HOUSE OF REPRESENTATIVES, 2002-2015

Former U.S. Representative J. Randy Forbes is a Senior Distinguished Fellow at the U.S. Naval War College in Newport, Rhode Island, where he shares with students and faculty his perspective on topics such as maritime strategy, naval policy, civil-military relations, and the role of Congress in national security affairs. Previously, he represented the Hamp- ton Roads region for 16 years in the U.S. House of Representatives. While in Congress, Forbes served as a senior member of the House Armed Services Committee. He was Chairman of the Subcommittee on Readiness from 2011–2013 and Chairman of the Subcommittee on Seapower and Projection Forces from 2013–2017. Forbes was

widely recognized as the leading authority in Congress on naval issues. He also founded the Congressional China Caucus to call attention to China's growing military and economic power and raise awareness about its implications for the United States. He has been recognized with more than a dozen awards for his maritime leadership, including the Navy's Distinguished Public Service Award and the Navy League's "Outstanding Civilian Leadership" and "Teddy Roosevelt 'Big Stick'" Awards. Prior to his service in Congress, Forbes served in the Virginia Senate and House of Delegates and was an attorney in private practice. Forbes received his B.A. in Political Science from Randolph-Macon College (graduating valedictorian) and his J.D. from the University of Virginia Law School.

CSBA BOARD MEMBERS



Adam Frankel GENERAL COUNSEL

CBAM PARTNERS, LLC

Adam B. Frankel is General Counsel at CBAM Partners, LLC in New York. Prior to joining CBAM, he was Evercore's Senior Managing Director and the firm's General Counsel from 2006 to 2018. From 2003 to 2006, Mr. Frankel was senior vice president, general counsel, and corporate secretary of Genesee & Wyoming Inc., a leading owner, and operator of short line and regional freight railroads in the United States, Canada, Mexico, Australia, and Bolivia. Mr. Frankel was also responsible for matters related to human resources and government affairs. Mr. Frankel worked from 1999 until 2003 as a corporate and transactions attorney in the office of the general counsel at Ford Motor Company.

From 1995 until 1999, Mr. Frankel was an associate at Simpson Thacher & Bartlett in London and New York. Mr. Frankel is a member of the Council on Foreign Relations, and a trustee at the Sesame Workshop. He has a B.A. from Brown University and a J.D. from Stanford Law School.



General John M. Keane, United States Army, (Ret.)

INSTITUTE FOR THE STUDY OF WAR

General Jack Keane is a foreign policy and national security expert who provides nation-wide analysis and commentary in speeches, articles, congressional testimony and through several hundred television and radio interviews annually. He serves as an advisor to presidents, cabinet officials, members of congress, international leaders, CEOs and business leaders. He is the Chairman of the Institute for the Study of War, a member of the prestigious Secretary of Defense Policy Board, having advised four Defense Secretaries and a member of the 2018 and 2022 Congressional Commission on the National Defense Strategy.

General Keane, a four-star general, completed 37 years of public service in December 2003, culminating in his appointment as acting Chief of Staff and Vice Chief of Staff of the U.S. Army. As the chief operating officer of the Army for over 4 years, he directed 1.5 million soldiers and civilians in 120 countries, with an annual operating budget of 110 billion dollars. General Keane was in the Pentagon on 9/11 and provided oversight and support for the wars in Afghanistan and Iraq. In late 2006 President Bush invited General Keane to the Oval Office among others to discuss Iraq. Alone among them, General Keane brought the president a concrete strategic concept, later to be known as the troop "surge" which he helped develop, to change American strategy for the war and improve its execution. During the surge period General Keane conducted frequent trips to Iraq and Afghanistan for senior defense officials. General Keane is a career infantry paratrooper, a combat veteran of the Vietnam War decorated for valor, who spent much of his military life in operational commands, including command of the famed 101st Airborne Division (Air Assault) and the legendary 18th Airborne Corps, the Army's largest warfighting organization.

General Keane is the son of an immigrant mother, a WWII Marine father, a born and raised New Yorker and lifelong NY Yankee fan. He was commissioned an infantry 2nd Lieutenant from Army ROTC as a Distinguished Military Graduate at Fordham University receiving a Bachelor of Science degree and received a Master of Arts degree from Western Kentucky University. He is a graduate of the Army War College and the Army Command and General Staff College.

Among his awards, General Keane was the first military leader to be honored with the Ronald Reagan Peace Through Strength Award and the prestigious Bradley Prize. In March of 2020 General Keane was presented with the Presidential Medal of Freedom at the White House. General Keane's numerous military service medals and citations include two Defense and two Army Distinguished Service Medals, five Legions of Merit, the Silver Star, Bronze Star, three Vietnam Service medals, Combat Infantryman Badge, Master Parachutist Badge and Ranger Tab, to list a few.



General Paul Selva, USAF (Ret.) vice chair, board of trustees

THE AEROSPACE CORPORATION

General Paul Selva retired from the United States Air Force in July of 2019 after 39 years of service. He is an aviator whose operational assignments culminated with command of Air Mobility Command and subsequently United States Transportation Command. Immediately prior to his retirement General Selva served as the tenth Vice Chairman of the Joint Chiefs of Staff. He is an advisor to the Sierra Nevada Corporation, serves as a director for the Center for Strategic and Budgetary Assessments, and as a trustee for the Aerospace Corporation.

General Selva graduated from the United States Air Force Academy with a Bachelor of

Science degree in Aeronautical Engineering and holds Master of Science degrees from Abilene Christian University in Management and Human Relations and Auburn University in Political Science. He is a graduate of the Air Command and Staff College and served on the first Secretary of Defense Strategic Studies Group.



Laurence Zuriff GENERAL PARTNER ZFI CAPITAL

Laurence is the founder and CFO of Xometry, an advanced manufacturing company. He also serves as the General Partner of ZFI Capital, a private investment partnership spun out of Granite Capital International Group in 2011. 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.

CSBA COUNCIL

In 2019, we launched the CSBA Council, an advisory board composed of accomplished individuals whose interests in contemporary security debates coincide with CSBA's mission. The CSBA Council will further the institute's efforts to develop innovative, resource-informed defense concepts, promote public debate, and spur policies to advance the interests of the United States and its allies. The Council meets regularly with senior management, participates in efforts to promote CSBA and its work, and engages with our team to promote fresh thinking in national strategy and nurture the next generation of defense leaders.



Sid Ashworth vice president, operations ge aviation

Sid Ashworth serves on the Executive Committee of the National Defense Industrial Association, the Board of the National Military Family Association, and is a Trustee of the U.S. Air Force Academy Falcon Foundation. Previously she served as corporate vice president of government relations for Northrop Grumman Corporation, and vice president of Washington Operations for GE Aviation. Prior to joining GE Aviation, she was principal of the Ashworth Group.

Ms. Ashworth served for 14 years as a professional staff member with the U.S. Senate Committee on Appropriations. She also served as the staff director of the Defense

Subcommittee and the Military Construction Subcommittee on Appropriations. During her tenure with the Defense Subcommittee, she was responsible for formulating funding and legislation recommendations for defense and intelligence spending in excess of \$600 billion annually. She also worked as a civilian in the Department of the Army, focused on resource management, force structure, and strategy. She served as a Special Advisor to the Commanding General, U.S. Army Pacific, and held several senior analyst positions with Eighth U.S. Army and U.S. Forces Korea.

She is a Senior Adviser with the Center for Strategic and International Studies, has served as an adjunct professor at the University of Maryland, and has lectured at Indiana University, The Brookings Institution, and Georgetown University. Ms. Ashworth was Senior Executive Fellow at Harvard University's JFK School of Government.

Ms. Ashworth earned her MBA from Campbell University a bachelor's degree in management from the University of Maryland, and was a Senior Executive Fellow at the John F. Kennedy School of Government, Harvard University.



Philip Breedlove DISTINGUISHED PROFESSOR GEORGIA INSTITUTE OF TECHNOLOGY

General Philip M. Breedlove, USAF (ret.) serves on the Advisory Board of the Georgia Institute of Technology, where he is also a Distinguished Professor at the Sam Nunn School of International Affairs. He is also on the Board of Directors of the Atlantic Council.

Mr. Breedlove served for 39 years in the United States Air Force, culminating his career as one of six geographic Combatant Commanders and Supreme Allied Commander of NATO. As Supreme Allied Commander Europe (SACEUR) and the Commander of U.S. European Command—in his NATO capacity he answered directly to the North Atlantic

Council, and in his US capacity he answered directly to the President of the United States and Secretary of Defense. Previously, as Commander, U.S. Air Forces Europe, and Air Forces Africa, he was responsible for organizing, training, equipping, and maintaining combat-ready forces while ensuring theater air defense forces were ready to meet the challenges of peacetime air sovereignty and wartime defense. As Vice Chief of Staff of the Air Force, he presided over the Air Staff and served as a member of the Joint Chiefs of Staff Requirements Oversight Council and Deputy Advisory Working Group during a period of intense challenge as the Budget Control Act required a \$480 billion reduction of the DOD budget. Accordingly, he led the organization, training, and equipping of over 690,000 people serving in the United States Air Force and provided oversight of its \$120 billion annual budget. As Assistant Chief of Staff for Air Operations, Plans and Requirements, he directed all Air Force operations across the globe, oversaw strategic and operational planning, and set the requirements for all Air Force procurement. He held a variety of additional assignments including command of a squadron, a group, three fighter wings, and a Numbered Air Force in service across three different continents. His extensive command and control experience in wartime, contingency, and humanitarian relief actions include operations in Africa, Asia, and the Middle East.

Mr. Breedlove earned his Bachelor of Civil Engineering degree from The Georgia Institute of Technology, a Master of Science in Aerospace Technology from Arizona State University, and a Master of Science in International Security Affairs from the National War College.



Christian Brose HEAD OF STRATEGY ANDURIL INDUSTRIES

Christian Brose is Head of Strategy at Anduril Industries, Senior Fellow at the Carnegie Endowment for International Peace, and a member of the Aspen Strategy Group. From 2015-18, he was staff director of the Senate Armed Services Committee. In that capacity, he managed the Committee's professional staff in support of the Chairman and other majority members in overseeing all of the programs, policies, and resources of the Department of Defense, as well as confirming all of the Department's senior civilian and military leaders. He was also responsible for leading the production, negotiation, and passage of four National Defense Authorization Acts (FY16-19), which set policy

and authorized spending for all U.S. national defense activities. From 2009-14, he served as senior policy adviser to Senator John McCain, supporting his work on the Senate Armed Services Committee, the Senate Select Committee on Intelligence, and the Senate Foreign Relations Committee. From 2008-09, he was senior editor of Foreign Policy magazine. Previously, he served as policy adviser and chief speechwriter to Secretary of State Condoleezza Rice, working as a member of the Secretary's Policy Planning Staff. He began his career in public service as a speechwriter for Secretary of State Colin Powell.

Mr. Brose studied political science at Kenyon College and international economics at the Johns Hopkins University's School of Advanced International Studies.

CSBA COUNCIL



Jonathan Burks

VICE PRESIDENT, GLOBAL PUBLIC POLICY WALMART

Jonathan Burks is a policy and political professional with two decades of experience at the highest levels of public service. He most recently served as the chief of staff to Speaker of the House Paul Ryan, where he managed a team of over 40 staff and served as the Speaker's principal adviser on policy, strategy, and management. Burks was promoted to chief of staff after having served as the Speaker's national security adviser where he was responsible for advising the Speaker on sensitive intelligence, defense, and foreign policy issues.

Prior to joining the Speaker's office, Burks advised Senate Majority Leader Mitch

McConnell on budget and appropriations issues. Before going to the Senate, Burks served as policy director of the House Budget Committee, director of legislative affairs at the Securities and Exchange Commission, senior advisor to the Under Secretary of the Treasury for International Affairs, and policy advisor in the transition office of the newly created Director of National Intelligence. Burks also served as the deputy policy director on the 2012 Romney for President campaign. Previously, he served four years at the White House, including two years as a special assistant to President George W. Bush and two years as a deputy assistant to Vice President Dick Cheney.

Mr. Burks has an M.A. from the School of Advanced International Studies at Johns Hopkins University and a B.S. from Georgetown University.



Lisa Disbrow

SENIOR FELLOW JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY

Lisa Stephens Disbrow is the former United States Under Secretary of the Air Force. From January to May 2017, she served as the Acting Secretary of the Air Force until Heather Wilson assumed the office. Previously, Ms. Disbrow served as Assistant Secretary of the Air Force for Financial Management and Comptroller. From 1995 to 2014, she held a variety of positions on the Joint Staff as a senior civilian, including the Joint Staff Vice Director for Force Structure, Resources, and Assessment. While assigned to the Joint Staff, Ms. Disbrow was detailed to the president's National Security Advisor as the special advisor for policy implementation and execution at the White House, where

she assisted in planning and implementing the National Security Strategy.

Ms. Disbrow currently serves as a Director on the Boards of Mercury Systems, Perspecta, BlackBerry, and the Logistics Management Institute (LMI). She is a Senior Fellow at The Johns Hopkins University Applied Physics Laboratory and is the Chair of Mitre Corporation's U.S. Air Force Advisory Board.

Ms. Disbrow is a graduate of the University of Virginia, and she served as an officer in the United States Air Force from 1984 to 2008, primarily in the intelligence field. Following Operation Desert Storm, she left active service, continued to serve in the US Air Force Reserve, and contributed to the intelligence community both as a reserve officer and as a senior systems engineer for the National Reconnaissance Office.



Tina Jonas executive committee NATIONAL DEFENSE INDUSTRIAL ASSOCIATION

Tina W. Jonas has served at the highest levels in both the government and commercial sectors and is a recognized expert in military, defense, and aerospace issues. Ms. Jonas is currently an independent consultant and serves on several boards, including the Aerospace Corporation, Serco, Arete, and Top Aces Corporation. She also serves on the executive committee of the National Defense Industrial Association, the United Services Organization (USO), and is chairman of the National Military Family Association.

Ms. Jonas served more than two decades in government and national security positions. She was Undersecretary of Defense (comptroller) for the Department of Defense

from 2004 to 2008. Prior to that, she served as Assistant Director and Chief Financial Officer for the Federal Bureau of Investigation, as Deputy Undersecretary of Defense for Financial Management, and as a senior analyst with the Office of Management and Budget and the House Appropriations Defense Subcommittee. Her education includes executive studies at Harvard University's Kennedy School of Government and the University of Virginia's Darden School of Business. Ms. Jonas holds an M.A. in liberal studies from Georgetown University and a B.A. in political science from Arizona State University.



Paul Lettow DIRECTOR ALEXANDER HAMILTON SOCIETY

Paul Lettow served as the Senior Director for Strategic Planning on the National Security Council staff at the White House from 2007 to 2009. He has also served in the Department of State. Paul is the author of Ronald Reagan and His Quest to Abolish Nuclear Weapons and Strengthening the Nuclear Nonproliferation Regime, as well as numerous articles. He serves on the Board of Directors of the Alexander Hamilton Society and the American Friends of Christ Church (Oxford), and on the Advisory Board of First Amendment Voice.

Dr. Lettow received his undergraduate degree in history from Princeton University, a doctorate in international relations from Oxford University (Christ Church), and a law degree from Harvard Law School.

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Vance Serchuk executive director kkr global institute

Vance Serchuk is the Executive Director of the KKR Global Institute, the geopolitical strategy unit of the international investment firm KKR. In this capacity, Vance works on a range of KKR investments, with a particular focus on defense, national security, and emerging markets. He currently serves on the board of Hensoldt Inc. Vance is also an adjunct senior fellow at the Center for a New American Security. Previously, he served as the senior national security advisor to Senator Joseph Lieberman and as a professional staff member on the Senate Homeland Security and Governmental Affairs Committee. In 2013, he lived in Japan as a Council on Foreign Relations-Hitachi International Affairs

Fellow and was a monthly columnist for the Washington Post. Vance's writings have also appeared in the New York Times, Wall Street Journal, The Atlantic, National Review, and Politico.

Mr. Serchuk is a summa cum laude graduate of Princeton University, holds a JD from Yale Law School, and was a Fulbright scholar in the Russian Federation. He has served for the past 8 years as an officer in the U.S. Navy Reserve.



Mitchell Shivers PRESIDENT HUGHES+SHIVERS. LLC

HUGHES+SHIVERS, LLC Mitchell Shivers is a former Pr

Mitchell Shivers is a former Principal Deputy Assistant Secretary of Defense for Asian & Pacific Security Affairs in the Office of the Secretary of Defense (Policy). In that capacity, he was one of the Pentagon's top policy officials developing, implementing, and overseeing policy for the region. Mr. Shivers also served as Acting Assistant Secretary of Defense toward the end of the George W. Bush Administration. Previously, he was Deputy Assistant Secretary of Defense for Central Asia (with policy responsibility for an area that included Afghanistan, Pakistan, and five former Soviet republics). From November 2004 to November 2005, Mr. Shivers was a Senior Advisor and the Economic Sector Chief of

the State Department's Afghanistan Reconstruction Group at the United States Embassy, Kabul, Afghanistan. As such, he was the principal American advisor on economics and finance to several American ambassadors to Afghanistan as well as to the Afghan government.

An international investment banker by profession, Mr. Shivers retired from Merrill Lynch as Managing Director and Head of Global Public Credit Origination in 2002 – then the industry's top team in that highly competitive field. Also at Merrill Lynch, Mr. Shivers played a key leadership role earlier in the global initial public offerings of Indonesia's first privatized state-owned enterprises – at the time the largest-ever IPOs to come out of non-Japan Asia. In his almost thirty years in financial services, Mr. Shivers held senior management posts in New York, Chicago, Singapore, Tokyo, London (twice), and Jakarta with Merrill Lynch as well as two British merchant banks, Samuel Montagu and Kleinwort Benson (where he was the first American member of the main board at each bank).

Mr. Shivers is a Distinguished Alumnus, Distinguished Business Alumnus, and former trustee of Monmouth University and attended New York University's Graduate School of Business.



Roger Zakheim washington director ronald reagan presidential foundation and institute

Prior to his appointment at the Ronald Reagan Presidential Foundation and Institute, Mr. Zakheim practiced law at Covington & Burling LLP in the firm's Public Policy and Government Affairs practice group, where he served as co-chair. Before joining the firm, he was General Counsel and Deputy Staff Director of the U.S. House Armed Services Committee. In this role, Mr. Zakheim managed the passage of the annual National Defense Authorization Act (NDAA) the annual defense policy bill that authorizes the Defense Department's \$600 billion budget. Mr. Zakheim is currently a Congressionally appointed Commissioner on the Commission on the National Defense Strategy of the

United States. Previously, Mr. Zakheim served as Deputy Assistant Secretary of Defense, where he managed the department's policies and programs related to the Iraq and Afghanistan coalition affairs.

Mr. Zakheim frequently speaks and writes on national security and defense issues. His views have appeared in the Wall Street Journal, New York Times, Politico, National Public Radio, Fox News, CNN, BBC, The Weekly Standard, National Review, among other media outlets.

He received a B.A. from Columbia University, an M. Phil. from the University of Cambridge, and a JD from New York University School of Law.

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