

# CSBA

Center for Strategic and Budgetary Assessments



# 2021

ANNUAL REPORT





## MESSAGE FROM THE CHAIR OF THE BOARD



Dear Stakeholders,

On behalf of my fellow Directors, I am pleased to introduce this report on the activities of the Center for Strategic and Budgetary Assessments in 2021 as well as its plans moving forward. From the end of the Cold War up through the challenges of today's geopolitical environment, CSBA has illuminated key security issues and emerging trends. Operating along the axes of strategy, defense capabilities and investment priorities, CSBA continues to help policymakers, analysts, and informed citizens grasp the stakes of global competition and conflict. In 2021, the CSBA team delivered a wealth of publication and workshop offerings while launching new initiatives designed to expand its outreach.

At the beginning of a year of transition to a new Administration and Congress, CSBA set the stage with America's Strategic Choices: Defense Spending in a Post-COVID-19 World, a timely report on the strategic and fiscal choices facing the country's leaders. Adapting well to

ongoing pandemic-induced protocols, the organization offered a steady flow of virtual seminars, workshops, and policy events that enabled interested participants throughout the world to engage with leaders and experts such as the Chief of Naval Operations, acting and incoming Service Secretaries, and the co-chairs of the bipartisan National Security Commission on Artificial Intelligence. CSBA continued to refine on a new defense concept, Deterrence by Detection, which was cited by leaders such as the Commandant of the U.S. Marine Corps. CSBA also organized wargames and exercises with allied defense and security experts from the Baltics and the Indo-Pacific region. And it expanded a well-received educational outreach effort for congressional staffers to inaugurate a new series for defense journalists.

For CSBA's Board of Directors, 2021 was also a year of transition. After many years of dedicated service, the Hon. Nelson Ford, former Undersecretary of the Army, retired from the CSBA Board. At the end of the year, CSBA's former Board Chair and longest-tenured Director, former Congressman Dave McCurdy, stepped down after more than two decades of service. Given Dave's immense positive impact on CSBA, the organization has established a dedicated program in his name, the McCurdy Defense Investment and Innovation Initiative, to carry on new work in his name on the defense budget reforms to which he devoted so much of his public career. We are deeply grateful to Dave, and to all the members of our Board and wider community who have contributed to this important initiative.

In 2022, CSBA will build on this momentum, with new work on

strategic stability, reviews of U.S. military posture, and assessments on integrated air and missile defense and multi-domain operations. We are particularly grateful to our newest Director, Gen. Paul Selva, USAF (Ret.), who lent a great deal of his time and expertise to help the Board with its oversight responsibilities and to Tom Mahnken and his team as they deliver on CSBA's value proposition.

Of course, CSBA's contributions to forward thinking about national security matters would not be possible without the support of our donors, sponsors, and our broader global audience. I would ask all those who read this Annual Report to stay engaged with the CSBA team – whether it is through social media, virtual programs, the website or via our regular published reports and briefings. Moreover, please consider making a financial contribution to support CSBA's research and public education and outreach through the convenient "support" link on our web page. All of us at CSBA appreciate that support, and I am confident CSBA will continue to warrant your attention and your commitment in the years ahead.

Sincerely,

**BARBARA HUMPTON**

Chair, Board of Directors  
Center for Strategic and Budgetary  
Assessments  
March 2022

## MESSAGE FROM THE PRESIDENT AND CEO

I am pleased to offer a few words describing our accomplishments over the past year and how CSBA is positioned for the future. Over the past year, our team stepped up and delivered an extensive research and education agenda in the face of continuing pandemic-related challenges. Indeed, 2021 was a year of growth for us, and we enter 2022 with anticipation and enthusiasm.

In 2021, CSBA conducted an impressive set of analytical studies for the United States Department of Defense, the uniformed services, and defense agencies. In addition, our virtual policy forums allowed us to attract a truly global audience to many of our public sessions in real time. We expanded our work with several close allies and fostered relationships with a range of new sponsors. We also attracted a new crop of talented national security specialists, diversifying and enriching our talent base. The Executive and Legislative branches of the U.S. Government and close allies abroad have continued to seek our expertise in the new year, ensuring our continued ability to help shape the global security conversation.

The CSBA team produced seven new reports during the year, including a major work on China's strategic vulnerabilities, budget and acquisition studies, and new joint operational concepts. We had a high tempo of workshops and wargames, from exploring future warfare concepts with the U.S. Air Force and affordability opportunities with the Army Futures Command, to long-range force structure choices for the Japanese Ministry of Defense. Our work on NATO's Eastern Flank continued to prove both important and timely, with a major wargame conducted with the defense leadership of the Baltic states. CSBA's

partnerships included our work with the Ronald Reagan Institute on the defense investment choices; a rollout of the report of the National Security Commission on Artificial Intelligence; and a maritime strategy seminar coinciding with a special issue of the journal *Security Studies*.

As you shall see in the pages that follow, our focus in 2021 remained on the intersection of policy and strategy, emerging operational concepts and capabilities, and sound choices regarding defense resources and investments. During the year we adopted new approaches to traditional educational endeavors such as our management of the DoD's annual Secretary of Defense Fellows Program, our annual seminar with the graduating class of the Army War College, and our Congressional Defense Seminar Series and a new Defense Journalism Seminar Series. The latter two efforts were hugely successful and have become a core part of our agenda.

2021 was a bountiful year for the CSBA team. We welcomed back Dr. Travis Sharp, who was elevated to Fellow and Director of CSBA's Defense Budget Studies Program. In this capacity, Travis will lead the activities under our new McCurdy Initiative. The arrival of Dr. Katherine "Kaki" Kjellström Elgin as a Fellow strengthened our European security and alliance strategy expertise. We enhanced our team of Non-Resident Senior Fellows with the additions David Cooper, Michael Hunzeker, Ivan Kanapathy, and Tate Nurkin. We were pleased to host three outstanding officers from the Japanese Self Defense Force – Commander Kenichi "Ken" Matsui, Lieutenant Colonel Shinya "Taka" Takasaka, and Lieutenant Colonel Tatsuki "Turner" Yamaji – as the latest Visiting Fellows in our cooperative program with the Japanese Ministry of Defense. We also bolstered



our research staff with Analyst Tyler Hacker and Research Assistants Aidan Greer, Joseph Ross, and Madison Sparber. On the operations side of the organization, we were delighted to welcome Meredith Meyers to CSBA as our Office Manager.

As proud as we are of our accomplishments over the past year, CSBA has always looked forward with expectation to the future. In the coming year we will continue to drive new ideas in concept development, force structure, and resources; work with our close allies to help them prepare for a shifting security scene; and equip the next generation of professionals to defend American interests.

As always, thank you for your support of CSBA. At the end of the day, this organization exists because of the interest you have shown in our work. Please enjoy this report, and do not hesitate to reach out to us with your ideas and comments.

Sincerely,

**THOMAS G. MAHNKEN, Ph.D**  
President and Chief Executive Officer  
March 2022



# 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.

## 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.



CSBA President and CEO Thomas G. Mahnken and Ambassador Eric Edelman pose with Maj. Gen. (Ret.) Mick Ryan following a book release event at CSBA in February 2022.





# STRATEGIC FORESIGHT AND DEFENSE PLANNING IN THE 21<sup>ST</sup> CENTURY

In 2021, 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 alliance networks, energy infrastructure, and procurement processes.

## **LINKING INNOVATION WITH FUTURE WARFARE CONCEPTS**

Explores cutting-edge capabilities such as artificial intelligence and intelligence, surveillance, and reconnaissance ecosystems, 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 2021 PUBLICATIONS



## Seizing on Weakness: Allied Strategy for Competing with China's Globalizing Military

Toshi Yoshihara, Jack Bianchi

China's military is going global. In the coming decade, the People's Liberation Army (PLA) could be well-positioned to influence events and conduct a wide range of missions, including limited warfighting, beyond the Western Pacific. The United States and its close allies, who have enjoyed largely unobstructed access to the world's oceans for the last three decades, will need to adjust to new military realities as the PLA makes its presence felt in faraway theaters.

In this study, Senior Fellow Toshi Yoshihara and Research Fellow Jack Bianchi argue that a deep study of China's weaknesses as they relate to its worldwide ambitions is required to formulate an effective allied response. These weaknesses offer insights into the costs that Beijing will have to pay to go global. Importantly, the United States and its close allies enjoy agency over certain Chinese weaknesses, furnishing them leverage that, if exercised, could yield strategic dividends. The report concludes with a range of allied options that exploit China's weaknesses to constrain and complicate the PLA's global expansion.



## America's Strategic Choices: Defense Spending in a Post-COVID-19 World

Thomas G. Mahnken, Jack Bianchi, Regan Copple, Madison Creery, Jan van Tol, Josh Chang

This report summarizes the findings of two Strategic Choices Exercises hosted by The Ronald Reagan Institute and CSBA in October 2020, convening a bipartisan group of senior defense and budget experts, current and former policymakers, and industry leaders. The initiative was supported by the National Defense Industrial Association.

Using CSBA's Strategic Choices Tool, an interactive decision-making model that enables users to make changes to the defense budget, participants proposed fiscally-constrained adjustments to U.S. defense strategy and military forces over a 10-year window. They assessed two budgetary scenarios: an annual real 3% increase in defense spending and an immediate 10% cut.

The exercises found that the 10% cut scenario would have devastating consequences for defense strategy and capabilities. Teams had to make large-scale cuts to personnel, force structure, and modernization that have heretofore proven to be politically unpalatable.

“Even as rising deficits and the economic struggles imposed by COVID-19 place downward pressure on the defense budget, the threats the nation faces continue to increase,” said Roger Zakheim, Director of the Ronald Reagan Institute. “This exercise should be viewed as a dose of reality for policymakers examining the potential impact of defense cuts. The United States cannot build and maintain the military it needs to defend against the threats of today and tomorrow if we see a major reduction in its budget.”

“CSBA developed its Strategic Choices Tool, which features more than a thousand discrete sets of fully-costed defense capabilities, to allow users to consider the real-world, long-term consequences of various defense budgetary choices,” said CSBA President and CEO Dr. Thomas G. Mahnken. “Our participants were forced to make hard decisions regarding U.S. military forces and strategy, which in this exercise often yielded heroic assumptions or sobering assessments of risk.”



### Congressional Impact

## Testimony Before the House Appropriations Committee Defense Subcommittee Hearing on Future Defense Spending

Thomas G. Mahnken

On February 24, 2021, CSBA President and CEO Dr. Thomas G. Mahnken testified before the House Appropriations Committee Defense Subcommittee. Dr. Mahnken was invited to appear before the Committee to discuss future defense spending priorities, along with the long-term implications of current budget debates.

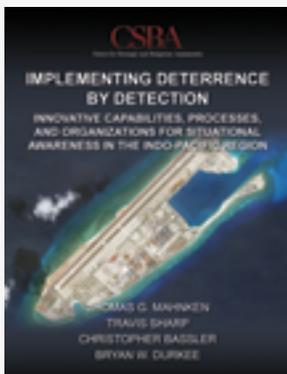


## Delivering Advanced Unmanned Autonomous Systems and Artificial Intelligence for Naval Superiority

Captain Sharif H. Calfee

At the individual level, organizations within the Department of the Navy's research and development ecosystem house significant talent and engage in innovative research at the cutting edge of a wide range of disciplines and technologies that could maintain the U.S. Navy's technological advantage. However, the Navy's current unmanned autonomous systems R&D construct has an opportunity to continue improving the organization of this effort to further expand and leverage its recent efforts.

This report makes the case that a robust, centralized effort--a Navy Autonomy Project Office, or APO--is necessary to achieve capability developments that leverage commercial and academic sector advances in autonomous systems. This effort would reduce barriers to innovation and further promote U.S. Navy efforts to develop, preserve, and extend the advantages that the United States currently enjoys over peer and near-peer adversaries in AI, unmanned autonomous systems, and other key technologies. Going further, this report outlines how the APO would function internally and within the broader R&D ecosystem to coordinate research efforts and maintain the Navy's technological edge in this field.



## Implementing Deterrence by Detection: Innovative Capabilities, Processes, and Organizations for Situational Awareness in the Indo-Pacific Region

Thomas G. Mahnken, Travis Sharp, Chris Bassler, Bryan Durkee

One of the essential hallmarks of deterrence is the ability to effectively detect – and therefore prepare for – a potential adversary's hostile action in a timely fashion. Just as the threat of effective retaliation must be credible, deterrence also depends on a robust ability to identify and assess aggressive acts, including acts of coercion that fall below the threshold of kinetic conflict. Recent Chinese actions toward Taiwan, for example, have heightened the conviction among U.S. and allied defense planners that effective, interoperable intelligence, surveillance, and reconnaissance (ISR) systems are essential for the security of the entire Indo-Pacific theater.

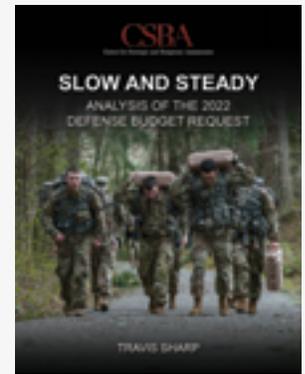
Building upon last year's *Deterrence by Detection* study, *Implementing Deterrence by Detection: Innovative Capabilities, Processes, and Organizations for Situational Awareness in the Indo-Pacific Region* assesses how both current platforms and emerging capabilities could be utilized to improve dramatically situational awareness in the Indo-Pacific region. The report focuses on ISR capabilities, processes, and allied engagement in the region. In the report, CSBA President Thomas G. Mahnken, Senior Fellow Christopher Bassler, Fellow Travis Sharp, and Navy Fellow Bryan W. Durkee argue that the United States and its allies should fully leverage existing ISR capabilities by boosting their performance with technology enablers, streamlining processes with Artificial Intelligence and other tools, and improving regional military coordination. Rather than seeking to replace all existing systems with new capabilities, the authors argue for a cost-effective approach that would enhance current technologies and bolster near-term deterrence in the Indo-Pacific region. This framework would also tie existing capabilities to missions outlined in the 2018 National Defense Strategy (NDS) and lays the foundation for next-generation ISR capabilities and processes.

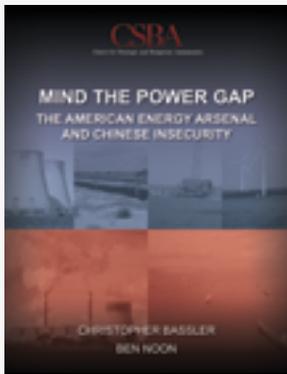
## Slow and Steady: Analysis of the 2022 Defense Budget Request

Travis Sharp

In May 2021, the Pentagon presented its first budget request to the Biden Administration, proposing a \$715 billion topline for Fiscal Year 2022, representing a 0.2 percent real decrease relative to the previous fiscal year. In a shift from previous budgets, the request also included contingency operations costs within DoD's base budget, eliminating the separate Other Contingency Operations (OCO) account that has supplemented the Defense Department's budget for two decades.

In *Slow and Steady*, CSBA Fellow and Director of Defense Budget Studies Travis Sharp analyzes the FY 2022 Defense Department Budget Request with a focus not only on comparisons with the previous administration's defense budgets but also on the insights into the current and future strategic priorities for the Biden Administration. As Sharp assesses, the request is "slow" – released at a later date than any new administration's first budget in almost a century – and "steady" in terms of its topline and respective outlays to individual services. Continuity does not necessarily presage future stagnation, however. Drawing upon historical budget patterns and fiscal policy, Sharp forecasts areas in which future resource shifts may occur, as well as what this year's budget may indicate for future allocations. This report is 36th in a series of annual budget analyses published by CSBA and its predecessor organization.





## Mind the Power Gap: The American Energy Arsenal and Chinese Insecurity

Chris Bassler, Ben Noon

The shale revolution has upended nearly a half-century of American energy insecurity. The United States is now the most energy-secure it has been since the 1970s and has returned to its position as the world's leading energy producer. Over a few short years in the 2010s, the United States shifted from being one of the world's largest oil and natural gas importers to instead being the world's largest exporter. Meanwhile, China faces long-standing and increasing challenges with energy insecurity. Not yet an advanced economy, China's growth remains tightly coupled to energy consumption. Most of the oil and natural gas its energy sector consumes must be imported from the Middle East, Central Asia, Southeast Asia, and even the United States. Moreover, China struggles to shift away from its long-standing primary energy source—coal.

In *Mind the Power Gap*, authors Christopher Bassler and Ben Noon compare and contrast the United States' growing and diversifying energy portfolio with China's limited energy portfolio. While the U.S. portfolio is not without pain points—which the authors discuss, including potential solutions—overall, they find that the Chinese Communist Party's efforts to build a secure, robust energy sector have been met with mixed success at best, as its sources primarily rely upon foreign imports and fossil fuels that both harm the environment and public health in the region. Consequently, they recommend several policies, including using the United States' energy exports to reinforce and expand its alliances and using scientific evidence to highlight China's role as the world's leader in greenhouse gas emissions in opposition to its efforts to style itself as a “green power.” The report also features policy goals with specific partners as well as opportunities for domestic innovation and job growth.

On September 15, CSBA hosted a virtual event on *Mind the Power Gap*, featuring the authors and Gabriel Collins, the Baker Botts Fellow in Energy & Environmental Regulatory Affairs at Rice University's Baker Institute. The event began at 1 PM with an introduction from Ambassador Eric Edelman, CSBA Counselor and host of the event. The authors offered their remarks on the report, followed by commentary from Gabriel Collins and a moderated Q&A session.

## Aligning South Korea's Defense Strategy and Capabilities

Evan B. Montgomery, Jack Bianchi, Regan Copple, Madison Creery, Josh Chang

Changing security dynamics on the Korean Peninsula are prompting the Republic of Korea (ROK) to reexamine its defense strategy and adjust its military capabilities and investment priorities. North Korea's growing missile arsenal and asymmetric defense strategy, along with China's rapid military modernization, present unique challenges to South Korean and American efforts to maintain stability on the Korean Peninsula and in the broader region. To identify how the ROK can best align its defense strategy and capabilities, and to clarify the alliance division of labor between the ROK and the United States, the Center for Strategic and Budgetary Assessments (CSBA) hosted a virtual roundtable discussion and decision-making exercise. The event, held on March 18-19, 2021, convened U.S. and South Korean defense analysts to debate the scenarios and objectives that should most influence Seoul's defense planning, capability and capacity requirements, and investment decisions over the next decade.



## Arms Control: Can Its Future Be Found in Its Past?

Eric Edelman

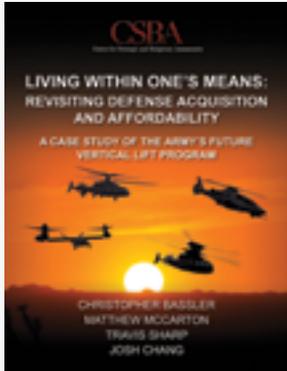
In the wake of the Trump Administration's withdrawal from the Intermediate Nuclear Forces Treaty (INF) of 1988 and the Open Skies Treaty of 1992 there was a great deal of fear that the New START Treaty which one scholar has called "the key bilateral arms control agreement" would expire. Now that the keystone of the arms control enterprise remains in place it is worth examining why so many arms control experts and advocates have been warning about "the end," "the death" or the "deep crisis" of arms control. As one leading Russian scholar of arms control has argued, "legacy Cold War-era arms control is collapsing and an uncontrolled nuclear arms race is threatening to return."



What has produced that outpouring of concern? And how ought one think about arms control as we move from a strategic era dominated by concerns about terrorism and counterinsurgency to one in which the focus of national security affairs is once again great power competition?

Considering the United States' withdrawal from the Intermediate Nuclear Forces Treaty (INF) of 1988 and the Open Skies Treaty of 1992, arms control agreements have been surrounded by a great deal of uncertainty in recent years. Although the Biden Administration extended the New START Treaty as one of its first national security-related acts in office, the five-year extension did little to assuage the fears of arms control advocates.

In this study, Ambassador Eric Edelman explores the origins of these concerns, as well as how the shift from counterinsurgency to great power competition informs thinking about arms control. He finds these answers in the years of the late Cold War and early post-Cold War, which many arms control scholars consider "the golden era" of arms control. Analyzing these arms control agreements, and especially the negotiations surrounding them, Edelman predicts what the next era of arms control will look like. He also offers suggestions to ensure the mistakes of the past are not repeated, drawing upon the history of these negotiations and how scholars at the time predicted they would affect the sphere of arms control.



## Living Within One's Means: Revisiting Defense Acquisition and Affordability

Chris Bassler, Travis Sharp, Josh Chang

Future Vertical Lift (FVL) is a force structure recapitalization effort to design and procure a family of rotary-wing platforms capable of operations in future highly contested environments. The Army's FVL is the leading edge of an effort that has identified the need for a rotary-wing Family of Systems that can deliver five capability sets for joint use across the Services. Due to budgetary limitations and force modernization priorities, the Army is currently pursuing only two of these capability sets, but they still represent a significant effort for the Army, as they are the first new helicopters designed since the mid-1980s. As the Army considers candidates for these new helicopters, it is carefully considering both near-term and long-term challenges from adversaries, as well as the perennial aspect of affordability.

In *Living within One's Means*, authors Christopher Bassler, Matthew McCarton, Travis Sharp, and Josh Chang analyze past vertical lift acquisition programs, current acquisition trends, and new acquisition methods in the digital age to apply all three to the FVL effort. Drawing upon these analyses and the results of a CSBA workshop (held under the Chatham House rule), the authors find that while past attempts to enhance affordability have been unsuccessful, new digital approaches, such as the Modular Open Systems Architecture (MOSA), may hold costs down while diversifying opportunities for new technologies and subsystem solutions. The authors also discuss the risks of deferring or cutting new helicopter designs, both in the face of adversaries and the technological limitations of current rotary-wing designs.

The FVL effort may face roadblocks, but it also could be one of the first major programs to drive an open ecosystem of affordable designs. If the Army can live within well-estimated means, stick to its plan, and pace advancing threats, FVL could become one of the most successful defense acquisition programs of the 21st Century.

# CSBA IN EXTERNAL MEDIA

## Trouble Finding Partners: Barriers to China's Overseas Basing

Toshi Yoshihara, China Brief  
January 2021

As the People's Liberation Army (PLA) goes global, it will increasingly need reliable access to overseas bases and dual-use facilities to sustain operations in faraway theaters. Recent U.S. defense and intelligence reports indicate that the People's Republic of China (PRC) is prospecting for locations where the PLA could obtain access and logistical support. According to the Department of Defense, Beijing has "likely considered" a dozen candidate countries that could play host to "military logistics facilities."

As Beijing explores its options, Chinese analysts have begun to pay attention to potential host nations and their suitability for PLA access and use. This article samples a budding literature on the requirements for China's overseas military presence. It finds that Chinese observers are realistic about the challenges and costs of obtaining bases and facilities abroad. The literature further demonstrates a keen awareness that capable host nations and adroit Chinese statecraft are both essential to the PLA's plans to go global.



## Japan's Three Pillars of Defense and the Future of the Japan-Taiwan Defense Relationship

Joseph Ross, Global Taiwan Brief

January 2021

In an interview with Reuters late last year, Japan Vice Defense Minister Yasuhide Nakayama observed, “There’s a red line in Asia – China and Taiwan.” He added: “How will Joe Biden in the White House react in any case if China crosses this red line? [...] The United States is the leader of the democratic countries. I have a strong feeling to say: America, be strong!” The statement’s purpose underscores Tokyo’s security concerns and how Taiwan factors into the US-Japan alliance. The last four years under the Trump administration saw the United States’ engagement with Taiwan increase as China became the primary strategic competitor. In tandem, communications between Washington and Tokyo on related matters have presumably grown. This trend is likely to continue under the Biden administration. Still, was Minister Nakayama’s statement of clarity a sign of one official’s assessment or reflective of an undercurrent in Japanese defense thinking? As Japan continues to express interest in increasing cooperation with Taiwan, cultivating this relationship’s security dimension is critical for all parties involved. The United States-Japan-Taiwan relationship is likely to be a cornerstone of regional security for years to come.

## Exploiting the PLA’s Global-Local Dilemma for Taiwan’s Defense

Toshi Yoshihara, Global Taiwan Brief

January 2021

In an interview last month, the Chairman of the Joint Chiefs of Staff, General Mark Milley, spoke bluntly about China’s growing military challenge. The principal military advisor to the president asserted that Beijing had already “developed a significant military today, as of right this minute.” He further acknowledged that the Chinese armed forces “are on a path [...] to be on par with the US at some point in the future” and have “stretched their legs and are becoming a global power.” Across the Pacific, the prognosis about Taiwan’s ability to resist China’s use of force has become pessimistic, if not fatalistic. Admiral (ret.) Lee Hsi-ming (李喜明), the former head of Taiwan’s military, conceded that, “Time is definitely not on Taiwan’s side.” In his view, “It’s only a matter of time for them to gather enough strength” to credibly threaten the island.

While the People’s Liberation Army (PLA) is clearly looking far beyond mainland shores even as it prepares for the worst over Taiwan, hard choices lie ahead for Beijing. The reality is that China’s globalizing military could impose opportunity costs on the massive resources Beijing needs to prevail over Taiwan should deterrence fail. Like household spending decisions about remodeling one room at the expense of upgrading another, every yuan China devotes to power projection forces is one fewer yuan it can invest in capabilities primarily suited for a cross-Strait war. The opposite is also true. This global-local dilemma will weigh on China’s calculus. In this context and others, the United States and its allies can shape Beijing’s decision making by bolstering Taiwan’s defense and by strengthening their own deterrent posture.

## Parrying the Proxy Payroll: An Analysis of Iranian Expenditures on Proxy Networks and the Effects of US Counter-Proxy Sanctions

Josh Chang, Georgetown Security Studies Review  
July 2021

This paper seeks to provide an overview of Iran's financial support to its proxies in the Middle East and evaluate the effects of US sanctions on this proxy network. While the U.S. has typically countered Iran's proxies through traditional military measures like counterinsurgency, such operations can incur costs in both materiel and lives. Sanctions represent an attractive nonmilitary, low-cost method to address the proxy issue, but also contain their own limitations. This paper finds that close to a tenth of Iran's defense expenditures are possibly geared towards proxy operations, amounting to 25-30% of the Islamic Revolutionary Guard Corp's (IRGC) budget. While US sanctions have drastically reduced funds available to proxies, they have not compelled Iran to end its support for these groups due to the valuable role they play in Tehran's national security strategy. Going forward, US sanctions must be paired alongside diplomatic, military, and intelligence tools and applied in selective ways to target Iran at key pressure points rather than indiscriminately blanketing its economy.

## Kokkiken Japan Study Award

Toshi Yoshihara  
July 2021

In July 2021, the Japan Institute for National Fundamentals (JINF) awarded Toshi Yoshihara the Kokkiken Japan Study Award for his 2020 study *Dragon Against the Sun: Chinese Views of Japanese Seapower*. This is the 8th time JINF has bestowed the Japan Study Award, given to an individual for "outstanding works in the field of Japanese studies at home and abroad that contribute to the furthering of understanding of Japan in the areas of politics, national security, diplomacy, history, education and culture, among others."

"The government and people of Japan must bear seriously in mind what Mr. Yoshihara has manifestly introduced", said Yoshihiko Sakurai, President of JINF and Chairman of the Japan Study Award Jury. "The Chinese people's harsh views of Japan; China's massive naval power with which Beijing intends to force Japan to succumb to its pressure and inevitably bend to its will; and the Chinese deep-rooted belief in power that keeps them strengthening military power... Mr. Yoshihara's super study on China is the most honest warning to Japan."

## The Catastrophic U.S. Exit from Afghanistan

Eric Edelman, The Bulwark

August 4, 2021

Disaster is imminent in Afghanistan. The judgment that the United States should draw down the roughly 3,500 troops still supporting Afghan forces after twenty years of effort, despite the relatively low casualties and the fact that Afghans were bearing the brunt of the combat, was an arguable proposition when Biden made the call. Reasonable people and experts could and did disagree. What is inexcusable is the failure to foresee and plan for the downstream consequences.

Over the past few days, the Taliban has shifted from sweeping through largely rural districts to contesting larger urban areas and important provincial capitals—Herat, Kandahar, and Lashkar Gah, where the Taliban appears to have seized nine of the city’s ten districts with only the government center, reinforced apparently with units from Kabul and U.S. airstrikes, barely holding on.

The Taliban will likely find that urban areas fall less quickly and less easily to their forces than the rural areas they have taken so far. But the group’s rapid resurgence over the past few months raises the prospect that Afghanistan will collapse much more quickly than the Biden administration appears to have expected when it announced its withdrawal deadline of September 11. As one anonymous senior Defense Department official told Politico, “I . . . don’t think anyone thought Afghanistan would turn so badly so quick.”

Yet the reaction of the U.S. government seems almost otherworldly. The secretary of state has called the carnage “deeply disturbing and totally unacceptable,” while the U.S. embassy in Kabul has tweeted that the Taliban’s actions constitute possible war crimes and that unless it holds its commanders in check it should have no place in the future governance of Afghanistan. And yet the Biden administration’s policy appears to be meekly to accept a new Taliban emirate, with all that implies.



## Credibility Controversies: The Implications of Afghanistan for the Indo-Pacific

Evan Montgomery, War on the Rocks

September 7, 2021

Should policymakers be worried about the credibility of American security commitments now that the war in Afghanistan has come to an end? Amid the Taliban's rapid takeover and Washington's chaotic departure, many pundits and some politicians quickly struck a cynical tone. Echoing longstanding tropes, they declared that losing and leaving would wreck trust in U.S. promises and weaken respect for U.S. threats. That could push allies to go their own way and prompt adversaries to go on the march.

Academics and analysts, by contrast, have drawn very different and much more sanguine conclusions. Building on recent research, most argue that Washington's security commitments are unlikely to suffer. If anything, the United States might benefit from a credibility boost following its withdrawal. Relieved of the operational burdens that Afghanistan imposed and free of the strategic distraction that it represented, Washington can devote greater attention and additional resources to more serious threats from China and Russia. That should inspire confidence in allies and instill caution in adversaries.

## Schrodinger's Military? Challenges for China's Military Modernization Ambitions

Ben Noon and Chris Bassler, War on the Rocks

October 14, 2021

Xi Jinping wants China to have a "world-class military" by the middle of the century. While the country has undergone a historic military modernization effort in the last two decades, the People's Liberation Army (PLA) remains a regional military power, albeit one with growing ambitions to achieve regional dominance and expand its ability to project power around the globe.

Is Xi's dream of a world-class PLA realistic? His vision largely depends on PLA efforts to increase jointness and achieve intelligitization.

By all accounts, the Chinese military is on the march. The PLA's annual budget grows at a rapid pace year after year. The PLA Navy is now larger than the U.S. Navy. "Carrier-killer" missiles attempt to threaten America's ability to project power in the Indo-Pacific. The PLA's increasingly sophisticated nuclear arsenal grows at an alarming pace. But these raw numbers alone do not capture some of the more subtle measures of warfighting capabilities, such as organization, training, education, and doctrinal concepts. These seldom noted yet critical measures of military power may tell a different story about the PLA's pace of growth and ability to achieve its ambitions.



## NATO 2030: Towards A New Strategic Concept and Beyond

Jason Blessing, Katherine Kjellström Elgin, and Nele Marianne Ewers-Peters, Editors

The North Atlantic Treaty Organization (NATO) is the world's largest, most powerful military alliance. The Alliance has navigated and survived the Cold War, the collapse of the Soviet Union, and the post-9/11 era. Since the release of the 2010 Strategic Concept, NATO's strategic environment has again undergone significant change. The need to adapt is clear. An opportunity to assess the Alliance's achievements and future goals has now emerged with the Secretary General's drive to create a new Strategic Concept for the next decade – an initiative dubbed “NATO 2030.” A necessary step for formulating a new strategic outlook will thus be understanding the future that faces NATO. To remain relevant and adjust to new circumstances, the Alliance must identify its main challenges and opportunities in the next ten years and beyond.

Sponsored by the Henry A. Kissinger Center for Global Affairs and the Foreign Policy Institute at the Johns Hopkins University School of Advanced International Studies (SAIS), with the generous support of the Deutsche Akademischer Austauschdienst (DAAD) / German Academic Exchange Service, this book contributes to critical conversations on NATO's future vitality by examining the Alliance's most salient issues and by offering recommendations to ensure its effectiveness moving forward. Written by a diverse, multigenerational group of policymakers and academics from across Europe and the United States, this book provides new insights about NATO's changing threat landscape, its shifting internal dynamics, and the evolution of warfare. The volume's authors tackle a wide range of issues, including the challenges of Russia and China, democratic backsliding, burden sharing, the extension of warfare to space and cyberspace, partnerships, and public opinion. With rigorous assessments of NATO's challenges and opportunities, each chapter provides concrete recommendations for the Alliance to chart a path for the future. As such, this book is an indispensable resource for NATO's strategic planners and security and defense experts more broadly.

## A Maritime Strategy to Deal with China

Thomas G. Mahnken, Proceedings

February 2022

The United States today suffers from a critical deficit in strategic thinking about the most consequential challenge of the current era: the rise of China and the threat it poses to U.S. interests in the western Pacific and beyond. Addressing that deficit is a matter of the utmost importance and urgency.

The prospect of 21st-century great power war is *terra incognita*. The vast majority of officers in the U.S. armed forces and civil servants in the U.S. government entered service after the fall of the Berlin Wall and the collapse of the Soviet Union. For them, the notion of great power competition is at best a theoretical and historical matter; it is certainly not one of personal experience. The novelty of the current situation is compounded by the emergence of new technologies, concepts of operations, and organizations that presage wars that will look very different from past conflicts.

It is the professional obligation of U.S. military leaders to ensure the U.S. armed forces are prepared to fight and win the nation's wars, including developing strategies and supporting joint operational concepts to do so. As Vice Admiral Stansfield Turner noted during his first convocation address at the Naval War College in 1972, the military "profession can only retain its vitality so long as we ourselves are pushing the frontiers of knowledge in our field." It is the role of civilian leaders to hold the military accountable for developing approaches to meet the challenges the nation faces, not wish them away. Similarly, it is the responsibility of civilian leaders to define the parameters within which strategy and concepts are developed, to include the political constraints and operational assumptions that are necessary to ensure new ways of war are politically useful and strategically relevant.



# Rings of Fire

Strike Portfolio Options for a Post-INF Treaty World



March 15, 2022

CSMA  
Center for Strategic and Military Analysis



# 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.

## Strategic Choices Exercises

CSBA's Strategic Choices Tool (SCT) has been updated to address the new realities of a world with COVID-19, but also the promise of new platforms and operations. The SCT is designed to illuminate challenges and foster better linkages between the U.S. Defense budget and force structure. It accomplishes this objective 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 SCT allows users to explore alternatives defense investment priorities and develop strategies for future plans and programs, highlighting how future plans should differ from current plans. Driven by a user's view of 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 and potential strategic challenges, examining defense spending and strategic planning from a regional lens to a global perspective in both the near and long term. The U.S. tool includes over 1,200 force structure and capability options across twelve areas, including air, sea, ground, manpower, readiness, and R&D.

The SCT provides its users the unique capability to link force planning and future strategy with budgetary decisions and constraints. For example, in late 2021, CSBA held a week-long workshop in which participants first took part in a wargame involving a crisis on NATO's Eastern flank set in 2030 given current force outlays and investments. Following the outcome of that game, the participants used the SCT to realign defense investments in the theater, then ran the scenario a second time with their new investments in place.

In 2021, CSBA unveiled its new China Strategic Choices Tool, adding to its capabilities to examine conflict in the Indo-Pacific from both sides. Early exercises asked participants to make investment decisions based on theater-level strategic goals as well as potential global objectives. In 2022, CSBA will release a report on these exercises and the tool itself.

In late 2020 and in the period leading up to the new U.S. administration in January 2021, CSBA partnered with the Ronald Reagan Institute for 2 high-level bipartisan workshops on defense budget challenges after COVID-19. The exercises resulted in a published report, a major op-ed piece by CSBA's Dr. Thomas G. Mahnken and Ronald Reagan Institute Director Roger I. Zakheim, a presentation at the 2021 Reagan National Defense Forum, and extensive coverage on Capitol Hill and in the media.

CSBA



# 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

Despite the limitations imposed by the COVID-19 pandemic, CSBA was proud to host leaders from the Department of Defense and its leadership to discuss the future of defense strategy for the United States.

In June, we hosted the Chief of the Army Futures Command, General John Murray. The wide-ranging and interactive session featured Murray's experience as the first commanding general of the Army Futures command, the Army's development during that time, and how the Army can further evolve to meet the growing challenges of the 21st Century.

CSBA was also able to host a variety of virtual and limited in-person educational events throughout 2021, including sessions with the Secretary of Defense Executive Fellows Program (SDEFP), Chief of Naval Operations Admiral Michael M. Gilday, and the Georgia Institute of Technology.



## 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 2019 and 2020 programs, CSBA welcomed its third cohort of CDSS fellows in October 2021, hosting the seminars virtually. Featuring senior CSBA scholars and outside national security experts, the 2020 CDSS included such topics as:

- Defense Strategy and the Threat Environment
- Force Planning and the Future Operating Environment;
- Technology and Innovation;
- Nuclear Deterrence in the 21st Century;
- Alliances in Europe and the Indo-Pacific; 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.

Due to the COVID-19 pandemic, the initial ten-person cohort met virtually for four two-hour webinars from January-February 2021. The initial curriculum included the following topics:

- Assessing Military Service Modernization and Innovation Efforts;
- Understanding Nuclear Weapons Technologies and Deterrence Concepts;
- Demystifying the Defense Budget: Policy, Process, and Politicians; and
- Diagnosing the State of Civil-Military Relations.

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 2022, CSBA will launch several activities under the McCurdy Initiative, including public events, policymaker forums, published briefings, and expanded applications of CSBA's Strategic Choices Tool. These activities will focus on topics such as the legacy of the Nunn-McCurdy Amendment, Department of Defense FY2023 budget issues and financial planning, procurement and spending reform in the defense sector, and using the CSBA Strategic Choices Tool to assess recent defense spending decisions and educate current and future generations of policymakers.

CSBA looks forward to expanding the McCurdy Initiative to include workshops on investment and innovation featuring CSBA experts and Council members, as well as to seek the establishment of a McCurdy Fellowship within CSBA to direct the Initiative's research.





Some Final Discussion Topics

- What if potential falls below performance level?
- What if potential falls below value and time of investment in skills ability to deliver the project?
- How should cost, effort, risk and resources be managed?
- What does it really mean to fully recognize the value of an asset?
- Other possible initiatives/improvements affecting the skills report? (e.g., need for new organizational structure, etc.)

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# LOOKING FORWARD: STRATEGIC INNOVATION FOR GLOBAL CHALLENGES

In 2022, 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.





## Thomas Mahnken

### PRESIDENT AND CEO

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

He currently serves as a member of the Congressionally-mandated National Defense Strategy Commission and as a member of the Board of Visitors of Marine Corps University. 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. He served on the staff of the 2014 National Defense Panel, 2010 Quadrennial Defense Review Independent Panel, and the Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction. He served in the Defense Department's Office of Net Assessment and as a member of the Gulf War Air Power Survey. In 2009 he was awarded the Secretary of Defense Medal for Outstanding Public Service and in 2016 the Department of the Navy Superior Civilian Service Medal.

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



## 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.

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.

## CSBA STAFF



### 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.



### William C. Bodie

#### DIRECTOR OF DEVELOPMENT

Bill Bodie is a highly experienced business executive, government official, foundation professional, and international communications and marketing strategist. In a career spanning more than three decades, he has overseen and managed business portfolios for leading U.S. defense and civil engineering firms such as Northrop Grumman, KBR, Fluor, and Parsons. He most recently served as Group Executive Vice President for Parsons' Middle East Africa business unit. Prior to joining CSBA, Bill was Visiting Fellow at the Lexington Institute, focusing on economic and security currents in the Middle East.

In the U.S. government, Bill served as Special Assistant to the Secretary and Director of Air Force Communications from 2001-2004, and as a Senior Fellow for the Institute for National Strategic Studies at the National Defense University, 1992-1993. Bill has published numerous articles and reviews, has designed and executed strategic communications campaigns for domestic and international business clients, and is active in national security and philanthropic organizations, including the Board of Trustees of the Shakespeare Theatre Company and the Advisory Board of the Salvation Army's National Capitol Area Command.



## 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.



### Chris Bassler

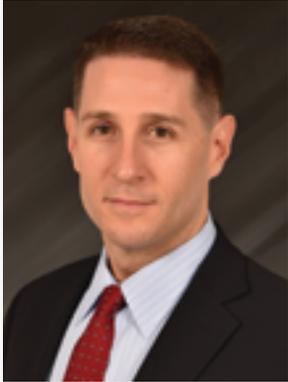
#### SENIOR FELLOW

Dr. Chris Bassler is a Senior Fellow at the Center for Strategic and Budgetary Assessments. He previously served as the Chief Strategy Officer (CSO) for the F-35 Lightning II Joint Program Office (JPO), the Department of Defense's largest acquisition enterprise, responsible for developing and acquiring the most advanced next-generation strike aircraft weapon system for the U.S. Air Force, Marines, Navy, and many allied nations. As the CSO, he directly supported the Program Executive Officer (PEO) and JPO senior leadership on the development and implementation of comprehensive efforts across the entire JPO enterprise, and lead the F-35 JPO's teams for requirements analysis & integration; new capability assessments; technology strategy, planning, & integration;

intelligence planning & analysis; and strategic planning & communications.

He also previously served as Deputy Director of the Office of the Senior National Representative (SNR) in the Office of the Chief of Naval Operations, Directorate for Innovation, Technology Requirements, Test & Evaluation (OPNAV N94). In this role, he led the development of strategies and programs to enhance capabilities, capacities, integration, and interoperability with coalition allies and partners across the full spectrum of naval missions and all warfighting domains, for both bilateral and multi-lateral efforts. Prior to that assignment, Dr. Bassler served as the Director of the Naval Science & Technology Cooperation Program at the Office of Naval Research (ONR). He led the development and strengthening of a portfolio of science, research, and technology development relationships with allies and foreign partners, in order to enhance future naval capabilities and missions. He oversaw the development and coordination of all international science and technology engagement by the Chief of Naval Research, the Executive Director of ONR, and the broader ONR leadership.

Earlier in his career, Dr. Bassler held several positions at the U.S. Navy's Naval Surface Warfare Center, Carderock Division (NSWCCD), leading research projects, design studies, and teams. His last assignment at NSWCCD was Team Leader for Future Surface Combatants in the Future Ship & Submarine Concepts Branch. In 2014, Dr. Bassler worked as a member of the technical staff on the U.S. Navy's Small Surface Combatant Task Force. In his previous assignments, Dr. Bassler also led several collaborative S&T and R&D projects with allies and partners and served as a U.S. representative on several forums in NATO in both the Science & Technology Organisation and the Naval Armaments Group. He has also served as a technical advisor to the U.S. delegation to the International Maritime Organization.



## 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

### RESEARCH FELLOW

Jack Bianchi focuses on Asia strategy and U.S.-China long-term competition, including 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.

Bianchi has working proficiency in Mandarin Chinese and has studied the language at academic programs in both Beijing and Taipei. His writing has appeared in *War on the Rocks*, *China Brief*, and *ORMS Today*, and he co-authored "Warfare Drivers: Mission

Needs and the Impact on Ship Design," a chapter in *Chinese Naval Shipbuilding: An Ambitious and Uncertain Course*. His prior experience also includes work at the Department of Justice and in the Office of Investment Security at the Department of the Treasury.

Bianchi has an M.A. in China Studies and International Economics from SAIS and a B.A. in International Studies from Boston College. He also completed the International Chinese Language Program at National Taiwan University as well as language courses at the Beijing Center for Chinese Studies at the University of International Business and Economics.

## CSBA STAFF



### Ryan Boone

ANALYST – ON ASSIGNMENT

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

Boone was a Robertson Scholar at Duke University and graduated with a B.A. in International Relations and Middle Eastern and East Asian history. He also earned an M.A. in Strategic Studies & Economics.



### Josh Chang

ANALYST

Josh Chang is an analyst at the Center for Strategic and Budgetary Assessments (CSBA), where he focuses on U.S. defense strategy, force planning, great power competition, military alliances, nuclear deterrence/strategy, and missiles. He is also a 2022 Nuclear Scholar at the Center for Strategic and International Studies' (CSIS) Project on Nuclear Issues (PONI), where he is conducting a research project on allied views of U.S. nuclear modernization. He previously worked for CSIS Japan Chair, the Council on Foreign Relations (CFR), and the Long Term Strategy Group (LTSG), where he conducted research on areas such as the U.S.-Japan alliance, Chinese military power, and near-peer competition. Outside of his professional work, Josh is a specialist on great power competition

in Latin America and writes on the activities of U.S. adversaries in the Western Hemisphere, with his work published in outlets such as the Georgetown Security Studies Review (GSSR), the National Interest, Small Wars Journal, and E-International Relations. He previously served as Associate Editor for the Americas at GSSR and founded the journal's podcast program, Precision-Guided Podcast, which discusses foreign policy and national security issues.



## David 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

### SENIOR ANALYST

Madison Creery is a senior analyst 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

#### FELLOW

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.



### Aidan Greer

#### RESEARCH ASSISTANT

Aidan Li Ping Greer is a research assistant at the Center for Strategic and Budgetary Assessments. His research focuses on East Asia, specifically U.S.-China-Taiwan relations and security. He is currently working on China's space program. He previously worked for Trivium China, a small policy research firm focusing on China's political economy. He has spent time studying Mandarin in both China and Taiwan.



### Tyler Hacker

#### ANALYST

Tyler Hacker is an analyst 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.

## CSBA STAFF



### 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.



### 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.



## Kenichi “Ken” Matsui

### VISITING FELLOW

Commander Kenichi Matsui, Japanese Maritime Self-Defense Force (JMSDF), is currently assigned as a strategic planner with the Defense Plans and Policy Department (J5) of the Joint Staff at the Japanese Ministry of Defense. Previously, he was Deputy Defense Attaché in the Japanese Embassy in Paris.

Throughout his career as a Tactical Coordinator (TACCO) in the P-3C Orion surveillance aircraft, he participated in missions as part of Air Patrol Squadron 2, including counter-piracy operations in the waters off the coast of Somalia and in the Gulf of Aden in 2010. He also has coordinated and participated in several US-Japan bilateral exercises. Commander Matsui has also served as an instructor the Air Training Squadron 203,

Shimofusa Air Base, in Chiba.

During his almost 20 years of service with the JMSDF, he has also served in the Public Affairs Division of the Ministry of Defense, contributing to the editorial direction of its monthly publication, MAMOR.



## James Mersol

### PUBLICATIONS MANAGER

James Mersol is the Publications Manager at the Center for Strategic and Budgetary Assessments. Prior to joining CSBA, he covered cybersecurity and national security for GovernmentCIO Media & Research. Previously, James interned at the Center for Strategic and International Studies, where he focused on defense budget issues, and at the Intelligence and National Security Alliance, where he focused on financial threats, cybersecurity, and acquisition management. While pursuing his master’s degree, he edited for the SAIS Review and worked as Dr. Eliot Cohen’s research assistant. James also serves as an editor for Charged Affairs, the online publication for Young Professionals in Foreign Policy.

James graduated from Davidson College with a B.A. in Political Science (cum laude) and from the Johns Hopkins School of Advanced International Studies (SAIS) with an M.A. in Strategic Studies and International Economics.



## Meredith Meyers

### OFFICE MANAGER

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.



### 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.

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.



## 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

RESEARCH ASSISTANT

Joseph Ross is a research assistant 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.

## CSBA STAFF



### 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.



## Travis Sharp

### FELLOW

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.



## Madison Sparber

### RESEARCH ASSISTANT

Madison Sparber is a research assistant at the Center for Strategic and Budgetary Assessments. Her work focuses on East Asian security and Chinese military modernization. Previously, she served in the Secretary of State’s Office of Policy Planning as a research assistant, where she helped draft, edit, and translate Mandarin sources for the Secretary’s seminal report “Elements of the China Challenge.” Her prior experience also includes work at the Senate Armed Services Committee and defense consulting firm Systems Planning and Analysis, Inc., focusing on defense strategy and legislative affairs. In addition to her current role at CSBA, she is a graduate student at the Naval War College, earning a Master of Arts in Defense and Strategic Studies.



## Jan van Tol

### SENIOR FELLOW

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.

## CSBA BOARD MEMBERS



### Tatsuki "Turner" Yamaji

#### VISITING FELLOW

Lt. Col Tatsuki Yamaji, from Japanese Ground Self-Defense Force (JGSDF), is currently assigned as a strategic planner with the Defense Plans and Policy Department (J5) of the Joint Staff at the Japanese Ministry of Defense. As an Infantry officer, he has served as an intelligence platoon leader, a staff, and an infantry company commander. He was responsible for peace cooperation activities in Ground Staff Office and has also worked in the human resources field, including positions as recruitment officer of a provincial office, training officer of a cadet candidate school, and an instructor of CGSC.



### 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

SENIOR MANAGING DIRECTOR  
HOULIHAN LOKEY

Ms. Antenucci is a Senior Managing Director and leads Houlihan Lokey's Aerospace • Defense • Government practice - a leading global investment bank with expertise in mergers and acquisitions, capital markets, financial restructuring, valuation, and strategic consulting. Antenucci has two decades of investment banking experience, including M&A, financing, and valuation. She has worked on the buy-side and the sell-side 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. Before joining Houlihan Lokey, Antenucci served as the

Co-President and Managing Director of Quarterdeck Investment Partners, a boutique M&A advisor to the aerospace, defense, and government services industries. With degrees from Johns Hopkins' School of Advanced International Studies and Northwestern University, Antenucci is on the Executive Committee of the Board of Trustees of the Shakespeare Theatre Company, the Board of Directors of the Space Foundation, the Board of the National Guard Youth Foundation, and CSBA. Antenucci is based in the firm's Washington DC office.



## 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.



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

**MEMBER**

**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 Hampton 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, USA (Ret.)

**SENIOR MANAGING PARTNER  
KEANE ADVISORS, LLC**

John M. Keane is Senior Managing Director and co-founder of Keane Advisors, LLC. General Keane is a retired four-star general who dedicated four decades of his life to public service, which culminated in his appointment as acting Chief of Staff and Vice Chief of Staff of the U.S. Army. General Keane is a career paratrooper, a combat veteran of Vietnam, decorated for valor. He is a member of the Secretary of Defense's Policy Board, member of the Congressional Commission on the National Guard and Reserves, a member of the Council on Foreign Relations, director of the George C. Marshall Foundation, director of the Knollwood Foundation, a member of the Executive

Committee of the Pentagon Memorial Fund, chairman of the Terry Maude Foundation and chairman of Senior Executive Committee of the Army Aviation Association of America. General Keane holds a B.S. in Accounting from Fordham University and an M.A. in Philosophy from Western Kentucky University. He is a graduate of the Army War College and the Command and General Staff College.



## 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.



### 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.



## 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

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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Center for Strategic and Budgetary Assessments

1667 K Street NW, Suite 900

Washington, DC 20006

(202) 331-7990 | Fax: (202) 331-8019

[www.csbaonline.org](http://www.csbaonline.org)