

# Acknowledgments

No publication of this type is possible without the contributions of a great many people. Nevertheless, there are a few special contributors whose talents, work ethic, and willingness to go the extra mile have made certain that the *Index of U.S. Military Strength* remains a uniquely special undertaking.

James Di Pane, Research Associate in the Center for National Defense, assumed the major task of shepherding production of the *2020 Index of U.S. Military Strength*. He worked with the authors, editors, and graphics and production professionals to make this *Index* a reality, both in print and on the web. In particular, he brought together authors and our graphics team in a series of sessions to think through ways to keep the *Index* vibrant and informative beyond the ability of a purely text-based document to do so.

Special thanks go to Jeff Smith, Research Fellow for South Asia, and Robin Simcox, Margaret Thatcher Fellow, who spearheaded a redesign of the assessment chapter on “Threats to Vital U.S. Interests,” shifting the presentation from one organized by U.S. security interest to one focused on major threat-actors. This seems to us a more natural and coherent way to discuss threats to U.S. interests.

Senior Editor William T. Poole admirably sustained his instrumental role in maintaining a consistent tone throughout this multi-author document—a challenging feat all its own—and checking every reference to ensure accuracy of reporting and coherence throughout the *Index* while also updating text that, though still current, can become stale when carried from one year to the next. He was aided again this year

by Research Editor Kathleen McCann Scaturro, who reviewed four of the five topical essays, as well as the nuclear capability assessment, with a keen eye for editorial nuance and detail. Data Graphics Services Manager John Fleming, ably assisted by Data Graphics Specialist and Editorial Associate Luke Karnick, once again gave visual life to text and statistics to convey a message with maximum impact, working with the authors to explore more creative ways to convey important information. Senior Designer of Research Projects Jay Simon and Digital Strategy Director Maria Sousa ensured that the presentation of *Index* materials was fine-tuned to account for changes in content delivery as our world becomes increasingly digital, portable, and driven by social media. Finally, Director of Research Editors Therese Pennefather was critical in guiding and coordinating these efforts to create a cohesive, finished product.

We believe that this *Index* helps to provide a better-informed understanding and wider appreciation of America’s ability to “provide for the common defence”—an ability that undergirds The Heritage Foundation’s vision of “an America where freedom, opportunity, prosperity, and civil society flourish.” Judging by the reception the *Index* received during this past year—the work cited and referenced by Congress, the executive branch, officials within the Department of Defense, supporting government agencies, the media, academia, and policy institutes, as well as among the public—we are encouraged that so many Americans are similarly concerned about the state of affairs in and the multitude of factors affecting our country.

The Heritage Foundation seeks a better life for Americans, which requires a stronger economy, a stronger society, and a stronger defense. To help measure the state of the economy, our Institute for Economic Freedom and Opportunity publishes the annual *Index of Economic Freedom*; to help guide Congress in its constitutional exercise of the power of the purse, our Institute for Economic Freedom publishes the *Blueprint for Balance*; and to help Americans everywhere more fully understand the state of our defenses, our Kathryn and Shelby Culom Davis Institute for National Security and

Foreign Policy is publishing this sixth annual edition of the *Index of U.S. Military Strength*.

In addition to acknowledging all of those who helped to prepare this edition, very special recognition is due to the Heritage members and donors whose continued support has made this *2020 Index of U.S. Military Strength* possible.

Finally, as always, The Heritage Foundation also expresses its profound appreciation to the members of the U.S. armed forces who continue to protect the liberty of the American people in an increasingly challenging world.

# Contributors

## Heritage Experts

**Dakota L. Wood** is Senior Research Fellow for Defense Programs in the Center for National Defense, of the Kathryn and Shelby Cullom Davis Institute for National Security and Foreign Policy, at The Heritage Foundation. He served for two decades as an officer in the U.S. Marine Corps, including service as a strategic analyst for the Commandant of the Marine Corps and the Secretary of Defense's Director of Net Assessment.

**Thomas W. Spoehr**, Lieutenant General, U.S. Army (Ret.), is Director of the Center for National Defense. Before joining The Heritage Foundation, he served America for more than 36 years in the U.S. Army.

**Frederico Bartels** is Policy Analyst for Defense Budgeting in the Center for National Defense. Before joining The Heritage Foundation, he served for three years as a Policy Analyst with Concerned Veterans for America.

**Thomas Callender** is a former Senior Research Fellow for Defense Programs in the Center for National Defense. Following a 20-year career in the U.S. Navy's submarine fleet, he served for five years as Director for Capabilities in the Capabilities and Concepts Directorate of the Office of the Deputy Under Secretary of the Navy for Policy.

**Dean Cheng** is a Senior Research Fellow in the Asian Studies Center of the Davis Institute. He specializes in China's military and foreign policy.

**Luke Coffey** is Director of the Douglas and Sarah Allison Center for Foreign Policy of the Davis Institute. He joined Heritage after service as Senior Special Advisor to the Secretary of State for Defence of the United Kingdom.

**James Di Pane** is a Research Associate in the Center for National Defense. He focuses on military cyber and the U.S. Coast Guard and manages production of the *Index of U.S. Military Strength*.

**Michaela Dodge** is a former Senior Policy Analyst for Defense and Strategic Policy in the Center for National Defense. She specializes in missile defense, nuclear weapons modernization, and arms control.

**Bruce Klingner** is Senior Research Fellow for Northeast Asia in the Asian Studies Center. He served for two decades at the Central Intelligence Agency and the Defense Intelligence Agency.

**Daniel Kochis** is a Policy Analyst in European Affairs in the Davis Institute's Margaret Thatcher Center for Freedom, where he specializes in trans-Atlantic security issues including NATO, U.S.-Russia relations, and the Arctic.

**Walter Lohman** is Director of the Asian Studies Center. He has served on the staff of the Senate Committee on Foreign Relations, in the Office of Senator John McCain, and as Executive Director of the U.S.-ASEAN Business Council.

**James Phillips** is Senior Research Fellow for Middle Eastern Affairs in the Allison Center. He has also served at the Congressional Research Service and at the East-West Center.

**Robin Simcox** is the Margaret Thatcher Fellow in the Thatcher Center. He specializes in counterterrorism and national security policy.

**Jeff Smith** is a Research Fellow in the Asian Studies Center. He specializes in South Asia, has authored and contributed to several books on Asian security matters, and formerly served as Director of Asian Security Programs at the American Foreign Policy Council.

**John Venable** is Senior Research Fellow for Defense Policy in the Center for National Defense. A 25-year veteran of the U.S. Air Force and F-16 pilot, he served in three combat operations, was commander of the Thunderbirds, and earned the rank of colonel before retiring.

**Emma Watkins** is a Research Assistant in the Center for National Defense. She focuses on the military industrial base.

## **External Reviewers and Expert Contributors**

**Thomas P. Ehrhard, PhD**, is Vice President for Defense Strategy at the Long Term Strategy Group.

**Bryan L. Fearey, PhD**, is an independent national security advisor. He formerly served as Senior Science and Deterrence Policy Advisor for OSD Policy in the Office of the Deputy Assistant Secretary of Defense for Nuclear and Missile Defense and as Director of the National Security Office at Los Alamos National Laboratory, from which he is now retired.

**Annie Fixler** is Deputy Director of the Center on Cyber and Technology Innovation at the Foundation for Defense of Democracies.

**Rebecca Grant, PhD**, is Founder and President of IRIS Independent Research.

**William Hix**, Major General, U.S. Army (Ret.), and former Director of Strategy, Plans, and Policy for the U.S. Army, is Founder and Managing Partner of Next Horizon Partners.

**Tom Karako, PhD**, is a Senior Fellow at the Center for Strategic and International Studies.

**Kathleen J. McInnis, PhD**, is a nonresident Senior Fellow at the Atlantic Council of the United States.

**Samantha F. Ravich, PhD**, is Chair, Center for Cyber and Technology Innovation, Foundation for Defense of Democracies.

Any views presented in or reflecting the results of any prepublication review of this document by an officer or employee of the United States are rendered in his or her individual capacity and do not necessarily represent the views of the United States or any agency thereof.