

An Assessment of U.S. Military Power

America is a global power with global interests. Its military is tasked first and foremost with defending America from attack. Beyond that, it must be capable of protecting Americans abroad, allies, and the freedom to use international sea, air, and space while retaining the ability to engage in more than one major contingency at a time. America must be able not only to defend itself and its interests, but also to deter enemies and opportunists from taking action that would challenge U.S. interests, a capability that includes both preventing the destabilization of a region and guarding against threats to the peace and security of America's friends.

As noted in the five preceding editions of the *Index*, however, the U.S. does not have the necessary force to meet a two-major regional contingency (two-MRC) requirement and is not ready to carry out its duties effectively. Consequently, as we have seen during the past few years, the U.S. risks seeing its interests increasingly challenged and the world order it has led since World War II undone.

How to Think About Sizing Military Power

Military power begins with the people and equipment used to conduct war: the weapons, tanks, ships, airplanes, and supporting tools such as communications systems that make it possible either for one group to impose its will on another or to prevent such an outcome from happening.

However, simply counting the number of people, tanks, or combat aircraft that the U.S. possesses would be insufficient because it would lack context. For example, the U.S.

Army might have 100 tanks, but to accomplish a specific military task, 1,000 or more might be needed or none at all. It might be that the terrain on which a battle is fought is especially ill-suited to tanks or that the tanks one has are inferior to the enemy's. The enemy could be quite adept at using tanks, or his tank operations might be integrated into a larger employment concept that leverages the supporting fires of infantry and airpower, whereas one's own tanks are poorly maintained, the crews are not well-prepared, or one's doctrine is irrelevant.

Success in war is partly a function of matching the tools of warfare to a specific task and employing those tools effectively in battle. Get these wrong—tools, objective, competence, or context—and you lose.

Another key element is the military's capacity to conduct operations: how many of the right tools—people, tanks, planes, or ships—it has. One might have the right tools and know how to use them effectively but not have enough to win. Given that one cannot know with certainty beforehand just when, where, against whom, and for what reason a battle might be fought, determining how much capability is needed is an exercise of informed but not certain judgment.

Further, two different combatants can use the same set of tools in radically different ways to quite different effects. The concept of employment matters. Concepts are developed to account for numbers, capabilities, material readiness, and all sorts of other factors that enable or constrain one's actions, such as whether one fights alone or alongside

allies, on familiar or strange terrain, or with a large, well-equipped force or a small, poorly equipped force.

All of these factors and a multitude of others affect the outcome of any military contest. Military planners attempt to account for them when devising requirements, developing training and exercise plans, formulating war plans, and providing advice to the President in his role as Commander in Chief of U.S. military forces.

Measuring hard combat power in terms of its capability, capacity, and readiness to defend U.S. vital interests is difficult, especially in such a limited space as this *Index*, but it is not impossible. However difficult determining the adequacy of one's military forces may be, the Secretary of Defense and the military services have to make such decisions every year when the annual defense budget request is submitted to Congress.

The adequacy of hard power is affected most directly by the resources the nation is willing to apply. Although that decision is informed to a significant degree by an appreciation of threats to U.S. interests and the ability of a given defense portfolio to protect U.S. interests against such threats, it is not informed solely by such considerations; hence the importance of clarity and honesty in determining just what is needed in terms of hard power and the status of such power from year to year.

Administrations take various approaches in determining the type and amount of military power needed and, by extension, the amount of money and other resources to commit to it. After defining the national interests to be protected, the Department of Defense (DOD) can use worst-case scenarios to determine the maximum challenges the U.S. military might have to overcome. Another way is to redefine what constitutes a threat. By taking a different view of whether major actors pose a meaningful threat and of the extent to which friends and allies have the ability to assist the U.S. in meeting security objectives, one can arrive at different conclusions about necessary military strength.

For example, one Administration might view China as a rising belligerent power bent

on dominating the Asia–Pacific region. Another Administration might view China as an inherently peaceful rising economic power, with the expansion of its military capabilities a natural occurrence commensurate with its strengthening status. The difference between these views can have a dramatic impact on how one thinks about U.S. defense requirements. So, too, can policymakers amplify or downplay risk to justify defense budget decisions.

There also can be strongly differing views on requirements for operational capacity.

- Does the country need enough for two major combat operations (MCOs) at roughly the same time or just enough for a single major operation and some number of lesser cases?
- To what extent should “presence” tasks—the use of forces for routine engagement with partner countries or simply to be on hand in a region for crisis response—be in addition to or a subset of a military force sized to handle two major regional conflicts?
- How much value should be assigned to advanced technologies as they are incorporated into the force?

Where to Start

There are two major references that one can use to help sort through the variables and arrive at a starting point for assessing the adequacy of today's military posture: government studies and historical experience. The government occasionally conducts formal reviews that are meant to inform decisions on capabilities and capacities across the Joint Force relative to the threat environment (current and projected) and evolutions in operating conditions, the advancement of technologies, and aspects of U.S. interests that may call for one type of military response over another.

The 1993 Bottom-Up Review (BUR) conducted by then-Secretary of Defense Les Aspin is one such frequently cited example. Secretary

Aspin recognized that “the dramatic changes that [had] occurred in the world as a result of the end of the Cold War and the dissolution of the Soviet Union” had “fundamentally altered America’s security needs” and were driving an imperative “to reassess all of our defense concepts, plans, and programs from the ground up.”¹

The BUR formally established the requirement that U.S. forces should be able “to achieve decisive victory in two nearly simultaneous major regional conflicts and to conduct combat operations characterized by rapid response and a high probability of success, while minimizing the risk of significant American casualties.”² Thus was formalized the two-MRC standard.

Dr. Daniel Gouré, in his 2015 *Index* essay “Building the Right Military for a New Era: The Need for an Enduring Analytic Framework,” noted that various Administrations have redefined force requirements based on their perceptions of what was necessary to protect U.S. interests.³ In an attempt to formalize the process, and perhaps to have a mechanism by which to influence the executive branch in such matters, Congress mandated that each incoming Administration must conduct a comprehensive strategic review of the global security environment, articulate a relevant strategy suited to protecting and promoting U.S. security interests, and recommend an associated military force posture.⁴

The Quadrennial Defense Reviews (QDRs) have been conducted since 1997, accompanied in 1997, 2010, and 2014 by independent National Defense Panel (NDP) reports that have reviewed and commented on them. Both sets of documents purport to serve as key assessments, but analysts have come to minimize their value, regarding them as justifications for executive branch policy preferences (the QDR reports) or overly broad generalized commentaries (the NDP reports) that lack substantive discussion about threats to U.S. interests, a credible strategy for dealing with them, and the actual ability of the U.S. military to meet national security requirements.

The QDR was replaced by the National Defense Strategy (NDS), released in 2018, and the independent perspectives of the formal DOD review by the National Defense Strategy Commission, which released its view of the NDS in November 2018. Departing from their predecessors, neither document proposed specific force structures or end strength goals for the services.⁵

Correlation of Forces as a Factor in Force Sizing

During the Cold War, the U.S. used the Soviet threat as its primary reference in determining its hard-power needs. At that time, the correlation of forces—a comparison of one force against another to determine strengths and weaknesses—was highly symmetrical. U.S. planners compared tanks, aircraft, and ships against their direct counterparts in the opposing force. These comparative assessments drove the sizing, characteristics, and capabilities of fleets, armies, and air forces.

The evolution of guided, precision munitions and the rapid technological advancements in surveillance and targeting systems, however, made comparing combat power more difficult. What was largely a platform v. platform model has shifted somewhat to a munitions v. target model.

The proliferation of precise weaponry means increasingly that each round, bomb, rocket, missile, and even (in some instances) individual bullet can hit its intended target, thus decreasing the number of munitions needed to prosecute an operation. It also means that the lethality of an operating environment increases significantly for the people and platforms involved. We are now at the point where, instead of focusing primarily on how many ships or airplanes the enemy can bring to bear against one’s own force, one must consider how many “smart munitions” the enemy has when thinking about how many platforms and people are needed to win a combat engagement.⁶

In one sense, increased precision and the technological advances now being

incorporated into U.S. weapons, platforms, and operating concepts make it possible to do far more than ever before with fewer assets.

- Platform signature reduction (stealth) makes it harder for the enemy to find and target them, and the increased precision of weapons makes it possible for fewer platforms to hit many more targets.
- The ability of the U.S. Joint Force to harness computers, modern telecommunications, space-based platforms—such as for surveillance, communications, and positioning-navigation-timing (PNT) support from GPS satellites—and networked operations potentially means that in certain situations, smaller forces can have far greater effect in battle than at any other time in history (although these same advances also enable enemy forces).
- Certain military functions—such as seizing, holding, and occupying territory—may require a certain number of soldiers no matter how state-of-the-art their equipment may be. For example, securing an urban area where line of sight is constrained and precision weapons have limited utility requires the same number of squads of infantry as were needed in World War II.

With smaller forces, each individual element of the force represents a greater percentage of its combat power. Each casualty or equipment loss therefore takes a larger toll on the ability of the force to sustain high-tempo, high-intensity combat operations over time, especially if the force is dispersed across a wide theater or across multiple theaters of operation.

As advanced technology has become more affordable, it has become more accessible for nearly any actor, whether state or non-state. Consequently, it may well be that the outcomes of future wars will depend far more on the skill of the forces and their capacity to sustain

operations over time than they will on some great disparity in technology. If so, readiness and capacity will take on greater importance than absolute advances in capability.

All of this illustrates the difficulties of and need for exercising judgment in assessing the adequacy of America's military power. Yet without such an assessment, all that remains are the defense strategy reviews, which are subject to filtering and manipulation to suit policy interests; annual budget submissions, which typically favor desired military programs at presumed levels of affordability and are therefore necessarily budget-constrained; and leadership posture statements, which often simply align with executive branch policy priorities.

The U.S. Joint Force and the Art of War

This section of the *Index* assesses the adequacy of the United States' defense posture as it pertains to a conventional understanding of "hard power," defined as the ability of American military forces to engage and defeat an enemy's forces in battle at a scale commensurate with the vital national interests of the U.S. While some hard truths in military affairs are appropriately addressed by math and science, others are not. Speed, range, probability of detection, and radar cross-section are examples of quantifiable characteristics that can be measured. Specific future instances in which U.S. military power will be needed, the competence of the enemy, the political will to sustain operations in the face of mounting deaths and destruction, and the absolute amount of strength needed to win are matters of judgment and experience, but they nevertheless affect how large and capable a force one might need.

In conducting the assessment, we accounted for both quantitative and qualitative aspects of military forces, informed by an experience-based understanding of military operations and the expertise of external reviewers. The authors of these military sections bring a combined total of more than a hundred years of uniformed military experience to their analysis.

Military effectiveness is as much an art as it is a science. Specific military capabilities represented in weapons, platforms, and military units can be used individually to some effect. Practitioners of war, however, have learned that combining the tools of war in various ways and orchestrating their tactical employment in series or simultaneously can dramatically amplify the effectiveness of the force that is committed to battle.

Employment concepts are exceedingly hard to measure in any quantitative way, but their value as critical contributors in the conduct of war is undeniable. How they are used is very much an art-of-war matter that is learned through experience over time.

What Is Not Being Assessed

In assessing the current status of the military forces, this *Index* uses the primary measures used by the military services themselves when they discuss their ability to employ hard combat power.

- The Army's unit of measure is the brigade combat team (BCT);
- The Marine Corps structures itself by battalions;
- For the Navy, it is the number of ships in its combat fleet; and
- The most consistent measure for the Air Force is total number of aircraft, sometimes broken down into the two primary subtypes of fighters and bombers.

Obviously, this is not the totality of service capabilities, and it certainly is not everything needed for war, but these measures can be viewed as surrogates that subsume or represent the vast number of other things that make these "units of measure" possible and effective in battle. For example, combat forces depend on a vast logistics system that supplies everything from food and water to fuel, ammunition, and repair parts. Military operations require

engineer support, and the force needs medical, dental, and administrative capabilities. The military also fields units that transport combat power and its sustainment wherever they may be needed around the world.

The point is that the military spear has a great deal of shaft that makes it possible for the tip to locate, close with, and destroy its target, and there is a rough proportionality between shaft and spear tip. Thus, in assessing the basic units of measure for combat power, one can get a sense of what is probably needed in the combat support, combat service support, and supporting establishment echelons.

The scope of this *Index* does not extend to analysis of everything that makes hard power possible; it focuses on the status of the hard power itself. It also does not assess the services' Reserve and National Guard components, although they account for roughly one-third of the U.S. military force⁷ and have been essential to the conduct of operations since September 2001. Consistent assessment of their capability, readiness, and operational role is a challenge because each service determines the balance among its Active, Reserve, and National Guard elements differently (only the Army and Air Force have Guard elements; the Navy and Marine Corps do not). This balance can change from year to year and is based on factors that include cost of the respective elements, availability for operational employment, time needed to respond to an emergent crisis, allocation of roles among the elements, and political considerations.⁸

As with other elements essential to the effective employment of combat power—logistics, medical support, strategic lift, training, etc.—the U.S. military could not handle a major conflict without the Reserve and Guard forces. Nevertheless, to make the challenge of annually assessing the status of U.S. military strength using consistent metrics over time more manageable, this *Index* looks at something that is usually associated with the Active component of each service: the baseline requirement for a given amount of combat power that is readily available for use in a major combat operation.

There are exceptions, however. For example, in this edition of the *Index*, four Army National Guard BCTs are counted as “available” for use because of the significant amounts of additional resources that have been dedicated specifically to these formations to raise their readiness levels.

The Defense Budget and Strategic Guidance

When it comes to the defense budget, how much we spend does not automatically determine the posture or capacity of the U.S. military. As a matter of fact, simply looking at how much is allocated to defense does not tell us much about the capacity, modernity, or readiness of the forces. Proper funding is a necessary condition for a capable, modern, and ready force, but it is not sufficient by itself. It is possible that a larger defense budget could be associated with less military capability if the money were allocated inappropriately or spent wastefully. That said, however, the budget does reflect the importance assigned to defending the nation and its interests in prioritizing federal spending.

Absent a significant threat to the country’s survival, the U.S. government will always balance spending on defense against spending in all of the other areas of government activity that are deemed necessary or desirable. Ideally, defense requirements are determined by identifying national interests that might need to be protected with military power; assessing the nature of threats to those interests, what would be needed to defeat those threats, and the costs associated with that capability; and then determining what the country can afford or is willing to spend. *Any difference between assessed requirements and affordable levels of spending on defense would constitute a risk to U.S. security interests.*

This *Index* enthusiastically adopts this approach: interests, threats, requirements, resulting force, and associated budget. Spending less than the amount needed to maintain a two-MRC force results in policy debates about where to accept risk: force modernization, the

capacity to conduct large-scale or multiple simultaneous operations, or force readiness.

The National Defense Strategy released in late January 2018 by the Department of Defense is the DOD’s current effort to establish the connection among interests, threats, requirements, and resources.⁹ It serves to orient how the DOD intends to prepare the country’s defense and establishes a public baseline of mission and associated requirements against which the country can measure its defense efforts. When discussing resources, the strategy calls for an increased, sustained, and predictable budget as the necessary precondition for its execution—something that has proved elusive in the current budgetary climate of two-year deals designed to circumvent the Budget Control Act of 2011 (BCA).¹⁰

The decision to fund national defense commensurate with interests and prevailing threats reflects our national priorities and risk tolerance. This *Index* assesses the ability of the nation’s military forces to protect vital national security interests within the world *as it is* so that the debate about the level of funding for hard power is better informed.

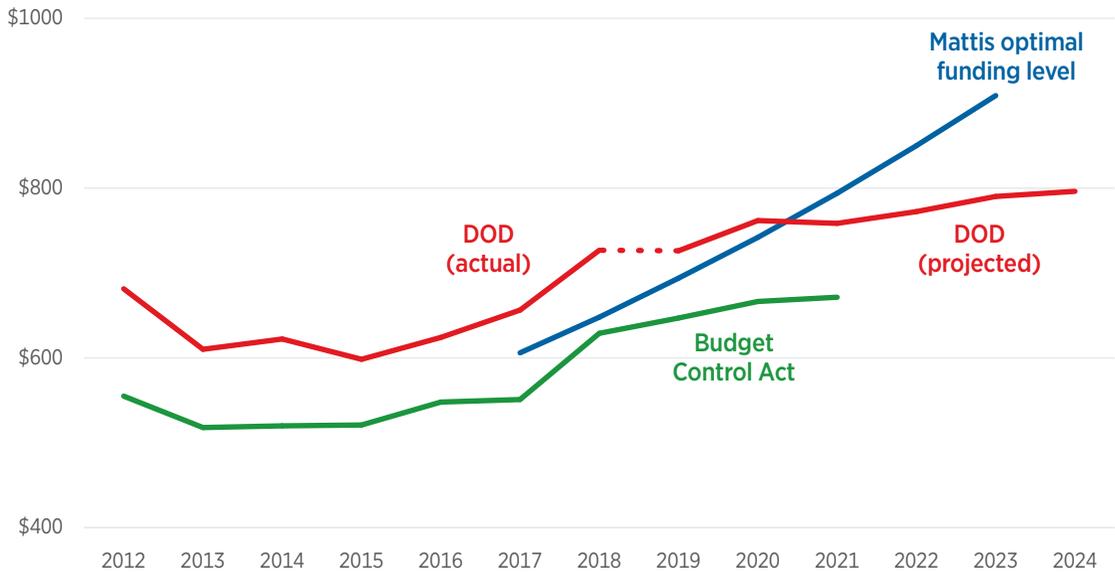
The fiscal year (FY) 2019 base discretionary budget for the Department of Defense was \$616 billion.¹¹ This represents the resources allocated to pay for the forces (manpower, equipment, training); enabling capabilities (things like transportation, satellites, defense intelligence, and research and development); and institutional support (bases and stations, facilities, recruiting, and the like). The base budget does not pay for the cost of major ongoing overseas operations, which is captured in supplemental funding known as OCO (overseas contingency operations).

The debate about how much funding should be allocated to defense has been framed by the current Administration’s campaign promise to rebuild the military, an objective that is generally supported by Congress. Despite repeated emphasis on the importance of investing more to fix obvious readiness, capacity, and modernization problems, the debate has been determined by larger political dynamics that

Defense Spending Improves but Falls Short of Optimal Levels

Despite expected increases, defense spending is projected to fall short of former Defense Secretary Gen. Mattis's optimal funding levels.

IN BILLIONS OF DOLLARS



NOTES: DOD spending includes mandatory spending (about \$9 billion per year) and OCO spending, which is exempt from the BCA.
SOURCES:

- Department of Defense: Office of Management and Budget, *Historical Tables*, “Table 5.1—Budget Authority by Function and Subfunction: 1976–2024,” <https://www.whitehouse.gov/omb/historical-tables/> (accessed June 20, 2019).
- Budget Control Act: Brendan W. McGarry, “The Defense Budget and the Budget Control Act: Frequently Asked Questions,” Congressional Research Service *Report R44039*, July 13, 2018, <https://fas.org/sgp/crs/natsec/R44039.pdf> (accessed June 20, 2019), and Congress.gov, “H.R. 3877-Bipartisan Budget Act of 2019,” August 2, 2019, <https://www.congress.gov/bill/116th-congress/house-bill/3877> (accessed September 12, 2019).
- Mattis optimal funding levels: Frederico Bartels, “Current Planned Defense Budget Falls Short,” Heritage Foundation *Backgrounder* 3352, September 21, 2018, <https://www.heritage.org/defense/report/current-planned-defense-budget-falls-short>.

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pitted those who want to see an overall reduction in federal spending against those who advocate higher levels of defense spending and those who want to see any increase in defense spending matched by commensurate increases in domestic spending.

Passage of the Bipartisan Budget Act of 2018 (BBA)¹² in early February 2018 raised the BCA caps for FY 2018 and FY 2019. The legislation raised the cap by \$71 billion to \$629 billion in

FY 2018 and by \$69 billion to \$647 billion in FY 2019. This provided substantial budgetary relief for the DOD and, given its two-year coverage, a modicum of stability. This stability was translated into on-time passage of the National Defense Authorization Act and the Defense Appropriations bill, a first since 2008.¹³ Passage of a budget before the end of the fiscal year allowed the Pentagon to execute the budget properly and use all the months of the

fiscal year, in contrast with previous years that have been marked by continuing resolutions.¹⁴

The Department of Defense attributes many of the recent gains in readiness to the stability and predictability provided by the BBA:

The Bipartisan Budget Act of 2018 enabled the Department of Defense (DoD) to continue rebuilding the U.S. military after years of destructive budget cuts. In a time of competing priorities, Congress demonstrated political courage to ensure [that] America’s sentinels remain the combat-credible military force we need to deter war and guarantee [that] the President and our diplomats always negotiate from a position of strength.¹⁵

Following the Bipartisan Budget Act of 2018, Congress and the President come to an agreement on altering the last two years of the BCA caps, and the Bipartisan Budget Act of 2019 became law on August 2, 2019.¹⁶ The act raises the cap for FY 2020 from \$576 billion to \$666.5 billion and for FY 2021 from \$590 billion to \$671.5 billion. The law could yield a more predictable defense budget in the next two years, because the lawmakers will be able to begin their debates based on a defense budget level that is more acceptable to both sides of the aisle.

However, the growth in the defense budget as outlined by the Bipartisan Budget Act of 2019 falls short of what is assessed as needed.

In testimony before the House Armed Services Committee, for example, former Secretary of Defense James Mattis and Chairman of the Joint Chiefs of Staff General Joseph Dunford emphasized the need for sustained budget growth so that U.S. forces can maintain a competitive advantage over likely adversaries.¹⁷ “We know now,” General Dunford testified, “that continued growth in the base budget of at least 3 percent *above inflation* is the floor necessary to preserve just the competitive advantage we have today, and we can’t assume our adversaries will remain still.”¹⁸ Further, the bipartisan commission that assessed the

National Defense Strategy also assessed the need to have budgetary growth of between 3 percent and 5 percent above inflation.¹⁹ The BCA limits the increases to little over inflation, and the current budget request projects increases that are slightly below the inflationary rate.

Purpose as a Driver in Force Sizing

The Joint Force is used for a wide range of purposes, only one of which is major combat operations. Fortunately, such events have been rare (but consistent), averaging roughly 15 years between occurrences.²⁰ In between (and even during) such occurrences, the military is used to support regional engagement, crisis response, strategic deterrence, and humanitarian assistance, as well as to support civil authorities and U.S. diplomacy.

All of the U.S. Unified Geographic Combatant Commands, or COCOMS—Northern Command (NORTHCOM); European Command (EUCOM); Central Command (CENTCOM); Indo-Pacific Command (INDOPACOM); Southern Command (SOUTHCOM); and Africa Command (AFRICOM)—have annual and long-term plans through which they engage with countries in their assigned regions. These engagements range from very small unit training events with the forces of a single partner country to larger bilateral and sometimes multilateral military exercises. Such events help to foster working relationships with other countries, acquire a more detailed understanding of regional political–military dynamics and on-the-ground conditions in areas of interest, and signal U.S. security interests to friends and competitors.

To support such COCOM efforts, the services provide forces that are based permanently in respective regions or that operate in them temporarily on a rotational basis. To make these regional rotations possible, the services must maintain base forces that are large enough to train, deploy, support, receive back, and again make ready a stream of units that ideally is enough to meet validated COCOM demand.

The ratio between time spent at home and time spent away on deployment for any given unit is known as OPTEMPO (operational tempo), and each service attempts to maintain a ratio that both gives units enough time to educate, train, and prepare their forces and allows the individuals in a unit to maintain some semblance of healthy home and family lives. This ensures that units are fully prepared for the next deployment cycle and that service-members do not become “burned out” or suffer adverse consequences in their personal lives because of excessive deployment time.

Experience has shown that a ratio of at least 3:1 (three periods of time at home for every period deployed) is sustainable. If a unit is to be out for six months, for example, it will be home for 18 months before deploying again. Obviously, a service needs enough people, units, ships, and planes to support such a ratio. If peacetime engagement were the primary focus for the Joint Force, the services could size their forces to support these forward-based and forward-deployed demands.

Thus, the size of the total force must necessarily be much larger than any sampling of its use at any point in time.

In contrast, sizing a force for major combat operations is an exercise informed by history—how much force was needed in previous wars—and then shaped and refined by analysis of current threats, a range of plausible scenarios, and expectations about what the U.S. can do given training, equipment, employment concept, and other factors. The defense establishment must then balance “force sizing” between COCOM requirements for presence and engagement and the amount of military power (typically measured in terms of combat units and major combat platforms, which inform total end strength) that is thought necessary to win in likely war scenarios.

Inevitably, compromises are made that account for how much military the country is willing to buy. Generally speaking:

- **The Army** sizes to major warfighting requirements;
- **The Marine Corps** focuses on crisis response demands and the ability to contribute to one major war;
- **The Air Force** attempts to strike a balance that accounts for historically based demand across the spectrum because air assets are shifted fairly easily from one theater of operations to another (“easily” being a relative term when compared to the challenge of shifting large land forces), and any peacetime engagement typically requires some level of air support; and
- **The Navy** is driven by global presence requirements. To meet COCOM requirements for a continuous fleet presence at sea, the Navy must have three to four ships in order to have one on station. A commander who wants one U.S. warship stationed off the coast of a hostile country, for example, needs the use of four ships from the fleet: one on station, one that left station and is traveling home, one that just left home and is traveling to station, and one that is otherwise unavailable because of major maintenance or modernization work.

This *Index* focuses on the forces required to win two major wars as the baseline force-sizing metric. The military’s effectiveness, both as a deterrent against opportunistic competitor states and as a valued training partner in the eyes of other countries, derives from its effectiveness (proven or presumed) in winning wars.

Our Approach

With this in mind, we assessed the state of America’s military U.S. forces as it pertains to their ability to deliver hard power against an enemy in three areas:

- Capability,
- Capacity, and
- Readiness.

Capability. Examining the capability of a military force requires consideration of:

- The proper tools (material and conceptual) of sufficient design, performance characteristics, technological advancement, and suitability needed for the force to perform its function against an enemy force successfully;
- The sufficiency of armored vehicles, ships, airplanes, and other equipment and weapons to win against the enemy;
- The appropriate variety of options to preclude strategic vulnerabilities in the force and give flexibilities to battlefield commanders; and
- The degree to which elements of the force reinforce each other in covering potential vulnerabilities, maximizing strengths, and gaining greater effectiveness through synergies that are not possible in narrowly stovepiped, linear approaches to war.

The capability of the U.S. Joint Force was on ample display in its decisive conventional war victory over Iraq, in liberating Kuwait in 1991, and later in the conventional military operation in Iraq to depose Saddam Hussein in 2003. Aspects of its capability have also been seen in numerous other operations undertaken since the end of the Cold War. While the conventional combat aspect of power projection has been more moderate in places like Yugoslavia, Somalia, Bosnia and Serbia, and Kosovo, and even against the Taliban in Afghanistan in 2001, the fact that the U.S. military was able to conduct highly complex operations thousands of miles away in austere, hostile environments and sustain those operations as long as required is testament to the ability of U.S. forces to do things that the armed forces of few if any other countries can do.

A modern “major combat operation”²¹ along the lines of those upon which Pentagon planners base their requirements would

feature a major opponent possessing modern integrated air defenses; naval power (surface and undersea); advanced combat aircraft (to include bombers); a substantial inventory of short-range, medium-range, and long-range missiles; current-generation ground forces (tanks, armored vehicles, artillery, rockets, and anti-armor weaponry); cruise missiles; and (in some cases) nuclear weapons. Such a situation involving an actor capable of threatening vital national interests would present a challenge that is comprehensively different from the challenges that the U.S. Joint Force has faced in past decades.

Throughout 2018 and 2019, the military community reenergized its debate about the extent to which the U.S. military is ready for major conventional warfare, given its focus on counterinsurgency, stability, and advise-and-assist operations since 2004 and Secretary Mattis’s directive to prepare for conflict in an era of great-power competition.²² The Army in particular has noted the need to reengage in training and exercises that feature larger-scale combined arms maneuver operations, especially to ensure that its higher headquarters elements are up to the task.

This *Index* ascertains the relevance and health of military service capabilities by looking at such factors as average age of equipment, generation of equipment relative to the current state of competitor efforts as reported by the services, and the status of replacement programs that are meant to introduce more updated systems as older equipment reaches the end of its programmed service life. While some of the information is quite quantitative, other factors could be considered judgment calls made by acknowledged experts in the relevant areas of interest or as addressed by senior service officials when providing testimony to Congress or examining specific areas in other official statements.

It must be determined whether the services possess capabilities that are relevant to the modern combat environment.

Capacity. The U.S. military must have a sufficient quantity of the right capability or

capabilities. When speaking of platforms such as planes and ships, there is a troubling and fairly consistent trend that characterizes the path from requirement to fielded capability within U.S. military acquisition. Along the way to acquiring the capability, several linked things happen that result in far less of a presumed “critical capability” than supposedly was required.

- The manufacturing sector attempts to satisfy the requirements articulated by the military.
- “Unexpected” technological hurdles arise that take longer and much more money to solve than anyone envisioned.
- Programs are lengthened, and cost overruns are addressed, usually with more money.
- Then the realization sets in that the country either cannot afford or is unwilling to pay the cost of acquiring the total number of platforms originally advocated. The acquisition goal is adjusted downward, if not canceled altogether, and the military finally fields fewer platforms at a higher cost per unit than it originally said it needed to be successful in combat.

As deliberations proceed toward a decision on whether to reduce planned procurement, they rarely focus on and quantify the increase in risk that accompanies the decrease in procurement.

Something similar happens with force structure size: the number of units and total number of personnel the services say they need to meet the objectives established by the Commander in Chief and the Secretary of Defense in their strategic guidance. The Marine Corps has stated that it needs 27 infantry battalions to fully satisfy the validated requirements of the regional Combatant Commanders, yet it currently fields only 24. In 2012, the Army was building toward 48 brigade combat teams, but incremental budget cuts reduced that number

over time to 31—less than two-thirds the number that the Army originally thought was necessary. The Navy has produced various assessments of fleet size since the end of the Cold War, from 313 ships to 355 ships, and in 2019 conducted yet another force structure review.

Older equipment can be updated with new components to keep it relevant, and commanders can employ fewer units more expertly for longer periods of time in an operational theater to accomplish an objective. At some point, however, sheer numbers of updated, modern equipment and trained, fully manned units are going to be needed to win in battle against a credible opponent when the crisis is profound enough to threaten a vital interest.

Capacity (numbers) can be viewed in at least three ways: compared to a stated objective for each category by each service, compared to amounts required to complete various types of operations across a wide range of potential missions as measured against a potential adversary, and as measured against a set benchmark for total national capability. This *Index* employs the two-MRC metric as a benchmark.

The two-MRC benchmark for force sizing is the *minimum* standard for U.S. hard-power capacity because one will never be able to employ 100 percent of the force at the same time. Some percentage of the force will always be unavailable because of long-term maintenance overhaul, especially for Navy ships; unit training cycles; employment in myriad engagement and small-crisis response tasks that continue even during major conflicts; and the need to keep some portion of the force uncommitted to serve as a strategic reserve.

The historical record shows that, on average, the U.S. Army commits 21 BCTs to a major conflict; thus, a two-MRC standard would require 42 BCTs available for actual use. But an Army built to field only 42 BCTs would also be an Army that could find itself entirely committed to war, leaving nothing back as a strategic reserve, to replace combat losses, or to handle other U.S. security interests. Although new technologies and additional capabilities have made current

TABLE 1

Historical U.S. Force Allocation

Troop figures are in thousands.

| | Korean War | Vietnam War | Persian Gulf War | Operation Iraqi Freedom |
|--|------------|-------------|------------------|-------------------------|
| ARMY | | | | |
| Total Troop Deployment During Engagement | 206.3 | 219.3 | 267.0 | 99.7 |
| Divisions* | 6 | 7 | 4 | 1 |
| Reserve Component Divisions Total for Strategic Documents | n/a | n/a | n/a | n/a |
| Total Army End Strength During Engagement, During Year of Strategy Document Active | 1,313.8 | 1,113.3 | 738.0 | 499.0 |
| Total Active End Strength Recommendations | n/a | n/a | n/a | n/a |
| NAVY | | | | |
| Total Fleet During Engagement | 904 | 770 | 529 | 297 |
| Aircraft Carriers | 6 | 5 | 6 | 5 |
| Carrier Air Wings | 6 | 5 | 6 | 5 |
| Large Surface Combatants | 37 | 14 | 30 | 23 |
| Small Surface Combatants | 16 | 47 | 16 | 9 |
| Attack Submarines | 4 | 0 | 12 | 12 |
| Amphibious Vessels | 34 | 26 | 21 | 7 |
| Combat Logistics and Support Ships | 28 | 29 | 45 | 42 |
| Fighter/Attack Squadrons | 21 | 43 | 22 | 24 |
| MARINE CORPS | | | | |
| Total Troop Deployment During Engagement | 33.5 | 44.7 | 90.0 | 66.2 |
| Active Divisions* | 1 | 2 | 2 | 1 |
| Reserve Divisions | n/a | n/a | n/a | n/a |
| Marine Expeditionary Force | 1 | 1 | 1 | 2 |
| Air Wings Active/Reserve | 1 | 1 | 1 | 1 |
| Total Marine Corps End Strength During Engagement by Year of Strategy Document | 187.0 | 289.0 | 196.3 | 178.0 |
| Total Recommended End Strength | n/a | n/a | n/a | n/a |
| AIR FORCE | | | | |
| Bombers or Bomber Squadrons** | 21 | 23 | 3 | 4 |
| Fighter Squadrons | 26 | | 30 | 30 |
| Active Fighter Wings | 7 | 8 | 10 | 10 |
| Reserve Fighter Wings | | | | |
| Airlift/Tankers | 239 | 167 | 388 | 293 |

* Figures for engagements are numbers deployed; figures for documents are totals.

** Figures for Air Force bombers for Korean War, Vietnam War, Persian Gulf War, and Iraq are bomber squadrons.

All other figures are bombers.

*** 2014 QDR prescribed nine heavy bomber squadrons, equaling 96 aircraft.

| | 1993 BUR | 1997 QDR | 2001 QDR | 2006 QDR | 2010 QDR | 2010 Indep. Panel | 2-MRC Paper | 2014 QDR | 2014 NDP |
|--|-------------|-------------|-------------|-------------|-------------|-------------------------|----------------|-------------|-------------|
| ARMY | | | | | | | | | |
| Total Troop Deployment During Engagement | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Divisions* | 10 | 10 | 10 | 11 | 18 | 11 | 10 | 10 | n/a |
| Reserve Component Divisions Total for Strategic Documents | n/a | 5 | 8 | 8 | | 7 | 8 | 8 | n/a |
| Total Army End Strength During Engagement, During Year of Strategy Document Active | 572.0 | 492.0 | 481.0 | 505.0 | 566.0 | 566.0 | 550.0 | 490.0 | 490.0 |
| Total Active End Strength Recommendations | n/a | n/a | n/a | 482.4 | n/a | 1,106.0 | 600.0 | 450.0 | 490.0 |

| | | | | | | | | | |
|------------------------------------|-----|-----|-----|-----|-------|-----|-----|-----|-----|
| NAVY | | | | | | | | | |
| Total Fleet During Engagement | 346 | 310 | n/a | n/a | n/a | 346 | 350 | n/a | 346 |
| Aircraft Carriers | 12 | 12 | 12 | 11 | 11 | 11 | 11 | 11 | n/a |
| Carrier Air Wings | 12 | 11 | 11 | n/a | 10 | 10 | 10 | 10 | n/a |
| Large Surface Combatants | 124 | 116 | 116 | n/a | 84-88 | n/a | 120 | 92 | n/a |
| Small Surface Combatants | | | | n/a | 14-28 | n/a | n/a | 43 | n/a |
| Attack Submarines | 55 | 50 | 55 | n/a | 53-55 | 55 | 50 | 51 | n/a |
| Amphibious Vessels | 41 | 36 | 36 | n/a | 29-31 | n/a | 38 | 33 | n/a |
| Combat Logistics and Support Ships | 65 | n/a | n/a | n/a | 58 | n/a | 75 | n/a | n/a |
| Fighter/Attack Squadrons | 33 | 30 | 30 | n/a | 30 | 30 | 30 | 30 | n/a |

| | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MARINE CORPS | | | | | | | | | |
| Total Troop Deployment During Engagement | n/a |
| Active Divisions* | 4 | 3 | 3 | n/a | 3 | n/a | n/a | 3 | n/a |
| Reserve Divisions | 1 | 1 | 1 | n/a | 1 | n/a | n/a | 1 | n/a |
| Marine Expeditionary Force | 3 | 3 | 3 | n/a | 3 | 3 | 3 | 2 | n/a |
| Air Wings Active/Reserve | n/a | 4 | 4 | n/a | 4 | n/a | n/a | 4 | n/a |
| Total Marine Corps End Strength During Engagement by Year of Strategy Document | 174.0 | 174.0 | 173.0 | 180.0 | 202.0 | 202.0 | 196.0 | 182.0 | 182.0 |
| Total Recommended End Strength | n/a | n/a | n/a | 175.0 | n/a | 243.0 | 202.0 | 182.0 | 182.0 |

| | | | | | | | | | |
|-------------------------------|-----|-----|-----|-----|------|------|-------|-------|-----|
| AIR FORCE | | | | | | | | | |
| Bombers or Bomber Squadrons** | 200 | 187 | 112 | n/a | 96 | 180 | 200 | 96*** | n/a |
| Fighter Squadrons | 54 | 54 | 46 | n/a | 42 | 66 | 54 | 48 | n/a |
| Active Fighter Wings | 13 | 12+ | 15 | n/a | n/a | 20 | 20 | 9 | n/a |
| Reserve Fighter Wings | 7 | 8 | 12 | n/a | n/a | n/a | | 7 | n/a |
| Airlift/Tankers | n/a | n/a | n/a | n/a | 1023 | 1023 | 1,000 | 954 | n/a |

BCTs more capable than those they replaced, one thing remains the same: Today's BCT, like its predecessors, can only be committed to one place at a time and must be able to account for combat losses, especially if it engages a similarly modernized enemy force. Thus, numbers still matter regardless of modernity.

Again, this *Index* assesses only the Active component of the service, though with full awareness that the Army also has Reserve and National Guard components that together account for half of the total Army. The additional capacity needed to meet these "above two-MRC requirements" could be handled by these other components or mobilized to supplement Active-component commitments. In fact, this is how the Army thinks about meeting operational demands and is at the heart of the long-running debate within the total Army about the roles and contributions of the various Army components. A similar situation exists with the Air Force and Marine Corps.

The balance among Active, Reserve, and Guard elements is beyond the scope of this study. Our focus here is on establishing a minimum benchmark for the capacity needed to handle a two-MRC requirement.

We conducted a review of the major defense studies (1993 BUR, QDR reports, and independent panel critiques) that are publicly available,²³ as well as modern historical instances of major wars (Korea, Vietnam, Gulf War, Operation Iraqi Freedom), to see whether there was any consistent trend in U.S. force allocation. The results of our review are presented in Table 1. To this we added 20 percent, both to account for forces and platforms that are likely to be unavailable and to provide a strategic reserve to guard against unforeseen demands.

Summarizing the totals, this *Index* concluded that a Joint Force capable of dealing with two MRCs simultaneously or nearly simultaneously would consist of:

- **Army:** 50 BCTs.
- **Navy:** at least 400 ships and 624 strike aircraft.

- **Air Force:** 1,200 fighter/attack aircraft.
- **Marine Corps:** 36 battalions.

America's security interests require that the services have the capacity to handle two major regional conflicts successfully.

Readiness. The consequences of the sharp reductions in funding mandated by sequestration have caused military service officials, senior DOD officials, and even Members of Congress to warn of the dangers of recreating the "hollow force" of the 1970s when units existed on paper but were staffed at reduced levels, minimally trained, and woefully ill-equipped.²⁴ To avoid this, the services have traded quantity/capacity and modernization to ensure that what they do have is "ready" for employment.

Supplemental funding in FY 2017, a higher topline in FY 2018, and sustained increases in funding through FY 2019 have helped to stop the bleeding and have enabled the services to plan and implement readiness recovery efforts. Although the return of further cuts under the BCA (to continue in force by law until 2021 unless modified by Congress) could threaten to undo these gains, readiness reporting has been largely optimistic compared to recent years.

It is one thing to have the right capabilities to defeat the enemy in battle. It is another thing to have enough of those capabilities to sustain operations and many battles against an enemy over time, especially when attrition or dispersed operations are significant factors. But sufficient numbers of the right capabilities are rather meaningless if the force is not ready to engage in the task.

Scoring. In our final assessments, we tried very hard not to convey a higher level of precision than we think is achievable using unclassified, open-source, publicly available documents; not to reach conclusions that could be viewed as based solely on assertions or opinion; and not to rely solely on data and information that can be highly quantified. Simple numbers, while important, do not tell the whole story.

U.S. Military Power: Five-Grade Scale

VERY WEAK

WEAK

MARGINAL

STRONG

VERY STRONG

We believe that the logic underlying our methodology is sound. This *Index* drew from a wealth of public testimony from senior government officials, from the work of recognized experts in the defense and national security analytic community, and from historical instances of conflict that seemed most appropriate to this project. It then considered several questions, including:

- How does one place a value on the combat effectiveness of such concepts as Air-Sea Battle, Multi-Domain Operations, Littoral Operations in a Contested Environment, Distributed Maritime Operations, Network-centric Operations, or Joint Operational Access?
- Is it entirely possible to assess accurately (1) how well a small number of new-generation ships or aircraft will fare against a much larger number of currently modern counterparts when (2) U.S. forces are operating thousands of miles from home, (3) orchestrated with a particular operational concept, and (4) the enemy is leveraging a “home field advantage” that includes strategic depth and much shorter and perhaps better protected lines of communication and (5) might be pursuing much dearer national objectives than the U.S. so that the political will to conduct sustained operations in the face of mounting losses might differ dramatically?

- How does one neatly quantify the element of combat experience, the erosion of experience as combat operation events recede in time and those who participated in them leave the force, the health of a supporting workforce, the value of “presence and engagement operations,” and the related force structures and patterns of deployment and employment that presumably deter war or mitigate its effects if it does occur?

This *Index* focused on the primary purpose of military power—to defeat an enemy in combat—and the historical record of major U.S. engagements for evidence of what the U.S. defense establishment has thought was necessary to execute a major conventional war successfully. To this we added the two-MRC benchmark; on-the-record assessments of what the services themselves are saying about their status relative to validated requirements; and the analysis and opinions of various experts, both in and out of government, who have covered these issues for many years.

Taking it all together, we rejected scales that would imply extraordinary precision and settled on a scale that conveys broader characterizations of status that range from very weak to very strong. Ultimately, any such assessment is a judgment call informed by quantifiable data, qualitative assessments, thoughtful deliberation, and experience. We trust that our approach makes sense, is defensible, and is repeatable.

Endnotes

1. Les Aspin, Secretary of Defense, *Report on the Bottom-Up Review*, U.S. Department of Defense, October 1993, p. iii, http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=OCCUQFjAB-ahUKEwj4dWf6N3HAhVEmh4KHdG1Cdg&url=ht tp%3A%2F%2Fwww.dtic.mil%2Fcgi-bin%2FGetTRDoc%3FAD%3DADA359953&usq=AFQjCNFvz730XRz7YRxp5BNr5_UdfMiQ (accessed May 17, 2019).
2. *Ibid.*, p. 8.
3. Daniel Gouré, “Building the Right Military for a New Era: The Need for an Enduring Analytic Framework,” in *2015 Index of U.S. Military Strength*, ed. Dakota L. Wood (Washington: The Heritage Foundation, 2015), pp. 27–36, <http://index.heritage.org/militarystrength/important-essays-analysis/building-right-military-new-era/>.
4. John Y. Schrader, Leslie Lewis, and Roger Allen Brown, *Quadrennial Defense Review 2001: Lessons on Managing Change in the Department of Defense* (Santa Monica, CA: RAND Corporation, National Defense Research Institute, 2003), http://www.rand.org/content/dam/rand/pubs/documented_briefings/2005/DB379.pdf (accessed May 17, 2019).
5. Commission on the National Defense Strategy, *Providing for the Common Defense: The Assessment and Recommendations of the National Defense Strategy Commission*, <https://www.usip.org/sites/default/files/2018-11/providing-for-the-common-defense.pdf> (accessed May 17, 2019), and press release, “National Defense Strategy Commission Releases Its Review of 2018 National Defense Strategy,” United States Institute of Peace, November 13, 2018, <https://www.usip.org/press/2018/11/national-defense-strategy-commission-releases-its-review-2018-national-defense> (accessed May 17, 2019).
6. The United States has not had to contend in combat with any credible air force since the Vietnam War, but U.S. Air Force planners are increasingly concerned about an enemy’s ground-based, anti-air missile capability. For naval planners, ship-based, air-based, and shore-based anti-ship cruise missiles are of much greater concern than is the number of conventional surface combatants armed with large-caliber guns that an enemy navy has. Likewise, ground force planners have to consider the numbers and types of guided anti-armor weapons that an enemy possesses and whether an opposing force has guided artillery, mortar, or rocket capabilities. Guided/precision weapons are typically less expensive (by orders of magnitude) than the platforms they target, which means that countries can produce far more guided munitions than primary weapons platforms. Some examples: Harpoon ASCM (\$2 million)/DDG-51 *Arleigh Burke*-Class destroyer (\$2 billion); AT4 anti-armor weapon (\$1,500)/M1A1 Abrams main battle tank (\$9 million); 120mm guided mortar round (\$10,000) or 155mm guided artillery round (\$100,000)/M198 155mm howitzer (\$500,000); S-300 anti-air missile (\$1 million)/F/A-18 Hornet (\$60 million) or F-35A Lightning II (\$180 million).
7. For a detailed discussion of this force, see Richard J. Dunn III, “America’s Reserve and National Guard Components: Key Contributors to U.S. Military Strength,” in *2016 Index of U.S. Military Strength*, ed. Dakota L. Wood (Washington: The Heritage Foundation, 2015), pp. 61–73, https://s3.amazonaws.com/ims-2016/PDF/2016_Index_of_US_Military_Strength_FULL.pdf. For the percentage of U.S. military capability that resides in the Guard/Reserve, see *ibid.*, p. 63.
8. One example of balancing the forces was the Army’s Aviation Restructuring Initiative, in which the active-duty force sought to redistribute certain rotorcraft platforms among the active-duty Army and the National Guard. The Guard has contended that this plan would reduce the capabilities it has gained during recent combat engagements, such as its pilots’ proficiency in flying Apache helicopters. For more on this issue, see U.S. Government Accountability Office, *Force Structure: Army’s Analyses of Aviation Alternatives*, GAO-15-430R, updated April 27, 2015, <http://www.gao.gov/assets/670/669857.pdf> (accessed May 17, 2019).
9. James Mattis, U.S. Secretary of Defense, *Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military’s Competitive Edge*, U.S. Department of Defense, <https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf> (accessed May 17, 2019).
10. Budget Control Act of 2011, Public Law 112-25, 112th Cong., August 2, 2011, <https://www.congress.gov/112/plaws/publ25/PLAW-112publ25.pdf> (accessed April 30, 2019).
11. Table A-7, “DoD Base Budget by Appropriation Title,” and Table A-8, “DoD Base Budget by Military Department,” in U.S. Department of Defense, Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer, *United States Department of Defense Fiscal Year 2020 Budget Request: Defense Budget Overview*, March 2019, pp. A-4 and A-5, https://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2020/fy2020_Budget_Request_Overview_Book.pdf (accessed May 19, 2019).
12. Bipartisan Budget Act of 2018, Public Law 115-123, 115th Cong., February 9, 2018, <https://www.congress.gov/bill/115th-congress/house-bill/1892/text/eas2?q=%7B%22search%22%3A%5B%22bipartisan+budget+act+of+2018%22%5D%7D&r=1> (accessed May 20, 2019).
13. Joe Gould, “Pentagon Set to Win First On-Time Budget Since 2008,” *Defense News*, September 13, 2018, <https://www.defensenews.com/congress/2018/09/13/pentagon-set-to-win-first-on-time-budget-since-2008/> (accessed April 30, 2019).
14. Frederico Bartels, “Continuing Resolutions Invariably Harm National Defense,” Heritage Foundation *Issue Brief* No. 4819, February 21, 2018, <https://www.heritage.org/defense/report/continuing-resolutions-invariably-harm-national-defense>.

15. James N. Mattis, Secretary of Defense, introduction to U.S. Department of Defense, Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer, *Providing for the Common Defense: A Promise Kept to the American Taxpayer*, September 2018, n.p., <https://media.defense.gov/2018/Oct/03/2002047941/-1/-1/PROVIDING-FOR-THE-COMMON-DEFENSE-SEPT-2018.pdf> (accessed May 19, 2019).
16. Bipartisan Budget Act of 2019, Public Law No 116-37, 116th Cong., August 2, 2019, <https://www.congress.gov/bill/116th-congress/house-bill/3877/text> (accessed September 11, 2019).
17. James Mattis, U.S. Secretary of Defense, statement on President's budget request for FY 2018 before the Committee on Armed Services, U.S. House of Representatives, June 12, 2017, <https://docs.house.gov/meetings/AS/AS00/20170612/106090/HHRG-115-AS00-Bio-MattisJ-20170612.pdf> (accessed May 19, 2019).
18. Aaron Mehta, "DoD Needs 3-5 Percent Annual Growth 2023, Top Officials Say," *Defense News*, June 13, 2017, <http://www.defensenews.com/pentagon/2017/06/13/dod-needs-3-5-percent-annual-growth-through-2023-top-officials-say/> (accessed May 17, 2019). Emphasis added.
19. Commission on the National Defense Strategy, *Providing for the Common Defense: The Assessment and Recommendations of the National Defense Strategy Commission*, p. 22.
20. Since World War II, the U.S. has fought four major wars: the Korean War (1950-1953); the Vietnam War (1965-1973); the Gulf War/Operation Desert Shield/Desert Storm (1990-1991); and the Iraq War/Operation Iraqi Freedom (2003-2011).
21. Defense references to war have varied over the past few decades from "major combat operation" (MCO) and "major theater war" (MTW) to the current "major regional contingency" (MRC). Arguably, there is a supporting rationale for such shifts as planners attempt to find the best words to describe the scope and scale of significant military efforts, but the terms are basically interchangeable.
22. Mattis, *Summary of the 2018 National Defense Strategy of the United States of America*, p. 4.
23. The Department of Defense, through the Joint Staff and Geographic Combatant Commanders, manages a relatively small set of real-world operational plans (OPLANS) focused on specific situations where the U.S. feels it is most likely to go to war. These plans are reviewed and updated regularly to account for changes in the Joint Force or with the presumed enemy. They are highly detailed and account not only for the amount of force the U.S. expects that it will need to defeat the enemy, but also for which specific units would deploy; how the force would actually flow into the theater (the sequencing of units); what ports and airfields it would use; how much ammunition, fuel, and other supplies it would need at the start; how much transportation or "lift" would be needed to get the force there (by air, sea, trucks, or rail); and the basic plan of attack. The Pentagon also routinely develops, explores, and refines various notional planning scenarios in order to better understand the implications of different sorts of contingencies, which approaches might be more effective, how much of what type of force might be needed, and the regional issue or issues for which there would have to be an accounting. These types of planning events inform service efforts to develop, equip, train, and field military forces that are up to the task of defending national security interests. All of these efforts and their products are classified national security information and therefore not available to the public.
24. For more on the potential for a hollow force, see Association of the United States Army, "Preventing a Hollow Force Is Army's Top Priority," May 25, 2017, <https://www.ausea.org/news/preventing-hollow-force-army%E2%80%99s-top-priority> (accessed May 19, 2019), and J. V. Venable, "America's Air Force Is in Bad Shape," *National Review*, June 13, 2017, <http://www.nationalreview.com/article/448556/us-air-force-weakened-funding-cuts-shrinking-workforce-aging-fleet-hurt-preparedness> (accessed May 19, 2019).