

Measuring Military Power

Washington again teeters in a state of strategic freefall—similar to the periods of ambiguity immediately after World War II and the end of the Cold War. During such eras of indecision, when national decision makers and thought leaders lack a commonly accepted strategic framework, subjectivity largely drives the classic debate over how much defense is sufficient. There is an unprecedented need for tools that provide a transparent, standardized assessment of US military power over time. A common baseline that describes how much hard power the United States actually has in relation to its vital interests would help discipline the defense sufficiency discussion, much in the way an audit of family finances acts as the sobering first step in balancing the household budget.

The Precedence of Power

All relevant history of the struggle of policymakers to decide how much hard power—forces, weapons, systems, bases—the United States needs to protect the nation and its vital interests has occurred since World War II. Only after this conflict was there consensus in its strategic culture that the United States had become a global power with global interests. During the Second World War, the US military developed a laudable capacity to determine military sufficiency. In particular, as historian Paul Kennedy illustrates in *Engineers of Victory*, the armed forces adopted operational research and systems analysis methods to determine optimum cost-benefit tradeoffs in forces and tactics.¹ Yet, these tools gave planners and decision makers scant confidence in facing the future. Washington lacked a consensus on almost every front in determining military roles and missions, the nature of the Soviet threat, and the potential for stability in every major theater where forces might be deployed.²

As US decision makers began to move toward consensus on providing a robust mix of conventional and nuclear forces as a deterrent against Soviet expansion, the practice of quantifying US hard power requirements became a more practical exercise. Robert McNamara's long tenure as secretary of defense proved especially influential in institutionalizing the measure of hard power to determine its sufficiency as a component of national strategy. McNamara's team included Alain C. Enthoven, an

economist who had also served at the influential think tank, RAND—established after the war to preserve the military’s capacity to do high-level operational analysis as well as pioneer new methods of military research.

In 1961, Enthoven was named deputy assistant controller and deputy secretary of defense in the Defense Department’s Office of Controller. He headed the Office of Systems Analysis. Later, that office was split from the controller, and Enthoven served as an independent assistant secretary for systems analysis until he left government in 1969. He is widely credited with helping McNamara institutionalize operational systems analysis in driving programming and budgeting decisions in the Pentagon.³ Enthoven catalogued this approach to defense planning in a book he co-authored after leaving the Defense Department. Its title, *How Much Is Enough?*, became the standard for measuring the adequacy of the US military for decades.⁴

As with many aspects of defense planning, quantitative analysis came under intense scrutiny in the wake of the controversies of the Vietnam War. Emotion suffused much of the postwar debate. “To an unfortunate degree,” wrote scholar Richard K. Betts at the time, “reformist critiques have made an impression by resorting to hyperbole, overlooking dilemmas, and fixating on stark conceptual alternatives that rarely stand up to the practical requirements of fielding a large, variegated force committed to meet multiple contingencies.”⁵

The Reagan administration made a significant public effort to revive the credibility of quantitative assessments in force planning with publication of *Soviet Military Power* reports in 1981. The DoD produced new editions annually from 1983 to 1991. The goal of the reports was to provide a publically available assessment that could be used to compare the Soviet threat with US defense capabilities. This effort was not without critics who argued that the administration overstated Soviet forces.⁶

The use of quantitative measures of sufficiency as a basis for defense planning also came into question as new research methods suggested a strict accounting of the correlation of forces between the United States and the Soviet Union did not accurately reflect the true nature of the military balance. Especially influential was the work of the DoD Office of Net Assessment under Andrew Marshall, which looked at the combined evaluation of qualitative and quantitative factors to determine the

effectiveness of military force and how it might affect competition between the United States and the Soviet Union.⁷

Yet, controversies over measuring hard power remained a staple of defense planning, and the debates continued over sufficiency of the armed forces until the collapse of the Soviet Union. Indeed, getting back to a more dispassionate, rigorous measure of military needs eventually became a hallmark of the defense reform movement.

Arguably, the swan song for measuring hard power proved to be the development of the “Base Force” under JCS Chairman Colin Powell. Under Powell’s direction, the services and Joint Staff developed what they believed were “minimum” post–Cold War force requirements employing traditional measures of military power but adopting them for threats and missions absent the danger of a global standoff with the Soviets.⁸

Powell’s Base Force was quickly supplanted in 1993 by “The Report on the Bottom-Up Review” directed by then Secretary of Defense Les Aspin.⁹ Critics dismissed the “BUR” as a budgeting exercise that lacked a substantive foundation for the strategic choices called for in the report.¹⁰ This initiated the freefall of rigorous defense planning based on objective measures of military power.

After the failure of the BUR, congressional efforts to legislate the requirement for the *Quadrennial Defense Review (QDR)* reflected, in part, the desire of legislators to institutionalize standardized reporting that could serve as a baseline for long-term defense planning. The first *QDR* in 1997 proved a disappointment, doing little to change “the status-quo.”¹¹ While the legislation set price requirements for the *QDR*, the Pentagon had great flexibility in how to address them. Further, there was no real disciplining mechanism to force the administration to speak to reporting requirements that were not adequately addressed.

Each subsequent *QDR* adopted its own framework for analysis, assumptions, and metrics for assessing military power. Thus, the string of reports produced over the last two decades remains virtually useless as a benchmark for evaluating relative US military power over time.

Decade of Dissonance

While the 9/11 crisis proved a watershed in thinking about national security, it did little to resolve the challenge of returning to a baseline

of objectively measuring military forces as the basis of rational defense planning. The major threats that concerned Americans after the terrorist attacks on New York and Washington did not center on conventional and nuclear force planning, despite the major employment of US combat forces in Iraq and Afghanistan. The defense sufficiency debate was subsumed in bickering over soft power, counterinsurgency, hybrid warfare, asymmetric threats, failed states, nonstate actors, climate change, and a host of other considerations. The more concerns, issues, and factors added to assessing the adequacy of defense, the more difficult became establishing a commonly accepted benchmark for sufficiency.

Highly partisan and fractious political debates over defense—from the occupation of Iraq to budget sequestration—have further exacerbated the challenge of establishing a baseline. At the same time, the value of standard measures seems to have become less compelling in driving public policy decisions.¹²

The dissonance over defense planning may well have reached its nadir over the last several years. In rapid succession, the administration has issued a *QDR*; then, only two years later, new “strategic guidance,” followed soon after by a Strategic Choices and Management Review; and subsequently, a second *QDR*. After the 2014 *QDR* was issued, the chairman of the House Armed Services Committee publically rejected the report for failing to meet the statutory guidelines in the legislation.¹³ While some argue the defense planning process and the *QDR* still have merit, others have concluded that the process has increasingly lost legitimacy.¹⁴

Back to the Baseline

It is an open question as to when the United States will have another defining event such as Pearl Harbor or the outbreak of the Korean War which will forge sufficient consensus for a common strategic outlook to measure what kind of military it needs. Waiting for such an event to galvanize and clarify how Washington sees the world seems the height of maleficence. Sound defense planning should preclude disasters and wars. Washington must do better than only knowing when it has it wrong—when everything starts to go wrong. Defense planning unanchored in rational decision making increasingly leaves critical choices to the whim of politics. A serious effort to rebuild and reshape the armed forces of the future will require setting goals and milestones to achieve.

Without a baseline measure, Washington will have no idea whether it is making progress or not.

A Modern Measuring Stick

The decision to get back to measuring is not without risks. Bad metrics can drive bad results as surely as no measure at all. The Clinton administration established the Government Performance and Results Act of 1993 and other executive and legislative efforts intended to improve how federal agencies operated by grading their ability to meet key performance goals. In some cases, such as the employment of new information technologies, the metrics and requirements established actually made performance worse.¹⁵ More recently, the Veterans Administration was rocked by scandal when performance measures imposed by its secretary sparked rampant fraud and did little to improve either the efficiency or effectiveness of the organization.

Undoubtedly, there are risks as well in establishing a standardized measure of military power. A bad measure will lead to bad choices. But this is a risk worth taking. Otherwise, Washington will continue to pick its way into the future without being bothered by reality. Further, there is a good argument to be made that measuring power is not only still important, but doable, albeit perhaps not using just the traditional measures and frameworks for analysis used during the Cold War.¹⁶

The first challenge in grading “military power” in a manner that can influence public policy decision making is to ask if it can be effectively measured. There is a strong case the answer is yes. The era of “big data” affords more information than ever. Much of this information is publicly available, suggesting that power can be measured in a manner that is transparent, verifiable, and repeatable from year to year. A second issue will be deciding what to measure. Any evaluative system will have to recognize that there are important components that cannot adequately be measured, and everything that can be measured may not be vital to decision makers.¹⁷ One approach might be to assess military power only in terms of protecting US vital interests, then grading that ability against a high and unimpeachable standard such as sufficient capacity to undertake two major military operations simultaneously.¹⁸

Next, this measure might be limited to clearly definable elements of military power—what the US military describes as “military capability;” that is, the ability to achieve a specified wartime objective (win a war or

battle, destroy a target set). It includes four major components: force structure, modernization, readiness, and sustainability.

- a. Force structure—The numbers, size, and composition of the units that comprise our defense forces; e.g., divisions, ships, air wings.
- b. Modernization—The technical sophistication of forces, units, weapon systems, and equipment.
- c. Unit readiness—The ability to provide capabilities required by the combatant commanders to execute their assigned missions. This is derived from the ability of each unit to deliver the outputs for which it was designed.
- d. Sustainability—The ability to maintain the necessary level and duration of operational activity to achieve military objectives. Sustainability is a function of providing for and maintaining those levels of ready forces, materiel, and consumables necessary to support military effort.¹⁹

Finally, since the effectiveness and utility of the US military's capabilities are relative to the threats it faces and the operational environment in which it operates, these factors would have to be part of an annual assessment as well to determine how US military power is changing over time. There are already some publically available tools, such as the International Institute for Strategic Studies' "The Military Balance," that have useful data.²⁰ But they are not nearly adequate. The IISS report does not provide nearly enough descriptive data to measure military capability nor does it account for the interests a nation must protect or the threats it faces.

The Limits of Power

A capacity to effectively measure US "hard" power over time would not come near to solving all of Washington's challenges. Leaders will still have to decide the optimal way to use the capabilities they have. They will still have to decide the best way to get more power if they think they need it. They will also have to decide how the military will work in concert with other instruments of US power to keep the nation safe, free, and prosperous. On the other hand, a common measure would at

least give all sides in the strategy debate a shared platform from which to address the needs for a future military. **SSQ**

James Jay Carafano, PhD

*Vice President, Foreign and Defense Policy Studies
The Heritage Foundation*

Notes

1. Paul Kennedy, *Engineers of Victory: The Problem Solvers Who Turned the Tide in the Second World War* (New York: Random House, 2013). See also Charles Shrader, *History of Operations Research in the United States Army*, vol. 1, 1942–1962 (Washington: Center of Military History, 2006).
2. These controversies are described well in Melvyn Leffler, *A Preponderance of Power: National Security, the Truman Administration, and the Cold War* (Redwood City, CA: Stanford University Press, 1993).
3. Charles Shrader, *History of Operations Research in the United States Army*, vol. 2, 1961–1973 (Washington: Center of Military History, 2008), 43. See also, Walter S. Poole, *Adapting to Flexible Response, 1960–1968* (Washington: Department of Defense, 2014).
4. The book was republished by RAND with a new introduction in 2005. Alain C. Enthoven and K. V. Smith, *How Much Is Enough? Shaping the Defense Program, 1961–1969* (Santa Monica, CA: RAND, 2005).
5. Richard K. Betts, “Conventional Strategy: New Critics, Old Choices,” *International Security* 7, no. 4 (Spring 1983): 140.
6. See Tom Gervasi, *Soviet Military Power: The Pentagon’s Propaganda Document*, annotated and corrected (New York: Random House, 1987).
7. Paul Bracken, “Net Assessment: A Practical Guide,” *Parameters* 36, no. 1 (Spring 2006): 96.
8. Lorna S. Jaffe, *The Development of the Base Force, 1989–1992* (Washington: Joint History Office, 1993), 2, 11.
9. Eric V. Larson, David T. Orletsky, and Kristin J. Leuschner, *Defense Planning in a Decade of Change Lessons from the Base Force, Bottom-Up Review, and Quadrennial Defense Review* (Santa Monica: RAND, 2001), 42–81.
10. John T. Correll, “The Legacy of the Bottom-Up Review,” *Air Force Magazine* 8, no. 10 (October 2003), <http://www.airforcemag.com/MagazineArchive/Pages/2003/October%202003/1003bur.aspx>.
11. John Y. Schrader, Leslie Lewis, and Roger Allen Brown, *Quadrennial Defense Review (QDR) Analysis: A Retrospective Look at Joint Staff Participation* (Santa Monica: RAND, 1999), vii.
12. James Jay Carafano, “Thinking the Future,” *Whitehead Journal of Diplomacy and International Relations*, Summer/Fall 2009, 27–31.
13. “Chairman McKeon Rejects QDR,” House Armed Services Committee press release, 4 March 2014, http://armedservices.house.gov/index.cfm/press-releases?ContentRecord_id=BDA3450C-2CFA-4BA2-B428-CC26354A3163.
14. For contrasting views see, Joseph Collins, “Two Cheers for the QDR,” *Armed Forces Journal*, 6 April 2014, <http://www.armedforcesjournal.com/two-cheers-for-the-qdr/>; and James Jay Carafano, “Ten Questions the National Defense Panel Must Answer,” *National Interest*,

14 May 2014, <http://nationalinterest.org/feature/ten-questions-the-national-defense-panel-must-answer-10465>.

15. James Jay Carafano, *Wiki at War: Conflict in a Socially Networked World* (College Station: Texas A&M University Press, 2011), 136–37.

16. Ashley J. Tellis et al., *Measuring National Power in the Postindustrial Age* (Santa Monica: RAND, 2000). This study proposes a model of measuring power for the intelligence community evaluating national resources, national performance, and military capability.

17. Richard J. Dunn III, “Measuring Military Capabilities: An Essential Tool for Rebuilding American Military Strength,” Heritage Foundation backgrounder, 16 May 2014, http://www.heritage.org/research/reports/2014/05/measuring-military-capabilities-an-essential-tool-for-rebuilding-american-military-strength#_ftn5.

18. Daniel Goure, “The Measure of a Superpower: A Two Major Regional Contingency Military for the 21st Century,” Special Report no. 128, 25 January 2013, <http://www.heritage.org/research/reports/2013/01/the-measure-of-superpower-a-two-major-regional-contingency-military-for-21-century>.

19. US Joint Chiefs of Staff, *Doctrine for the Armed Forces of the United States* (Washington: GPO, 2013), I-12–I-13, http://www.dtic.mil/doctrine/new_pubs/jp1.pdf.

20. See “The Military Balance: The Annual Assessment of Global Military Capabilities and Defence Economics,” International Institute for Strategic Studies, 1 May 2014, <http://www.iiss.org/en/publications/military-s-balance>.

Disclaimer

The views and opinions expressed or implied in SSQ are those of the authors and are not officially sanctioned by any agency or department of the US government. We encourage you to send comments to: strategicstudiesquarterly@us.af.mil.