



Statement before the
Senate Committee on the Budget
hearing
“Budgeting for the Storm: Climate Change and the Costs to National Security”

Investing in Defense to Prioritize Peace

Climate Challenges, Priorities, and the Path Forward

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The United States Constitution grants more separate powers to the Congress in order to provide for the common defense than any other purpose—six of the 17 enumerated powers in Article One, Section Eight. Providing for the common defense is the exclusive and mandatory responsibility of the federal government. Congress alone can declare war and provide appropriations of funds for the U.S. military. As such, the legislative branch raises armies and maintains the navy, as well as establishes the rules and regulations for the operation of armed forces.

Ongoing wars in two regions and tensions rising in a third remind us that the peace does not keep itself. America's military must maintain and bolster its conventional and strategic deterrents while supporting two wars, preventing a third, rebuilding the defense industrial base and keeping sea lanes open in the Bab el-Mandeb strait while restoring readiness, preparing for the future and bolstering sagging recruiting.

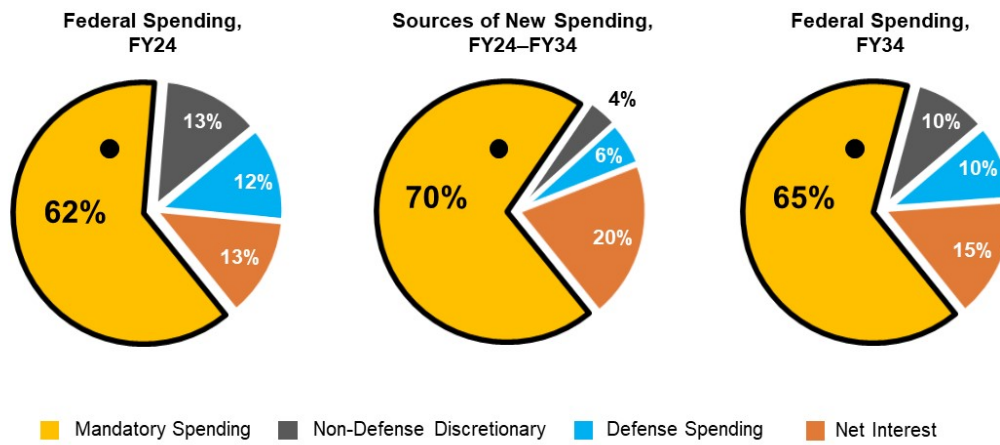
The National Defense Strategy does not adequately account for the full breadth and scope of what the nation asks the U.S. military to do. Rectifying this mismatch will require either more investment, scaled back national objectives, or fewer demands on U.S. forces. Managing and mitigating climate impacts are important but additive demands for resources that cannot be met by pivoting away from threats and missions American leaders will be unable to ignore.

Defense Falls Below Non-Defense Discretionary and Interest Payments

Over the past three decades, military investments map out like a sine wave evidenced by significant fluctuations. Although the defense budget has generally increased nominally in the last 30 years, consistent, annual real growth has been lacking. The post-Cold War 'peace dividend' of the 1990's greenlighted a procurement holiday from which the U.S. military has never fully recovered. This trough was followed by a hollow consumables-driven buildup for the wars in Iraq and Afghanistan, which themselves were followed by the Budget Control Act era. Procurement of new equipment slowed, modernization plummeted, and the military downsized. This dearth was never remedied as the last Defense Strategy Commission estimated that the military today is a half a trillion dollars behind in modernization needs.¹

Commonly outpaced by inflation and the rising cost of doing business, the average real growth rate in defense budgets over the last decade has been less than one percent annually.² Defense spending as a percentage of our national wealth is also declining. During the height of the Cold War, defense accounted for as much as six percent of gross domestic product. This figure has dipped below three percent for the first time since the end of the Cold War, and is expected to stay there for the next decade.³ The same is not true for other priorities of federal spending. According to the Congressional Budget Office (CBO) over that same time, mandatory spending will stabilize around 14 percent of GDP—nearly five times what the nation invests in its armed forces.⁴

Defense Spending Projected to Shrink as Proportion of Federal Spending, Outpaced by Interest Payments and Non-Defense Discretionary Spending



Source: Congressional Budget Office Long-Term Budget Projections, March 2024.



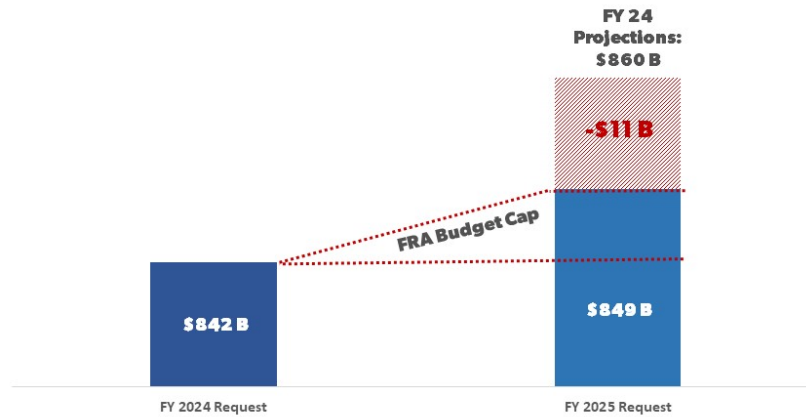
This year in a notable shift, CBO estimates that the United States will now spend more on interest payments on the national debt than on defense. This trend is expected to worsen; over the next decade, both discretionary defense and non-defense spending are projected to continue their decline relative to the escalating costs associated with servicing the debt and mandatory spending. In the next decade, 70 percent of new federal spending will go to mandatory accounts. Of the remaining 30 percent, 20 percent will service the debt, and discretionary defense and non-defense will split the remaining 10.⁵

The composition of the federal budget is increasingly dominated by mandatory spending categories such as healthcare and retirement benefits. As the federal budget continues to be squeezed, discretionary accounts will decline further, impacting the ability of the Department of Defense to maintain and enhance the size and strength of the force globally.

FY 2025: A Budget of Hard Choices

Given the fiscal severity of rising interest payments, it's understandable that Congress moved to take action against an ever-increasing debt. However, constraining the resourcing of national defense at a time of increased instability and global commitments will continue to strain the force. President Joe Biden's 2025 budget request for the Defense Department is \$849.8 billion—a one percent increase over last year's topline of \$842 billion.⁶ With Pentagon inflation estimates at 2.1 percent, this amounts to a cut in real terms.⁷ This budget request is \$10 billion dollars short from the projected Pentagon plans from last year, compounding the strain.⁸ The effects of these "hard choices"⁹ range from sacrificing future capability to the Army shrinking to its smallest size since 1940 to the Navy cutting new ship production.¹⁰ Across the force, funding for future equipment has been pushed into the outyears, with Secretary of Defense Lloyd Austin stating "...we'll need to have growth in a top line in the out years to ensure that we can recapture some of the things that we weren't able to get into this [budget]." Absent real growth, however, means a reliance on outyear "recapture" looks unlikely.¹¹

Budget Caps Shrink FY 2025 Defense Request



Source: Department of Defense FY 2024 Budget Request, Department of Defense FY 2025 Budget Request, Department of Defense National Defense Budget Estimates for FY 2024.



The U.S. military’s strategy-resource mismatch is aggravated by Congress’ inability to pass a timely budget. The operational effectiveness of the military is compromised when forced to operate under continuing resolutions. These spending freezes lock amounts and accounts at previous year’s levels. Characterized by Former Secretary of Defense Ash Carter as a “straitjacket,” continuing resolutions also prohibit the Pentagon from initiating new programs, adjusting existing ones, or shifting funds to emergent needs, slowing initiatives critical to national security.¹²

The latest continuing resolution subjected the Department of Defense to these ailments for almost half a year: 174 days at a cost of \$52 billion in lost buying power last year alone.¹³ Nor is this a departure from the norm. The Pentagon has spent a cumulative five of the last 15 years operating under a continuing resolution.¹⁴ That’s time and money the Pentagon can’t get back. Given that the near-majority of funding that is granted to the armed forces goes back out the door in the form of contracted goods, services, IT and technology, spending freezes are uniquely harmful to the Defense Department—unlike any other federal agency.

All the Butter in the Budget for Guns

Maintaining a large, ready and professional force in peacetime is expensive. But war is much more so—in blood and treasure. Given the vast resources and authorities of the Defense Department, it is often the ‘easy’ button to problem solving, including those outside of its core warfighting functions.¹⁵

Estimates on the amount of nondefense spending in the Pentagon’s budget vary—ranging from the roughly \$100 billion of AEI’s Elaine McCusker¹⁶ to upwards of \$200 billion from former Representative Anthony Brown (D-MD).¹⁷ These estimate are derived from compiling the billions spent on programs and activities that have no direct contribution to military capabilities or retaining the all-volunteer force.¹⁸ Some of these initiatives include protecting endangered

species, fish transportation systems, and other such activities.¹⁹ While these initiatives may be worthy investments and improve the general welfare of society, they may be better shifted to another federal agency or outside entity with jurisdiction and deeper expertise. These nondefense items marbled into the defense budget give the American public a misleading understanding of the true size and scope of where their defense dollars are going.

Some of this spending includes projects related to climate change. Since its inclusion in the 2022 National Defense Strategy, the Pentagon has released service strategies and guidance on confronting the problem.²⁰ This is a welcome development. A force at optimal readiness will have the doctrine, training, infrastructure and resilience to handle extreme weather and rising temperatures. Investments in facility resilience throughout potentially vulnerable areas, enhanced emphasis on Arctic warfare operations, and training for climate catastrophe contingencies are all directly correlated with warfighting and select peace operations.

The services are also working on improving the fuel efficiency of certain fleets and inventories of equipment. For example, the Marine Corps has upgraded one third of their medium tactical vehicle replacement seven-ton trucks into fuel efficient versions, with the rest to be upgraded by 2024. The Air Force is incorporating drag reduction technologies to aircraft to reduce fuel consumption. These initiatives are better for the operational environment and cost-savers for the taxpayer.²¹

However, Congress must scrutinize which defense programs may be more fitting for other federal entities. The Pentagon also has five environmental restoration accounts, totaling \$1.2 billion. These fund all the phases of environmental remedy at sites under the jurisdiction of the Department of Defense, National Guard, or formerly-used defense sites. Could these types of initiatives alternatively be funded through the Department of the Interior or the Environmental Protection Agency, for example? To put things in perspective, this \$1.2 billion is more than Army's procurement spending on the Precision Strike Missile, Javelin and Joint Air-to-Ground Missile combined (\$866.3 million).²² \$1.2 is worth more than the procurement of Standard Missile-6s, Naval Strike Missiles, and Rolling Airframe Missiles (\$1.1 billion).²³

The Military Needs Its Own Bipartisan Infrastructure Bill

While the Pentagon has identified infrastructure resilience as a core focus to combat effects of climate change, investments in this area have been underfunded. Currently, the department is starting with a major handicap: \$137 billion worth of deferred maintenance in their Facilities Sustainment, Restoration and Modernization program, which is meant to fund repairs and routine maintenance.²⁴

With select bases serving as power projection platforms, this growing problem is too expensive to address within the existing topline. A separate defense infrastructure supplemental will likely soon be required to fix decades of deferred maintenance, military construction projects delayed by continuing resolutions, and aging and antiquated buildings too old to adapt to advanced manufacturing techniques or shift layouts for better incorporation of cutting edge technologies that reduce touchpoint labor and send equipment back out the door faster.

Though there have been major funding initiatives for facilities devastated by climate like Tyndall Air Force Base, which was destroyed by Hurricane Michael in 2018, many upgrade and new-build projects remain unfunded.²⁵ The damage resulting from Hurricane Mawar that hit Guam in

2018 requires an estimated \$9.7 billion for the Air Force alone, and possibly \$50 billion across the department, to rebuild and improve facilities on the island. This sum alone is larger than the \$17.5 billion requested for FY25's total military construction budget and possibly requires an emergency supplemental to fund according to Lt. Gen. Tom D. Miller.²⁶ Furthermore, the Navy also needs \$580 million and \$600 million to fund a damaged helicopter squadron hanger and repairs for a breakwater respectively. However neither were included in the FY 2025 budget request, and instead are included in the Navy's unfunded priorities list.²⁷

The heightened effects and occurrence of extreme weather can harm force posture, combat readiness and power projection. If facilities on Guam fail, submarines will be stuck in or out of their bases, planes will be unable to takeoff, and the logistical abilities of the joint force will be hampered.²⁸ If the Pentagon is committed to mitigating climate change effects, funding these repairs and upgrades should be top priorities beyond the base defense budget.

Moving Beyond Defense-Reform Theater

Reforming how the Defense Department does business is a never-ending process of improvement that contributes to better military outcomes. Major changes that yield big savings are often the hardest politically to achieve, but it can be done.²⁹ Often these efforts have an upfront cost in order to reap yield later. These can include the costs of acquiring new software systems, training personnel, or conducting studies. When the topline is fixed, introducing new costs may seem counterproductive, especially when cuts are being made elsewhere. This creates a tension between the immediate financial burden of reform initiatives and their long-term benefits.

Initiatives like the Base Realignment and Closure (BRAC) process, though immediately expensive, have demonstrated their ability to yield significant long-term offsets. Particularly when service leaders repeatedly emphasize the cost of keeping aging infrastructure on the books—whose excess ranges from 15 to a whopping 25 percent in some cases.

Such reforms are pivotal, not only for cutting excess costs but also for aligning the Pentagon's infrastructure with contemporary military needs and strategic objectives.³⁰ Moreover, key reforms that promise forward-thinking and cost-saving outcomes demand sustained commitment and investment. Stakeholders must be willing to see these reforms through to fruition with leadership attention and sustained funds to achieve the desired results.

Additionally, to move beyond defense-reform theater, some responsibility must be borne by Congress to tackle contentious, multi-faceted and difficult issues, such as making major changes to the way the defense budgeting process occurs.³¹ These changes require coalition building, outside support, and deliberate attention to get beyond half-measures. Often overlooked change also demands regular reviews of what work may stop, rules sunsetted, regulations un-wound, headcount shifted, or laws no longer relevant to the moment ended.

Beyond the Dollars: An Equal Focus on Military Outputs

One of the primary inputs of U.S. defense strategy, financial resources, are crucial but only one piece of the puzzle. The outcomes they achieve in mission success in executing the National Defense Strategy are paramount. Readiness is challenged as the services struggle with shrinking and aging capital assets, impacting their ability to achieve the desired ends through effective

ways and means. These in turn cost more to maintain than buying new, forcing the military into its version of an acquisition “doom loop” from which recovery is long and expensive.

The U.S. Navy, for example, is nearly half the size it was during the height of the Cold War but just as busy with about 100 ships forward at any given moment for decades. In 1987 at its peak, the U.S. Navy boasted 594 ships.³² Today, the fleet has been reduced to just 294 ships.³³ In 1985, about 15 percent of Navy ships were deployed at any given time,³⁴ and tours typically did not exceed six months. In recent years, to meet this same demand, deployment length has doubled while consuming 30 percent or more of the fleet since 2017.³⁵ Fewer ships to spare mean that servicemember time away from family must be lengthened and maintenance must be deferred, compounding growing costs on the shrinking fleet.

The Navy’s surface fleet has still not yet met its goal of having 75 mission-capable ships ready at any given time.³⁶ The Air Force is plagued by maintenance and supply challenges, hampering the inventory of availability aircraft, and the Army continues to see availability and safety issues with its aviation fleet.³⁷

The U.S. military's commitment to aiding allies and deterring war in three key theaters—Europe, the Middle East, and the Indo-Pacific—exacerbates these strains. This operational stretch occurs despite the military no longer being sized as a force capable of simultaneously engaging effectively across three theaters or two wars. This mismatch between growing missions and reduced military capacity presents challenges as our national interests have not similarly been reduced. It calls for a reassessment of how financial inputs are allocated and managed to ensure that outputs—namely, operational readiness, strategic presence and mission success—are not only maintained but enhanced in line with current and emerging global security demands.³⁸

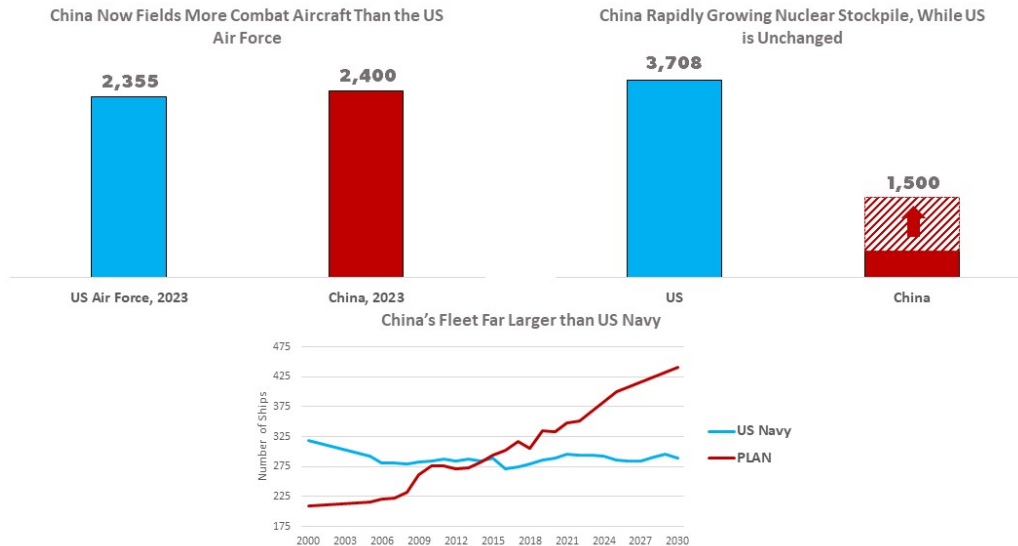
Keeping Up With the Pentagon’s Pacing Threat

While the Pentagon is continuously losing buying power and getting less bang for its proverbial buck, China is not standing still.³⁹ Over the past 28 years, China’s defense budget has seen a consistent average increase of about 9 percent annually.⁴⁰ During this period, Beijing’s officially-reported defense budget more than tripled, reflecting rapidly expanding military capabilities and strategic ambitions.

Deeper analysis estimating the true military spending by the CCP shows a more worrisome picture from the frontlines of the IndoPacific region. Last year, it was publicly disclosed by the American intelligence community that the true size of the Chinese military budget is likely around \$700 billion.⁴¹ This suggests that China’s defense budget is nearly on par with that of the United States. AEI research supports these claims, appraising the true size of China’s military budget as even larger, having reached at least \$711 billion in 2022.⁴²

This figure represents approximately 96 percent of the Pentagon’s budget of \$742 billion for that same year. This not only underscores the rapid growth of China’s military but also highlights the potential challenges this poses to U.S. military competitiveness and strategic balance around the world. While estimates of China’s military spending vary, there’s no denying that China is rapidly increasing its combat power, production capacity, training and doctrine development, and technological know-how. According to the Pentagon’s latest report on military power, China is not only catching up but in several key areas exceeding the capabilities of the United States.

The Pacing Threat: China is a Peer Competitor to the United States



Source: *Air & Space Forces Almanac 2023*, *Military and Security Developments Involving the People's Republic of China 2023*, *Federation of American Scientists: Status of World Nuclear Forces*, *Congressional Research Service: China Naval Modernization: Implications for U.S. Navy Capabilities*



One stark illustration of China's military expansion is naval. Nearly a decade ago, China's navy surpassed the United States Navy and is projected to grow to 440 ships by 2030. Meanwhile, the U.S. fleet remains relatively stagnant, with fewer than 300 ships.⁴³ According to the Pentagon, Beijing now fields more combat aircraft than the United States Air Force, possesses the largest rocket force in the world, and plans to triple its nuclear stockpile before 2030.⁴⁴

Furthermore, Beijing must worry only about achieving its more limited objectives in the region and denying U.S. aims there. This effectively means Beijing's defense investments may be concentrated more effectively on a smaller problem set. Nearly equal defense spending between America and China is therefore not equal investment for similar outcomes.

Peace Begets Prosperity

Maintaining a military large and modern enough to compete and prevent conflict requires a costly premium.⁴⁵ But an ounce of deterrence is worth much more than a pound of war. The costs of war extend far beyond immediate financial expenditures, impacting generations through economic disruption, regional instability, and human suffering.

The return on investment that the American taxpayers achieve from their military is worthy. The prosperity allowed from stability that is fostered by an American-led world order are directly sustained by the strength and reach of the U.S. military, alongside its global partners. Recent violence underscores the consequences when this order begins to unravel.

America's theory of deterrence rests on the hope of technological breakthroughs on longer timelines.⁴⁶ The United States is divesting of equipment and platforms now in the hopes of fielding game-changing technologies in the future, even when production capacity for those advanced technologies do not yet exist.

But U.S. adversaries do not operate on American timelines. They can strike and wreak havoc at will on their own timeframes. That is why building back military capacity quickly, streamlining bulging military missions, sunseting functions that do not contribute directly to core warfighting functions, and addressing military infrastructure comprehensively outside the defense budget are all so important. In the near term, defense investments must prioritize being able to close the yawning gap between ends and means at the heart of the U.S. approach to great power competition.

¹ <https://www.usip.org/sites/default/files/2018-11/providing-for-the-common-defense.pdf#page=67>.

² <https://www.19fortyfive.com/2024/03/chinas-defense-budget-has-only-one-trajectory-up/>.

³ https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2025/FY2025_Budget_Request_Overview_Book.pdf#page=11.

⁴ <https://sgp.fas.org/crs/misc/R44641.pdf>.

⁵ <https://www.cbo.gov/data/budget-economic-data#3>.

⁶ https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2025/FY2025_Budget_Request_Overview_Book.pdf.

⁷ <https://www.defense.gov/News/Transcripts/Transcript/Article/3704504/comptroller-michael-j-mccord-and-vice-adm-sara-a-joyner-hold-a-press-briefing-o/>.

⁸ https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2024/FY24_Green_Book.pdf#page=15.

⁹ <https://www.af.mil/News/Article-Display/Article/3005740/kendall-says-budget-request-meets-current-needs-while-opening-path-to-the-future/>.

¹⁰ <https://www.aei.org/foreign-and-defense-policy/5-highlights-of-bidens-most-recent-military-budget/>

¹¹ <https://www.defense.gov/News/News-Stories/Article/Article/3769429/austin-fy-2025-budget-includes-tough-but-responsible-decisions/>.

¹² <https://crsreports.congress.gov/product/pdf/R/R45870>.

¹³ <https://www.aei.org/wp-content/uploads/2024/01/McCusker-Buying-Power-One-Pager-Final.pdf?x91208>.

¹⁴ <https://www.defense.gov/News/Transcripts/Transcript/Article/3682022/deputy-pentagon-press-secretary-sabrina-singh-holds-a-press-briefing/>.

¹⁵ <https://warontherocks.com/2019/10/just-say-no-the-pentagon-needs-to-drop-the-distractions-and-move-great-power-competition-beyond-lip-service/>.

¹⁶ <https://www.aei.org/research-products/report/defense-budget-transparency-and-the-cost-of-military-capability/>.

¹⁷ <https://www.defensenews.com/opinion/commentary/2021/05/14/the-case-for-a-robust-defense-budget/>.

¹⁸ <https://www.aei.org/research-products/report/defense-budget-transparency-and-the-cost-of-military-capability/>

¹⁹ <https://www.aei.org/research-products/report/defense-budget-transparency-and-the-cost-of-military-capability/>;

<https://www.defense.gov/News/Feature-Stories/Story/Article/3751517/protecting-endangered-species-national-security-at-the-avon-park-air-force-range/>; and <https://www.nww.usace.army.mil/Missions/Fish-Programs/>.

²⁰ <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>.

²¹ <https://www.defense.gov/News/News-Stories/Article/Article/2853649/prototype-aims-to-reduce-fuel-use-improve-tactical-vehicle-performance/>.

²² https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2025/FY2025_Weapons.pdf.

²³ https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2025/FY2025_Weapons.pdf.

²⁴ <https://www.gao.gov/products/gao-23-106725>.

²⁵ <https://www.washingtonpost.com/climate-solutions/2023/08/06/climate-change-florida-military-tyndall/>.

²⁶ <https://www.airandspaceforces.com/air-force-guam-mawar-recovery-cost/>.

²⁷ <https://s3.amazonaws.com/static.militarytimes.com/assets/pdfs/1711399308.pdf>.

²⁸ <https://jrm.cnic.navy.mil/Installations/NAVBASE-Guam/About/Tenant-Commands/>.

²⁹ <https://www.19fortyfive.com/2023/03/congress-find-the-savings-hold-the-defense-budget-cuts/>.

³⁰ <https://www.heritage.org/defense/report/defense-dollars-saved-through-reforms-can-boost-the-militarys-lethality-and-capacity>.

³¹ <https://www.aei.org/wp-content/uploads/2023/03/Beyond-Monopsony.pdf?x91208>.

³² <https://www.history.navy.mil/research/histories/ship-histories/us-ship-force-levels.html>.

³³ <https://www.nvr.navy.mil/NVRSHIPS/FLEETSIZE.HTML>.

³⁴ https://www.cna.org/archive/CNA_Files/pdf/d0022262.a3.pdf#page=9.

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- ³⁵ <https://news.usni.org/2023/07/24/usni-news-fleet-and-marine-tracker-july-24-2023>.
- ³⁶ <https://www.defensenews.com/naval/2024/01/09/seeking-75-ready-ships-navy-turns-to-new-readiness-orgs/>.
- ³⁷ <https://www.gao.gov/products/gao-23106673#:~:text=Nearly%20%20decades%20of%20conflict,while%20also%20modernizing%20its%20forces>.
- ³⁸ <https://www.aei.org/foreign-and-defense-policy/wars-of-mass-and-attribution-demand-a-military-sized-for-three-theaters/>.
- ³⁹ Punaro, Arnold L. *The Ever-Shrinking Fighting Force*. Hardcover, June 8, 2021.
- ⁴⁰ <https://www.19fortyfive.com/2024/03/chinas-defense-budget-has-only-one-trajectory-up/>
- ⁴¹ <https://www.congress.gov/118/crec/2023/06/01/169/95/CREC-2023-06-01-senate.pdf#page=9>
- ⁴² <https://www.aei.org/research-products/report/keeping-up-with-the-pacing-threat-unveiling-the-true-size-of-beijings-military-spending/>.
- ⁴³ <https://www.aei.org/research-products/report/10-ways-the-us-is-falling-behind-china-in-national-security/>.
- ⁴⁴ <https://media.defense.gov/2023/Oct/19/2003323409/-1/-1/1/2023-MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA.PDF>.
- ⁴⁵ <https://www.aei.org/foreign-and-defense-policy/putting-slack-and-margin-back-in-the-military/>.
- ⁴⁶ <https://sais.jhu.edu/kissinger/programs-and-projects/kissinger-center-papers/american-deterrence-unpacked>.