



# An Affordable Necessity:

## The Case for a Larger Defense Budget

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## EXECUTIVE SUMMARY

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**To protect its essential interests around the globe and defend freedom in the world, the United States needs to devote more resources to its military. Democrats should lead the charge for the required increase in defense spending — and make sure it goes to the right places.**

President Trump and his Republican Party talk a very big game when it comes to defense spending, but their own priorities remain unrealistic and misplaced. Despite their proposed funding increase,<sup>1</sup> the Trump administration looks set to slash core military capabilities — including a possible 90,000-soldier cut<sup>2</sup> to the Army — in order to pay for fantasies such as the so-called Golden Dome missile defense system. Secretary of Defense Pete Hegseth has made his focus on fighting domestic culture wars crystal clear and appears to believe that logistics contribute little, if anything, to successful military operations. Meanwhile, Elon Musk has expressed public antipathy toward weapons like the F-35 stealth fighter and favors replacing them with hypothetical drone swarms presumably built by new defense firms founded and owned by Silicon Valley venture capitalists.

Worse, Trump's foreign policy threatens America's own defense industry, which likely means each U.S. dollar will buy less in terms of defense. With his threats to Canadian and Danish sovereignty as well as his attempts to push Ukraine into an effective capitulation while offering unilateral concessions to the Kremlin, he has alienated America's long-standing NATO allies in Europe — to the point where these traditional friends and allies question whether or not they can or even should rely on American military support. Trump's blunderbuss tariffs, moreover, threaten American industries that depend on global supply chains and relationships with manufacturers among America's allies in

Europe and Asia. Fewer overseas sales and higher costs for industrial materials and inputs mean the Department of Defense will likely pay more for the weapons it buys for itself from U.S. defense firms. Even worse, ruptured alliances mean the United States will have to shoulder more of the burden for its own national security and spend more on defense than it would need to otherwise.

For their part, Democrats must reject predictable, knee-jerk calls from the left to cut the defense budget as well as claims that even modest increases in defense spending will prove unaffordable. In reality, a steady and significant rise in defense spending up to \$1 trillion by 2029 is both warranted and within America's means. A defense budget that sees an increase of roughly \$37.5 billion a year over the next four years would provide the U.S. military with the resources it requires to secure American interests while remaining well within the lower bounds of historical defense spending — no matter the metric chosen to measure it.

It's hard to make solid policy recommendations given the extraordinary uncertainty the United States and the world face over the next four years — to say nothing of the damage President Trump, Elon Musk, and others in the Trump administration have already done to the U.S. government. But even if it underestimates the scope of the defense policy challenges that will confront the next Democratic administration a modest increase in defense spending dedicated to the right priorities could still yield national security dividends well beyond the initial investment and plant the seeds of a robust national defense program.

As PPI previously argued,<sup>3</sup> a Democratic defense program should pursue three main goals:

- Deter and defend American allies in Europe and the Pacific against aggression from the likes of a belligerent Russia and an increasingly well-armed China.<sup>4</sup>
- Produce arms, ammunition, and equipment in sufficient quantities to supply the United States, its allies, and nations on the frontlines of freedom like Ukraine and Taiwan.
- Maintain and modernize America's aging nuclear deterrent.

Without increased investment in defense, however, America's military will not be able to attain these three goals. Indeed, the military has too few combat ships and aircraft available to meet the demands placed upon it — and many of these ships and planes have been in service for decades. What's more, Russia's war against Ukraine has revealed the limits and weaknesses of America's own modern defense industry that have only begun to be addressed. Money alone cannot safeguard American national security, of course, but a defense budget that rises to \$1 trillion by 2029 will certainly help do so.

A strong defense program along the lines proposed below can help Democrats reclaim their rightful place as the party of national security. It was Franklin D. Roosevelt, after all, who called on the United States to become "the great arsenal of democracy," and John F. Kennedy who welcomed the responsibility of "defending freedom in its hour of maximum danger."<sup>5</sup> At a time when gangster powers like Russia, China, and Iran press their geopolitical advantage — including through force or its threat — Democrats can and must summon the same spirit today.

## DEFENSE SPENDING IN HISTORICAL CONTEXT

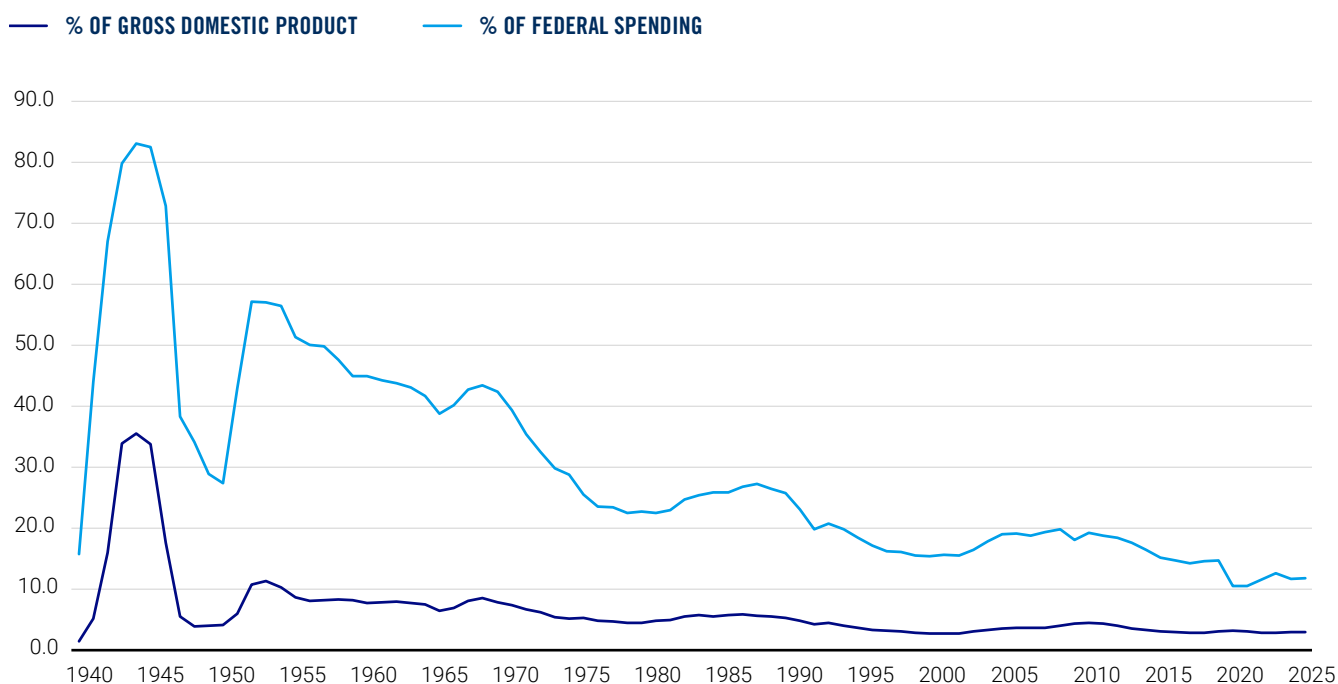
A \$1 trillion defense budget by the year 2029 would not be exorbitant by historical standards. At just under 2.9% of the nation's economy, a defense budget that large would come in well below the lowest Cold War-era defense budgets of 4.5% in 1978 and 1979 and on par with the lowest post-Cold War defense budgets of 2.8% in 1998, 1999, and 2000.<sup>6</sup> Given the Trump administration's reckless economic policies and President Trump's inflammatory rhetoric, however, it's possible the American economy may not be as strong as the Department of Defense projected in 2024 — meaning that a trillion-dollar defense budget in 2029 may consume more of the nation's economy than this analysis assumes.

As a share of overall federal spending, defense remains at historic lows: just 11.8% of all public expenditure in the Biden administration's last defense budget request for fiscal year 2025. That's

lower than the 15.7% of federal spending dedicated to defense in 2000, President Bill Clinton's last full year in office, and below even the paltry pre-World War II level of 15.8% in 1940.<sup>7</sup> Based on the Pentagon's estimates of future federal spending, moreover, a trillion-dollar defense budget in 2029 would raise that figure to just 11.9%.<sup>8</sup>

It's important to note that federal spending as a whole has grown substantially since 1940. Social Security had just been created five years earlier, and Medicare and Medicaid were still a quarter-century away from passage in Congress. Interstate highways and the space race were more than a decade in the future. Moreover, federal spending tends to increase when America faces a crisis: the defense share of the federal budget went down amid the higher overall spending needed to weather the global financial crash in 2008 and the COVID-19 pandemic in 2020.<sup>9</sup>

## DEFENSE SPENDING AS SHARE OF GDP AND SHARE OF FEDERAL BUDGET, 1940-PRESENT



Source: U.S. Department of Defense

Overall, a modestly higher defense topline can fit well within the wider budget framework proposed by PPI that brings the federal deficit under control and balances the budget by 2045.<sup>10</sup>

## A NATIONAL DEMOCRATIC DEFENSE PROGRAM

What would a notional Democratic defense program look like?

It's important to make clear that this outline doesn't necessarily address the fate of specific programs or weigh in on perennial debates about the utility of specific systems like large-deck aircraft carriers. Instead, it seeks to speak to the general thrust of defense policy—one that's already started to evolve and adapt to new circumstances in some promising ways.

It's also important to note that the program outlined here reflects two main assumptions about the world: that the U.S. domestic economy and America's alliances will proceed on the courses they were on when President Biden left office in January 2025. Though they remain both useful and necessary for planning and policy purposes, these assumptions proved clearly out of date by the time this report was conceived and written in early 2025.<sup>11</sup> President Trump's tariffs and eagerness to curry favor with Vladimir Putin have alienated America's allies while making defense production more expensive in a weaker overall domestic economy.

Before Trump returned to office, the U.S. military had slowly but surely begun to adapt to its new strategic and technological environment. The U.S. Marine Corps has traveled furthest down this road with its overarching Force Design 2030 concept, elimination of tank units, and creation of Marine Littoral Regiments designed to blunt aggression—particularly in the Pacific.<sup>12</sup> In their own ways, the other three services have begun to evolve as well: the Air Force with its Agile Combat Employment scheme and uncrewed Collaborative Combat

Aircraft (CCA) program,<sup>13, 14, 15</sup> the Army with its Multi-Domain Operations concept and fielding of cruise missiles,<sup>16, 17</sup> and the Navy with its uncrewed drone fleet in the Middle East called Task Force 59.1 and MQ-25 Stingray drone tanker program.<sup>18, 19</sup>

But the U.S. military also now teeters on a precipice where the high quality of its weapons and forces no longer makes up for their small quantity. Too few of even the best systems and best-trained forces will leave it unable to meet its strategic obligations in Europe and the Pacific. Limited numbers of warships, aircraft of all types, and air defense systems mean higher rates of deployment, more wear-and-tear, and more maintenance—not to mention increased difficulty in meeting pressing strategic challenges in different parts of the world.

It's a problem that even a modest rise in defense spending can go a long way toward solving. In short, an increased defense budget that ramps up to an annual \$1 trillion over the course of the next four years — an additional \$37.5 billion a year — could and should:

- Fund more Navy shipbuilding, with an ambition to increase the Navy's fleet to 350 warships by 2035. The Congressional Budget Office estimates that the Navy's current shipbuilding plans over that timeframe would likely cost \$41.7 billion a year, well above the Navy's most recent shipbuilding budget request of \$32.4 billion for fiscal year 2025.<sup>20, 21</sup> To meet the aspirational goal of a 350-ship fleet by the end of the next decade, the United States may need to work with Japan and South Korea to take advantage of their shipbuilding capacity — particularly on Aegis destroyers, which serve in all three navies — and drive down costs.<sup>22</sup>

- Pursue a bomber force of at least 250 aircraft, including a long-term mix of 175 B-21 stealth bombers and 75 upgraded B-52s. That's above the Air Force's own stated minimum requirement of 220 bombers and well above the current bomber fleet size of 141 aircraft.<sup>23, 24</sup> The last Air Force budget projects that annual B-21 procurement costs will rise from \$2.67 billion in fiscal year 2025 to \$5.77 billion by fiscal year 2029 — an average increase of \$774.4 million a year — while research and development costs will decrease from \$2.65 billion to \$1.48 billion over the same time frame.<sup>25, 26, 27, 28</sup> If B-21 production can be ramped up in the near term from six to seven aircraft a year to nine or ten, the annual cost of the program could grow by an additional \$2.01 billion to \$2.35 billion.<sup>29, 30</sup>
  - Buy the full complement of 144 F-15EX fighters, continue research and development of the uncrewed Collaborative Combat Aircraft, and explore viable alternatives to the crewed Next Generation Air Dominance (NGAD) fighter before fully committing to the program. The Air Force's fighter fleet needs to be refreshed, but as Biden administration Air Force secretary Frank Kendall has argued it's unclear whether the NGAD — now dubbed the F-47 — should be the service's top priority given its likely cost in the hundreds of millions of dollars and the need to invest in other capabilities like the B-21.<sup>31</sup> For its part, Lockheed Martin has proposed a souped-up "Ferrari" version of the F-35 that the company claims could provide 80% of the required NGAD capability at roughly half the cost.<sup>32</sup> Moving forward with the CCA and buying 54 additional F-15EX fighters at projected costs of \$8.3 billion and \$5.4 billion, respectively, over the next four years<sup>33</sup> while deferring a definitive decision on the NGAD fighter would allow the Air Force to bring new fighters into the fold and advance future technology without making a possibly premature commitment to a costly new fighter.
  - Continue rebuilding defense industrial capacity for munitions like missiles, rockets, and artillery while maintaining or increasing investment in research and development. Despite substantial investments made by the Biden administration expanding America's defense production capacity in the wake of Russia's war against Ukraine, the U.S. defense industry continues to fall short of goals and targets for missile and artillery shell production.<sup>34</sup> When it comes to big-ticket weapons like fighter jets and warships, inconsistent demand signals and a dysfunctional budget process have raised costs and delayed production.<sup>35</sup> Multiyear commitments to buy arms and ammunition as well as co-production with allies can help alleviate these problems, but additional money — roughly \$10 billion more a year — will be needed.<sup>36</sup>
  - Continue to modernize nuclear forces while anticipating further cost growth. America's nuclear deterrent needs to be updated and upgraded, but the bills for all three legs of the nuclear triad — bombers, ballistic missile submarines, and intercontinental ballistic missiles — have come due at the same time. In particular, the projected cost of the new Sentinel ICBM — the replacement for the half-century-old Minuteman III — has exploded by \$30 billion over the last five years.<sup>37</sup> The Navy's Columbia-class ballistic missile submarine program also faces likely significant cost increases.<sup>38</sup> Future defense budgets should include a buffer to cover further rises in the costs of these systems. At the same time, Democrats should oppose attempts to add expensive and unnecessary elements to the nuclear deterrent such as a proposed sea-launched cruise missile.<sup>39</sup>
- Democrats shouldn't be afraid to trim the defense budget when and where necessary, either — though no one should expect significant savings



from these cuts. Some possible areas for greater efficiency include:

- Pare back and “right-size” the role of special operations forces. For the past quarter-century, America’s special operations forces — the Navy SEALs as well as the Army’s Delta Force and Green Berets most prominent among them—have played a central role in the counterterrorism wars the United States has fought in Afghanistan, Iraq, Syria, and elsewhere. But these forces are less relevant to the strategic challenges now facing the United States, namely deterring and, if necessary, defending against Russia and China. However, special operations forces are not particularly large in terms of personnel or budget; U.S. Special Operations Command requested just under \$9.7 billion in the Biden administration’s last defense budget for its 66,000-strong force.<sup>40</sup> Congress should at very least allow the Pentagon to reduce the size of America’s special operations forces, not block attempts to do so as it did when the Army proposed a cut of 3,000 special operations soldiers in 2024.<sup>41</sup>
- Retire the Air Force’s aging A-10 aircraft fleet on or ahead of schedule and retire the Navy’s woebegone littoral combat ship (LCS) fleet. The Air Force already plans to mothball the A-10 ground attack aircraft by the end of the decade if not earlier, in no small part because the service does not see a role for it in potential high-end conflicts with the likes of Russia and China.<sup>42, 43</sup> Likewise, the Navy has decommissioned a number of its ill-starred littoral combat ships — some just a few years after they entered service.<sup>44, 45</sup> While it won’t help the Navy meet a 350-ship goal by 2035, rapidly retiring the LCS fleet could save the Navy money that it could then dedicate to new shipbuilding. At the same time, however, the Navy must ensure that it is not making similar mistakes with its new Constellation-class frigates that will take on the roles and missions of the LCS.<sup>46</sup>
- Refuse to waste money on the Trump administration’s unrealistic and unworkable “Golden Dome” ballistic missile defense scheme. Congressional Republicans have sought some \$24.7 billion for the fuzzily defined program, while President Trump has asserted that this system will be up and running by the end of term at a total cost of \$175 billion.<sup>47</sup> These sums would be better spent on other priorities like ships, bombers, and existing, proven missile defense systems like Patriot and THAAD or not at all.<sup>48, 49, 50</sup> Rather than invest tens if not hundreds of billions of dollars to build an impractical and strategically destabilizing ballistic missile defense system, Democrats should call for the purchase of additional Patriot and THAAD batteries — both of which remain in high demand and short supply around the world.<sup>51</sup> They should also propose a less expensive and more effective program to defend the United States against the much more plausible threat of cruise missiles and suicide drones.<sup>52</sup> Developing such a system would also help defend allies and American forces against similar threats overseas, like Russian cruise missile and drone attacks on Ukraine or the ongoing Houthi campaign against international shipping in the waters around Yemen.

All in all, the conventional part of this defense program will cost roughly \$110 billion over the next four years: an additional \$40 billion for shipbuilding, \$9.4 billion for expanded B-21 production, \$8.3 billion for CCA program, \$8.4 billion for continued NGAD research and development, \$5.4 billion for additional F-15EX production, and \$40 billion for expanded missile and munitions production. A portion of the residual \$40 billion available should be dedicated to a nuclear modernization buffer

fund, while the remainder could pay for additional missile defense batteries, guard against cost overruns for conventional weapons and munitions production, increase research and development funding to keep America's military on the cutting edge of defense technologies, refresh the aging Global Positioning System satellite fleet, and meet a number of the "unfunded priorities" the armed services list each year.<sup>53</sup>

### UNKNOWN UNKNOWN: DEFENSE POLICY ISSUES BEYOND THE BUDGET

As important as it is, the defense budget does not and cannot cover every defense policy issue. Some of these questions can be addressed through legislation, such as the annual National Defense Authorization Act or other mechanisms, while others simply need to be raised and thoroughly examined to determine what, if any, action ought to be taken.

In the first category, Democrats in Congress could take steps to force the Hegseth Pentagon to end or, at the very least, curtail its attempt to fight domestic culture wars in the U.S. military. That can start with the replacement of the unqualified and inept Secretary of Defense Pete Hegseth with a qualified professional more concerned with fighting actual wars against America's adversaries abroad than sticking it to political and cultural enemies at home. Congress could also take legislative action to prevent Hegseth from continuing to prosecute his culture war in the Pentagon, such as restricting his authority to rename bases after Confederate military officers or purge qualified servicemembers.

Democrats should also prevent the Trump administration from eliminating military capabilities needed to meet America's moral and legal obligations to its allies in both Europe and the Pacific. Beyond a large proposed cut in the Army's overall end strength, the Hegseth Pentagon apparently has set its sights on the Army's armor corps — a capability required to

deter and defend against Russian aggression in Europe.<sup>54</sup> Congress could legally require the Army to maintain a minimum armor force of a size necessary to meet American security obligations in Europe, a force that would likely need to include several armor brigade combat teams. Legislators could also protect the Army's aviation and artillery branches, the former especially given Secretary Hegseth's apparent intent to bet the Army's future on unproven drone swarm concepts at a time when even the most impressive autonomously piloted aircraft have had trouble keeping formation with other aircraft and sensing their immediate surroundings.<sup>55, 56, 57</sup>

What's more, Trump's tariffs and trade war with the rest of the world will almost certainly make it more expensive for the Pentagon to buy arms and ammunition. Trump has imposed duties as high as 25% on essential industrial inputs like steel and aluminum crucial to aerospace manufacturing and naval shipbuilding, and has threatened to do the same for semiconductor chips, copper, and critical minerals — all vital components that will probably raise costs for finished products like aircraft carriers, destroyers, and fighter jets beyond previous estimates from both the Pentagon and official watchdog agencies like the Congressional Budget Office and Government Accountability Office. A poorly performing overall economy beset by higher prices as imports dry up thanks to Trump's tariffs will not help either; indeed, the American economy contracted by 0.3% in the first quarter of 2025 largely due to the increased cost of imported consumer goods and industrial inputs.<sup>58, 59</sup> Fewer arms sales abroad as a result of Trump's hostility toward American allies will also likely increase the cost of major weapons systems, at least on the margins.

Finally, Democrats must give serious thought to the future of the U.S. government's relationship with defense firms founded and run by openly partisan, pro-Trump Silicon Valley moguls



like Peter Thiel and Elon Musk who possess ideological agendas at least tacitly hostile to democracy.<sup>60, 61, 62, 63</sup> This fundamental rethinking must be done without regard to the possible contributions newer companies may or may not make to national defense. It makes no sense for Democrats to support the funneling of taxpayer funds to individuals who strenuously support their political opponents in ways that go well beyond mere campaign donations and have displayed contempt for democratic self-government in both word and deed. Democracy itself is more important than ensuring the Pentagon can buy slightly less expensive or marginally more innovative software, rockets, and drones.

Musk himself is case in point: even before he bankrolled Trump's 2024 presidential campaign and began illegally stripping out the federal government's wires with his so-called Department of Government Efficiency, Musk's prodigious substance abuse,<sup>64</sup> unauthorized communications with Vladimir Putin,<sup>65</sup> and deep business relationships with Beijing<sup>66</sup> ought to have raised serious concerns about both his own executive role at SpaceX and the federal government's dependence on SpaceX as a launch and satellite communications provider. Beyond the denial of a high-level security clearance to Musk and a review of Musk's and SpaceX's failure to adequately comply with government security protocols at some point in 2024, however, the Biden administration and Secretary of Defense Lloyd Austin's Pentagon had little apparent appetite to hold Musk accountable for his questionable behavior and foreign policy freelancing.<sup>67, 68</sup> That's not a mistake Democrats can afford to make again, either with Musk himself or the heads of other newer defense companies with Silicon Valley venture capitalist roots.

It's a difficult problem without obvious or immediate solutions, or at least solutions that don't have obvious downsides and large, easily foreseeable obstacles. Fostering greater competition among launch and satellite internet constellation providers, for instance, represents one possible if incomplete way to address the issue through policy. But Democrats should at minimum be aware that this tangled political and policy challenge exists — and they should resolve to do something about it.

### CONCLUSION: AN OPPORTUNITY TO REBUILD TRUST ON NATIONAL SECURITY

Come 2029, Democrats must be prepared for a Pentagon hamstrung by four years of deeply misplaced priorities from an administration determined to wage domestic culture wars in the military, build an expensive and ill-conceived missile defense system, and burn bridges with America's closest and oldest allies—with the administration's Silicon Valley benefactors champing at the bit to win military contracts and replace proven, existing weapons systems with illusory concepts and vaporware.<sup>69</sup>

In a plausible worst-case scenario, Democrats may find themselves in the unenviable position of having to rebuild and reconstitute the U.S. military in a world made much more dangerous by Trump's foreign policy — and with the military possibly bogged down in active combat operations in any number of countries. America's alliances — institutions that have kept the peace between major powers and maintained international stability for eight decades while amplifying America's own power — have already been weakened by Trump's rhetoric and actions.

Any military reconstruction project will likely prove a much more expensive proposition than the notional defense program outlined here. Just how expensive it could be depends on how much damage Trump's economic policies can do to the American economy, and the early returns do not look promising. And without allies to help share the burden of security in Europe and the Pacific, the overall cost of national defense will only go up for the United States.

But it's also an opportunity for Democrats to once again reclaim their rightful heritage as the party of national security. They have done it in the past with leaders like Franklin D. Roosevelt and John F. Kennedy, and they can do it again after Trump. But they must start thinking seriously about their own defense program along the lines put forward here — and start thinking fast.

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## **ABOUT THE AUTHOR**

**Peter Juul** is the Director of National Security at the Progressive Policy Institute. In this role, Peter aims to craft a new foreign policy narrative that reaffirms the vital importance of active American engagement in the world and backs it up with substantive analysis of key issues relating to the defense of America's interests, values, and prosperity.

# Notes and References

- 1 The Trump administration claims that it will spend \$1 trillion on defense in fiscal year 2026, but it has requested only \$892.6 billion in its proposed budget. To reach \$1 trillion in total spending, the administration includes the \$150 billion in additional defense spending included by Congressional Republicans in their reconciliation bill – but that spending is spread out over ten years, amounting to roughly an additional \$15 billion a year. See Joe Gould et al., “Making Sense of Trump’s Defense Spending Math,” *Politico*, May 5, 2025, <https://www.politico.com/newsletters/national-security-daily/2025/05/05/making-sense-of-trumps-defense-spending-math-00329045>.
- 2 Steve Benyon, “Army Planners Are Weighing Force Reductions of Up to 90,000 Active-Duty Soldiers,” *Military.com*, April 3, 2025, <https://www.military.com/daily-news/2025/04/03/army-mulling-dramatic-reduction-of-tens-of-thousands-of-troops.html>.
- 3 Peter Juul, “Five Pillars of Freedom: First Steps Toward a New Democratic Foreign Policy,” Progressive Policy Institute, February 2025, p. 5, <https://www.progressivepolicy.org/wp-content/uploads/2025/02/PPI-Five-Pillars-of-Freedom-Policy.pdf>.
- 4 China’s navy will reportedly increase in size to 395 ships this year while the U.S. Navy will remain roughly two dozen ships below its own goal of a 313-ship fleet and faces capacity constraints on shipbuilding expansion. See Emmanouil M. Karatarakis, “U.S. Warship Production in Crisis as China’s Navy Surges Ahead,” *The Cipher Brief*, May 19, 2025, [https://www.thecipherbrief.com/column\\_article/u-s-warship-production-in-crisis-as-chinas-navy-surges-ahead](https://www.thecipherbrief.com/column_article/u-s-warship-production-in-crisis-as-chinas-navy-surges-ahead).
- 5 Franklin D. Roosevelt, “Fireside Chat,” December 29, 1940, <https://www.presidency.ucsb.edu/documents/fireside-chat-9>; John F. Kennedy, “Inaugural Address,” January 20, 1961, <https://www.presidency.ucsb.edu/documents/inaugural-address-2>.
- 6 “National Defense Budget Estimates for FY 2025,” Office of the Under Secretary of Defense (Comptroller), April 2024, p. 284 for estimated 2029 GDP, p. 295 for historical DoD spending as shares of GDP, [https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2025/fy25\\_Green\\_Book.pdf](https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2025/fy25_Green_Book.pdf).
- 7 “National Defense Budget Estimates for FY 2025,” p. 294-296.
- 8 “National Defense Budget Estimates for FY 2025,” p. 284.
- 9 “National Defense Budget Estimates for FY 2025,” p. 295-296.
- 10 Ben Ritz and Laura Duffy, “Paying for Progress: A Blueprint to Cut Costs, Boost Growth, and Expand American Opportunity,” Progressive Policy Institute, July 2024, <https://www.progressivepolicy.org/wp-content/uploads/2024/09/PayingForProgress-2024.pdf>.
- 11 James A. Dewar et al., “Assumption-Based Planning: A Planning Tool for Uncertain Times,” Rand Corporation, 1993, [https://www.rand.org/content/dam/rand/pubs/monograph\\_reports/2005/MR114.pdf](https://www.rand.org/content/dam/rand/pubs/monograph_reports/2005/MR114.pdf).
- 12 Andrew Feickert, “U.S. Marine Corps Force Design Initiative: Background and Issues for Congress,” Congressional Research Service, October 3, 2024, [https://www.congress.gov/crs\\_external\\_products/R/PDF/R47614/R47614.5.pdf](https://www.congress.gov/crs_external_products/R/PDF/R47614/R47614.5.pdf).
- 13 “Air Force Doctrine Note 1-21: Agile Combat Employment,” U.S. Air Force, August 23, 2022, [https://www.doctrine.af.mil/Portals/61/documents/AFDN\\_1-21/AFDN%201-21%20ACE.pdf](https://www.doctrine.af.mil/Portals/61/documents/AFDN_1-21/AFDN%201-21%20ACE.pdf).
- 14 David Roza, “Airmen Confused and Understaffed for Elements of ACE, Report Says,” *Air and Space Forces Magazine*, April 22, 2025, <https://www.airandspaceforces.com/air-force-ace-rand-report/>.

- 15 Jennifer DiMascio, "U.S. Air Force Collaborative Combat Aircraft (CCA)," Congressional Research Service, January 22, 2025, [https://www.congress.gov/crs\\_external\\_products/IF/PDF/IF12740/IF12740.4.pdf](https://www.congress.gov/crs_external_products/IF/PDF/IF12740/IF12740.4.pdf).
- 16 Andrew Feickert, "Defense Primer: Army Multi-Domain Operations (MDO)," Congressional Research Service, October 1, 2024, <https://sgp.fas.org/crs/natsec/IF11409.pdf>.
- 17 Joe Lacdan, "Army Successfully Fires Tomahawk Missiles from MRC System," *Army News Service*, August 22, 2023, [https://www.army.mil/article/269227/army\\_successfully\\_fires\\_tomahawk\\_missiles\\_from\\_mrc\\_system](https://www.army.mil/article/269227/army_successfully_fires_tomahawk_missiles_from_mrc_system).
- 18 "Task Force 59 Launches New Unmanned Task Group 59.1," U.S. Navy Central Command, January 16, 2024, <https://www.navy.mil/Press-Office/News-Stories/Article/3645647/task-force-59-launches-new-unmanned-task-group-591/>.
- 19 Tyler Rogoway, "MQ-25 Stingray's Extreme Range Gives It Massive Potential Far Beyond A Tanker," *The War Zone*, April 7, 2025, <https://www.twz.com/air/mq-25-stingrays-range-gives-is-massive-potential-far-beyond-a-tanker>.
- 20 "An Analysis of the Navy's 2025 Shipbuilding Plan," Congressional Budget Office, January 2025, <https://www.cbo.gov/publication/61155>.
- 21 "Department of Defense Fiscal Year (FY) 2025 Budget Estimates — Shipbuilding and Conversion, Navy," Department of the Navy, March 2024, p. 3, [https://www.secnav.navy.mil/fmc/fmb/Documents/25pres/SCN\\_Book.pdf](https://www.secnav.navy.mil/fmc/fmb/Documents/25pres/SCN_Book.pdf).
- 22 Becca Wasser and Philip Sheers, "From Production Lines to Front Lines: Revitalizing the U.S. Defense Industrial Base for Future Great Power Conflict," Center for a New American Security, April 2025, p. 26-31, [https://s3.us-east-1.amazonaws.com/files.cnas.org/documents/Defense\\_Defense-Industrial-Base\\_2025-04-02\\_vFinal.pdf](https://s3.us-east-1.amazonaws.com/files.cnas.org/documents/Defense_Defense-Industrial-Base_2025-04-02_vFinal.pdf).
- 23 Michael Marrow, "Bomber Fleet Size Target 'Probably' Needs to be Reassessed: Air Force Global Strike Chief," *Breaking Defense*, December 6, 2024, <https://breakingdefense.com/2024/12/bomber-fleet-size-target-probably-needs-to-be-reassessed-air-force-global-strike-chief/>.
- 24 Lt. Col. Ross Hobbs, "Risking America's Long-Range Strike Capability," *Air and Space Forces Magazine*, April 4, 2025, <https://www.airandspaceforces.com/article/risking-americas-long-range-strike-capability/>.
- 25 "Department of Defense Fiscal Year (FY) 2025 Budget Estimates—Aircraft Procurement, Air Force," Department of the Air Force, March 2024, p 1-1, <https://www.saffm.hq.af.mil/Portals/84/documents/FY25/FY25%20Air%20Force%20Aircraft%20Procurement%20Vol%20I.pdf>.
- 26 "Department of Defense Fiscal Year (FY) 2025 Budget Estimates — Research, Development, Test & Evaluation, Air Force," Department of the Air Force, March 2024, p. 2-15, <https://www.saffm.hq.af.mil/LinkClick.aspx?fileticket=jQCmIF-YLMg%3d&portalid=84>.
- 27 According to Biden administration Secretary of the Air Force Frank Kendall, production of the B-21 will remain limited in the near term and that increasing the size of the bomber force will require older aircraft like the B-1 and B-2 to remain in service longer. See John A. Tirpak, "Accelerating B-21 Production Would 'Make Some Sense'—If It's Affordable: Kendall," *Air and Space Forces Magazine*, January 11, 2025, <https://www.airandspaceforces.com/accelerating-b-21-production-affordable-kendall/>.
- 28 Air Force planners indicate that any decision on building more than 100 B-21s will not need to be made until the mid-2030s at the earliest. See Unshin Lee Harpley, "Air Force Programs Boss: No Need to Decide on More than 100 B-21s for at Least a Decade," *Air and Space Forces Magazine*, March 13, 2024, <https://www.airandspaceforces.com/air-force-programs-boss-more-than-100-b-21s/>.
- 29 The Air Force and Northrop Grumman, the builder of the B-21, have indicated that it may be possible to accelerate B-21 production with existing capacity. See Thomas Nedwick, "B-21 Raider Numbers Could Be Boosted With Existing Production Capacity," *The War Zone*, December 6, 2024, <https://www.twz.com/air/b-21-raider-numbers-could-be-boosted-with-existing-production-capacity> and Thomas Nedwick, "Rising B-21 Raider Stealth Bomber Costs Hit Northrop Grumman," *The War Zone*, April 22, 2025, <https://www.twz.com/air/rising-b-21-raider-stealth-bomber-costs-hit-northrop-grumman>.

- 30 At a production rate of 6-7 bombers a year and given projected procurement costs from FY26 to FY29, a single B-21 could cost between \$671 million and \$783 million. However, the cost of the first five B-21 production lots decreased by \$5.1 billion — over a quarter of previous estimates — from 2023 to 2025, and efficiencies of scale combined with additional purchase commitments could reduce the cost of increased production. See Stefano D’Urso, “The B-21’s Price Is Decreasing With Over \$5 Billion Saved for the First Five Lots,” *The Aviationist*, November 12, 2024, <https://theaviationist.com/2024/11/12/the-b-21s-price-is-decreasing/>.
- 31 Frank Kendall, “Did the Trump Administration Move Too Quickly to Commit to the F-47?” *Defense News*, April 9, 2025, <https://www.defensenews.com/opinion/2025/04/09/did-the-trump-administration-move-too-quickly-to-commit-to-the-f-47/>.
- 32 John A. Tirpak, “What a ‘Ferrari’ Version of the F-35 Might Look Like—and What the Pentagon Thinks,” *Air and Space Forces Magazine*, April 24, 2025, <https://www.airandspaceforces.com/ferrari-version-f-35-concept/>.
- 33 DiMascio, “U.S. Air Force Collaborative Combat Aircraft”; “Aircraft Procurement,” p.1-27.
- 34 Wasser and Sheers, p. 5-6, 23-31.
- 35 Wasser and Sheers p. 7-11.
- 36 President Biden’s last defense budget proposed \$29.8 billion for missiles and munitions, for instance. See “National Defense Industrial Strategy Implementation Plan for FY 2025,” Department of Defense, last updated March 18, 2025, p. 65, [https://www.businessdefense.gov/docs/ndis/NDIS%20Implementation%20Plan\\_Revised\\_03182025\\_508.pdf](https://www.businessdefense.gov/docs/ndis/NDIS%20Implementation%20Plan_Revised_03182025_508.pdf).
- 37 “Projected Costs of U.S. Nuclear Forces, 2025 to 2034,” Congressional Budget Office, April 2025, <https://www.cbo.gov/publication/61362>.
- 38 “Columbia Class Submarine: Overcoming Persistent Challenges Requires Yet Undemonstrated Performance and Better-Informed Supplier Investments,” Government Accountability Office, September 2024, p. 12-15, <https://www.gao.gov/assets/gao-24-107732.pdf>.
- 39 Anya L. Fink, “Nuclear-Armed Sea-Launched Cruise Missile (SLCM-N),” Congressional Research Service, February 12, 2025, [https://www.congress.gov/crs\\_external\\_products/IF/PDF/IF12084/IF12084.12.pdf](https://www.congress.gov/crs_external_products/IF/PDF/IF12084/IF12084.12.pdf).
- 40 “Fiscal Year 2025 Budget Estimates,” United States Special Operations Command, March 2024, p. 6, [https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2025/budget\\_justification/pdfs/01\\_Operation\\_and\\_Maintenance/O\\_M\\_VOL\\_1\\_PART\\_1/SOCOM\\_OP-5.pdf](https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2025/budget_justification/pdfs/01_Operation_and_Maintenance/O_M_VOL_1_PART_1/SOCOM_OP-5.pdf).
- 41 Andrew Feickert, “U.S. Special Operations Forces (SOF): Background and Considerations for Congress,” Congressional Research Service, March 4, 2025, p. 10, [https://www.congress.gov/crs\\_external\\_products/RS/PDF/RS21048/RS21048.88.pdf](https://www.congress.gov/crs_external_products/RS/PDF/RS21048/RS21048.88.pdf).
- 42 Joseph Trevithick, “A-10 Warthogs Sent To Boneyard For The First Time In Years,” *The War Zone*, April 13, 2023, <https://www.twz.com/a-10-warthogs-sent-to-boneyard-for-the-first-time-in-years>.
- 43 Stephen Losey, “US Air Force Wants to Retire All A-10s by 2029,” *Defense News*, March 9, 2023, <https://www.defensenews.com/air/2023/03/09/us-air-force-wants-to-retire-all-a-10s-by-2029/>.
- 44 Noah Robertson, “Can the US Navy Save Money by Accepting the LCS as a Sunk Cost?” *Defense News*, October 4, 2023, available at <https://www.defensenews.com/naval/2023/10/04/can-the-us-navy-save-money-by-accepting-the-lcs-as-a-sunk-cost/>.
- 45 Joaquin Sapien, “The Inside Story of How the Navy Spent Billions on the ‘Little Crappy Ship,’” *ProPublica*, September 7, 2023, <https://www.propublica.org/article/how-navy-spent-billions-littoral-combat-ship>.

- 46 "Navy Frigate: Unstable Design Has Stalled Construction and Compromised Delivery Schedules," Government Accountability Office, May 2024, <https://www.gao.gov/assets/gao-24-106546.pdf>.
- 47 Tara Copp, "Trump Selects Concept for \$175 Billion 'Golden Dome' Missile Defense System," *Associated Press*, May 21, 2025, <https://apnews.com/article/golden-dome-missile-defense-trump-space-e74d637feac06edcfe79214d8ac179>
- 48 Valerie Insinna, "Shipbuilding, Golden Dome and Munitions Win Big as GOP Unveils \$105B Bill to Boost Defense," *Breaking Defense*, April 27, 2025, available at <https://breakingdefense.com/2025/04/shipbuilding-golden-dome-and-munitions-win-big-as-gop-unveils-150b-bill-to-boost-defense/>.
- 49 Zachary Cohen and Oren Liebermann, "Trump Wants a 'Golden Dome' Capable of Defending the Entire US: 'Strategically, it Doesn't Make Any Sense,'" *CNN*, March 22, 2025, available at <https://www.cnn.com/2025/03/22/politics/pentagon-golden-dome-scramble/index.html>.
- 50 THAAD stands for Terminal High-Altitude Area Defense. See Andrew Feickert, "The Terminal High Altitude Area Defense (THAAD) System," Congressional Research Service, October 17, 2024, [https://www.congress.gov/crs\\_external\\_products/IF/PDF/IF12645/IF12645.8.pdf](https://www.congress.gov/crs_external_products/IF/PDF/IF12645/IF12645.8.pdf).
- 51 Lolita C. Baldor, "Sending a THAAD Air Defense System to Israel Adds to Strain on US Army Forces," *Associated Press*, October 14, 2024, <https://apnews.com/article/army-israel-thaad-air-defense-strains-e49a65aaaf3a4ff051b54eebb869f241>.
- 52 Jason Sherman, "DOD Launches Domestic Cruise Missile Defense Program to Protect U.S. Cities, 'Critical' Sites," *Inside Defense*, September 5, 2023, <https://insidedefense.com/share/218957>.
- 53 The Army, Navy, Air Force, and Marine Corps identified a combined \$10 billion-plus in "unfunded priorities" in fiscal year 2025. See Adm. Lisa M. Franchetti, "Navy FY 2025 Unfunded Priorities List," Department of the Navy, March 25, 2024, <https://s3.documentcloud.org/documents/24512533/fy25-navy-upl.pdf>; Ashley Roque and Valerie Insinna, "Army, CENTCOM Ask Congress for Spending Jump for Counter-Drone Mission," *Breaking Defense*, March 22, 2024, <https://breakingdefense.com/2024/03/army-centcom-ask-congress-for-spending-jump-for-counter-drone-mission/>; John A. Tirpak, "USAF Wishlist: \$3.5 Billion for Exercises, Construction Projects, Spare Parts," *Air and Space Forces Magazine*, March 26, 2024, <https://www.airandspaceforces.com/air-force-unfunded-priorities-2025/>; Heather Mongilio, "Barracks, Quality of Life Improvements Top Marine Unfunded Wish List," *USNI News*, March 19, 2024, <https://news.usni.org/2024/03/19/barracks-quality-of-life-improvements-top-marine-unfunded-wish-list>.
- 54 Ashley Roque and Aaron Mehta, "Hegseth Orders 'Comprehensive Transformation' of US Army, Merging Offices and Cutting Units," *Breaking Defense*, May 1, 2025, <https://breakingdefense.com/2025/05/hegseth-orders-transformation-of-us-army-combining-offices-and-cutting-roles/>.
- 55 Joseph Trevithick, "Making Sure Wingman Drones Don't Hit Their Crewed Companions Still a Challenge Marines Say," *The War Zone*, May 1, 2025, <https://www.twz.com/air/making-sure-wingman-drones-dont-hit-their-crewed-companions-still-a-challenge-marines-say>.
- 56 Joseph Trevithick and Tyler Rogoway, "Next Big Challenge For AI Dogfighting Is Keeping Track Of Enemies Up Close," *The War Zone*, April 24, 2024, <https://www.twz.com/air/next-big-challenge-for-ai-dogfighting-is-keeping-track-of-enemies-up-close>.
- 57 Secretary Hegseth's enthusiasm for drone swarms and "AI-driven command and control" may have something to do with his relationships with the founders and heads of newer defense companies born out of Silicon Valley's venture capitalist ecosystem — Hegseth's public Venmo account included executives at Peter Thiel's Palantir and Palmer Luckey's Andruil, both of which have or are in competition for major Pentagon contracts. Palantir and Andruil have also partnered with Elon Musk's SpaceX for a joint proposal for Trump's Golden Dome missile defense system. See Liam Archacki, "Hegseth's Venmo is on Display in Embarrassing Leak," *The Daily Beast*, February 5, 2025, <https://www.yahoo.com/news/hegseth-venmo-display-embarrassing-leak-220028117.html>; Daniel Boguslaw and Luke Goldstein, "Pete Hegseth's Venmo: Defense Contractors, UnitedHealth Execs, Fox, and Friends," *The American Prospect*, February 5, 2025, <https://prospect.org/politics/2025-02-05-pete-hegseths-venmo-defense-contractors-unitedhealth/>; Drew FitzGerald, Heather Somerville, and Nancy A. Youssef, "Military-Tech Startups Vie for Billions as Hegseth Shakes Up Pentagon Spending," *Wall Street Journal*, February 28, 2025, <https://www.wsj.com/politics/national-security/defense-spending-contractors-hegseth-startups-3c510191>; Mike Stone and Marisa Taylor, "Exclusive: Musk's SpaceX is Frontrunner to Build Trump's Golden Missile Shield," *Reuters*, April 17, 2025, <https://www.reuters.com/business/aerospace-defense/musks-spacex-is-frontrunner-build-trumps-golden-dome-missile-shield-2025-04-17/>.



- 58 Peter Foster et al., "Demand Slump Fuelled by Trump Tariffs Hits US Ports and Air Freight," *Financial Times*, April 27, 2025, <https://www.ft.com/content/967a0c1a-6ae5-4d72-bd78-b7a8bdabccce>.
- 59 "Gross Domestic Product, 1st Quarter 2025 (Advance Estimate)," Bureau of Economic Analysis, April 30, 2025, <https://www.bea.gov/news/2025/gross-domestic-product-1st-quarter-2025-advance-estimate>.
- 60 On Thiel, see Peter Thiel, "A Time for Truth and Reconciliation," *Financial Times*, January 10, 2025, <https://www.ft.com/content/a46cb128-1f74-4621-ab0b-242a76583105>; Ed Luce, "Peter Thiel's Cant and Retribution," *Financial Times*, January 24, 2025, <https://www.ft.com/content/837ee009-9f06-4f3d-897c-d099e662989d>; Helen Lewis, "MAGA's Demon-Haunted World," *The Atlantic*, January 15, 2025, <https://www.theatlantic.com/ideas/archive/2025/01/peter-thiel-maga-conspiracy/681310/>.
- 61 On Musk, see Eryk Salvaggio, "Anatomy of an AI Coup," *Tech Policy Press*, February 9, 2025, <https://www.techpolicy.press/anatomy-of-an-ai-coup/>; Jill Lepore, "The Failed Ideas That Drive Elon Musk," *New York Times*, April 4, 2025, <https://www.nytimes.com/2025/04/04/opinion/elon-musk-doge-technocracy.html>; Makena Kelly et al., "Inside Elon Musk's 'Digital Coup,'" *Wired*, March 3, 2025, <https://www.wired.com/story/elon-musk-digital-coup-doge-data-ai/>.
- 62 On Silicon Valley politics in general, see Henry Farrell, "Why Did Silicon Valley Turn Right?" *Programmable Mutter*, December 4, 2024, <https://www.programmablemutter.com/p/why-did-silicon-valley-turn-right>; Elizabeth Lopatto, "Welcome to the Era of Gangster Tech Regulation," *The Verge*, January 20, 2025, <https://www.theverge.com/2025/1/20/24346317/trump-gangster-tech-regulation-corruption-grift>; Don Moynihan, "DOGE: Dangerous Oligarchs Grab Everything," *Can We Still Govern?* (Substack), January 19, 2025, <https://donmoynihan.substack.com/p/doge-dangerous-oligarchs-grab-everything>.
- 63 A number of former Palantir employees have taken positions with Musk's DOGE, while others have protested their ex-employer's role in the Trump administration's mass deportation schemes. See Sophie Alexander and Jamie Tarabay, "Peter Thiel's Deep Ties to Trump's Top Ranks," *Bloomberg*, March 7, 2025, <https://www.bloomberg.com/features/2025-peter-thiel-trump-administration-connections/>; Bobby Allyn, "How Palantir, the Secretive Tech Company, is Rising in the Trump Era," *NPR*, May 3, 2025, <https://www.npr.org/2025/05/01/nx-s1-5372776/palantir-tech-contracts-trump>; Bobby Allyn, "Former Palantir Workers Condemn Company's Work with Trump Administration," *NPR*, May 5, 2025, <https://www.npr.org/2025/05/05/nx-s1-5387514/palantir-workers-letter-trump>.
- 64 Emily Glazer and Kristen Grind, "Elon Musk Has Used Illegal Drugs, Worrying Leaders at Tesla and SpaceX," *Wall Street Journal*, January 6, 2024, <https://www.wsj.com/business/elon-musk-illegal-drugs-e826a9e1>.
- 65 Thomas Grove et al., "Elon Musk's Secret Conversations With Vladimir Putin," *Wall Street Journal*, October 25, 2024, <https://www.wsj.com/world/russia/musk-putin-secret-conversations-37e1c187>.
- 66 See Joshua Keating, "Are Elon Musk's China Ties a National Security Risk?" *Vox*, March 21, 2025, <https://www.vox.com/world-politics/404621/elon-musk-china-tesla-trump>; Michelle Toh, "Elon Musk Praises China's 'Economic Prosperity' on 100th anniversary of Chinese Communist Party," *CNN*, July 1, 2021, <https://www.cnn.com/2021/07/01/business/elon-musk-chinese-communist-party-intl-hnk/index.html>; Evelyn Cheng, "Musk Makes Surprise Visit to Beijing as Tesla's China-Made Cars Pass Data Security Rules," *CNBC*, April 28, 2024, <https://www.cnbc.com/2024/04/29/musk-visits-beijing-as-teslas-china-made-cars-pass-security-rules.html>.
- 67 Kirsten Grind, Eric Lipton, and Sheera Frenkel, "Elon Musk and SpaceX Face Federal Reviews After Violations of Security Reporting Rules," *New York Times*, December 17, 2024, <https://www.nytimes.com/2024/12/17/technology/elon-musk-spacex-national-security-reporting.html>.
- 68 Joe Palazzolo, Emily Glazer, and Micah Maidenber, "Why Musk Doesn't Have Access to SpaceX's Biggest Government Secrets," *Wall Street Journal*, December 15, 2024, <https://www.wsj.com/tech/musk-spacex-security-clearance-secrets-b9774346>.
- 69 Elon Musk, for instance, has waged a months-long war against the F-35 and repeated his profession of faith in the power of artificial intelligence-run drone swarms to replace crewed aircraft — a campaign since bolstered by right-wing online provocateur Laura Loomer's claims that F-35 maker Lockheed Martin is somehow "woke." See Jake Epstein, "Trump World's Laura Loomer Takes Aim at a 'Woke' Lockheed Martin and its \$2 Trillion F-35 Program," *Business Insider* (Yahoo News), April 28, 2025, <https://www.yahoo.com/news/trump-worlds-laura-loomer-takes-213943225.html>.



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