Winning the Next War:
Overcoming the U.S. Air Force's Capacity, Capability, and Readiness Crisis

Col John Venable, USAF (Ret.)
with Joshua Baker

MITCHELL INSTITUTE FOR AEROSPACE STUDIES

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Foreword

The nation will ask much of the U.S. Air Force in the coming years. Considering China's aggression in the Pacific, Russia continuing its invasion of Ukraine, Iran destabilizing the Middle East, North Korea continuing its nuclear arms ambitions, adversary proxies lashing out in their respective regions, or the U.S. homeland coming under threat like never before, the world is an incredibly dangerous place. While America has faced elements of these threats before, it has never confronted the entire array of them simultaneously. Air Force airpower will provide essential options at the strategic, operational, and tactical levels.

At this critical time, today's Air Force is stretched thin. Looking at capacity, capability, or readiness indicators show that America's Air Force is badly out of sync with what the security environment demands. Never has the service been so small, so old, or struggled so much to maintain basic levels of readiness. It is time for a reset. That responsibility falls to the Trump administration and Congress.

To help explain the scale and scope of these challenges, Col J.V. Venable, USAF (Ret.) has executed an insightful assessment comparing where the Air Force stands relative to the last time it was asked to confront a peer competitor—the Soviet Union at the end of the Cold War. Yet this paper is not a call to rebuild Ronald Reagan's Air Force. Quite the contrary. Today's security challenges and the realities of the information age require a different array of airpower options. However, there is value in comparing the respective eras, for there are enduring elements of airpower across the generations. War plans still require sufficient inventories of aircraft, spare parts, munitions, and personnel. Modernization remains crucial, especially in an era of rapid technological change. Above all, operator training, well-maintained aircraft, and a balanced operational enterprise make the difference between success or failure in a conflict.

This paper concludes with a set of recommendations that provide sincere, thoughtful solutions for how to arrest the Air Force's decline and work to rebuild it to meet the demands of today's and tomorrow's security environment. Too many people have admired this problem for too long. It's time to get serious about solutions.

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Abstract

The Air Force's commitment to generating a highly lethal force that is technologically superior, numerically sufficient, and flown by the most well-trained airmen in the world is the bedrock of deterring aggression in times of peace and prevailing in war. Projecting joint military power demands a robust level of airpower that only the Air Force can provide. Yet today's United States Air Force is the oldest, smallest, and least ready in its history. Facing the severely challenging global threat environment for the next decade and beyond, these shortfalls set the conditions for an existential national security crisis. Moreover, projected underfunding of the Air Force within the future years defense plan (FYDP) will exacerbate the service's decline. The service's FY 2025 budget request sought to divest 250 aircraft, while only procuring 91. The FY 2026 request seeks to divest 340 aircraft, while only acquiring 76.[1] Anemic funding for operations and maintenance will only advance the downward trajectory of force readiness, taking already historic lows to levels once thought unfathomable.[2] It is essential that the Trump administration and Congress reverse the service's decline in capacity, capability, and readiness.

The solution demands increasing the Air Force budget, while also shifting internal service funds from Research, Development, Test, and Evaluation (RDT&E) into both procurement and operations and maintenance (O&M) accounts specifically aimed at re-establishing readiness to prevail in peer conflict. The Air Force's innovative capabilities are only relevant if procured in operationally significant quantities and flown by an exceptionally well-trained force. If the declines in the U.S. Air Force are excused or ignored, the human and material losses we will suffer in the next major conflict risk being significant. Defeat is a very real possibility. That is a price the nation cannot afford.

Introduction

Across the decades of the Cold War, American airpower underpinned the nation's ability to deter aggression. It was also the key to fighting and winning in times of conflict. Now, U.S. deterrence is wavering in the wake of war in Eastern Europe, conflict with Iran, and aggressive adversary military actions in the South China Sea. Our ability to decisively fight and win is no longer guaranteed. The United States is confronting an exceedingly dangerous world. Not only did the 2024 Commission on the National Defense Strategy declare that these threats are "the most serious and most challenging the nation has encountered since 1945 and include the potential for near-term major war," they also agreed that "the nation was last prepared for such a fight during the Cold War, which ended 35 years ago. It is not prepared today." The American public and government leaders take the preparedness of national security forces for granted; it is important for national security leadership to sound the alarm and take action to rebuild capabilities, capacity, and readiness.

The United States has previously faced individual threats from China, Russia, Iran, and North Korea, but it has rarely, if ever, had to balance so many serious challenges concurrently. The coincidence of these geographically dispersed and uniquely challenging escalation scenarios places enormous strain on the military services—especially the U.S. Air Force. While capacity, capability, and readiness deficiencies exist in the Army, Navy, Marine Corps, and Space Force, shortfalls are particularly acute in the U.S. Air Force,

which is now the smallest, arguably the oldest, and unquestionably the least ready in its history. Service leaders have long recognized this vulnerability and regularly sounded the alarm. Consider then-Secretary of the Air Force Heather Wilson's 2018 warning, when she explained, "The Air Force is too small for what the nation is asking us to do."[3] Seven years later, Chief of Staff of the Air Force (CSAF) Gen David Allvin echoed the same warning: "Our service lacks the required funding and resources, even as the potential for near-term conflict grows. In short, America needs more Air Force, and it needs it now."[4]

Looking back to the end of the Cold War provides benchmark insights regarding what a dominant force might comprise from a capability, capacity, and readiness vantage point.[5] This was the last time that the Air Force fielded a dominant force prepared to deter or defeat a peer competitor. In 1987, the United States had roughly 1,941 combat-coded fighters in 81 fully mission-ready, active-duty squadrons that were either based in theater or prepared to rapidly deploy to thwart a Soviet advance into Western Europe.[6] An additional 1,389 fully mission-capable Air National Guard and Air Force Reserve fighters were prepared and postured to move into theater to support the effort within 60 days. When combined with the United States' European allies, we could generate and fly 11,442 fighter sorties a day.[7]

However, NATO still faced a much larger Soviet force of roughly 4,567 fighters that were capable of flying 15,985 sorties a day. Importantly, the numerically greater Soviet force inventory was composed of platforms that were generally older and less technically advanced than U.S. counterparts. Their pilots likewise received just 120 hours of flying time each year, compared to U.S. and NATO aircrews, who received 200-plus flying hours each year, providing a robust training regimen and improved readiness levels. Better capability and readiness went a long way toward mitigating the disparity in numbers.[8]

Supporting and augmenting its combat forces, the U.S. Air Force possessed additional aircraft inventories in operationally relevant numbers. Its inventory of 325 bombers was scheduled to grow by 100 more platforms, slated to become operational in a few years.[9] The service's intelligence, surveillance, and reconnaissance (ISR) inventory was similarly robust, with 309 aircraft. These fighter, bomber, and ISR aircraft were maintained at high levels to afford excellent aircraft availability rates, which allowed aircrews to fly at rates that well exceeded the minimums required by the Ready Aircrew Program (RAP) to be considered combat mission ready.[10]

Over three decades later, Air Force airpower looks far different. Demand for airpower is surging to meet the increasingly challenging global threat environment, but the size of the force, its capabilities relative to the threat, and overarching readiness levels are a far cry from their comparative Cold War levels. Today's active Air Force has just 750 combat-coded fighters in 31 squadrons. The guard and reserve forces, combined, add 434 fighters in 24 squadrons, for a total force capacity of 1,184 fighters—little more than a third of U.S. Cold War capacity. Proposed divestitures in FY 2026 would exacerbate this shortall even further, with the Air Force asking to retire 260 fighters and only buy 45 new ones.[11] When it comes to bombers, the Air Force has roughly half of its Cold War capacity, with 140 tails on the ramp today, but these aircraft average 46 years in age. These well-worn, heavily used platforms carry significant risk. The service's ISR platforms have absorbed similar risk.

Capacity, Capability, Readiness

Assessing the warfighting capability of an air force is no simple task. However, there are some macro variables that provide key insights. They include:

Capacity: the total number of operationally relevant aircraft.

Capability: the force of technologically advanced weapons systems required to dominate or at least compete with an adversary threat.

Readiness: a combination of the mission readiness levels of aircraft on the flightline and the level of training afforded to U.S. combat crews.

Currently, the Air Force faces debilitating challenges in capacity, capability, and readiness. It was largely forced upon the service by multiple administrations and Congresses reacting to a range of short-term global circumstances and budgetary pressures. With each cycle of governance, the Air Force was asked to do more with less. As CSAF Gen Allvin recently highlighted, "Today, our aircraft fleet is smaller and older than any time in history, and the gap between our high-end combat training and that of our pacing competitors has closed dramatically. As the arc of the threat increases daily, it is my assessment this risk is unacceptable and will continue to rise without substantially increased investment in airpower—one of our remaining sources of competitive advantage."[12] Ravi Chaudhary, former Air Force assistant secretary for energy, installations and environment, put it this way: "The nation's Air Force... needs a bigger budget, and it needs it now.... there exists a budget driven conundrum between readiness and modernization that is driving us to suboptimize both."[13]

The decline in capacity and readiness began at the end of the Cold War, when the service's budgets were cut by as much as 30 percent as national leadership moved aggressively to secure a peace dividend. Downsizing affected all military branches in the 1990s, but the scale and scope of the cuts were most dramatic for the Air Force. Between 1989 and 2001, funding for Air Force procurement (including funding for space missions that would be assumed by the Space Force in 2019) was reduced by 52 percent, while the drop for the Department of the Navy and Army was only 32 and 36 percent, respectively.[14] The Department of Defense cut programs like the B-2 stealth bomber from a planned build of 132 aircraft to just 21 jets. That is why a mere 14 percent of the nation's bomber inventory is now stealthy, even though these platforms are one of the most crucial capabilities in the arsenal.[15] Service leaders also cut the existing air force fighter, bomber, and ISR aircraft inventories. Their intent was to recover the associated operations and maintenance funding meant to sustain those aircraft to reinvest in sustaining the remaining aircraft inventory—a concept called "divest to invest." Not only has the divest to invest approach failed, but it is also a key contributor to the service's current capacity death spiral. From 1987 through 2024, the total air force inventory was reduced from 4,253 fighters, 393 bombers, and 309 ISR platforms to just 2,026 fighters, 140 bombers, and 297 ISR platforms.[16]

The shrinking of the force is not the only issue. Today's aircraft and their crews were flown hard over 30 years of conflicts, including Operation Desert Storm, the follow-on Operations Northern Watch and Southern Watch over Iraq, Operation Deliberate Force over Bosnia, Operation Allied Force over Kosovo, and numerous smaller contingencies. Demand spiked heavily in the wake of the 9/11 attacks with Operation Enduring Freedom in Afghanistan, Operation Iraqi Freedom, Operation Odyssey Dawn over Libya, Operation Inherent Resolve over Syria, Operation Midnight Hammer, and other engagements. Meanwhile, Air Force aircraft modernization was further curtailed and canceled as a means of making room in the wider defense budget

for these conflicts. The truncation of the F-22 production line at 187 aircraft stands as the starkest example—the original requirement was set at 750 aircraft, but the program was cut over time to fund alternate DoD priorities. The procurement rate for the F-35 was also slowed precipitously. The Air Force should have had 800 F-35s by 2020, but it ended up with just 272.[17] The F-22 and F-35 procurement struggles are why only 28 percent of the Air Force's fighter fleet has the necessary 5th-generation characteristics needed to operate in highly contested modern threat environments—these attributes include stealth, advanced sensors, processing power, teaming connectivity, and electronic warfare capabilities.[18]

Existing aircraft were also retired as a means of freeing funds. Thirty-three B-1s were retired in 2003, and over 250 F-15s, F-16s, and A-10s were cut in 2009. The aggressive application of "divest to invest" continues today.[19] Unfortunately, operational demands remained high, so smaller inventories of aircraft and their crews were stretched thinner to meet mission requirements. Procurement surged for new ISR types like the MQ-1 Predator, MQ-9 Reaper, and RQ-4 Global Hawk. These aircraft are some of the newest in the inventory and are in continually high demand, but they have been flown on a non-stop basis, stressing those aircraft and crews. The Air Force, often driven by fiscal pressures, has retired portions of these inventories to pursue other modernization areas despite continued mission requirements.[20]

The bottom line is that the Air Force has sustained a high level of operational demand with fewer aircraft and crews to carry the load for decades, pushing the force ever closer to burnout. Modernization programs to backfill aging aircraft were delayed, truncated, or canceled. Older aircraft with extended service lives break more frequently, costing more to sustain. This reduces their availability and further stresses the force. Compounding these challenges, advanced training was sharply curtailed in recent decades because of the generally permissive threat environments found over Iraq, Afghanistan, and Syria. Realities like the 2011 Budget Control Act and the 2024 Fiscal Responsibility Act, which sharply reduced defense spending, further exacerbated the Air Force's precarious situation at a time it needed modernization across all of its key platforms. All the while, China, Russia, Iran, and North Korea invested in growing their military capacity, capability, and readiness.

Continuing to ask the U.S. Air Force to do more with less, given the state of its existing force, is like asking it to "eat the seed corn" of its future force. While an organization can balance that risk for short windows of time, the multi-decade cycle has pushed the Air Force to the brink of failure. Service leaders must reset the force with new capabilities and more capacity across virtually every mission area and re-establish the readiness of its existing force to meet near-term security requirements. Funding is insufficient to meet these multiple demands, so service leaders must continually play a shell game of balancing modernization against sustainment and readiness. All are at all-time lows, making the shell game of investing in one or another a losing proposition for both the service and combatant commands writ large. No form of military power projection is viable without a dominant Air Force. It is time for a reset.

Leaders in the Department of Defense, the broader executive branch, and Congress need to recognize these challenges and provide the resources necessary for the Air Force to arrest its ongoing capacity, capability, and readiness nosedive.[21] In the words of CSAF Gen Allvin, "The solution is clear: We must be allowed to grow. That requires significant financial investment on behalf of the American people…this is about the security of the nation…China is hellbent on lapping us in the skies. It cannot be allowed to do so.[22]"

This assessment examines the steps the service will need to take to maintain a dominant position over the People's Liberation Army Air Force (PLAAF) and other global threats by comparing its capacity, capability, and readiness levels across two critical periods: the Cold War peak in 1987, when a robust and dominant Air Force successfully deterred the Soviet Union under Reagan-era investment, and 2025, when a depleted Air Force confronts a rising PLAAF amid broader, more complex global threats. While both eras present unique challenges, the 1987 Air Force wielded unmatched airpower capability and readiness levels, enabling it to serve as a cornerstone of America's deterrence and warfighting strength. In contrast, today's Air Force, despite its enduring importance, suffers from decades of underfunding, leaving it ill-equipped to meet the scope and span of the global threat environment and its associated demands. Left unaddressed, these disparities are a modernization, capacity, and readiness crisis that jeopardizes not only the Air Force but all joint military operations. The Trump administration and Congress must take urgent actions to restore the service's strength. Based on this assessment and a mature body of evidence from related studies, the Mitchell Institute offers the following recommendations:

1. The Air Force should fully acknowledge the depth of its capacity, capability, and readiness challenges, identify what forces and investments are required to meet the national defense strategy, and then build a plan to achieve those objectives. Today, the Air Force does not have a force sizing methodology, modernization rates lag, and the service has all but abandoned its own readiness construct based on budget shortfalls. Budget, not the nation's security strategy, shapes today's force. Department of Defense and Trump administration leaders should demand absolute transparency and a frank dialog on the specific gaps, the risks they create, and funding needed to elevate the service back to a level of global threat dominance. Challenges can only be fixed if they are recognized.

2. Congress must authorize an increase in U.S. Air Force top-line funding to rebuild the capacity, capability, and readiness of the entire service to meet the needs of the national defense strategy. After identifying shortfalls and what investments are necessary to buy down risk, the service must be adequately resourced. Additive top-line in the budget is needed if the service is expected to meet even its minimum recapitalization, readiness, and modernization goals. Readiness and acquisition of fieldable systems over the next one to three years should take precedence, followed by mid-term readiness (three to seven years), and then long-term readiness (seven years and beyond). Rebuilding capacity, capability, and readiness must be done concurrently.

3. Air Force leaders should decide on a force structure plan to regrow Air Force aircraft inventories to the levels needed to meet the combatant commands' war plan requirements. OMB, DOD, and congressional budget leaders must stop the capacity death spiral driven by the divest to invest force management strategy.

    a. Foremost, the Air Force should halt the freefall decline of its aircraft inventory and retain all serviceable combat-coded aircraft until new acquisitions are brought into service. Retiring older aircraft simply cannot free up sufficient funds to underwrite procurement of new aircraft at scale.

b. The service should increase F-35 procurement to 72 jets a year, B-21 procurement to a minimum of 21 a year, and the F-15EX acquisition rate to 24 jets a year as rapidly as it can.[23] Continuing the block development of the F-35, B-21, and other advanced new types is important for future warfighting requirements, but the priority should be fielding mission-capable jets in quantity as rapidly as possible. Collaborative Combat Aircraft (CCA) funding must also remain robust to ensure capabilities and capacity are delivered to manifest operationally meaningful results in the near term. The E-7 program must continue despite calls for its cancelation, and MQ-9 inventories must not be allowed to fall below what is required to sustain Combatant Command (COCOM) demands. Regarding the latter, this may require supplementary buys given recent operational attrition. Adequate EA-37B inventories will also prove crucial in an era where electromagnetic spectrum operations are key to victory. It takes roughly three years from funding an airframe to a weapons system's arrival on the flight line, so this process must begin immediately.

4. The Air Force must significantly improve aircrew readiness and aircraft mission capability rates. It will take significantly more funding and at least five years of concerted effort for the Air Force to rebuild a dominant posture that meets the demands of the current and projected security environment. As it rebuilds capacity and capability, readiness must improve concurrently, and it must begin now, given the severity of the challenge.

   a. Congress should fully fund weapons system sustainment (WSS) accounts for the current fiscal year, as well as fund WSS at 100 percent of the flying hour requirement, to include any increase in flying hours. Currently, the lack of spare parts remains a key factor in decreasing flying hours. The Air Force has only funded WSS at 80–87 percent of the flying hour requirement for over five years, which has never allowed the service to fly the hours it funds due to lack of spare parts. It will take several months of increased WSS funding before the system begins to catch up with the high demand for spare parts.[24] Addressing this will, in turn, increase current aircraft availability and aircrew sortie rates, improving readiness to a level needed to deter and defeat peer adversaries.

   b. Congress should increase flying hour funding by 55 percent over the next three years to the point where fighter pilots are averaging more than three sorties a week and 200 hours a year, and bomber aircrews are flying an average of one sortie of 4-plus hours a week. Fighter pilots have received, on average, less than two sorties a week and 140 hours a year since the Budget Control Act of 2011, and bomber aircrews have averaged less than three sorties a month. However, the last period that the Air Force openly supplied readiness details was the first quarter of 2023, when the average fighter pilot averaged 1.2 sorties a week and 9.0 hours of flying time a month—numbers below even what Soviet pilots endured during the Cold War.[25] That leaves the current combat air force in a state of readiness that is well below the "hollow force" days of the Carter administration.[26]

   c. The service should establish flying hour contracts for all training and combat-coded wings to ensure that 100 percent of funded flying hours are executed. These contracts will hold wing commanders accountable for elevating the sortie rates and mission readiness levels for operational units, as well as pilot thruput for training units.

d. F-35 operational wings should increase aircraft mission capability rates to support a minimum of three sorties a week per pilot. This will double the rate at which unit experience levels grow and accelerate the production of formation flight leads and instructor pilots. As the pool of experience grows, they can migrate more rapidly to squadrons transitioning to the F-35, reducing the time it takes to bring those units up to an initial operating capability (IOC) and compressing the time it takes to expand and complete F-35 bed-down.

e. The Department of the Air Force should reestablish independent Operational Readiness Inspection (ORI) teams to conduct evaluations of the combat capability of operational units across the Air Force. These teams should report to an Air Force-level Inspector General, who will report their results to Congress.

5. The service should shift its funding priorities away from the development of future systems in favor of procurement and readiness. Funding for Research, Development, Test and Evaluation (RDT&E) is at a historically high level, in large part because modernization requirements have been deferred for multiple decades. Truncations, cancelations, and reduced buys gradually shifted dollars from procurement back to numerous new RDT&E programs—a trend that consumes valuable resources without fielding new capabilities. Should the Trump administration or Congress be unwilling to increase the service's total obligation authority (TOA) to a level commensurate with today's threats, this shift will be unavoidable.

   a. RDT&E programs that are now in production or nearing production must continue apace. As these programs become operational and their RDT&E efforts draw down, the associated funding should shift to increase their procurement and readiness.

   b. In the event the administration or Congress continue to underfund the Air Force, its leaders should reduce its budget for Research, Development, Test and Evaluation (RDT&E) by $6.6 billion in FY 2026 and $8.7 billion in the fiscal years beyond and shift the funding to increase procurement and operations and maintenance (O&M) accounts to begin increasing near-term readiness.

   c. The Air Force should reprioritize RDT&E funding based on the operational enhancement of the program, likelihood of delivery, and timing of delivery. With the exception of the technology and weaponry being developed for Next Generation Air Dominance (NGAD), programs that cannot be fielded within seven years or have not demonstrated key technology in an operational environment (referred to as technical readiness level seven [TR-7] or above) should be moved to caretaker levels of funding until Congress increases the obligation authority of the Air Force to a level that can support those programs.

Failing to adequately invest in the U.S. Air Force to revitalize its capacity, capability, and readiness opens a window of opportunity for adversary aggression that we may be unable to thwart. The combined threat posed by China, Russia, Iran, North Korea, and a host of other hostile actors is severe. "Peace through strength" is the right approach, but it requires a military that is both inherently—and visibly—dominant. Airpower is a key part of that equation, and the Trump administration and Congress must move immediately to reset and revitalize its core elements. The threat environment will tolerate nothing less.

Historical Perspective: The Air Force in 1987

At the height of the Cold War, the Air Force sustained a robust fleet of combat-coded (CC) fighter, bomber, and reconnaissance aircraft. It possessed the right mix of capabilities, capacity, and readiness levels required to not just deter but also win a fight with the Soviet Union. Existential interests were on the line, and the Air Force was built and sustained accordingly.

Unfortunately, in 2025 this is no longer the case. The Air Force does not have the capacity, capability, and readiness levels necessary to execute the core tenets of the national security strategy. Yet Air Force airpower remains critical to deterring China or fighting and winning, should circumstances warrant. Today's Air Force is too old, small, and insufficiently ready to address all missions. Furthermore, airmen will not be afforded the luxury of concentrating their assets in one theater, given the range of global threats they must respect. The Air Force must be empowered to reset. The risk of losing the next major war is as existential as it was in the Cold War.

Using the Cold War baseline for U.S. fighter, bomber, and reconnaissance aircraft capacity, capability, and readiness highlights the deficiencies of today's Air Force as well as the level of additional resources that are required to restore a credible warfighting force.[27] To work from the full sight picture, it is also important to characterize the capabilities, capacity, and readiness of allied air forces and that of the United States' primary adversary. The Cold War Air Force was dominant over its Soviet counterpart; the current national security environment demands a return to this level of air combat competence to deter or overcome adversary forces, especially those of China.

Fighters

Capacity, Capability, and Readiness. At the height of the Cold War in 1987, the U.S. Air Force (USAF) had the capacity, capability, and readiness to not just deter the Soviet Union from attacking NATO, but to defeat it if its forces attempted an invasion of Western Europe. A key component of this was tied to fighter aviation. These jets focused first and foremost on securing air superiority over the battlespace, a condition required for the successful employment of any joint facet of combat power. They were also responsible for executing strike and interdiction missions to stop, starve, and destroy the Soviet's invading ground force. The active component of the service had 732 F-15s for air superiority and 2,135 multi-role F-16s, A-10s, F-4s, and F-111s for strike and interdiction.

The vast majority of this fleet were brand new 4th-generation jets fitted with the latest engines, avionics, and weapons technologies. The average age of the fighter inventory was 14 years, but aircraft like the F-15, F-16, and A-10 were on average far younger. Collectively, they enjoyed a healthy mission capability (MC) rate of 81 percent, which means eight out of ten operational fighters were ready to fly and capable of being employed in combat at any given time. Importantly, anything over 80 percent is a very healthy MC rate.

Combat coding is an important caveat. Within the total Air Force inventory, there are airframes that are not available for combat use. These aircraft are instead dedicated to testing out innovative technology, and others are used to train pilots for operational units. For a variety of reasons, those jets are not combat capable. Removing those training and test platforms, there were roughly 588 CC F-15s and 1,847 CC general purpose

How Many Aircraft Can Go to War?

Total Aircraft Inventory (TAI): includes every aircraft in the active, Air National Guard, and Air Force Reserve inventories.

Combat-Coded (CC) aircraft: jets assigned to operational squadrons that have the hardware and software required for combat.

Fully Mission Capable (FMC): aircraft with the material condition required to perform all of a unit's designated missions.

Mission Capable (MC): aircraft with the material condition required to perform at least one or more of the unit's designated missions.

Training Aircraft: formal training unit (FTU) aircraft that do not have the hardware and software required for combat.

Test Aircraft: modified aircraft assigned to operational test and evaluation units that are not combat capable.

Primary Assigned Aircraft (PAA): aircraft assigned to meet the unit's aircraft authorization.

Attrition Reserve Aircraft: spare aircraft beyond PAA assigned to a unit in anticipation of peacetime and/or wartime loss or damage.

Backup Aircraft Inventory: aircraft assigned to a unit beyond PAA that permit scheduled and unscheduled maintenance.

strike fighters in the active-duty Air Force. After applying the various mission-capable rates to those aircraft, the active fighter inventory had roughly 482 mission-capable CC air superiority and 1,459 mission-capable CC strike fighters ready for war on any given day in 1987.[28]

These inventory numbers translated to an Air Force that had 81 active-duty combat-coded fighter squadrons that maintained healthy readiness levels. This allowed them to deploy into high-threat environments within days, if not hours, of notification with aircrew and maintenance teams that were prepared to operate upon arrival, even while under attack.[29]

Added to this active-duty inventory, another 1,353 combat-coded fighters in 53 squadrons resided in the Air National Guard (ANG) and Air Force Reserve (AFR).[30] The majority of these were trained and ready to reinforce NATO within 30 days of the order to mobilize.[31] This was an incredibly important component of force structure that added strategic depth, both in additive numbers and backfill, to offset combat attrition. Depth also came from NATO's 45-day supply of air-to-surface munitions and enough air-to-air missiles to handle the anticipated Soviet threat.[32] This fighter fleet delivered capabilities that collectively outmatched their Soviet counterparts.[33]

Posture and Deployability. The U.S. Cold War Air Force had the benefit of a focused threat in the Soviet Union, allowing forces to primarily concentrate the U.S. military's aim toward the Eastern European theater. These forces were well postured to deliver a significant level of viable airpower on the first day of a conflict, even with little or no notice. A critical aspect of readiness is geographic disposition: how much combat power is forward deployed and how quickly the United States can move assets based stateside to reinforce a theater. In 1987, 43 of 81 active fighter squadrons were forward based. Of that, 29 units with 702 fighters were based in Europe, and 14 more with a total of 347 fighters were in South Korea, Japan, and the Philippines.[34] Forward based units could fight from their home stations using every mission-capable fighter within their fleet while awaiting reinforcements.[35]

The remaining 38 active-duty stateside squadrons possessed a total of roughly 892 combat-coded fighters that were trained to rapidly deploy into and then establish operations in a highly contested survive-to-operate environment (STO).[36] Every two years, wings were evaluated on their ability to generate mission-capable

Deployment Takes Practice

Given that the U.S. defense enterprise is fundamentally designed around power projection—deploying abroad to engage—it is crucial for airmen in their respective units to practice for combat deployments. When maintenance and operations are combined, an average fighter squadron includes roughly 500 airmen. Each person requires four large mobility bags that contain everything from underwear to chemical warfare ensembles, but those bags are just the leading edge of the packing and shipping requirement. Mission planning/laptop computers and life-support equipment also need to be packed and shipped. The maintenance package required to support deployed fighter operations physically dwarfs all others. Toolboxes, jacks, spare parts, engines, and other items in wartime readiness kits must all be packaged and positioned on pallets for shipment to their wartime operating locations.

The process of packing up all required bags, tools, equipment, and personnel is mastered through repetition. Taking time to exercise that process completely interrupts normal training regimens, but the planning, scheduling whitespace, and funding required to rehearse that process was built into budgets and operational tempos during the Cold War. This may sound like an arcane, inconsequential process, but it is highly complex and demands practice. Failure to exercise these fundamental procedures degrades readiness.

aircraft, deploy those assets if required, and then execute the wing's mission during Operational Readiness Inspections (ORIs), which tested every aspect of employment—from the units' command and control and logistics to operational employment.[37]

Active-duty combat-coded wings primarily used a three-squadron basing posture. This posture provided a level of redundancy and strategic reserve that maximized the ability to project mission-capable aircraft and fully qualified aircrews into the fight. By using aircraft and aircrews from one squadron to "plus up" the others, fighter wings could immediately deploy two full-strength units into combat.[38] In this way, 25 of 38 U.S.-based squadrons were able to deploy with a total of roughly 600 fighters to support NATO operations. This configuration reflects a reality that, on any given day, every squadron has aircraft that are not flyable due to long-term inspections, deep maintenance, or because they are waiting on spare parts, collectively referred to as "down" jets. Additionally, combat operations come with greater personnel demands to cover extended flying operations, mission planning cells, and supervision requirements, which increase the aircrew manning requirements from a ratio of 1.25 aircrew to aircraft in peacetime to a ratio of 1.5 in wartime.[39] The remaining aircraft and crews that do not deploy can help train replacements that would flow into the combat theater to fill in for attrition and loses.

In addition to the active-duty squadrons, the ANG component had 736 fighters in 31 combat-coded squadrons, and the AFR component had another 258 fighters in nine combat-coded, mission-ready squadrons.[40] It takes roughly two ANG or AFR fighter squadrons to deploy one forward under the same logistical challenges and wartime manning requirements as the active component, but the vast majority of guard and reserve wings have just one fighter squadron.[41] With that in mind, the total reserve component could deploy 496 fighters in 20 combat-coded squadrons to the European theater within 60 days of a deployment order.

Operational Tempo and Training. The level, intensity, and standards for aircrew training throughout the 1980s developed exceptionally proficient operators in highly effective and lethal squadrons. USAF fighter squadrons possessed the maintenance and operational manning required to produce and fly more than enough sorties to fulfill mission-ready aircrew training requirements. The average fighter pilot flew three

Practicing Ops in Combat Conditions

Mission oriented protective postures (MOPPs) require different levels of protective combat gear for toxic and hazardous battlefield environments. MOPP levels correspond to an alert status or the gear required to be worn or carried. For example, at MOPP 1 a protective gas mask is carried, and a chemical warfare ensemble must be immediately available. At MOPP 4, all protective gear must be worn. It is important for the airmen on bases that will come under attack during a conflict to exercise various MOPPs.

to four times a week.[42] In total, the average pilot or aircrew flew more than 200 hours, which translates to approximately 160 sorties a year. This exceeded the minimum numbers required to keep aircrews combat mission ready according to RAP requirements.[43]

Every two years, ORIs tested and evaluated the ability of wings to generate, deploy, and sustain the sortie rates required to support high tempo combat operations. Those scenarios included integrated combat turns–the rapid refueling and rearming of aircraft–under simulated combat conditions and wearing chemical warfare protective suits at mission oriented protective posture (MOPP) level 3.[44] Exercises were woven into the operational tempo of wings to ensure every squadron was prepared for the ORI and, therefore, for combat. The net effect of this constant, high intensity training was that airmen—from the pilots to the support crews—were extremely well prepared for fighting through the dynamic operational pressures of combat. The Combat Air Force (CAF) of the day went beyond meeting training requirements to create a truly combat-ready force prepared to dominate the battlespace.

Distances from Basing to Targets. The volume of combat power a unit can project depends on more than aircraft quantities. Mission duration, based on travel distance and loiter time, is a considerable factor. Shorter distances mean shorter sortie durations, which allow airmen and the aircraft to turn and fly more combat missions each day. Operating from any main or collocated operating base in Western Europe enabled fighters to launch and interdict targets located in and around the most likely avenue of approach that the Soviets would use to invade, known as the Fulda Gap, and return home without the need for tanker support.[45] With such short sortie durations, a single aircrew could fly up to three sorties, and each mission-capable fighter could fly five times per day. Applying known MC rates, the United States alone could commit 2,843 air-to-air, strike, and suppression of enemy air defenses (SEAD) sorties to the air tasking order (ATO) on the first day of the war, even before reinforcing squadrons arrived. Once those reinforcements arrived, the number climbed to roughly 7,172 sorties a day (before attrition).[46] Those are enviable numbers in the face of a potential large-scale peer conflict.

Bombers

Capacity, Capability, and Readiness. Long-range strike is one of the U.S. Air Force's core missions. Bombers strike key enemy targets, often behind enemy lines, in high volume. No other service branch or ally possess these aircraft, which makes USAF bombers unique and crucial capabilities. In 1987, the active Air Force had a total of 263 B-52s and 62 FB-111s, which equated to 23 combat-coded bomber squadrons.[47] The average age of the fleet was 21 years, and it held a collective MC rate of 77 percent, which means there were 208 MC B-52s and 43 FB-111s available to fly combat missions at any given time.[48] Bomber squadrons maintained readiness levels that allowed them to either deploy or employ from their home stations within days of notification, if not hours. By

the end of 1987, the service accepted 68 of 100 B-1s and expected 132 more programmed stealth B-2s.[49] While the B-1s were ready for combat that year, and the Air Force had not accepted an operational B-2, the Reagan administration recognized the need to aggressively grow bomber capacity and worked to modernize the force.

Force Posture and Deployability. This relatively robust bomber force was postured to support many other core Air Force and DOD missions aside from long-range strike, including homeland defense and nuclear deterrence. In 1987, all bombers were CONUS based, and Strategic Air Command (SAC) dedicated 30 percent of the bombers assigned to strategic bombardment wings to support 24-hour nuclear alert. That means that, at that time, SAC policy sequestered 79 B-52s and 19 FB-111s for full-time nuclear alert and left 184 B-52s and 44 FB-111s available for conventional operations.[50] After applying MC rates, there were 145 B-52s and 30 FB-111s available for employment on any given day for long-range strike operations.[51] Mission-capable bomber numbers rose even more once the B-1 entered the operational inventory in the years that followed.

Operational Tempo and Training. Bomber aircrews, like fighter aircrews, were well-prepared for the very real possibility of fight with an imposing Soviet adversary. They averaged at least one sortie of 7 to 8 hours each week, allowing them to maintain exceptional levels of readiness. Squadrons had the maintenance and operational manning levels required to sustain that number of training sorties, which was greater than what was required for pilots to meet the minimum RAP currency requirements and achieve combat mission ready (CMR) status.[52]

Bomber Wings underwent evaluation every other year throughout the 1980s with both scheduled and no-notice ORIs. This tested their capability to rapidly mobilize, often with actual deployments to Guam, and included nonnuclear employment from that island.[53] Service leadership also regularly tasked wings with multi-ship deployments to forward operating locations in the United Kingdom in support of NATO.[54]

Distances from Basing to Targets. As with fighters, maximizing sortie generation maximizes the bombers' combat value, and distance to targets is key in this equation. Bombers staging out of bases in the UK were just 1,400 NM from targets surrounding Moscow—a round trip that B-52s could accomplish without air refueling.[55] That 6-hour round trip enabled the same aircraft to fly at least two sorties every day. With just half of the non-sequestered mission-capable fleet of B-52s and FB-111s flying out of the UK, and the other half flying every other day from their stateside bases, the strategic fleet was capable of more than 219 conventional strike sorties a day in support of NATO.[56] The subsequent arrival of the B-1 and B-2 boosted this even higher.

Air-Breathing Reconnaissance Aircraft

Capacity, Capability, and Readiness. Intelligence, surveillance, and reconnaissance (ISR) is an Air Force mission that empowers the operations of other combat aircraft. ISR aircraft and their crews focused on flying a variety of missions to help build the situational awareness necessary to inform decision making at the strategic, operational, and tactical levels of mission execution for all the services and combatant commands. In 1987, the active Air Force had 54 RF-4s, 22 U-2s, 21 SR-71s, 34 E-3s, and approximately 25 RC-135s for additional strategic reconnaissance.[57] Another 153 combat-coded RF-4s were in the ANG in seven different squadrons.[58]

The average age of the RF-4 fleet was just under 20 years, and it had an MC rate of 74 percent. The average E-3 was eight years old and had an MC rate of 87 percent.[59] While there is little MC data available for the SR-71, U-2, or the RC-135 in 1987, the latter two likely had rates that exceeded their current rates of 62 and 79 percent, respectively.[60] Applying those rates to the inventory, there were 154 RF-4s, 16 U-2s, 18 RC-135s, 30 E-3s, and three SR-71s available for employment on any given day.

RF-4s underwent evaluation through the same ORI scheme as operational fighter squadrons, and while SR-71s, U-2s, and RC-135s were generally not subject to ORIs, those aircraft flew operational reconnaissance missions that were constantly evaluated for aircrew and mission effectiveness—and many are still.

Posture and Deployability. As combat forces in all theaters require reliable ISR, the Air Force in 1987 postured its ISR units to meet geographic demands. Of the three active RF-4 squadrons, two were forward based in Europe and Japan.[61] The 34 E-3s were permanently based in Oklahoma, but there were regular rotational detachments of two to four E-3s based at both Kadena Air Base, Japan and RAF Waddington in the United Kingdom. U-2s, SR-71s, and RC-135s were based in the United States, but each platform would regularly deploy to sites around the world to execute their respective missions through operational tasking, regularly demonstrating required flexibility from an excellent posture. To this end, detachments of SR-71s and U-2s were flying almost continually from the United Kingdom and bases in the Indo-Pacific to ensure forward presence and rapid sortie generation.

The Air National Guard RF-4s were trained and ready to reinforce NATO within 60 days of the order to mobilize. These aircraft afforded depth in terms of added capacity and backfill for attrition or loss. The units experienced the same manning requirements and non-mission capable jet issues that affect active-duty units, but with just one squadron in each ANG wing, they had to rely on other ANG squadrons to fill the gaps.[62]

Ops Tempo and Training. ISR units enjoyed a high level of readiness. RF-4 squadrons possessed the maintenance and operational manning required to produce and fly more than enough sorties to fulfill mission-ready aircrew training requirements for their entire roster of aircrews.[63] ORIs tested and evaluated the ability of wings to generate and sustain the high sorties rates required to support high tempo combat operations.

During exercises and combat operations, RC-135s and E-3s could sustain continuous, 24-hour coverage in up to three orbits, with crews flying every other day.[64] During the combat operations of Operation Desert Storm, U-2s generally flew every other day, and every SR-71 flew roughly once a week due to the extensive repair and recovery work required following each flight.[65]

Distances from Basing to Targets. Many ISR units were based close to their anticipated combat employment zones. SR-71 and U-2 utilization and availability was high thanks to ample basing options near the most probable mission execution regions. Those two reconnaissance assets had a permanent detachment in the UK from 1979 through the end of the Cold War.[66] The U-2 had the range and standoff reconnaissance systems needed to readily perform its mission against the Soviet Union and recover at NATO or other U.S.-friendly airfields, as did the SR-71 with air refueling assets.[67]

RF-4s operating from Zweibrücken Air Base, Germany, or other collocated operating bases in Western Europe could launch and execute reconnaissance missions on targets in Eastern Europe and return to base without tanker support.[68] This capability allowed the same aircrew to fly up to three sorties and every RF-4 to fly five times per day with the available mission-capable fleet, equating to 78 task-able tactical reconnaissance sorties for the ATO with just U.S. assets based in Europe. Once U.S.-based active and guard RF-4s and strategic reconnaissance platforms arrived in theater, the U.S. reconnaissance portion of the ATO would surge to 820 sorties a day.[69]

Allies & Partners

Capacity, Capability, and Readiness. Allied capacity afforded the U.S Air Force another important advantage for which the Soviets had no counterpart. In 1987, NATO had 14 members, including the United States. None of the 13 other nations possessed bombers, but collectively, they had a total of 1,220 operational 4th-generation fighters, 154 dedicated tactical reconnaissance jets, and 18 E-3s.[70]

Posture and Deployability. NATO fighter and reconnaissance wings were trained to fight effectively in a survive-to-operate, chemical and biological environment.[71] Every two years, these wings were evaluated on their ability to generate mission-capable aircraft and then execute the wings' missions during NATO Tactical Evaluations (TACEVALs).

Operational Tempo and Training. NATO aircrews held an exceptional level of readiness that included regular large force package employment with live adversaries—training that was realistic, dynamic, and relied minimally on simulations.[72] The NATO standard for fighter training was a minimum of 200 flying hours or 160 sorties a year, equating to more than three sorties a week.[73]

Distance from Basing to Targets. Most NATO partner nation fighters were based within an unrefueled combat radius for interdiction and close air support targets in and around the Fulda Gap. While mission-capable rates for those aircraft are not available, a realistic 70 percent MC rate would mean 854 fighter and 120 reconnaissance jets were available to fly at any given time.[74] Assuming every MC tactical aircraft flew five sorties a day and every E-3 flew twice, they would add 4,270 air-to-air and interdiction sorties and 564 reconnaissance sorties to the ATO.

The Soviet Threat

Capacity, Capability, and Readiness. The formidable forces of the Soviet Union posed a very serious military threat to the United States and its NATO allies. Airpower was a key element of their operational equation. In 1987, the Soviet Union possessed an estimated 6,525 air superiority and interdiction aircraft, including 3rd- and 4th-generation fighters in its inventory. It also had 590 bombers and 580 reconnaissance platforms.[75] Assuming 70 percent of those were combat coded platforms, and the MC rate was 70 percent across the fleet, the Soviets had 3,197 fighters, 289 bombers, and 284 reconnaissance platforms that were combat coded and mission capable at any given moment.

	1987 Cold War U.S./Allies			1987 Cold War Soviet		
In-Theater Force	Fighters	Bombers	Recce	Fighters	Bombers	Reece
Theater Based	702	0	21	4,567	413	406
Allies	1,220	0	172			
Total combat coded	1,922	0	193	4,567	413	406
MC aircraft	1,423	0	136	3,197	289	284
Total sorties/day	7,113	0	643	15,985	578	1,421
+ U.S. Deployable Reserves						
Deployable U.S. CC fleet	1,096	228	179			
MC rate	0.79	0.77	0.74			
MC aircraft	866	175	132			
Total MC ATO jets 1	2,288	175	268			
Total ATO sorties/day	11,442	219	1,123	15,985	578	1,421

Figure 1: Cold War Air Force Inventories: USAF and Allies vs Soviet Union.

Source: Mitchell Institute.

Posture and Deployability. Soviet forces enjoyed a huge sortie generation advantage over U.S. forces due to their internal lines of communication (LOC), which greatly aided their military movements, logistical sustainment, command and control, and integrated air defenses. Conversely, U.S. forces faced the challenge of long external LOCs in its deployment of combat-ready forces to the European theater.

Operational Tempo and Training. Soviet fighter pilot effectiveness was not commensurate to that of their Western counterparts due to a lack of flight training and an outmoded command and control paradigm. The average Soviet fighter pilot reportedly received 120 hours of flight time, equating to one to two sorties a week—markedly less than U.S. pilots.[76] Additionally, whereas the U.S. and NATO approach to training empowered pilots to operate with a much higher degree of mission autonomy, Soviet training sorties were heavily scripted and tightly controlled by Ground Control Intercept (GCI) radar controllers. The former hones pilots' tactical judgement and yields better mission outcomes.

Distance from Basing to Targets. Launching from Soviet bases and operating within their own airspace maximized the availability of Soviet fighters and reconnaissance platforms. And, with internal LOCs, they could mask the massing of deployed forces within 75 miles of the border. With such short distances and sortie durations, Soviet interdiction and air-to-air pilots could fly five or more sorties a day, equating to upward of 16,000 sorties. Bombers could easily fly two sorties a day, equating to 578 sorties.

The Air Force Today

"We are a service that is too small for what's being asked of us."

-24th Secretary of the Air Force Heather Wilson[177]

The Air Force inventory of combat aircraft has significantly declined in terms of relative capability, capacity, and readiness from the 1987 Cold War force. It is arguably the oldest, but it is unquestionably the smallest and least prepared in its history—a troubling reality given the scale and scope of the current threat environment. This shift did not occur overnight. The end of the Cold War came with expectations of a "peace dividend," as the federal government reasoned that, without the Soviet threat, it could significantly reduce funding for the military and downsize force structure in the name of efficiency. Air Force procurement funding fell by 52 percent, whereas the Navy cuts registered at 32 percent and the Army at 36 percent. As the nation focused on the global war on terror (GWOT), these budget cuts continued to fall disproportionately on the Air Force.[77] In the twenty years post 9/11, between 2002 and 2021, the Army and Navy received about $1.3 trillion dollars and $914 billion dollars more, respectively, than the Air Force (after removing pass-through funding from its budget for other agencies).[78]

Amidst these fiscal pressures, Air Force modernization programs were cut, capacity was reduced, and readiness was eroded significantly. One of the most visible modernization decrements came with the 2008 decision to curtail F-22 production at 187 airframes, a figure well short of the original requirement for 750 of the 5th-generation jets.[79] Budget pressures drove Air Force leaders to pursue a concept known as "divest to invest." The premise was that retiring older aircraft could free up operations and maintenance funding in the Air Force Budget to invest in sustaining the remaining inventory and procuring new aircraft. However, the retirements never delivered enough money to sufficiently resource the acquisition of new jets, which resulted in the current capacity death spiral. Consider that in 2003, at the beginning of Operation Enduring Freedom, the Air Force retired 33 B-1s with the intent to reinvest that funding in the remaining force. However, the retirement essentially transferred the B-1's high combat sortie demands onto a smaller fleet in the years that followed, causing significant wear and tear that severely degraded the B-1 inventory.[80] In a similar example, budget pressures in 2009 forced the Air Force to retire 250 fighters to free up funds for investment elsewhere. However, demand for airpower capabilities during the GWOT did not go down. In fact, they went up and exacerbated the degradation of the remaining force. Fewer aircraft were available to cover the relentless demand for airpower over the last several decades, which accelerated the aging of every platform in the inventory.[81] Training opportunities also decreased, which steadily contributed to the erosion of readiness.

The passage of the Budget Control Act of 2011 imposed significant artificial limits on defense budgets from 2012 through 2017. Air Force resourcing subsequently fell to a level that was grossly insufficient to sustain effective combat airpower. As resources contracted and the relentless demand for air assets in the Middle East endured, Air Force force structure wore down, and the Air Force began to "consume itself," attempting to do too much with too little. It could not modernize its capabilities, sustain sufficient capacity, and maintain readiness for its aging inventory without requisite levels of funding. In the words of former Air Combat

Commander General Mark Kelly, "We literally ate the muscle tissue of the Air Force in the form of reduced fighter capacity, reduced readiness, putting hard miles on older aircraft, driving more extensive sustainment efforts."[82] The same could be said for other mission areas, especially bombers. Funding for flying hours and spare parts fell significantly, which forced squadrons not deploying for the GWOT to reduce training flights to the point where pilots and entire squadrons were no longer mission capable. [83]

By 2016, the funding shortfall left the Air Force with 55 total force fighter squadrons and very low readiness levels. Just four of the Air Force's 32 active-duty squadrons had the resources and flying hours necessary to be considered combat mission ready for conflict with a near-peer competitor.[84] The severity of the modernization, capacity, and readiness shortfalls became readily apparent when the United States returned its focus to peer competition. The 2018 National Defense Strategy (NDS) recognized the growing threats of a rising China and resurgent Russia. It directed the services to prepare for a large-scale, high-intensity conventional conflict with a peer adversary for the first time since the end of the Cold War.[85]

Looking to boost modernization and capacity to meet this new security focus, Congress directed the U.S. Air Force to conduct several independent studies on the force required to execute the 2018 NDS. At the time, 53 airlift squadrons, nine bomber squadrons, 55 fighter squadrons, 40 command, control, intelligence, surveillance and reconnaissance (C2ISR) squadrons, 25 RPA reconnaissance/strike squadrons, and 40 tanker squadrons comprised the active, guard, and reserve forces. The study the service released, titled "The Air Force We Need," found the service needed one more airlift, five additional bomber, seven additional fighter, 22 additional C2ISR, 2 more RPA reconnaissance/strike, and 14 additional tanker squadrons to fulfill the requirements dictated by the new NDS.[86]

Recognizing the poor state of service readiness during this same period, the Secretary of Defense directed the Air Force and the Navy to increase fighter aircraft mission capable rates to 80 percent by the end of 2019.[87] Air Force senior leaders were vocal in their call for a larger budget to meet these objectives.[88] In response to these calls, and based on overarching efforts to grow defense spending, the Air Force received a 31 percent budget increase between 2017 and 2020.[89] However, because modernization demands were deferred for multiple decades, the Air Force faced a crippling bow wave of recapitalization expenses. Research and development (R&D) accounts received most of the budget increases because they were carrying several major concurrent modernization imperatives—everything from F-35 modernization and the F-47 effort to the B-21 and Sentinel programs.

SORTS Score	Resource/Training Level Score	Mission Capability	Air Force Active Duty Units Meeting Capability Threshold
C1	90-100%	Can excecute all wartime missions	4 (of 36)
C2	70-89%	Can excecute most wartime missions	Less than 18 of 36
C3	55-69%	Can excecute portions of wartime missions	Up to 32 of 36
C4	0-54%	Needs more resources before it can execute its mission	Up to 32 of 36

SORTS-Status of Resources and Training System

Figure 2: Readiness of today's active-duty U.S. Air Force.

Source: Mitchell Institute.

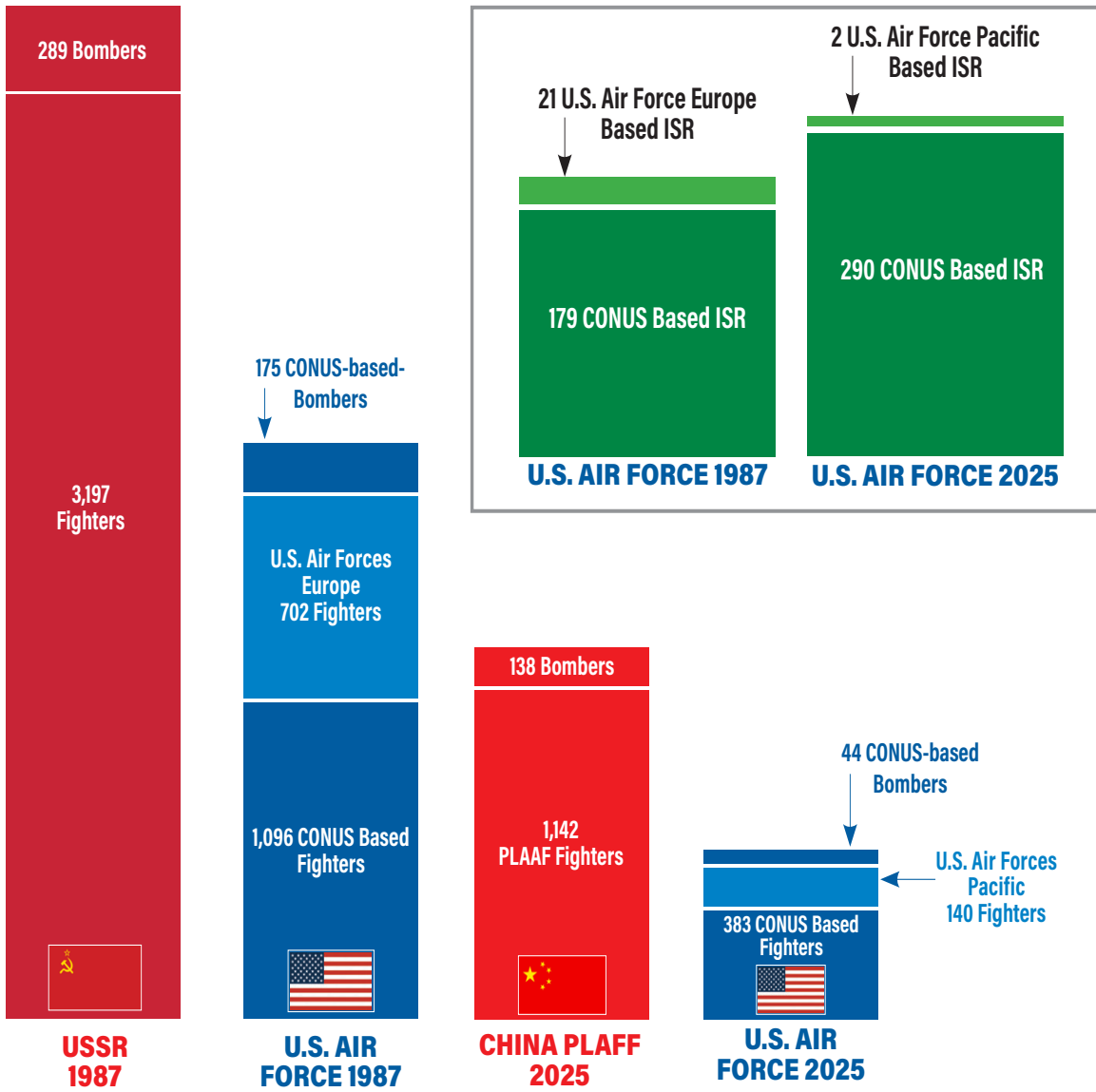

Figure 3: Combat Power: U.S. VS. Rivals, 1987 and Today. This chart depicts how U.S. air combat capacity measured up against the Soviet Union in 1987 compared with how current U.S. air combat forces measure up against China today. Fighter totals are reduced to show only mission capable fighters that are deployable based on posture.

Source: Mitchell Institute.

New development aircraft like the KC-46, E-7, T-7, MH-139, EA-37B, and CCA induced new major fiscal pressures, as did broader initiatives like Joint All-Domain Command and Control (JADC2), the Advanced Battle Management System (ABMS), and next-generation munitions. Costs tied to the stand up and growth of the Space Force also stressed the Department of the Air Force's budget during this period.

Once again, the Air Force was stretched too thin trying to attain and maintain modern capabilities, capacity, and readiness. Modernization was slow, aircraft inventories remained small, and readiness continued to decline to new lows. While procurement grew from $22.4 billion in FY 2017 to $25.6 billion in FY 2022,

that level did not keep up with inflation.[90] Flying hours and sortie rates improved marginally, but readiness for the F-16, F-22, and F-35 never reached the 80 percent mission capable rate target set by Secretary of Defense James Mattis in 2019. As a matter of fact, the average for the three fighters in question never rose above 70 percent, and the MC rate never rose above 80 percent for any Air Force fighter.[91] Defense budget caps passed in the summer of 2024 continue to exacerbate the Air Force's fiscal challenges today. Factoring inflation into the most recent defense budget, defense buying power dropped precipitously since the prior year, and modernization and readiness accounts bore the brunt of this effective cut.[92]

Reflecting upon these realities in one of his final interviews as Secretary of the Air Force, Frank Kendall issued a stark warning: "If we don't act and fund the Space Force and the Air Force, it's only a matter of time until China achieves superiority."[93] The reality is that circumstances in 2025 and beyond present a greater challenge to the Air Force than what they faced in the midst of the Cold War. Not only is the service old, small, and not ready, but the operating environment of the Indo-Pacific presents much larger challenges than those faced in the past. During the Cold War, U.S. and allied aircraft could operate from a plethora of European bases close to their zones of employment. The short distances allowed fighters to handle most of the combat sorties required to take on the Warsaw Pact and reduced refueling requirements. Conversely, the vast distances in the Indo-Pacific will significantly reduce the number of sorties U.S. combat aircraft can fly on any given day, placing a premium on aerial refueling and further diluting the effects of a small force—one much smaller than the Air Force of the Cold War. On top of this, the U.S. Air Force faces concurrent demands for its airpower assets in Europe and the Middle East as well as for homeland defense and other missions. The imperative for modern capabilities, sufficient capacity, and ample readiness is more important than ever.

Today's Fighter Force

Capacity, Capability, and Readiness. The Air Force is at a breaking point. Aggressive downsizing halved the size of the post-Cold War force, and the remaining elements sustained high combat use, received inadequate modernization, and continue to experience challenges tied to operating aging aircraft well beyond their design lives. Things are in a precarious state. Today's Air Force has just 1,386 fighters, 750 of which are combat-coded, although the national security environment demands a far larger force.[94] Only 28 percent of Air Force fighters and 14 percent of its bombers are stealthy, meaning most of its combat aircraft are not survivable against China's or Russia's most advanced threats.[95] C2ISR aircraft like the E-3 AWACS and Reconnaissance/Strike RPAs like the MQ-9 Reaper are high-demand, low-density assets. The average fighter is now 26 years old, and, given a lack of funding for spare parts, it should come as no surprise that the average MC rate is just 59 percent for the entire fighter inventory. Applying fighter-specific MC rates to the active inventory means there are just 56 combat-coded air superiority F-22s, and 354 combat-coded F-15E, F-16, and F-35 strike fighters capable of employment at any given time.[96] The years of "doing more with less" must end. A capabilities, capacity, and readiness reset is required now.

The Air Force has 31 active combat-coded fighter squadrons, none of which sustain the training requirements, sortie rates, or crew qualifications required to be able to execute all or even most of their wartime missions.[97] They also face logistical challenges associated with deployment. The Air National

Collaborative Combat Aircraft: A Crucial Complementary Combat Capability

The Air Force's Collaborative Combat Aircraft (CCA) program brings new capability to the warfighter by addressing capacity, readiness, and modernization deficiencies. CCA open the door to new manned-unmanned teaming concepts of operation—expanding the risk tolerance envelope in ways not possible with strictly crewed airframes. A competitive price point substantially lower than 5th- or 6th-generation combat aircraft should allow for high volume procurement. Added to this, as new aircraft, CCA should experience higher availability rates than what is currently experienced for older types. The necessary AI software development and sustainment certainly drives a cost, but it can be downloaded to CCA at scale with uniform levels of assured performance. Operating with common autonomy software for its mission execution, CCA can be scaled with highly reliable standards of performance. Maintaining CCA software the same across the fleet eliminates the variability of human performance across experience levels, fatigue, or currency tied to traditionally manned aircraft. While they cannot replace the functions of crewed aircraft, the program advances automation and AI to ensure continued air dominance through new and novel ways.

Guard and Air Force Reserve (collectively referred to as the Air Reserve Component or ARC) have a combined total of 640 fighter aircraft. Removing training and test platforms, the ARC has a total of 434 fighters in operational units. After removing the A-10 and applying respective MC rates to the fleet, there are just 66 F-15C and F-22 air superiority fighters and 155 F-16 and F-35 strike fighters that would be viable for employment against China on any given day.[98]

The munitions stockpile is another concern for the current force. The USAF has a total of 10,843 Advanced Medium Range Air-to-Air Missiles (AMRAAM).[99] Its air-to-surface and anti-ship inventories of 2,034 Joint Air-to-Surface Standoff Missiles (JASSM), 2,935 Joint Air-to-Surface Standoff Missiles-Extended Range (JASSM-ER), and 56 Long-Range Anti-Ship Missiles (LRASM) are also low in relative terms.[100] Unclassified public wargames suggest that, in a conflict with China, the United States would exhaust its munitions inventories in as few as three to four weeks, with some important munitions (e.g., anti-ship missiles) lasting only a few days. Once expended, replacing these munitions would take years.[101]

Posture and Deployability. The Air Force has 31 active and 24 ANG and AFR squadrons for a total of 55—seven short of the requirement spelled out in the "Air Force We Need."[102] The FY 2026 budget request, if approved by Congress, would see this fighter inventory significantly contract—with 260 legacy fighters retired and just 45 new ones procured. Of the 31 current active fighter squadrons, 13 are forward based: seven in Europe with 197 fighters and six more in South Korea and Japan with 168 fighters.[103] The Air Force has already started withdrawing the A-10 squadron at Osan Air Base, Korea, which will bring the total in South Korea and Japan to five squadrons and 140 jets.[104] Forward units can fight from their home stations using every mission-capable fighter within their fleet while awaiting reinforcements, which equates to 95 forward-based MC fighters in the Indo-Pacific.

The remaining 18 stateside squadrons (including those in Alaska and Hawaii) possess approximately 503 combat-coded fighters. The A-10 would not be viable in a fight with China—the Air Force called to retire the remaining A-10 inventory in its FY 2026 budget request. Removing those assets leaves 17 squadrons and 487 viable air-to-air, strike, or SEAD assets.[105]

Figure 4: Indo-Pacific Basing and Force Posture.

Source: *U.S. Defense Infrastructure in the Indo-Pacific: Background and Issues for Congress*, Congressional Research Service (CRS) Report No. R47589 (Washington, DC: CRS, 2023), p.13.

In 2018, then-Chief of Staff of the Air Force, General David Goldfein, said the Air Force could prevail in a fight with China, but it would take global sourcing, leaving the rest of the world uncovered. The viability of that option likely disappeared with Russia's invasion and ongoing war with Ukraine, which will anchor seven fighter squadrons in Europe for the foreseeable future. Pressure in the Middle East, largely driven by Iran, cannot be ignored. The June 2025 Operation Midnight Hammer against Iran's nuclear facilities, for example, was an essential undertaking. The homeland defense mission is also increasingly important in the face of capable adversaries and growing demonstrations of their hostile intent. Capacity realities need to account for this concurrent demand.

On top of these limitations, fighter wings are no longer able to surge forward as they once were in the Cold War. They do not regularly train or exercise, nor are they evaluated by independent inspection teams on their ability to rapidly deploy, establish operations, and fight effectively in a STO environment.[106] Active fighter wings are now generally structured with two fighter squadrons and manned at roughly 100 percent, which means a 24-jet squadron has the required 30-pilot peacetime manning level.[107] Wartime operations require higher manning levels, and the requirement for a 24-jet squadron increases to 36 pilots—six more than those squadrons have on their rosters to cover increased sortie rates and supervision requirements for longer duty days. When coupled with down jets, a two-squadron wing of 54 jets could, at best, deploy 36 fighters.[108] That two-squadron wing basing posture means that a maximum of roughly 12 of 20 active-duty coded fighter squadrons could deploy with 288 fighters from the United States to the Indo-Pacific to support a conflict with China.[109]

Mobilization Reps and Sets are Key

Taking time to practice the process of packing up all required bags, tools, equipment and personnel for deployment completely interrupts normal training regimens. Moreover, the planning, scheduling whitespace, and funding required to rehearse ready mobilization are not built into annual operational tempos or budgets today. As a result, deployment processes are not regularly practiced at scale, nor are wings regularly evaluated by independent, external teams. The lack of practice negatively impacts both deployment timing and the capabilities of the force once they arrive in theater.[178]

The ANG is tasked with the air defense mission, which would sequester ten guard squadrons in a time of hostilities. This means they would remain in the United States to defend North American airspace, leaving the ARC with just six deployable squadrons. ARC operational wings have just one fighter squadron. It would take roughly two guard or reserve component fighter squadrons to deploy one forward, assuming the same aircraft challenges and manning requirements as the active units.[110] The combined logistical and manpower deployment limitations mean that just four ARC fighter squadrons and a total of 95 combat-coded fighters could deploy to support combat operations in the Indo-Pacific.

With 140 fighters in five squadrons forward based in the Indo-Pacific and 383 deploying fighters in 16 total U.S.-based active, guard, and reserve squadrons, the USAF has a total of 523 CC fighters that are manned, equipped, and partially prepared to fight China in a potential conflict.[111] Once in theater, the fleet's 59 percent average MC rate means that just 309 MC jets could be tasked to fly on the ATO the first day of employment.[112]

Operational Tempo and Training. For more than 12 years, the Air Force has not been funded to achieve the flying hours or sortie rates needed to sustain mission-ready aircrew training requirements. Over the last seven years, fighter pilots have averaged two or less sorties a week, which is below the minimum sortie requirement for any pilot or squadron to be considered combat mission ready.[113] Pilots are flying at basic mission capable (BMC) rates, but they no longer have the habit patterns and sound judgement that come with healthy levels of reps and sets. It is very likely those pilots, and therefore all fighter squadrons in the Air Force, are qualified to carry out only portions of their wartime missions, at best. This status falls below what is required for high-threat employment against a peer adversary.[114]

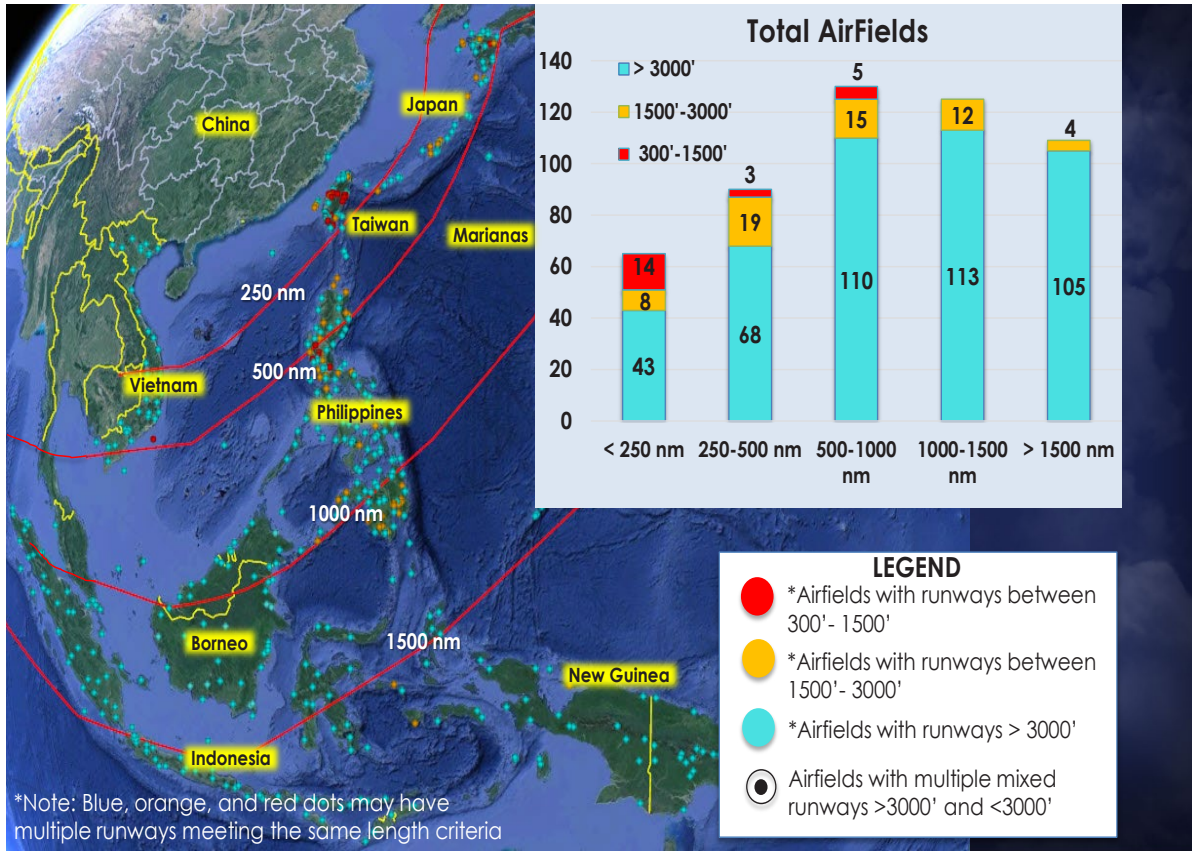

Figure 5: Bases of Operation in INDOPACOM.

Source: courtesy of General Atomics Aeronautical Systems Inc.

Unit level Operational Readiness Exercises, once a regular part of annual training to prepare for semiannual Operational Readiness Inspections, are no longer part of regular training and evaluation regimen, nor are STO scenarios integrated into training plans. Without the experience of reps and sets under simulated combat conditions or mission oriented protective postures, airmen are no longer prepared to continue operations on an airfield that is under attack.[115] During a peer conflict, U.S. operating locations will almost certainly face regular attacks, and airmen must regain those skills. Just last year, CSAF Gen Allvin told a Senate subcommittee that the Air Force is "committed to building forward basing resilient enough to enable continued sortie generation, even while under attack."[116]

During the Cold War, the Air Force and its sister services invested in superior training to offset the Soviet Union's broad numerical advantage in every domain, but particularly in the air. U.S. aircrews were flying three to five times a week, far exceeding the minimum number of sorties required to be considered combat ready. Today, U.S. Air Force crews are flying less than two times a week, which means readiness is no longer able to offset the enemy's superior numbers. Readiness cannot be easily or quickly regained. This is a situation akin to competing in the National Football League—if a team only practices once a week, while the others are on the field every day, they will likely be in for a relentless series of losses. The stakes are much higher in combat, and it will take years of intense, highly focused work to be ready to prevail against peer competitors.

Distances from Basing to Targets. The distances and basing challenges associated with a fight with China are markedly more challenging than the ones the United States faced with the Soviet Union. The plethora of allied bases in Europe, coupled with the relatively short distances to Soviet targets, allowed fighters to handle most of the combat sorties required to take on the Warsaw Pact. The basing options for a fight with China are severely limited by comparison. The closest base to mainland China that current Air Force senior leaders consider somewhat survivable is Andersen Air Force Base in Guam, which is 1,700 NM away from Taiwan.[117] The 8-hour-plus round trip from Andersen and other second island chain locations to Taiwan would limit USAF fighters to just two sorties a day per MC jet. Assuming the squadrons normally based in Japan and South Korea are repositioned to Guam, the number of ATO missions they could fly would be limited to just 165 total sorties a day.[118] Once reinforcements arrive at those locations, the number of U.S. Air Force sorties would go up to 617 a day before factoring in attrition.[119]

Distance Dilutes the Force

These challenges, which dilute the effect of bomber force structure, are not new. During the Vietnam War, USAF B-52s were based at Andersen AFB in Guam and U-Tapao airfield in Thailand. A round-trip B-52 flight between Guam and Vietnam spanned nearly 6,000 miles and lasted 12 to 14 hours. Conversely, B-52s based at U-Tapao flew one-third the distance. This meant that Thailand-based B-52s could easily fly more missions over time, thereby increasing their combat impact.[179]

Because of today's small numbers of Air Force fighters, they would, by necessity, need to operate from airfields within the first island chain to generate the number of needed sorties. However, operating so close to China, they would come under frequent attack from Chinese missiles. Loses in such a conflict are inevitable, but with the right training and investment in air and missile defense, the advantages could outweigh that risk.[120] Combat Air Patrol (CAP), SEAD, or interdiction missions launched from the first island chain would have much shorter durations, allowing each jet to fly up to five sorties, totaling 1,543 U.S. Air Force sorties a day—a rate two and a half times what could be flown from the second island chain.[121] It comes down to pure math—shorter combat hops, coupled with the integrated combat turns delivered by exceptionally well trained maintainers is the force multiplier we need to level that playing field.[122]

Today's Bomber Force

Capacity, Capability, and Readiness. Because of their phenomenal range and payload offerings, bombers are incredibly valuable assets. The B-2 and the B-21 stealth bombers can penetrate enemy air defenses and hold virtually any target at risk around the globe—and they are only found in the U.S. Air Force. Airmen demonstrated their capabilities to great effect with the Operation Midnight Hammer raid, in which B-2s struck Iranian targets with the GBU-57, a bomb so large that only the B-2 can currently carry it. The combination of range, survivability, and payload was paramount to mission success. No other service branch or ally possesses long-range bombers. That places a premium on the active Air Force's total of 58 B-52s, 44 B-1s, and 19 B-2s.[123]

Yet, the average age of the bomber inventory is 48 years. U.S. bombers have a collective MC rate of 52 percent, which means that, on any given day, just 21 B-1s, 11 B-2s, and 31 B-52s are available for mission

execution from a deployed location or from their home fields.[124] Years of low funding for flying hour program and WSS accounts have reduced both bomber availability and sortie rates to the point where aircrews can neither achieve nor maintain combat mission ready status.[125] Currently, it is very unlikely that a single bomber squadron is capable of executing all or even most of the mission requirements within their respective designed operational capability (DOC) statements.[126] Employing forces that are not trained for a high-end fight would undoubtedly suffer higher attrition rates, not just in combat but also, as we have already witnessed, during more benign phases of flight like taking off and landing.[127]

The Air Force Reserve maintains a fleet of 18 B-52s within a formal training unit—a squadron that is not combat-coded. Roughly four of the crews within that unit maintain "combat proficiency," which could help augment deploying bomber forces in a time of war.[128]

Force Posture and Deployability. Global Strike Command maintains and has demonstrated the capability to deploy small packages of strategic strike aircraft across the globe within days of notification.[129] These bomber task force missions provide theater familiarization for aircrews and aircraft integration opportunities with allies and partners across the globe.[130] That said, the Air Force has not conducted a squadron level mobilization and deployment of bomber assets in several decades. What the airmen of the 509th Bomb Wing executed as part of Operation Midnight Hammer was a great display of airpower, but the Israelis had achieved air supremacy over Iran in the weeks leading up to the B-2 attack. That would not be the case if they were tasked to strike targets in mainland China, and those crews deserve regular, intense training and exercises to ensure they are ready for such a peer fight.

All U.S. bombers are based in the continental United States (CONUS), and there are currently no aircraft committed to supporting 24-hour nuclear alert. That would change rapidly in a time of war with China, so the elevated defense condition (DEFCON) levels associated with a peer fight should be factored into training and posture once more.[131] 40 B-52s are nuclear capable, as are all 19 B-2s, but none of the B-1s have nuclear capability.[132] In a conflict with China, it would be reasonable to assume the National Security Council would revert back to the former Strategic Air Command's policy of placing roughly 30 percent of the nuclear-capable bomber aircraft on alert, equating to 18 B-52s and six B-2s being sequestered for/moved into a 24-hour nuclear alert posture.[133] That would leave just 41 B-52s, 44 B-1s, and 14 B-2s for other missions. Applying the respective MC rates would mean there would only be 22 B-52s, 21 B-1s, and 8 B-2s available for conventional tasking.

Operational Tempo and Training. Bomber squadrons no longer have the maintenance, operational manning, or spare parts required to produce and fly enough sorties to fulfill combat mission ready aircrew training requirements.[134] Pilots are receiving just enough sorties to be judged as having BMC levels of competency, but, as recent accident reports prove, many crews no longer have the habit patterns and sound judgement associated with healthy levels of reps and sets in the air.[135]

Distances from Basing to Targets. The distances and basing challenges for bombers executing combat sorties against China are far more challenging than those NATO faced in its struggle with the Soviet Union. Basing options for a fight in the Indo-Pacific are considerably more limited. When coupled with reduced fighter capacity, fewer options for basing severely restrict the total number of combat sorties

Operation Midnight Hammer: Strategic Success, but a Cautionary Operational Case Study

Operation Midnight Hammer, the U.S. airstrike against Iranian nuclear facilities on June 21, 2025, epitomizes the capabilities, capacity, and readiness challenges facing the Air Force. The mission was of strategic importance, and only the U.S. Air Force—out of any air arm in the world—possessed the enterprise to execute the tasking. Long-range, stealth B-2s were essential due to their survivability, high payload capacity, and endurance. While the strike was successful, Israel had achieved air supremacy over Iran before the strike, allowing the package to go in virtually unmolested. That said, a significant number of U.S. Air Force 5th- and 4th-generation fighters helped ensure the strike package went untouched. A major aerial refueling effort was required to support these aircraft, and air battle managers provided essential real-time coordination. The Air Force's inventory in these key mission areas is so small and lacks enduring readiness such that it would have been hard to repeat the raid. Note that one of the decoy B-2s had to abort in Hawaii due to mechanical difficulties. The B-2s in question average over 30 years in age, the F-22s average over 20, and the tankers average over 40. Each of these inventories is in high demand but can only provide a low-density force that faces significant readiness issues. Major conflicts are won or lost based on the ability to project sustained high-volume, high intensity strikes over a long period of time. The nation needs a more modern, larger, and more ready Air Force.

available for tasking. The closest, somewhat survivable bases to mainland China that can support bombers are in the Mariana Island chain. Bomber sorties to engage targets in and beyond the Taiwan Strait out of these locations would fly approximately 1,700 NM one way, which equates to an 8-hour round trip. The rearmament and refueling process for bombers returning post mission would take several hours, which would limit each MC aircraft to flying a maximum of two sorties in a 24-hour period.

Once hostilities begin, in-theater bomber bases would be inundated by China's deep magazine of long-range, precision missiles, which may force a decision to employ bombers from U.S. bases in Alaska, Hawaii, or even their home bases in the contiguous United States.

The distance from Alaska to the Taiwan Strait is more than 4,000 NM, and a round trip would take more than 16 hours, which would limit those aircraft to flying one sortie a day and crews to one sortie every two days.[136] The distance from Hawaii to the Taiwan Strait is more than 5,000 NM, equating to a 21-hour round trip, which would limit bombers to flying two sorties every three days.[137] A B-2 flying out of Whiteman AFB in the United States would fly more than 6,700 miles to hit targets near Beijing. That 28-hour round trip would limit mission-capable bombers to flying no more than one sortie every three days.

Distance matters, and the closer the United States can station combat aircraft to the fight, the better. If the entire MC fleet of 51 non-sequestered, MC bombers deployed to the Marianas, with the associated flight times, those jets could execute a total of 102 sorties on the first day's ATO.[138] With the Chinese surface-to-surface missile threat, putting all 51 bombers in the Marianas would come at an elevated level of risk to the fleet. Assuming a more moderate level of risk, 25 bombers based in Alaska and 26 in the Marianas would enable roughly 77 bomber sorties for the first day of a wartime ATO, numbers which are sorely inadequate for the need.[139] Executing a viable operational plan against China while still holding a nuclear alert posture would require a fleet of more than 210 mission-capable bombers. The total demand would require a fleet of more than 300 bombers.[140]

Today's Air-Breathing Intelligence, Reconnaissance & Surveillance Aircraft

Capacity, Capability, and Readiness. Today, the Air Force has a total of 84 known long-range airbreathing reconnaissance aircraft that include 22 RC-135, 16 E-3G, nine RQ-4 Global Hawks, 27 U-2s, and approximately ten RQ-170 Sentinels. The active force has 184 MQ-9 Reapers for armed, tactical ISR, and another 24 are in the Air National Guard, for a total of 292 combat-coded ISR aircraft in the Air Force inventory.[141] Different ISR aircraft have uniquely useful attributes, but the MQ-9's long dwell time is especially advantageous in a vast theater like the Indo-Pacific.

The average age of U.S. manned, long-range ISR aircraft is 50 years, making them much harder to maintain than their uninhabited counterparts that are, on average, six years old. The MC rates for the RC-135, E-3G, RQ-4, U-2, and the MQ-9 are 79 percent, 56 percent, 65 percent, 62 percent, and 86 percent, respectively. Little detail is available for the RQ-170, but this assessment assumes it has at least a 50 MC rate. Applying the MC rates to the inventory and subtracting out training platforms, there are 17 RC-135s, nine E-3Gs, six RQ-4s, 17 U-2s, 179 MQ-9s, and five RQ-170s for a total of 233 MC ISR platforms available for employment on any given day.[142]

Parent wings and squadrons have not been subject to Operational Readiness Inspections, but each weapon system is constantly evaluated for mission effectiveness during ongoing operational reconnaissance missions around the world.

Posture and Deployability. Five of the six ISR aircraft types are completely based in the United States. Two of the E-3s are forward based at Kadena Air Base in Japan, enabling immediate employment in a time of crisis in the Indo-Pacific. The other five weapons systems regularly deploy to forward locations in the United Kingdom, Japan, Alaska, Diego Garcia, Greece, and Qatar, as well as throughout the African continent.

RC-135s, E-3s, U-2s, and RQ-4s are-self deploying assets and move on their own power to deployed sites or target areas of interest. MQ-9s (and likely the RQ-170s) must be moved to regions of interest aboard transport aircraft. Once in theater, the uninhabited aircraft are launched and recovered by qualified technicians, but they can be flown and controlled via satcom links from anywhere in the world, making for a very small deployed logistical footprint.[143]

Ops Tempo and Training. The operational tempo for the ISR fleet was high throughout the Global War on Terror and remains so today. Age, a low MC rate, and the divestment of half the fleet has limited E-3 aircrew training to the point aircrews just meet flying "currency" requirements rather than combat mission readiness requirements.[144] By all appearances, the other five ISR aircraft types possess the maintenance and operational manning required to produce and fly enough sorties to fulfill day-to-day mission requirements, as well as the training requirements for aircrews/operators as dictated by the RAP.

Distances from Basing to Targets. The same risks and challenges associated with forward deployed bombers apply to the RC-135, the E-3, the U-2 and the RQ-4. Sorties out of the Marianas would fly some

TOTAL NUMBER OF ACTIVE DUTY AIRCRAFT IN SERVICE OVER TIME (As of Sept. 30, 2024)													
Active	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Bomber	144	141	141	140	140	139	139	140	140	123	123	123	124
Fighter/Attack	1,289	1,287	1,273	1,252	1,257	1,280	1,309	1,338	1,352	1,476	1,456	1,452	1,430
Aerial Targets*	**	**	**	60	25	17	23	32	39	43	66	73	N/A
Special Ops Forces	117	122	124	144	132	138	135	144	154	139	143	139	142
ISR/BM/C3	413	394	444	437	434	441	432	428	422	471	439	338	311
Tanker	246	243	244	239	236	234	215	238	289	264	235	241	230
Transport	425	413	410	381	384	363	356	361	366	366	358	357	357
Helicopter	170	138	137	157	160	131	154	159	159	155	158	158	139
Trainer	1,182	1,118	1,171	1,157	1,170	1,177	1,157	1,156	1,155	1,153	1,180	1,077	1,026
Gliders	31	47	24	30	24	34	24	24	24	23	N/A	25	N/A
Total Active Duty	4,017	3,927	3,968	3,997	3,962	3,954	3,944	4,015	4,100	4,213	4,158	4,008	3,759
* QF-16 Aerial Targets replaced QF-4 Phantoms from FY15. **Previous years' QF-4 data not available.													
ANG	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Bomber	0	0	0	0	0	0	0	0	0	0	0	0	0
Fighter/Attack	635	630	585	611	577	575	575	577	594	593	583	536	503
Special Ops Forces	4	4	4	4	4	4	1	0	0	0	0	2	2
ISR/BM/C3	87	86	88	91	89	93	78	59	59	35	55	29	29
Tanker	189	187	185	184	181	181	185	181	164	188	188	187	194
Transport	232	223	207	207	212	210	208	208	319	191	191	191	194
Helicopter	17	17	17	17	17	17	17	23	23	18	18	18	31
Total ANG	1,164	1,147	1,086	1,114	1,080	1.080	1,064	1,048	1,159	1,025	1,035	963	953
AFRC	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Bomber	18	18	18	18	18	18	18	18	18	18	18	18	18
Fighter/Attack	101	95	104	111	111	109	109	109	109	109	109	105	94
Special Ops Forces	5	4	0	0	0	0	0	00	0	0	0	0	0
ISR/BM/C3	11	11	10	10	10	10	10	10	10	10	10	0	0
Tanker	72	71	68	68	72	72	72	74	73	75	75	80	80
Transport	148	147	145	139	101	91	96	98	140	98	98	96	89
Helicopter	15	15	15	15	15	15	15	15	16	16	16	16	10
Total AFRC	370	361	360	361	327	315	320	324	366	326	326	315	291
TOTAL FORCE	5,551	5,435	5,414	5,472	5,369	5,349	5,328	5,387	5,625	5,564	5,519	5,286	5,003

Figure 6: USAF Aircraft, 2012–2024.

Mitchell Institute.

1,500 NM to get to an effective monitoring distance for intel collection on targets along the Chinese coastline. As in Desert Storm, the RC-135s and E-3s are capable of sustaining continuous, 24-hour coverage in at least one orbit, with each crew flying every other day.[145] Similarly, RQ-4s and U-2s have the range and standoff reconnaissance systems capability to readily perform their missions from second island chain basing, with each aircraft flying at least every other day. While that would equate to just 27 long-range reconnaissance sorties for the first wartime ATO, the loitering capability of these aircraft deliver an enormous effect.[146]

The same is true for MQ-9 Reapers. Their sizable range, loiter capability, and minimum peacetime runway requirement of just 5,000 feet make Reapers exceptionally flexible in an Indo-Pacific scenario.[147] Operating from airfields in the Philippines and within the first island chain would enable roughly nine MQ-9 orbits. These aircraft, when fitted with appropriate sensors, can monitor every available approach to Taiwan and several other critical areas of interest with just 27 aircraft. The remaining deployable MQ-9s could bed down at several of the roughly 60 airfields that meet the 5,000-foot requirement within the first island chain.[148] That bed down, coupled with the 181 sorties a day the fleet could produce, would add a great deal of capability for the air component commander and make the Chinese targeting problem that much more complex. The MQ-9's ability to serve as a sensor-shooter also affords distinct value in the region compared to other traditional airborne ISR assets that lack organic kinetic capabilities. Not only do these assets shorten the kill chain timeline, but they can also reduce mission demand on bombers and fighters. Accounting for the complexity of RQ-170 operations, every MC RQ-170 will likely be able to fly one sortie every other day.

Once the full complement of ISR assets deploy into theater, the U.S. ISR portion of the first wartime ATO would surge to 211 sorties per day. Depending on employment scenarios and adversary responses, attrition for most ISR types will likely be high, given their limited defensive capability and a lack of stealth for all types except the RQ-170. Inventories need to account for this, with attrition and loss factors programmed into inventory assumptions. This may necessitate the growth of certain inventories, like MQ-9.

Allies & Partners Today

U.S. leaders perennially reinforce the importance of allies and partners. The United States does not plan on fighting alone and, in fact, cannot, given the diminished state of the Air Force and deficiencies in the other services brought on by years of effective defense budget cuts. The allied and partner contribution is key, but it is important to be realistic about the scale and scope of their contribution. Whether countries participate and how they engage obviously depends on each nation's sovereign decisions. Moreover, their capabilities and capacity do not scale to the levels U.S. war plans may require. The decline in the size of the U.S. Air Force will not be wholly offset by allied and partner aircraft inventories, but the allied aircraft complement is now more important than ever before.

Australia, Taiwan, Japan, South Korea, and India are the nations that are most closely aligned to the United States, and they have the most potential for partnership should a war with China erupt. The commitment

any of those nations might offer would depend on the incidents or scenarios leading up to the conflict. Likewise, the number of aircraft they contribute will depend on other national policies and restrictions, such as the need to defend their homeland and the depth of their weapons stockpile. Ideally, each will join the fight and present the following combat forces.

Capacity, Capability, and Readiness. Australia, Japan, South Korea, Taiwan, and India have a combined total of 1,221 combat-coded fighters in their respective aircraft inventories, but those nations will likely hold back a significant portion of their fighters for homeland defense.[149] Assuming those allies retain fifty percent of their fighters for that role, the remainder could be tasked against Chinese targets within the ATO. Removing the hold-back aircraft, as well as those that lack the range, compatibility, or weapons systems to make them suitable for a fight with China, leaves a combined total of 114 F-35s, F-18Gs, F-15Ks, and F-16s.[150] While there is little to no public mission capability data available for these aircraft, this assessment assumes a MC rate of 70 percent and that 80 MC fighters would be available for an allied campaign against China.

Perhaps the biggest limitation with the United States' Indo-Pacific allies (as well as those in NATO) is their lack of munitions. With the depth and breadth of China's integrated air defense system (IADS), 4th-generation air-to-surface, anti-ship, and air-to-air engagements will only be survivable using long-range munitions that give those fighters a standoff capability.[151] Those high-end weapons are expensive and primarily acquired through the U.S. government foreign military sales (FMS) program. The conflict in Ukraine demonstrates clearly that the FMS program does not move fast, even when subject to the pressures of combat, nor can the industrial base easily surge production. The limited access to key materials, the inefficiencies and red tape beleaguering the supply chain, and other logistical and legal issues with the U.S. defense industrial base make the sale of even a relatively simple weapon like an artillery round overly complex.[152] Assuming fighter pilots expend every long-range missile they carry on every sortie they fly, the number of weapons that Australia, Japan, and South Korea currently possess would likely be completely exhausted after the execution of the first day's ATO.[153] Keeping them in the fight beyond would depend on the limited U.S. stockpile and the ability to get those weapons into theater in time to keep them in the fight.

There is little documentation available that describes the day-to-day training regimens and posture of these five allies. Taiwanese readiness levels are heightened due to near-daily air defense identification zone (ADIZ) incursions by the PLAAF. Similarly, the Republic of Korea Air Force also maintains heightened readiness due to the military antics and ballistic missile launches of North Korea. Given the proximity of these allies to the threat, with the exception of Australia, they would very likely execute missions in support of an allied ATO from their home airfields. Australia has exercised deployed operations with portions of its F-35 fighter force on several occasions, but there is little evidence that the other allies have practiced similar operations.[154]

Operational Tempo and Training. While there is little publicly available data to support the claim, all five allies likely provide more sorties and training opportunities for their pilots than the U.S Air Force. South Korea, Japan, and Australia have fielded their F-35s. Every nation flying that jet uses a common FTU based in the United States, and the level of intensity and quality of their training is likely rising to meet, if not already on par with, that of the United States.

Distance from Basing to Targets. The proximity of bases in India, South Korea, Japan, and Taiwan to mainland China would allow their fighters to engage target sets without air refueling.[155] Australia is the outlier. At roughly 4,000 NM from China, Australian fighters would suffer a 17-hour round trip, which will prevent Australian fighters from striking targets in China unless they deploy forward. Assuming Australian fighters move to the first island chain, and that all five allies fly their apportioned fighters for five missions each day, they would add 399 missions to the first day's wartime ATO.[156]

The Chinese Threat

> **"We are out of time to match China."**
>
> *-26th Secretary of the Air Force Frank Kendall[180]*

Capacity, Capability, and Readiness. China has an estimated 2,225 fighters in its inventory, of which 1,311 are 4th-generation and 320 are 5th-generation aircraft.[157] With a production rate reportedly increasing to 120 J-20s a year, the PLAAF's acquisition of 5th-generation jets almost triples that of the USAF.[158] There is little data available regarding readiness, but assuming 70 percent of their fleet is combat-coded and has the same 70 percent MC rate that was assumed for the allies is reasonable. That equates to the PLAAF having roughly 799 MC fighters available to employ at any given time.

China's fleet of 197 combat-coded H-6 bombers is also sizable. 12 of those aircraft are nuclear capable and would likely be sequestered for nuclear alert, leaving 185 combat-coded bombers. Assuming a 70 percent MC rate means the PLAAF could task 130 of those aircraft with conventional missions. With land attack and anti-ship cruise missiles, these aircraft would pose a serious threat to U.S. and allied forces.

Posture and Deployability. China's internal lines of communication offer huge advantages for military movements, logistical sustainment, command and control, and integrated air defenses compared to the extraordinarily long and external LOCs the United States and its allies would rely upon in a major conflict.

Operational Tempo and Training. Chinese pilots now allegedly fly more sorties than their U.S. counterparts, with the average PLAAF fighter pilot reportedly receiving more than 200 hours or 160 sorties a year, equating to three to four sorties a week.[159] Importantly, like the Soviets during the Cold War, those sorties have a history of being highly scripted. While the PLAAF are gradually moving toward implementing full-up, free-play air combat, it has not yet reached the point where pilots are free to maneuver at will.[160]

Distance from Basing to Targets. Launching from Chinese basing with internal LOCs gives the PLAAF a leg up on sortie execution and the turn time associated with heading back to a base to rearm and refuel. The distance from bases inside of China to targets anywhere in Taiwan can be as little as 150 NM, allowing for short mission durations and up to five sorties for each fighter and bomber, which equates to roughly 3,997 fighter and 648 bomber sorties a day.

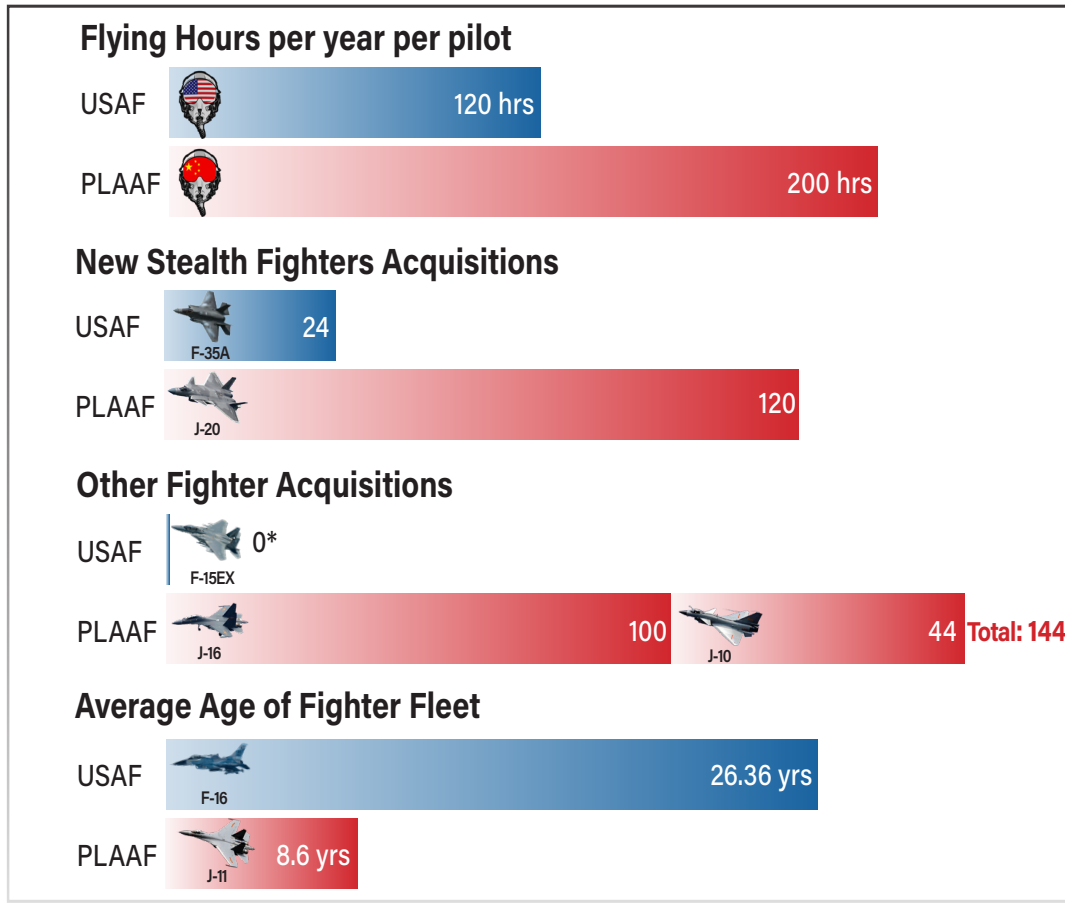

Figure 7: Who's More Ready? USAF vs. China's PLAAF: looking at four key factors.

Source: Mitchell Institute.

	U.S./Allies 2nd Island Chain			PLAAF			U.S./Allies 1st Island Chain		
In-Theater Force	Fighters	Bombers	Recce	Fighters	Bombers	Reece	Fighters	Bombers	Recce
Theater based	140	0	2	1,142	197	*	140	0	2
Allies	114	0	0	0	0	*	114	0	0
Total combat coded	254	0	2	1,142	197	*	254	0	2
MC aircraft	162	0	1	799	130	*	162	0	1
Total sorties/day	564	0	2	3,997	648	*	812	0	2
+ U.S. Deployable Reserves									
Deployable U.S. CC fleet	383	98	290	0	0	0	383	98	290
MC rate	0.59	0.52	0.80	0	0	0	0.59	.52	0.80
MC aircraft	226	51	233	0	0	0	226	51	233
Total MC ATO jets 1	388	51	237	799	130	*	388	51	236
Total ATO sorties/day	1,016	33	211	3,997	648	*	1,942	77	211

* There are no specific PLAAF ISR airframe numbers available from reputable unclassified sources. Estimates range from 36 to well over 1,000 total ISR platforms in the PLA/PLAAF inventory. Calculating a PLAAF ISR sortie generation estimate would prove extremely hypothetical.

Figure 8: Today's Air Forces: USAF and Allies vs. China's PLAAF by the Numbers.

Source: Mitchell Institute.

Allied Capacity Shortfalls

The disparity between U.S. and allied capacity, capability, and readiness and that of the PLAAF is stark. If coalition forces succeed in thwarting a Chinese military move in the region, they will nonetheless surely suffer significant attrition through the effort—and victory may rely more on the PLAAF's ineptitude in employing its forces than an allied capability to defeat it. A side-by-side analysis of the force capacity levels from the Cold War and the most optimistic force representation of the United States and its allies in the Indo-Pacific today offers a startling picture of the shortfalls U.S. forces will existentially experience in a fight with China. Perhaps the foremost shortcoming is the woefully inadequate military presence in the region.

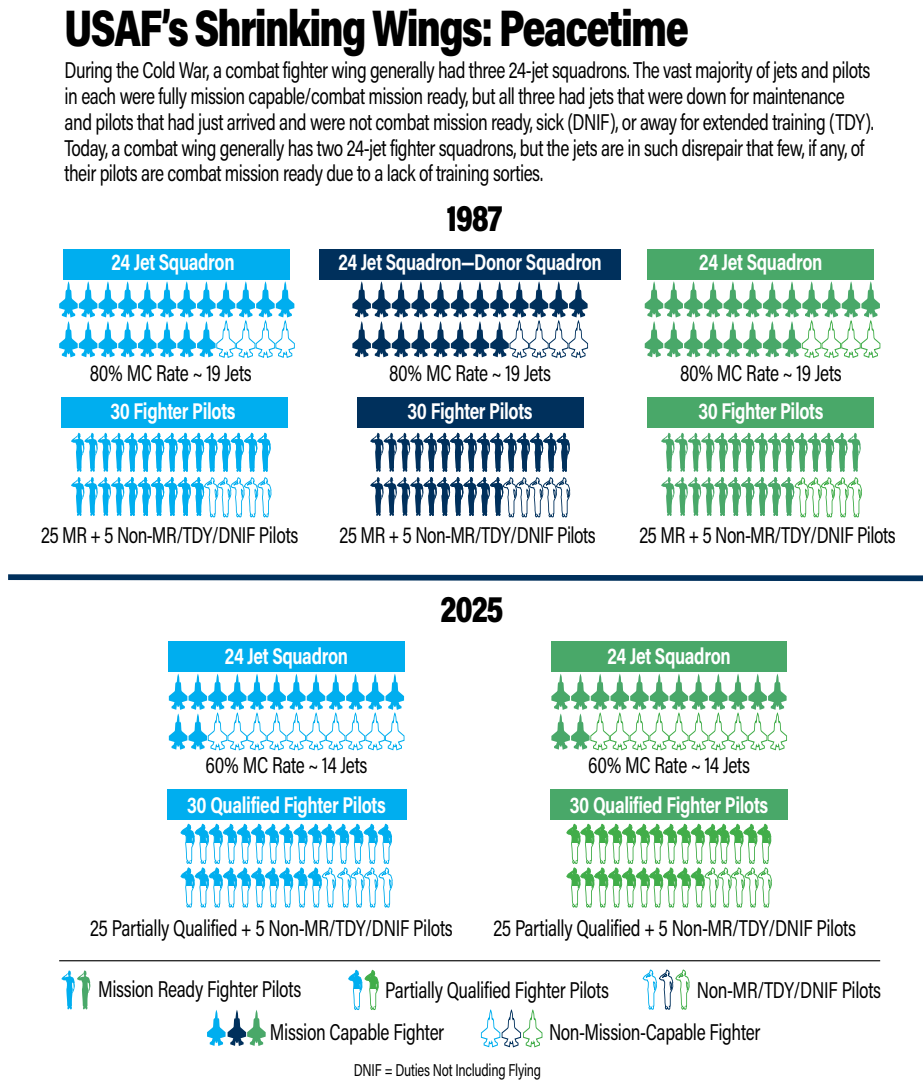

Figure 9a: USAF's Shrinking Wings: Peacetime

Source: Mitchell Institute.

As a reminder, the Cold War force capacity of 1987 was not only more robust than today's, but it was also concentrated in a much smaller geographic area, creating a more lethal force density. Assuming there were no indicators or warnings of a Soviet invasion into Western Europe at the time, the United States and its allies still had roughly 1,922 combat-coded fighters in 80 fully mission-ready squadrons that could generate more than 7,100 sorties a day to thwart an advance. An additional 1,096 fully mission-capable U.S. active and reserve component fighters could rapidly move into theater to support the effort over the next two months, creating the potential for over 11,442 sorties a day. NATO would have faced a larger force of over 4,567 CC fighters, but Soviet platforms were poorly maintained and flown by pilots who received just 120 flying hours annually throughout their careers. The robust training regimens and 200-plus flying hours that U.S. and NATO aircrews received every year helped mitigate the disparity in numbers.

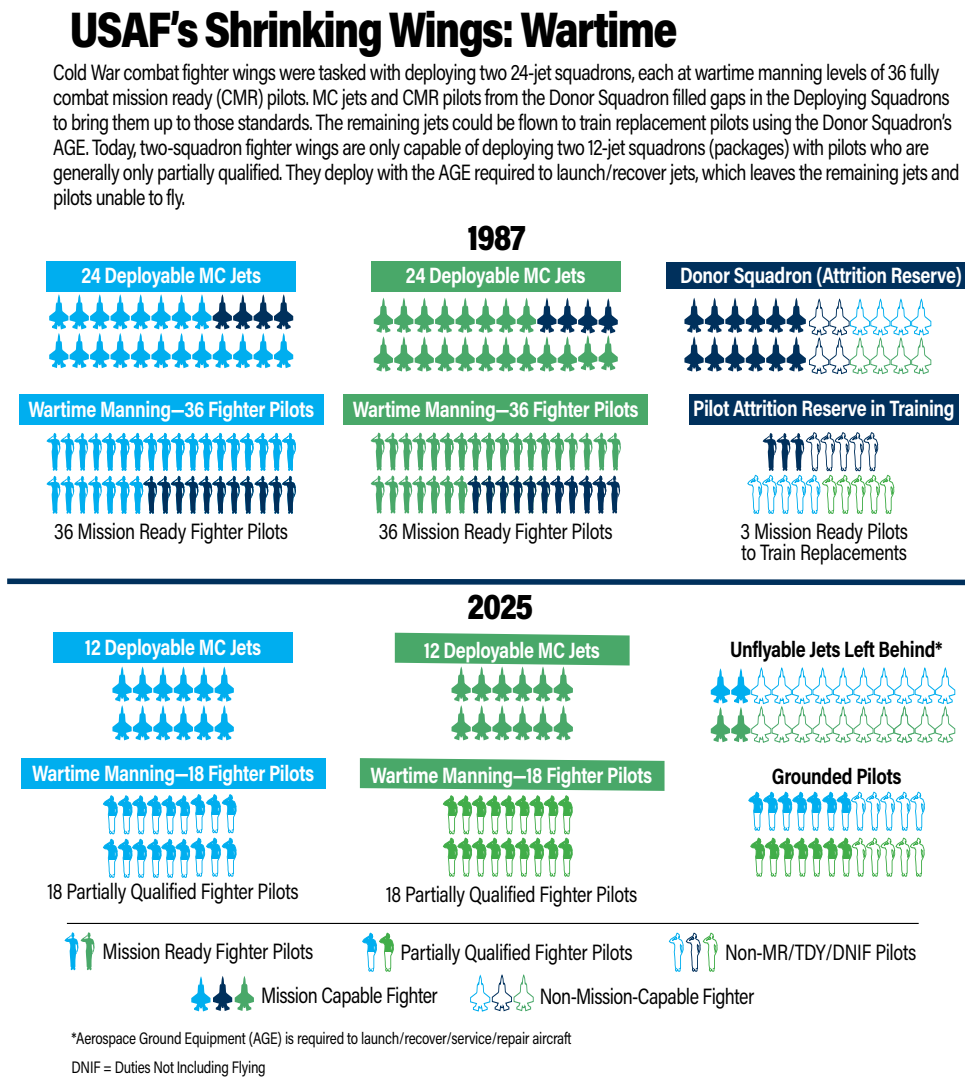

Figure 9b: USAF's Shrinking Wings: Wartime

Source: Mitchell Institute.

Today, not only do the Chinese have more available fighter and bomber aircraft than the United States and its allies, but the flying hour disparity of the Cold War has flipped. USAF aircrews now fly at a rate comparable to what the Soviets flew in the 1980s. The six U.S. squadrons that are bedded down in the Indo-Pacific would be able to muster less than 200 sorties a day from the second island chain.[161] Even with a maximum effort from U.S. allies in the region, the combined allied force could generate less than 600 sorties a day—just 12 percent of the number of fighter and bomber sorties the Chinese could execute.

Any measure of allied success would depend on the arrival of reinforcements rapidly deploying from the United States, but the ability of those forces to flood into the battlespace in a relevant timeframe is questionable. The lack of practice required to prepare units to pack up entire wings and move with very little or no notice means that units could very well falter on such an effort, miss the necessary phased-deployment timing, or depart without the critical wartime readiness supplies required for employment.

The Chinese have studied the U.S. mass mobilizations for Desert Storm and the operations that followed throughout the first decade of the 21st century, and they will do everything they can to disrupt that already fragile mobilization network. Once in theater, units will have to operate while under the constant threat of attack with insufficient STO training.[162] Experiences in Ukraine have demonstrated the challenges involved with sustaining extended combat engagements—especially from a munitions and spare parts vantage, but the U.S. industrial base, purposefully downsized following the Cold War, has yet to ramp up now to meet the demands of a more dangerous and complex security environment. In the best-case scenario, the USAF could deploy approximately 383 fighters and 51 bombers to the Indo-Pacific region within 60 days of notification, which would add 485 sorties from the second island chain, for a total of 1,049 allied fighter and bomber sorties a day—less than one quarter the number the PLAAF can generate.

Attrition. The first operational assignments of the current generation of Air Force general officers came after the end of the Cold War. Senior defense civilians and political leaders are generally in the same position. Their only experience facing or planning for attrition was during the Global War on Terror, in which aircraft losses to enemy action were virtually zero. To them, the thought of losing a quarter of their fleet of combat aircraft in the first 19 days of a war with China is profound. Yet, this level of attrition was not just a planning factor during the Cold War; it was also what allied nations experienced during the peer fights of the 20th Century.[163] Aircraft buys, personnel depth, and spare parts were sustained based on those realities. However, attrition and reserve inventories were cut in the years between the end of the Cold War and today; this depth must be reconstituted. The only thing worse than planning for losses at scale are the consequences of self-deterring in hopes of avoiding them altogether.

U.S. Fighter Attrition - Remaining Assets 523 Deployed Fighters at Start of Conflict		
Attrition Rate	**10 Days**	**19 Days**
3%	487	349
5%	396	174
7%	305	87
9%	230	40

Figure 10: Notional Attrition Rates in a Future Peer Conflict.

Source: Mitchell Institute.

Recent wargames against China reflect the potential for attrition rates that mirror those envisioned during the Cold War era, particularly when operating from the first island chain where ground losses from Chinese ballistic missiles are projected to be high. The natural tendency for some leaders

Air Combat is Dangerous—Aircraft Inventories Need to Reflect This Reality

The MQ-9 inventory represents an interesting case study when it comes to the need for sustainable inventories. The Reaper is relatively new and enjoys high mission capable rates. However, demand for sustained operations in high-risk combat environments has resulted in unplanned MQ-9 fleet attrition. In 2025 alone, the Air Force has already lost over 20 MQ-9s due to enemy air defenses. Yet the Reaper's mission effectiveness—both as a sensor and a shooter—is singular. The aircraft delivers these results without putting a pilot at direct risk, which allows ground-based operating crews to execute tactics that are highly effective and take certain operational risks—higher risks than would be accepted for a crewed aircraft. It is important that inventories for types like the MQ-9 be sustained at sufficient levels to ensure that the real-world attrition of the force does not undermine the type's ability to remain viable across the desired lifespan of the aircraft. The Air Force faced this challenge in Vietnam, when F-105 attrition grew so significant that the type had to be withdrawn from combat prematurely due to challenges stemming from a small inventory. Air combat entails risk. The Department of Defense and Congress need to account for this when they consider funding decisions. Attrition and reserve numbers are essential parts of any aircraft acquisition and sustainment program.

may be to avoid potential losses by bedding down forces outside of the first island chain and focusing their plans on unproven notions of multidomain engagements of the enemy using primarily standoff weapons to ensure aircraft survival.[164] That approach is tantamount to a withdrawal prior to conflict and cedes an operational sanctuary to the enemy. If the U.S. pulls back in the Pacific region, China can press forward to fill the void.

The total number of fighter and bomber sorties the United States and its allies could muster with USAF forces flying from the second island chain would be roughly 23 percent of the number the Chinese could fly and employ over Taiwan.[165] Distance dilutes force density. That fact, coupled with the limited U.S. stockpile of longer-range munitions like the JASSM, the LRASM, and the AMRAAM, would make a standoff war unsustainable. By some estimates, a war with China could fully deplete the U.S. stockpile of these long-range precision munitions in as little as eight days.[166] Once the U.S. stockpile of standoff munitions is expended, production of replacement missiles would meet a fraction of the need, which would allow the Chinese to quickly dominate the war.[167]

Deploying aircraft to the first island chain would almost double the number of sorties the United States could put up on day one of a wartime ATO and allow for the employment of shorter-range munitions. Furthermore, deploying to those locations prior to the outbreak of a conflict may create the degree of uncertainty necessary to deter Chinese leadership from initiating conflict altogether. The Air Force must prepare its forces for those operations and take the associated risks if it hopes to prevent Chinese military aggression in the region or suppress it if it becomes necessary. This places a premium on ambitious investment in a full range of air and missile defense capabilities that can be employed at a sustainable scale.

"It's really not a question of whether we'll go. It's a question [of] how many people come back."

-24th Secretary of the Air Force Heather Wilson

Recommendations

"The United States could in short order be drawn into a war across multiple theaters with peer and near-peer adversaries, and it could lose."[168] That quote from the commission on the National Defense Strategy should be a wakeup call to the entire U.S. military. Airpower is a cornerstone capability required for any successful modern combat operation, which means this is not just a USAF problem—the declining state of the U.S. Air Force is a national security problem. Deterrence relies on an enemy believing his opponent is capable enough to either thwart a military operation or inflict costs so great that the tradeoff is not worth the effort. Unfortunately, the United States no longer has a dominant hand when it comes to airpower, and it needs significant attention. Assessing the baseline of service readiness levels from previous years and flying hour execution and accident reports makes it clear that the Air Force is at its lowest level of capacity, capability, and readiness in its history. The Air Force needs a generous infusion of resources to recover the deterrent quality and warfighting capability it requires to prevent and defeat aggression from its peer competitors and address a global array of threats.

With complementary assets from Australia, Japan, South Korea, Taiwan, and India, U.S. forces may succeed in thwarting a Chinese military move in the Indo-Pacific region, but they would still experience a high degree of attrition. Moreover, success might hinge more on Chinese forces making significant operational missteps than a coalition ability to thwart their aggression in the region—that is not a prudent planning assumption. Should a conflict erupt elsewhere in the world, concurrent force demands risk driving the U.S. and allied airpower to the breaking point. Given increased coordination between Russia and China, the chances of that happening may be increasing.

The U.S. Air Force must realign its capabilities, capacity, and readiness to meet current and anticipated future demand signals. Across the past three decades, multiple administrations and Congress have asked airmen to do too much mission with too little force. The fact that the Army received over $1.3 trillion and the Navy over $914 billion more than the Air Force in the 20 years after the attacks of 9/11 speaks to this perennial under-investment.[169] The chronic lack of resources led the Air Force to play a shell game in which modernization, capacity, and readiness failed to strike an impossible balance. Factoring in essential nuclear deterrence modernization resource requirements, given the Air Force owns two legs of the triad and much of the nuclear command and control enterprise, further exacerbates the service's budget pressures. There comes a point where significant investment is required, and that time is now.[170] That is what Chief of Staff of the Air Force Gen David Allvin meant when he said the nation "needs more Air Force."[171]

Rectifying this imbalance will require at least five years of concerted effort and a serious percentage increase in funding for the Air Force to rebuild capacity and field a readiness posture that can effectively deter China. A dramatic budget increase is not without precedence and mirrors similar foundational resource resets. In the most recent example, resources were shifted from the Air Force to the Army to the degree where the Army received an average of $65 billion a year more than the Air Force from 2002 to 2021. Consider similar investments made in the 1950s at the beginning of the Cold War to bolster nuclear deterrence, during Vietnam in the 1960s, and in the Reagan buildup of the 1980s. The reality is that the Air Force was due for a similar reset in the 2000s, but

alternate priorities saw resources diverted elsewhere. A force with tankers and bombers built in the 1950s and 1960s, trainers largely built in the 1960s, an ISR force largely from the 1960s and 1970s, and a fighter force from the 1970s and 1980s requires a major renewal.

There is little question of the scale and scope of the problem the Air Force is facing. The first step in recovery is to stabilize the existing force with required investments that will rapidly improve readiness and modernization for the foreseeable future. DOD leadership must stop the death spiral efforts of divesting operational platforms in the hope that those funds can be invested in future systems. Now service funding for RDT&E is at a historic high with little capability to show for it. The divest to invest approach only accelerated the erosion of today's force. While innovation is positive and necessary, military value is only realized if operational systems are procured in adequate numbers and kept ready. Many funding lines within that budget are near- to mid-term efforts like the F-35 TR3 Block 4, F-47, B-21, Sentinel, T-7, E-7, EA-37B, MH-137, CCA, munitions, and parts of the ABMS and JADC2 programs that must cross the finish line. As those programs become operational, dollars must follow through procurement and readiness. The process for rebuilding readiness must begin by shifting the service's funding priorities, at least temporarily, away from long-term developmental efforts for unproven technologies. While such efforts may theoretically pay dividends in 15 years, the service must move those funds into O&M accounts to begin sharpening the warfighter now. Rebuilding capacity, capability, and readiness must be concurrent and potentially begin even before Congress can significantly increase funding for the Air Force.

Based on this assessment and a mature body of evidence from related studies, the Mitchell Institute offers the following recommendations:

1. The Air Force should fully acknowledge the scale and scope of its capacity, capability and readiness challenges. DOD and administration leaders should empower this transparency. Challenges can only be fixed if they are recognized. Identify what is required to meet the needs of the national defense strategy and build a plan to achieve those objectives. Today the Air Force does not have a force sizing methodology, and the result is a force driven by an arbitrary budget, not the nation's security strategy.

2. The Air Force requires an increase in its top-line funding to rebuild the capabilities and capacity needed to support the national defense strategy. Rebuilding those capabilities must start by increasing the procurement of F-35s to 72 jets a year and B-21s to a minimum of 21 a year. It should likewise increase the rate of F-15EX acquisition to 24 jets a year as rapidly as it can.[172] Continuing the block development of the F-35, B-21, and other new-build aircraft is important for future warfighting requirements, but the priority should be fielding mission-capable jets in quantity as rapidly as possible. Collaborative Combat Aircraft funding must remain robust to ensure capabilities and capacity are delivered and manifest operationally meaningful results in the near term. The E-7 program must continue despite calls for its cancelation, and MQ-9 inventories must not be allowed to fall below what is required to sustain COCOM demands. Regarding the latter, this may require supplementary buys in light of recent operational attrition. Adequate EA-37B inventories will also prove crucial in an era where electromagnetic spectrum operations are key to victory. It takes roughly three years from funding an airframe to a weapons system's arrival on the flight line, so this process must begin immediately. With

a congressional plus-up of just $5.1 billion in FY 2027, $15.4 billion in FY 2028, and a total of $19.5 billion in FY 2029 and the years beyond, the service can ramp up to procure 72 F-35s, 21 B-21s, 360 LRASMs, and 750 JASSMs, and it can sustain 462 AIM-120Ds a year by FY 2029.

3. Halt the decline in the Air Force aircraft inventory. Build a force structure plan to rebuild the Air Force to the inventory levels necessary to meet COCOM war plan requirements.

    a. Stop the capacity death spiral driven by the divest to invest force management strategy. Retiring older aircraft cannot free up sufficient funds to underwrite the procurement of new aircraft at scale. The Air Force should retain serviceable combat-coded aircraft until new acquisitions are brought into service.

    b. Even without additional congressional funding today, senior Air Force leaders have options they should consider to begin to turn the corner on readiness and capacity: increase procurement of the F-35 from 42 to 54 jets a year; increase procurement of the B-21; increase procurement of LRASMs from 115 to 190 missiles a year; and increase JASSM procurement from 550 to 650 a year. Inventories for types like the MQ-9 must be carefully stewarded to ensure expected attrition does not prematurely sunset the type. This may require supplementary buys. Programs like the E-7 must also continue at their full planned buy to ensure mission areas are recapitalized before aging legacy aircraft are retired due to age-related problems.

4. The Air Force should regenerate its current operational force with the necessary investments to significantly improve aircrew readiness and aircraft mission capability rates. It will take significantly more funding and at least five years of concerted effort for the Air Force to rebuild a dominant posture that meets the demands of the current and projected security environment. Rebuilding capacity, capability, and readiness must be concurrent, and it must begin now given the severity of the threat. The lens should focus on restoring the service to health no later than 2030.

    a. Incrementally increase flying hour funding by 55 percent to the point where fighter pilots are averaging more than three sorties a week and 200 hours a year. Fighter pilots have received less than two sorties a week and 140 hours a year on average since the Budget Control Act of 2012.[173] The current downward trend continued through the first quarter of 2023, the last period the Air Force released readiness data on its aircrews. Pilots averaged 1.2 hours of flying time a week and 9.0 hours of flying time a month during those three months—levels even Soviet pilots did not suffer during the Cold War.[174]

    b. Flying hour contracts should also be established for all training and combat-coded wings to ensure that 100 percent of funded flying hours are executed. These contracts will hold wing commanders accountable for elevating the sortie rates and mission readiness levels for operational units, as well as pilot thruput for training units.

c. Fully fund weapons system sustainment (WSS) accounts for the current fiscal year and fund WSS at 100 percent of the flying hour requirement to include every subsequent increase in flying hours. The Air Force has funded WSS at 80–87 percent of the flying hour requirement for more than five years, which has never allowed the service to fly the hours it funds due to lack of spare parts. It will take several months of increased WSS funding before the system begins to catch up with the increasing demand for spare parts.[175] Moving funding from RDT&E can help increase flying hours and WSS by 10 percent.

d. F-35 operational wings should be supported and pressed to increase aircraft mission capability rates as rapidly as possible to deliver a minimum of three sorties a week per pilot. This will double the rate unit experience levels grow and accelerate the production of formation flight leads and instructor pilots. As the pool of experience grows, those pilots can migrate more rapidly to squadrons transitioning to the F-35, reducing the time it takes to bring those units up to an IOC and compress the time it takes to expand and complete F-35 bed down.

e. The Department of the Air Force should reestablish independent ORI teams to conduct evaluations of the combat capability of operational units across the Air Force. These teams should report to the Air Force level Inspector General, who will report their results to Congress. Without these assessments, Congress cannot understand the level of risk assumed by the force due to insufficient training and readiness.

5. Rebuilding capacity, capability, and readiness must be concurrent and begin before Congress can significantly increase funding for the Air Force. The service must shift the focus of its funding priorities from the development of future systems to increasing readiness and acquisition over the next one-to-three years, followed by mid-term readiness (three-to-seven years), and then long-term readiness (seven years and beyond). The Air Force and Congress should redirect dollars tied to basic and long-lead research to near-term procurement and readiness. Funding for RDT&E is at a historically high level because modernization demands have been deferred for multiple decades.

   a. RDT&E funding tied to programs that are in production or nearing production should continue. However, as these programs become operational and their RDT&E efforts draw down, the associated funding should follow to increase their procurement and readiness.

   b. The Air Force should rebalance its out-year budget by reducing RDT&E to increase procurement and O&M funding. The RDT&E budget should be reduced by $6.6 billion in FY 2026, and those funds must shift to procurement and readiness accounts.

   c. The Air Force should reprioritize RDT&E funding based on the operational enhancement of the program, likelihood of delivery, and delivery timing. With the exception of technology being developed for the F-47, programs that cannot be fielded within seven years or have not demonstrated key technology in an operational environment (technical readiness level seven [TR-7] or above) should be moved to caretaker levels of funding until Congress increases the obligation authority of the Air Force to a level that can support those programs.

	Procurement of B-21s, F-35s, select S/O missiles	O&M Flying Hours + WSS	Total	Above FY25	RDT&E Recovery	Required Congressional Funding + up beyond Sentinel
PB FY26	$8.5	$26.8	$35.3	N/A	N/A	N/A
FY27	$13.0	$31.8	$44.8	$9.5	$(6.6)	$2.9
FY28	$17.2	$36.6	$53.8	$18.4	$(8.7)	$9.7
FY29	$21.3	$43.9	$65.2	$29.8	$(8.7)	$21.1
FY30	$25.8	$48.3	$74.1	$38.7	$(8.7)	$30.0

Prices in Billons

Figure 11: Estmates of Recommended Budget Additions.

Source: Mitchell Institute.

The costs to execute these recommendations will ramp up with incremental increases in aircraft procurement and sortie production.

Conclusion

It is more than obvious that the USAF needs a significant increase in its total obligation authority. The capacity, capability, and readiness levels of the U.S. Air Force are at the lowest point in its history—well below even the hollow-force days of the Carter administration in late 1970s. In 2016, just four of 32 fighter squadrons could execute all or even most of the missions those units were tasked to support through their respective designed operational capability statements. Today, it is unlikely that a single squadron can execute all or most of their tasked DOC missions. Mission capability rates remain poor, and pilots receive just enough sorties to have a minimum level of employability. While these sorties allow them to be labeled as having basic mission-capable levels of competency, they no longer have the reflexes, habit patterns, or judgement required for a peer fight.

Meanwhile, PLAAF capacity and readiness levels already exceed those of the USAF, and it is increasing both at rates that will place U.S. airmen in an untenable position for a confrontation with China. Their fighter pilots are flying half-again as much as USAF pilots, and the PLAAF will acquire 120 5th-generation J-20s this year, almost three times the 42 F-35s the Air Force is programmed to acquire in FY 2025.[176] Dropping the F-35 buy to 24, as the FY 2026 buy requests, is wholly unacceptable. In fact, in FY 2026, the Air Force, driven by budget pressures, seeks to divest 260 fighters and only procure 45. That death spiral math is no longer acceptable given the small size of the current inventory and the realities of the threat environment. The Trump administration and Congress must recognize and address this growing capability disparity immediately.

With a congressional plus-up of just $5.1 billion in FY 2027, $15.4 billion in FY 2028, and a total of $19.5 billion in FY 2029 and the years beyond, the service can ramp up to procure 72 F-35s, 21 B-21s, 360 LRASMs, and 750 JASSMs, and it can sustain 462 AIM-120Ds a year by FY 2029. Programs like E-7 must also be protected, and MQ-9 inventories must be sustained. CCA represents an important investment in future capabilities and necessary capacity. Even without additional congressional funding today, senior Air Force leaders have options they should consider to begin to turn the corner on readiness and capacity:

I understand from open-source reporting that the Air Force is smaller and older than it has ever been in its history. I am equally concerned—as a private citizen—about the low mission capable rates for our fleets, some of which have been reportedly as low as 50 percent or so. … If there are shortfalls, I commit to working with this Committee and this Congress to advocate for the resources needed.

-27th Secretary of the Air Force Dr. Troy Meink

Confirmation hearing before the Senate Armed Services Committee, 2025[181]

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move funding from RDT&E to increase flying hours and WSS by 10 percent; increase procurement of the F-35 from 42 to 54 jets a year; increase procurement of the B-21; increase procurement of LRASMs from 115 to 190 missiles a year; and increase JASSM procurement from 550 to 650 a year.

The United States has much more to lose than just seeing portions of the Indo-Pacific become absorbed by China. The loss of trust from U.S. allies alone is incredibly problematic, but expecting Chinese aggression to stop with Taiwan—or any other ally in the region—is naive at best. While executing the recommendations of this assessment is difficult and costly, failing to increase USAF capacity, capability, and readiness opens a window for the Chinese to make that first move. If U.S. efforts to thwart adversary aggression are defeated, a seismic shift in regional alliances and even the international rules-based order would ensue. That cost is unacceptable. ✪

Endnotes

1 See Douglas A. Birkey, "If America Wants Airpower, It Needs to Invest in Its Air Force," *Air & Space Forces Magazine*, July 2, 2025; and "U.S. Air Force overhauls 2026 Budget: Full A-10 retirement, E-7 cancelled, F-35 cuts, and major shifts in modernization strategy," *Defense Magazine*, June 27, 2025.

2 Chris Gordon, "Air Force Plans to Divest 250 Aircraft in 2025, Shrinking Fleet to New Low," *Air & Space Forces Magazine*, March 11, 2024; and John Tirpak, "Air Force Mission Capable Rates Fall in 2023, Led by Declines for F-15C and B-1," *Air & Space Forces Magazine*, May 29, 2024.

3 Secretary of the Air Force Public Affairs (SAF PA), "The Air Force We Need: 386 operational squadrons," *U.S. Air Force News*, September 17, 2018.

4 David W. Allvin, "Allvin: It's make or break time. America needs more Air Force," *Breaking Defense*, January 27, 2025.

5 John Venable, *Rebuilding America's Military: The United States Air Force* (Washington, DC: The Heritage Foundation, March 26, 2020), p. 2.

6 Financial Managment and Comptroller of the Air Force (SAF/FMC), *The United States Air Force Summary: FY 1988/1989 (Amended)* (Washington, DC: U.S. Air Force, May 15, 1988), Table D-2, "USAF Flying Squadrons By Mission, As Of Feb 1988," and Table D-3, "Total Active Aircraft Inventory By Mission/Designation, Regular-Air Force As Of February, 1988."

7 SAF/FMC, *The United States Air Force Summary: FY 1988/1989 (Amended)*, Table D-5, "Total Active Aircraft Inventory By Mission/Designation, Air National Guard As Of February, 1988."

8 All fighter and bomber aircrews were subject to training requirements dictated by their parent commands, which, in 1987, were Tactical Air Command and Strategic Air Command, respectively. The governing instructions during that period are no longer available, but the most recent to that period accurately reflect the sortie requirements for 1987 for all fighter and bomber platforms. SAF, "Air Force Instruction 111-2F-16, Volume 1: Flying Operations: F-16 Aircrew Operations," Air Combat Command (ACC), May 1, 1998, p. 11; and SAF, "Air Force Instruction 11-2B-52V1: Flying Operations: B-52 Aircrew Training," ACC, September 8, 2011.

9 There were 263 B-52s, 68 B-1s and 62 FB-111s in the active-duty inventory. FB-111 had a 69 percent MC rate (64.1 percent FMC, 4.9 percent PMC), and the B-52 had a 79.2 percent MC rate (76.6 percent FMC, 2.4 percent PMC). The Air Force had acquired and taken possession of 68 B-1s, and while it had been declared IOC in October of 1986, the weapons system had a 2 percent MC rate when it was declared IOC. Rushed to fielding, it held very low MC rates throughout 1987 and, when coupled with a mishap in September that prevented high speed, low altitude training, the available training did not allow aircrews the ability to become combat mission ready in the low altitude regime in which it was designed to be employed. SAF/FMC, *The United States Air Force Summary: FY 1988/1989 (Amended)*, Table D-3 and Table D-16, "Mission Capability Rates by Aircraft Mission/Designation in Percent"; Frank Conahan, *Strategic Bombers: Logistics Decisions Impede B-1B Readiness and Supportability* (Washington, DC: General Accounting Office, May 19, 1989); SAF/FMC, *United States Air Force Statistical Digest Fiscal Year 1991* (Washington, DC: U.S. Air Force, 1992), Table E-5, "AF Selected Total Aircraft Inventory (TAI) By Mission Designation," p. 101; and "Northrop Grumman B-2 Spirit—30 years," *Aerotech News*, updated July 17, 2019.

10 At the time, these requirements were dictated by the service's Graduated Combat Capability (GCC) program. The GCC program was replaced in 1997 by the Ready Aircrew Program (RAP). For sake of simplifying the discussion, both will be referred to as "RAP" for the remainder of the assessment. Conversation with Lt Gen David A. Deptula, USAF (Ret.), March 15, 2025; and Frank Conahan, *Aircrew Training: Tactical Air Command and Strategic Air Command Flying Hour Programs* (Washington, DC: General Accounting Office, September 30, 1986); SAF, "Air Force Instruction 111-2F-16, Volume 1: Flying Operations: F-16 Aircrew Operations,"; and SAF, "Air Force Instruction 11-2B-52V1: Flying Operations: B-52 Aircrew Training."

11 Valerie Insinna, "Air Force cancels E-7 Wedgetail, citing survivability and cost concerns," *Breaking Defense*, June 26, 2025.

12 Allvin, "Allvin: It's make or break time."

13 Vanessa Montalbano, "Budget-Driven 'Conundrum' Causing Both Readiness and Modernization to Fall Flat, Former USAF official says," *Inside Defense*, January 28, 2025.

14 Mark Gunzinger and Carl Rehberg, *Moving Toward the Air Force We Need? Assessing Air Force Budget Trends* (Arlington, VA: The Mitchell Institute for Aerospace Studies, 2019), p. 8.

15 SAF/FMC, *The United States Air Force Summary: FY 1988/1989 (Amended)*, Table D-3; Darrick Leiker, "A Look at the Dozen SR-71 Blackbird Losses," *The Aviationist*, June 9, 2025; and "2024 USAF & USSF Almanac: Equipment: Total Aircraft Inventory (TAI)," *Air & Space Forces Magazine*, June 7, 2024.

16 "The United States Air Force In Facts And Figures," *Air Force Magazine*, May 1989, pp. 51–53. The numbers for the current total aircraft inventory (TAI) were derived through review of the U.S. Air Force, *FY 2024 Department of the Air Force Budget Overview*, and the International Institute for Strategic Studies (ISS), *The Military Balance 2023: The Annual Assessment of Global Military Capabilities and Defence Economics* (London: Routledge, 2023), pp. 43–47. Where the two publications were in conflict for TAI, the USAF numbers were generally adopted. The total number of fighter aircraft does not include approximately 30 F-15C/D models due to the aircraft's recent retirement from the active force from Kadena Air Force Base. See Tyler Rogoway and Thomas Newdick, "Air Force Confirms Permanently Based U.S. F-15s Leaving Japan For Good," *The Warzone*, October 28,2022. The B-1 has a 47 percent MC rate, the B-52 has a 54 percent MC rate, and the B-2 has a 56 percent MC rate. "2024 USAF & USSF Almanac Equipment, Aircraft Total Active Inventory (TAI)," and "2023 Aircraft Mission Capable Rates," in, "Air & Space Forces Almanac 2024," *Air & Space Forces Magazine*, May/June 2024, p. 56–60.

17 Heather Penney, *The Future Fighter Force Our Nation Requires: Building a Bridge* (Arlington, VA: The Mitchell Institute for Aerospace Studies, 2021), pp. 10, 15.

18 "Aircraft Total Active Inventory (TAI)," in "Air & Space Forces Almanac 2024."

19 John Tirpak, "Repairing Broken Bones," *Air & Space Forces Magazine*, January 25, 2021; and Penney, *The Future Fighter Force Our Nation Requires: Building a Bridge*, p. 15.

20 Rachel Cohen, "Lawmakers Seek Guardrails for RQ-4 Retirement," *Air & Space Forces Magazine*, June 23, 2020; and Stephen Losey, "U.S. Air Force Pursues Major Aircraft Retirements in 2024," *Defense News*, March 13, 2023.

21 David A. Deptula, "President Trump—Reverse The Air Force Nosedive & Boost The Space Force," *Forbes*, January, 29, 2025.

22 Allvin, "Allvin: It's make or break time."

23 To reach the goal of 21 B-21s a year will require $9.36B total above FY 2025 funding, but that acquisition level can be accomplished incrementally with 6 B-21s being purchased in FY 2025 (current programmed level), 8 B-21s in FY 2026, 12 B-21s in FY 2027, and 20 B-21s in FY 2028. The Air Force should sustain the procurement of 21 B-21s until it has purchased 300 bombers. The goal of 74 F-35As a year will require an additional $3.71B a year, but that acquisition level will also be achieved incrementally, moving from 42 F-35s in FY 2025 (current programmed level), to 54 jets in FY 2026, 66 jets in FY 2027, and 72 jets in FY 2028. It should acquire 72 jets a year until the Air Force has 1,254 jets in its inventory.

24 In FY 2025, WSS was funded at $18.8B, which was 87 percent of what was required to support the flying hour program. The service should increase O&M funding for WSS by 13 percent ($2.81B) in FY 2026, by 23 percent ($5B) in FY 2027 to $23.77B, and by a total of 43 percent ($9.7B) in FY 2028 to $28.5B to support 100 percent of increased flying hours in those respective years. Kristyn E. Jones and Mike Greiner, "U.S. Air Force, Fiscal Year 2025 Budget Request, Overview," U.S. Air Force brief, March 2024, slide 11.

25 Information provided by Headquarters, U.S. Air Force, A8XC/A5RW, in response to author's request for information on May 24, 2023.

26 The Air Force should increase O&M funding for flying hours by 10 percent ($0.9B) to $10.1B in FY 2026, by another 10 percent ($1.9B) to $11.1B in FY 2027 and by 20 percent ($4.2B) to $13.4B in FY 2028. Jones and Greiner, "U.S. Air Force, Fiscal Year 2025 Budget Request, Department of the Air Force," slide 11.

27 The number of aircraft available, mission capable rates, and sortie rates quoted throughout this assessment do not include attrition, something leadership from the GWOT onward has grown accustomed to being low. Attrition would have been very high if the Cold War had ever gone hot, and it would be at least as high in a war with China today.

28 732 F-15As, minus two F-15A training wings with 72 jets each leaves 588 combat-coded jets. F-15As had an 82 percent MC rate, which means there were roughly 482 mission-capable combat-coded aircraft in the inventory. 2,135 F-16, A-10, F-4, and F-111fighters, minus 144 F-16, 48 A-10, 48 F-4, and 48 F-111 FTU jets, leaves 1,847 combat-coded fighters. With an MC rate of 79 percent, there were 1,459 CC, MC fighters.

29 SAF/FMC, *The United States Air Force Summary: FY 1988/1989 (Amended)*, Table D-2 and Table D-3

30 "USAF Aircraft Tail Markings," and "Air Defense Unit Fin Flashes," in "An Air Force Almanac," *Air Force Magazine*, May 1989, p. 55.

31 "By M-day + 30, over 60 percent of all U.S. aircraft in Europe will have been flown in from the United States and bedded down at COBs." Donald Lewis et al., *A Perspective on the USAFE Collocated Operating Base System* (Santa Monica, CA: RAND Corporation, July 1986), p. v.

32 *NATO-WARSAW PACT Conventional Force Balance: Papers for U.S. And Soviet Perspectives Workshops*, GAO/SSAID-89-23B (Washington, DC: GAO, December 1988), see Appendix V.

33 SAF/FMC, *The United States Air Force Summary: FY 1988/1989 (Amended)*, Table D-3 and Table D-7, ""Average Aircraft Age by Mission/Designation." The following were the actual mission capable rates: F-15, 82 percent; F-16, 86 percent; A-10, 83 percent; F-4, 74 percent; F-111, 74 percent; B-52, 79 percent; and FB-111, 69 percent.

34 There were 156 A-10s (83.4 percent MC), 264 F-16s (85.8 percent MC), 150 F-111s (73.8 percent MC), 114 F-15Cs (81.9 percent MC), and 24 F-4Gs (74.1 percent MC) in USAFE, rendering a total of 467 interdiction/attack, 18 SEAD, and 93 air-to-air MC fighters. SAF/FMC, *The United States Air Force Summary: FY 1988/1989 (Amended)*, Table D-16.

35 Squadrons were generally equipped with 24 aircraft, plus several more attrition reserve and maintenance spare aircraft. Unit locations/bed down found in Robert E. Harkavy, *Bases Abroad: The Global Foreign Military Presence* (New York: Oxford University Press, 1989), pp. 81–82.

36 Harkavy, *Bases Abroad: The Global Foreign Military Presence*, pp. 81–82.

37 This is based on the author's experience as an OV-10 forward air controller (FAC) and F-16 fighter pilot from 1984–1995.

38 The remaining flyable jets and pilots were used to bring replacement pilots up to mission-ready status and to replace pilots that were lost during combat. This is based on the author's experience through 26 years of Air Force operations and senior leader engagements from 2018–2024.

39 Fighter squadrons were manned based on a ratio of 1.25 aircrew members for every aircraft, which meant that a unit with 24 assigned aircraft would have 30 fully qualified pilots or aircrews. Increased sortie rates, mission duration, the requirement for mission planning teams and increased supervisory windows drive personnel demands during combat. To cover that load, manning ratios increase to 1.50 pilots per aircraft, or 36 pilots/aircrews per squadron—six more than it has on its roster. For units with 18 primary assigned aircraft (PAA), four additional pilots were required to reach wartime manning levels. Even though active-duty fighter squadrons have an average of 30 aircraft per squadron, that number includes maintenance spare and attrition reserve platforms. Manning was based on PAA, which was between 18 and 24 aircraft for active-duty fighter squadrons. Albert A. Robbert et al., *Reducing Air Force Fighter Pilot Shortages* (Santa Monica, CA: RAND Corporation, November 24, 2015), p. 33.

40 The Air National Guard squadrons were Bradley, Barnes, Martin Airport (MD), Truax, Tucson, Buckley, Sioux City, Selfridge, Kirkland, Rickenbacker, Tulsa, Puerto Rico, Pittsburgh, Dannley Field, Fort Smith, Hancock (NY), Mcquire, Burlington, Kelly AFB, Andrews AFB, Fort Wayne, Hulman (IN), Capital (Il), Bridgeton (MO), Carswell AFB, and Bergstrom AFB. The Air Force Reserve squadrons were located at Barksdale AFB, Grissom, Richards Gabaur, New Orleans, Hill AFB, Luke AFB, Wright-Patterson, Homestead AFB, and Tinker AFB. See "USAF Aircraft Tail Markings," and "Air Defense Unit Fin Flashes," in "An Air Force Almanac," p. 55.

41 The very premise of these units is that they are manned with citizen soldiers whose main source of income is full-time civilian jobs and who are committed to travel and temporary duty locations that make them unavailable for days or weeks at a time. Those units would likely require several days to assemble the manpower required to deploy, and, once an assessment of their real mission currency was made, they would need some period of intense training before a responsible senior leader could employ them in a fight with a peer competitor.

42 Robert S. Dudney, "Generating Sorties and Sustaining Combat," *Air Force Magazine*, November 1, 1988.

43 Conversation with Lt Gen David A. Deptula, USAF (Ret.), March 15, 2025; and Conahan, *Aircrew Training: Tactical Air Command and Strategic Air Command Flying Hour Programs*. SAF, "Air Force Instruction 111-2F-16, Volume 1: Flying Operations: F-16 Aircrew Operations,"; and SAF, "Air Force Instruction 11-2B-52V1: Flying Operations: B-52 Aircrew Training."

44 At MOPP 3, chemical warfare suits, boots, and masks must be worn, and gloves must be carried. "2.8. Mission-Oriented Protective Posture (MOPP) Figures 2.2-2.3 in *Air Force Handbook 32-4014, Volume 4, USAF Ability to Survive and Operate Procedures In a Nuclear, Biological, and Chemical (NBC) Environment* (Department of the Air Force, March 1, 1998), pp. 26–31.

45 Collocated operating bases (COBs) were generally civilian airfields that were used to base units deploying from the States during the Cold War. Lewis et al., *A Perspective on the USAFE Collocated Operating Base System*. The distance from: RAF Lakenheath to the Fulda Gap was 360 NM (720 NM round trip); The distance from Ramstein AB to the Fulda Gap was 107 NM (214 NM round trip).

46 SAF/FMC, *The United States Air Force Summary: FY 1988/1989 (Amended)*, Table D-7. Theater-based fighters had a .81 MC rate, equating to 2,843 sorties a day. The deploying fleet of 1,389 fighters had a combined MC rate of .79, which added 1,097 fighters capable of five sorties a day. When added to the theater based sorties equated to 7,977 sorties a day, before attrition.

47 SAF/FMC, *The United States Air Force Summary: FY 1988/1989 (Amended)*, Table D-3 and Table D-16; and Conahan, *Strategic Bombers: Logistics Decisions Impede B-1B Readiness and Supportability*.

48 The B-1s were not operational. SAF/FMC, *The United States Air Force Summary: FY 1988/1989 (Amended)*, Table D-3 and Table D-16.

49 SAF/FMC, *The United States Air Force Summary: FY 1988/1989 (Amended)*, Table D-3 and Table D-16; SAF/FMC, *United States Air Force Statistical Digest Fiscal Year 1991*, Table E-5; and "Northrop Grumman B-2 Spirit—30 years."

50 Conahan, *Strategic Bombers: Logistics Decisions Impede B-1B Readiness and Supportability*. See also William Burr, "Alerts, Crises, and DEFCONs," and "Crises, Alerts, and DEFCONS, 1961-1976 – Part II," National Security Archives, updated May 26, 2021 and April 8, 2021; and Andrew Glass, "President Bush ends B-52 alert, Sept. 27, 1991," *Politico*, September 27, 1991.

51 SAF/FMC, *The United States Air Force Summary: FY 1988/1989 (Amended)*, Table D-2 and Table D-3; and "Number Of Aircraft Per Active-Duty USAF Squadron," in "An Air Force Almanac," p. 54.

52 Inexperienced pilots required 3.5 sorties a month and experienced pilots required 2.6 sorties a month to maintain CMR status. SAF, "Air Force Instruction 11-2B-52V1: Flying Operations: B-52 Aircrew Training," Table 1.1. "Minimum B-52 Sortie (SR00) Requirements."

53 Bruce Eickhoff, "SAC Trains the Way It Would Fight," *Air Force Magazine*, February 1, 1982.

54 Eickhoff, "SAC Trains the Way It Would Fight."

55 The FB-111 had a combat mission radius of 1,500 NM, .and, while targets in Moscow fell within that range, they likely would have hit tankers to give the jets a pad for fuel. David Eyre, "General Dynamics F-111," *Aeropedia*, May 19, 2019.

56 Based on 184 MC B-52s and 36 MC FB-111s being available for conventional employment. Two sorties a day for half the fleet employed from bases in the UK equates to 220 sorties. Sortie duration and crew rest requirements would limit the remaining fleet to flying every other day from bases in the United States, for a total of 275 bombers available for ATO employment every day.

57 The active Air Force carried 166 RF-4s on its books through the end of 1987. However a review of historical data from Zweibrücken AB, Germany; Bergstrom AFB, Texas; and Kadena AB, Japan reveal several of those units were disbanded that year, leaving approximately three active squadrons: one at Kadena, one at Bergstrom, and one at Zweibrücken. SAF/FMC, *The United States Air Force Summary: FY 1988/1989 (Amended)*, Table D-3; SAF/FMC, *USAF Summary: Amended FY 1990/1991 Biennial Budget* (Washington, DC: U.S. Air Force, December 15, 1989), Table D-3, "Total Active Aircraft Inventory By Mission/Designation, Regular Air Force as of February 1988"; SAF/FMC, *United States Air Force Statistical Digest Fiscal Year 1991*, Table E-5; and Harkavy, *Bases Abroad: The Global Foreign Military Presence*, pp. 81–82. The Air Force acquired a total of 32 SR-71s but lost 12 before 1987. Leiker, "A Look at the Dozen SR-71 Blackbird Losses."

58 The seven ANG squadrons were the 106th (Alabama), 196th (California), 190th (Idaho), 123D (Kentucky), 186th (Mississippi), the 155th (Nebraska), and the 152nd Tactical Reconnaissance Squadron (Nevada). SAF/FMC, *USAF Summary: Amended FY 1990/1991 Biennial Budget*, Table D-5, "Total Active Aircraft Inventory By Mission/Designation, Air National Guard as of February 1988."

59 SAF/FMC, *USAF Summary: Amended FY 1990/1991 Biennial Budget*, pp. D-13, D-15, D-26, and D-27.

60 "2023 Aircraft Mission Capable Rates" in "2024 USAF & USSF Almanac: Equipment," *Air & Space Forces Magazine*, June 7, 2024.

61 SAF/FMC, *USAF Summary: Amended FY 1990/1991 Biennial Budget*, Table D-3; and Harkavy, *Bases Abroad: The Global Foreign Military Presence*, pp. 81–82.

62 Lewis et al., *A Perspective on the USAFE Collocated Operating Base System*, p. 21.

63 Dudney, "Generating Sorties and Sustaining Combat."

64 Robert Hopkins III, "Ears of the Storm," *Air Force Magazine*, February 1, 1992.

65 Coy F. Cross II, *The Dragon Lady Meets the Challenge: The U-2 in Desert Storm* (U.S. Air Force, January 1996); Linda Sheffield Miller, "Blackbird RSO tells the story of the first time a SAM was fired at an SR-71 Mach 3+ Spy Plane," *The Aviation Geek Club*, May 29, 2022.

66 "Detatchment 4 RAF Mildenhall," RAF Fairford USAF Air Base History.

67 The SR-71 had the standoff capability, but range was subject to air refueling.

68 Lewis et al., *A Perspective on the USAFE Collocated Operating Base System*.

69 66 sorties at the outset of a conflict is based on 18 Zweibrücken based RF-4s with a .74 MC rate, flying five sorties each day. Once the remaining U.S. based RF-4s (18 active and 75 ANG) deploy into theater, the number of tactical ISR missions would grow by 344 to a total of 410 per day. While not all of the 22 U-2s, 21 SR-71s, and 25 RC-135s may have been committed to a Fulda Gap invasion, all of them could

have. The U-2 MC rate of 73 percent made 7 jets available with each of those jets flying every other day—meaning a minimum of 3 jets were available for daily tasking. 21 SR-71s flying one sortie a week would add three sorties each day. 25 RC-135s with a 71 percent MC rate would make 18 jets available for daily tasking for a total of 24 strategic reconnaissance sorties and 434 total reconnaissance sorties.

70 International Institute for Strategic Studies (IISS), *The Military Balance 1989-1990: The Annual Assessment of Global Military Capabilities and Defence Economics* (London: Routledge, October 1989); "Germany," Panavia Managing Tornado; and "The Spanish Phantoms of Torrejón: The Two Phantom II Aircraft Preserved by the 12th Wing," *DefenseAndAviation.Info* blog, January 8, 2024.

71 STO operations initiated under threat of imminent attack.

72 Author's experience as a fighter pilot, based in Europe from 1987–1990.

73 John Venable, *Independent Capability Assessment of U.S. Air Force Reveals Readiness Level Below Carter Administration Hollow Force* (Washington, DC: The Heritage Foundation, April 17, 2017).

74 IIISS, *The Military Balance 1989-1990*; and "Germany," Panavia Managing Tornad.

75 *Force Comparison 1987: NATO and the Warsaw Pact* (Bonn, West Germany: Federal Republic of Germany Press and Information Office of the Federal Government, June 1988), p. 16, Figure 8, "NATO—Warshaw Pact Combat Aircraft Quantitative Comparisons."

76 John Venable, "Fighter Pilots Aren't Flying Enough to Hone the Skills of Full-Spectrum War," *Defense One*, November 21, 2016.

77 Gunzinger and Rehberg, *Moving Toward the Air Force We Need? Assessing Air Force Budget Trends*, p. 8, Table 2, "Changes in the military services' total obligational authority (TOA) by percentage, using Constant Year (CY) 2020 dollars, from 1989 to 2001."

78 David A. Deptula and Mark Gunzinger, *Decades of Air Force Underfunding Threaten America's Ability to Win* (Arlington, VA: The Mitchell Institute for Aerospace Studies, September 2022), p. 2.

79 Madison Callahan, "F-22 Raptor Fast Facts," Lockheed Martin Corporation, September 2024.

80 Tirpak, "Repairing Broken Bones."

81 Penney, *The Future Fighter Force Our Nation Requires: Building a Bridge* , p. 12.

82 "Watch, Read: Gen. Mark Kelly on the Air Force Fighter Enterprise," Air & Space Forces Association, Air, Space & Cyber Conference, September 21, 2022.

83 John A. Tirpak, "Moving Into Sequestration," *Air Force Magazine*, April 1, 2013.

84 Venable, *Independent Capability Assessment of U.S. Air Force Reveals Readiness Level Below Carter Administration Hollow Force*, p. 2.

85 Office of the Secretary of Defense (OSD), *Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge* (Washington, DC: U.S. Department of Defense, January 19, 2018).

86 "The Air Force We Need" calls for one additional airlift squadron and five additional bomber, seven additional fighter, and 14 additional tanker squadrons. While the number of aircraft in any one of those categories varies from unit to unit, there are approximately 30 fighters, 10 bombers, 15 tankers, and 15 strategic airlift aircraft in each squadron. Mathematically, "The Air Force We Need" calls for 182 more fighters, 50 more bombers, 210 more refuelers, and 15 more airlift aircraft than the Air Force currently has in its inventory. Airframe purchases alone would cost approximately $80B. That rough estimate is based on the need for 182 more F-35s (seven squadrons, 26 fighters per squadron, $80M each); 50 more B-21 bombers (five squadrons, 10 bombers per squadron, $564M each); 210 more KC-46s (14 squadrons, 15 tankers per squadron, $169M each); and 15 additional C-17s (one squadron, 15 aircraft per squadron, no longer in production but an average of $262M each in FY 2020 dollars). See, respectively, SAF PA, "The Air Force We Need: 386 operational squadrons"; Marcus Weisgerber, "Price Drop: Lockheed Pitches $80M F-35A to Pentagon," *Defense One*, May 7, 2019; Jeremiah Gertler, *Air Force B-21 Raider Long-Range Strike Bomber* (Washington, DC: CRS, updated September 22, 2021), p. 4; Secretary of the Air Force, Office of Financial Management and Budget (SAF/FMB), *Department of Defense Fiscal Year (FY) 2020 Budget Estimates: Air Force Justification Book*, Volume 1 of 2, *Aircraft Procurement, Air Force* (Washington, DC: DOD, March 2019), p. 25; and Fact Sheet, "C-17 Globemaster III," U.S. Air Force, May 14, 2018.

87 Aaron Mehta, "Mattis Orders Fighter Jet Readiness to Jump to 80 Percent—In One Year," *Defense News*, October 9, 2018.

88 Stephen Losey, "Pilots Are Flying 17 Hours per Month, but It's Still Not Enough, Air Force Secretary Says," *Air Force Times*, March 1, 2018.

89 Data extracted from U.S. Air Force budget summaries for the years 2017 through 2021, available on the U.S. Air Force's Financial Management and Comptroller website. For example: SAF/FMB, *United States Air Force Fiscal Year 2018 Budget Overview* (Washington, DC: DOD, May 2017), p. 15, Table 1, "Air Force Budget Highlights Summary"; and SAF/FMB, *Department of the Air Force FY 2021 Budget Overview* (Washington, DC: DOD, February 2020), p. 2, Table 1, "Department of the Air Force Budget Summary."

90 Data extracted from U.S. Air Force budget summaries for the years 2017 through 2021.

91 MC rates by year:
2017: F-16, 69 percent; F-22, 49 percent; F-35, 55 percent.
2018: F-16, 69 percent; F-22, 52 percent; F-35, 50percent.
2019: F-16, 72 percent; F-22, 51 percent; F-35, 62 percent.
2020: F-16, 74 percent; F-22, 52 percent; F-35, 76 percent.
2021: F-16, 72 percent; F-22, 5 percent; F-35, 69 percent.
2022: F-16, 71 percent; F-22, 57 percent; F-35, 65 percent.
For 2023 and 2024 see Stephen Losey, "Fewer Planes Are Ready To Fly: Air Force Mission-Capable Rates Decline Amid Pilot Crisis," *Air Force Times*, March 5, 2018; Stephen Losey, "Aircraft Mission-Capable Rates Hit New Low In Air Force, Despite Efforts too Improve," *Air Force Times*, July 26, 2019; Brian Everstine, "Breaking Down USAF's 70-Percent Overall Mission Capable Rate," *Air & Space Forces Magazine*, May 19, 2020; Dakota Wood, ed., *2022 Index of U.S. Military Strength* (Washington, DC: The Heritage Foundation, 2022), p. 434, Table 7, "Mission-Capable Combat-Coded Fighters in the Active-Duty Air Force"; and Dakota Wood, ed., *2023 Index of U.S.*

Military Strength (Washington: DC: The Heritage Foundation, 2023), p. 410, Table 10, "Mission-Capable Combat-Coded Fighters in the Active-Duty Air Force." Dakota Wood, ed., *2024 Index of U.S. Military Strength* (Washington, DC: The Heritage Foundation, 2024), p. 495, Table 14, "Mission-Capable Combat-Coded Fighters in the Active-Duty Air Force."

92 John Tirpak, "Acquisition Boss: Spending Caps Forced USAF to Trim 2025 Budget Request," *Air & Space Forces Magazine*, March 7, 2024.

93 Greg Hadley, "Space Force, Air Force Need More Money, Kendall Says," *Air & Space Forces Magazine*, December 19, 2024.

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95 David A. Deptula, "President Trump—Reverse The Air Force Nosedive & Boost The Space Force," *Forbes*, January 29, 2025.

96 There are an additional 69 MC A-10s that would be available for low threat employment in the Middle East.

97 "Readiness Score, Very Weak," in Wood, ed., *2024 Index of U.S. Military Strength*, p. 499; Dakota Wood, ed., *2018 Index of U.S. Military Strength* (Washington, DC: The Heritage Foundation, 2017), p. 356, Table 4, "Air Force: Only Four of 32 Combat-Coded Fighter Squadrons Fully Mission Capable"; and "Resource Readiness," Air Force Instruction 10-201, Operations Force Readiness Reporting, June 5, 2024, p. 24.

98 SAF/FMB, *Department of the Air Force FY 2024 Budget Overview*; IISS, *The Military Balance 2023*, pp. 43–47; "2024 USAF & USSF Almanac: Equipment."

99 10,843 AMRAAMs represent "Prior Year" procurements of defined weapon systems. Normally, it takes 1–2 years from the initial funding of the weapon system to its eventual procurement. Therefore, this assessment uses FY 2022 as the final cut-off year for procurement of weapon systems, since weapon systems procured in FY 2022 will likely be filled by the close of FY 2024. SAF/FMB, *Department of Defense Fiscal Year (FY) 2025 Budget Estimates: Air Force Justification Book, Volume 1, Missile Procurement, Air Force* (Arlington, VA: DOD, March 2024), p. 127.

100 2,034 JASSM (JASSM-BL/AGM-158A) represent "Prior Year" procurements of defined weapon systems. 2,935 (JASSM-ER/AGM-158B/B-2) represent "Prior Year" procurements of defined weapon systems. 57 LRASM represent "Prior Year" procurements of defined weapon systems. Normally, it takes 1-2 years from the initial funding of the weapon system to its eventual procurement. Therefore, this assessment uses FY 2022 as the final cut-off year for procurement of weapon systems since weapon systems procured in FY 2022 will likely be filled by the close of FY 2024. SAF/FMB, *Department of Defense Fiscal Year (FY) 2025 Budget Estimates: Air Force Justification Book*, Volume 1, *Missile Procurement, Air Force*, p. 74 and p. 97.

101 *Commission on the National Defense Strategy* (Washington, DC: DOD, July 2024), p. 53.

102 "Watch, Read: Gen. Mark Kelly on the Air Force Fighter Enterprise."

103 Squadrons were generally equipped with 24 primary assigned aircraft and several more attrition reserve and maintenance spare aircraft. Unit locations/bed down found in Harkavy, *Bases Abroad: The Global Foreign Military Presence*, pp. 81–82.

104 Greg Hadley, "USAF Will Withdraw A-10s from Final Overseas Base in Korea in 2025," *Air & Space Forces Magazine*, November 13, 2024.

105 A-10s have been removed because of their lack of speed, range, and, primarily, weaponry that could be used in a fight with China in the Indo-Pacific. There are approximately 26 A-10s operational and A-10s based at Osan AB, Korea. The remaining 77 are based in the United States. Removing those jets from the total of 564 leaves 487 combat coded fighters.

106 STO operations initiated under threat of imminent attack.

107 The exceptions to these numbers are three squadrons of F-16s at Shaw, and one squadron of F-16s based in Spangdahlem AB, Germany. Manning is based on a squadron with 24 primary assigned aircraft. For units with 18 PAA, four additional pilots are required. Office of the Undersecretary of Defense for Personnel and Readiness, *Report to Congressional Armed Services Committees on Initiatives for Mitigating Military Pilot Shortfalls* (Washington, DC: DOD, January 16, 2019), p. 3.

108 Robbert et al., *Reducing Air Force Fighter Pilot Shortages*, p. 33.

109 The remaining flyable jets and very limited number of pilots could be used to bring replacement pilots up to mission-ready status and to replace pilots that may be lost during combat. This is based on the author's experience through 26 years of Air Force operations and senior leader engagements from 2018–2024.

110 See note 41. Those units would likely require several days to assemble the manpower required to deploy, and they would need some period of intense training before engaging with a peer competitor.

111 This includes 114 air-to-air F-15s and 522 interdiction fighters plus 364 deployable active and 95 total deployable ARC aircraft (a total 459 deployable fighters).

112 The idea that these jets will have higher MC rates because they are healthier, better maintained, and/or receive healthier levels of spare parts—like the jets deployed to support GWOT operations in the 2010s—ignores the comparative scale of the deployments. GWOT deployments of four to a dozen squadrons or 300 jets could depend on the resources and spare parts inventories of the squadrons that did not deploy, which were often reduced

to minimal flying schedules. A deployment of 459 jets, coupled with Nobel Eagle and European flight operations, would demand more spare parts than the system is able to support, forcing Indo-Pacific units (and all others) to heavily cannibalize "down" jets in order to sustain flying operations.

113 Inexperienced fighter pilots require a minimum of 9 sorties a month and experienced pilots require a minimum of 8 sorties to be considered combat mission ready. SAF, "Air Force Instruction 111-2F-16, Volume 1: Flying Operations: F-16 Aircrew Operations,", pp. 11. 2023 was the last year the Air Force would release unclassified data on sortie rates and flying hours for the CAF. One possible logical reason for withholding that data could be that the service has continued its draconianly low sortie rate. based on Headquarters U.S. Air Force, Deputy Chief of Staff for Operations, written responses to Heritage Foundation request for information on Air Force sortie rates from 2016 through 2023. The last response was dated May 24, 2023.

114 Headquarters U.S. Air Force, Deputy Chief of Staff for Operations, written response to Heritage Foundation request for information on Air Force sortie rates, July 25, 2023; and, G. James Herrera, *The Fundamentals of Military Readiness* (Washington, DC: CRS, October 2, 2020), p. 46.

115 Mission Oriented Protective Postures (MOPP): MOPP 1—Protective gas mask carried, chemical warfare ensemble (protective suit, boots and gloves) immediately available. MOPP 2—Suit/boots worn, mask and gloves carried. MOPP 3—Suit/boots/mask worn, gloves carried. MOPP 4—All protection worn. USAF Ability to Survive and Operate Procedures In a Nuclear, Biological, and Chemical (NBC) Environment, Air Force Handbook 32-4014, Volume 4 (Washington, DC: Department of the Air Force, March 1, 1998), pp. 26–30, "2.8. Mission-Oriented Protective Posture (MOPP)," Figures 2.2-2.3.

116 SAF/PA, "Kendall, Allvin, Saltzman Urge Modernization While Warning Senate of Delayed Budget," *U.S. Air Force News*, April 9, 2024.

117 While no single senior Air Force leader has explicitly stated in a widely publicized, verbatim quote that "in a war with China, Air Force fighters based in Japan and the Philippines would be repositioned to the second island chain," several high-ranking officials have made statements and driven strategies that strongly imply this approach as part of broader operational planning to counter China's military capabilities. For example, during remarks at the Air Force Association's Warfare Symposium in March 2024, CSAF General Allvin outlined a vision for the Air Force to adapt to modern threats by dispersing operations across a wider network of bases, which implicitly includes moving assets beyond the first island chain to less vulnerable locations like Guam, Tinian, or Saipan in the second island chain.

118 Assumes 168 fighters with a .59 MC rate, equating to 99 flyable jets that can fly a total of two sorties per day from the second island chain. Once the additional 459 fighters arrive in theater, the total MC fleet of 370 fighters could fly 740 sorties from the second island chain.

119 The average MC rate for the current fighter fleet is 59 percent. J. Michael Dahm, *Fighting the Air Base: Ensuring Decisive Combat Sortie Generation Under Enemy Fire* (Arlington, VA: The Mitchell Institute for Aerospace Studies, July 2024), p. 8.

120 During testimony before the House Armed Services Committee on March 8, 2023, then-Commander, Pacific Air Forces, General Kenneth Wilsbach stated, "The ranges of the weapons that our adversaries have—and I'm talking specifically about the PRC [People's Republic of China]—put every fixed base we have in the Indo-Pacific at risk. We have to assume that any base within a couple thousand miles of an adversary could be targeted, and we're working hard to mitigate that." Wilsbach's public statements often balanced operational candor with strategic ambiguity, but his candor during testimony revealed his concerns about first island chain survivability. Dahm, *Fighting the Air Base: Ensuring Decisive Combat Sortie Generation Under Enemy Fire* , p. 15.

121 This includes 140 jets based in Japan and Korea plus 383 that would deploy into theater for a total of 523 jets. An MC rate of 59 percent equates to 309 jets that could ideally fly five times in a single day, for a total of 1,543 sorties a day.

122 Dahm, *Fighting the Air Base: Ensuring Decisive Combat Sortie Generation Under Enemy Fire*, p. 8,

123 As of September 2024

124 The B-1 has a 47 percent MC rate, the B-52 has a 54 percent MC rate, and the B-2 has a 56 percent MC rate. "Equipment, Aircraft Total Active Inventory (TAI)," and "2023 Aircraft Mission Capable Rates," in "Air & Space Forces Almanac 2024," p. 56 and p. 59.

125 "United States Air Force Aircraft Accident Investigation Board Report," 34th Bomb Squadron, 28th Bomb Wing, Ellsworth Air Force Base, USAF Global Strike Command, July 7, 2024.

126 "United States Air Force Aircraft Accident Investigation Board Report," 34th Bomb Squadron, 28th Bomb Wing.

127 SAF, "Air Force Instruction 11-2B-52V1: Flying Operations: B-52 Aircrew Training"; and "United States Air Force Aircraft Accident Investigation Board Report," 34th Bomb Squadron, 28th Bomb Wing, p. 30.

128 "93rd Bomb Squadron Approved as Formal B-52 Training Unit," *U.S. Air Force News*, 307th Bomb Wing, March 13, 2009.

129 Greg Hadley, "B-52s Land on Guam for Latest Bomber Task Force Deployment," *Air & Space Forces Magazine*, April 4, 2023.

130 Rachel Waller, "2024 Bomber Task Force missions: A year of first-ever accomplishments," *U.S. Air Force News*, 8th Air Force, January 21, 2025.

131 Burr, "Alerts, Crises, and DEFCONs"; and Glass, "President Bush ends B-52 alert, Sept. 27, 1991."

132 B-1s were physically altered/decertified as nuclear-capable platforms back in the 1990s. Amy F. Woolf, *U.S. Strategic Nuclear Forces: Background, Developments, and Issues* (Washington, DC: CRS, updated December 14, 2021), see summary.

133 "Equipment, Aircraft Total Active Inventory (TAI)," and "2023 Aircraft Mission Capable Rates," in "Air & Space Forces Almanac 2024," p. 56 and p. 59.

134 Inexperienced bomber pilots require 4 sorties a month, and experienced pilots require 3 sorties to be combat mission ready. The inexperienced mishap pilot had 3 sorties the previous month, and the experienced instructor pilot had just two in the previous 60 days. SAF, "Air Force Instruction 11-2B-52V1: Flying Operations: B-52 Aircrew Training"; and "United States Air Force Aircraft Accident Investigation Board Report," 34th Bomb Squadron, 28th Bomb Wing.

135 "United States Air Force Aircraft Accident Investigation Board Report," 34th Bomb Squadron, 28th Bomb Wing.

136 Based on bombers flying out of Elmendorf AFB, Alaska, would endure a 16 hour round trip, which would enable one sortie per day per aircraft. However, current manning levels of 1.25 to one aircraft would cut that number down to one sortie every two days per aircraft.

137 Bombers flying out of Hickam AFB, Hawaii, would endure an 18 hour round trip, which would enable one sortie per day per aircraft. However, current manning levels of 1.25 to one aircraft would cut that number down to one sortie every two days per aircraft.

138 Once bombers return from the first sortie, approximately 57 percent of those aircraft (the MC rate for the fleet) would be MC and available to turn on the next sortie.

139 This presumes 21 bombers based in Alaska flying one sortie a day and the 12 at Andersen AFB, Guam flying two sorties a day.

140 John Venable, "B-21 Raider: The Stealth Bomber the Air Force Needs Right Now," *The National Interest*, January 10, 2024.

141 "RQ-170 Sentinel," U.S. Air Force fact sheet; and "Total Aircraft Inventory (TAI)," in SAF/FMB, *Department of the Air Force Fiscal Year 2025 Budget Request* (Washington, DC: U.S. Air Force, May 2024), p. 43.

142 Tirpak, "Air Force Mission Capable Rates Fall in 2023, Led by Declines for F-15C and B-1."

143 Lewis et al., *A Perspective on the USAFE Collocated Operating Base System*, p. 21.

144 Interview with former E-3 squadron commander, March 26, 2025.

145 Hopkins, "Ears of the Storm."

146 Cross, *The Dragon Lady Meets the Challenge: The U-2 in Desert Storm.*

147 SAF, "Air Force Manual 11-2MQ-9, Volume 3: Flying Operations: MQ-9—Operations Proceedures," ACC, January 12, 2023, p. 12.

148 Based on data provided by Air Mobility Command (AMC).

149 No U.S. allies and partners have bomber aircraft in their inventories. Australia has 72 F-35s, 24 FA-18Fs, and 24 F-18G electronic warfare platforms. Japan has 38 F-35As and 200 F-15Js for homeland defense. South Korea has 39 F-35s, 59 F-15Ks, and 165 F-16C/Ds. Taiwan has 140 F-16C/Ds and 54 Mirage 2000s for air defense. India has 61 Mig-29s, 47 Mirage 2000s, 36 Rafales, and 262 Su-30 Flankers. IISS, *The Military Balance 2025: The Annual Assessment of Global Military Capabilities and Defence Economics* (London: Routledge, October 2024), pp. 270, 300–308, 317, and 321.

150 Equates to 36 F-35s and 12 F-18Gs from Australia, 19 F-35s from Japan, 20 F-35s and 70 F-16s from South Korea, and 70 F-16s from Taiwan. Indian Su-27 Flankers were not included due to compatibility issues.

151 Examples include the Advanced Medium Range Air-to-Air Missile–Extended Range (AMRAAM-ER), the Long Range Anti-Ship Missile (LRASM), and the Joint Air to Surface Standoff Missile—Extended Range (JASSM-ER).

152 Stephen Grey, John Shiffman, and Allison Martell, "Years of miscalculations by U.S., NATO led to dire shell shortage in Ukraine," *Reuters*, July 19, 2024.

153 Allied munition stockpile are difficult to estimate, as much of this information is highly secreted and unavailable to the public domain. The Defense Security Cooperation Agency has documented foreign military sales of exquisite weapon systems to Allied countries over the last decade publicly available. The following sortie loadouts can be assumed based on that data: 4 AMRAAMS, 4 LRASMs, or 2 AMRAAMs and 2 freefall PGMs. Australia has 558 AMRAAMs. See Defense Security Cooperation Agency, "Major Arms Sales"; and Ministry of Defense, *Progress and Budget in Fundamental Reinforcement of Defense Capabilities: Overview of the FY 2024 Budget* (Tokyo, Japan: June 7, 2024) p. 13.

154 "RAAF Deploys F-35 Aircraft to Remote Areas of Western Australia," *Australian Aviation*, October 3, 2024.

155 Air bases in Korea are 360 NM from Shanghai, which would allow F-35As and F-15Ks to strike targets without refueling. Japan is 435 NM from Shanghai, which would also be within the unrefueled range of the F-35A. Taiwan is less than 100 NM from China, and India shares a border with China. The flight time for jets from all four of those nations would be less than two hours, allowing units with the requisite manning to fly each jet up to five sorties a day.

156 Japan has 38 F-35s; South Korea has 39 F-35s and 59 F-15Ks; and Taiwan has 140 F-16s. India has 262 Su-30s that were not considered due to compatibility issues. Assuming a 70 percent MC rate, and that that nation will apportion 50 percent of those jets to the effort, regional allies would add 675 sorties to the allied ATO.

157 IISS statistics are current as of November 2023. Adding aircraft that are coming off hot production lines to the IISS totals increases those numbers by 120 J-20s and 100 J-16s. IISS, *The Military Balance 2024: The Annual Assessment of Global Military Capabilities and Defence Economics* (Routledge: London, 2024), p. 260.; and "Special Report: China Inducts Additional J-20 Stealth Fighters," *Janes*, June 13, 2024.

158 IISS, *The Military Balance 2024*; and "Special Report: China Inducts Additional J-20 Stealth Fighters."

159 Kenneth Allen and Cristina Garafola, *70 Years of the PLA Air Force* (Maxwell AFB, AL: China Aerospace Studies Institute, April 12, 2021), p. 259.

160 Allen and Garafola, *70 Years of the PLA Air Force*, p. 286.

161 This assumes 168 theater-based fighters with a 59 percent MC rate that can fly two sorties a day from the second island chain.

162 SAF, "Department of the Air Force Instruction 90-302: Special Management: The Inspection System of the Department of the Air Force," SAF Inspector General (SAF/IG), March 15, 2023 Incorporating Change 1, July 25, 2025, attachments 2, 3, and 4, pp. 116–136.

163 The Israeli Air Force (IAF) lost 102 of its 390 aircraft in 19 days of operations during the 1973 Yom Kippur War, with a total aircraft lost or damaged rate of 4.8 percent during the first week of fighting. *The 1973 Arab-Israeli War: Overview and Analysis of the Conflict* (Central Intelligence Agency, September 1975, approved for release September 4, 2021), pp. 34 and 42.

164 Emma Moore, "Attrition and the Will to Fight a Great Power War," *Strategic Studies Quarterly*, Winter 2019, pp. 11–13.

165 The distance/flying time involved when flying from Guam to Taiwan would limit each MC fighter to flying a total of two missions a day. With fleet of 627 deployed jets and an MC rate of 59 percent, that equates to 740 sorties a day. Bombers flying out of Guam would be limited to two sorties a day and those flying out of Alaska or Hawaii would be limited to a single mission a day, equating to a total of 33 bomber sorties before attrition. The Chinese CC fighter fleet has roughly 960 fighters and assuming an MC rate of 70 percent equates to 772 MC fighters. Those jets, because of their proximity to Taiwan, could fly up to five times a day. The Chinese bomber fleet has roughly 197 combat coded aircraft and assuming an MC rate of 70 percent equates to a fleet of 138 bombers. Each jet could sortie up to four times a day, equating to an additional 552 sorties for a total of 3,911 total combat sorties a day.

166 Mark Gunzinger, *Affordable Mass: The Need for a Cost-Effective PGM Mix for Great Power Conflict* (Arlington, VA: The Mitchell Institute for Aerospace Studies, November 2021), p. 19.

167 Mark Gunzinger, *Long-Range Strike: Resetting the Balance of Stand-in and Stand-off Forces* (Arlington, VA: The Mitchell Institute for Aerospace Studies, June 18, 2020. The USAF procures less than a 1,000 long range standoff air to surface or anti-ship missiles and less than 700 AMRAAM missiles a year. That production rate would deliver less than three JASSM/LRASM/Joint Strike missiles and less than two AMRAAMs a day.

168 *Commission on the National Defense Strategy* (2024).

169 Deptula and Gunzinger, *Decades of Air Force Underfunding Threaten America's Ability to Win*.

170 Michael Bennett, *Projected Costs of U.S. Nuclear Forces, 2023 to 2032* (Washington, DC: Congressional Budget Office, July 2023).

171 Allvin, "Allvin: It's make or break time."

172 The goal of 21 B-21s a year will require $9.36B total above FY 2025 funding, but that acquisition level will be accomplished incrementally with 6 B-21s being purchased in FY 2025 (current programmed level), 8 B-21s in FY 2026, 12 B-21s in FY 2027, and 20 B-21s in FY 2028. The Air Force should sustain the procurement of 21 B-21s until it has purchased 300 bombers. The goal of 74 F-35As a year will require an additional $3.71B a year, but that acquisition level will also be achieved incrementally, moving from 42 F-35s in FY 2025 (current programmed level), to 54 jets in FY 2026, 66 jets in FY 2027, and 72 jets in FY 2028. It should acquire 72 jets a year until the Air Force has 1,254 jets in its inventory.

173 The Air Force should increase O&M funding for flying hours by 10 percent ($.9B) to $10.1B in FY 2026, by another 10 percent ($1.9B) to $11.1B in FY 2027 and by 20 percent ($4.2B) to $13.4B in FY 2028. Jones and Greiner, "U.S. Air Force, Fiscal Year 2025 Budget Request, Overview," slide 11.

174 Information provided by Headquarters, U.S. Air Force, A8XC/A5RW, in response to author's request for information on May 24, 2023.

175 In FY 2025, WSS was funded at $18.8B, which was 87 percent of what was required to support the flying hour program. The service should increase O&M funding for WSS by 13 percent ($2.81B) in FY 2026, by 23 percent ($5B) in FY 2027 to $23.77B, and by a total of 43 percent ($9.7B) in FY 2028 to $28.5B to support 100 percent of increased flying hours in those respective years. Jones and Greiner, "U.S. Air Force, Fiscal Year 2025 Budget Request, Overview," slide 11.

176 "China's Air Force Surges J-20 Stealth Fighter Acquisitions to 120+ Annually: USAF Receiving Just 48 F-35s," *Military Watch Magazine*, July 20, 2023; and SAF, *Department of Defense Fiscal Year (FY) 2025 Budget Estimates: Air Force Justification Book,* Volume 1 of 2, *Aircraft Procurement, Air Force* (Washington, DC: DOD, March 2024), p. volume 1-9.

177 Stephen Losey, "Air Force Secretary: 'We are a service that is too small'," *Air Force Times*, September 17, 2017.

178 Today's "Inspection System of the Department of the Air Force" is essentially run by units (wings) who design their Commanders Inspection Program (CCIP) based on guidance from their major commands (MAJCOMs). Wings then run "self-inspections" to determine compliance. Exercise planners must consider command guidance and utilize appropriate scope, scale, rigor, relevance, recurrence, and reporting (S2R4) when developing combat readiness exercise (CRE) scenarios. This means that the number of aircraft and aircrews tasked to participate may be reduced to the point where only a fraction of the squadron/wing assets are tasked/evaluated. However, the CCIP should also include CREs for mission essential tasks. The CCIP program is evaluated through a "capstone visit," conducted by MAJCOMs. These inspections may be done remotely, and wing inspection teams determine how frequently and what areas will be examined or inspected. "The responsibility for detecting blind-spots and non-compliance rests with commanders and supervisors at every level of the organization." The wing inspector general is the commander's representative for the administration of the CCIP, and "may use any appropriate inspection method available to meet command intent and comply with this instruction." The CCIP will inspect each subordinate unit at least once during the UEI cycle (24–36 months). "An effective USAP depends on airmen/guardians accurately reporting the status of compliance with directives, and on commanders using that information to determine whether they can comply or if they should accept risk in coordination with the tiered waiver authority assigned." SAF, "Department of the Air Force Instruction 90-302: Special Management: The Inspection System of the Department of the Air Force," pp. 26, 27, 30, 40, and 53.

179 John T. Correll, "Arc Light," *Air Force Magazine*, January 1, 2009.

180 Michael Marrow and Theresa Hitchens, "Air Force launches reorganization, as Kendall warns 'We are out of time' to match China," *Breaking Defense*, February 12, 2024, February 12, 2024,

181 Hearing before the Senate Armed Services Committee to consider the nomination of Dr. Troy E. Meink to be Secretary of the Air Force, March 27, 2025. Video available.

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