

Toward Strategic Nuclear Funding: The USSOCOM Model

Lt Col Geoffrey M. Steeves, USAF

Abstract

Though the nuclear mission “shapes” the strategic landscape in ways that are less obviously utilitarian, it remains necessary for US security and global leadership. Today the nuclear enterprise is in a situation similar to that of special operations in the 1980s—at risk of being unable to fulfill its mission. A root cause that currently challenges the nuclear mission is a reliance on the services for funding. The services tend to prioritize funding the more pressing and far more utilized conventional mission over strategic requirements. This bias contributes to underinvestment in the nuclear mission. As the United States struggles to improve its nuclear preparedness, granting the nuclear mission its own congressional funding line could restore capabilities and readiness to this strategic mission. A new funding mechanism could also reinvigorate and advance the strategic mission of nuclear deterrence.



Since their conception, nuclear weapons have been a critically important part of US national security. Their sheer power and potential for widespread devastation demand the world’s highest levels of respect and caution. However, despite nuclear weapons’ incredible destructive capability, their relative importance and commensurate levels of funding have varied greatly along with the geostrategic landscape. Throughout the Cold War (1947–91), the relative importance of the nuclear mission helped it maintain its status as the ultimate guarantor of national security.

Lt Col Geoffrey M. Steeves is director of operations for the 13th Bomb Squadron at Whiteman AFB, Missouri. Previously, he served as deputy division chief, J5 Policy, United States Forces Korea. He holds a master’s degree in economics from the University of Colorado and earned a doctorate in economics from the Federal University of Santa Catarina while studying as an Olmsted Scholar in Brazil. The author gratefully acknowledges the contributions of CDR Kim Smith, USN; MAJ Brian Darnell, USA; and LCDR Matthew Hopkins, USN, for their contributions to the original version of this work prepared during the Joint Forces Staff College.

After the dissolution of the Soviet Union in 1991, the world seemed to breathe a collective sigh of relief, allowing the specter of mutually assured destruction to somewhat fade from its collective consciousness. The relative importance of nuclear weapons continued to wane in the twenty-first century, when the global war on terrorism forced the United States to become more focused on employing conventional forces. This caused the nuclear mission to reach a relative low point regarding funding, credibility, and readiness. In recent years, a resurgent Russia, a nuclear-armed North Korea, an aspiring Iran, and the potential for regionalized nuclear arms races in the Middle East and Northeast Asia all have increased the relative importance of the nuclear mission.

However, contemporary nuclear forces, much like special operations in the 1980s, are in a degraded state and have a compromised ability to accomplish their strategic mission. Unfortunately, the price to simultaneously rebuild all three legs of the triad, nearly from scratch, is daunting.¹ But given that this mission underpins national security, failure to maintain a credible deterrent is not optional. As former US Strategic Command (USSTRATCOM) Commander Adm Cecil Haney stated, “Maintaining and modernizing the nation’s nuclear triad isn’t debatable even in times of tight budgets.”² And while maintaining a survivable capability to respond with at least one leg of the triad is certainly important, this article treats the overall neglect of nuclear forces rather than survivability. With this in mind, to reverse the effects of decades of underinvestment requires not only a realistic assessment of the mission’s current state but also a deliberate plan to return it to sound footing—regardless the force posture. One area deserving assessment is the current funding mechanism that, for decades, failed to sustain and modernize the nuclear mission. Given the services’ previous track record and the likely continued pressure to modernize the conventional capabilities, it is unrealistic to expect they would reliably fund the critical nuclear mission into the future.

Furthermore, geopolitical shifts coupled with a series of mishaps that exposed the precarious state of the nuclear mission forced the nation to assess the health of America’s nuclear enterprise and garner support for reform and modernization efforts. National leaders have placed a renewed emphasis on the nuclear mission and have begun efforts to improve its trajectory. One positive step toward revitalizing the nuclear triad (strategic bombers, intercontinental ballistic missiles, and submarine-launched

ballistic missiles) was former Secretary of Defense Ashton Carter's acknowledgment that the nuclear deterrent forms the "bedrock of U.S. defense strategy," citing it as the "highest priority mission" and pledging to lead efforts to invest, innovate, and rebuild the nation's nuclear mission.³ This renewed emphasis is also reflected in some of the fundamental documents that underpin national security, such as the president's *National Security Strategy*, the Pentagon's 2014 *Quadrennial Defense Review (QDR)*, and the chairman of the Joint Chiefs of Staff's *National Military Strategy*.⁴ All of these documents outline the critical role that the nuclear mission plays in the national security of the United States. In the case of the *QDR*, the nuclear deterrent was prioritized ahead of homeland defense as the nation's most important mission. The results of these assessments brought to light that decades of underinvestment and prioritization of other missions left the nuclear mission in a degraded state of preparedness. Revitalizing it will require significant measures.

Fundamental to restoring credibility of the nuclear mission is ensuring appropriate funding. The Pentagon recognized that the current funding construct, which in recent decades failed to adequately resource the nuclear enterprise, is likely ill-suited to fund this mission appropriately going forward. One concept presented to overcome this challenge is the development of a separate Department of Defense (DOD)–wide national nuclear modernization fund. Ostensibly, this fund would pay the expenses required to upgrade all three legs of the outdated nuclear triad by the mid-2020s.⁵ As the nation grapples with how to maintain a viable nuclear deterrent, it should implement a funding mechanism similar to that of US Special Operations Command (USSOCOM), which bypasses the services. In years past, the services neglected funding for the special operations mission with disastrous results. Similarly, since the Cold War, the services have revealed a preference for conventional programs at the expense of the nuclear mission. The result of these funding priorities is an outdated nuclear capability that requires a comprehensive overhaul in nearly all aspects. Given the massive costs associated with these upgrades, both the Air Force and Navy have expressed interest in unburdening their respective services from funding the expensive modernization initiatives. The Navy has already embraced a National Sea-Based Deterrence Fund to garner necessary funding for modernizing its submarines. Creating a service-specific fund to rectify

resourcing shortfalls prompted the Air Force to request equal treatment for its legs of the triad.⁶

As military officials and lawmakers assess how to appropriately fund the nuclear mission, especially after a decades-long funding hiatus leading to all the bills coming due at the same time, they should consider lessons learned from the Special Operations Command mechanism. Creating a new funding mechanism in which Congress awards USSTRATCOM its own congressional funding line for the nuclear mission could greatly advance the US nuclear deterrent in several ways.⁷ Adopting this USSOCOM-style funding mechanism could increase the likelihood of being adequately funded in times of volatility and limited resources, demand greater accountability from both military and national leaders for this important mission, improve strategic messaging for renewed importance of the nuclear mission, and create a more unified and coherent nuclear enterprise that is less prone to interservice rivalry—one better positioned to synchronize procurement requirements with the nuclear posture and mission.

Service Priorities and the Decline of the Nuclear Mission

The current state of the nuclear enterprise is a result of decades of prioritizing other mission sets at the expense of the nuclear mission. The evidence of this neglect is reflected in the degraded state of equipment, outdated delivery systems, and a lack of professionalism and readiness of the service members trusted to employ nuclear weapons. Instead of funding the nuclear mission, resources were diverted to support conventional forces. In the wake of the June 2014 report issued by retired Air Force Gen Larry D. Welch and Navy Adm John C. Harvey Jr.'s Nuclear Deterrent Enterprise Review Groups, then-Secretary of Defense Chuck Hagel cited insufficient resourcing as a root cause for the nuclear mission's decline, acknowledging, "A consistent lack of investment and support for our nuclear forces—over far too many years—has left us with too little margin to cope with mounting stresses. The reviews [the independent and internal Nuclear Enterprise Reviews] found evidence of systemic problems that, if not addressed, could undermine the safety, security and effectiveness of the elements of the force in the future."⁸

One of the most poignant examples highlighting inadequate resourcing and a lack of preparedness relates to the ground-based portion of the triad. The intercontinental ballistic missile (ICBM) system of record,

the LGM-30G Minuteman III, dates to the 1960s and has arrived at the end of its service life. The combination of advanced age and consistent underfunding for the past 20 years has left this mission in a precarious state. Blast doors in missile silos failed to seal shut. Critical certified tools required to perform maintenance on nuclear warheads were in short supply.⁹ Launch control centers faced repeated sustainment challenges, leaving equipment broken for months or years.¹⁰ The helicopter fleet—the UH-1N Huey—charged with protecting these nuclear assets and transporting key personnel is among the oldest in the Air Force’s inventory. The inability of these helicopters to fully accomplish their mission has long put the ground-based leg of the triad at risk.¹¹ These challenges represent a subset of numerous other challenges facing ICBMs. Yet, the most daunting and expensive task required to put the ground-based leg of the triad back on sound footing remains to be done: upgrading the missiles themselves or replacing them with the ground-based strategic deterrent (GBSD).

The sea-based leg of the triad also symbolizes years of the Navy prioritizing other mission sets at the nuclear mission’s expense. Like the ICBMs, the nuclear-equipped, Ohio-class ballistic missile submarines have also reached an advanced age and require upgrades or replacements. Budgeting and planning uncertainties have left the program to develop and field a replacement submarine (SSBN[X]) behind schedule, forcing the Navy to extend these craft beyond their planned 30-year service life. And while these submarines will be overhauled concurrently with the development and fielding of a replacement, projections suggest the Navy’s stock of nuclear-equipped submarines—either Ohio-class or its replacement—will drop to 10 or 11 between 2029 and 2040. These numbers are below the 12 required to keep sufficient numbers on nuclear deterrence patrols.¹²

The air-based leg, currently composed of nuclear-capable B-52 and B-2 bombers, has generally fared better than its triad counterparts. The B-21 long-range strike bomber (LRS-B) has benefited from an accelerated funding and development timeline and is slated to enter service by the mid-2020s.¹³ This new bomber will replace the venerable B-52 bomber, whose maiden flight occurred in the early 1950s. Yet despite the B-52’s advanced age, the airframe stayed relevant and capable over the past 60 years through routine and consistent upgrades. A key difference that explains the extra attention bombers received relative to their ground

and sea counterparts is that they have long maintained a conventional mission. In other words, dual-capable aircraft, such as B-52s, B-2s, and certain fighters, which are capable of delivering both nuclear and conventional weapons, benefited from the Air Force's need to execute the conventional mission in the post-Cold War environment. In contrast, funding for the Air Force's ICBMs, which always fulfilled a strictly nuclear mission, fell by the wayside.

The current degraded state of the nuclear enterprise is evidence that the funding mechanism in place since the Cold War, which allowed the services wide discretion to determine priorities, failed to sustain the nuclear mission. This is not to say the services did not face other challenges during these years. Since the fall of the Soviet Union, the United States has been in a state of near perpetual conflict, mostly conventional in nature. From the first Gulf War, to the Balkans, Afghanistan, Operation Iraqi Freedom, and now Syria and the Islamic State of Iraq and the Levant, the services have been compelled, time and again, to address these pressing conventional threats. Underfunding of the strategic nuclear mission was not likely a deliberate decision but rather a byproduct of the services reacting to the nearest threat to fund conflicts. In other words, investment in the nuclear mission was crowded out by the near-term conventional threats.

Moreover, the services' revealed preference to fund conventional over nuclear is consistent with observed behavior patterns studied in the social sciences. Numerous studies demonstrate that agents consistently exhibit a bias that favors near-term gratification rather than waiting for larger payoff in the future.¹⁴ When framed in the context of the post-Cold War environment, the services' myopic bias to fund the pressing conventional mission at the expense of longer-term strategic nuclear deterrence is understandable. Terrorism, not nuclear holocaust, was forefront in the minds of the military and society. America's children no longer hunkered under their desks to practice "duck and cover" drills in preparation for an inbound nuclear strike. Instead, the focus was squarely on terrorism, and schoolchildren now train to safeguard themselves against the more tangible terrorism threats, such as active shooters. Lawmakers and military leaders, along with the rest of the United States, became accustomed to onerous screening at airports and the sight of gas masks at subway stations. These ever-present symbols remind Americans of their conventional conflicts, making them feel safe and justifying expen-

ditures on the conventional mission. On the other hand, the bombers, ICBMs, and nuclear submarines of the nuclear triad failed to be as ubiquitous. And despite the ICBM force maintaining nonstop nuclear alert operations throughout this period, the nuclear mission was out of sight and out of mind for the American public and its military.

The context of the post-Cold War environment explains—but does not justify—the military's spending priorities in these years. During this period, America's strategic nuclear deterrent still underpinned national security. Despite the overarching importance of the nuclear mission, though, preparedness devolved into its current degraded state, such that the United States must develop a strategy to rebuild its nuclear triad nearly from scratch. In this sense, the services' discounting the readiness of their most important strategic mission can be thought of as a system failure. And when systems fail to produce optimal outcomes, positive and deliberate interventions are often required. To overcome the inadequacies of the current funding mechanism, the USSOCOM model provides lessons on how deliberate intervention can ensure viability of certain strategic missions.

Lessons from the USSOCOM Model

In the 1980s, as special operations struggled to achieve its mission, Congress identified the services' inability to appropriately prioritize and fund this mission as causal. In response Congress awarded the newly created US Special Operations Command its own checkbook, with funds appropriated directly by Congress rather than through the services. This change formed the foundation that enabled special operations to obtain the consistent resourcing required to reestablish credibility and return this mission to sound footing. Today's nuclear mission finds itself at a crossroads similar to that of US special operations forces decades ago. When special operations forces remained distributed across all services and exclusively dependent on the services for funding, readiness suffered. Structural reforms were necessary to reinvigorate the special operations mission and ensure it remained prepared to accomplish its strategic mission. Some of the lessons learned from this period may provide insights to help the nuclear mission again achieve a high state of readiness.

USSOCOM was created in the 1980s, a decade removed from the conflict in Vietnam, during a period with little focus or enthusiasm for nontraditional forms of warfare. In this environment, when the Soviet

Union was still the major threat, other missions were viewed as a higher priority than developing the more nuanced capabilities of special operations. As such, the services incrementally minimized expenditures on this mission. The Air Force's AC-130 gunships transitioned to reserve status and were removed from the Air Force budget after 1979. The MC-130 Combat Talon, which provides infiltration, exfiltration, and resupply of special operations forces, no longer received updates or modifications. The Navy followed suit, decommissioning its only special operations-capable submarine. Overall, the services left special operations in a precarious state of readiness.¹⁵

In April 1980, when the US military launched a failed operation to rescue American hostages held in the US embassy in Iran, the weakness of special operations was brought to light. This joint operation, named Operation Eagle Claw, was supported by assets from every branch of service. The services' collective budget cuts from this mission left operators ill-prepared and without the specialized transportation and equipment needed to successfully conduct this operation. In addition to failing to rescue the hostages, eight Americans died during the mission.¹⁶

In response to Operation Eagle Claw, Adm James L. Holloway Jr., a retired former chief of naval operations, led an investigation to analyze the causes of failure. Holloway's report cited mission planning, command and control, and joint interoperability challenges as causal. He further assessed that if this operation had been launched against a more experienced and better-equipped adversary, the outcome would have been even worse.¹⁷ Holloway's findings did not go unnoticed on Capitol Hill, and the report proved a catalyst for DOD reform, eventually leading to the Goldwater-Nichols Act that, among several changes, mandated a higher degree of cooperation between the services.

Despite Goldwater-Nichols, Sen. Sam Nunn (D-GA), Sen. William Cohen (R-ME), and Rep. Dan Daniel (D-VA) remained unconvinced that the military would take the additional necessary measures required to adequately reform special operations and took it upon themselves to lead further reforms. In May 1986, the senators introduced the Nunn-Cohen Act, which called for a special operations forces (SOF) joint military organization with a designated special funding line and budget authority under major force program 11 (MFP-11). Then-Pres. Ronald Reagan approved the establishment of the new command and activated USSOCOM on 16 April 1987.¹⁸

MFP-11 was designed “to provide the incremental funding necessary for Special Operations Forces’ unique capabilities and items, rather than to supplement or supplant activities that are or should be provided by the military services.”¹⁹ USSOCOM’s budget covers specific SOF related items such as uniforms, specialized training, and equipment (to include air, land, and sea platforms). The DOD budget for the regular forces covers all non-SOF related services and equipment, even those services and equipment that are occasionally used by SOF. Ultimately, USSOCOM’s funding line allowed this new functional combatant command to achieve operational readiness un beholden to the services and to form the foundation for today’s force, capable and adequately prepared for future threats.

Operation Eagle Claw’s failure highlighted the importance of SOF and that conventional forces are not always sufficient to conduct specialized, strategic missions in denied areas. Nunn, Cohen, and Daniel recognized that the services’ decision-making bias toward near-term requirements jeopardized SOF’s long-run sustainability and took action to ensure this mission became adequately trained, integrated, and funded.

As with SOF in the 1980s, today’s nuclear mission finds itself in a similar position where the services’ focus on the near-term conventional mission crowded out alternative strategic missions. Already, the deficiencies found within the nuclear mission have caused many to rethink the compatibility of the current funding mechanism with revitalization efforts.²⁰ In today’s current funding mechanism, where the services have wide discretion to establish their funding priorities, the nuclear mission continues to risk losing out to the conventional mission in times of scarce budgets. With that in mind, creating a system that recognizes the nuclear deterrent as the true bedrock of national security may require a new generation of clairvoyant senators and congressmen to step forward and ensure the nuclear mission is funded appropriately.

A New Funding Mechanism: USSTRATCOM

Presently, the Department of Energy (DOE) and the services jointly fund the nuclear enterprise with the Air Force and Navy completely funding their respective legs of the triad. The Air Force assumes all the costs of the ICBMs and aircraft-delivered bombs and missile bodies, as well as all of the costs associated with fielding the B-21 (LRS-B). Likewise, the Navy assumes responsibility for funding the SLBM body and

100 percent of the acquisition fees associated with the Navy Ohio Class Replacement Submarine (SSBN[X]). This status quo funding model continues to require that the services consider tradeoffs between funding nuclear or conventional forces. In recent decades, for example, the Navy has consistently chosen to fund aircraft carriers rather than new nuclear weapon–equipped submarines, and the Air Force seemed to devote funds to a wide spectrum of conventional capabilities at the expense of its ICBMs. Given the services' revealed preference for funding conventional capabilities, under the present funding mechanism, there is increased risk that research and development (R&D) for nuclear assets will continue to be underfunded.

An alternative to the current funding mechanism for the nuclear mission is to use USSTRATCOM as the primary vehicle to fund the nuclear mission. Similar to special operations that used USSOCOM as its funding vehicle, the nuclear mission would likewise be funded by USSTRATCOM, directly from Congress. This change would relieve the services of budgetary oversight for the nuclear triad. Furthermore, consolidating funding under USSTRATCOM would improve unification within the nuclear enterprise and mitigate interservice funding rivalry generated by service-specific initiatives such as the National Sea-Based Deterrence Fund.²¹ USSTRATCOM, like USSOCOM, is a functional combatant command, which maintains the responsibility for executing strategic missions throughout the world. In many ways, the uniqueness of USSOCOM as a functional combatant command underpins the rationale for adopting a similar funding framework for USSTRATCOM.²² A failure to adequately fund these missions, which the geographic combatant commands have no organic capabilities to accomplish by themselves, generates global strategic risk. The following three funding options offer varying degrees of service oversight in funding the nuclear mission. In each case, the DOE would fund the nuclear warheads associated with Air Force ICBMs, Navy SLBMs, and aircraft-launched nuclear weapons.

The first funding option is an absolute model, in which USSTRATCOM's nuclear mission is fully funded by Congress to develop and maintain the entire nuclear triad. Under this option, USSTRATCOM would fund R&D, procurement, and maintenance costs for each air-delivered weapon and weapon system over its entire lifecycle. This option would include current and projected costs for SSBN(X), LRS-B, the proposed GBSD, and future

modernization of any nuclear-related system. Once the SSBN(X), LRS-B, and GBSD are delivered to the military, USSTRATCOM will continue to fund the maintenance and operational costs of these assets until they are retired from service or assigned a conventional-only mission. This option requires the greatest financial commitment to USSTRATCOM while providing the best strategic messaging regarding the nuclear triad. USSTRATCOM funds and maintains control of all three legs of the nuclear triad, while the Air Force and Navy are required to train service members. This option permits the conventional military to operate without diverting funding from established conventional programs.

The second option available to the government is the handoff model. Under this proposal, USSTRATCOM funds R&D, procurement, and modernization costs for all current and planned nuclear weapons systems as above. However, the individual services would fund maintenance on the nuclear triad and train all personnel in employment. The handoff option offers the advantage of proactive funding for the bulk of the nuclear mission outside most of the service budget competition. It represents a modest risk approach since the only service component funding requirement is training and maintenance.

The third alternative is a hybrid model. Under this plan, USSTRATCOM and the services would split the costs of R&D and procurement for the nuclear triad systems. However, once a system reached initial operational capability (IOC), the services assume the financial responsibility to maintain the system, modernize it, and train personnel until the assets are removed from service. The hybrid model allows the services to share the financial burden associated with fielding a new weapon system. However, because the R&D and acquisition are paid by both the services and USSTRATCOM, the Air Force and Navy would most likely have to cut funding to conventional programs to help fund nuclear acquisitions. By diverting funds from established and forecasted conventional programs, the services must assume additional risk in those areas until the SSBN(X), LRS-B, and GBSD have completed R&D.

The hybrid model represents the option with the least departure from the status quo funding model and thus represents the greatest risk to future sustainment efforts as it still allows services discretion to prioritize other missions over nuclear. Therefore, adopting either the absolute or hand-off option, which allows for funding and sustainment of the nuclear mission at least through IOC, may represent the best choice for funding

the nuclear mission. However, any of these options would require congressional support to change Title 10 of the US Code. While amending the US Code is difficult, it may be necessary to improve the nuclear deterrent.

Conclusion

As the nation considers how, or if, to implement a special nuclear fund, the USSOCOM model provides a useful template for consideration. Adopting a similar model to fund the nuclear mission could rejuvenate the nuclear mission by offering four clear benefits. First, utilizing USSTRATCOM as the vehicle to finance the nuclear mission improves the likelihood that it will remain funded, even in times of volatility and limited resources. Funding the nuclear mission as the default position, as opposed to requiring agents to opt-in, represents a powerful change to increase the probability it would receive adequate resourcing.²³ If lawmakers were required to take deliberate actions to divert funding from the sustainment and modernization efforts in the nuclear mission, they would be less inclined to do so. Furthermore, in this proposed construct the Navy and Air Force would no longer directly have to internally debate difficult funding decisions between competing conventional and nuclear missions. For example, the Navy would be spared a difficult decision to fund nuclear missile-capable submarines at the expense of aircraft carriers.

Second, this proposed funding mechanism shifts more of the accountability for this mission from the military to the national leaders, who, ultimately, should share greater responsibility for ensuring the viability and credibility of the strategic nuclear deterrent. Nonetheless, this change does not guarantee future funding for the nuclear mission as it would remain possible for Congress to under-resource it. However, holding lawmakers directly accountable for sustaining the mission may make them think twice before doing so. As the stewards trusted to execute the mission, the military would still maintain a crucial role to ensure readiness. However, by transferring resourcing decisions to Congress, the services would be somewhat relieved of the responsibility to ensure this unique and critical mission remained appropriately funded. In this sense, this change would more closely align the responsibility for this crucial mission at a more appropriate national and strategic level. Ultimately, national leaders, not the

services, would be held more accountable to citizens and the military for ensuring a viable deterrent.

A third advantage of this proposal is strategic messaging. Changing the funding process signals to American citizens, allies, and enemies the reemergence and preeminence of this strategic mission. In other words, it demonstrates that the nuclear deterrent actually does form the bed-rock of US national security. America and its allies that depend on the US nuclear deterrent will correctly interpret that the nuclear mission has garnered the attention of the highest levels of government. Likewise, enemies that may have begun to question the health of America's nuclear force will construe that the nuclear mission has returned to become the top strategic priority.

The fourth benefit of funding the nuclear mission through USSTRATCOM is that this change would bring more structure and coherence to the nuclear enterprise. General Welch's and Admiral Harvey's 2014 Independent Review of the Department of Defense Nuclear Enterprise found little evidence of unity within the nuclear enterprise despite the office of the secretary of defense and the services referring to it as if it were a "coherent, integrated structure."²⁴ Funding the nuclear mission under one umbrella, rather than being dispersed across services, could help address this issue to simplify and consolidate the nuclear triad currently described as a "loose federation of separate nuclear activities."²⁵ A single broker, with a broader scope of responsibility for funding the nuclear mission, would be better equipped to match resourcing and procurement requirements with nuclear strategy, posture, and mission.

Overall, lessons learned from special operations provide a useful framework on how to restore credibility and improve readiness in today's nuclear mission. However, as the United States searches for ways to address these challenges it must bear in mind a key difference between today's degraded nuclear mission and the circumstances that led to the creation of a separately funded functional combatant command for special operations. In the 1980s, the services and the nation had the luxury to learn from its mistakes in Operation Eagle Claw and implement sensible and meaningful reforms. Unfortunately, given the incredibly high stakes associated with the nuclear mission, there is no margin for error. Conducting an after-action report for failed nuclear deterrence is not the answer. **SSQ**

Notes

1. Kingston Reif, "Executive Summary," U.S. Nuclear Modernization Programs, Arms Control Association, under "Fact Sheets and Briefs," December 2015, <https://www.armscontrol.org/factsheets/USNuclearModernization>. The Department of Energy is responsible for the funding of nuclear warheads; the military is responsible for funding everything else for the nuclear triad.

2. John Grady, "U.S. USSTRATCOM Commander Haney Defends U.S. Nuclear Triad," *UNSI News*, 22 January 2016, <https://news.usni.org/2016/01/22/u-s-stratcom-commander-haney-defends-u-s-nuclear-triad>.

3. Jim Garamone, "Carter: DoD Will Rebuild, Sustain its Nuclear Deterrence Enterprise," *Defense.gov*, 26 September 2016, <http://www.defense.gov/News/Article/Article/956050/carter-dod-will-rebuild-sustain-its-nuclear-deterrence-enterprise>.

4. Pres. Barack Obama, *National Security Strategy* 2015 (Washington, DC: Office of the President, 6 February 2015), <http://nssarchive.us/national-security-strategy-2015/>; Obama, *National Security Strategy* 2010 (Washington, DC: Office of the President, 27 May 2010), <http://nssarchive.us/national-security-strategy-2010/>; Department of Defense, *Quadrennial Defense Review* 2014 (Washington, DC: Office of the Secretary of Defense, 4 March 2014), <https://www.defense.gov/News/Special-Reports/QDR>; and Michael G. Mullen, *The National Military Strategy of the United States of America 2011: Redefining America's Military Leadership* (Washington, DC: Joint Chiefs of Staff, 8 February 2011), <http://books.google.com/books?id=n035gVcjYawC>.

5. Aaron Mehta, "Carter Open to DoD-wide Nuclear Weapons Fund," *Defense News*, 18 March 2016, <http://www.defensenews.com/story/defense/policy-budget/budget/2016/03/18/carter-open-department-wide-nuclear-weapons-fund/81972126/>.

6. Ibid.

7. The proposal here deliberately excludes separate funding for the space or cyber mission within US Strategic Command (USSTRATCOM). Only USSTRATCOM's nuclear mission would be granted its own funding line, while the space and cyber missions would continue with their current funding mechanisms.

8. Secretary of Defense Chuck Hagel, "Nuclear Enterprise Review and Reforms" (statement, Pentagon Press Briefing Room, Washington, DC, 14 November 2014), <http://www.defense.gov/News/Speeches/Speech-View/Article/606634/statement-on-the-nuclear-enterprise-review-reforms>.

9. David E. Sanger and William J. Broad, "Pentagon Studies Reveal Major Nuclear Problems," *New York Times*, 13 November 2014, http://www.nytimes.com/2014/11/14/us/politics/pentagon-studies-reveal-major-nuclear-problems.html?_r=0.

10. John C. Harvey Jr. and Larry D. Welch, "Independent Review of the Department of Defense Nuclear Enterprise," 2 June 2014, <http://archive.defense.gov/pubs/Independent-Nuclear-Enterprise-Review-Report-30-June-2014.pdf>.

11. Marina Malenic, "USAF Issues RFI for Huey Replacement," *IHS Jane's Defence Weekly*, 16 September 2016, <http://www.janes.com/article/63879/usaf-issues-rfi-for-huey-replacement>.

12. Erik Slavin, "Nuclear Missile Submarine Deploys as US Mulls Future of Replacement," *Stars and Stripes*, 16 March 2016, <http://www.military.com/daily-news/2016/03/16/nuclear-missile-submarine-deploys-as-us-mulls-future-replacement.html>.

13. Dave Majumdar, "Beyond the Ohio-Class: Inside America's Next-Generation Missile Submarine," *National Interest*, 19 May 2016, <http://nationalinterest.org/feature/beyond-the-ohio-class-inside-americas-next-generation-16270>.
14. See Ted O'Donoghue and Matthew Rabin, "Doing It Now or Later," *The American Economic Review* 89, no. 1 (March 1999): 103, <http://www.jstor.org/stable/116981>; and J. T. Warner and Saul Pleeter, "The Personal Discount Rate: Evidence from Military Downsizing Programs," *The American Economic Review* 91, no. 1 (March 2001): 32–33, <http://www.jstor.org/stable/2677897>.
15. William G. Boykin, "Special Operations and Low Intensity Conflict Legislation: Why Was it Passed and Have the Voids Been Filled?" (individual study project, US Army War College, 12 April 1991), 5, accessed 28 March 2017, <http://www.dtic.mil/dtic/tr/fulltext/u2/a235154.pdf>.
16. Ibid.
17. Dwight John Zimmerman, "From WW II to Nunn-Cohen," Defense Media Network, 25 August 2010, <http://www.defensemedianetwork.com/stories/from-world-war-ii-to-nunn-cohen-socom-history-part-1/>.
18. Boykin, "Special Operations and Low Intensity Conflict Legislation," 29–30, 33, 36.
19. Andrew Feickert, "U.S. Special Operations Forces (SOF): Background and Issues for Congress," Congressional Research Service, 18 September 2013, 14, accessed 28 March 2017, www.dtic.mil/get-tr-doc/pdf?AD=ADA587142.
20. Mackenzie Eaglen, "Funding America's Nuclear Triad," *National Interest*, 13 May 2015, <http://nationalinterest.org/feature/funding-americas-nuclear-triad-12872>.
21. Megan Eckstein, "Congress Saves Ohio-Replacement Sub Fund for Second Time in 2 Months," USNI News, 11 June 2015, <https://news.usni.org/2015/06/11/congress-saves-ohio-replacement-sub-fund-for-second-time-in-2-months>. The National Sea-Based Deterrence Fund, which is modeled on the National Defense Sealift Fund, creates a special fund for the ballistic missile submarine replacement program. However, since this fund is tied directly to the nuclear mission, it encourages the Air Force to request equal treatment for its legs of the triad. Placing funding responsibilities within USSTRATCOM would encourage funding for all legs of the triad to be synchronized with national strategy, irrespective of the service.
22. Even though USSOCOM has a much smaller budget relative to the nuclear mission and USSTRATCOM, budget size does not underpin the rationale for a separate funding mechanism. Special operations and the nuclear mission are both strategic in nature and may require unique treatment to ensure funding exists for these important missions to remain capable and credible.
23. See Daniel Kahneman, *Thinking, Fast and Slow* (New York: Farrar, Straus, and Giroux, 2011), 14; and R. H. Taylor and C. R. Sunstein, *Nudge: Improving Decisions about Health, Wealth, and Happiness* (New York: Penguin Books, 2009), 34, 112.
24. Harvey and Welch, "Independent Review." 5–6.
25. Ibid., 6, 18.

Disclaimer

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