Getting to Less?

The Innovation Superiority Strategy

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THE ISSUE
This is the second CSIS Brief in a series called Getting to Less, which explores different philosophies and motivations that could lead to a decreased emphasis on U.S. defense ends, ways, or means. In this brief, the authors discuss a strategy they have labeled the Innovation Superiority Strategy. The strategy is guided by a focus on achieving enduring American military advantage in the U.S.-China security competition. In orienting Department of Defense investments toward this goal, the strategy bets big on innovation efforts to create a favorable balance of power in the Indo-Pacific and beyond. The authors explore likely changes that such a strategy might entail. The brief concludes by exploring the risks and opportunities associated with the Innovation Superiority Strategy.

INTRODUCTION
“History shows that the U.S. Joint Force has ... a demonstrated ability to question the status quo, to take risks and experiment, and adopt new technologically enabled operational concepts that confound its opponents. If it hopes to upset the Chinese offset, it will need to do so again.”

Many modern American defense thinkers have focused on how military innovation, especially technological innovation, can create a more effective force. Although there are a wide range of perspectives on how best to achieve this, there is a particularly rich history of seeing such innovation as a means of maintaining relatively robust national security objectives while seeking to significantly shift the ways and reduce the costs of U.S. military contributions to those objectives.

The following Innovation Superiority Strategy is an example of such an approach. The strategy focuses U.S. defense efforts on the Indo-Pacific region. It seeks to maintain global military superiority, while hedging that it cannot, by relying on a reduced operational tempo, new operational concepts, and technological advantages substituting for current force structure. The strategy can thus be thought of as an extension of, and narrowing around, some key themes in the Trump administration’s National Defense Strategy (NDS).3

PRINCIPLES AND ASSUMPTIONS
The goals of the Innovation Superiority Strategy include protecting the U.S. homeland and ensuring that a democratic form of government continues to flourish in the United States. It also aims to ensure a peaceful world abroad, which further secures the United States and contributes to increased American prosperity.4

The Innovation Superiority Strategy is guided by the assumption that U.S. global primacy is declining and unlikely to return. This geopolitical shift is worrisome for the strategy’s adherents, as the threat environment...
is daunting. Innovation Superiority Strategy proponents worry especially about the hostile aspirations and capabilities of China. Strategists aspire to focus U.S. national security around vital economic and security interests, and they view cooperation with like-minded nations as essential. Non-military tools of influence will be the most commonly used in this strategy. Use of military force is largely reserved for deterring China and Russia and assuring allies and partners concerned about these potential regional hegemons. The Innovation Superiority Strategy finds that the most effective way for the U.S. military to support these ends is to ensure military superiority over competing powers, advanced in part by improving the design of U.S. forces and capabilities while also reducing existing military commitments, especially outside of Asia.

The region of greatest interest in this strategy is the Indo-Pacific, while Europe is an important but secondary theater. The Innovation Superiority Strategy seeks to secure and maintain a positive U.S. balance of power in both of these regions. Accordingly, the United States continues to rebalance its investments and attention in the Indo-Pacific theater as a counterweight to China’s rise. Defense strategists seek foremost to have the power projection capabilities to secure U.S. interests in the region and beyond. However, they are wary of the potential that such a strategy may fail, given the potential that China achieves and sustains the ability to deny the United States operating sanctuary, especially in the Indo-Pacific, space, and cyberspace. The strategy thus includes hedges to support a defense-in-depth posture to growing Chinese military power, as needed. In Europe, the United States seeks to strengthen the North Atlantic Treaty Organization (NATO), which the strategy deems as critical to balancing Russian power in the region. Proponents of the strategy nevertheless oppose adding additional members to NATO and encourage European leadership of the alliance, with the objective of reducing U.S. force commitments on the continent over time.

The Innovation Superiority Strategy seeks to restrict other U.S. military activities in order to husband resources for the capability transformation needed to balance China in Asia and Russia in Europe. Adherents view peacekeeping and stabilization operations as costly distractions from these goals. They understand that political leaders might at times turn to U.S. forces to work alongside others in preventing atrocities, such as genocide, but they hold that this will only occur when “the need is clear, the mission is feasible, and U.S. leaders are confident that intervention will not make matters worse.” Under an Innovation Superiority Strategy, the United States seeks to end, largely or in whole, its force commitments in Afghanistan and Syria and avoid any further military intervention in the greater Middle East.

**PRIMARY CONTINGENCIES AND MISSIONS**

The sizing and shaping of U.S. forces for the Innovation Superiority Strategy is mostly driven by the need to be ready for the following most stressing combination of contingencies:

- Deter and be prepared to respond to external military attacks against U.S. territory. Maintain sufficient assured second-strike nuclear capability to deter and respond to nuclear, chemical, biological, or other mass destruction attacks against the United States and to provide credible extended deterrence to treaty allies.
- In support of local forces and when treaty commitments or other U.S. vital interests are gravely at risk, be prepared to deter and, if needed, defeat over time the objectives of a significant, all-domain attack by China or Russia. The desired U.S. end state in any such conflict is an eventual shift in the local balance of power toward the United States.
- Protect U.S. forces, the Department of Defense (DoD), and, in support of the private sector’s primary responsibility, defense critical infrastructure from attack, including cyber- and space-based attacks.
- Be prepared to provide defense support to civil authorities, including for kinetic and non-kinetic attacks against non-defense critical infrastructure.

At all other times, the United States must ensure its forces are capable of undertaking the following missions:

- Contribute to foreign policy efforts aimed at preventing China and Russia from threatening the Western Hemisphere.
- Defend against terrorist attacks on U.S. forces and defense assets and provide defense support to civil authorities for counterterrorism and related missions.
- Undertake highly selective “active defense” or offensive operations to thwart growing threats, such as supporting national counterterrorism, countering weapons of mass destruction, and securing cyber and space security objectives.

**OPERATIONAL CONCEPTS**

Operationally, the Innovation Superiority Strategy prioritizes the ability to surge superior forces, prevent conflict escalation into the nuclear realm, and defend
the U.S. homeland. Conventional deterrence is critical to the strategy. It assumes adversaries will threaten the U.S. homeland early in a campaign, especially through non-kinetic means, including space and cyberspace. It also promotes increased burden sharing with select interoperable allies, including NATO member states, Australia, Japan, and the Republic of Korea (ROK, commonly referred to as South Korea). This is intended both to reduce demands on U.S. forces and to help speed response. The strategy is dependent on local forces building capabilities to uphold the regional balance of power out of their own self-interest and deal with local security challenges themselves.

For the United States, the key operational challenge is projecting power in highly contested anti-access/area denial (A2/AD) environments when local deterrence fails to re-establish a favorable balance of power. Because the goal is to deny the adversary’s objectives rather than pursue regime change, it does not assume a significant requirement for holding hostile territory. Rather, where such occupation is required, it assumes allied forces will perform the bulk of the mission. This strategy assumes that adversaries will have capabilities that threaten the survivability of many existing conventional platforms, their supply chains, the force’s logistics tail, and its networks. Given concern about lack of sanctuary, defense of the force from cyber, space, missile, directed energy, and other attacks is also critical.

The Innovation Superiority Strategy seeks some forward forces to help establish credible deterrence and assurance and enable rapid response. It prefers those forces and platforms that are survivable and seeks to invest in resiliency improvements that can increase survivability. Overall, however, the Innovation Superiority Strategy relies on forces to surge into the region and looks for asymmetric options to re-establish a balance of power over time. Conventional technology improvements that shift the cost-imposition calculus between the United States and its chief military rivals, China and Russia, are believed to hold the key to operationalizing these concepts, so achieving these improvements is a core emphasis of the strategy.

GLOBAL POSTURE

The Innovation Superiority Strategy gradually draws down forces in Europe, pressuring the growth of European capabilities. It also disengages the United States, largely or in whole, from operations in the Middle East, including Afghanistan, and substantially reduces missions focused on building partner capacity that are not deemed directly relevant tocountering Chinese and Russian high-end military capabilities. The United States maintains limited presence abroad for ongoing counterterrorism operations, with a focus on defense of U.S. assets, small-scale direct action in exceptional circumstances, and high-priority train, advise, and assist missions. The strategy’s long-term vision for European and Middle East posture resembles a limited “hub and spoke” model of U.S. naval and air forces in and around those regions.

Unlike its determination to rely on Europeans more to maintain the Russia-NATO balance, the strategy deems active U.S. leadership critical for maintaining an effective balancing coalition in Asia. China is significantly more powerful than its neighbors, and these neighbors are both geographically far from each other and do not always share similar interests. At the same time, Chinese capability improvements put many types of U.S. forces at risk. The United States thus seeks to calibrate its force presence in Asia to provide credible deterrence and assurance and to support combined capabilities improvements while improving force resiliency.

KEY FORCES AND CAPABILITIES

The Innovation Superiority Strategy’s force and capabilities choices fall into three broad categories: nuclear forces and missile defense, conventional and special operations forces, and space and cyber capabilities.

NUCLEAR FORCES AND MISSILE DEFENSE

Although the strategy is wary of Russia, it signals interest in future mutual, verifiable strategic and non-strategic arms reductions in order to achieve a smaller, less expensive force sufficient for assured second strike. However, the strategy does not place a priority on such reductions absent changes in Russian security behavior. Instead, it extends the New Start Treaty and maintains the triad of land-based intercontinental ballistic missiles, sea-based submarine-launched ballistic missiles, and bomber-based missiles at currently planned force levels. The Innovation Superiority Strategy forgoes any new non-strategic nuclear capabilities, including those proposed in the 2018 Nuclear Posture Review, preferring instead to invest in advanced conventional strike capabilities. The United States retains its extended nuclear deterrent for existing treaty allies. The strategy is mindful of Chinese nuclear capabilities and does not seek reductions that would approach parity with China.

The Innovation Superiority Strategy envisions a limited national missile defense; ground-based midcourse defense interceptors are maintained at the current level, rather than increased further as currently planned. Aegis-equipped ships are similarly reduced due to cuts in the number of...
large surface combatants (see below).

To address the continued presence of strategic ballistic missiles, the United States maintains a limited national missile defense. As a priority, it invests in the development of lower shot-cost concepts and capabilities for theater and point defense.

**CONVENTIONAL AND SPECIAL OPERATIONS FORCES**

The force structure for this strategy is designed to ensure both the offensive conventional military edge the United States and its allies have over competitors and the U.S. ability to sustain global reach, albeit with a smaller force. These forces are expected to deter and, if necessary, defeat over time a significant, all-domain attack by China or Russia in support of local, allied forces, where defeat is defined as establishing or re-establishing a favorable regional balance of power. The United States places a premium on ensuring that its military technology and personnel are the best in the world. Consequently, trade-offs are made in force size and the readiness of much of the force to allow for greater investments in modernization. Readiness is prioritized for counter-A2/AD capabilities in the Indo-Pacific theater and, to a lessening extent over time, Europe. Because the strategy shifts many early requirements and enduring ground force solutions to local forces, it promotes interoperability efforts to spur modernization and the embrace of new technologies by needed allies and partners.

To ensure the United States can both counter and employ A2/AD capabilities, the strategy emphasizes air- and maritime-delivered precision conventional strike that can be projected into and operate through a denied environment. The Air Force maintains all existing bombers in the aircraft inventory rather than eliminating the B-1B as currently planned. It also fulfills its current plans for adding B-21s to its inventory. However, it reduces both active component non-stealthy fighters due to their lack of survivability in A2/AD environments and, to a lesser extent, the planned inventory of stealthy fighters due to their short range.

The Navy’s projected FY 2030 ship count declines under this strategy, perhaps by as much as one quarter. This includes a dramatic reduction in aircraft carriers from the current baseline. The strategy similarly makes significant reductions to both large and, especially, small surface combatants. However, the planned number of submarines and unmanned systems increases. Cognizant of the need to operate through and deliver precision conventional strike in a denied environment, the number of attack submarines is increased as far as the DoD can stretch the capacity of current shipyards, and the DoD retains the current number of ballistic missile submarines. The Navy invests significantly in unmanned vessels—both surface and undersea—to enhance strike and intelligence, surveillance, and reconnaissance capabilities.

The United States maintains a modestly sized ground force that is likewise designed for A2/AD environments. In the event of a conflict abroad, local allies must provide the bulk of ground forces, close air support forces, and theater-level ground command and control. Nevertheless, the strategy hedges against the risks in a sizable reduction to U.S.-ground force capabilities by seeking to design “reversibility” levers into its reductions. These measures aim to facilitate force expansion in extremis.

Ground forces under the Innovation Superiority Strategy see a sizeable reduction relative to the DoD’s current force structure plans for FY 2030. Army Active Component Infantry Brigade Combat Teams are reduced in line with the strategy’s plan to withdraw from Afghanistan and Syria and reduce U.S. ground presence in Europe. Stryker Brigade Combat Teams are also cut, as less mobility is necessary for now-limited counterterrorism operations. The Army adds additional Active Component Field Artillery Brigades to the force and invests in long-range precision fires (non-INF compliant) to enhance current A2/AD capabilities and create mutually deniable environments. The strategy maintains the current number of Security Force Assistance Brigades rather than increasing them as currently planned, given an anticipated reduction in requirements to build partner capacity. The active component of the Marine Corps is maintained to serve as a highly capable ground force in A2/AD environments when necessary, though the corps’ strategic reserve is reduced.

Under the strategy, special operations forces are largely maintained—save for reductions in the number of Army Special Forces Battalions—to support highly selective offensive operations, such as national counterterrorism missions.

**SPACE AND CYBER CAPABILITIES**

The strategy emphasizes that the United States must lead in space superiority. As strategic rivals China and Russia increasingly prioritize dominance in space, a superior U.S. space-based capability is necessary to deter and defend against space-based threats and to more effectively prosecute military campaigns. Further, the United States must be prepared to use offensive space operations in response to attacks in space or other domains. The United States must attempt to clearly signal its red lines and interests and take the lead on efforts to establish norms in space that help manage escalation dynamics. With the exception of
wideband and narrowband communication satellites, space-based assets are increased across the board.

The United States must also achieve and maintain cyber superiority under this strategy’s philosophy, aiming to deter and defend against adversarial cyberattacks and activity. As with space-based activity, the United States should be prepared to use offensive cyber operations in response to attacks in cyber or other domains. It must attempt to clearly signal its red lines and interests and take the lead on efforts to establish norms in cyberspace that help manage escalation dynamics.

**INDUSTRIAL BASE AND INSTALLATION IMPLICATIONS**

The Innovation Superiority Strategy’s top industrial base priorities are protecting the competitiveness of the defense industrial base and the security of its supply base in order to maintain U.S. technological superiority over geopolitical competitors. While the strategy values the traditional benefits of industry competition for the taxpayer, it places greater emphasis than today on competition as a means to drive technological advancement.

Given the importance of technological development, the Innovation Superiority Strategy makes several acquisition policy changes. First, the United States trades off some of its existing production capacity and legacy platforms to prioritize the development of advanced capabilities. Second, the United States adopts acquisition policies that make it easier to access technologies from non-traditional defense vendors. Examples might include, but are not limited to, expanding the use of Other Transaction Authority agreements, increasing the simplified acquisition threshold, making greater use of middle-tier acquisition authorities, and expanding efforts like the Defense Innovation Unit and Small Business Innovative Research. These efforts are focused more squarely on key areas of competition with China and Russia. Finally, the United States expands and aggressively uses authorities and functions such as the Committee on Foreign Investment in the United States and technology controls to prevent foreign adversaries from threatening the security of U.S. supply chains.

The Innovation Superiority Strategy narrows defense trade and cooperation to a limited set of allies, with an emphasis on the development of emerging technologies and increasing allies’ self-defense capabilities. For example, the United States might seek cooperation on hypersonic weapons and artificial intelligence with countries such as Australia, Canada, and the United Kingdom. It also accepts that industry consolidation may occur in key sectors as modernization needs shift. The DoD is open to managing such consolidation where important industrial capabilities are involved. Finally, the strategy accepts the consolidation of basing inside the United States as well as abroad, retaining state national guard basing structure as a hedge for emergencies.

**ASSESSING RISKS AND OPPORTUNITIES**

The geopolitical risks to this strategy begin with its assumption that advanced Chinese military capabilities and hegemonic designs in East Asia are the challenges for which the U.S. military should be optimized. This is really a collection of assumptions, foremost about China, but also about the United States and the broader context.

First, the Innovation Superiority Strategy assumes that Chinese interests and intent could lead it to militarily challenge the United States in East Asia, particularly absent significant improvements in U.S. capability. The strategy implicitly assumes this challenge is the foremost one China could militarily pose to the United States, hence its place as the central operational challenge in the strategy. The strategy is also based on the assumption that China’s military capability growth and continued geopolitical rise are likely to be significant and essentially unabated.

Second, the strategy makes a series of assumptions about the United States and its aims. It assumes continuing U.S. interest in fulfilling security commitments in the Indo-Pacific region. It also assumes that regional allies will want to continue their alignment with the United States, at least if they perceive American military capabilities can deter Chinese adventurism. It also implicitly assumes that U.S. capabilities can pace China’s if the strategy is effectively implemented. It does hedge on several of these assumptions by creating potential off-ramp opportunities for the strategy. Even so, it takes a risk in a third set of assumptions: that more important challenges will not arise for which an almost singular U.S. focus on China and the Indo-Pacific theater could significantly sub-optimize American military readiness and capability.

If the strategy’s assumptions are correct, however, pursuing its ways and means creates a significant opportunity to focus immediately on developing the U.S. military capabilities needed in such a world. Moreover, to the extent that such a focus creates new advantages for the United States against other actors or classes of threat or aids in keeping together the alliance and coalitions the United States needs in non-military spheres, it presents cascading opportunities.
There are also political risks to the Innovation Superiority Strategy, as the history of the post-Cold War period attests. It bears some resemblance, for instance, to the direction to “rebalance to the Asia-Pacific region” in the DoD’s 2012 Defense Strategic Guidance (DSG) and the prioritization of “long-term strategic competitions” in the 2018 NDS. However, as with the DSG’s failure to launch in the face of emergent threats—notably Russia’s annexation of Crimea and ISIS’s invasion of Iraq—and the weighting down of the current NDS by continuing demands throughout the world and a slow adaptation process within the DoD, the Innovation Superiority Strategy risks being derailed. To make the strategy plausible, political leaders will need to remain committed for a decade or more to limiting military operations and shifting burdens of security to allies, partners, and the rest of the U.S. national security community. Similarly, the DoD will need to get politicians behind major changes in industrial base and acquisition policy that will create losers as well as winners. That said, if such political leadership can be garnered, the Innovation Superiority Strategy may provide the needed framework to drive defense innovation.

Challenges exist in connecting the ends of the Innovation Superiority Strategy to the military ways and means to achieve it. Its dependence on allied capability as the linchpin for common security interests in Europe and elsewhere could introduce significant risk to the strategy. Ground force reductions, and the viability of a rapid reconstitution capability, are noteworthy choices in this regard. If allied and partner capability growth is not realized, the United States may suffer direct costs to its interests or, as noted above, feel compelled to take on responsibilities and missions that undercut the viability of the strategy. This could be true even in Asia, the strategy’s theater of focus, because the strategy significantly redirects assets to the United States, relying on local allies to assist in speed of response.

New operational concepts and associated structure could ease this dilemma, and the strategy creates an opportunity for the DoD and industry to focus the full weight of their efforts on the high-end contest in East Asia. However, as the National Defense Strategy Commission noted, the United States has not yet demonstrated such a plausible operational theory of victory to Congress or the American people, U.S. allies, or U.S. rivals. For instance, survivability concerns in a conflict with China are a key reason for the strategy’s reduction of U.S. presence in East Asia. However, the strategy does not yet have a theory on how to assure sanctuary for U.S. forces beyond the region, including at home, in cyberspace, or in space. Moreover, the strategy cuts structure that it may ultimately need to control the air, sea, and land in any broader regional contest, such as outside the second island chain. Establishing an effective deterrent concept that does not require an ability to control battlespace, or to do so substantially differently than today, is daunting.

Finally, realizing the Innovation Superiority Strategy’s potential requires more than just structure cuts and new ideas: it requires successful pay-off from new investments. This includes significant capability growth in such areas as artificial intelligence, robotics and unmanned systems, directed energy, hypersonic systems, force security and cybersecurity, and space. Even if breakthroughs in technology and operational concepts can be effectively married, scaling up to campaign-level experimentation and connecting it to force design and modernization plans will take time. Achieving such goals inside the next decade is a high bar.

The CSIS study team assesses that its instantiation of an Innovation Superiority Strategy could generate approximately $450 billion in savings from the DoD’s current program of record over a 10-year period (FY 2021–FY 2030), ramping up from a relatively modest percent of defense savings in FY 2021 (estimated at approximately $10 billion) to almost $70 billion per year by FY 2029. The pattern of increasing savings over time results from the compounding savings in Operations and Support (O&S) costs associated with each unit of force structure that is cut. For example, if one unit is cut in FY 2021, the O&S costs associated with that unit continue for each year thereafter. If a second unit is cut the following year, then those O&S savings are additive. This analysis suggests that major savings are unlikely to be realized immediately but will come over time.

CONCLUSION

The current U.S. defense strategy and program also suffer from mismatches of ends, ways, and means. If the Innovation Superiority Strategy can succeed in limiting global defense commitments and generating war-winning concepts and capabilities, and if the nation bets correctly that preparing to deter and defeat Chinese military threats is the key to securing American interests over the coming decades, the strategy could advantage the United States.

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1 The Innovation Superiority Strategy is a creation of the authors for heuristic purposes and does not seek to represent the views of any other single author or work.


5 The Western Hemisphere is also important, but it is not a projected focus of defense commitments.


12 The cost evaluation that led to these estimates was based on a hypothetical military force structure developed in accordance with the assumptions, missions, and capabilities outlined in the Innovation Superiority Strategy. The evaluation represents the net change from the current program of record for the DoD from FY 2021–FY 2030. Cuts in force structure were implemented gradually to reflect an orderly stand-down of operational forces. Overseas Contingency Operations (OCO) costs were not factored in given the lack of projections in budget justification documents but are expected to decline to $10 billion in total by FY 2024, according to the FY 2020 budget request.