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The Need for an Integrated Strategy: Denial, Deterrence, and Relentless Resilience

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"The strategic threat to the homeland has entered a new era. Key adversaries Russia and China have deployed and continue to advance a range of capabilities to hold the homeland at risk with

nuclear, conventional, and cyberspace weapons, believing it to be an effective means of offsetting Western military advantages and limiting our options in a crisis...While our adversaries seek to avoid a direct military conflict with the United States, their growing assertiveness increases the risk of miscalculation and gives rise to a threat environment more complex and dynamic than we have seen since the end of the Cold War". (Statement of General Terrence J. O'Shaughnessy, United States Airforce, Commander United States Northern Command and North American Aerospace Defense Command before the Senate Armed Services Committee Strategic Forces Subcommittee 13 February 2020)

Introduction

"The homeland is no longer a sanctuary" (Mattis, 2018, p.3). Not since the Cold War has the nation faced the magnitude and complexity of multidimensional threats from state and nonstate adversaries capable of striking the homeland from a great distance. Natural hazards alone have shown how inefficient processes and incompetence have impaired risk perception and eroded public trust and confidence. Armed with this knowledge, former Cold War adversaries reinvest in long-range offensive military capabilities and await the opportune moment to threaten and influence civil leaders not only by overt force but through the informational and social dynamics and by the creation of conditions of distrust in the nation. As the country responds to COVID-19 and rebuilds the military for conventional threats, it must recognize that protection and resilience send an equally strong message of denial. To address the complexity of the emerging threats to the nation, a unifying national strategy is necessary. This strategy must integrate defense and security concerns, capable of deterring an adversary from attack while denying them the ability to achieve their objectives.

Development of an integrated national strategy incorporating deterrence and denial could better align the defense and security roles by recognizing and resourcing structures, potentials, and opportunities. Such an integrated approach can cause adversaries to pause when considering actions harmful to the nation. Beyond the development of an integrated strategy, considerations

of resourcing, integration of resilience into the national frameworks, strengthening and expanding the use of the National Incident Management System (NIMS), and developing a "Resilience Force" are but a few ideas for potential integration. Leveraging the broader elements of national power (diplomacy, information, military, economic, financial, intelligence, and law enforcement) in a concerted way will further strengthen the nation's resilience.

A determined and motivated adversary will find a method to strike. To protect the nation effectively, conventional military deterrence alone is inadequate. Balancing the potential limited attacks by a determined non-state aggressor against the broader capabilities of a determined state actor requires identifying the essence of the nation's security. Military deterrence may only be effective against some threats. A nation with a balanced and integrated approach to defense and security embraces the Department of Homeland Security concept of Relentless Resilience (Department of Homeland Security, 2019, p. 1). Relentless Resilience recognizes absolute prevention's futility but limits the damage of attack by nefarious actors or disasters through persistent preparation, response, and rapid recovery. Relentless Resilience, layered with a capable deterrence may alter adversaries' strategic calculus by making attacks fruitless, denying the likelihood of achieving objectives. An effective, layered, and resilient nation will deter potential adversaries and allow leaders to resist the influence of fear.

To signal Relentless Resilience to adversaries, the nation must continually strengthen the response to natural and human-made disasters and rebuild a community of individual preparedness and response. Relentless Resilience requires guiding principles to ensure a whole of community approach to develop concerted responses to disasters. Accordingly, senior leadership must charge their institutions to uphold the precepts of the National Incident Management System (NIMS), which provides a comprehensive framework to guide disaster

response. This emphasis may evoke visions of the former Civil Defense structure but investing in and strengthening communities to build public will is essential to signaling resilience to those that intend harm.

Whereas the Coronavirus 2019 (COVID-19) has openly demonstrated shortfalls in our processes, responses to future disasters must prove to the world that the U.S. has a seamless planning and execution system that integrates all Departments and authorities, built around the value of the individual's contribution to national security and defense. Integration of Homeland Defense, Homeland Security, and Defense Support of Civil Authorities is an essential ingredient to defense and deterrence by demonstrating to any adversary that an attack on the U.S. will not achieve desired effects while strengthening public trust in governmental institutions.

Disasters befall the U. S. with alarming regularity. As a developed nation, the U.S. response to internal disasters follows orchestrated, resourced, and timely processes and procedures. The U.S. response and recovery systems are robust; however, the waning of public trust as disasters increase in complexity and magnitude is of growing concern, exacerbated by the COVID-19 response, illustrated by Kulke, 2020. Identified as the costliest year in U.S. disaster history (before the COVID-19 Pandemic, ongoing at the time of this writing), 2017 costs taxpayers \$308 billion and over 300 lives (when counting Hurricanes Harvey, Irma, Maria, and the extreme wildfire season) (Doyle Rice, & USA TODAY, 2018). The three Hurricanes (Harvey, Irma, and Maria) each individually rank one of the top five costliest hurricanes in U.S. history (FEMA, 2018, p.1). Analysis of the 2020 Atlantic Hurricane Season is incomplete but proved extremely active with 29 Tropical Cyclones and four Major Hurricanes (National

Hurricane Center, 2020). The costs in dollars, lives, and chaos of natural disasters creates opportunity space for nefarious actors to sow seeds of discontent through perceptions of failure, or worse, seize the opportunity for physical or cyber-attacks on critical infrastructure.

The U.S. response to disasters has matured throughout history, making significant strides since the terrorist attacks of 9/11, Hurricane Katrina of 2005, Superstorm Sandy of 2012, and the 2017 Hurricane Season. A key element identified by the National Incident Management System (NIMS) is "unity of effort by providing a common approach for managing incidents" (FEMA 2017, p. v) and often referred to as the "bottom-up" approach of handling response at the local level and building capacity (resources) as required. Usually, the means of last resort, Defense Support of Civil Authorities (DSCA) resources are expensive and designed for military deployment that must meet the tests of legality, lethality, risk, cost, appropriateness, and impact on readiness (Department of Defense, 2010, p.4). The use of such assets detracts from the Department of Defense's (DoD) primary mission of defense while impacting readiness and warfighting capacity. Embedded in the \$308 billion in response and recovery to disasters of 2017 was a commitment of significant DoD capabilities.

Acquired for use in defending U.S. interests, the use of DoD resources in the homeland are subject to a variety of laws and regulations. In a time of need, DoD can legally provide discreet resources to support civil authorities to fill urgent requirements. It is difficult to discern the price of DoD's support to the 2017 disaster season; however, the impact of DoD support is undeniable. U.S. Transportation Command provided over 2,800 strategic airlift sorties, while the Defense Logistics Agency provided more than 100 million meals and millions of fuel gallons (Garamore, 2017). These examples demonstrate straightforward and essential use of military resources unavailable in the civil sector; however, when the nation was conducting operations in

Iraq and Afghanistan, or during this era of Great Power Competition, these assets are in high demand on the global stage. Each disaster is unique, but DoD routinely responds with troops, vehicles, airlift, amphibious warfare ships, hospital ships, and a wide assortment of materials acquired for defending the nation when requested by Civil Authorities or through FEMA Mission Assignments.

Resource Mismatch

Resourcing of Relentless Resilience, the focus of the Department of Homeland Security is severely imbalanced to that of traditional deterrence. Civil Authorities request defense support when necessary to "save lives, prevent suffering, and mitigate great property damage" (Department of Defense, 2010, p 4). DSCA resources are DoD warfighting capabilities integrated to achieve the outcomes of the requesting Civil Authority (Chairman of the Joint Chiefs of Staff, 2019). DSCA directly supports the response to the public and is an understandably justifiable and emotional mission. Consider, however, that during the 2017 Hurricane Season, North Korea launched its "Highest Ever" Ballistic Missile on 29 November 2017 (BBC News, 2017), demonstrating the operational capability to strike the U.S. during the peak of response to Hurricane's Harvey, Irma, Maria, and major wildfires. An opportunistic attack on the homeland would have had a severe impact on an already severely strained response system and undermined the public trust and confidence in the ability to defend the nation. The reported influence attempts during the 2016 Presidential Election illustrates how actions of a hostile actor may impact public trust, perception, and confidence. It is at this nexus that the concept of deterrence and resilience must converge and inform an integrated strategy.

Natural disasters offer openings for our adversaries. Hostile actors can use the distraction of catastrophe as an opportunity to further damage critical infrastructure or seek to launch an

attack on other U.S. interests. With the emergence of new threats compounded by the effects of global climate change as highlighted by Department of Defense, 2019 and Watkins and Redick, 2014, the demand for DSCA may increase as local authorities and states become overwhelmed. Arguably, the DoD focus during disasters should be deterrence and preemption, affording a resilient state and local population the ability to manage the response. A cost comparison of the 2021 Departments of Homeland Security and Defense budgets illustrates a mismatch in priority, however. Figure 1 illustrates that the DoD's \$705.4 billion budget proposal for FY 2021 includes no mention of DSCA (legally prevented), while DHS's total discretionary budget is significantly less: \$49.8 billion.

| Department of Homeland Security 2021 | Department of Defense 2021 Budget |
|--|--|
| Budget Proposal | Proposal |
| \$75.9 billion Total Budget Authority | \$705.4 billion |
| \$49.8 billion in Net Discretionary funding. | |
| \$5.1 billion for the Disaster Relief Fund | |
| Funding Priorities: | Nuclear Modernization (\$28.9 billion) |
| Securing Our Borders | Missile Defeat and Defense (\$20.3) |
| Enforcing Our Immigration Laws | billion) |
| Securing Cyberspace and Critical | Space Domain (\$18.0 billion) |
| Infrastructure | Cyberspace Domain (\$9.8 billion) |
| Coast Guard Operational Modernization | Air Domain (\$56.9 billion) |
| Transportation Security | Maritime Domain (\$32.3 billion) |
| American Preparedness | • Land Domain (\$13.0 billion) |
| Preparing the Nation's Highest Leaders | Munitions (\$21.3 billion) |
| | • RDT&E (106.6 billion) |
| | Readiness (\$125 billion) |
| | Military Construction (\$21 billion) |
| | Overseas Contingency Operations (\$69 |
| | billion) |

Figure 1 DHS vs. DoD 2021 Budget Proposals (FY 2021 Budget in Brief and DoD Releases FY 2021 Budget Proposal)

While DSCA receives much of the nation's attention during a disaster, DoD's Homeland

Defense mission receives the budgetary focus and priority. DoD is the lead for Homeland

Defense and the "protection of US sovereignty, territory, domestic population, and critical infrastructure against external threats..." (Joint Chiefs of Staff, p. x). The Department of Homeland Security (DHS) is the lead for the Homeland Security mission "to prevent terrorist attacks within the US; reduce America's vulnerability to terrorism, major disasters, and other emergencies; and minimize the damage and recover from attacks, major disasters, and other emergencies that occur." (Joint Chiefs of Staff, p. x). These broad definitions and missions are often misleading or misunderstood by the public as the "bottom-up approach" requires support to the local and state systems of government in a rapid and concerted manner. Identifying more accurately the DoD role in resilience through DSCA (and other functions) is one example of accounting for and potentially aligning resources to a deterrence, resilience, and denial focus.

Deterrence and Resilience

"Our strategic forces and the associated targeting policy must, by any calculation, be perceived as making nuclear warfare a totally unacceptable and unrewarding proposition for the Soviet leadership." (National Security Strategy of the United States, 1988)

A core precept of the U.S. Cold War strategy was Mutually Assured Destruction (MAD). MAD intended to prevent an adversary (the Soviet Union) from launching a first strike by maintaining the capacity to launch a responsive strike that would be equally destructive. In many respects, this strategy was less about the punishment origins of Deterrence Theory and more about a strategy of denial of success. The inability to achieve objectives would prevent a rational actor from launching a first strike.

Deterrence is more complex and nuanced than illustrated by the intended strategic effect achieved by MAD. Deterrence Theory finds its roots in criminal justice. Tomlinson (2016) traces the origins to Jeremy Bentham's 1781 *An Introduction to the Principles of Morals and*

Legislation and relates the origins to the development of Rational Choice Theory. The threat of appropriate punishment will influence rational decision making by a rational actor. This basic premise is logical and proves valid in simple, one-dimensional scenarios, but more unpredictable on the international stage of global politics, war, irrational actors, and in the irregular and grey zone context.

A review of current literature on Deterrence Theory as it develops during the return of Great Power Competition reveals discussions of the use of deterrence in cyberspace (Libicki, 2018), the effect of deterrence against ISIS (Allison, 2016), the Israeli concept of deterrence (Adamsky, 2017), and the Clausewitzian doctrine of the "Counterpuncher" (Chiabotti, 2018). The visualization of a "Boxer" stance, described by the former Chairman of the Joint Chiefs of Staff, General (Retired) Dunford, places deterrence into perspective; the fighter "balanced, protected, and ready to throw quick, powerful punches" (Dunford 2017, p.2). In this analogy, protection is the shared responsibility of DHS and DoD, and the boxer's mass must come from and through the homeland.

After the fall of the Soviet Union, theorists and leaders searched for alternatives to nuclear deterrence in an uncertain security situation. Although the concept of MAD worked in the Cold War, U.S. National Security Strategies of the 1990s continually sought to deter, assure, and dissuade as the U.S. appeared the sole remaining Superpower. The post 9/11 world, Afghanistan, and Iraq have seen a resurgence in the study and application of Deterrence Theory as the world returns to an era of Great Power Competition. Mueller (2018) contends that deterrence may be by punishment or denial (p. 78). Punishment is traditionally the work of armed forces by making the costs of an attack too high. Denial implies the deterrence of an

adversary by denying the attainment of their objectives. It is here that Relentless Resilience plays its part in the broader strategy of deterrence through denial.

Resilience remains the subject of significant academic inquiry and adaptation in recent years. Earlier use of the concept involved engineering applications of how metals reform or rebound to an original shape after applying stressors. Matthews (2019), citing Holling (1973), demonstrated a new application of the concept to apply to "the characteristic of an ecosystem that allows it to absorb shocks and stressors without shifting it to a new state" (p. 2). DHS is applying the concept of resilience by "instilling a 'culture of relentless resilience' across the United States to harden security for the threats on the horizon, withstand attacks, and rapidly recover" (DHS, p 1). Consistent with the term's progression, Relentless Resilience seeks to make the nation capable of absorbing the effects of a wide range of disasters and rapidly rebounding while protecting the American Way of Life (i.e., not shifting to a new state).

Lasconjarias (2018) addresses the connection of resilience and deterrence in the North Atlantic Treaty Organization (NATO). Suggesting that resilience is the ability for societies to withstand challenges and rapidly recover, Lasconjaris furthers that the traditional focus of resilience has been about preparedness for traditional threats and risks. Now, accounting for nuclear and WMD threats, state vs. state conflicts, and the potential of the new dimension of "hybrid warfare" is necessary (p. 49-50). This interconnectedness of being prepared for the disaster addresses the preparedness to counterpunch if further threatened. Relentless Resilience signifies a strong nation supported by a whole of community commitment to protect, respond, and recover rapidly. Such resilience messages the nation's resolve to remain strong in the light of a disaster, while deterrence, through the traditional definitions, postures to counterpunch if struck.

Perhaps more concerning than the punch and counterpunch analogy described above (the conventional application of force) is the threat of Irregular Warfare aimed at Critical Infrastructure. As the U.S. continues to rebuild conventional warfighting capabilities, "Our adversaries seek to undercut our global influence, degrade our relationships with key allies and partners, and shape the global environment to their advantage without provoking a U.S. conventional response" (Department of Defense, 2020b, p. 4). The seam of Homeland Defense and Security is a potential point of focus to enable and empower the calls to action outlined in the 2013 National Infrastructure Protection Plan (NIPP) (Department of Homeland Security, p. 21-26). It links to the National Defense Strategy objective of "Enabling U.S. interagency counterparts to advance U.S. influence and interests (Mattis, p. 4). Strengthening this seam through integration into a broader National or Grand Strategy enables the defense and resilience of the nation by creating an effective approach to preparing and responding to unseen or unanticipated risks. Synchronizing the approach to defense and security can enable more effective and balanced employment of the "Boxer Stance" (Dunford).

Relentless Resilience is about public trust, confidence, and safety of the American People while *denying* hostile actors the ability to effectively create a human-made disaster through an attack (kinetic or non-kinetic) or exploit the inevitable natural disaster to attain their ends.

Deterrence is traditionally about the threat of punishment of an adversary that disrupts their decision calculus. In concerted combination, resilience, and deterrence, or more specifically, denial and threat, offer the homeland more security while protecting the American Way of Life.

Missing from the equation is a national strategy that synchronizes the U.S. Government's Departments to meet this goal. A review of the disjointed nature of the primary national

strategies reinforces this. The DoD Strategy for Homeland Defense and Defense Support of Civil Authorities was last updated in 2013, and the Department of Homeland Security Quadrennial Homeland Security Review, was due a revision in 2018. Published in the wake of Hurricane Katrina, the National Strategy for Homeland Security is over 13 years old. The current collection of national strategies as they specifically relate to Homeland Defense and Security require revision and integration with the National Security Strategy.

Despite the current state of homeland related strategies, efforts to synchronize the Departments continue. Starting with the Bush Administration's Homeland Security Presidential Directive-8 and reinforced by the Obama Administration's Presidential Policy Directive-8, the nation is far better situated today through the National Frameworks of Prepare, Prevent, Mitigate, Respond, and Recover. As the global security situation evolves, compounded by the effects of global climate change, pandemics such as COVID-19, and other emerging threats, the nation must continue to move forward to innovate and adapt when considering efforts informed by an integrated strategy that seeks resilience and deterrence.

Global Integration Begins with National Integration

Relentless Resilience is the Department of Homeland Security's call to action (Department of Homeland Security, 2019). It is the lead guiding principle seeking to instill "a "culture of relentless resilience" across the United States to harden security for the threats on the horizon, withstand attacks, and rapidly recover." (p. 1). Conversely, the DoD Strategy for Homeland Defense and Defense Support of Civil Authorities appears to look inward by stating:

"When faced with a crisis in the homeland - for example, a complex catastrophe as a result of an attack against the Nation or a natural disaster - DoD must be prepared to respond rapidly to this crisis while sustaining other defense and civil support operations. Within the homeland, arriving late to need is not an option". (Department of Defense, 2013, p. 2).

Convergence, in response to an incident or attack is a core element in the abovementioned strategic plans and strategies. This convergence is an essential component of resilience, the ability to respond rapidly. Messaging the strength of resilience and embedding the deterrent component of denial while maintaining the ability to deter (punish) through military force projection should seek to lessen the requirement of DSCA by enhancing the nation's inherent ability to rebound.

The Department of Homeland Security's 2010 Quadrennial Homeland Security Review Report (QHSR) introduced the Homeland Security Enterprise. Integral to the Enterprise is the concept that included the "Federal, State, local, tribal, territorial, nongovernmental, and privatesector entities, as well as individuals, families, and communities who share a common national interest in the safety and security of America and the American population." (Napolitano, 2010, p. iii). The phrase Homeland Security Enterprise, unfortunately, is not linked or integrated by any formal strategy, and the term has rapidly fallen from use. The Enterprise is a needed entity in the strengthening of Relentless Resilience. Strengthening the Enterprise and integrating it across security, defense, health, human services, information, law enforcement, diplomacy, and related functions through an integrated strategy will focus resources in a more concerted and coordinated manner.

Global Integration must include national integration. The Constitution limits the ability to effectively merge the authorities of the three systems of government (local, state, and federal). This inability to merge authorities does not preclude the need, requirements, or benefit of integrating the efforts. The nation's security posture currently offers a significant imbalance in the annual funding of DoD versus Homeland Security (Department of Homeland Security, 2020).

The nexus or intersection of the roles and authorities offers excellent potential. Consider the previously mentioned \$308 billion expended on the 2017 Disaster Season. Response and recovery efforts received most of the funds to mitigate the damage in future incidents. In the spirit of resilience, the Disaster Recovery Reform Act of 2018 identified a percentage of federal assistance spent in a previous year toward mitigation measures to invest in mitigation projects to save \$4-\$6 in recovery costs per every \$1 in mitigation (FEMA 2020). Increased federal investment in resilience programs before the next occurrence offers the opportunity to strengthen the most vulnerable regions of the nation.

Federalism maintains clear distinctions between local, state, and federal authorities.

McIntyre & Lieberman (2020) highlight that the Constitution "divides jurisdiction for homeland security challenges between the Federal Government and thousands of state, local, and even private organizations. Essentially, no single person or organization—not even the President—is in charge" (p. 125). The National Incident Management System (NIMS) is a proven doctrine providing a framework that synchronizes the approach to an incident or disaster. Significant reports of the 21st Century, including the 9/11 Commission Report, the Federal Response to Hurricane Katrina Lessons Learned, and the Post Katrina Reform Act, all argue for the effective integration of NIMS principles across the nation. Today, the application of NIMS remains inadequate and inconsistent but is one of the most effective bridges between federal, state, and local systems in times of crisis. Efforts to reopen the economy during the COVID-19 Pandemic illustrates the need for such a bridging policy and strategy. Without effective integration, the principles of Federalism allow for potentially fifty-four different and distinct approaches, compounded by bureaucracy and opening opportunities for those wishing to harm further the nation.

One of the most outstanding shortfalls remains the lack of concerted interagency education. In the urgency of post 9/11, many attempts emerged to enhance interagency effectiveness; however, there remains no legislation or forcing function to bring this ill-defined entity together. Without such a forcing function, the agencies often revert to the comfort and isolation of their organization until another crisis forces the next surge of energy seeking integration. The most cost-effective solution remains interagency education designed to create a cadre of Homeland Security Professionals. General Douglas MacArthur, Chief of Staff of the Army during the Great Depression, expressed in his 1933 Report of the Secretary of War that:

"Suspension of military training or further slashing into the Army's existing organization would produce a tragic situation—a situation even more serious in its eventual results than that discussed in the previous section. Efficiency would fall off rapidly. Future correction would involve years of intensive work to make good months of current neglect. In the event of an emergency, human and material costs and risks of defeat would be multiplied.

Mutual confidence, morale, and teamwork in a military force are the product of unremitting and intelligent effort...." (MacArthur, 1933, p. 21).

Although General MacArthur's comments are military-focused, they well illustrate the risks of suspending training (or education), emphasizing the shortsightedness and dangers to efficiency when crises emerge. Building interagency trust and teamwork to integrate the concepts of resilience and deterrence in advance of an emergency and sustaining the approach when urgency lessens requires a strategic-minded leader on par with General MacArthur.

Conducting Interagency education through interactive, hands-on experiential-based discourse builds trust and confidence in advance of a crisis. Only through continuous education that reaches individuals entering the profession that involves protecting the American Way of Life can the nation move to a more unified approach to National Security.

Time to Expand Resources

The most effective military force with operational authorities in the United States is the National Guard. Often torn between preparing for war and responding to a disaster at home, the National Guard stands ready. Perhaps it is time to invest purposefully in discreet, niche capabilities in the National Guard and certain auxiliary forces similar to the Virginia Defense Force, the Coast Guard Auxiliary, the U.S. Veterans Reserve Corps, and the Civil Air Patrol, to name but a few. By focusing federal funding and training on the specific many DSCA responsibilities currently provided by active Duty Title 10 forces to the volunteer forces, if properly vetted, trained, and organized could relieve Title 10 forces of many of the current Mission Assignments.

Development of a "Resilience Force" of organizations that can augment the state and local response and leverage the talents, experience, and expertise of veterans, retired emergency, medical, law enforcement professionals, and varied other skills is a logical step forward. Such a force of skilled volunteers will strengthen the resilience of communities by leveraging the American volunteer spirit and filling in needed capabilities during crises. Although funding these organizations may come at a cost to some wartime capabilities, it enhances the rapid response to disasters through Emergency Management Assistance Compact (EMAC). Federal assistance could relieve the anticipatory costs on our military deterrence in times of disaster. Focusing the National Guard on the military arm's resilience mission may make the wartime mission appear secondary, but possibly strengthen deterrence through denial. Such a concerted approach demonstrates our nation's ability to absorb and rebound while maintaining a solid counterpunch when deterrence is needed.

The organizational structure of a "Resilience Force" may require flexibility, similar to NIMS and the Incident Command System (ICS). Aligning specific volunteer functions under

departmental leads (e.g., DoD, DHS, Army Corps of Engineers, State National Guards, local county and municipalities) while arranging them as Support Functions (similar to the Emergency Support Functions of ICS) can leverage decades of expertise and experience in a flexible structure. The strength of a decentralized leadership model guiding control may prove attractive and enable unity of effort by leveraging the altruistic nature of American volunteers.

An Integrated Strategy for Resilience and Deterrence

Development of an Integrated National Strategy for Resilience and Deterrence, designed to empower the "bottom-up" approach with a core precept of denial, will allow the DoD to focus on deterring adversaries as an essential ingredient preventing an internally focused reaction to widespread catastrophe. Resourcing all the "what ifs" of Homeland Security can be an expensive proposition. Failure to resource the most significant and dangerous potentials can be crippling when they come to pass. Expanding Presidential Policy Directive-8 to include Resilience as a core component of Prevent, Protect, Mitigate, Respond, and Recover will begin the conversation of merging the concept of deterrence and denial through a Federal Integrated Operation Plan (FIOP) informed by a Resilience Framework.

The ongoing response to COVID-19 illustrates in real-time the difficulties the nation faces when confronted by a naturally occurring, widespread disaster requiring an internally focused response while simultaneously requiring vigilant deterrence. At the time of this writing, the situation is beginning to brighten, although only slightly. Since the January 2020 strike that killed Iranian General Suleimani, the world remains in the grip of COVID-19, almost forgetting the threat posed by Iranian sponsored terrorism that has killed U.S. Servicemen and women. It further appears a news item of a distant past when recalling the September 2019 drone attack on

Saudi oil refineries and the threat of technologically savvy terrorists bent on disrupting critical infrastructure. It is, however, essential to remember that adversaries continue to challenge the U.S. and allies during times of crisis. North Korea continued to press South Korea with missile launches in April 2020, and China continues to posture with an aggressive information campaign. Cyber-attacks and hacking attempts continue during the height of COVID-19.

During this unprecedented period, the U.S. has declared a National Emergency, invoked the Defense Production Act, and Federal Disaster Declarations are active in all 54 States and territories. Potential food shortages due to slowed production and distribution systems caused by fears of outbreaks and rumblings of protests have created a situation rarely, if ever, seen outside of movie theaters. The DoD responded rapidly to extensive DSCA requests and Mission Assignments that included the deployment of the USNS Mercy and Comfort to expand hospital capacities in Los Angeles and New York. The U.S. Army Corps of Engineers constructed temporary hospitals in the most heavily impacted areas throughout the country. The National Guards of many states fulfilled various unusual yet vital tasks to support the pandemic's response.

Whereas it would be impossible to prepare thoroughly for every potential disaster, the nation must look to those that can significantly impact the American Way of Life. Capturing the lessons of the COVID-19 response will occur in real-time over the next months. These lessons must lead to an effective and operationalized strategy to make the nation resilient before the next complex disaster occurs. The nation is re-learning many of the lessons of resilience discovered during past pandemics. The 1918-19 "Spanish Flu" killed an estimated 20 million people worldwide, 500,000 in the U.S. (2005, National Strategy for Pandemic Influenza, page vii).

During 1957-58, a strain of the H2N2 virus known as the "Asian Flu" killed 1.1 million across

the globe, and 116,000 in the U.S. (CDC, n.d. a.), and in 1968, the "Hong Kong" flu pandemic killed an estimated 1 million around the world and approx. 100,000 in the U.S. (CDC, n.d. b.). During the pandemics of the 20th Century, the U.S. was engaged in major conflicts (hot and cold wars) with a significant and expanding military capacity already involved in either combat or deterrence against a national security threat. COVID-19 has become the costliest pandemic since 1968 in lives lost. A homeland security threat such as COVID-19 has far-reaching effects on the economy and the military's capability to respond rapidly and effectively to an opportunistic adversary. Integration of deterrence and denial through a National Strategy can strengthen the traditional seam between homeland defense and homeland security.

Conclusion

The response to the COVID-19 Pandemic has challenged the development of this paper. As the response matures, the pandemic lessons must be captured and studied for the benefit of future generations. Much of the information posited in the preceding paragraphs may be selfevident to some, contentious to others. A dynamic and uncertain security situation dominates the first decades of the 21st Century. Old rivalries, competition for resources, global expansion, and economic tensions will continue creating conflict conditions. Opportunistic actors will seek to exploit periods of unrest, political divide, and disasters to further their objectives. Pursuing an integrated strategic approach that balances the roles of defense and homeland security through the concepts of denial, deterrence, and resilience may provide a way to progress through the next decades. Specific recommendations for consideration include:

1. Development of an Integrated National Strategy for Denial, Deterrence, and Relentless Resilience.

- 2. Integrate resilience into an update of Presidential Policy Directive-8 and develop a Resilience Framework and Federal Integrated Operation Plan (FIOP).
- 3. Integrate and enforce the use of the National Incident Management System.
- 4. Develop and strengthen a "Resilience Force" of organizations to augment the state and local response.

The world today faces many threats, whether natural or adversarial. While the "Homeland is no longer a sanctuary" (Mattis), the difference in the modern context is that COVID-19 occurred while the U.S. is not focused on a World War or Cold War but in a time of lessened capacity. In the current environment, expectations to provide an increasing amount of resources in a Defense Support of Civil Authorities role potentially lessens the deterrence capacity of the military. In this dramatic shift in context, it is time to consider an integrated strategy to focus on domestic resources to build and sustain a resilient nation. Such resilience enables navigation of a complex response to a homeland security incident while allowing the military to focus on its primary function of defense, nesting the components of resilience and deterrence in a manner to preserve our way of life.

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