Military Review

November-December 2024

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By Order of the Secretary of the Army:

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2430221

Special Forces candidates assigned to the U.S. Army John F. Kennedy Special Warfare Center and School lead mules down a path as part of a long-distance movement during the final phase of field training known as Robin Sage in central North Carolina, 7 June 2020. Robin Sage is the culminating exercise for soldiers in the Special Forces Qualification Course and has been the litmus test for soldiers striving to earn the Green Beret for more than fifty years. Soldiers are evaluated on various skills required to successfully operate on a Special Forces Operational Detachment-Alpha on the battlefields of today and tomorrow. (Photo by K. Kassens, U.S. Army)

Foreword

Every day, there is deep admiration for what our people and teams are doing to solve our Nation's hardest problems. We are challenged with institutionalizing irregular warfare (IW) as a key modernization priority, and our Special Warfare Institution is undertaking one of the most substantial revisions of Army Special Operations Forces (ARSOF) doctrine since 2014. Our country faces a decisive decade marked by compounding strategic challenges, and we must ensure we are capturing the right lessons learned. SOF has been the pathfinder of IW since its inception dating back to the creation of the Office of Strategic Services (OSS). Our irregular approach is unique to the joint force and a critical component of the *National Defense Strategy*. It is important to remember that in our doctrine, IW occurs in concert with conventional warfare and large-scale conflict and spans the entire competition continuum. People are our platform, and our adaptive and innovative culture provides asymmetric advantages toward strategic objectives. Maj. Gen. William "Wild Bill" Donovan, founder of the Office of Strategic Services, reminds us of the importance of this culture: "The OSS is not a club, it's a way of thinking."

In modern conflict, the decisive advantages in the information, cyber, and space dimensions will become even more critical in both conventional warfare and IW. Our competitors undermine peace and stability through overt aggression as well as operations in the "gray zone." Technology is expanding the scope of strategic competition. For instance, China has intensified its actions in the South China Sea, particularly around disputed territories in the Spratly Islands. In the Middle East, Iranian-backed militia groups are armed with theater ballistic missiles threatening our sea lines of communication and international shipping lanes. In Europe, the Russia and Ukraine conflict demonstrates the transformation of robotic autonomous systems with their unprecedented capabilities for surveillance, precision strikes, and swarming techniques to

A FUTURE WITHOUT EQUAL

USEFUL FICTION VISIONS OF THE US ARMY SPECIAL OPERATIONS COMMAND
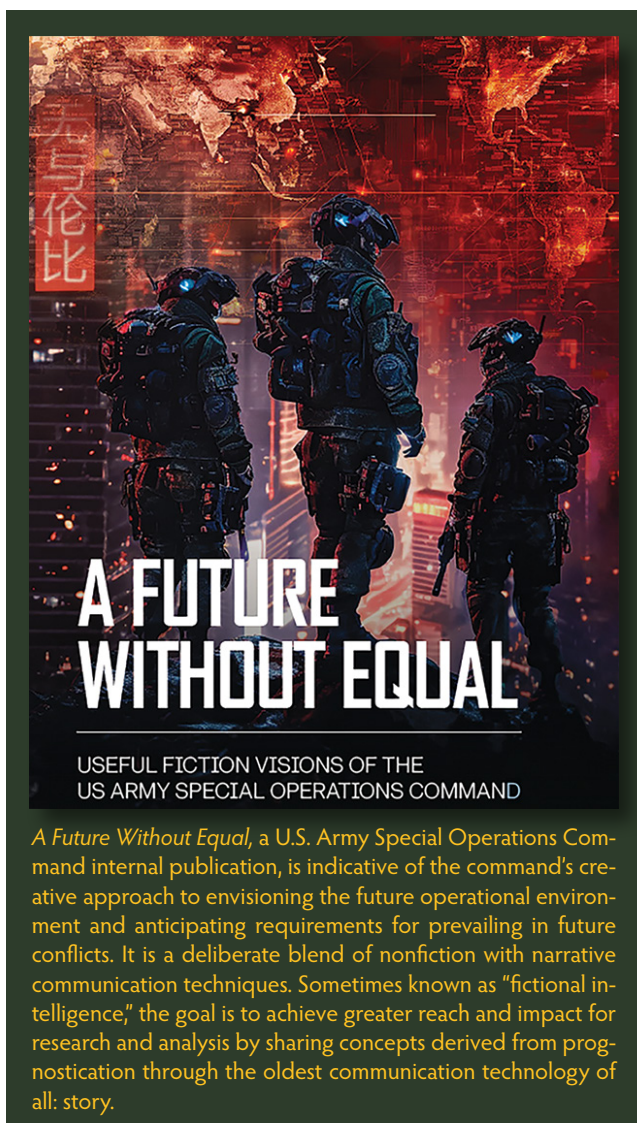
A Future Without Equal, a U.S. Army Special Operations Command internal publication, is indicative of the command's creative approach to envisioning the future operational environment and anticipating requirements for prevailing in future conflicts. It is a deliberate blend of nonfiction with narrative communication techniques. Sometimes known as "fictional intelligence," the goal is to achieve greater reach and impact for research and analysis by sharing concepts derived from prognostication through the oldest communication technology of all: story.

Lt. Gen. Jonathan P. Braga
Commanding General
U.S. Army Special Operations Command

overwhelm offensive and defensive operations. In all these cases, the use of advanced technology—particularly robotic autonomous systems capabilities and information operations—plays a crucial role in escalating tensions below the threshold of armed conflict. The future of warfare will see a greater reliance on these systems, with AI and autonomous decision-making playing a central role in shaping the battlefield of tomorrow. The character of warfare is rapidly evolving, where achieving dominance requires proficiency across a broader spectrum of capabilities, allowing for more versatile and integrated operations that can address the diverse challenges posed by contemporary threats.

With the resurgence of great power competition, the character of IW has expanded to include more sophisticated strategies aimed at countering the influence and actions of rival states. My message to the force has been consistent and clear: ARSOF has a critical role in shaping the theater to gain, maintain, or improve the strategic competitive advantage to win the fight. For ARSOF to succeed, we simultaneously need to (1) innovate faster by developing new capabilities and prepare for all-domain high-end conflict, (2) compete today in the "gray zone" to deny our adversaries' goal to win without fighting, and (3) strengthen our partnerships and alliances to influence shared security interests, improve resilience, and seize opportunities for progress. We must have a concerted effort with SOF and convention forces working hand in hand at every opportunity during irregular approaches in the competition environment. Placing IW subject-matter experts as the institutional pathfinders will enable combatant commanders to perform IW tasks necessary to achieve their campaign objectives.

In this edition, we have the perfect opportunity to delve into the activities of IW and how it shapes the strategic landscape of modern conflict. The articles in this edition are directly influencing our doctrine. With the advent of multidomain operations as the Army's operating concept and similar all-domain warfighting concepts emerging in joint doctrine, our ARSOF capstone doctrine will align with multidomain operations while adapting to the changing character of warfare in the twenty-first century. I hope the ideas in publications compel us to think more deeply, challenge our existing perspectives, and encourage us to overcome barriers from outdated processes. By sharing lessons learned laterally and vertically, professional writing fosters a culture of continuous improvement, and essential for driving meaningful change. Together we must be threat informed, strategically driven, operationally focused, and tactically prepared. ∎

Sine Pari!
Without Fail, Without Fear, Without Equal

Jonathan P. Braga
Lieutenant General
U.S. Army Special Operations Command

Lt. Gen. Jonathan P. Braga, U.S. Army, is the commander of U.S. Army Special Operations Command. His previous assignments include deputy commanding general of U.S. Army Pacific and the commander of Special Operations Command Pacific. He holds a master's degree from the Naval War College and served as an Army War College Special Operations Fellow at the Naval Post Graduate School in Monterey, California. Braga has completed numerous deployments and humanitarian relief operations throughout the Caribbean, Central America, and South America, as well as operational assignments in support of Operation Enduring Freedom, Operation Iraqi Freedom, and Operation Willing Spirit in Colombia.

Summer-Fall 2024 New Release

SPECIAL WARFARE

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Irregular Warfare
Defining the Debate

Col. Todd Schmidt, PhD, U.S. Army

There is a debate over how to define "irregular warfare." Conventional thinking advocates for a conservative definition of irregular warfare that hinges on adversarial engagement utilizing lethal force that is violent and militarized. For example, the 2007 *Irregular Warfare Joint Operating Concept* defines irregular warfare as "a violent struggle among state and non-state actors for legitimacy and influence over the relevant populations."[1]

However, there is a growing awareness and recognition that classical irregular warfare doctrine requires rethinking and a less conventional understanding and approach. Forward-thinking theorists believe that irregular warfare exists across the cooperation-competition-crisis-conflict continuum. Irregular warfare is increasingly used to describe the ever-present condition of enduring competition among nations, whether that competition is lethal or nonlethal; militarized or nonmilitarized; embroiled in armed conflict or below the threshold of armed conflict. Current doctrine found in Joint Publication 1, *Joint Warfighting*, for example, defines irregular warfare as "a form of warfare where states and non-state actors campaign to assure or coerce states or other groups through indirect, non-attributable, or asymmetric activities, either as the primary approach or in concert with conventional warfare."[2]

This debate of definitions is important, because it ultimately informs U.S. national security, defense, and military policies. It also informs how resources are allocated. Thus, it is a political issue, as well. Given this complexity, predicting what future warfare and battlefields will look like is a dangerous and risky business, and pundits or subject-matter experts are rarely accurate in their predictions. Moreover, the U.S. military has often been accused of preparing for the war that it wants to fight, not the wars in which it is required to fight.

Col. Todd Schmidt, PhD, U.S. Army
Director, Army University Press

Current U.S. Army doctrine and readiness focuses on large-scale combat operations. Large-scale combat operations are, by nature, extensive multinational, joint combat operations involving multiple corps and division size units and include conventional and irregular forces on both sides.[3] But what happens if an adversary elects for a strategy that depends wholly on unconventional and asymmetric tactics and operations to achieve a desired end state?

There may be a scenario wherein a sophisticated adversary seeks to engage and attack the United States in a manner for which it is unprepared. For example, it is often stated that the support of the populace in democratic nations is a center of gravity in war. However, a democratic society, such as the United States, can be divided and polarized to such an extent that trust between political parties does not exist. Truth and facts can be called into question and politicized for personal and partisan gain. The populace can be divided, confused, frustrated, and hopeless to such an extent that they lose significant trust and confidence in public institutions.

At a critical moment, perhaps during a major natural disaster or a national event such as a presidential election period, for example, an adversary could conduct an asymmetric attack that damages or destroys critical national infrastructure; debilitates our military and strategic deterrence capabilities; or significantly damages our international influence. Can a nation so polarized and lacking trust in national leaders and institutions see past their partisan divides to focus on an external enemy? If a devastating attack under the threshold of armed conflict can achieve a strategic objective of the enemy or deny and damage the strategic interests of the United States and its allies, it may be worth the risk. And without the support of the public or electorate in a democracy, our leaders cannot mobilize the Nation for war.

Irregular warfare, liberally defined, takes these scenarios into consideration. We must have the political will, resources, doctrine, and capabilities to meet the enemy where they are, not where we wish them to be. We must be willing and able to engage our enemies with all levers of national power on their homeland, in their homes, on their airwaves, and against their national interests. We must be willing and able to engage with persistent staying power to achieve long-term gains. We must be willing and able to dominate our adversaries in a comprehensive, absolute game of narrative, perception, influence, and information.[4] We must be willing and able to engage in infinite irregular warfare.

The articles that follow in this special edition discuss all manner of issues and topics in irregular warfare. We are deeply appreciative of the U.S. Army John F. Kennedy Special Warfare Center and School at Fort Liberty, North Carolina, for curating this edition and thank the authors for their submissions. We hope you enjoy this edition and that it instigates further constructive, professional debate and discourse. ∎

Editor's note: The 2025 General William DePuy Writing Competition, the U.S. Army's premier writing contest, is focused on the topic of security challenges presented by a world that is increasingly borderless, multicultural, and interdependent. The theme of the 2025 DePuy writing competition finds roots in the definition of irregular warfare, wherein state and nonstate actors struggle and compete for power. Read how to enter the contest at https://www.armyupress.army.mil/DePuy-Writing-Competition/.

Notes

1. Department of Defense (DOD), *Irregular Warfare (IW) Joint Operating Concept (JOC)* (Washington, DC: DOD, 11 September 2007 [obsolete]), 5, https://apps.dtic.mil/sti/pdfs/ADA496061.pdf.

2. Joint Publication 1, *Joint Warfighting*, vol. 1 (Washington, DC: U.S. Government Publishing Office [GPO], 27 August 2023 [CAC required]), II-7, https://jdeis.js.mil/jdeis/new_pubs/jp1vol1.pdf.

3. Field Manual 3-0, *Operations* (Washington, DC: U.S. GPO, 2023), para. 1-46.

4. Sydney J. Freedberg Jr., "China—A Deadly 'Infinite Game': Army Chief McConville," Breaking Defense, 29 March 2021, https://breakingdefense.com/2021/03/china-a-deadly-infinite-game-army-chief-mcconville/.

2024
ANNUAL ESTIMATE
of the
STRATEGIC SECURITY ENVIRONMENT

Strategic Research and Analysis Department

The *2024 Annual Estimate of the Strategic Security Environment* guides the defense community to research and write collectively on critical national security challenges. Its supplemental "Strategic Research Topics" list contains over one hundred questions provided by US Army senior leaders to focus aspiring researchers on the pressing problems impacting defense organizations today.

You will find this publication and many others on our website https://ssi.armywarcollege.edu

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U.S. Army Special Operations History Office

Located at Fort Liberty, North Carolina, the U.S. Army Special Operations History Office has the mission of preserving the institutional memory and organizational history of Army Special Operations Forces (ARSOF); informing ARSOF leaders and soldiers, the Army, the Department of Defense, and the Nation on ARSOF's legacy; and inspiring ARSOF soldiers past, present, and future by connecting them with their rich heritage. In discharge of these mission objectives, it maintains an unparalleled collection of online unclassified published material that provides important, hard-to-find, and fascinating details of ARSOF operations and missions—many from firsthand accounts that have had little previous visibility to the public. Such accounts provide researchers with a rich source of material with which to study not only tactical and operational decision-making but also to gain perspectives and new insights on the context of evolving historical events involving U.S. foreign policy since the formal inception ARSOF components during World War II and the beginning of the Cold War. To learn more, visit https://arsof-history.org/.

The *Veritas* archive provides a selection of important articles discussing Army special operations forces. It is an example of the products the Army Special Operations History Office makes available to the public and can be found at https://arsof-history.org/downloads.html.

Write for *Military Review*

Suggested Writing Themes and Topics—2024–2025

- From a U.S. military perspective, what are the greatest near-term external threats to the United States? Why, and how?

- What are the greatest long-term threats (looking out twenty-five years)?

- Many observers assert that Russia, China, and Iran already see themselves at war with the United States. Is there evidence that these and other actors are conducting actual "war" against the United States, and what are the probabilities of their success?

- What confederated blocs of nation-states are now aligned against the United States, and how do they cooperate with each other? What types of treaties or agreements do they have that outline relationships they share to reinforce each other?

- Which U.S. adversaries best synchronize their DIME (diplomacy, information, military, and economic) elements of power to achieve their strategic goals? Contrast and compare employment of DIME by China, Russia, Iran, and the United States. How should the United States defend itself against foreign DIME?

- Do China, Russia, and Iran have "Achilles' heels"? What are their centers of gravity? If each has one, how can it best be attacked/exploited?

- What do China, Russia, and Iran view as the United States' "Achilles' heel" or center of gravity? How specifically are they attacking it?

- What is the role now of the U.S. Armed Forces in Africa? Far East? Middle East?

- What does the future hold for nanoweapons? Electromagnetic warfare? Artificial intelligence? Information warfare? How is the Army planning to mitigate effects?

- What is diversity? How does one reconcile the concept of diversity with the concept of unity?

For information on how to submit an article, please visit https://www.armyupress.army.mil/Journals/Military-Review/MR-Article-Submission-Guide/.

2025 General William E. DePuy Special Topics Writing Competition

This year's theme: "The challenges of planning for security in a world that is increasingly borderless, multicultural, and economically interdependent."

Developments in modern technology, changing global demographics, increasingly complex economic ties among nations, and the speed and ease of population mobility have dramatically highlighted factors that now must be considered and dealt with to achieve success in modern conflicts. The age of empires that overtly built on the assumption that some states had a natural Darwinian entitlement for military conquest of other states viewed as racial or cultural inferiors has largely disappeared. However, while the age of empires is arguably over, the myths of empire remain. Different permutations of the same instinct to pursue imperial ambitions, but in a different guise, appear to remain powerful underlying elements of aggressor ideologies, nationalism, racial animus, some forms of organized religion as well as international economic and criminal cartels of one stripe or another. It is also a key impetus for resurgent revanchism, a state posture seeking to retaliate against other states for perceived historical wrongs that animates the desire to recover lost territory.

The intent of this year's DePuy competition is to identify by close examination where such factors strongly influence today's operational environment and to identify specific strategies to either mitigate their influence or provide solutions for exploiting them to achieve the accomplishment of strategic objectives. A few examples of such possible topics are provided below. These are provided primarily to encourage authors to identify on their own the most salient of any of a myriad of other such topics relevant to the theme.

- How are China, Russia, and the United States viewed by the populations in Central and Southern Africa as each nation competes to exploit Africa's natural resources? How are they viewed by the international community with regard to their presence in Africa?
- Does racism, tribalism, ideology, and religion play a role in China, Russia, Iran, and other states where conflict has emerged or is emerging? How do they manifest?
- Does regionalism, racism, ideology, or history play the most prominent role in Chinese aggression in the Indo-Pacific region where increasing tensions and potential for conflict are emerging? How do they manifest?
- How much influence do cartels of different varieties and international business conglomerates have on foreign policy dealing with the U.S. military deployments overseas? Do such entities view themselves as virtual independent nations without an obligation of loyalty to traditional nation states?
- What long-term impact would a large-scale war (non-nuclear) between China and the United States have on their mutual economies? Impact the world order?

Competition opens 1 January 2025 and closes 30 June 2025

1st Place: $1,000 and publication in *Military Review*
2nd Place: $750 and consideration for publication in *Military Review*
3rd Place: $500 and consideration for publication in *Military Review*

Prize money contributed by the Association of the United States Army

For information on how to submit an entry, please visit https://www.armyupress.army.mil/DePuy-Writing-Competition/.

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Testimony of Ronald E. Neumann for the Afghanistan War Commission July 19, 2024

Madam Chairwoman, Mr. Chairman,

I am honored to appear before you today. Reflecting on and learning lessons from Afghanistan is an important endeavor in which I am keenly interested. While I take some pride in having served my country in four wars, one as a soldier and three as a diplomat, I am also keenly aware that two of those wars ended in failure and one, Iraq, is still being evaluated.

After failed wars our national response has been something between amnesia and a firm conviction that we will "never do it again." But, in fact, we do "do it again." From Mexico to the Truman administration in Greece, to Panama, to Afghanistan and Yemen, today America is, has been, and is likely to continue to be involved in various forms of interventions. Thus, I believe your mission is important.

As one looks back, even to Vietnam as you have asked me to do, it is important to remember that memory alone can distort events over time. When I wrote my book on Afghanistan, and later a memoir, I had access to many personal letters written close to the events in question. Frequently, I found that my memories had changed over time. Things, such as historical conflicts between political leaders that were to understand in order to get them to work together, which I thought I had understood at one point in time turned out to reflect knowledge I gained only months later. Thus, while drawing on current recollections of participants is valuable, it should not be accepted without also fact checking contemporary records.

Recollections also require a need for honesty. Politically and bureaucratically honesty is difficult in our culture, whatever one may say about the need for accountability. In the private sector one can fail and go bankrupt, come back and still come out as a success. That is scarcely true in politics or bureaucracy where a "got you" culture tends to repay error with permanent career failure. Careers do not recover. The natural consequence of this is that it makes learning from mistakes extremely difficult because the tendency is to either deny the mistake, insist it was someone else's fault, or that there was no mistake to begin with. Yet if we do not learn then there are many lessons observed but few learned.

We Need to Go beyond Bumper Stickers

You will also have to deal with a tendency to extract simple answers and catch phrases from a complex 20-year history. The desire to boil a lesson down to a phrase may be one of the most pernicious dangers you will face. This is because such phrases, bumper stickers of policy, lead to more misunderstanding than to learning. As simple example from the Iraq war may illustrate the point. The US troop surge has been given great credit for the success of the so called "Anbar" revolt. The lesson has been drawn that a military surge empowered the politics. Yet close study shows that most of the surge did not go to Anbar and the reasons for the success was only slightly related to the surge.[1] Simplifying and mislabeling the lesson of the past may lead to new dangers in the future.

The same is true about the pursuit of democracy. Recently, when speaking to a university class, one

student asked me whether Afghanistan does not finally prove that it is a mistake to try to create democracy as a policy goal. Whether or not supporting democracy is a worthy goal is a big question. But the fact remains that in Afghanistan the quest for democracy was never the reason for the war. It started as an invasion caused by the attack of 9/11. Once the United States was in Afghanistan the question became how to leave. Four administrations dealt with this in different ways. I do not believe a single one of them chose democracy as its ultimate policy goal. Rather, democracy was part of the strategy to try to build a country that could stand on its own feet. It was always part of the larger question of how to substantially disengage. Misunderstanding the difference between a policy goal and a strategy will not help.

Whether or not democracy can be part of a successful strategy is a large issue in many places, not just Afghanistan or Vietnam. It requires considering the circumstance and the time needed to change. Comparison with the time needed for democracy to arrive in Korea, or Taiwan may be helpful to considering whether the problems in Afghanistan lay in the objective or in the time given to achieve it. In this connection, you may find it useful to consider whether the American propensity to try to shorten a required time frame with more funding always makes sense.

You will no doubt look in some detail at the first days of the war. My understanding is that the simplistic lesson from the Balkans against nation building was part of the reason that many opportunities may have been lost in the first year of peace in Afghanistan. This is simply one more illustration of the responsibility you bear to seek complete and complex answers rather than simple labels.

Policy Versus Implementation

A particularly difficult area, which I hope you will look at, is the difference between policy and implementation or execution. In my experience, when things are not going well, Washington reverts to a policy review. Yet, such policy reviews rarely raise the question of whether the problem is in the policy goal itself, the strategy, or the execution of the strategy. The execution may be flawed, but it may also be that much more time or resources are required for proper execution. Yet, the policy review usually results in a shifting and changing

of goals, which often confuses local allies and makes long term strategy impossible.

By my count, we had ten different policies in our 20 years in Afghanistan. The average life of each policy was two years. Policy changes from Washington were particularly problematic when they occurred without support, or sometimes even consultation with host government officials. This was the case in both Vietnam and Afghanistan and was probably destructive in both.

Realism

A particularly difficult area that calls for your judgment is to be realistic about what was politically possible in the context of a specific time. One of the most frequently cited errors regarding Afghanistan is the failure to have the Taliban invited to the peace conference at Bonn. Yet I wonder how realistic this criticism is. None of the other Afghan groups at the conference would have welcomed the Taliban so the political pressure required of the United States to include the Taliban would have been extremely large. Much of the Bonn conference was taken up with trying to work out a division of power and ministerial responsibility for the interim government. Reviewing that record, how realistic is it to think one could have injected the Taliban into that mix? I am not trying to answer this question but, rather, to illustrate the need to attach a lesson learned to a realistic understanding of possibility. Without that there is no lesson, but only an observation that it would have been nice if the world had been different.

In your very kind invitation, you asked me to reflect on lessons that might be drawn in common from Vietnam and Afghanistan. Obviously, my experience of each war was vastly different, having seen a part of one from the ground level view of an infantryman and the other from a much more strategic view. Still, I think there are a few things one can say. One, of course, is the importance of sanctuary for the insurgents. Without solving that, success is very difficult. Much has been written on the issue of sanctuaries in insurgencies, so I will not linger except to note one difference between Vietnam and Afghanistan. In Vietnam, the strategic importance of the sanctuaries was understood and there were repeated efforts to solve the problems through bombing the north to force a policy change. In Afghanistan, there was no

comparable effort to end Pakistan's support for sanctuary during the Obama Administration. You may wish to examine whether there was any detailed consideration of the likelihood of success without dealing with the problem. The Trump administration did adopt a policy of pressure on Pakistan but gave that up when it began the Doha negotiations.

Perhaps the larger point to start with in considering the two wars is that there were almost no valid lessons carried over from one war to the other.

Short Tours and Revolving Policies

For example, a clear problem in Vietnam was the short tour. Combat officers generally spent 6 months at the company level and then moved on to a staff job. There was no effective transfer of knowledge. I still remember that just as I left Vietnam, my infantry company was going back to a difficult area in which we had operated before. With great effort and some loss, we knew every trail, where we had found enemy bunkers and so on. I was the last officer in the company who still retained this knowledge, and I was getting on a plane. The company would have to relearn the hard way.

In Afghanistan the short tours of senior officers and generals were devastating. I have referred to it elsewhere as the institutional equivalent of a frontal lobotomy. If one carried away only one lesson from Vietnam and Afghanistan I believe it would be the need for longer tours for senior military and civilian officials.

The short tour was not only devastating to continuity of planning and execution but also to building support among host government officials. After they have experienced several years' changing plans and priorities and often the abandonment of previous plans, host officials tend to become skeptical of any American idea. They have learned that even a good idea may cease to have support when personnel change. And local government officials may accept a bad idea if it is the enthusiasm of the Americans who are going to fund it. For example, in Afghanistan local Afghan NGOs were heavily dependent on foreign funding to keep their organizations going. The result was that they would develop projects that fit what foreigners wanted but not push for their own sense of priorities. There was a multiplicity of gender projects, some very good and some, as shown in later analysis, with almost no impact.

At the same time, Afghan ideas on how to advance the status of women, particularly in rural areas, received less traction.

In the provinces, US military commanders with Commanders Emergency Response Program funds would move priorities as commands rotated. When the funding moved, projects or plans often died. Such swings in project emphasis were detrimental to effective implementation of any idea. In fact, I have often thought that even a mediocre policy carried out consistently over time would outperform the greater brilliance which is buried in swings of policy from one idea to another.

Vietnam and Afghanistan were both marked by highly unrealistic assumptions about how rapidly progress could be made when it depended on institution and cultural change. The problem lies less in whether the analysis of the situation. Including the changes that needed to occur for policy success, was accurate, and more in whether it was complimented by analysis of whether the means employed, and the time being given for success were likely to reach the desired result. Post World War II history does show examples of countries that went from essentially kleptocratic corrupt autocracies to functioning States with a degree of democracy. Taiwan, Korea, and Greece after the American intervention in its civil war have all done rather well. And each took 20 or 30 years or more to get there. Were these experiences ever drawn on in considering what was likely to be required to bring about similar changes in Afghanistan? Or were assumptions allowed to stand without more critical examination or simply forced into the Procrustean bed of the time the policy makers thought they had to give to a problem?

Even where there appear to be useful lessons from Vietnam it is not clear that we are able to draw on them very well. The provincial reconstruction teams that were deployed in Afghanistan and later in Iraq were often said to draw on the experience of CORDS (The Office of Civil Operations and Rural Development Support) in Vietnam. Yet the strength of the CORDS operation was

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partially in having a unified chain of command. State Department, USAID officials, and military officers were in an integrated chain of command where the officers of one agency were positioned to give orders to the entire operation including civilian to military even in military operations. Nowadays, we are told that such crossing of command lines is legally not possible. Yet no one has been able to tell me whether what was done in Vietnam was on the basis of some legal interpretation or whether the law has actually changed since those days. It is another example of how superficial lessons need to be examined at some depth to make real use of them. Since unity of command is an important part of success, this reflection may also suggest an area for eventual recommendations.

Working with Local Allies

Another area which invites comparison between Vietnam and Afghanistan is the vexing problem of how to work with local leaders when they do not seem to meet our sense of what is needed. In the Afghan case, I hope you will engage with the need to find a balance between the responsibility for American actions and those of our Afghan hosts. Neither worked in a vacuum. Each was heavily influenced by perceptions and misperceptions of the other. Responsibility will have to be judged in a difficult matrix of looking at both sides.

How much responsibility to take and how much to leave with local leaders is not easily resolved, but the problem is long standing. As former CIA station chief in Vietnam and later CIA director William Colby ruefully noted about Vietnam, "the conviction [was] widespread among the Americans that the failures of the various American formulas for success in Vietnam could be due only to the unwillingness or inability of the Vietnamese to perceive their validity—indeed, their brilliance—and then apply them as indicated.[2]

In Afghanistan, I frequently saw Americans quote from T.E. Lawrence's WWI advice, "Do not try to do too much with your own hands. Better the Arabs do it tolerably than that you do it perfectly. It is their war, and you are to help them, not to win it for them." But as often as I saw this written on a paper or a briefing slide, I never saw it put into action.

Instead, our default reaction to problems of local effectiveness is to try to develop our own policy and convince the locals to accept it, or simply to do it ourselves. At senior levels, this led us to seek the replacement of leaders. In Vietnam this included backing for a coup that led to the murder of President Ngo Dinh Diem and a later series of coups as one general replaced another. In Afghanistan, Ambassador Richard Holbrooke totally alienated President Hamid Karzai by seeking the latter's replacement in numerous conversations with other potential candidates.[3] As then ambassador Karl Eikenberry noted in his famous NODIS telegram, a central flaw in the conclusions of President Obama's 2009 policy review was that we did not have a local partner and President Karzai was unlikely to accept the plan.

The American reaction to the lack of local buy-in is to come up with a policy and do it ourselves. An interesting example of this is a study of CIA field operations in Vietnam.[4] Time after time, field operators identify problems, often correctly, and design solutions. But the solutions rarely had a top-level Vietnamese buy-in and when US priorities changed or funding slipped the programs ended.

A somewhat similar example comes from Afghanistan. The Obama policy review of 2009 led to a large surge of money and district support teams as well as troops. Ambitious plans were developed for local progress. US provincial and district teams developed projects and policies on their own as I saw in 2010 while traveling in Helmand and Kandahar provinces. Many of these efforts had no support from Afghan authorities in Kabul. But as I traveled, I was repeatedly told, "Kabul doesn't matter." Of course, Kabul did matter. As did the lack of Afghan ability to develop in short order the necessary personnel to replace the teams. Those teams are long gone. They had all the lasting effect of plunging one's fist into a bucket of water and then withdrawing it.

But if our efforts to craft policies without local acceptance largely failed; if our repeated, almost knee-jerk response, to local incapacity is to keep making such plans, and if local incapacity is real, *how are we to stem this cycle*? I don't know if there is an answer. Yet I hope it is a problem on which you will reflect. It has large strategic implications for the future and yet it remains essentially unaddressed in political science theory as much as in policy.

I want to thank you again for giving me the opportunity to reflect on the experiences of two wars and the

chance to suggest some things that you may want to look at. I hope these ruminations may be useful to you. Of course, I will be glad to return for a more detailed discussion of my own period as ambassador. ■

Notes

1. Carter Malkasian, *Illusions of Victory: The Anbar Awakening and the Rise of the Islamic State* (New York: Oxford University Press, 2017).

2. William Colby with James McCargar, *Lost Victory: A Firsthand Account of America's Sixteen-Year Involvement in Vietnam* (Chicago: Contemporary Books, 1989).

3. Hamid Karzai (president of Afghanistan and then head of the UN Assistance Mission in Afghanistan), in conversation with the author.

4. Thomas L. Ahern Jr., *Vietnam Declassified: the DIA and Counterinsurgency* (Lexington: University Press of Kentucky, 2010).

New AU Films Release
Irregular Warfare: Defining "Irregular"

The U.S. Army's irregular warfare doctrine is being reviewed and updated by the Combined Arms Doctrine Directorate at Fort Leavenworth, Kansas. AU Films newest film, *Irregular Warfare: Defining "Irregular,"* is part of that ongoing discussion and highlights some of the most basic and important parts of current irregular warfare doctrine that should remain in place while suggesting some needed changes as well.

To watch this film, visit the AU Films website at https://www.armyupress.army.mil/Films/ or scan the QR code.

Unconventional Warfare on the Conventional Battlefield

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As the global security environment returns to multipolarity after a thirty-year unipolar "moment," Western militaries are necessarily laser-focused on rebuilding capabilities to prevail in large-scale combat operations (LSCO).[1] Rising tensions over Taiwan and in the South China Sea, the ongoing war in Ukraine, a bellicose and nuclear-armed North Korea, and escalating brinkmanship between Iran and Israel heighten concerns about the outbreak of major war. Concern is buoyed by evidence from conflict datasets frequently employed by scholars, which note a rise in conflict globally, to include a 12 percent increase from 2022 to 2023 and 40 percent overall from 2020 to 2023.[2] Such observations drive a sense of great war inevitability within the United States, reflected in a March 2023 survey, which finds "the majority of Americans believe that another world war is at least somewhat likely to happen in the next five to 10 years."[3]

As the defense establishment pivots focus from the Global War on Terrorism to strategic competition, some have questioned the role of irregular warfare (IW) and special operations forces (SOF).[4] Irregular warfare—which includes the tasks of unconventional warfare, foreign internal defense, counterterrorism, counterinsurgency, and stabilization—has become synonymous with failed wars in Iraq and Afghanistan.[5] SOF has excelled at counterterrorism, which some argue presents a distraction in strategic competition.[6] Sen. Joni Ernst argues that "within the Pentagon SOF is seen almost as a 'one-trick pony' that's focused solely on counterterrorism."[7] In this view, SOF and IW are tools of the last wars; "wise" national security policy and military force generation will look to conventional weapons and tactics to prevail in LSCO should strategic competition turn into conflict. This is reflected in recent personnel cuts to Army SOF.[8]

Challenging these arguments, history suggests that IW will play a prominent role in both strategic competition *and* LSCO.[9] Especially in the nuclear age, major powers will seek to avoid the devastating effects of direct conflict.[10] Instead, they are most likely to pursue goals with other tools, to include IW approaches.[11] SOF's role in strategic competition short of direct war is well documented, generally understood, and outside the scope of this article.[12] Prudent military planning demands that we also examine the most dangerous case—where strategic competition escalates to conflict. The U.S. government definition of IW itself suggests it will play an important role in LSCO; IW is defined as "a form of warfare where states and non-state actors campaign to assure or coerce states or other groups through indirect, non-attributable, or asymmetric activities, either as the primary approach *or in concert with conventional warfare* [italics added]."[13]

For some, strategic conflict evokes a picture of purely conventional LSCO: capital ships, aircraft, and

Soldiers from the Lithuanian National Defense Volunteer Force (KASP) and a U.S. Army Special Forces soldier discuss room clearing tactics during Saber Junction 20 at Hohenfels, Germany, 17 August 2020. Saber Junction 20 is a force-on-force exercise with 3,500 multinational participants and over 140 multinational SOF from Moldova, Albania, the U.S., with members of the Lithuanian KASP, to improve integration and enhance their overall combat abilities. (Photo by Sgt. Patrik Orcutt, U.S. Army)

ground formations facing off to destroy their adversary's similarly equipped forces. Analysis of the past century of LSCO is replete with examples of this; it also reveals that IW tools, especially unconventional warfare (UW)—support to indigenous resistance forces—can provide a significant supporting line of effort to the overall campaign. While the capabilities needed to conduct UW reside in SOF, it is senior civilian and military decision-makers and planners who must understand when and how to employ UW as part of broader campaigns. However, there are two challenges in the employment of UW: many leaders know too little about how it can contribute to LSCO, while others expect too much of it. This article provides an overview of the use of UW in support of historical LSCO with the aim of aiding current joint force military leaders in understanding how they might employ UW and SOF in future LSCO.

History of UW in Conventional Campaigns

Unconventional warfare is simply understood as providing support to a resistance movement.[14] It is one of the core activities of U.S. SOF and falls under the aegis of IW.[15] Within SOF, UW is the primary mission set for which Army Special Forces (a.k.a. "Green Berets") are selected, trained, organized, and equipped. UW provides a means for the United States to indirectly attack its rivals' interests through advising, assisting, training, and equipping indigenous fighters to pursue U.S. interests. This is done in lieu of or in support of a direct conventional war.

Over the past century, UW has been frequently employed as a shaping operation in broader LSCO campaigns. During World War I, T. E. Lawrence trained, advised, and equipped the Arab Revolt to tie down a sizable portion of the Ottoman army during

A special operations soldier guards two prisoners during Ridge Runner Irregular Warfare Exercise 23-01, held throughout West Virginia from 27 May to 17 June 2023. Ridge Runner is a dynamic and realistic exercise platform for the U.S. Special Operations Command and community of interest allies and partners that enables participants to train on mission-essential tasks and assess and validate readiness while enhancing the Nation's strategic irregular warfare capabilities. (Photo by Staff Sgt. Jake SeaWolf, U.S. Army)

the Sinai and Palestine campaign. A continent away in Africa, German Gen. Paul von Lettow-Vorbeck leveraged indigenous fighters to skirmish with French and British rivals in the colonial periphery of the Europe-centric war. During World War II, the United States and United Kingdom employed special operations teams through the Office of Strategic Services (OSS) and Special Operations Executive (SOE) to mobilize French resistance to prepare the environment for Operation Overlord, the Allied invasion of France.[16] Similarly, Detachment 101 employed UW approaches to advance U.S. objectives in the China-Burma-India theater.[17] UW continued to play a prominent role in post-9/11 LSCO fights, to include the United States partnering with the Northern Alliance to overthrow the Taliban, U.S. partnering with the Kurds to fix Iraq's conventional units in northern Iraq during the 2003 overthrow of Saddam Hussein, and most recently, Ukraine and its partners leveraging resistance in the Russian-occupied territories in support of the frontline fight.

These cases indicate two scenarios where UW proves useful for conventional commanders: either to *supplement* limited conventional forces with additional indigenous forces (the resistance fighters) or to *substitute* indigenous forces where conventional forces are unable to operate due to political or physical constraints. These concepts of supplementing and substituting for conventional forces have been extensively analyzed in two fields of academic research. The proxy warfare literature identifies that "belligerents use third parties as either supplementary means of waging war or as a substitute for the direct employment of their own forces."[18] Similarly, literature on the theory of SOF identifies that SOF is often employed in order to achieve "economy of force" or "expansion of choice."[19] Both logics are relevant to the conventional commander, who in LSCO will find themselves operating with

constraints—either resource constraints or constraints on their freedom of action to employ conventional force. These literatures provide the theoretical and historical foundations for conventional military leaders to understand the role of SOF in LSCO.

Supplementing conventional forces. Economy of force and the concept of supplementing reflect the same logic. In all forms of warfare, commanders inevitably face constraints and hard decisions on where to employ forces and allocate resources. This is especially true in LSCO, where forces are likely to be more evenly matched and combat losses and resource expenditures are orders of magnitude larger. While the main effort warrants the bulk of a commander's forces, there will be shaping efforts that benefit from economy of force approaches at additional risk. Unconventional warfare and SOF, experts in mobilizing indigenous force multipliers, provide options to joint force commanders to directly support main effort forces or to conduct important shaping activities.

The use of specialized capabilities to fill the void of conventional forces is not a uniquely contemporary approach. Spartan commander Lysander argued 2,400 years ago, "Where the lion's skin will not reach, it must be patched out with the fox's."[20] This sentiment—that guile/unconventional solutions must fill the void where strength reaches its limits—is still relevant today. As LSCO imposes resource constraints on decision-makers, working through indigenous partners can cover where the conventional effort is insufficient. Historical examples abound of UW used to supplement conventional military forces through indigenous mass, a few of which we explore here.

Both the British and Germans employed UW as a shaping operation during World War I. The British, after two years of fighting in Western Europe and the Eastern Mediterranean, faced a deteriorating strategic situation in the Middle East. In the opening months of 1916, their twin campaigns against the Ottomans in Gallipoli and Mesopotamia culminated in calamitous defeats, staining the Empire's prestige and draining manpower. Equally concerning, the Germans and Austrians overran Serbia, and both powers held plans to divert small arms, artillery, munitions, and troops to the Ottomans. These setbacks, in addition to a heavy commitment of forces elsewhere, made a partnership with the Arabs attractive to the British. The Saudi Hashemites proved to be an amenable partner. Concerned with an invigorated hyper-Turkic nationalist Ottoman government guided by the Committee of Union and Progress, colloquially the "Young Turks," Hussein ibn Ali, the sharif of Mecca and leader of the Hashemites, coveted his own autonomous kingdom in the Hejaz.[21]

British war planners hoped an Arab revolt in the Hejaz would threaten the integrity of the Ottoman troops, as Arabs comprised one-third of the Ottoman army.[22] They further surmised that an Arab revolt would compel the Ottomans to divert a sizable force for counterinsurgency operations despite ongoing combat operations across multiple other fronts. Senior British strategists further deduced that an Arab insurgency could enhance the security of the Suez Canal and Egypt. Importantly, the British intended to mount a major conventional campaign in the Sinai and Palestine to knock the Ottomans out of the war. British war planners envisioned utilizing UW, via an Arab revolt, as a shaping operation to the larger conventional offensive.[23] To achieve this, the British relied on a cohort of anthropologists and regional cultural experts turned army

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Gen. Paul von Lettow-Vorbeck (*on horseback*) leads the protection troops from German East Africa circa March 1919 in Berlin. (Photo courtesy of the German Federal Archives via Wikimedia Commons)

officers—personalities like T. E. Lawrence—to embed with Arab rebels and lead them into Palestine.

From 1914 to 1918, the Germans, facing a comparable resource-constrained scenario, relied on UW to ward off repeated Entente (initially the United Kingdom, France, and Russia) incursions against its colonies in East Africa. At the onset of hostilities, the Entente pounced on Germany's colonies in West and East Africa. With the British Royal Navy and the French Navy dominating sea lanes worldwide, the Germans were unable to reinforce their African colonies.[24] Furthermore, with the Kaiser's armies facing off against the British, French, and Russians in a two-front land war, Berlin knew the war would be won on the battlefields of Europe and allocated most available forces toward that main effort.

On the other hand, the British and French had larger colonial armies stationed in Africa at the war's start. Although the Entente captured West Africa in the war's opening moments, Maj. Gen. Paul von

Lettow-Vorbeck led three thousand Germans and eleven thousand African Askari auxiliaries in an unconventional campaign against Belgian, British, French, and Portuguese armies numbering approximately three hundred thousand troops at their height.[25] Anticipating war in the years preceding 1914 and recognizing their inferior military position in East Africa, the Germans demonstrated prescience by creating a "self-reliant mini-army" that was better organized, equipped, and trained than their Entente counterparts.[26] When Vorbeck took command of the *Schutztruppe* of East Africa in January 1914, he inherited a highly capable force that could supplement Germany's main war effort in Europe.

Unconventional warfare also played a supplementing role during World War II. Since the "Arsenal of Democracy" could not commit conventional forces in significant numbers everywhere, the United States relied on SOF in the China-Burma-India (CBI) theater to supplement its main effort elsewhere. The British

employed SOF in the CBI, but also maintained a significant conventional presence in Field Marshal William Slim's Fourteenth Army, which ultimately delivered the decisive blow against Japanese forces in Burma in 1945.

In December 1941, the Japanese invaded British-controlled Burma and quickly evicted the British from their colony.[27] Poised to threaten British India directly, the Japanese also cut the Burma Road, which served as an indispensable lifeline to Chiang Kai-shek's Nationalist

A Jedburgh team receives instructions from a briefing officer in a London flat circa 1944. (Photo courtesy of the National Archives)

Chinese forces who faced the preponderance of Japanese land forces in the Pacific theater. The United States had an interest in Nationalist China's survival but could not spare the tens of thousands of ground troops required to keep the Burma Road open, nor the shipping to get those troops into the theater.[28] "The Burma Campaign is probably not going to be the big show, but it is the going show," observed an OSS operative describing the U.S. efforts in CBI.[29] For key American decision-makers, Brig. Gen. William Donovan's nascent OSS became an attractive option to keep the artery to China open. The U.S. Army formed OSS Operational Detachment 101, initially comprising twenty men (later a few hundred) under Maj. Carl F. Eifler in April 1942, to satisfy American objectives in CBI to reopen the Burma Road and enervate the Japanese occupation.[30] American war planners intended for Detachment 101 to raise an army of irregular fighters from northern Burma's Kachin people, a group marginalized by the Japanese occupation forces, to execute UW behind Japanese lines.[31]

Though not a comprehensive list of examples where UW supplemented conventional forces in LSCO, these cases capture important ways that SOF and UW can be leveraged by conventional commanders for shaping operations in the context of a broader military campaign. While SOF "patched out" the lion's skin in the First and Second World Wars cases above, we now demonstrate how SOF and UW can serve as a substitute for conventional forces who face either physical or political constraints to action.

Substituting for conventional forces. During LSCO, decision-makers not only face resource constraints but also other restrictions in the form of politically or physically denied spaces that forestall conventional operations.[32] In these contexts, UW offers the ability to substitute conventional forces with indigenous partner forces. Substitution is the practice of employing military forces capable of gaining access to territory otherwise denied to conventional forces; specifically, this means working through indigenous partners, often with the support of specially trained personnel who can infiltrate and operate in denied spaces to include the deep battle area. The Allies' employment of OSS/SOE teams during Operation Overlord in 1944, the use of SOF in northern Iraq during Operation Iraqi Freedom (OIF) in 2003, and Ukraine's UW efforts against

Jedburgh team members stand in front of a B-24 aircraft at Area T, Harrington Airdrome, England, circa 1944. (Photo courtesy of the National Archives)

Russian forces today serve as examples of substitution in LSCO.

By June 1944, the Allies postured themselves for the invasion of mainland Europe. While conventional forces were tasked with carrying out major ground operations in Normandy, France, senior Allied leaders accepted plans to prepare the environment by carrying out UW in regions of occupied France inaccessible to conventional forces. Prior to the invasion, SOE and OSS operatives across France gathered intelligence for the impending campaign, which included designating drop zones, organizing supply and munitions drops for the French resistance, and determining the requirements for varying resistance groups.[33] Once the invasion was underway, Allied planners intended to parachute highly trained three-man multinational

OSS/SOE Jedburgh teams and other SOF elements into France in the weeks following D-Day to train, advise, and command thousands of French Maquis fighters to "provide a strategic reserve that could create and control offensive action [for conventional forces]."[34] Alongside resistance across occupied France, Jedburgh teams disrupted German reinforcements to the frontlines and diverted some German forces against the rear area threat. The OSS/SOE teams were able to access physically denied terrain and influence French resistance fighters due to specialized capabilities that provided a valuable shaping operation for the conventional main effort.

More recently, the American-led coalition that invaded Iraq in March 2003 to depose Saddam Hussein's Baathist regime demonstrates SOF serving as a shaping

operation for the campaign. Among the 160,000 troops entering Iraq, two U.S. Army Special Forces groups, a naval special warfare group, and nearly the U.S. Air Force's entire SOF capacity took part in what may be the largest employment of SOF.[35]

When devising OIF, war planners identified an advance through the Tigris-Euphrates Valley as the invasion's main effort with the goal of capturing Iraq's political center, Baghdad.[36] Acting in a supporting role, the 4th Infantry Division (4ID), 173rd Airborne Brigade, and Joint Special Operations Task Force North (JSOTF–N), also known as "Task Force Viking," would advance from the north. Coalition planners tasked JSOTF–N's main element, consisting of forty-eight operational detachment-alphas belonging predominantly to 10th Special Forces Group with leading Kurdish Peshmerga militias in an offensive in northern Iraq.[37] While the United States saw movement from the south as the main effort, Baghdad anticipated the decisive advance would come from the north and maintained three Iraqi army corps and an armored division—totaling 150,000 soldiers—in a defensive posture in northern Iraq.[38] If the coalition failed to fix Iraq's forces in the north, they could shift these forces toward Baghdad and more than double their strength in the south, bludgeoning the coalition's main effort.

The coalition originally intended for JSOTF–N to supplement the 4ID conventional advance southward; however, on the eve of OIF, political shifts in Türkiye imposed constraints on conventional force insertion. Days before OIF's scheduled start, Türkiye's parliament rescinded basing access to all American ground forces due to long-standing grievances surrounding American military support for Iraq's Kurdish population. Türkiye's decision threatened to derail coalition planning in the north as the 4ID required Turkish border access to invade Iraq. Unable to delay OIF's start, JSOTF–N assumed command responsibility for the region, which included all supporting conventional contingents including the 173rd Airborne Brigade and a Marine expeditionary unit. JSOTF–N was able to substitute 4ID conventional forces as SOF units entered Iraq through specialized air mobility capabilities in the context of political constraints that denied conventional units access to Iraq.[39] In the context of the broader U.S. invasion of Iraq, JSOTF–N played a vital shaping operation, tying down and destroying multiple divisions of Iraqi conventional forces where U.S. conventional forces were unable to operate.[40]

Achieving Campaign Effects

There are a wide range of activities and effects UW offers a joint force commander; here, we focus on a few of them from the historical record. These include sabotage and kinetic actions in denied territories that divert enemy resources and deny freedom of maneuver in rear areas; intelligence operations, information operations, and other efforts to prepare the environment for conventional attacks; and replacing conventional forces with indigenous partners as maneuver elements in the close fight. While examples below largely lean on historical precedents, it is not difficult to imagine how these activities are applicable to the current war in Ukraine or to potential LSCO in the South China Sea.

Sabotage and kinetic effects. Unconventional warfare can be employed to target enemy formations, lines of communication, and logistics nodes. These actions can divert enemy resources from the conventional battlespace and degrade their capabilities for the conventional fight.

In the summer of 1944, OSS/SOE teams and their resistance partners carried out operations to sever German lines of communication. In a well-touted action, Maj. Tommy MacPherson's Team Quinine and its twenty-seven Maquisards (French resistance fighters) delayed the elite 2nd SS Panzer Division—numbering 17,283 men—for several hours during its movement to the front in Normandy.[41] MacPherson and his resistance fighters repeatedly destroyed the lead vehicles to block the primary German avenues of approach while killing dozens of fleeing German *Panzergrenadiers*.[42] Daily Jedburgh missions like this forced the German High Command to make "strategic misjudgments" and overestimate the scale of the resistance. Rather than expediently driving to Normandy, many German units were delayed by the Jedburgh-led Maquis and detached portions of their force to address the rear area threat.[43]

Similarly, Detachment 101 conducted sabotage and attacks in Spring 1944 to support an American-Chinese offensive spearheaded by Merrill's Marauders to capture the Japanese airfield at Myitkyina. After setting conditions for the Myitkyina offensive through intelligence gathering, Detachment 101's primary mission changed to support the Allied advance in northern Burma

Gen. Joseph "Vinegar Joe" Stillwell pins medals on senior leaders of the 5307th Composite Unit (Provisional) on 17 May 1944, sometime after the seizure of the Myitkyina airstrip from Japanese forces. Col. Charles N. Hunter (*second from left*) was the de facto commander of overall march, assault, and following actions after seizure of the objective. (Photo courtesy of the U.S. Signal Corps)

Operation Galahad and Col. Charles Hunter

Galahad was the code name for the U.S. Army's 5307th Composite Unit (Provisional), dubbed "Merrill's Marauders" in contemporary press reports. Organized for the specific objective of seizing the key Japanese-held airstrip at Myitkyina, Burma, it began a treacherous one-thousand-mile march in February 1944 with 2,503 men and 360 mules. The march took the unit out of mustering location in India over the Patkai region of the Himalayas and deep into the Burmese jungle. Resupplying the unit on the move proved to be an exceptionally difficult challenge, especially with regard to providing food and medicine. The unit was Initially led by Brig. Gen. Frank Merrill, but on March 29, he suffered his first heart attack. Subsequently, Merrill's executive officer, Col. Charles N. Hunter, assumed de facto command for the rest of the mission. Following months of forced marches through monsoon season, weakened by hunger and malnutrition, suffering from amoebic dysentery, malaria, various fevers, snake bites, scrub typhus, and fungal skin diseases, the unit finally reached the objective, and on 17 May, Hunter executed a surprise attack on the Japanese garrison holding the airstrip. The Japanese soldiers driven off the field who remained in the area were determined to resist, and the conflict became a grinding siege that did not end until 2 August when many of the

Japanese defenders committed suicide. One U.S. participant in the battle, Capt. Fred O. Lyons, said that the last thing keeping him going had been not letting Hunter down. He said, "By now my dysentery was so violent I was draining blood. Every one of the men was sick from one cause or another. My shoulders were worn raw from the pack straps, and I left the pack behind … I was so sick I didn't care whether the Japs broke through or not; so sick I didn't worry any more about letting the colonel down. All I wanted was unconsciousness." Lyons later confided, "Not a man of the Marauders went back to India a walking, well man. Everyone was ordered out by the medics; every man who marched into Burma so proudly and confidently three months before all either went out as a medical casualty or was left in a Burma jungle grave." On 3 August 1944, following the last battle, Myitkyina was declared secure. A later historian opined, "Colonel Charles N. Hunter had been with Galahad from the beginning as its ranking or second ranking officer, had commanded it during its times of greatest trial, and was more responsible than any other individual for its record of achievement." ◾

Source: Fred O. Lyons, "Merrill's Marauders in Burma," interview by Paul Wilder, 1945.

through direct action. By February, Detachment 101 had over four thousand Kachin fighters for the Myitkyina offensive.[44] During the American-Sino advance, the Kachin, formed into company-sized formations, acted as screening forces, protecting the flanks of the main conventional force.[45] The Kachin carried out diversionary attacks to protect the Allied main body, and in one incident, a company of Kachin diverted three Japanese battalions away from the main advance.[46]

Once the combined force reached Myitkyina and captured the airfield, they battled with the Japanese for control of the area. During this phase, the Kachin carried out extensive ambushes and raids in the Japanese rear areas, targeting supply depots, troop-marshalling areas, and command-and-control nodes.[47] The tempo of attacks had a psychological impact on the Japanese, further demoralizing them. Illustrating the impact, a Japanese prisoner of war confessed during interrogation that one Kachin fighter equaled ten Japanese soldiers.[48] Furthermore, the Kachin served as dependable guides and scouts for the Marauders throughout the offensive. In a noteworthy incident, a Kachin scout successfully guided the Marauders during their surprise attack on the airfield.[49] The force multiplying effect achieved by Detachment 101's Kachin fighters was significant. "Thanks to your people for a swell job. Could not have succeeded without them," attested Col. Hunter, commanding Merrill's Marauders, in a note to Col. William Peers, commanding Detachment 101.[50]

Intelligence support and preparation of the environment. Indigenous partners, particularly partisan "civilians" who can blend in with local populations in occupied territories, provide an intelligence-gathering capability in denied territory that can support conventional forces. In the months preceding the Myitkyina campaign, Detachment 101 conducted extensive intelligence missions that set the conditions for the Allied offensive. Spread out across northern Burma, Detachment 101's Kachin contacts gathered intelligence on Japanese force strengths, troop disposition, unit type, and terrain; their efforts directly shaped considerations at CBI theater-level command and confirmed the Allies' intent to strike in north Burma.[51] In addition to keeping CBI theater-level command informed, Detachment 101 provided the 10th U.S. Army Air Force (USAAF) with Japanese target locations. This enabled the 10th USAAF to severely reduce

Japanese logistical infrastructure in north Burma, compounding Japanese struggles once the American-Sino offensive began.[52] Maj. Gen. Howard Davidson, commanding the 10th USAAF, reported, "OSS furnished the principal intelligence regarding Japanese troop concentrations, hostile natives, stores and enemy movement. Up to 15 March 1944, some 80% of all combat missions were planned based on intelligence received from this source."[53]

More recently, resistance fighters reportedly provided intelligence in support of a Ukrainian air strike that sank the Russian *Novocherkassk* warship in the Black Sea in December 2023.[54] News reports and Ukrainian partisan social media indicated that not only did resistance fighters provide critical intelligence, but that President Vladimir Putin was furious at the attack and diverted Russian military forces to hunt down the resistance. This event suggests that resistance in denied spaces serve as intelligence sensors in support of conventional Ukrainian attacks in the deep fight.

Maneuver forces in the close fight. In some cases, indigenous forces led by SOF achieve effects in the close fight. As mentioned earlier, in northern Iraq during OIF, JSOTF–N and the Peshmerga completely replaced the planned conventional force. Arrayed along the Green Line's 200 km length, eighty thousand Peshmerga fighters, under JSOTF–N's command, crossed the line of contact separating Kurdish and Iraqi forces in March 2003.[55] During the offensive, coalition airpower proved decisive in supporting the SOF-led Peshmerga. Before the advance across the Green Line, American aircraft reduced Iraqi defensive positions along the border, enabling initial attacks.[56] Kurdish forces advanced toward Kirkuk and Mosul under an umbrella of precision coalition airstrikes.

In an example emblematic of the fighting throughout northern Iraq, SF operational detachment-alphas coordinated several AC-130 gunship sorties against the 108th Iraqi Brigade dug in along an extensive ridge complex known as Objective Bushman.[57] The air attacks severely weakened the 108th, and the Peshmerga, exploiting the damage inflicted on the Iraqis, assaulted the position and established a foothold on the ridge.[58] Unwilling to abandon the position, the Iraqis repeatedly attacked the now-entrenched Peshmerga over four days. SOF continued to call in airstrikes that not only repulsed exposed Iraqi counterattacks but also rendered

Peshmerga fighters watch a Special Forces 81 mm mortar team set up their weapon 28 March 2003 in the vicinity of Halabja, Iraq, to support Peshmerga forces during a ground assault. (Photo courtesy of the U.S. Army Special Operations Command History Office)

coalition's capture of Kirkuk and Mosul.[60] An epitome of SOF-enabled UW, JSOTF–N prevented three Iraqi corps from influencing the U.S. main effort in the South.

Similar effects were seen in both world wars. By mid-September 1918, British forces under the command of Sir Edmund Allenby launched a climatic final act in Palestine, which culminated in the Battle of Megiddo. In support of Allenby's masterstroke, the Northern Arab Army, led by Lawrence and Lord Feisal, launched an offensive to capture the vital railway hub at Deraa, which served as a communications and reinforcement node for the Ottomans. The Arab army successfully seized Derra and forced the Ottomans to dispatch their fourteen thousand-strong Fourth Army, a reserve force destined for the Palestine front, to deal with the Arab army.[61] Instead of engaging an Ottoman army of about thirty-two

the 108th combat ineffective.[59] Akin to British bite-and-hold tactics from World War I, where a combatant takes ground and forces their opponent to attack them, SOF-led-Peshmerga utilized this approach to combat the Iraqis throughout the campaign. Battles across northern Iraq largely unfolded in this manner, and by early April, Iraqi forces had disintegrated, opening the way for the thousand combatants, Allenby attacked seventeen thousand Ottomans, giving his army a decisive 3.4:1 numerical advantage over the Ottomans.[62] As fighting progressed on Lawrence's front, his Arab forces dealt the Ottomans a heavy blow by inflicting five thousand enemy killed and capturing eight thousand prisoners during the offensive.[63] During the Allied

breakout in Normandy in World War II, fifteen thousand French resistance fighters, under OSS/SOE leadership, guarded the U.S. 3rd Army's southern flank along the Loire River, enabling the 3rd Army's drive toward the German border.[64] To further free up Allied conventional forces for operations elsewhere, the Allies also used Jedburgh-led resistance formations to reduce isolated German garrisons across France, namely in Brittany.[65]

Limitations of Unconventional Warfare

As the character of warfare evolves, there will likely become additional uses for indigenous partner forces to supplement or substitute the joint force. Debates over the role of SOF's value proposition in LSCO often lead to the question, "What line will they hold?" The analysis above suggests that first, SOF will supplement where conventional forces lack the resources to hold a line. Second, SOF can act where conventional forces are unable to gain access, such as the deep fight behind enemy lines or where politics immobilizes conventional units. The need for special capabilities to penetrate deep are increasingly important as adversary antiaccess/area denial makes air and missile strikes difficult without first setting conditions in denied territory.[66]

Unconventional warfare and resistance elements provide valuable shaping effects and can impose costs and dilemmas on a conventional adversary, but they rarely serve as the decisive operation in LSCO. The conflict's context matters, including the scale of the war, strength of the opponent, and feasibility of building resistance networks to carry out UW. In LSCO, on the scale of the Russia-Ukraine war or World War II, employing UW or resistance as a stand-alone tool would likely be ineffective. Allied reliance solely on SOE/OSS support to the French resistance is unlikely to ever have led to France's

Lt. Col. Thomas E. Lawrence, "Lawrence of Arabia," in 1919. (Photo from Lowell Thomas, *With Lawrence in Arabia* [1924], via Wikimedia Commons)

liberation. In May 1944, 880,000 German troops were stationed in occupied France, Belgium, and the Netherlands, including heavily armored panzer divisions; the French resistance could field only a fraction of that herculean German force let alone manage to obtain the quantity and type of equipment from the Allies to fight as a stand-alone force.[67]

Similarly, in Ukraine, the Ukrainian Armed Forces would be remiss to rely exclusively on resistance when fighting against an opponent with sizable conventional advantages in fires, equipment, and manpower. However, in LSCO conflicts, UW can impose costs on the enemy, especially in occupied areas, that have favorable effects in support of the campaign plan. In other contexts, UW has proven capable of replacing large parts of conventional forces, such as in northern Iraq during OIF and in the initial invasion of Afghanistan in 2001. In these contexts, UW had a greater relative impact on the overall campaign. It is critical for military planners and commanders to understand the context of the conflict to effectively apply unconventional warfare capabilities, fully cognizant of its potential and its limits to support LSCO and great power wars.

Mounted fighters brandish their rifles during the 1916–1918 Arab Revolt. (Photo courtesy of Wikimedia Commons)

Conclusion and Implications

After a thirty-year hiatus initiated by the collapse of the Soviet Union, the world has once again entered an era of strategic competition between peer great powers. Historically, such periods have been marked by competition phases, where nations attempt to achieve national objectives and expand influence below the threshold of direct conflict by wielding all the elements of power available to them. When measures short of war fail, nations resort to conflict. In other instances, chance and miscalculation have led to great-power war.

As military leaders seek to navigate strategic competition and potential escalation to direct conflict, analysis of historical conventional wars provides insights into the full range of capabilities available to joint force commanders to include understanding the role of UW in LSCO.[68] The United States and its allies can prepare to optimize the employment of IW and UW capabilities in multiple ways. First, UW doctrine should be incorporated into professional military education, combat training center and Warfighter exercise scenarios, and wargaming. Second, it is vital that SOF and conventional forces maximize their interactions to ensure each understands and can integrate the capabilities of the other. Last, as the Army builds the force for strategic competition, it must preserve its unconventional warfighting capability.

Our adversaries have spent decades analyzing the American way of war, on display from the first Iraq War (1991) through the present. They have designed their force structure and doctrine to counter U.S. advantages in precision fires and maneuver and created large, capable forces. Given the scale and efficacy of U.S. adversaries, the United States and its allies must think beyond exclusively conventional approaches and bring all available tools to the fight. ■

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The *Counterinsurgency Reader,* published in 2006, is a compendium of articles previously published in *Military Review* that was developed as a resource to help military personnel then engaged in the Global War on Terrorism to develop an understanding of insurgent conflict and irregular warfare.

To read online, visit https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/COIN-Reader-1/.

Students move pieces around the board during a war game based on a Pacific conflict while attending Air War College at Maxwell Air Force Base, Alabama, 21 December 2023. Game phases are actioned with a deck of cards, spawning new and viable assets with each play. These items can range from instituting an element of air superiority to launching an information campaign. (Photo by Billy Blankenship, U.S. Air Force)

Change the Incentives

An Information Theory of Victory

Maj. Don Gomez, U.S. Army

Show me the incentives and I'll show you the outcome.
                                    —Charlie Munger

We're getting our rear end handed to us in the information space.

                    —Gen. Glen D. VanHerck, U.S. Air Force

Within the information community, it is taken as a near-article of faith that measuring effectiveness is what matters in determining whether an information activity is successful. The following discussion challenges that assertion and offers an alternative framework that could fundamentally alter how information activities are planned, executed, and assessed.

Despite increased discourse concerning the role of information and influence in achieving success in modern conflict, there remains a nagging sense among military leaders, policymakers, and the public that the United States is constantly on the back foot in this arena.[1] It is routine for political and military senior leaders to claim that the United States is *losing* the information war against adversaries who are more nimble, shameless, and aggressive.[2] How can it be the case, they openly wonder, that the strongest Nation in the world, which is also home to Hollywood and big-brand marketing talent, cannot compete with the information efforts of hypocritical autocratic regimes, low-budget nonstate actors, or lone wolves leveraging artificial intelligence to pump out cheap propaganda?

The answer to this question is both simple and dull. We are using the wrong bureaucratic incentives. First, humans are messy and do not think, feel, or behave in ways that can be neatly categorized. While this seems intuitive, it does not prevent well-meaning planners, practitioners, and theorists from positing that human activity can be optimally stratified, quantified, and measured. Second, information professionals often conceptualize and demonstrate success in ways incongruent with their senior leadership's goals and desires; they tend to chase a metric that may be unknown to senior leaders. Changing the status quo and achieving success in the modern information environment requires a shift in thinking away from an *outcomes*-based model rooted in industrial-age management practices and toward an information-age model that recognizes and accepts the subjective messiness of audiences and incentivizes *output* in conjunction with a theory of victory.[3]

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Informational Heresy

The notion that measuring qualified output might be preferable to measuring desired outcomes is likely considered heretical among many information professionals.[4] Achieving positive measures of effectiveness is routinely accepted as the gold standard in demonstrating success both internally and to key external stakeholders.[5] However, examining how assessments intermingle with incentives within large bureaucracies reveals problems that contribute to the legitimate sense among many leaders that the United States is losing in its information efforts vis-à-vis its adversaries.

To demonstrate that a focus on achieving objective effects limits U.S. information efforts, an exploration of critical definitions is required, particularly nebulous and oft-redefined terms like information. I argue that achieving firm definitions is a distraction that stands in the way of effective operations in this realm. Additionally, a critical examination of prevailing management and assessment practices indicates that incentivizing outcomes tends toward dysfunctional incentive structures that often fail to meet stated objectives. Instead, adapting theory of victory concepts to information activities creates a pathway toward an output-based system that aligns with what many businesses and brands have discovered is critical for sustained long-term success and growth.[6] These theory of victory concepts were tested in an experimental information war-game exercise in the fall of 2023 in support of building a deeper understanding of "what winning looks like" in the information space.[7] Finally, this discussion concludes with important qualifications and potential recommendations for implementation.

Eternal Term Warfare

There is an increased awareness across the joint force of the importance and relevancy of information in campaigning, competition, and conflict.[8] At the same time, there is corresponding confusion over how information concepts fit into greater national strategy, how they are operationalized, and perhaps most importantly, how operations, activities, and investments can be measured to indicate success.[9] Much of the confusion

begins with the persistent inability to settle on widely accepted and sufficient definitions.

Despite rigorous intellectual effort, definitions regarding information and information activities remain nebulous and dynamic.[10] Once a qualifier is affixed to information, it becomes difficult to understand where one effort begins and another ends. How is information warfare different from psychological warfare? What about influence activities or cognitive warfare?[11] These terms are constantly deployed and redefined internally and externally with little thought to what they may be subsuming or excluding. This incessant defining and redefining of adjacent words is referred to some as "term warfare."[12] While defining terms is important and can clarify thought, remaining in a constant state of bureaucratic "term warfare" can inject uncertainty, skepticism, and timidity into planning and operations. Meanwhile, adversaries appear to be less interested in what a particular activity is called and more interested in what it can accomplish.

For many years, the term "information operations" was used to describe in a general sense the activities taking place and serving as the term for the coordinating function that encompassed other roles of information activity like military information support operations, electronic warfare, or public affairs.[13] In recent years, this changed in Army doctrine to information advantage, which differs from joint doctrine's emphasis on operations in the information environment.[14] Further, Army doctrine describes the information efforts of adversaries as *information warfare* but does not use the same term to describe its own activities.[15] Meanwhile, both the Navy and the Air Force have embraced the term information warfare but to different ends.[16] To further muddy the waters, academics who study the same activity and journalists who report on it do not make these same distinctions, referring to related activities variably as information warfare, information operations, psychological warfare, or propaganda.[17] While the activities taking place have not changed much in recent years with the important exception of the introduction and proliferation of new communication technologies, the terms used to describe them continually change, increasing confusion among both practitioners in charge of their execution and leaders responsible for providing direction and oversight.[18]

While some might argue that without firm definitions it can be prohibitively challenging to plan and execute effective operations, accepting the nature of these types of activities as inherently murky and arguably undefinable presents an alternative way forward. Reviewing the history of defining information, we see that shifting definitions is one of the only constants. Accepting a sufficient definition for a given time and context is likely to satisfy the needs of the day, fully knowing that as things change, so too will the definitions. Finally, the divergence of opinion on definitions should be welcomed, as this leads to additional research and thought that can advance the discourse. Considering that strong opinions and disagreements abound, to state categorically that an enduring decision has been made regarding a definition would likely hamper future efforts toward growth and innovation. The subsequent discussion accepts the vague and often changing nature of these terms and argues that the constant fight to redefine them only adds to the confusion about what constitutes success. Although unsatisfactory, planners and practitioners can move forward with an understanding that definitions will likely shift with different audiences and contexts. With that, a deeper exploration of the role that metrics and incentives play in information reveals a much larger problem.

Metrics and Incentives: A Broken Cycle of Good Intentions

Leaders expend precious resources to achieve their objectives. Stakeholders up, down, and adjacent to the chain of command want to know if those resources are employed effectively. Demonstrating success is often the key criterion within bureaucracies to gain continued support in executing a plan or course of action. In rigid bureaucracies, demonstrated success serves as a powerful career incentive and often leads to better evaluations, increased promotion potential, desired assignments, and enhanced professional prestige. This confluence of factors—the need to demonstrate success as good stewards of public resources coupled with the incentive structures of large bureaucracies—is a fundamental contributing factor to the inability to compete effectively with adversarial information efforts. This confluence leads to a broken cycle of good intentions, and at the heart of this cycle is a military culture obsessed with metrics.[19]

Flying under radar control with a B-66 Destroyer, Air Force F-105 Thunderchief pilots bomb a military target through low clouds over the southern panhandle of North Vietnam, 14 June 1966. (Photo by Lt. Col. Cecil J. Poss, U.S. Air Force)

While the introduction and proliferation of performance measurement into military activity was well-intentioned, research reveals a chaotic system that often results in misguided efforts that frequently fail to achieve their objectives. At the onset of the Cold War, the U.S. military began adopting emerging business practices that emphasized hyperefficiency and performance measurement to compete with the centralized

whether that success is real, exaggerated, or completely false.[26]

In the realm of information, some might argue that this problem simply requires identifying better metrics.[27] That is, achieving certainty that the metric measured is precisely correct and its successful manipulation will deliver the objective desired. While this solution is tempting—especially in an era of machine

> This rubric served as a *theory of victory*—that more enemy dead and more bombs dropped would shift the dynamics of the war toward a U.S. victory.

planning efforts of the Soviet Union.[20] As far back as 1956, there were indications that an overreliance on metrics could lead to "dysfunctional consequences" within a system.[21] A simple example of this is known as the "ratchet principle," where workers who meet a certain quota of productivity are rewarded with an increased quota, often without an increase in the means to accomplish the additional work.[22] This can lead to workers deliberately ensuring they never meet the initial quota to avoid the imposition of a higher workload.

A well-known military example of dysfunctional consequences in performance measurement is found during the Vietnam War, where the U.S. military measured success by the number of enemies killed and the tonnage of bombs dropped.[23] Once measurements are introduced into a system, incentives tend to realign and reward short-term success over long-term progress, regardless of any safeguards implemented by management. In this case, incentives realigned leading to an increase in the number of enemies killed in action and tonnage of bombs dropped as that was what senior leaders valued as indicative of success. This rubric served as a *theory of victory*—that more enemy dead and more bombs dropped would shift the dynamics of the war toward a U.S. victory.[24] Only in this case, the theory of victory was flawed, resulting in tactical efforts that undermined the war effort.[25] Additionally, military leaders under both career and operational pressure to produce results may contort themselves and their data to demonstrate success,

learning, artificial intelligence, and "big data"—even when conducted flawlessly, processes that deal with the thoughts, feelings, and behaviors of humans are rooted in social science approaches that are limited in what they can definitively prove.[28] For example, in attempting to determine how to measure the *will to fight*, researchers at RAND argued that while literature, doctrine, and some of the most prominent military leaders throughout history have stated that the *will to fight* is the most important factor in war, it remains nearly impossible to prove or measure.[29] However, to satisfy the deeply ingrained military desire for objective metrics, the authors offer an impressive model that includes over twenty factors at the individual and unit levels to generate a potential model with quantifiable metrics. Despite this exhaustive and impressive work, the authors conclude that "we can quantify the will to fight in simulations but we can never accurately quantify the will to fight in the real world."[30]

Further research into the effects of metrics and performance management systems on bureaucracies reveals systemic and emergent problems. Chief among these is a performance measurement concept known as Goodhart's law, which states that "when a measure becomes a target, it ceases to be a good measure."[31] The classic example comes from a phenomenon during colonial British rule of India. British officials placed a bounty on the skins of cobras to curb the growing population. Local hunters quickly realized they could exploit the system by breeding cobras at scale and

delivering their skins to receive the bounty rather than hunting them—a much less dangerous endeavor.[32] While it may be possible to craft the perfect measure to ensure that only the specific desired behavior is enacted, evidence and history show that, in most cases, the measure becomes the target precisely because of the incentive structure built into the system. Considering the wide array of internal and external factors that comingle and interact with a specified metric, it is difficult to predict how all audiences and practitioners will behave to influence it.

In the case of information, identifying assessment criteria, often in the form of crafting measures of effectiveness, is one of the first steps in planning.[33] Before deep thought or analysis begins on target audiences, susceptibility, or dissemination methods, planners are already considering what metrics might be used to determine whether the effort will be considered successful. While this may appear logical and forward-thinking, Goodhart's law states that once the measure becomes the target, it fails to be a good measure. Additionally, practitioners under immense operational pressure to deliver results are incentivized to ensure that the measure moves in the desired direction and will likely dedicate everything they can to make that happen.[34] A savvy planner or practitioner may be tempted to craft an information effort that is more likely to generate tangible, observable results rather than a potentially superior effort that is prohibitively difficult to measure.[35]

Researchers Leo Blanken and Jason Lepore further explore the problem of incentive structures in military operations.[36] They argue that in hierarchical systems, the principals who set objectives and policy (i.e., political and military senior leaders) are often far removed from the agents that carry out the tasks (i.e., military planners and practitioners).[37] Further, the principals are often unaware that the agents tend to pursue a metric that was generated *as a way* to demonstrate success as opposed to achieving the actual goal, which may have a distant relation to the established metric. This distance contributes to the confusion between the principal and the agent. While an information practitioner may be able to demonstrate apparent success through the attainment of positive measures of effectiveness (i.e., the desired change is achieved), achieving those metrics was never the goal of the senior leader in the first place,

and thus the lingering sense of "losing" in the information environment. This cognitive disconnect between the principal and the agent occurs precisely because of the imposition of a flawed performance measurement system that does not match the task.[38]

The confluence of performance measurement and metrics, bureaucratic incentive structures, and the unique subjectivity of influencing thoughts, emotions, and behaviors sits at the heart of the problem of achieving success in information efforts. Effective leaders demand results and want to demonstrate that they are good stewards of public resources while also being successful at achieving the goals of their institutions. Good practitioners are diligent in demonstrating that their efforts are effective, typically through communicating the successful attainment of desired outcomes with measures of effectiveness. Unfortunately, research on the subject that stretches back nearly a century indicates that under the best conditions, metrics intermingling with bureaucracies often leads to dysfunction. Add to this the inherently difficult task of measuring abstract concepts like the emotions or thoughts of a target audience in relation to a specific message or information campaign, and it becomes clear that the current system is unlikely to satisfy the needs of all who are involved. This phenomenon is precisely what leads many to rightly conclude that the United States is losing in the information space. To overcome this, an alternative to classic assessments is needed that provides an overarching concept that demonstrates "what winning looks like" in the information environment.

The Need for an Information Theory of Victory

The joint force has recognized that its adversaries are not confined by neat categorizations between war and peace, and that these adversaries routinely engage in forms of warfare below the threshold of armed conflict.[39] The shift toward competition provides a useful framework for conceptualizing and planning operations to compete for advantage in the event of war. Inherent to this shift is the important role that information and influence play in this concept.[40] While the doctrine, tactics, techniques, and procedures concerning information remain sound, an overarching concept that attempts to conceptualize "what winning looks like" in the realm of information is lacking.[41] Borrowing from theory of

victory studies and identifying a potential theory of victory for information is the first step in developing an approach that stands a chance of achieving success.

Theory of victory research is a subset of war studies that attempts to fill the gap between crafting effective strategy and achieving the policy goal desired. It attempts to answer the question of how we get from the attainment of the military objective to the achievement of the policy goal. Two war studies scholars, Bradford A. Lee and J. Boone Bartholomees offer complementary approaches to conceptualizing a theory of victory that can be adopted for information. Following a summary of these approaches, they are applied to information to introduce a new model for conceptualizing victory in information.

Lee argues that a theory of victory represents "the assumptions that strategists make about how the execution of the military operations that they are planning will translate into the achievement of the political objectives that they are pursuing."[42] While lengthy, that statement captures precisely what a theory of victory is—an assumption about how friendly activity will shift the dynamics of a given system in such a way that the adversary will "give up, go away, or go down swinging."[43] Additionally, Lee recognizes that it is difficult to measure the effects of these activities, with the exception of "first-order military effects" like destroying equipment. Thus, he argues that assumptions are paramount in any theory of victory. While the word *assumption* often carries a negative connotation due to its ambiguity and introduction of risk, Lee argues that assumptions are essential when conceptualizing victory against a complex adversarial system.[44] Furthermore, assumptions should be based on tangible qualities like expertise, experience, data, cultural acumen, etc.; they are not simply gut feelings or the absence of facts. Finally, Lee offers an important caveat for democracies. To sustain continued support toward achieving victory, relevant stakeholders, from military and political officials to the public, must see incremental dividends over time.[45] Examples of incremental dividends include the raid that killed Osama bin Laden as part of the larger Global War on Terrorism, and the early disclosure of Russian deception intentions at the outset of the Russia-Ukraine War in 2022.[46] These incremental dividends provided a satisfactory and tangible "win" as part of a much longer and more difficult to measure effort against an adversary.

Bartholomees takes a different approach to theory of victory studies, beginning with the claim that "victory in war is at the most basic level an assessment, not a fact or condition."[47] Importantly, he argues that this assessment is subjective, contextual, and hierarchical, and not objective, absolute, or equal among actors. He stratifies the importance of these assessments in the American context, arguing that it is (1) the American public, (2) military and political elites, (3) American partners and allies, and (4) world opinion that determine whether victory was achieved or not, in that order.[48] Additional research outside of war studies identifies the concept of intersubjective belief as relevant, where the beliefs of individuals and groups are formed through interaction with one another, and these intersubjective beliefs wax and wane as new information is revealed or norms change over time.[49] Altogether, Bartholomees presents the importance of subjectivity, audience, and context in achieving victory.

The combined theory of victory research of Lee and Bartholomees offers a framework toward a potential theory of victory for information. From Lee's formula for victory, we can propose that a theory of victory for information consists of "the *assumptions* made about *actions/activities* taken to *influence dynamics* within the *information environment* to achieve a *stated objective*."[50] And from Bartholomees, we understand that victory is an intersubjective assessment made by various actors in specific times and contexts. This combination of factors—a concept for a theory of victory and an understanding of how victory might be assessed—opens the door for experimentation.

Testing a Theory of Victory in an Information War Game

To test this, I designed an information war game based on theory of victory research and prevailing information concepts. The war game aimed to replicate the complex dynamics inherent in information activities, the incentive structures of bureaucracies, and the subjective assessments of multiple actors. In the war game, two information professionals from opposing states compete for influence over multiple target audiences. Using cards marked with various information activities along with a corresponding value (1, 2, 3), the players attempt to influence generic target audiences to support their side. While this influence effort takes

Soldiers with Task Force Guardian, 41st Infantry Brigade Combat Team, war-game courses of action prior to a combat operation as part of an exercise during the Joint Readiness Training Center rotation (JRTC) 24-09 at Fort Johnson, Louisiana,18 July 2024. The JRTC goal is to create realistic environments that help prepare units for complex operations. (Photo by 1st Sgt. Zachary Holden, U.S. Army)

place, additional players take on the roles of political/military elite, partner and ally nations, and world opinion, each with their own ability to register assessments of the two sides. Over the course of multiple rounds players experience how the other players perceive their actions and can adjust their tactics in attempt to "win"—which in this case means maintaining a positive sentiment among a majority of players while also influencing the various target audiences to their side.

An important aspect of the war game concerns the interactions between players. While the influence professionals have full autonomy to play any cards they wish, the political/military elite are responsible for providing additional cards to them at the end of a round. Thus, the political/military elite players have influence over which cards are possible to play in the first place—a dynamic that replicates authorities and permissions in the real world.[51] A failed information effort, for example, might result in negative feedback from tangential players, reducing the appetite among the political/military elite for similar activities in future rounds. These dynamics serve as a simulation for what information professionals face when trying to demonstrate success (e.g., effectively influencing a target audience) while their supervisors claim that in the grand scheme, they are "losing" based on the subjective responses of various actors who are often unseen and unaccounted for by the information professional.

While the scope of the war game was small and the results cannot be generalized outside of the context in which it was played, it provided a useful tool for experimentation. Based on previous research, I tested a hypothesis that a high volume of information activity—increased output—would likely contribute to an increased subjective assessment of "winning" among various actors. This was confirmed in the specific context of the war game.[52] However, further experimentation is required to generalize and build upon these results. For example, during war-game sessions, it became clear that participants often made subjective assessments based on criteria not controlled for in the game (e.g., their level of familiarity with information concepts). Future research using similar methods could attempt to control and isolate specific criteria to generate deeper insight. Finally, the game itself proved to be a valuable educational tool for demonstrating how information and assessment work in a safe and replicable environment. At the conclusion of a given game, players can state why they thought one side was winning over the other, and with more data, trends are likely to emerge that could inform the development of new concepts.

Not Everything That Counts Can Be Counted

Research informs us that understanding exactly why humans choose to think, feel, and act in certain ways is likely to remain at best an imprecise discipline. Attempts to quantify attributes that are not readily quantifiable introduces the patina of hard science and unqualified certainty. Large bureaucracies—and especially rigid hierarchical bureaucracies like the military—tend to reward short-term success often demonstrated through data manipulation. Incentive structures coalesce around a strong desire at both the individual and organizational level to prove that a course of action is successful. This incentive structure can lead to timidity among information professionals who may choose to pursue a metric that is easy to influence rather than the activity that might truly be effective but difficult to measure.

With that understanding, there is an opportunity to introduce an alternative approach based on two important claims. First, a recognition that as success is currently demonstrated, career and organizational structures incentivize agent behavior that often fails to deliver the stated objective of senior leaders—the agents tend to chase the metric, not the goal. Second, a recognition that despite heroic and continuous efforts, measuring human thought, emotions, and behavior will continue to be an imprecise science. The focus on delivering objective results can prevent organizations from success as they are expected to prove that a course of action *will* work or *did* work in order to continue. This dysfunction can be corrected by adopting a theory of victory for information based on qualified assumptions concerning the effects of informational actions/activities and pairing this with an organizational incentive structure that is concerned with qualified *output* over tangible *outcomes*. Stated plainly, if organizations measured *output* in accordance with a theory of victory, planners and practitioners would be properly incentivized to meet the needs of the current information environment. Assessments would then be

focused on ensuring the right activities are conducted in accordance with a theory of victory, instead of whether those activities can be definitively linked to tangible outcomes. Finally, information war games can explore and experiment with various criteria that are most likely to lead toward victory.

There are three important qualifications worth considering. First, for a theory of victory for information to be successful, it must be correct. Returning to the Vietnam War example, a theory of victory predicated on body counts and tonnage of bombs dropped was incorrect. That theory did not account for the totality of the dynamics at play, like the role of the American antiwar movement and domestic politics.[53] While a theory of victory can be wrong, without one, planners and practitioners are left to do *the next best thing* in perpetuity. Second, it is possible that as technology and data collection improve, the ability to accurately measure the effectiveness of specific information efforts will also improve. The rapid advances and use cases in artificial intelligence, for example, have generated intense discussion on how new technologies might be used in future information efforts.[54] However, the importance of context—especially cultural context—is often absent from this conversation, as new technologies impress stakeholders looking for the next advantage. While technological developments may enhance the ability of data collection and analysis in a data-rich environment, the same may not be the case in a denied area where information activity is taking place.[55] Finally, there are cases when achieving strong measures of effectiveness remain the best assessment for determining whether an information effort was successful or not. Instances with a clear behavioral outcome, like surrender or defection, are best accomplished through classic assessment. Adopting theory of victory practices to information does not mean casting aside traditional assessment and the need to determine effectiveness—those assessments are still necessary. However, this provides an alternative framework that offers a way to measure activity that may have an effect absent of clear measures of effectiveness.

The concepts proposed in this research cut against the grain of established practice and are likely to be met with understandable skepticism. While there is a seeming consensus on the importance of information as well as an appetite for increased effectiveness, little is offered that deviates from calls to do more or do better.[56] This research offers an alternative. Stakeholders who have oversight on information activity should consider the possibility that the current system as it exists may be flawed and remain open to alternatives. Planners and practitioners in information should consider the concepts described in this research as potential avenues for achieving success. Finally, experimentation—especially in the form of information war games—should be encouraged and incentivized to garner additional insight and criteria toward what winning looks like in the information environment. ■

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To read online, visit https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/MR-Coin-Reader2/.

A Ukrainian marine prepares to launch a first-person-view drone 12 October 2023. (Photo courtesy of the 35th Marine Brigade, Defense Forces of Ukraine)

Democratization of Irregular Warfare

Emerging Technology and the Russo-Ukrainian War

Treston Wheat, PhD

David Kirichenko

Warfare went through drastic changes over the past millennia, but a consistent theme throughout these changes has been the increasing democratization of conflict. What was once chivalric orders gave way to mercenaries and militias, and then Napoleon Bonaparte radically altered war by raising popular armies not bound by the same hierarchical requirements as other militaries. The nineteenth and twentieth centuries saw mass mobilization through the draft, and the citizen-soldier became a critical symbol of militaries in republics and democracies. During World War II, people normally disenfranchised from society and politics were even included in the war effort, such as women taking a far more active role than ever before in conflict.[1] The history of war over the past five hundred years includes the further democratization of military power. Today, technological development has furthered democratization to a level never seen before because weapons of war like drones and cyber capabilities are available to the masses at an extremely low cost as a barrier to entry.

Russia's invasion of Ukraine provides a useful case study in how democratization has happened in three critical areas of modern warfare: drones, cyberattacks, and influence operations. The availability of the technology for regular citizens to participate in warfare has changed the way conflicts are fought, and Ukrainian citizens have demonstrated mechanisms that citizens of other countries can utilize in their own conflicts. This aspect of war is important for government analysts and scholars to understand because wars of the future are extremely likely to include this element. For example, should the United States ever go to war

with China over Taiwan, netizens will likely spend an extraordinary amount of time on cyberspace defending their country's online and physical infrastructure. The Russo-Ukrainian War provides an ongoing natural experiment in how democratization of warfare is taking place, which will allow scholarship to develop concerning this novel approach to war.

Crowdsourcing Drones Supplies

Civilian funding of the military is not new to warfare (beyond the normal taxes as well). A significant portion of the American Revolution was funded through the confiscation of property, and average citizens would buy bonds to raise money for the war effort during World War II. However, the Russo-Ukrainian War has shown a different side of this kind of funding as citizens and supporters are directly buying military equipment for the soldiers on the front lines. In modern parlance, people are crowdfunding the war in Ukraine, which shows a novel way that warfare is unfolding and the aspect of the democratization of irregular war.

Lt. Col. Pavlo Kurylenko, a top Ukrainian military commander, said, "We're only holding back the Russians with crowdfunded drones."[2] He further mentioned that 90 percent of first-person view (FPV) supplies are provided by volunteers or military divisions themselves. With drones in such short supply, demand far outstrips supply. It is quickly becoming a battle of drones, and many Ukrainian units on the front line are dependent on volunteers who bring them drones.[3] Volunteer organizations like Dzyga's Paw have not only built military tech supply chains for Ukrainian units but were also at the forefront of driving drone operations innovation at the start of the war.[4] A soldier using an FPV drone can effectively neutralize heavy armor worth millions of dollars with a drone that costs just $300.[5] FPV drones equipped with cameras transmit live video to goggles or screens, letting pilots navigate via the drone's perspective. Primarily used as kamikaze drones with explosive payloads, they provide detailed views crucial for tasks demanding precision and swift pilot responses.

Paul Lushenko of the U.S. Army War College notes that drones have given "asymmetric advantages to the militaries of lesser states."[6] Drones have been so effective in warfare that Ukraine had to sideline the U.S. Abrams tanks because drones have been too effective

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First-person-view drones are ready for transfer to the Ukrainian military in September 2024 as part of the Birds of Victory project. Lt. Col. Pavlo Kurylenko, a top Ukrainian military commander, said that more than 90 percent of these drones are supplied by volunteers or the military units themselves. (Photo courtesy of the Lviv Regional Military Administration)

at spotting tanks and hitting them.[7] Soldiers and heavy armor simply can't move around on the battlefield anymore without being spotted. The security world has been concerned about the ubiquity and cheapness of drones for some time, but the Russo-Ukrainian War shows the advantages in irregular warfare of this technology. Russia has significantly more manpower and resources than Ukraine. However, in typical irregular warfare, the weaker side can use novel technologies (or older technology that is adaptable) to outmaneuver the more advanced forces.

Ukraine relies not only on volunteers to source drones for the military but to also drive innovation and production of drones.[8] Numerous volunteers work in garage-style shops to make improvements to drones and are even setting up repair shops near the front line. If soldiers retrieve a damaged drone, they send it to volunteer organizations who help repair the drones for soldiers.[9] Ukrainian charities run supply chains to source drones for soldiers to help them on the battlefield.[10] Drones not only have changed the battlefield in Ukraine, but democratization has also occurred through the fact that all sorts of individuals

and organizations are able to get their hands on amateur drones that anyone can buy and then supply them directly to the front.

An ability to supply conflicts more directly will majorly alter warfare as great powers could find themselves at the mercy of crowdfunded militias and guerillas. Although that itself is not necessarily new as diasporas (e.g., the Irish Republican Army) supplied irregular operations through donations.[11] What is new is the ability to buy cheap arms and bring them directly to the soldiers. Importantly, emerging technology like drones is relatively cheap. Previously, weapons systems were extraordinarily expensive, and even donations from the diaspora could only supply limited arms. Drones, on the other hand, can be supplied more easily with only a few hundred dollars. These cheap drones, which previously people could buy off the store shelves, have the ability to neutralize tanks worth millions of dollars and have made tanks play more of a secondary role in the Russo-Ukrainian War.[12] As military strategies are considering the future of irregular warfare, they will need to consider this kind of crowdsourcing from either the diaspora or supportive citizens. There

A North Atlantic Fella Organization (NAFO) mascot is perched on a destroyed Russian tank in front of the Russian embassy in Berlin on 24 February 2023. NAFO, a play on NATO, is an internet meme and social media movement dedicated to countering Russian propaganda and disinformation about the 2022 Russian invasion of Ukraine. It has been categorized as a form of information warfare. (Photo by Leonhard Lnez via Wikimedia Commons)

will need to be legal considerations for governments to work through as well. Supplying terrorist organizations (when they are officially designated as such) is illegal in Western countries, and geoeconomic considerations will need to take place. In addition, there will be security concerns even when crowdsourcing technology like drones for militaries and militias that are supported by Western governments. For example, drones made by Chinese manufacturers could have intentional vulnerabilities that leak data back to the enemy.

Cyber Operations through a Volunteer Force

Russia's full-scale invasion of Ukraine in February 2022 unleashed the first all-out cyberwar between two nation-states.[13] Many feared that Ukraine would suffer from a "digital Pearl Harbor," but that moment never came. Russian cyberattacks fizzled out, and Ukraine withstood Russia's cyber onslaught with help from both public and private partnerships from the West.[14] Ukraine also acted by going on the cyber offensive. Ukraine's Ministry of Digital Transformation spearheaded an effort to bootstrap an IT army to ensure maximum resistance.[15] Volunteer hackers from around the world joined in on the efforts to wage cyberwar alongside Ukraine's government. This IT Army of Ukraine has contributed extensively to Ukraine's cyber offensive against Russia, executing a diverse and effective range of attacks.[16] These include leaking documents from Russia's central bank, disrupting internet services in Russian-occupied territories, incapacitating one of Moscow's major internet providers, and targeting private corporations to hinder economic activities.[17]

At its peak, the group had several hundred thousand members, but the overall subscriber count and the associated impact need to be more accurate. While subscriber counts have decreased on its Telegram channel, the IT Army's attacks have grown in effectiveness
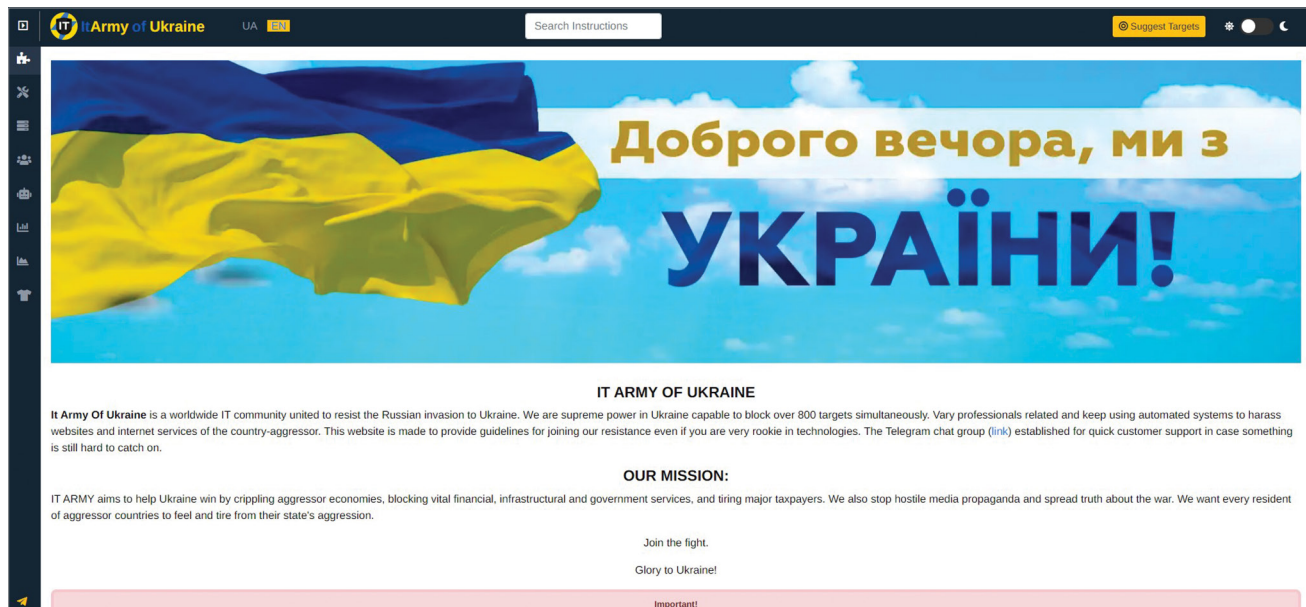
The IT Army of Ukraine has contributed extensively to Ukraine's cyber offensive against Russia. The group, at its peak, had several hundred thousand members who participated in thousands of distributed denial of service attacks throughout Russia. (Screenshot from the IT Army of Ukraine)

and scale. The primary tactic of the IT Army involves executing distributed denial of service (DDoS) attacks as it's easier than targeted cyberattacks. This approach is simple yet effective; it consists of coordinating a large number of computers to launch a concerted attack on a specific network or website. By flooding the target with an overwhelming volume of requests, the strategy aims to overload the system, ultimately causing it to crash.

According to assessments by the IT Army, the group has inflicted economic losses on Russia estimated to be between $1 billion and $2 billion.[18] Consequently, the cyberwarfare conducted by the IT Army represents a novel and innovative form of sanctions against their adversaries. Ted, the spokesperson for the IT Army of Ukraine, shared that cyber warfare can "operate as a form of economic sanction, a tool to strategically weaken an adversary's economy: the faster these digital capabilities are deployed, the more immediate the impact on the enemy's fighting capabilities."[19] In fact, the IT Army even caught the attention of officials from the Security Council of the Russian Federation.[20] One Russian official threatened Western officials, saying that by "supporting the IT ARMY, they are opening Pandora's box which will eventually turn against its masters."[21]

The IT Army's campaign against Russian internet providers led to a disruption of 40 percent of its resources at one point, leading to extensive disruptions in service.[22] *Kommersant*, a Russian daily newspaper, wrote that the "number of DDoS attacks on Russian companies doubled year on year in the first quarter. Mostly companies from critical industries ... Roskomnadzor speaks of repelling almost three times more attacks in the first quarter alone than in the entire 2023."[23] Furthermore, while Russia has invested billions of dollars in its building out its own satellite internet network, Ukraine's IT Army launched an attack in April 2024 that took out "two of the largest providers, Astra and Allegrosky," for several days.[24]

However, assembling a volunteer IT army presents a significant challenge because it introduces civilians to uncharted waters. As the world continues to digitize, there are increasing opportunities for ordinary individuals to participate in cyberwarfare when their nation's needs become apparent. This involvement helps to decentralize key aspects of warfare, showing how wars will increasingly be fought in the digital age. Ukraine has been attempting to draft legislation to provide a more formal legal structure to the fairly informal IT Army.[25] If the Ukrainian legislation in formalizing the "IT Army" is enacted, foreign volunteers seeking legal protection for participating in hacking on Ukraine's behalf would need to join Ukraine's cyber reserves. Vasileios Karagiannopoulos, an associate professor in cybercrime and cybersecurity at the University of

Portsmouth, believes that if the IT Army were incorporated into Ukraine's cyber reserves, it could help offer legal protections for civilians participating in cyberwar by offering "legal protection as combatants and potentially shield them from prosecution for their actions during the war."[26]

Importantly, not all preparations will need to be technical. One limitation that the IT Army has faced is engaging with nontechnical audiences. To scale the work of effective botnets and DDoS attacks, more people are needed to join the attacks. The average civilian citizen, though, does not consider themselves capable of conducting cyberattacks against an enemy. The reality is that anyone can follow simple instructions to download a tool and allow their computer's processing power and internet access to be added to the botnet and help flood an enemy's networks to bring them down. The IT Army also said that their cyber operations were conducted in support of bringing down Russian CCTV cameras to reduce visibility on Ukrainian drones bombing Russian oil refineries inside Russia demonstrating the ability of volunteer forces to bolster the regular military in cyberspace.[27] If there is a battlefield objective and the military needs some target to be shut down, they can relay the request to the hacker army to initiate an attack to help provide support. An easy example would be Ukraine's hacker army attacking Russian satellite systems or attacking Russian telecom providers in occupied territories, which they have previously done.

As society moves deeper into the digital age, the involvement of ordinary people in warfare will increasingly expand. Also, as economies and vital services become more integrated with the digital realm, vulnerabilities will multiply, presenting new opportunities for attacks. Countries like Taiwan and other democracies under threat should accept this reality and will need to prepare for how its citizenry will engage in cyberwar. Some military theorists have developed the idea of "cyber militias" in which private citizens could be called up or be prepared during a major cyberattack.[28] There will be a number of ways that governments can organize citizens to volunteer for service without having to join the military to contribute to the war effort.

Comparably to other aspects of democratization, there are risks from this occurring. Cyberattacks cannot always be contained, even when performed by highly professional hackers. For example, the NotPetya attack committed by a Russian threat actor spread far beyond Ukraine and devastated companies like Maersk.[29] That connection to the corporate world raises a separate issue. The democratization of cyberwar will not just involve hacktivists and citizens. Within the Russo-Ukrainian War, major technology companies have also directly participated, such as Microsoft providing intelligence on cyber incidents and SpaceX providing internet access.[30] Democratization of cyberwar means that organizations, some even powerful and well-funded, can also directly intervene in the conflict based on economic, security, or ideological interests. That will further change the nature of warfare and complicate the democratization of conflict as companies could stop hacktivists or oppose government interests as well.

Influence Operations and Social Media

When pundits think about the weaponization of social media, they usually refer to the use of social media to drive political change like the Arab Spring or how Russia used it to try and influence U.S. elections. However, use of social media and open-source intelligence can be used by nation-states to try to influence outcomes on the battlefield itself. Such information operations have been a critical part of warfare for some time, but social media now allows average citizens (even those not party to the conflict) to impact operational capabilities. The purpose of information operations is to gather relevant information on the enemy along with disseminating propaganda (white, black, and gray) to create an advantage in the war. White propaganda is truthful information shared to counter opposing narratives, black propaganda is false, distorted, or exaggerated information (i.e., disinformation), and gray propaganda is a combination of white and black.[31]

Social media is now quintessential to information operations for gathering intelligence and spreading propaganda. For example, militaries and intelligence agencies scout and extract as much information from social media and open-source intelligence to try and direct battlefield strikes. Ukrainian citizens in particular have been prolific at leveraging these tools to gather intelligence and direct attacks. For example, Russian soldiers have been tricked into revealing sensitive
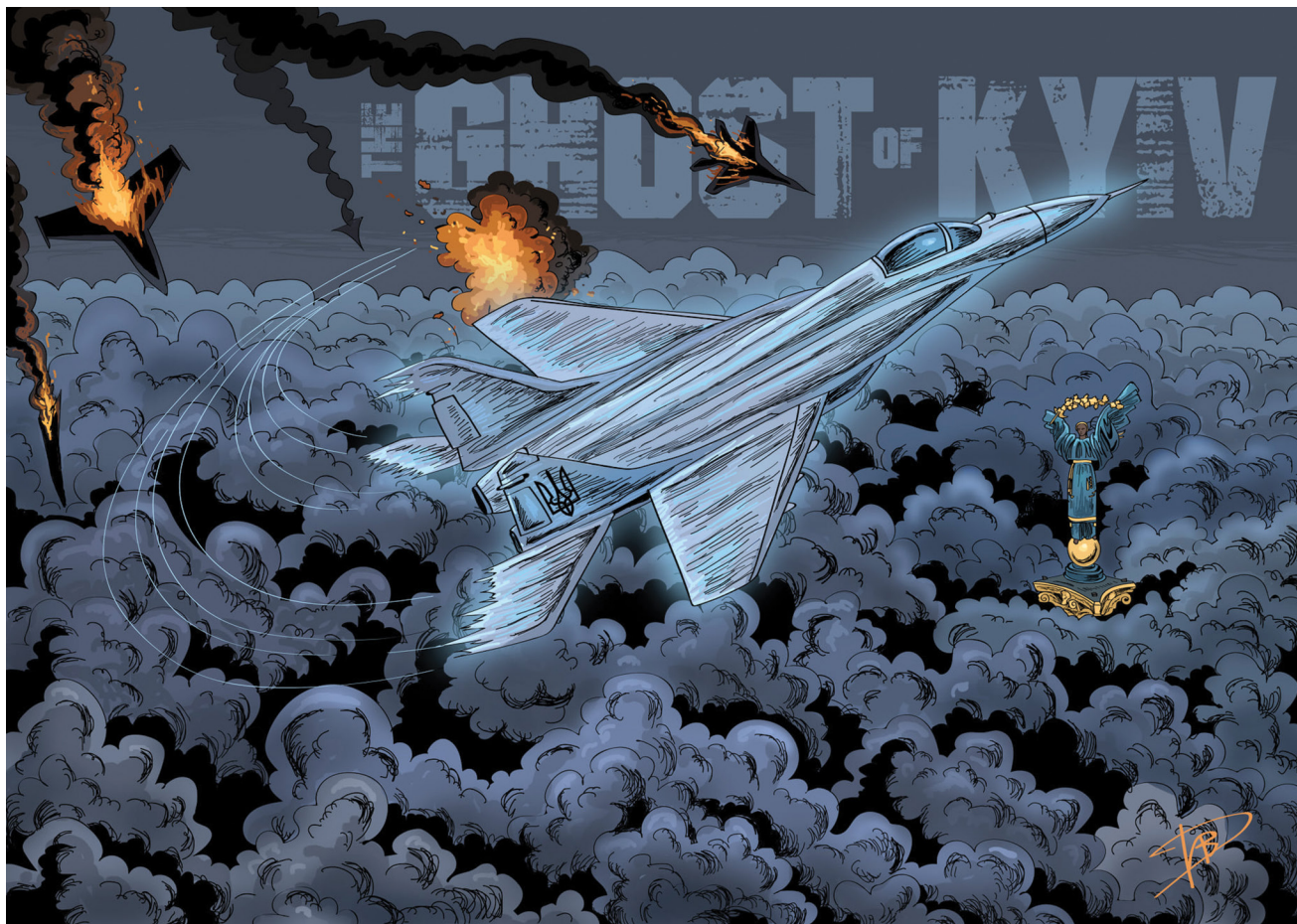
The "Ghost of Kyiv" is the nickname given to a mythical MiG-29 Fulcrum flying ace credited with shooting down six Russian planes over Kyiv on 24 February 2022. The Ghost of Kyiv has been lauded as a morale booster for Ukrainians during the Russo-Ukrainian War. (Artwork by Andriy Dankovych via Wikimedia Commons)

information via Tinder.[32] Some disclosed their tactical locations through profile images while searching for companionship. One clever woman used dual Tinder accounts with varied border locations to pinpoint and report over seventy such profiles to Ukrainian authorities. Ukrainian hackers also created fake profiles on platforms like Telegram to lure Russian soldiers near Melitopol into sharing on-duty photos.[33] These images helped locate a Russian military base, leading to a targeted Ukrainian military strike days later. In August 2022, a local pro-Russian journalist shared photos online and unintentionally compromised the location of their base.[34] Shortly after, Ukraine struck the base with rockets. The journalist had shared images on Telegram that included visible details sufficient to pinpoint the Wagner base's precise location.

Similarly, messaging apps have allowed Ukrainians to spread malicious software under the guise of support. On Russian Navy Day in July 2023, Ukrainian hackers targeted Russian sailors by sending videos with deceptive "good wishes" via messaging apps. These videos, which showed Ukrainian attacks on Russian ships, contained malware that breached the sailors' phones, extracting confidential data for Ukrainian use. Many sailors thanked the senders before realizing the videos' true intent.

When it comes to propaganda, the Russo-Ukrainian War has been called the world's first TikTok war.[35] It is important to point out that Russia has used social media at a high level to try to direct the outcome of the entire war, but Ukrainians have fought back with their own information operations. Social media helps Ukraine in "crowdsourcing people to fight, materials, donations through cryptocurrencies, and more."[36] Part of that is those in the Ukrainian diaspora sharing their own perspectives, videos, and memes about

the atrocities Russia is committing. There is no clear evidence if this democratized propaganda is impactful, but that it is still occurring with regular frequency.

Then there is the issue of artificial intelligence (AI) employed in information operations. Large language models are still nascent in this area, and it remains unclear how they can effectively be utilized to gather information or spread propaganda. While North Korean hackers have been using AI tools like ChatGPT to conduct sophisticated attacks, there is no doubt that nation-states will use a tool like ChatGPT to influence the battlefield. For example, like in the case of fake Tinder women reaching out to Russian soldiers and extracting important intelligence, if either side can identify low-level soldiers on the battlefield, they can use AI to build a dossier or a profile on an individual and more easily trick them into revealing information. Researchers from the Alan Turing Institute used AI agents to collect open-source intelligence on a specified target, and then the system was able to build a "dossier on an individual and permit users to ask questions about them."[37]

The battlefield has expanded beyond the physical landscape to encompass the extensive, interconnected domain of the internet, where every click or post can have as much impact as a conventional military operation. Western military planners should understand that the next compromised service member could be a NATO soldier who accidentally leaks vital information on social media to our adversaries or falls prey to virtual "honey traps."[38] With the growing digitization of societies, these types of social media attacks will only increase in the future.

There are risks that come with the democratization of propaganda, though, and countries will have to be considerate of how supporters might cause reputational risks. Governments cannot control the kind of memes and videos that will be shared online, and it is entirely plausible that citizens will spread misinformation, disinformation, and ideologically extreme statements. Should that happen, this could harm the overall war effort by reducing broader support for the conflict. In addition, citizens participating in propaganda can plausibly lead to the spread of conspiracy theories that similarly harm support for particular operations. Social media now allows average citizens to contribute to the war effort by encouraging support, but that support

can be a double-edged sword if they stray too far from the messaging or cause false beliefs to spread that turn away public support.

Conclusion

The Russo-Ukrainian War is the best-case study of modern warfare in a number of areas, and one area that will need serious analysis and scholarship is the further democratization of conflict. This article looked at the three major areas that is happening: drones, cyberattacks, and information operations. Drones are incredibly cheap to produce and purchase, and supporters of Ukraine fund them to bring them into the conflict with exceptional ease. In the cyber domain, Ukraine was able to raise a cyber militia to support attacks against Russia and bolster the defense of the homeland. Then on social media, netizens and global supporters help shape the narrative of the conflict while also gathering critical information on Russian soldiers and operations. Each of these areas shows how regular citizens can far more easily participate in warfare to support their countries, but the war is ongoing. Further scholarship will be needed to explore this phenomenon more fully.

However, governments and military strategists can already learn a tremendous amount from the information currently available. In bygone decades, militias would serve the purpose of bringing regular citizens into war. The American Revolution was only successful because of the many militias that supported the regular military. Now, military leaders will need to strategize on how to incorporate regular citizens in new and different ways. Could they create a coordinated propaganda campaign using netizens to spread videos and memes to turn a population against its government? Can they create "cyber militias" where patriotic hackers become part of the reserves and called up to attack foreign enemies? Are drones and other cheap technology the new "war bonds" that would allow people to give resources to the war effort? These are only the start of the questions military and government leaders will need to ask when creating strategies for the future of war.

The great war theorist Carl von Clausewitz articulated in his writings the nature of "small wars." For Clausewitz, a small war included irregular units that supported the regular army in the field by gathering

intelligence and guerilla attacks on the enemy (what was then called partisan warfare). In *On War*, Clausewitz spends time on this concept while discussing general uprisings, and he notes that the system of conscription and militias "run in the same direction when viewed from the standpoint of the older, narrower military system, and that also leads to the calling out of the home guard and arming the people."[39] Of course, he was referring to physically arming the people to support the military through irregular operations, but his concept remains valid for the new democratization efforts that are far more extensive. Rather than armed citizens attacking foreign militaries on the battlefield, "armed" citizens are fighting with propaganda on social media, using cheap drones, and engaging in cyberattacks against the enemy's critical infrastructure. The democratization of warfare is not a new concept and has been part of the broader trends of conflict for centuries, but the Russo-Ukrainian War shows how technology has furthered that democratization and how it will differ in wars of the future. ■

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The Ghost-X Unmanned Aircraft System awaits takeoff during experimentation at Project Convergence-Capstone 4, 11 March 2024 at Fort Irwin, California. Robots like the Small Multipurpose Equipment Transport ground robot (*in the background*) and the Ghost-X Unmanned Aircraft System are part of human-machine integration in simulated operations; this portion of the experimentation involved soldiers from across the U.S. Army including Fort Moore, Georgia, and Fort Liberty, North Carolina. (Photo by Sgt. Charlie Duke, U.S. Army)

Cunning Tools of War

Moving Beyond a Technology-Driven Understanding of sUAS Infiltration

Maj. Nathaniel Martins, U.S. Army

Small unmanned aircraft systems (sUAS) are shaping modern warfare. The capability of sUASs to bypass air defenses to provide targeting data, deliver munitions, and perform reconnaissance are their defining features in conflict across the world. Initially a convenient tool for situational awareness, sUASs now provide belligerents immense value through *infiltration*, which the U.S. Army's field manual on tactics (Field Manual 3-90, *Tactics*) defines as the "undetected movement through or into an area occupied by enemy forces."[1] Such infiltration by sUAS is an equalizer that has eroded the concept of air superiority by forcing all belligerents to defend against airborne threats even if one side of the conflict still controls the airspace above ten thousand feet. The area below this altitude, referred to as the *air littoral*, is now a contested space accessible to almost anyone.[2] Yet, sUASs do not fly with impunity—efforts to interdict or mitigate sUAS missions by the United States, Russia, Ukraine, and others have turned the air littoral into a back-and-forth struggle of adaptation to employ sUASs and their countermeasures.

The United States is investing in both sides of this struggle, and military leaders such as Lt. Gen. Sean Gainey, commander of U.S. Army Space and Missile Defense Command, have emphasized the need to generate advanced technical capabilities to maintain an edge in the battle between sUAS infiltration and counter-UAS (C-UAS).[3] Yet history shows us that success in warfare requires more than a technical edge, and C-UAS is more than a material problem. Success in the air littoral also requires an effective doctrine of employment. This idea echoes in the U.S. Department of Defense's strategy document for C-sUASs.[4] More fundamentally, success on both sides of this struggle requires a deep understanding of the causal logic of successful sUAS infiltration at the tactical level. Although technical mismatches play an important role in most sUAS infiltrations, close inspection of sUAS use in Ukraine, the Middle East, and the southern border of the United States reveals that these aircraft exploit other tactical means. Put simply, successful sUAS infiltration is far more than a technological battle—it is a *tactical art*. Moreover, if properly employed, this tactical art provides opportunities to produce effects in areas otherwise inaccessible or even denied to military operations. Likewise, C-sUAS efforts must acknowledge and respond to this tactical art.

Women's Auxiliary Air Force radar operator Denise Miley plots aircraft on the cathode ray tube of an RF7 receiver in the Receiver Room at Bawdsey Chain Home (CH) in England, circa 1945. Her right hand has selected the direction or height finding and her left hand is ready to register the goniometer setting to the calculator. RAF Bawdsey was originally an experimental system set up at Bawdsey Manor, home of Robert Watson-Watt's radar development team. When the team was moved away from Bawdsey, the radar station became a part of the operational CH network. (Photo courtesy of the Imperial War Museums)

Technology, Tactics, and Causal Logic

History indicates that technology requires an effective concept of employment to deliver success in battle. One particularly fitting example is the use of radar during World War II. Although both Germany and the Allies developed technically advanced radar systems, the British understood the "new logic of technological change" for air defense.[5] The speed of modern aircraft meant that defenders needed an early and accurate report of incoming air raids to enable effective preparation. This required linking radar systems together and fusing this information with other intelligence. To execute this concept, the British centralized all detection systems into a single station that could build a common intelligence picture and relay it to the fighter

Table. Tactical Logic of sUAS Infiltrations

Tactical Logic 1 (Physical): *Operate beyond the responsive capabilities of the adversary (physical and/or technical)*	Tactical Logic 2 (Cognitive): *Use uncertainty and dilemmas to impede an adversary's effective response*
Tactic 1.1: Use technical advantages to *create* gaps in the adversary's C-UAS cycle. Tactic 1.2: Use *intelligence* to find gaps in the adversary's C-UAS cycle. Tactic 1.3: Instead of precise intelligence, employ large numbers of expendable sUAS to locate gaps in the adversary's defenses.	Tactic 2.1: Make it difficult for the adversary to separate friend from foe. This includes manipulation of the adversary's rules of engagement. Tactic 2.2: Compress time available for the adversary to analyze the threat and respond. Tactic 2.3: Use mass to divide the adversary's resources and force decisions on which sUAS to interdict.

(Table by author)

command during the Battle of Britain. Simply put, the British understood that the tactical logic of air defense was combining sensors to enable advanced warning. In contrast, the Germans used their radar systems as extensions of preexisting human observer corps that remained relatively independent of each other. Ultimately, the German approach proved less effective despite leveraging highly advanced radar systems.[6]

So what is the tactical logic of sUAS infiltrations? This article presents evidence of two distinct but complementary logics that are summarized in the table. The first and most obvious logic is *operating beyond the responsive capabilities of the adversary* (Tactical Logic 1). The concept of infiltration does not rely on forcible entry. Instead, sUAS infiltration must frustrate or avoid altogether an opponent's ability to execute countermeasures. Avoiding detection is not a requirement per se, but the logic requires "the infiltrating force to *avoid* detection and engagement" or at least reduce exposure.[7] sUAS infiltration may succeed by taking advantage of gaps in any part of the C-UAS cycle that includes several steps: (1) detecting an airborne object, (2) identifying its relevant characteristics, (3) classifying it as a threat, (4) prioritizing a response, (5) deciding on an engagement method, (6) engaging the sUAS, and (7) exploiting information from the event to improve further efforts.[8]

Technical advantages provide just one option to operate outside of the capabilities inherent to this cycle (Tactic 1.1). Another way is to find gaps in C-sUAS system coverage that result from any variety of battlefield choices by the adversary. A technical advantage may permit an aircraft to fly through the expected coverage of a C-sUAS system undetected, but the latter approach might locate an area of dead space to fly around the coverage. Locating and exploiting these gaps is essentially a function of *intelligence* (Tactic 1.2). Additionally, sUAS infiltration can simply use mass in the form of large numbers of sUASs to find these vulnerabilities by attrition rather than precise intelligence (Tactic 1.3). Each case study of sUAS infiltration will show that although a technical edge provides one means to satisfy the first logic of sUAS infiltration, the other methods are very much in play.

The second logic of sUAS infiltration is *using uncertainty and dilemmas to impede an effective response by the adversary* (Tactical Logic 2). Whereas the first is essentially physical, this second logic occurs primarily in the cognitive domain. This is a far more subtle approach that relies on the fact that detection and identification technology rarely provide certainty, and effective use of the airspace by the adversary often requires C-sUAS concessions and trade-offs with other tactical interests. By leveraging these cognitive seams, sUAS infiltrations effectively burden the human

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Small consumer drones have proved versatile tools for Ukraine. (Photo courtesy of the Dnipropetrovsk Territorial Defense Brigade)

decision-maker in war. Although this approach may not be deliberate in every case, it often plays a key role in success.

Subsequent examples from across the world show three general techniques for exploiting this tactical logic. The first method uses the tactical situation to make it difficult for the adversary to separate friend from foe (Tactic 2.1). sUAS infiltrations may accomplish this by either making their identity ambiguous or by flying in ways that make it difficult for the adversary to engage without damaging its own aircraft or resources. The second method is simply to compress reaction time. This creates cognitive stress during decision-making and physically limits the responses available (Tactic 2.2). The final method is using mass employment to force difficult decisions on how to prioritize assets (Tactic 2.3). Mass plays an important role in both the physical and cognitive logic of sUAS infiltration.

Short-Range sUAS Infiltration in Ukraine

The battles fought in Ukraine are undoubtably the most developed examples of sUAS infiltration to date. Since the invasion in 2022, sUASs have provided a critical means of locating and destroying critical

targets beyond the forward line of troops. Even when these operations are conducted across just a kilometer or two, they still provide a critical sensor or munition in relatively inaccessible locations. The intensity of this kinetic conflict has prompted innovation on both sides, resulting in a diverse set of tactics and techniques to execute sUAS infiltration and prevent them.

The primary tension at the tactical level is the use of electronic warfare, especially jamming, global navigation satellite system (GNSS) spoofing, and cyber-enabled techniques.[9] Whereas kinetic C-sUAS methods require precise targeting data that can be difficult to obtain against small aircraft that are inherently difficult to detect, these methods exploit the radio frequency connection required by sUASs to control the aircraft, receive GNSS data, and provide a video feed. These techniques are also cost-effective and do not require munitions that may be exceedingly expensive.[10]

Technical advantages have played an important role in enabling Ukrainian sUASs to succeed in the face of substantial electronic warfare capabilities on both sides, especially jamming (Tactic 1.1).[11] Although recent Russian improvements in jamming have resulted in as many as ten thousand sUAS losses per month for Ukraine, technical advancements have allowed a small

number of Ukrainian sUASs to succeed. According to open-source reporting, these advances may be improvements in shielding methods, an automatic ability to detect and use unjammed frequencies, better filters that block out noise, or something else.[12] Another less sophisticated technical approach has been using the momentum of small first-person view drones to carry munitions to their target even after successful jamming and the loss of control by the operator. This works because Russian jammers such as the RP-377 reportedly only work at a short range (less than one hundred feet).[13] With the advent of more capable jammers such as the Volnorez and Saniya, the range of this type of jamming is increased, which will require more sophisticated sUAS navigation systems to maintain a favorable technical mismatch.[14] This fleeting advantage is an example of the inherent weakness of relying on technical advantages alone.

Instead of relying on an outright technical mismatch, Ukrainians use intelligence to locate gaps in jammer coverage and frequencies that Russians are not actively jamming (Tactic 1.2). These gaps result from several factors. One source of the gaps is the fact that Russians have been keeping their more valuable jammers far from the front lines.[15] This is likely due to their targetable electromagnetic signature. Another source of gaps may be the requirement for Russians to reduce electromagnetic fratricide with their communications, an issue that many analysts believe explains the impotency of Russian electronic warfare during the initial invasion.[16] U.S. Army doctrine acknowledges that these factors are inherent characteristics of electronic warfare, which means that gaps of some kind will be present for those cunning enough to use them.[17] Other gaps may be due to the movement of equipment during major troop movements or simply mistakes. Whatever the reason, successful Ukrainian sUAS infiltrations appear to leverage these opportunities through the use of intelligence, including maps of electromagnetic activity.[18]

Another central component of Ukraine's UAS strategy is to use mass to locate these gaps instead of precise intelligence (Tactic 1.3). This is possible because of two inherent qualities of sUAS. First, sUASs are unmanned. Although the controllers are always vulnerable to targeting, sUAS missions do not carry the same physical risk as manned infiltrations. Second,

by keeping the manufacturing requirements low for sUASs, Ukrainians can afford attritive tactics in which only small numbers of aircraft survive infiltration. Some Ukrainian sUAS units report successful attacks for just 10 percent of their missions.[19] Yet, large numbers of sUASs can try different routes and different frequencies until weak points are discovered and exploited. This is a significant argument that some Ukrainian commanders have made against shifting to more expensive, technically advanced sUAS models.[20]

In addition to creating or finding gaps in electronic warfare defense, Ukrainian infiltrations impose dilemmas on Russian commanders (Tactic 2.1). Electromagnetic fratricide offers an obvious opportunity to do so. According to the commander of Ukraine's Aerorozvidka unit in 2022, one tactic involves executing sUAS missions when Russians are launching and employing their own sUASs to make it more difficult for the Russian commander to employ his own jamming capabilities.[21] The ability of Russians to coordinate electronic warfare with their own operations has improved since, but the same concept should still apply, albeit using more refined methods. If successful at flying at the same times, places, and frequencies as the adversary's aircraft, infiltrating sUASs put the Russian commander in a difficult position—begin jamming and lose his aircraft or attempt less effective protective measures and risk conceding a successful Ukrainian sUAS infiltration. This type of dilemma plays to the advantage of the infiltrating sUASs.

One-Way Unmanned Aerial Vehicles in the Middle East

Since the Islamic State first began using the tactic in 2016, U.S. forces, allies, and their partners in the Middle East have been grappling with sUAS infiltration.[22] The latest perpetrators have been Iranian-backed militias who employ "one-way UAV" (unmanned aerial vehicle) attacks in which explosive-laden sUASs fly into targets on American bases across the region. Between October and November 2023, American bases received over fifty attacks involving either sUASs or rockets.[23] Although most of these attacks have failed to inflict significant damage, a select number of sUAS infiltrations have inflicted serious casualties. An attack on 23 March 2023 killed a U.S. contractor, and another attack on 24 January
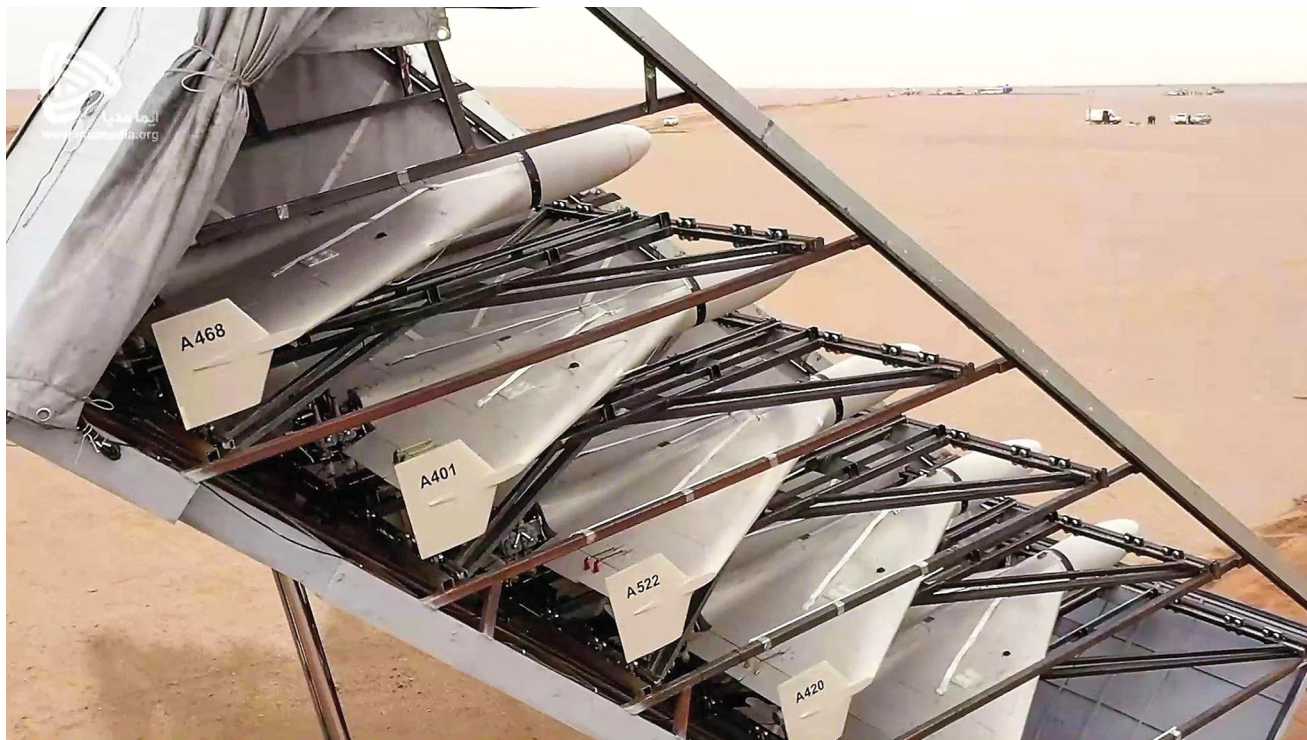
Iranian Shahed-136 loitering munitions in their launch container. (Photo courtesy of the Iran Ministry of Defense)

2024 killed three U.S. soldiers at the Tower 22 outpost in Jordan.[24] Other attacks have been close calls—attacks between October and November 2023 failed to cause significant damage but resulted in at least fifty-six injuries.[25] Given the grave consequences of sUAS infiltration into American bases, the Middle East is a critical case study to investigate.

Like Ukraine, successful one-way UAS attacks in the Middle East find ways to operate beyond our capability to detect and ultimately respond to these aerial threats (Tactical Logic 1). In some cases, this success likely benefits from technical mismatches between sUAS and the C-UAS used to defend U.S. bases in Iraq, Syria, and Jordan (Tactic 1.1). Class III UASs like the Iranian-made Shahed-136 are relatively small, can fly exceedingly low, and are made of lightweight material that further lowers its radar cross-section.[26] In some cases, these advantageous technical characteristics may be enough to avoid detection without any other tactical sophistication. Early attacks in 2021 appeared to avoid many of the technical detection and engagement options available.[27] However, the fact that many recent attacks are intercepted or otherwise unsuccessful suggests additional causal factors for the select cases that do strike their targets.

Although not employed in the same numbers as observed in Ukraine, sUAS attacks on U.S. bases are frequent and provide multiple opportunities for Iranian-backed militias to breach air defenses (Tactic 1.3). Retired Gen. Kenneth McKenzie Jr., former commander of the U.S. Central Command, has articulated this logic differently: "If the opponent is allowed to continue these [sUAS] attacks on such a scope and scale, eventually they're going to get lucky with something."[28] However, because sUASs are inherently cheap, mass employment provides success not through luck but through statistical probability. If there is any gap in coverage for any reason, including maintenance needs, operator error, dead space, or some abnormal phenomena, high numbers of low-risk missions provide a tactical means of capitalizing on the smallest of vulnerabilities. This does not imply that this approach is haphazard either—there is a long insurgent tradition in the Middle East of probing U.S. positions systematically to find vulnerabilities.[29] Therefore, unless future technical prowess reduces these tactical seams to zero, mass employment of sUASs will retain a meaningful tactical logic.[30]

There is also potential for Iranian-backed militias to employ the cognitive logic of sUAS infiltrations in

A soldier with Company B, 2nd Battalion, 135th Infantry Regiment, looks through the optic device of the Drone Defender V2 during counter unmanned aircraft systems training at Camp Lemonnier, Djibouti, 19 August 2020. The Drone Defender V2 is an electronic warfare weapon that is capable of downing and disabling a small unmanned aircraft system. (Photo by Sgt. Sirrina Martinez, U.S. Army)

the Middle East (Tactical Logic 2) by mimicking other military or civilian aircraft to delay or prevent engagement by coalition forces (Tactic 2.1). Several factors make this an exploitable possibility against U.S. forces. First, the U.S. Army techniques publication (ATP) for C-UASs (ATP 3-0.1.81, *Counter-Unmanned Aircraft System*) notes, "the proliferation of friendly joint and multinational UASs, many of which do not have identify-friend-from-foe (IFF) capability."[31] This opens the door for technical difficulties to distinguish between friendly and adversarial aircraft. Second, although newer systems such as the Low, Slow, and Small UAV Integrated Defeat System (LIDS) can synchronize several detection and engagement options into one system, the large family of C-UASs employed by the Department of Defense still require some level of human coordination to reconcile information on aircraft detections.[32] These factors are featured in a report by the Center for Strategic and International Studies,

concluding that "over the near term, identification will depend more on context or procedures than specific Identification Friend or Foe (IFF) systems."[33] These coordination mechanisms provide valuable tactical opportunities that a cunning adversary can exploit for their benefit. Finally, as with electronic warfare in Ukraine, even when U.S. forces can identify aircraft accurately, they may be unable to engage inbound sUASs due to fratricide concerns, especially if there are manned friendly aircraft in vicinity of the infiltrating adversary's sUASs.

Exacerbating this situation is that U.S. forces have very little time to make engagement decisions, a fact that is exploitable by adversaries in the Middle East (Tactic 2.2). Discussions with those involved in C-UAS operations in the region indicate that one of the most challenging factors is that engagement decisions must be made in a matter of minutes.[34] According to Raytheon, even a cutting-edge Ku-band Radar

Frequency System can only detect Class I UASs to a range of approximately sixteen kilometers.[35] For a small, commercial sUAS moving at maximum speed, this equates to a reaction time of less than thirteen minutes.[36] For the Iranian-built Shahed-136, this time shrinks to just six minutes.[37] If the situation is clear and unambiguous, this is plenty of time to make a decision and react, but with the introduction of just a little friction, this limitation in detection capability could have lethal consequences.

sUAS Smuggling on the Southern Border of the United States

The southern border provides yet another valuable example of sUAS infiltration. Although not a traditional military example, the use of both manned and unmanned varieties of low, slow, small aircraft by transnational criminal organizations for over a decade to smuggle contraband and people into the United States makes this case an exceptionally well-developed game of cat and mouse. Most of these aircraft cross the border to provide surveillance on U.S. Border Patrol (USBP) positions and guide illegal migrants across the border. A smaller number carry contraband such as fentanyl-based drugs.[38] Unlike the isolated bases in the Middle East, sUAS infiltrations on the southern border exemplify the challenges of protecting an extended region. Additionally, in contrast to the large-scale combat operations in Ukraine, this case shows how the nuances of a gray-zone environment provide additional opportunities for sUAS infiltrations. However, like belligerents in Ukraine and the Middle East, transnational criminal organizations still employ the same tactical logics.

From a technical perspective, transnational criminal organizations exploit that the USBP cannot employ cutting-edge C-UAS technology capable of apprehending sUASs. The USBP's Rio Grande Valley sector has detected thousands of sUAS along its 227-mile border. Yet, the USBP has only been able to mitigate a fraction of these aircraft.[39] It is a daunting problem. Conversations with USBP C-UAS personnel reveal that the majority of these aircraft are commercial sUASs manufactured by Da-Jiang Innovations, which broadens the options available to detect them, but engagement methods must adhere to restrictions designed to limit collateral damage that could impact the local civilian population.[40] As a result, methods such as jamming, GNSS spoofing, and kinetic means are seldom employed.[41] This provides criminal elements with considerably more flexibility. Although criminal organizations are exploiting a technical advantage in a strict sense (Tactic 1.1), they are actually benefiting from what the military would describe as stringent rules of engagement (ROE).

When these criminal elements use an opponent's ROE to their advantage, they impose an engagement dilemma (Tactic 2.1). Furthermore, this dilemma is not artificial. The legal requirements and use-of-force restrictions that underpin USBP engagement options exist for a reason. These rules must balance aircraft safety, commercial use of the electromagnetic spectrum, the public's right to safety, and other factors with the need to prevent illegal sUAS use. Criminals benefit from these restrictions by exploiting aircraft that are difficult to engage under our current standards for safety. They also do not exhibit obvious hostility that would trigger clear exceptions to use-of-force restrictions. This is not to say that these rules do not need serious adjustment—given the scope of the problem, the UBSP probably needs the authority to incorporate these technologies in a more flexible, case-by-case way. But even after the United States increases the countermeasures available, there will always be some exploitable margin inherent in the ROE. Therefore, the byproduct of any need to employ force selectively is a corresponding gap that spies, terrorists, and insurgents can exploit. This is true in wartime, but it is especially true in peaceful conditions in which the interests of commerce and public safety take on added weight.

Criminal groups conducting sUAS infiltrations across the U.S. border are also skilled at compressing USBP reaction times (Tactic 2.2) and using mass employment (Tactic 2.3) to divide limited U.S. government detection resources. During any given hour along the border of the Rio Grande Valley sector, agents may detect several different sUASs on the Mexican side of the border, often simultaneously. Although the detection coverage is quite good in this sector, C-UAS agents must choose exactly where to employ their limited engagement options that cannot cover the entire border. Because these detections can be miles apart, this creates a difficult resource allocation problem that provides opportunities for sUAS operators to take advantage

of displaced C-UAS capabilities. Additionally, many sUASs conduct surveillance from the Mexican side of the border without ever attempting infiltrations. This situation forces USBP personnel to decide which aircraft may attempt infiltration before committing C-UAS resources. Moreover, most sUAS flights start from concealed locations just meters from the border and often involve relatively short flights, further limiting the time available for C-UAS personnel to decide and react.[42]

Conclusion

Across Ukraine, the Middle East, and the southern border of the United States, sUASs use tactical art to bypass sophisticated defenses and access contested or denied areas. Although technology is a critical component of these tactics, it is not sufficient. Instead, sUAS infiltrations must also fly in ways that avoid the principal defensive measures of their adversaries (Tactical Logic 1). Less obviously, sUAS infiltrations must use the tactical situation and its inherent characteristics to impose uncertainty and dilemmas on their opponents (Tactical Logic 2). These basic tactical logics hold true in diverse conditions, including large-scale combat operations, base security in remote locations, and situations short of open military conflict. Training should acknowledge the psychological aspects of sUAS tactics as an inherent quality as important as the physical domain.

Further efforts to understand sUAS infiltrations should focus on understanding how the approaches in the table interact with the operational environment. Field Manual 3-90 acknowledges that tactics must be matched appropriately with the mission variables and operational conditions.[43] Just as doctrine may employ armor units differently in an open desert versus dense urban terrain, sUASs exhibit the same nuance, some of which can be gleaned from the different examples presented here. For one, sUAS infiltrations may benefit from situations with larger public safety or civilian infrastructure concerns because of opportunities to exploit dilemmas and uncertainty (Tactical Logic 2). This is far more likely in gray-zone conditions than in large-scale combat operations. Urban areas, in particular, may offer more dilemmas for commanders employing C-UASs because public services increasingly rely on the radio frequency spectrum and GNSS services.[44]

Urban areas also play to the physical logic of sUAS infiltration by inhibiting the line of site necessary for most C-UAS equipment and generating higher levels of electromagnetic clutter, which complicates detection efforts.[45] Although areas with high population density make standard ground infiltration techniques difficult due to the threat of compromise by civilian bystanders, recent research on the locations of sUAS infiltrations across the southern border of the United States suggest the same rules do not apply in the air littoral.[46]

What does the tactical logic of sUAS infiltration mean for C-UAS efforts? There are several broad implications. First, C-UAS forces must use intelligence and act on it aggressively. The pressure placed on decision-making processes through uncertainty, dilemmas, and compressed reaction time requires commanders to place more emphasis on intelligence as a warfighting function. This effort requires thoughtful analysis and the constant fusion of all available sensors and collection platforms. Because sUASs can fly almost *anywhere*, commanders may be tempted to look *everywhere*. Given resource constraints, this strategy may not be feasible. Instead, intelligence efforts should focus collection and analysis on specific times and areas. Narrowing these efforts will require an understanding of the tactical art that is equal to or surpasses those attempting sUAS infiltration. By focusing efforts prior to launch or farther out along expected avenues of approach, commanders buy back valuable response time.[47]

Second, because sUAS infiltration benefits from intelligence, deception must be a critical component of C-UASs as well. Deception should include decoy targets such as those used by Ukrainians and the camouflage methods recommended in ATP 3-01.81, *Counter-Unmanned Aircraft System (C-UAS)*.[48] This effort might also include changing the configuration of C-UAS equipment to reduce predictable vulnerabilities in a manner similar to random antiterrorism measures. Changing the configuration of C-UAS equipment would inhibit mass employment of successive (but not necessarily simultaneous) sUASs by making it difficult for adversaries to systematically probe defenses.

Third, both sUAS and C-UAS technical development should focus on enhancing the military's ability to apply the tactical logic of sUAS infiltrations outlined in this article. The cheap, mass employment of sUASs means that engagement options must be even

U.S. Army soldiers practice assembling the Mobile Low, Slow, Small Unmanned Aerial Vehicle Integrated Defense System (M-LIDS) outside of Camp Buehring, Kuwait, 22 January 2022. (Photo by Spc. Damian Mioduszewski, U.S. Army)

cheaper. This is the promise of directed energy weapons. Engagement dilemmas, collateral damage, and fratricide means that this same technology must also be precise and reliable. Remote sensing efforts should focus on ways to correlate information from a variety of existing systems and manufacturers (including those not originally designed for C-UASs) to make the intelligence picture as clear as possible.[49] Investments in one-stop-shop sensor systems like the Low, Slow, and Small UAV Integrated Defeat System are useful, but the former approach may reap better rewards in the long run as technology changes and acquisitions shift focus to other products over time.

Fourth, although the requirement to fuse capabilities from a variety of platforms may suggest the centralization of C-UAS efforts, local commanders must retain disciplined initiative. Hierarchal decision-making models will be too slow to address engagement decisions on compressed timelines. Current air defense doctrine already recognizes this reality by placing engagement decisions closer to the lower echelon executing element.[50] Yet lower-echelon commanders will also need the flexibility to cross-level ammunition and reposition systems dynamically. This requirement is more subtle and current

doctrine does not recognize this level of agility.[51] Yet with the high cost of engagement options like the Coyote interceptor, sUAS infiltrations can overload defenses faster than traditional hierarchal approval processes.[52]

Finally, if sUAS infiltration is more than employing superior technology, C-UAS is also more than a scramble to get the best equipment—*it is also a race to develop the best tactics*. The C-UAS strategy acknowledges this fact through lines of effort directed at training and doctrine.[53] Of course, tactical art is far more than the concepts outlined in this article. Ultimately, tactical competence is a product of either (1) the back-and-forth struggle experienced in war or (2) realistic training conditions. This is the basic premise of the National Training Center. Opportunities to experiment with C-UAS methods of employment will benefit from difficult and realistic adversaries that employ the tactical logic outlined in this article. Given the role that the operational environment plays in the tactical art, force-on-force exercises and testing may need to abandon the sterile, desert environment of the National Training Center, White Sands Missile Range, or Yuma Proving Grounds in favor of more complicated urban environments.

The tactical art of sUAS infiltration and C-UAS remain just one part of warfare, and success in the air littoral will depend on a combination of internal and external factors. However, as the late strategist Colin Gray acknowledged, "strategic utility rests upon tactical feasibility," and sUASs show us that tactical feasibility cannot simply be bought with better technology.[54] With the right tactical application, sUASs provide a tool of strategic proportions to infiltrate areas that are otherwise denied or accessible only at great cost. Because this tool is available to everyone, whoever masters the tactical logic of sUAS infiltrations will reap offensive and defensive rewards. ■

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China Coast Guard vessels shoot water cannons at fishermen on 10 December 2023 in Bajo de Masinloc (also known as Scarborough Shoal), disputed territory claimed by the Philippines and China. (Photo courtesy of the Philippine Coast Guard)

Confronting Irregular Warfare in the South China Sea

Lessons Learned from Vietnam

R. Kim Cragin, PhD

On 5 March 2024, the Philippine government released a video of Chinese maritime militia shooting water cannons at a coast guard vessel near the Spratly Islands. Water crashed through the windshield and injured several sailors on board.[1] It was just one of many ongoing confrontations in the South China Sea between the People's Republic of China (PRC) and the nations of Vietnam, Malaysia, Brunei, Taiwan, and the Philippines. The hostilities exemplify how state actors aggressively pursue their political objectives and yet remain below the level of armed conflict in modern irregular warfare.

This article explores irregular warfare in the South China Sea, focusing on the activities of the Chinese maritime militia and Vietnam's response. It then derives lessons from Vietnam's experiences for the U.S. military.

Most studies on the Chinese maritime militia examine the Philippines. This makes sense—the Philippines remains an important U.S. ally, and it has come under pressure from the militia. Further, in May 2009, the Philippines asked the United Nations to recognize its claim to the outer edge of the continental shelf, two hundred nautical miles from its baselines. This claim elevated what had been perceived as a regional security challenge. Vietnam and Malaysia followed.[2] The PRC refuted these countries' claims. In its response, the PRC released publicly a map of what is now referred to as the "Nine-Dash Line," asserting jurisdiction over approximately 90 percent of the disputed territory (see map).[3]

Since then, the disputes among the PRC, Vietnam, Malaysia, Brunei, Taiwan, and the Philippines have escalated.[4] Each country has historical claims to the South China Sea. Each also has political, economic, and security interests in controlling at least parts of it. The seabed has yet to be fully explored, but it is assumed to hold significant oil deposits. In March 2024, for example, the state-run Chinese National Offshore Oil Corporation (CNOOC) announced the discovery of a one-hundred-million-ton oil field near the coast of Guangdong Province.[5] Approximately 12 percent of global fishing occurs in the South China Sea. Further, the People Liberation Army Navy's (PLAN) ballistic missile submarine fleet is stationed at the Yulin Naval Base on Hainan Island.[6]

Regional experts for the most part judge the PRC as having been the most successful in asserting its claims to this territory. It has seized control of the Scarborough Shoal, creating 3,200 acres of new land by dredging and building artificial islands, as well as establishing twenty outposts in the Paracel Islands and seven in the Spratlys.[7] However, Vietnam has been surprisingly effective at managing tension with the PRC even as it defends its claims to the Paracel and Spratly Islands. The U.S. military would, therefore, benefit from a closer examination of Vietnam's approach.

Prior studies, journal articles, news reports, and social media posts related to irregular warfare in the South China Sea support this argument. The Asia Maritime Transparency Initiative, for example, publishes maps of disputed reefs, islets and, importantly, outposts.[8] These sources highlight the PRC's expanding presence. That said, the most significant findings in this article draw from the author's field research in Vietnam and Singapore conducted in April 2023.

Defining Irregular Warfare

What is irregular warfare? Several official documents address the topic of irregular warfare. The current U.S. *National Defense Strategy*, released in 2022, discusses irregular warfare in the context of integrated deterrence. It presents irregular warfare as a means of imposing direct costs on U.S. adversaries so that they reconsider aggression toward the United States.[9]

Interestingly, this characterization differs from the *Irregular Warfare Annex* to the *National Defense Strategy*. The *Irregular Warfare Annex* identifies the tools of irregular warfare—"unconventional warfare, stabilization, foreign internal defense, counterterrorism, and

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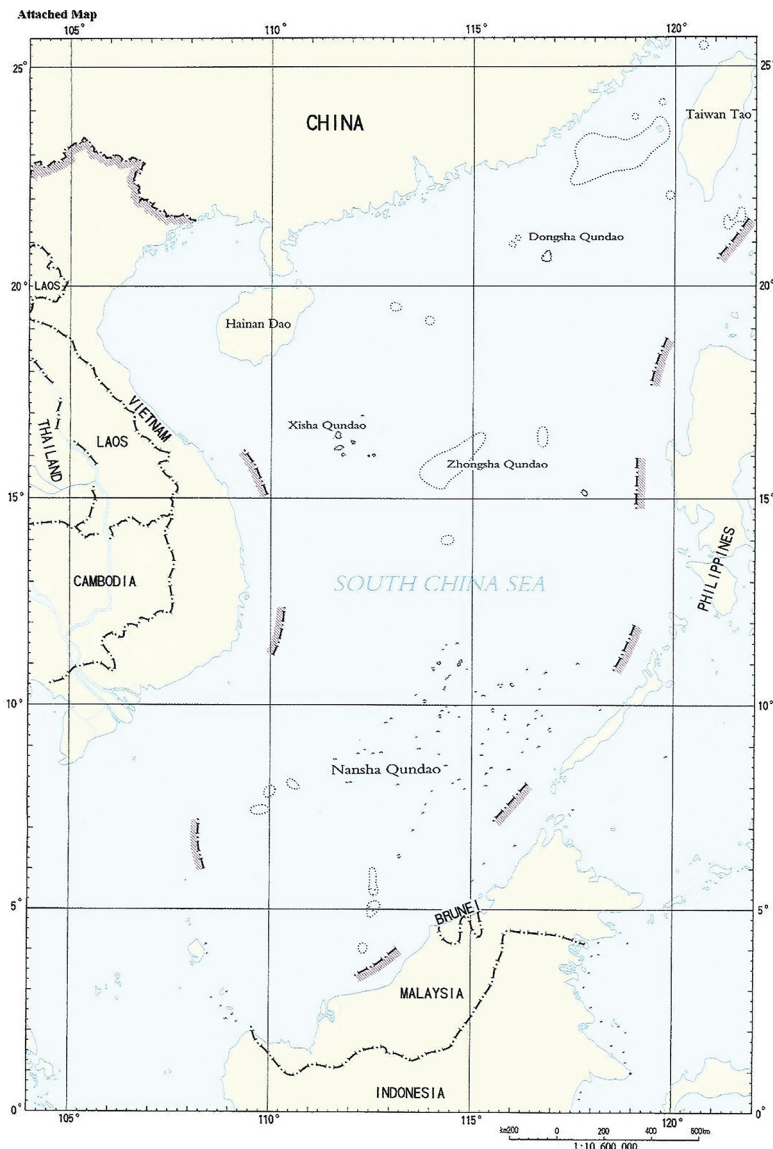
China's Dashed-Line Map from Notes Verbales of 2009

counterinsurgency"—and defines irregular warfare as follows:

> Irregular warfare [IW] is a struggle among state and non-state actors to influence populations and affect legitimacy. IW favors indirect and asymmetric approaches, though it may employ the full range of military and other capabilities, in order to erode an adversary's power, influence, and will.[10]

This definition seems to treat "irregular warfare" as synonymous with "population-centric warfare." It limits irregular warfare to a struggle for legitimacy as perceived by local populations. It assumes that diminishing an adversary's legitimacy will, in turn, erode the state or nonstate actor's power. As such, it is remarkably different from the 2022 *National Defense Strategy*.

Of course, national defense strategies are by definition political documents. They are rewritten with each new administration. Thus, it is important to interpret the *Irregular Warfare Annex* in its political context. It was written in the wake of U.S. security forces' withdrawal from Syria and in the midst of negotiations with the Taliban. The *Irregular Warfare Annex* stood as a reminder that population-centric warfare should not be rejected. But, in doing so, it arguably placed too many constraints on irregular warfare and its role in U.S. defense strategy and policy.

By comparison, Joint Publication (JP) 1, Volume 1, *Joint Warfighting*, represents foundational doctrine for the use of military force. It describes how the joint force should be prepared to prevent armed conflict and, if that is not possible, to win. Joint publications tend to be somewhat less political than national defense strategies. Released in August 2023, JP 1 deemphasizes efforts to influence populations and affect nation-states' legitimacy. It instead focuses on indirect efforts to achieve competitive advantage over adversaries as well as manage strategic risk. It states,

> IW is a form of warfare where states and non-state actors campaign to assure or coerce states or other groups through indirect, non-attributable, or asymmetric activities, either as the primary approach or in concert with conventional warfare. The term "irregular" highlights the character of this form of warfare, which seeks to create dilemmas and increase risk and

costs to adversaries to achieve a position of advantage.[11]

JP 1 provides a much broader definition of irregular warfare. It also notes that irregular warfare might be pursued as an alternative to conventional war or in concert with it. Most importantly, it emphasizes that irregular warfare seeks to "create dilemmas and increase risk and costs" for adversaries as means of achieving advantage. This definition has application beyond population-centric warfare. It also addresses the complexity of the current strategic and operational environments better than the others; therefore, it is the definition used in this article.

Chinese Maritime Militia

The PRC's use of its maritime militia fits the above definition of irregular warfare. The militia creates strategic and operational dilemmas for the United States, its allies, and partners. It imposes costs. It increases risk. The militia itself can be traced back to the late 1940s. A newly victorious Chinese Communist Party initially trained and funded the maritime militia, comprised primarily of fishermen, to assist with coastal defense.[12] But over time the maritime militia has expanded and, increasingly, augmented the PLAN and Coast Guard.

In January 1974, the PLAN fought the South Vietnamese navy for control of the Paracel Islands.[13] The PLAN used a combination of conventional and irregular forces to defeat the Republic of Vietnam's armed forces. The United States, moreover, did not intervene or push back against the PLAN's combined forces' control over the Paracel Islands. According to some experts, this reinforced the value of indirect, non-attributable, and asymmetric maritime tactics in the minds of Chinese strategists.[14]

The Chinese maritime militia has become larger and more advanced since the 1970s. Estimates vary on the exact number of vessels in the militia, as well as people employed. Some analysts assert that the militia has as many as 439,000 vessels, while others put the number closer to 23,000.[15] Recent studies also have observed divergent patterns in the militia's behavior. The so-called "Spratly backbone fishing fleet" reportedly does not engage in active hostilities. The individuals on these vessels receive a salary and some limited training.[16] But the fishing fleet seems to be used to overwhelm other

nations' vessels by sheer numbers and presence. The fishing fleet sometimes inadvertently provokes an attack, but multiple experts confirm that it has been directed by the PLAN to avoid initiating a confrontation.[17]

In contrast, the "maritime militia fishing vessels" receive more training, are better equipped, and seem to have closer ties to the PLAN.[18] This maritime militia partners with China's Coast Guard vessels to enforce the so-called fishing moratorium declared each year between May and August by the PRC.[19] It rams other countries' fishing and coast guard vessels, deploys water cannons, boards other vessels and arrests their occupants. It also cuts the cables of oil exploration and surveillance ships.[20] It has disrupted efforts by the Philippines to resupply its South China Sea outposts. In sum, the maritime militia fishing vessels pursue PRC interests more aggressively than the fishing fleet, but still hover just below the level of armed conflict.

In May 2013, PLA Maj. Gen. Zhang Zhaozhong put a name to this basic approach. He used the analogy of a "cabbage."[21] As Zhang described it, the PLAN layers fishing vessels, surveillance vessels, maritime enforcement ships, and warships just like the layers of a cabbage. The intent is to expand PRC control over the islets and reefs incrementally but not provoke a military response. In essence, the PLAN utilizes the "cabbage" approach to balance two somewhat competing priorities in the South China Sea: maintain regional stability versus exert sovereignty.

Vietnam's Response

Vietnam has a similar "three-layer" maritime presence in the South China Sea: navy, coast guard, and fishing vessels. It also has approximately fifty outposts on islets and submerged reefs.[22] But, practically speaking, there is not much of a comparison. Vietnam has a smaller navy and coast guard. Its commercial fishing vessels for the most part are not armed, although some reports suggest that Vietnam has plans to provide them with reinforced steel hulls, infrared technology, and more advanced communication equipment.[23] Vietnam's economy also is deeply intertwined with that of the PRC. Thus, officials must balance multiple competing interests in their response to Chinese militia activities in the South China Sea.[24]

That said, Vietnam has been the most assertive of its neighbors in responding to the PLAN and its

militias' presence within and around the Paracel Islands. Three key incidents exemplify Vietnam's approach. The following paragraphs describe each incident according to the behavior of the Chinese maritime militia, dilemmas posed by this behavior, and Vietnam's response.

First, in May 2011, the Chinese maritime militia approached the Vietnamese research vessel *Binh Minh 02* and cut its seismic survey cables. The *Binh Minh 02* belonged to the oil and gas company PetroVietnam and was operating approximately eighty miles off the coast of Vietnam in its exclusive economic zone.[25] The Chinese militia had grown more aggressive in its harassment of Vietnamese fishing vessels between 2005 and 2010. But the May 2011 incident marked a shift toward larger-scale and physical disruption of oil exploration. A month later, Chinese militia again cut the cables of a different vessel named *Viking II*. Like the *Binh Minh 02*, the *Viking II* was chartered by PetroVietnam for oil exploration in the South China Sea. PRC diplomats simultaneously demanded that Vietnam (and the Philippines) end all oil exploration in the area.[26]

This incident presented the Vietnamese government with a dilemma. For the most part, Vietnam had been able to manage tension with the PRC in the South China Sea informally, especially the fishing moratorium. But threats against Vietnam's claim to oil resources were more serious. The political and economic costs were higher. According to one interviewee, Vietnam's leaders had worked to create (and demonstrate) a stable environment for Western oil companies. The cut cables undermined these efforts. This necessitated a more assertive response.[27]

Vietnam's response included both formal and informal approaches, as described by experts in the region. Formally, it announced and conducted live-fire drills in the disputed territory off its coast.[28] Vietnam also sent its vice foreign minister, Ho Xuan Son, to Beijing to meet with PRC State Councilor Dai Bingguo. These discussions eventually led to a diplomatic agreement between the two countries titled "Agreement on Basic Principles Guiding the Settlement of Maritime Issues," announced four months later on 12 October 2011.[29] Informally, Vietnamese officials reached out to build international diplomatic support through multilateral channels such as the Association of Southeast Asian Nations (ASEAN). It also permitted popular protests against China; the summer of 2011 witnessed the most expansive anti-China protests in Vietnam since the early 1990s. Collectively, these efforts appear to have influenced (at least temporary) the withdraw of Chinese maritime militia from Vietnam's exclusive economic zone.[30]

Second, in May 2014, the state-run CNOOC deployed an oil rig near the Paracel Islands and within the territory claimed by Vietnam. The oil rig was accompanied by the Chinese maritime militia. This deployment came in the midst of the annual PRC-declared fishing moratorium. It also occurred in a wider geopolitical context. Namely, Southeast Asian countries had become increasingly alarmed at PRC efforts to establish new outposts in the South China Sea. In January 2013, for example, the PRC issued a new map with claims to 130 islets and reefs.[31] The Philippines issued a formal protest to the United Nations about the PRC's construction activities soon thereafter. The presence of the CNOOC oil rig, therefore, was only one of many smaller incidents that had been escalating over a period of eighteen months. These, collectively, prompted a more assertive response from Vietnam.

Vietnam's response followed a somewhat similar pattern to the summer of 2011. It pursued deescalation through formal diplomatic channels. Vietnam also allowed anti-China protests in the streets of Hanoi and elsewhere. Rather than live-fire drills, Vietnam sent approximately thirty of its own fishing and coast guard vessels to confront the CNOOC oil rig and accompanying militia.[32] According to interviewees, Vietnam wanted to respond more assertively than in May 2011 but still keep its response below the level of armed conflict. Vietnam's fishing and coast guard vessels were relatively small in comparison to the Chinese militia. They reportedly had been given to Vietnam by South Korea.[33] The fishing militia and coast guard, in this sense, were sent simply to prevent the oil rig from establishing a permanent presence. But they were overpowered. The Chinese militia rammed the Vietnamese vessels, causing extensive damage and injuring several sailors.[34]

Unlike in the summer of 2011, Vietnam's collective efforts in the summer of 2014 did not yield a publicly announced resolution. CNOOC did, however, withdraw its oil rig one month earlier than scheduled (July versus August 2014). Some analysts have attributed

this early withdrawal to Vietnam's response.[35] Yet it was not fully successful, as tension simmered below the level of armed conflict throughout the summer and fall. Soon thereafter, the Vietnamese government echoed the Philippines complaint to the United Nations about

costs for Vietnam and its neighbors. The Chinese maritime militias also have managed to forestall a direct U.S. military response. Experts in the region perceive Vietnam as losing ground against the PLA and its militia forces. That said, Vietnam has inarguably faced

> "This video was the first evidence of PLA bombers landing in the South China Sea; it demonstrated that the bombers could span the entire area, including Guam and northern Australia. "

PRC construction in the South China Sea. The U.S. military also began regular freedom of navigation operations (FONOPs) near the Spratly and Paracel Islands.

Third, in March 2018, PetroVietnam informed the Spanish oil company, Repsol, that it could no longer develop the Ca Rong Do oil field. Ca Rong Do, also referred to as the "Red Emperor," is located 273 miles off the coast of Vietnam's southern coast and close to the Nine-Dash Line.[36] According to unnamed Repsol executives, PetroVietnam's action resulted from PRC threats to Vietnamese outposts in the Spratly Islands.[37]

Importantly, Vietnam had attempted to increase its capabilities after the May 2014 incident. It had invested in submarines, reinforced its outposts, and expanded its own fishing militia to as many as eight thousand vessels.[38] Vietnam also invited a U.S. aircraft carrier, the USS *Carl Vinson*, to Vietnam in March 2018; it was the first visit since the war between the two countries.[39] But these efforts were not enough to deter Chinese threats against oil exploration by Vietnam. Instead, they arguably added to tensions. In an obvious response to the *Carl Vinson*, for example, the PLA-Air Force posted a video on its social media account of a long-range bomber taking off from a base in the Paracel Islands. This video was the first evidence of PLA bombers landing in the South China Sea; it demonstrated that the bombers could span the entire area, including Guam and northern Australia.[40]

In sum, the PRC has utilized its maritime militias in classic irregular warfare fashion against regional competitors in the South China Sea. The militia have created security dilemmas, presented risks, and increased

a much stronger force in the PLA and its maritime militias. It should be given credit for preventing even greater territorial and economic losses over the past decade. As such, Vietnam's experiences can provide the United States with some important lessons.

Implications for the U.S. Military

First, Vietnam uses a combination of official and backchannel responses to PRC aggression in the South China Sea as enacted by its maritime militia. Official bilateral engagements tend to be somewhat conciliatory, as evidenced by the October 2011 "Agreement on Basic Principles Guiding the Settlement of Maritime Issues." By comparison, Vietnam's multilateral diplomacy reflects an effort to increase risk and costs for the PRC and its use of the maritime militia. Vietnamese diplomats are better positioned to manage these official and backchannel responses, given longstanding ties between the Chinese Communist Party and the Communist Party of Vietnam. Nevertheless, they provide an example for how the United States could support countries in the region as they attempt to manage threats posed by the Chinese maritime militia.

Second, Vietnam partners its diplomatic engagements with irregular warfare activities. These activities include expanding Vietnamese outposts in the South China Sea, strengthening those outposts, and arming Vietnamese fishing and law enforcement vessels so that they can better monitor and confront the Chinese maritime militia. But Vietnam does not have the resources to support its fishing or law enforcement vessels on-scale with the PRC. This provides an opportunity for

the United States, its allies, and its partners to support Vietnam or other ASEAN countries. To be sure, the United States, Japan, India, and others have expanded their support to ASEAN countries in recent years, particularly efforts to increase maritime domain awareness. But more could be done.

Third, like with its diplomatic engagements, Vietnam reaches for multilateral support if its official or unofficial bilateral efforts are not sufficient. This support tends to be in the form of FONOPs. But FONOPs alone are not sufficient to counter an irregular warfare threat. While the U.S. military brings a larger and more capable force than Vietnam alone, the PLAN's use of a maritime militia complicates a U.S military response. The perceived asymmetry between the fishing militia and U.S. Navy is difficult to overcome. Any such response appears overly aggressive. Additionally, FONOPs are temporary in nature.

Although often welcomed, the ships soon depart, and tensions rise all over again. U.S. Coast Guard vessels could provide an important complement, if not alternative, to U.S. Navy ships. Some of this has already begun. The U.S. Coast Guard has rotated ships through the Western Pacific since 2018. Nevertheless, this presence, as well as relationships with regional coast guards, could be expanded.

Finally, this study demonstrates that even "great powers" can benefit significantly from irregular warfare tactics. The PRC has used a combination of its military, law enforcement, and militia to expand its presence and control over the South China Sea. While this article only focuses on the maritime militia, it is easy to see how the militia has contributed to the PRC's overall success. Given its successes, the U.S. military should anticipate this trend to continue and work to refine its responses. ■

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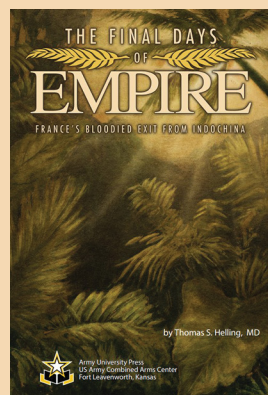
In *The Final Days of Empire: France's Bloodied Exit from Indochina,* author Thomas S. Helling, MD, explores the dying vestiges of France's bid for colonial greatness in Indochina through the lens of the doctors and nurses as they attempted to save the wounded and maimed. The hills of northern Indochina were the backdrop to the death throes of France's imperial designs of domination. In an ugly war filled with contempt, treachery, and sabotage, the medical lesson learned on both sides was the vital importance of early care by virtue of proximity and quick evacuation to medical facilities.

Chinese and Indian troops clash in the Galwan Valley during a 15 June 2020 incident at the Line of Actual Control—the de facto border between the two countries—in the mountainous Indian state of Arunachal Pradesh. (Screenshot from China State Television)

Clash in the Gray Zone
China's System to Win Without Fighting

Maj. Dustin Lawrence, U.S. Army

Folded in the wrinkles of the highest plateau on Earth, two battle formations met on opposite sides of a mountain tributary. Armed with clubs, spiked batons, and stones, they drew their battle lines on either side of a mountain stream. The two fought in the thin air for six hours. In the end, blood soaked the valley floor and flowed through the turbulent waters. Both sides claimed prisoners as the battle closed with the onset of the bitterly cold mountain night.[1] The

brutal scene, characteristic of countless skirmishes throughout the earliest pages of the historical record, was not a medieval bout or gang violence. Rather, it was a clash of two of the modern world's largest nuclear-armed states, each with a dynamic economic reach extending the world over.

The clash erupted between Chinese and Indian troops on 15 June 2020 over a long-standing border dispute at a key junction in the Galwan Valley. While

the event itself marked a significant point in the history of Sino-Indian relations, the context surrounding it sheds light on China's approach to warfare. Despite the rudimentary weapons used that day, the violence was a component of a sophisticated global system wielded by the People's Republic of China (PRC). The People's Liberation Army (PLA) soldiers were employed in harmony with China's other instruments of national power in pursuit of strategic objectives. Even though PLA actions led to bloodshed, the corollary approach was tailored to remain below the threshold of armed conflict. It was a component of China's strategy in the gray zone.

Many describe gray-zone activities as actions that violate international norms without venturing into the realm of armed conflict. This categorical approach is ambiguous and misses the purpose behind conducting gray-zone activities. Revisionist actors have reasons for breaking with international norms. Hal Brands, a senior fellow at the Foreign Policy Research Institute, expands the definition in "Paradoxes of the Gray Zone": "Gray zone conflict is best understood as activity that is coercive and aggressive in nature, but that is deliberately designed to remain below the threshold of conventional military conflict and open interstate war."[2] Its goal, Brands expanded, "is to reap gains, whether territorial or otherwise, that are normally associated with victory in war."[3] In other words, gray-zone operations offer alternative "ways" for China to accomplish the ends that have conventionally been associated with war.

Framing China's gray-zone activities is essential because they are systematic. That is, they are open, purposeful, multidimensional, and emergent. Because of these qualities, they can produce counterintuitive results.[4] To frame the Chinese gray-zone approach against India, this article divides activities by four categories—geopolitical, economic, cyber and information, and military. These are further divided by international, bilateral, and grassroot-level targets to contextualize the broader Chinese approach.[5] Extrapolated across the leadup and aftermath of Galwan, the model shows the system in context.

Analyzing China's gray-zone system against a partner with a diverse population, a stable democracy, global economic reach, and a functioning nuclear arsenal offers the United States valuable insights. As the United States confronts China globally, these lessons should inform a system to counter China in the gray zone.

Border Tension

The 2020 border clashes marked the first time since 1975 that violence led to a loss of life along the Sino-Indian line of actual control (LAC; figure 1 shows the LAC and the historic 2020 clash). At Galwan, twenty Indians and an unknown number of Chinese were killed.[6] Tensions rose early that summer when Chinese officials objected to road construction in the Galwan Valley. Small units of PLA troops increased the frequency of their patrols and ventured further into the disputed region. By late May, however, the PLA operations transitioned to occupying key tactical positions tied to infrastructure, chokepoints, and overlooks.[7] On 15 June 2020, Indian troops responded to reports of Chinese troops camped at a bend on the Galwan River. While Chinese reports claimed India instigated the confrontation when it confronted the PLA in Chinese-controlled territory, India accused the PLA of drawing-in and deliberately ambushing its troops.[8] By 7 September 2020, both sides accused the other of firing small arms—marking the first time in forty-five years that shots were fired along the LAC.[9] Experts from both sides designated the violence an inflection point, decades in the making.[10]

In 1962 and 1975, China and India engaged in armed conflict for control over the LAC. Following these conflicts, the status of the border remained unresolved, and both countries were nuclear powers. In the following decades, both sides often patrolled the border unarmed to prevent escalation. By 2020, China changed its approach.

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Note: Represented on the map is the site of the Galwan Valley clash. The red circles show areas of conflict at the height of 2020–21 tensions. (Figure by U.S. Central Intelligence Agency, *Kashmir Region* [Washington, DC: Library of Congress, 2004]; modified by author)

Figure 1. Sino-Indian Border Map

Winning without Fighting

The foundation for Chinese gray-zone operations rests in the classics. Most famously, Sun Tzu stated, "To win one hundred victories in one hundred battles is not the highest excellence; the highest excellence is to subdue the enemy's army without fighting at all."[11] Many other axioms placed a weight on the actions before armed conflict. This idea was pervasive beyond

the *Art of War*. Ancient stories captured in the *Wiles of War* can be seen as lessons on operating within the gray zone, such as "watch a fire from across the river," "beat the grass to frighten the snake," or "remove wood from under the cauldron."[12]

Foundational to ancient precepts of winning-without-fighting was the concept of *shi*. Lao Zi, who was likely an amalgamation of many ancient Taoist philosophers,

used the metaphysical concept to holistically define reality.[13] Followers of Zi saw shi as "the external shaping force of the environment that molds each object contained within that environment."[14] In policy and war, it was often used to describe the disposition that leads to a position of relative advantage.[15] Over the course of two millennia, the concept of shi transcended the lexicon, becoming a model to describe immeasurable complexity.[16] Contemporary Chinese writers continue to use shi to describe the political, and by extension military, disposition during and between armed conflict.

The most pervasive example of this is *Unrestricted Warfare: China's Master Plan to Destroy America*. The influential work, first published in 1999 by Qiao Lang and Wang Xiangsui, explores how a weaker China could challenge a hegemonic United States and conceptualize a way of war befitting China's disposition. They determined the battlefield had expanded beyond the typical three-dimensional understanding into outer space, across the electromagnetic spectrum, and into the psychological space of the human mind. Their theory dismissed any bifurcation of war and peace and instead assumed a state of constant competition. "The battlefield is omnipresent. Just think, if it is even possible to start a war in a computer room or a stock exchange that will send an enemy country to its doom, is there non-battlespace anywhere?"[17]

Following the publication of *Unrestricted Warfare*, this paradigm began to permeate PLA literature. In 2003, the Chinese Communist Party (CCP) published *The Political Work Guidelines of the People's Liberation Army*. Formalizing concepts from *Unrestricted Warfare* and expanding on pervasive ideas from earlier literature, the guidelines introduced the concept of "Three Warfares"—public opinion warfare, psychological warfare, and legal warfare.[18] Public opinion warfare would establish a foothold in the adversary's minds. Gaining dominance would facilitate psychological warfare, which aimed to disrupt decision-making by sapping the will and eroding support. Legal warfare operated as a subset of the previous two, further raising doubts across neutral parties and in adversarial populations.[19] The three warfares would have a symbiotic relationship and represent a new age of "informatized warfare."

Subsequent policies, white papers, and journals embraced "informatized warfare." The PLA guidance for "local wars under informatized conditions" emphasized concepts and capabilities to respond to a technologically superior adversary, emphasizing "system-of-system operations" and setting conditions to degrade opponent systems.[20] Beginning in 2005, this vision was operationalized through the "systems confrontation" approach.[21] This "leap" fused historical concepts such as shi with technological advancements observed during the U.S. operations in Iraq and Afghanistan and NATO operations in Serbia and Kosovo.[22] Parallel to the shift from a mechanized to an informatized force was the shift from "active defense"—never attack first but respond if attacked—to a preemptive approach. This idea was especially pervasive in the information category, where blowback for such operations was politically reduced. Calls for cyber formations or "net forces" under the control of the PLA began to echo in military journals.[23]

A 2009 white paper on national defense further expanded the role of the military beyond state-on-state armed conflict. Informatization tagged the military to politically important missions such as peacekeeping, antiterrorism, and military diplomacy. Such activities were captured under the term non-war military activities (NWMA).[24] By 2011, NWMA was officially adopted in the *People's Liberation Army's Military Terms*: "Military activities that the armed strengths carry out to protect the nation's security and developmental interests but do not constitute warfare."[25] In 2013, the PLA published the *Science of Military Strategy* (*SMS*) and devoted a chapter to NWMA. The *SMS* stated that these activities "are continually expanding. They are being used more and more broadly in social, political, and economic life and in international relations, and their importance is growing ever stronger."[26]

Concurrently, the Chinese began to use informatized tactics more broadly. This was evident in the cyber domain. By 2009, at least thirty-five Trojan horse programs were directed by the CCP, and over two hundred and fifty hacktivist groups were operating freely in China.[27] Under the precept of Mao Tse-tung's "people's war," China expanded programs like the Network Crack Program Hacker to establish an informal army of plausibly deniable hacktivists.[28] Keeping with their previous doctrine, the Chinese would target centers of gravity in adversary systems, including leadership institutions, command and control systems, and information nodes.[29]

In 2016, President Xi Jinping addressed the dialectical nature of war and peace with his concept on

CHINESE CONFLICT SPECTRUM

Peacetime use of military force
和平时期军事力量运用

Peacetime: no use of force

Low-intensity: use of force in peacetime

Wartime: wholesale use of force

Cooperation

Confrontation

CCP "Bottom Line" 底线思维

Armed Conflict

Local War

Large War

Nonwar military operations

Wartime operations
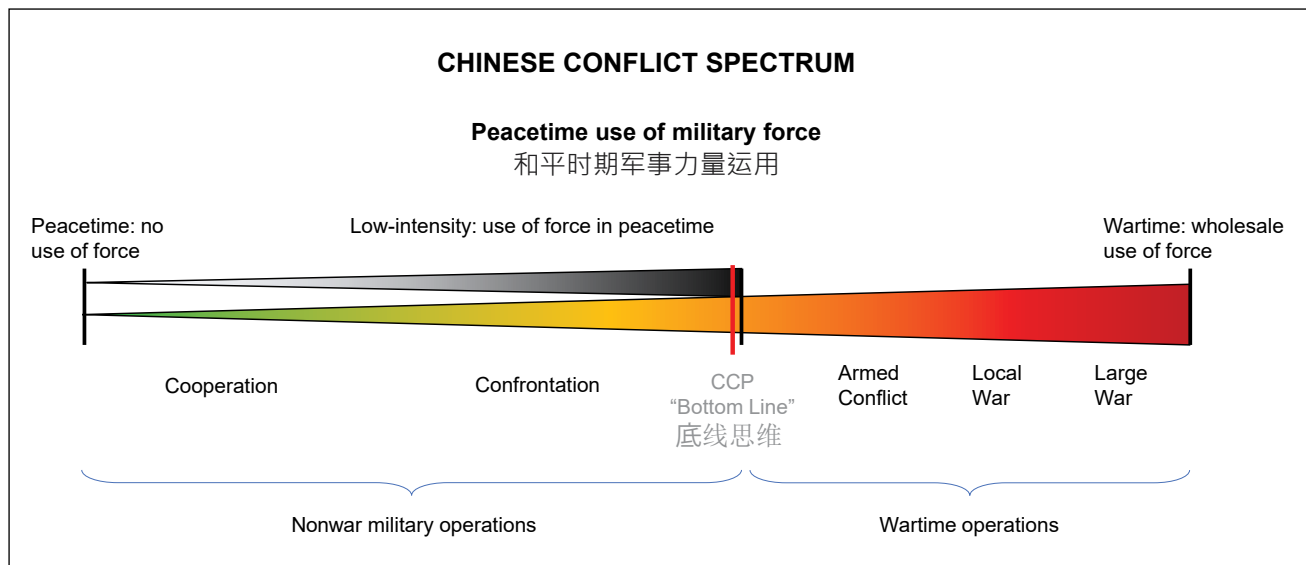
(Figure by author)

Figure 2. The Chinese Use-of-Force Spectrum

the "overall planning for war operations and the use of military forces in peacetime."[30] Here, Xi aligned China's means—political, economic, and military—to achieve national objectives during peace. (Figure 2 shows the Chinese use-of-force spectrum.) China's capacities, born of the leap to informatization, would be used to "manage crisis and prevent wars through the use of military forces in peacetime."[31] The weight of these capacities would be applied on a use-of-force spectrum ranging from "peacetime use of military force" to "wartime wholesale use of force" (see figure 2). In between these lay China's new *modus operandi* [low-intensity use of force in peacetime]."[32]

Underpinning this was the broader concept of "bottom-line thinking." This amounted to using force to prevent relevant actors from crossing China's "line in the sand." Xi described this mode of thought as driving away from war, toward "harmony."[33] The "bottom-line thinking" underlying Xi's spectrum would act as a counterbalance to Indian transgressions—when the situation along the LAC gravitates to war, "low-intensity use of force" would return it to peace. (Figure 3 shows the "means" and "ways" of this approach across the Chinese use of force spectrum.)

From this perspective, the 2020 border clashes may not be a failure of Xi's approach. The Chinese incursion into Indian territory was an attempt to change the status quo according to the Indian government.[34]

Assuming this, the incursion marked a more deliberate approach. The bottom in the "bottom-line thinking" could be raised, in essence, redrawing a line in the opponent's sand. Although changing the norms would invite chaos to the system, the CCP's "low intensity use of force" would return it to harmony. Strategic adjustment of the bottom-line would demand follow-on actions in the geopolitical, economic, and cyber-information spaces to return the environment to equilibrium. China would stay in the "gray zone," and win without fighting.

Geopolitical

Geopolitics represent the interplay of politics across space. Given the size and significance of these actors, Sino-Indian politics converge in multiple geophysical arenas. While the LAC may be the geopolitical epicenter, China's approach spans the globe, and it presses multiple geopolitical points in the gray zone at the international, bilateral, and grassroots levels. Like a game of Weiqi, the efforts across the board ultimately support the larger objective.

Internationally, India's most important strategic lines of communication extend over the Indian Ocean region (IOR). Historically, those lines were interwoven with other nations and great powers in an intricate tapestry of culture and trade.[35] Ports in Sri Lanka, Seychelles, Mauritius, and Maldives were crucial to the flow of imports and exports from Indian markets.

CHINESE CONFLICT SPECTRUM IN ACTION
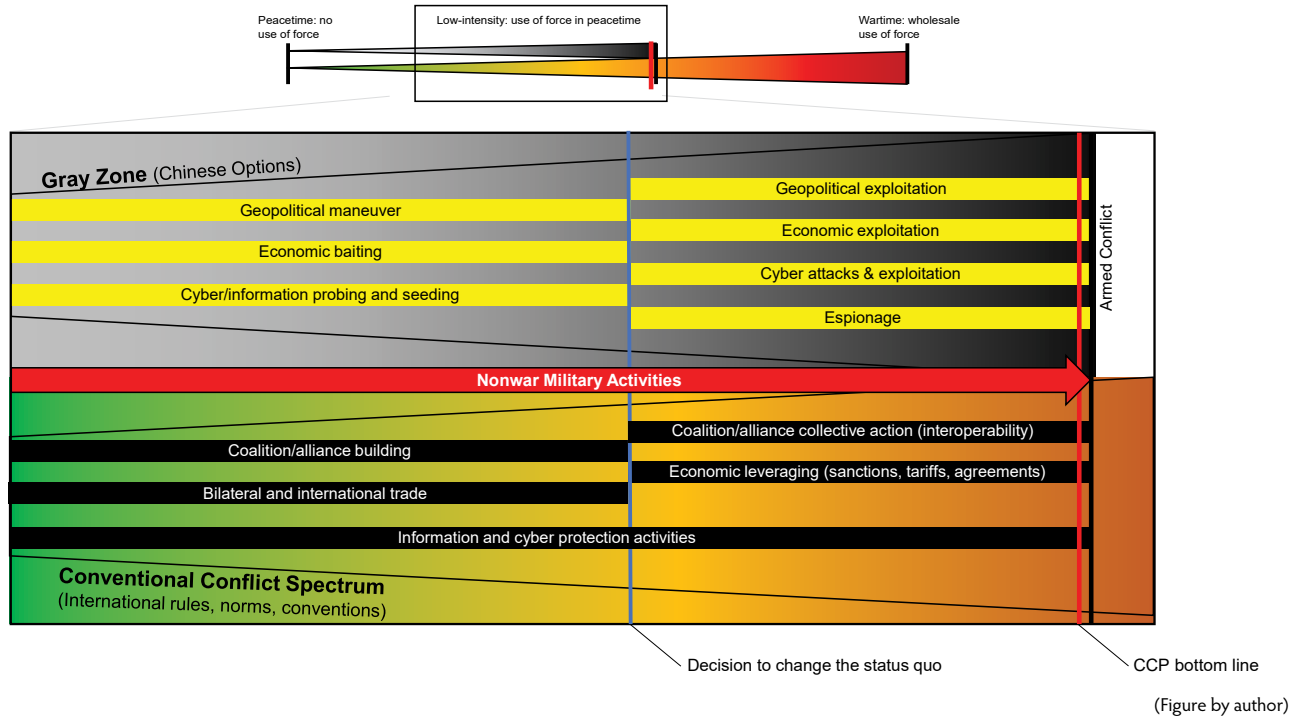
Figure 3. Chinese Use-of-Force Spectrum with "Means" and "Ways"

By 2016, 95 percent of India's trade by volume and 68 percent by value came via the Indian Ocean.[36] Nearly 80 percent of India's crude oil requirement was imported across the IOR.[37] Chinese policymakers understood this and attempted to shape the IOR's ecosystem to their advantage. Indian political scientist Mohan Malik described three core elements of the Chinese strategy: encirclement, envelopment, and entanglement.[38]

All three are seen through the "string of pearls," visual (see figure 4), which conceptualizes China's Belt and Road Initiative as the string with IOR trade hubs as the "pearls." At the string's center is Sri Lanka. The island nation, located fifty-five kilometers from India's southeast coast, is a strategically significant waypoint for trade across the IOR. Although both China and India could benefit from relations in Sri Lanka, China maintained a zero-sum approach. It pressed on diplomatic and economic pressure points to ensure its strategic positions and deny Indian influence.[39] This was evident in the struggle for the Colombo and Hambantota Ports. PLA investments in Colombo extend back to 2011, when a consortium led by a Chinese state-owned enterprise (SOE) signed a thirty-five-year agreement

to develop and operate the deep-water Colombo International Container Terminal. This promised an 85 percent stake of the terminal in exchange for $500 million in development.[40] The port serves a broader strategic purpose for China. According to Western analysts, "for the 'Quad [Quadrilateral Initiative of India-Australia-Japan-US]' to be meaningful, India or Japan requires a place in Colombo Port."[41]

Sri Lanka's other deep-water port, the Hambantota Port, is currently under a ninety-nine-year lease to a Chinese SOE. Given the expansion of Colombo, the economic rationale for Hambantota's construction is weak. Many see the development of the former fishing port as a shell of a People's Liberation Army Navy (PLAN) operating base aimed at further control over maritime lines of communication. During the contract negotiations, India pursued a joint venture to port construction. However, China aggressively leveraged its debt positions to maintain control of infrastructure projects. These debt positions were also used to ensure Sri Lanka voted in line with Chinese interests in intranational bodies.[42]

Another significant pearl strung on the Belt and Road string is the Gwadar Port. The port serves as a

(Figure by author)

Figure 4. The String of Pearls

critical component of the China-Pakistan Economic Corridor, a three thousand-kilometer infrastructure project that allows Chinese energy to bypass the Straits of Malacca. Construction on the port began when the Sino-Indian modus vivendi began to deteriorate as both countries expanded their economic reach. The port, however, caused significant Indian concern upon inception, not only because of its development with India's historical enemy but because it also completed the envelopment of India from the west. By Gwadar's inauguration in 2016, it was clear the port would link China's land lines of communication through Pakistan and the Himalayas with maritime lines of communication. With a Chinese SOE conducting port operations, Gwadar could serve as a gateway to the IOR from Western China.

As CPEC encircled from the west, the Chinese-Myanmar Economic Corridor looked to do the same in the east. Rail and road projects were proposed to extend from Yunnan Province to the port at Khaukpyu. This would mark an eastern "pearl," completing the string around the Indian subcontinent. However, Myanmar, concerned with excessive borrowing from China, proceeded cautiously. Before the Sino-Indian border clashes in June 2020, none of the proposed projects had commenced.[43] Even without

the proposed deep-water port at Khaukpyu, China maintains influence over port operations and lines of communication through the straits of Malacca to connect operations in the SCS.[44]

Where PLA military presence is an established reality is in the pearl of Djibouti. Jutting into the main arteries of the world's most important trade routes, the Horn of Africa offered China opportunities to protect its interests in Africa and project power across the IOR. When China began investing in infrastructure projects in 2013, India saw the projects as largely commercial and continued to look east toward the South Asian littorals. However, China developed a new port, two airfields, an underground basing complex capable of housing ten thousand troops, and defense agreements with Djibouti's government.[45] By 2020, expansion of the base's capabilities supported the full range of PLAN capabilities, including nuclear submarines and aircraft carriers.[46]

The Himalayas crown the Indian subcontinent and China's string of pearls. Here too, China inlaid jewels. These include terrain with military and political significance. PLA troops in the 1950s circulated pamphlets declaring that "Tibet is the palm of China's hand and that all that remains to be done is to win back the fingers: the Northeast Frontier Agency, Ladakh,

Nepal, Sikkim, and Bhutan."[47] The sentiment appears to live on. At the disputed junction border with India and Bhutan, China injected its entanglement strategy through development projects and policing efforts. Tension peaked in 2017 when Indian forces confronted the PLA. This raised the political stakes on India's historic support of Bhutan's territorial integrity. Despite the resolution in 2017, China had completed four villages in Bhutan-claimed Doklam territory after the 2020 disputes.[48] China has taken a similar approach in Nepal, encroaching on its borders. In both cases, Chinese incursions against Indian allies eroded a coherent approach from an Indian-led political bloc. For years, China entangled itself with India's rival Pakistan, exerting pressure on New Delhi.

Grassroots-level geopolitical actions further complicated Indian regional concerns. In Sri Lanka, local power brokers and national figures were often approached in China's bid to control their strategic ports. In the initial phases of Gwadar and Khaykpyu, key influencers were targeted to push development. Grassroot efforts, however, were not limited to India's periphery. China actively pursued influence in Indian politics. One obvious target was the Communist Party of India-Marxist, which routinely hosted Chinese officials and maintained active dialogue in the leadup to the 2020 border tensions. More directly, Chinese efforts targeted the Bharatiya Janata Party (BJP), one of India's two major political parties, which represents right-wing, traditional Hindu nationalist politics. Following a BJP delegation in 2019 to China, one member acknowledged that CCP officials "wanted to know how we have built the party, especially in the past five years. How we use the party machinery for elections."[49] However, neither party maintained ties after June 2020. Following the death of Indian soldiers on the border, Chinese ties represented a political liability to both the Communist Party of India-Marxist and the BJP.

Economic

Celebrated economist Lionel Robbins, in his landmark essay on the nature of economics, defined the subject as the "science which studies human behavior as a relationship between given ends and scarce means which have alternative uses."[50] As many of the earlier examples show, China reinforces its gray-zone actions with economic weight. Since liberalizing trade policies in 1979, China's annual gross domestic product has grown by an average of 9.5 percent, what the World Bank described as "the fastest sustained expansion by a major economy in history."[51] India's growth during the same time increased, albeit at a pace well behind its bourgeoning neighbor. However, China's meteoric rise has waned since its peak in 2007.[52] By 2020, the global pandemic hammered domestic markets and stymied trade as tensions mounted along the border. In this environment, Robbins's emphasis on human behavior becomes evident as the critical variable in "given ends" and "scarce means" formula.

At the international level, economic gray-zone activities involve controlling or reducing the availability of resources to induce a cognitive effect on a target. Similarly economic activity at the bilateral level involves reducing trade or the flow of specific goods for the same ends. Actions at both levels are facilitated by geopolitical maneuvering. In China's case, its domestic capacity and economic hubs across the Pacific and IOR provided additional options to the PLA in and out of the gray zone. While limiting exports to the massive Indian market would have resulted in blowback for China, the massive trade imbalance tilted toward Beijing, levying hardships disproportionally on India.[53] Before the 2020 border tensions, there were multiple sectors of India's economy at risk. From 2018 to 2019, of the 375 categories of products imported to India, 80 percent came from China.[54]

In 2020, China appeared to deliberately target several key sectors, most notably pharmaceuticals. Generic pharmaceutical production had made India the "pharmacy of the world."[55] However, acquiring this status brought vulnerabilities to India's markets. Between 90 and 100 percent of certain active pharmaceutical ingredients (API) were imported from China in 2019.[56] Turning off the flow of APIs represented an extreme option for China, not just because of the imports of lifesaving drugs, but because the downstream effect across the global market would have galvanized a significant international response. CCP restraint in leveraging their hold on Indian pharmaceuticals may have been about retaining gray-zone options. Still, strategic options have shelf lives. Following the border crisis, India developed a series of policies to limit dependence on APIs.

Often international and bilateral actions come with the risk of blowback because the downstream

effects extend beyond the target country or costs in the domestic markets. This is why China often surges economic actions at the grassroots level, where the PRC often use SOE to advance efforts. This was evident in Sri Lanka, where the Colombo port alone handles 40 percent of Indian transshipped cargo.[57] Six months after Galwan, China signed a deal to

Cyber actions are most often designed to be nonattributional while tailored to specific systems. Because of this, they primarily exist at the bilateral or grassroots levels. While bilateral actions consist of cyber operations against governments or targeted economic activities, grassroots action is characterized by information operations. Like economics, human behavior is the

> " Chinese actions in the cyber and information dimensions are often uninhibited, viral, and persistent. Cyber actions are most often designed to be nonattributional while tailored to specific systems. "

further develop Colombo's financial district. Up to that point, China developed $1.4 billion of a planned $13 billion in the port city. With China's control over the Colombo International Container Terminal deep water port, India and Japan signed a tripart memorandum of cooperation in 2019 to develop Colombo's East Container Terminal.[58] Seven months after Galwan, the deal collapsed, even though Sri Lankan officials offered an alternate proposal of their West Container Terminal. Multiple Indian news outlets cited rumors of Chinese interference in the negotiations, with one citing anonymous officials claiming China influenced the West Container Terminal counteroffer.[59]

Although India remained Sri Lanka's largest trading partner through the border crisis, China maintained insurmountable debt position investment packages. In addition to these were the decades of local projects accepted by key Sri Lankan officials for temporary bumps in political capital.[60] Through the border crisis, Sri Lankan currency reserves were plummeting. Rather than turning to the International Monetary Fund, which requires institutional reforms in exchange for assistance, Sri Lankan officials continued to incur debt from China. Even as the domestic population voiced concerns, and India offered assistance, officials remained wed to China.[61]

Cyber and Information

Chinese actions in the cyber and information dimensions are often uninhibited, viral, and persistent.

dependent variable at stake in both cyber and information activity.

This theme was echoed through the informatization literature before the 2020 border clashes and operationalized after Galwan. Nearly in sync with the incursion of PLA troops, a surge of malware flooded Indian systems. These cyber activities clustered around key infrastructure nodes. Malware linked to a PLA-affiliated hacker group targeted at least ten regionally important nodes in India's power grid and two seaports.[62] These clusters gravitated around geopolitically significant objectives. Most clusters were in proximity to the LAC and compromised state load dispatch centers, an Indian subsidiary of a multinational logistics company, and a national emergency response system. The minimal espionage value of these targets led Recorded Future, a U.S.-based intelligence company, to assess the Chinese goal was pre-positioning to "support several potential outcomes, including geostrategic signaling during heightened bilateral tensions, supporting influence operations, or as a precursor to kinetic escalation."[63] The two targeted seaports substantiate this. The first was the Jawaharlal Nehru port, which handles most of India's containerized cargo and offers the most direct route to Pakistan's port at Gwadar.[64] The other was India's southernmost port at Thoothukudi whose main competitor is Sri Lanka's Colombo port.[65]

On 13 October 2020, the Chinese cyber incursions may have gone beyond seeding. Blackouts rolled through Mumbai that Tuesday, halting trains, closing the Indian stock market, and forcing hospitals to turn

to generators amid a spike in coronavirus cases.[66] Initial reports from the Indian media cited state officials who claimed malware had been discovered that may have caused the blackouts. Indian officials later rolled back these statements. Still, reports from Recorded Future suggested a coordinated cyberattack occurred at the same time as the blackouts.[67] "I think the signaling is being done [by China to indicate] that we can and we have the capability to do this in times of a crisis," said retired Lt. Gen. D. S. Hooda, an Indian cyber expert who oversaw India's borders with Pakistan and China. "It's like sending a warning to India that this capability exists with us."[68]

PLA cyber activity ventured beyond messaging. In the first half of 2021, as the border dialogue continued, groups affiliated with the PLA cyber espionage groups continued to target the Indian aerospace industry, defense contractors, and telecommunication companies.[69] The patterns of these bilateral cyber actions—their timing, locations, and targets—directly linked to their objectives along the border. Chinese information actions at the grassroots level follow the same patterns. Cognitive effects were seeded in advance of the clashes at the Galwan border. This approach exudes lines of effort across India's media ecosystem—in social media, news aggregation, and content and messaging.

Chinese state media outlets maintained active accounts on social media in Hindi, Bangali, Tamil, and Urdu, amassing a significant number of followers before the clashes. For example, China Media Group Hindi's Facebook page had 7.2 million followers (the BBC's Hindi page had ten million).[70] Following the clashes, the extent of Chinese influence over X (Twitter) became apparent when anti-Indian misinformation spiked on the platform. In June, #ChinaComesModiRuns became one of the top trending hashtags with the help of Chinese bots.[71] These efforts were assisted from Pakistan, from which hundreds of fake X and Telegram accounts spread misinformation.[72]

China also made massive investments into major news aggregator apps before the clashes, the largest being a Chinese firm's investment into Dailyhunt—a news content platform designed to merge local and national content in regional languages. After a twenty-five-million-dollar investment in 2016, Chinese investors landed on the executive board.[73] Shortly afterward, a Chinese firm launched Newsdog, another

aggregator website. The company, completely controlled from China, aimed to open an office in every Indian state. By 2020, it had gained nearly one hundred million users.[74] A month after the clashes, the Army ordered its soldiers to delete eighty-nine apps from their smartphones because of data mining concerns. The list included Chinese apps like Newsdog, global social media apps like X and China's TikTok, and even Indian apps like Dailyhunt.

The Indian government feared social media and news aggregators seeding Chinese narratives amongst soldiers. These narratives, however, were also carried through Chinese journalists and agents to the general population. Numerous articles ran in national and local Indian papers following a boycott of Chinese goods after the border clashes that questioned the decision and recounted the benefits of Chinese businesses. Many of the authors had previously written pro-Chinese articles. In isolation, this reflects the diversification of an independent media. However, since 2012, China's Foreign Ministry's Chinese Public Diplomacy Association ran fellowship programs for journalists from India, Pakistan, Nepal, Sri Lanka, and other IOR nations.[75] On these fellowships, journalists were provided luxury housing, a sizable stipend, a degree from a Chinese University, and according to one source, iPhones that stored iCloud data in Chinese servers.[76] While journalists involved in the Chinese fellowships proclaimed their objectivity following backlash amid the border tensions, other journalists were arrested for espionage. Freelance journalist Rajeev Sharma was arrested and later admitted to passing on "sensitive information" to Chinese handlers.[77]

Where journalists could not be bought off, China opted to purchase full-page advertisements supporting their narrative of Indian border aggression and advocating appeasement. These ads were deceptively formatted to mimic news coverage with subtle messaging. One such example ran in *The Hindu* with the title, "A Strategic Dealing with China: India Must Engage with China Economically Even as It Confronts It Militarily."[78] These efforts extended across broadcast medians as well. China Radio International, for instance, actively broadcasted pro-Chinese narratives across Tamil-speaking populations. After the clashes, China Radio International criticized the Indian army actions leading to the tensions.[79]

In addition to media, education centers and think tanks have been grassroots targets. These platforms, typically seen as sources of credibility, offer salient positions to turn public opinion and influence policymakers. The list of organizations with direct ties ranges from the Confucius Institute to pro-China youth leagues that maintained active memorandums of understanding with the youth wing of the CCP.[80] At multiple universities across India, China has promoted pro-China discourses through language programs, academic circles, and fellowships.[81]

Military

Gray-zone activities avoid the onset of armed conflict, yet paradoxically, the military plays a central role in gray-zone operations. Serving as more than just the deterrence force, the PLA actively synchronizes the instruments of national power to achieve strategic objectives.

At the border, the PLA proved active before and after the clashes at the tactical and operational levels. After 2017, despite the ongoing annual Working Mechanism for Consultation and Coordination, China continued to expand its military basing in the Tibetan Autonomous Region.[82] From 2017 to 2020, the number of heliports and airbases doubled.[83] After Galwan, the military buildup ramped up. The PLA moved long-range strategic bombers to those airbases in 2021.[84] Around the same time, they built "militarized village[s]" that positioned electronic warfare and air defense stations close to India.[85] PLA tactical actions on the ground appeared to nest with these strategic moves. In late 2020, a Chinese academic in Beijing claimed the Chinese used microwave weapons to turn two key hilltops that had been occupied by Indian soldiers "into a microwave oven."[86] The effects caused the Indians to withdraw, enabling the PLA to occupy the hilltops "without any exchange of gunfire," constituting tactical-level gray-zone maneuvering.[87]

Tactical gray-zone maneuver has been a staple of Chinese activities in the SCS well before the border clashes. People's Armed Forces Maritime Militia ships provide support to maneuvering commercial vessels as they cross into territorial waters. Rather than the physical effects from supporting microwave emitters, the People's Armed Forces Maritime Militia provides a cognitive effect on adversaries attempting to enforce their maritime borders. In the IOR, China used this tactic with commercial vessels to prod Indian exclusive economic zones.[88] These incursions were backed by PLAN warships just outside the exclusive economic zone.

A political organization at its core, the PLA often synchronizes these operations, applying a whole-of-government framework to link geopolitical, economic, information, and cyber activities. The PRC's "Land Border Law, drafted during the standoff along the LAC and ratified after the 13th rounds of talks failed to reach a resolution, codified this mantle. The law organized various bureaucracies under the Central Military Commission and elevated the role of the PLA and the People's Armed Police in enforcing Chinese territorial claims. Further, the Land Border Law prohibited the construction of permanent facilities near the border without Chinese consent."[89] The language is aimed at India and suggests that additional defensive improvements along the LAC marks a trigger for the PLA to respond with the collective weight of its national apparatus. In other words, India building capacity to defend its sovereign territory crosses Xi's "bottom line."

An Uncalibrated System

Tagging Chinese actions with the gray-zone qualifier is frivolous if removed from the broader context. That is, if actions are viewed in temporal or spatial isolation. Only some of the actions presented in this case study stand-alone as gray-zone actions. Offensive cyber operations that target civilian infrastructure to degrade a military response or microwave emitters that deny adversaries key terrain are clear examples of gray-zone operations. They defy international norms and achieve objectives normally won through established warfare. Others, when viewed through a narrower lens, could be subjectively seen as normal statecraft. China leveraging debt positions to acquire port rights, for instance, could loosely be compared to U.S. basing acquisitions following World War II. It could also be argued that China's geopolitical encirclement of India only presents a security threat once the two cross the threshold of war. However, context matters. Chinese geopolitical, economic, information, cyber, and military actions should not be viewed in isolation. They must be viewed as a whole.

Carl von Clausewitz, in his opening chapter of *On War*, implored his audience to take the broader perspective on warfare: "We must begin by looking at the

Faustin-Archange Touadéra (*center*), president of the Central African Republic, arrives 28 August 2024 for the Summit of the Forum on China-Africa Cooperation in Beijing. (Photo by Chen Yehua, Xinhua)

nature of the whole; for here more than elsewhere the part and the whole must always be thought of together."[90] In the context of the Chinese understanding of warfare, the parts construct a whole anchored by the political objectives that often constitute Xi's "bottom line." Proliferating control across the string of pearls links to the seeding of malware in India's competing ports, offering further means to disrupt India's sea lines of communication. Retaining the threat over the vitally important pharmaceutical sector links to the invasive narrative of an Indian dependency on Chinese markets. Seeding doubt of India's response to border incursions within policymakers, influencers, and soldiers' links to the PLA buildup along the contested border and sending small units of unarmed PLA soldiers across that border links to the historically disputed territorial claims and the coercive "bottom line." All these actions form a purposeful whole designed, sequenced, and directed at the highest levels of the CCP. (Figure 5 depicts this system in isolation.)

However, the CCP system is still a component of the more complex and adaptive global system. The 2020 border clash and the Chinese gray-zone actions surrounding it altered that environment but not necessarily in ways anticipated by the CCP. Despite

their online information campaigns, a 2021 public opinion survey found that 77 percent of young Indians distrust China more than any leading country, expressing concerns about its military, economic reach, and interference in the politics of India's neighbors.[91] The same percentage saw the United States as the most trustworthy.[92] After the clash, the Modi government transitioned from seeking more ties with China to imposing Chinese-focused security directives and restricting Chinese activities within India. In the fallout from Galwan, Vijay Gokhale, India's former top diplomat, said, "The ambiguity that prevailed in India's decision-making and strategic circles as to whether China is a partner—or a rival has been replaced by strategic clarity. China's behavior is now perceived as adversarial, and few are willing to give it the benefit of the doubt."[93]

Despite the CCP's economic carrot and the PLA's multidomain stick, India further militarized its northern territory. By 2022, the Chinese-India LAC looked more like the India-Pakistan LAC.[94] Most significantly for the United States, India increased its commitment to the Quad. Since Galwan, the multilateral dialogue has yielded initiatives to increase COVID-19 vaccine access, increase cyber security, and combat illegal fishing.[95] The Indian army also expanded
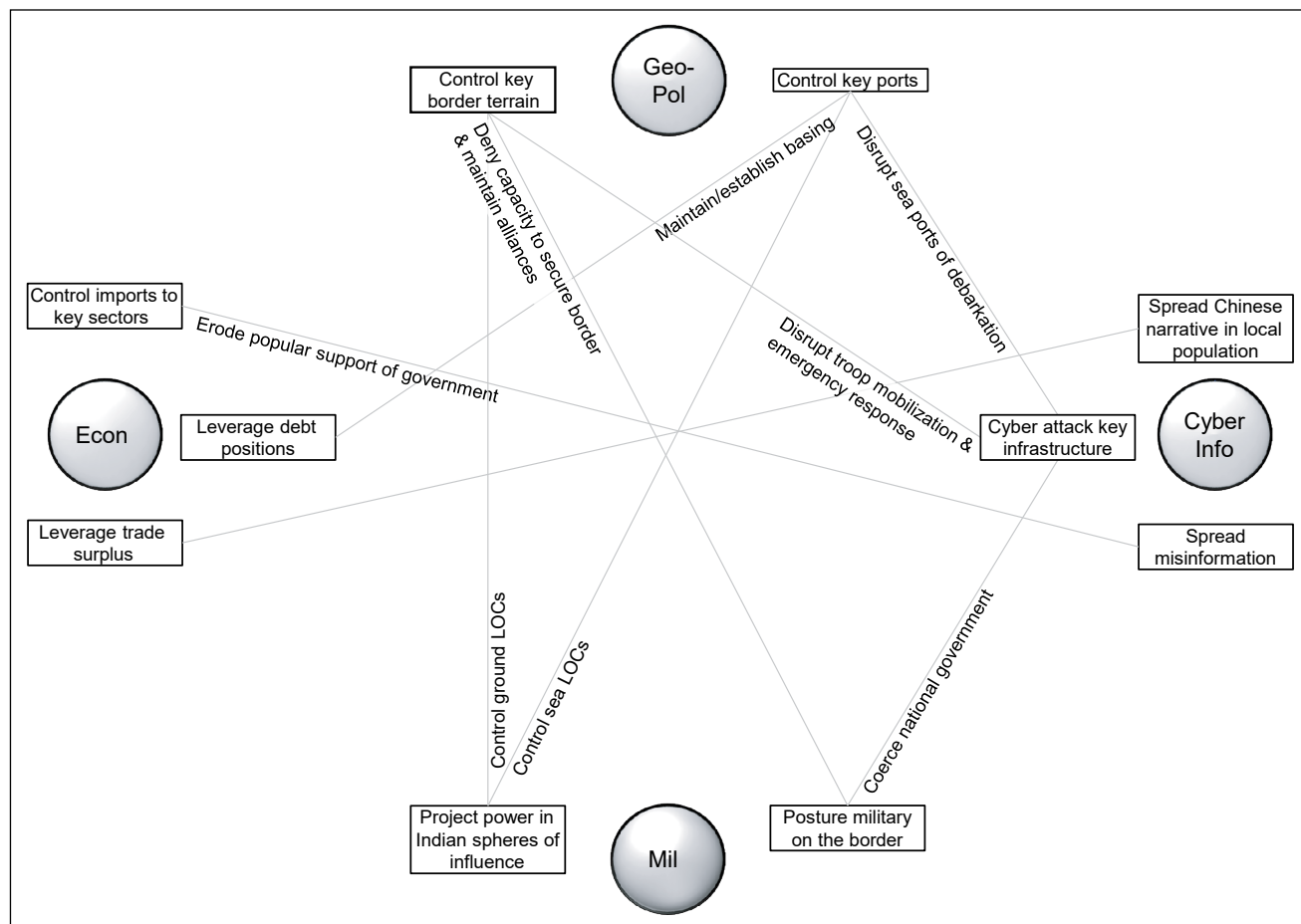
Figure 5. Mapping the Gray-Zone System

(Figure by author)

its annual training exercises with the U.S. joint force. In November 2022, U.S. troops conducted exercises alongside Indian troops in the Himalayas one hundred kilometers from the LAC.[96]

A Future System

Chinese actions in the gray zone, the Galwan clash, and the corollary system expose key considerations for the United States as it adjusts to the future environment. First, the lines of effort stratified from Chinese political objectives expand across time and space by their own logic. Gray-zone actions were likely seeded before the tenure of a combatant commander, ambassador, or senior executive and continue well after. They link to actions beyond their geographical area of responsibility, regionally focused bureaus, or functional areas. This was evident in the decade before Galwan, when China was shoring up control across the IOR

and in the Himalayas. Even though the clash may have shaken India, conditions were already manipulated in Sri Lanka, Pakistan, Djibouti, and Nepal.

Second, the Chinese gray-zone system is not perfectly calibrated to the complexity of the global system. Despite the assiduity and harmony of Chinese actions, the global environment is replete with chaos and emergence. Market dynamics, information trends, pandemics, and national passions cannot be perfectly anticipated. After Sri Lanka defaulted on its foreign debt and inflation rose to 60 percent in May 2022, protests erupted. President Gotabaya Rajapaksa fled the country, upending years of Chinese political and economic efforts.[97] Emergence disrupts the most well-laid plans. Even as the Chinese calculus extends decades and across every corner of the globe, shi is immeasurable and can refract actions across an endless array of potential outcomes.

Third, the Chinese are not monolithically tied to their own historic literature. One of the most well-known Chinese stratagems, which underpins their concepts of gray-zone operations, is "a victorious army only enters battle after having first won the victory, while the defeated army only seeks victory after having first entered the fray."[98] The clash at Galwan may have represented an army battling before winning. Emergence can strike when China's fondness for gray-zone actions yields to the hard-liners' desire to battle. In such a scenario, perspectives and resources from interagency and multinational partners are crucial to holistically analyzing the situation and forming an appropriate response. Just as too passive a response could undermine the confidence of partners, too strong of a response may unnerve them. Too passive may feed subsequent Chinese gray-zone actions. Too strong may embolden resolve.

The final lesson is that China's gray-zone system has vulnerabilities. Targeting the geopolitical, economic, cyber, information, or military nodes can undermine that system. An approach spanning horizontally across these dimensions and vertically at the international, bilateral, and grassroots levels can erode it. But to decouple these actions from their objectives, the approach must also be synchronized across time and space and nested in purpose. Just as gray-zone actions should not be viewed in isolation, their counters should not be planned in isolation. A whole-of-government construct must underpin a counter-gray-zone strategy in such a way that detailed actions, reactions, and counteractions utilize the resources of the U.S. joint force, interagency, partners, and allies. Even when the military does not lead such an approach, it must operate in concert with the other elements of national power to both maximize effectiveness and appropriately adjust to changing conditions.

For the United States to apply these lessons requires an adjustment to its own system. The United States, with its exquisite capabilities, ready force, expansive economy, and network of allies and partners, has the tools available to counter gray-zone operations. According to Hal Brands, however, "it is not simply a matter of resources. It is a matter of orienting ourselves organizationally and conceptually to the challenge."[99] This case, alongside Chinese actions globally, demonstrates the significance of the challenge. The 2022 U.S.

National Security Strategy states that in terms of competition with the PRC, "the next ten years will be the decisive decade. We stand now at the inflection point, where the choices we make and the priorities we pursue today will set us on a course that determines our competitive position long into the future."[100]

Those choices must be informed by a holistic understanding of the Chinese approach to war—from wholesale use of force to peacetime use of force. Their system thrives against disjointed allies, circumspect governments, isolated institutions, and uninformed populations. Before Galwan, India's reluctance to commit to regional partnerships, careful maintenance of Sino-trade ties, complex political discourse, and diverse demographics theoretically presented the Chinese an ideal operational environment for gray-zone operations. Galwan changed that environment. Indian passions were inflamed, and strategic vulnerabilities were identified and hardened. According to a former senior Indian security official, the border clashes marked a "very fundamental change" that drove revisions in India's "whole policy and discourse around China."[101] Given the scope and scale of China's system, the adjustment to the U.S. system should also be fundamental.

The United States is capable of fundamental change. In 1986, the United States passed the Goldwater-Nichols Act after Operation Eagle Claw in Iran and Operation Urgent Fury in Granada exposed the military's inability to collectively form a unified joint force.[102] The congressional act fundamentally reshaped the Department of Defense's (DOD) organizational structure and culture from the previous system established by the 1947 National Security Act. Before the Packard Commission exposed the depth of the problem, many in the services were calling for change.[103] However, history shows that militaries, bureaucracies, and governments often possess organizational inertia that stifles change. Even when the environment demands adaptation, social impetuses present barriers.[104] "Orienting organizationally and conceptually" must be a collective process among the DOD and every other component of the U.S. government that holds a tool or resource for countering China's gray-zone strategy.

This collective process could start with the gaps presented by the United States' own geopolitical construct. The U.S. Unified Campaign Plan drew the U.S. Indo-Pacific Command's area of responsibility to

include thirty-six countries, including the most populous nation in the world (China), the largest democracy (India), and a tenth of the fourteenth smallest nations in the world.[105] Meanwhile the State Department draws its regional bureaus to oversee embassies and consulates and coordinate regional issues. These include the Bureaus of Near Eastern Affairs, African Affairs, and South and Central Asian Affairs.[106] This means in the IOR there are three combatant commands and four regional bureaus. Given the first lesson from Galwan, this geographic misalignment between the State Department and DOD presents seams for China's global gray-zone system to exploit.

It also prevents the United States from capitalizing on the second lesson. While China may be constrained from a rigorous system-of-systems approach, the United States suffers a systems-in-systems problem. In the late 1980s, John Boyd highlighted that horizontal command channels, present multiple centers of gravity.[107] Targeting these horizontal command channels can lead to "non-cooperative centers of gravity," causing "strategic paralysis."[108] However, "non-cooperative centers of gravity" can develop organically. A horizontal system that delineates by government function and geographical alignment becomes fraught with constraints. Competition for resources, institutional heuristics, organization specific language, and fragmented discourse arise naturally. These bureaucratic barriers, wedged into a system that strives for whole-of-government in an environment that demands unity of action, fractures the strategic approach. The third lesson arises from humans breaking from the confines of an authority. Inversely, humans can work against each other in a disjunctive system. In the gray zone, this noncooperation presents strategic targets.

Fundamental change is required to apply the final lesson and forge an adaptable whole-of-government approach to exploit the vulnerabilities of the Chinese gray-zone system. Many have offered solutions. These range from concepts of regionally based joint interagency commands to dissolving geographical combatant commands and reassigning military engagement missions to interagency leads or the joint staff.[109] Aligning to the threat offers another model. This would involve the iterative inputs from strategic documents to regularly guide the ratio of diplomatic, information, military, economic, financial, intelligence, and law enforcement capabilities against the threat. In China's case, it would allow the United States to regularly calibrate its system against China's gray-zone system. Aligning against purpose, rather than geography and function, would also address the institutional stove-piping that presents "non-cooperative centers of gravity."[110] Enhancing education, either through a model such as the professional military education or utilizing private institutions, would further develop cultural connective tissue amongst departments and agencies.

Like the Packard Commission and Goldwater-Nichols Act, a collective analysis and subsequent synthesis of the current system must be driven from the highest levels of the U.S. government. This process requires academic, social, and bureaucratic drivers—processes which are themselves gray-zone targets. While a bloody clash on some disputed frontier may spur collective action in the United States, the Chinese have already learned from Galwan. Time is of the essence. ∎

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U.S. Army Special Forces soldiers assigned to 20th Special Forces Group (Airborne) and members of the Lithuanian National Defence Volunteer Forces (KASP) conduct mission planning 16 September 2018 during exercise Saber Junction 2018 at the Joint Multinational Readiness Center in Hohenfels, Germany. Special operations forces worked alongside the KASP during Saber Junction 18 to conduct irregular warfare in enemy occupied territory in support of the U.S. Army's 173rd Airborne Brigade as they executed land operations in a multinational joint environment. (Photo by 1st Lt. Benjamin Haulenbeek, U.S. Army)

Redefining Irregular Warfare

Partnerships and Political Action

Henry C. Pulaski

Since the conclusion of the Second World War, the U.S. military has been responsible for defending against national security threats that fall into three general categories: nuclear conflict, large-scale conventional conflict, and asymmetric challenges. The first two categories are existential challenges. The United States is faced with the rise of adversarial nation-states whose resources enable the growth and maintenance of militaries capable of challenging the United States in a global head-to-head contest. Our national strategy to avoid such a contest has been deterrence: ensuring such overwhelming conventional and strategic military superiority that the conflict appears futile to the potential challenger. The pursuit of deterrence has placed a national defense resourcing priority on the development and maintenance of conventional and strategic capabilities. The investment has delivered, and the U.S. military is unquestionably the world's most advanced fighting force with unrivaled strategic depth and force projection capability. The U.S. military's strength is the bedrock of America's national defense and underpins multiple defense alliances that protect U.S. interests, influence, and allies globally. For the last seventy years, the U.S. military's conventional and strategic strength has successfully deterred existential threats. However, deterrence has not dissuaded our adversaries from all attempts to erode U.S. influence and the U.S.-underpinned world order. Instead, it has driven our adversaries to develop successful asymmetric capabilities and initiatives that erode U.S. influence while simultaneously remaining below the threshold that would warrant U.S. conventional retaliation.

There is a common thread in the successful asymmetric challenges to U.S. interests: our adversaries have repeatedly dominated the ideological penetration of target populations. Through the proliferation of ideology, our adversaries co-opt target populations, winning the contest of influence. Without an analogous tool to effectively and reliably contest our adversary's expansion of influence and encroachments on U.S. interests, the U.S. military has resorted to deploying conventional forces, lowering their readiness for large-scale combat. Interventions in these scenarios have proven ineffective at securing long-term gains in U.S. influence. Instead, these interventions frequently conclude with the adversary's influence strengthened. To arrest what has now become a cycle of strategic

defeat in asymmetric contests, the U.S. military is faced with a clear problem. How does the United States meet asymmetric challenges without decreasing readiness to address existential threats of nuclear or large-scale conventional conflict? On the one hand, the U.S. military must continue to maintain conventional and strategic overmatch. On the other hand, the U.S. military must develop the ability to compete and win on the same plane as its adversaries—in the contest for influence over target population groups.

Within current U.S. military doctrine, an adversary's asymmetric challenge would be dealt with under one of two activities, unconventional warfare (UW) or foreign internal defense (FID). In unconventional warfare, the United States aids a resistance movement in coercing or overthrowing a government; in foreign internal defense, the United States aids a host-nation government as they counter an insurgency or resistance force.[1] While both address the military component of the challenge, neither incorporates deliberate political action (ideology, political system, or governance structure), even when a successful force application is anticipated to result in a political vacuum. This article argues that fortifying U.S. influence against rising global threats and providing U.S. policymakers with low-cost options to expand U.S. influence requires the cultivation of a new concept within the U.S. special operation forces (USSOF) spectrum of activities, one that incorporates political action as a deliberate component when the circumstances dictate. This concept is proposed under a revised and focused definition of the term "irregular warfare."

Irregular warfare (IW) is defined here as the combination of nontraditional force and political action in pursuit of an influence-based objective. Following this definition, IW becomes another special operations subtask alongside the likes of UW, FID, counterinsurgency, and counterterrorism. In this construct, USSOF elements executing IW are responsible for the development and integration of political action alongside, and as a priority above, the cultivation of nontraditional force (guerrilla, paramilitary, nonaligned partners). The mechanics of this IW concept are rooted in the theory of "Revolutionary Warfare"

Henry C. Pulaski is a pseudonym used to protect the identity of the author, a leader in special operations.

(RW) initially popularized by journalist, academic, and war correspondent Bernard Fall in the mid-to-late 1950s.[2] Fall developed this theory through his close observation and study of the Vietminh during the French Indochina War and the U.S. Vietnam War. His RW theory illuminated the criticality of political action in the Vietminh's strategy against the French and subsequent U.S. forces. Fall intended that his work on RW would help allied leaders understand the power of RW, as it was being applied by our Cold War adversaries. He hoped that RW would act as an instructional primer for allied special operations forces who could use the understanding to cultivate their own supported RW campaigns. Perhaps it was Fall's early death in Vietnam alongside U.S. troops, or perhaps it was that generation of military leader's inclination toward conventional force application, but Fall's ideas about RW were not broadly integrated into military doctrine. Instead, it was eschewed for a hypermilitarized version of counterinsurgency and unconventional warfare that focused principally on the elimination of the adversary's military force. Regardless of its popularity within the U.S. military, Fall's theory of RW continued to accurately characterize adversary-backed movements throughout the developing world during the Cold War.

Over the last twenty years however, the mechanics of Fall's theory, which highlights the power and importance of the combination of nontraditional force and political action, continued to explain the success of a number of movements adversarial to the United States. The Islamic State employed a combination of Islamic terrorism (force) and Salafi-jihadism (political action) in the pursuit of Islamic caliphates (influence). The Iranian regime employed the powerful combination of the Quds Force (force) and Islamic radicalism (political action) to cultivate a series of actors; Hezbollah, Hamas, and the Houthi Movement Ansar Allah (influence). Moreover, the mechanics were not limited in application to movements embracing Islamic radicalism; the Russian Federation employed the combination of state-sponsored private military companies (force) and clandestine coup d'etats and mutinies (political action) in the pursuit of autocratic alliances (influence). While Fall would have certainly recognized these activities for what they were, I doubt even he would feel the term "revolutionary warfare" still applies. In its place, I would like to think he would approve of the use of "irregular warfare," to more comprehensively address the variance of political ideologies employed.

This paper will take this concept of IW through various forms of military application. The term "IW strategy" is used to capture how the United States could employ IW at the national level to seek a specific influence-based outcome through the application of a nontraditional force combined with a political action. The term is "IW campaign" is used to discuss the specific details of the execution of an in IW strategy from the initial development of potential force and political-action options through to a stabilized influence outcome. And, the term "IW operation" is used to describes the military framework necessary to assemble authorizations and the appropriate capabilities to execute an IW campaign. Moving forward, this revision of IW will serve as the foundational concept from which the USSOF community can develop offensive IW capabilities, pursue the development and acquisition of unique IW authorities, and justify structural evolution of USSOF formations for IW optimization.

Strategic Objective Alignment

The adversary's perspective. The last two decades have provided U.S. adversaries the opportunity to observe firsthand the U.S. military's expeditionary force projection capability. In response, our adversaries have shown us how to combat a dominant conventional force with overwhelming technological and firepower superiority by displacing the conventional forces' influence over a target population. Understanding how the adversary accomplishes this feat provides insight into the mechanics of an effective IW campaign, which can help inform USSOF IW operational design.

To establish influence over a target population and undermine U.S. military efforts, our adversaries cultivate political action within the target population that encourage beliefs inherently antithetical and incompatible to U.S. interests. Second, the adversaries raise, train, and employ an indigenous cadre to ensure ideological proliferation within the target population. This two-part strategy has seen successful employment by U.S. adversaries in a variety of global environments and circumstances, ranging from the Third International (a.k.a. Communist International) operating in the developing world to international and transregional Salafi-jihadist movements.[3] Each actor that employed a

strategy with these components well has found success expanding their influence over time, usually at a cost to our own. We have found over the last several decades that our adversaries' influence-focused strategies are difficult to contest, especially with the application of conventional force.

In recent contests, the United States has attempted to use conventional forces to counter our adversaries' IW campaigns. The adversary harbors no hope of

strategy stands as both evidence and a model for USSOF IW campaigns that can combat this adversarial approach.

Envisioning a different outcome. One of the U.S. military's greatest strengths is a cultural focus on candor and openness about lessons learned and mistakes. We learn from our failures and the adversary's successes in combat, and we use those lessons to improve. However, our adjustments and realignments

> "The central narrative of the propaganda campaign is as dangerous as it is simple: 'Regardless of what happens on the battlefield from day to day, eventually the Americans will leave, and we will remain.'"

defeating U.S. conventional forces in direct ground combat. However, the presence of conventional forces provides the adversary with two opportunities. First, it allows the adversary to reinforce its narrative of permanency; second, it creates the opportunity for the adversary to begin inflicting casualties on U.S. uniformed troops, broadly understood by our adversaries as the fastest way to erode U.S. domestic support. When attacking U.S. conventional forces, the adversary concurrently conducts a propaganda campaign intended to fortify cooperation within the indigenous population. The central narrative of the propaganda campaign is as dangerous as it is simple: "Regardless of what happens on the battlefield from day to day, eventually the Americans will leave, and we will remain." This narrative is powerful because it is grounded in demonstrated truth. The world is aware of historical and recent examples in Vietnam, Iraq, and Afghanistan. When conventional forces are deployed into ambiguous situations to combat asymmetric threats and mounting casualties erode domestic support, this narrative becomes a self-fulfilling prophecy. To see this narrative through, all the adversary needs to do is wait. Balancing their lives between U.S. conventional forces who isolate themselves from them and the adversary that lives among them, the civilian population hedges in favor of the adversary.

But the U.S. military does not have to endure this cycle forever. The adversary's application of this

are designed too often based on our own operational biases and do not consider the adversary's definition of defeat. From the adversary's perspective, the supreme objective is to secure favorable influence over the target population. The adversary needs the target population to provide insulation from conventional attack and to act as an ideological estuary. For an adversary in conflict with the U.S. military, influence over the target population is existential. For this reason, counterinsurgency theorists correctly identified influence over the population as the center of gravity.[4] Inversely, the U.S. military has chosen too often to define operational success as control of geographic terrain. The presence patrols in Iraq and Afghanistan in the 2004–2007 time frame stand as an excellent example. This misalignment in the understanding of the importance of the population from an influence perspective creates conditions in which the U.S. military successfully secures terrain occupied by a population that the adversary has successfully brought under their influence. In this situation, the U.S. military and the adversary both believe they are achieving their strategic objectives in the same time and physical space. However, there is no argument that the adversaries influence within the population is of greater strategic value in the modern context. When the U.S. military and the adversary operate on two separate plains of understanding, we are, in effect, failing to close with the enemy. To enter a decisive engagement

with the adversary, we must ensure that the U.S. military's objectives and the adversary's objectives are inversely aligned.

If we understand the adversary's operational objective is to achieve his political action plan and establish resilient influence over the population, then we can confidently state that the following situational characteristics would represent the adversary's failure:

- popular rejection of the adversary's political action (alienation/loss of freedom of movement/loss of access),
- the displacement of the adversary's influence with an opposing political action compatible with that of the United States,
- a trend within the population toward greater Western alignment, and
- a recognition that these changes in the population are both organically driven and permanent.

These conditions would not only make it impossible for actors and agents of the adversary to move freely within the population, but it would also place the population on the path to active rejection of the adversary's ideology and active assistance to the friendly forces. In this situation, the environment necessary for the adversary to fortify and expand influence would cease to exist. In other words, it would result in the adversary's defeat.

With this understanding of the adversary's failure as our guide, we can craft an IW strategy that delivers an end state we can define as victory. Like our adversaries, the objectives of our IW strategy must be population and influence focused. We must establish effective indigenous force partnerships for access to the operational area and indigenous population, support the development of partner influence through political action (preferably one that is also incompatible to the adversary), and synchronize the application of both force and political action in the pursuit of stable influence over the population at a cost to that of the adversary.

Irregular Warfare Campaign Design

In the last section, we dissected an adversarial application of irregular warfare. The intent of this examination was to highlight core aspects of the strategy that can then be either co-opted by USSOF in their own IW strategy and employed back at the adversary or intentionally mitigated through disciplined execution. This section takes the examination one step further by using the core aspects of the adversary's irregular warfare strategy to inform the development of a template for USSOF irregular warfare strategy through the various phases of execution. Based on key lessons learned from the adversary's application of IW, this USSOF IW strategy is framed by three central constraints:

- It must focus, throughout the phases of the operation, on the desired end state of defended or expanded U.S. influence, which frequently takes the shape of aligned partner influence.
- It recognizes that U.S. combat troop presence is a temporary condition, and that the achieving long-term strategic objectives requires a legitimate indigenous partner.
- It will require USSOF to assist in the development and execution of political action in any instance which partner force application creates, or is intended to create, a political vacuum.

Establishing a partnership and setting operational conditions. Despite the USSOF community's emphasis on indigenous partner operations, there is a high degree of ambiguity within current USSOF doctrine about how indigenous relationships are initiated that threatens effective relationship development. U.S. Special Forces UW doctrine explicitly acknowledges that other government agencies or higher echelons would likely be responsible for the identification of, initial contact with, and policy deconfliction for potential indigenous partners of resistance forces prior to the involvement of Special Forces operational elements.[5] While there are certainly situations in which this may be the case, decoupling the operational element from the relationship establishment process or delegating that process to other organizations sows potential conflict and confusion into the relationship from the onset. While other government agencies are obviously competent in the cultivation and development of relationships for their agency's own purposes, if a military or paramilitary application of the relationship is the long-term goal, then the USSOF executing elements should strive to be involved from the earliest possible point and at the highest possible echelons. In contrast to UW doctrine, the IW methodology dictates that in an ideal situation, the development and management of the relationship with the indigenous partner is the responsibility of the executing military entity continuously from relationship inception through stabilization.

This ensures clarity and continuity in the conditions and expectations framed in the establishment of the relationship for both parties. The initial establishment phase of any relationship is the most sensitive and critical phase. As the operation grows in scale and consequence, the conditions and expectations agreed upon at establishment will be placed under immense strain and pressure. If the managing element was not party to the agreements established in the initiation of the relation-

of military and governance affairs does not stand as a wise, time-tested precedent.

World War II is frequently used as an example of the U.S. military's ability to unilaterally conclude a conflict and to usher in an era of stability as it did in both Germany and Japan. This historical recollection often omits that the U.S. military had its own Military Government and Civil Affairs Branch specifically designed and developed during ongoing combat oper-

> " Detaching the U.S. military's activities from a desired political outcome and the necessary governance development that must occur concurrent to combat operations just ensures that the U.S. military will fail to achieve its strategic objectives. "

ship, the relationship will bend to meet the partner's circumstantial needs, potentially to the detriment of the campaign.

Political action. While the U.S. military has a long and mixed history of developing indigenous partnerships, for the last seventy years, the U.S. military has avoided responsibility for the development and implementation of political action. This avoidance is based on the belief that military activities are apolitical and, therefore, must be tied strictly to definable and quantifiable tactical and operational objectives. But this traditionally was not the case. The U.S. military occupied much of the North American continent and later conducted expert occupations of Germany and Japan precisely because they recognized the importance of attaining governance objectives. This in no way conflicts with neutrality in internal U.S. partisan politics. Instead, detaching the U.S. military's activities from a desired political outcome and the necessary governance development that must occur concurrent to combat operations just ensures that the U.S. military will fail to achieve its strategic objectives. If the U.S. military truly assumes responsibility for reaching its strategic objectives, it must recognize the practical and critical role that that political and governance functions play. Any activity inherently required to achieve a strategic military objective should be considered within the scope of traditional military activities. The divorce

ations with the explicit intent of establishing effective governance as a vehicle for stability in the wake of operations.[6] While it may not be necessary to reestablish a governance branch within the U.S. Army, the importance of ensuring the effective concurrent development of an indigenous government alongside the development of an indigenous force as collective components of the indigenous movement cannot be overstated.

Political action is the vehicle that ultimately delivers stability and influence. The path to successful indigenous government requires cultivation through every phase in IW. An aligned governance component is the tool that ties the legitimacy created during combat operations to the stability desired at their conclusion. USSOF should ensure the delivery of effective indigenous government exists as a component of the indigenous partner's strategy from the onset of the relationship. Effective IW execution requires USSOF to provide appropriate organic experience and expertise to shape and influence the agenda and policy of the indigenous government through its development and implementation. Just as force application and political action are most powerful in concert, so must the USSOF military advisors and political-action advisors work in concert to ensure the appropriate resourcing and support to political action development as the priority throughout the IW campaign. This is one of several aspects of the IW methodology that has been

absent from USSOF doctrine and modern operational history, at least in the last several decades. The lack of U.S. involvement in the development of political action can lead to counterproductive situations in which the United States finds itself with an operationally successful partner who implements an incompatible governance or political position. If the end state is incompatible and U.S. influence has not been expanded or fortified, the effort is for naught.

When political action is not a priority, the probability of policy incompatibility between the United States and indigenous governments is high, leading to significant risks to indigenous government legitimacy. As a matter of necessity, the indigenous government will develop policies and laws continuously. Without intimate and constant involvement in the development process of these policies, it is highly likely that the indigenous government will implement policies that conflict with U.S. national interests or values to a degree that the U.S. government cannot endure. In these instances of conflict, USSOF influence can be used to alter, modify, or retract policies in question. However, post-decisional retractions are fraught with risk. They fuel the narrative of incompetency at best or foreign control at worst, serving to undermine the legitimacy of the indigenous government in the eyes of the population. The adversary will attempt to convince the population that the indigenous government is nothing more than a puppet regime of the U.S. government. The most effective way to buttress against this narrative is to ensure synchronization during the indigenous government's policy development process—to be so intimately involved in the development of laws, policies, and declarations that their content can be influenced before they're ever made public. This upstream involvement requires a high concentration of talent and resources, but it is the most effective way to ensure compatibility without the risk of eroding the legitimacy of the indigenous government.

Indigenous governance and population integration. Effective political action helps prevent policy collisions as the indigenous government ushers in stability at the conclusion of combat operations. However, political action during the execution of combat operations is of equal or greater importance. From the initiation of combat operations, the local government operates in concert with the indigenous force to assume an ever-increasing role representing the broader ideological movement in the population. This is especially true for population groups that fall under the control of the indigenous movement through the progress of combat operations. While the indigenous force will earn legitimacy in the eyes of the population during combat operations, the population instinctively recognizes that a military force cannot govern and hedges against the indigenous partner unless a more permanent structure falls into place following the advance of the indigenous force. IW strategy requires USSOF to work to set conditions for compatible indigenous governance through political action prior to the commencement of combat operations.

The learned experience of the last two decades tells us that the endless pursuit of tactical and operational objectives, the sterile and dogmatic pursuit of the militarized arm of the adversary, does not bring about a favorable strategic outcome. Effective targeted military pressure serves only to diffuse the adversary back into the population. Only the combination of a purposefully cultivated indigenous force and government can defeat the militant manifestation of the adversary and truly turn the population caustic against the adversary's presence. It is true the indigenous-U.S. military force will defeat the adversary in the terms we traditionally associate with counterinsurgency, FID, and UW, but it will be the indigenous government that actually ushers in the independent stability that the U.S. military has never been able to effectively realize. These two components are interdependent and indispensable and must be developed concurrently from a singular unified command-and-control construct. This approach is a significant departure from doctrinal and cultural comfort zones of the U.S. military, but any reasonable definition of strategic success depends on it. They must both be at the forefront of the USSOF IW strategy during the buildup to the displacement of the adversary. Commencing displacement without the framework of both an indigenous force and government reduces the chances of success significantly.

Active displacement. Once the relationship is established, the partner force is developed and resourced, an indigenous government is positioned to assume control, and the indigenous movement is ready to confront the influence of the adversary. Optimally, this confrontation is militaristic in nature. In every

A U.S. Army Special Forces soldier demonstrates to U.S. and Panamanian security forces how to secure a casualty 1 February 2018 prior to an air evacuation during a training exchange in Colón, Panama. U.S. irregular warfare campaigns must ensure indigenous governments have the resources to reinforce their security services to prevent the resurgence of the adversary's influence, provide external national defense, and address crisis response in support of the civil government. (Photo by Staff Sgt. Osvaldo Equite, U.S. Army)

historical instance noted, the adversary underpinned its ideological expansion with the threat or use of violence. Legitimacy is not always earned righteously. If an adversary can employ violence as a tool to underpin ideological expansion and is able to do so without consequence, the population will inevitably view the adversary as legitimate. We must not fail to recognize this challenge for the opportunity it is. Challenging the adversary's monopoly on violence is the most efficient way to displace influence. If a demonstration of military capability is required to establish the indigenous force's legitimacy, what better way to put it on display than by applying it against the adversary? An established and overt adversary military or paramilitary force provides the optimal scenario to supplant adversarial influence while simultaneously establishing the indigenous movement's legitimacy. An indigenous force that defeats an adversary's military capability in open combat has provided the population with visual

evidence that is impossible to ignore. However, we must also recognize that this phase of an IW campaign presents the greatest risk of USSOF inadvertently undermining the legitimacy of its own indigenous partner.

When advising the indigenous force during combat operations, USSOF personnel are naturally inclined to assume the role they were selected and trained to perform. USSOF elements at the operational level will face immense internal pressure to assume the command of the indigenous force, lead in combat, and close with the enemy. To meet the intent of the IW strategy, USSOF ground force commanders will be required exercise extreme discipline in the application of unilateral U.S. capability. Leaders must take into consideration the impact of USSOF unilateral action on the indigenous force's legitimacy, which directly impacts strategic success. Any USSOF unilateral action or perceived direct command of indigenous forces reinforces the adversary's narrative that the indigenous

force is not capable of winning without U.S. support. If applied, U.S. unilateral force should focus on creating optimal conditions for indigenous partner operational momentum and be conducted in such a way to reduce indigenous population awareness. This change in force application guidance places indigenous movement legitimacy at the center of the decision-making process. In some instances, it may reduce or limit the application of U.S. unilateral capability to prevent adverse cost to indigenous movement legitimacy.

In addition to the cultivation of legitimacy, combat also provides an excellent opportunity for command-and-control crystallization and coalition development within the indigenous movement and among the indigenous movement and aligned opposition groups. The challenges of combat create the conditions for the creation of resilient teams and alliances that allow distinctly different groups to set aside petty differences and unite for collective success. The United States is no exception. The alliances formed during the two European-based world wars remain a heavy influence on our foreign policy today. As the indigenous force accrues successes on the battlefield, it will concurrently recruit personnel and groups to its ranks. USSOF should reinforce a chain of command with the indigenous force as the preferred central authority in the indigenous coalition. The provision of materiel to the developing indigenous coalition through the primary indigenous partner will also act to strengthen the desired command relationships and architecture, with the added benefit of creating leverage with the primary indigenous partner if required. Indigenous force central authority of the expanding coalition will ensure USSOF presence can remain minimal, hence protecting the broader indigenous movement's legitimacy. There is a natural inclination in the U.S. military, especially prominent in USSOF culture and practices, to build direct relationships at the lowest possible echelon of the indigenous force structure. If the intent is to protect and fortify the indigenous force's legitimacy while simultaneously attempting to centralize control of the developing coalition, this common USSOF practice is counterproductive and should be avoided at all costs.

USSOF responsibility for the concurrent and synchronized development of political action along with an indigenous fighting force under a single unified command is one of the central tenets of this strategy and one of the strongest departures from U.S. military campaign strategy that emphasizes these activities sequentially, not concurrently. For decades, the U.S. military has struggled to eliminate the adversary's access to and freedom within the indigenous population. This methodology addresses that struggle through political action. Political action will often take the form of a concurrently developed indigenous government that fills any political vacuum created by the conduct of the IW campaign. The role of political action, and of the indigenous government, is to force a confrontation of influence within the target population. This function of the sponsored indigenous government is one of the key features missing from our unconventional warfare doctrine. In this IW strategy, political action supported indigenous government assumes the responsibility for integrating secured populations, fosters a collective sense of ownership through population involvement, diversifies the internal security services, and cultivates a sense of agency within the population that assists inculcation of the indigenous movement's governing ideology. In the areas under indigenous movement control, the indigenous government begins the steady and deliberate transition to stability, deconstructing the stasis of military control and building connective tissue with the population, driving the postcombat transition to full indigenous government control.

The transition to stability. The elimination of adversary main combat units, physical occupation of terrain, and the complete transition of target population control and management to the indigenous government security services represents the commencement of the stability phase. This is where the hard work protecting the legitimacy of the indigenous movement during the combat phase of operations pays off. While the indigenous force will continue to exist, it will begin the demobilization process and transition to a standing force. The retention of a smaller standing force ensures the indigenous government has the resources to reinforce its security services to prevent the resurgence of the adversary's influence, provide external national defense, and address crisis response in support of the civil government.

Where the primary activity of the military in this phase is to step back, the primary responsibility of the civil government is to step forward. In our current doctrine, there is a great deal of ambiguity about who

specifically in the U.S. government should assume lead in advising the indigenous government through this transition phase. Any gap between combat operations and the commencement of effective indigenous government will irrevocably erode the perception of legitimacy and competency of government in the eyes of the population. People are not patient. The transition from combat operations under the command of the indigenous force and steady-state stability under the indigenous government should be considered a decisive point for achieving the desired strategic end state. The execution of the strategy up to this decisive point has been responsibility of USSOF. Certainly, there will be government-focused advisors (both U.S. military and other government agencies) involved in advising the indigenous government throughout the various phases of the campaign. Despite the primary focus on transition from combat operations to stability and the success of the indigenous government during this phase, USSOF should retain overall command to ensure the steady flow of resources, provision of support through the transition, and continuity of focus on the desired end state of the IW strategy. This period is the indigenous government's "zero day." Leaders should recognize that they will only have one chance to deliver on the expectations of the population. Any critical failures during this period of transition risk corrupting the foundations of the indigenous government, which stability is ultimately built on.

Failure to ensure the nascent indigenous government survives and thrives through the transition places the entire enterprise at risk. The deliberate focus on a governance component of the indigenous movement from the onset of the campaign is specifically intended to set optimal conditions for this transition period and beyond. The indigenous government's primary strategic purpose (from a U.S. perspective) is to stabilize the population, defend against a resurgence of the adversary, and fortify U.S. aligned influence gains. If the population loses confidence during the transition, it returns the momentum to the adversary and sets the partner on a negative trajectory extremely difficult to arrest. If popular dissatisfaction results in the transition from the sponsored indigenous political and governance partner, the adversary will work to cultivate and co-opt the entity that arises to fill the void. This failure will also serve as a practical warning to other potential partners in the target area and region, as we are now seeing.[7] The common perception may become, "While the U.S. may be there to provide the support necessary to meet mutual tactical and operational objectives, it will hang us out to dry when it comes time to solidify our political position." If this narrative prevails, it can easily undermine the U.S. military's options for IW activities in an entire region for an entire generation.

The purpose of this section was to emphasize the need for continuity in the leadership of the U.S. executing element throughout all phases of the campaign until the strategic objectives are met and to ensure that responsibility for campaign leadership remained firmly with USSOF in an IW campaign. While the necessity for continuity is clearly justified in doctrine like Joint Publication 3-0, *Joint Campaigns and Operations*, it routinely breaks down at this transition point in practice.[8] This may be in part due to the understanding by U.S. military leaders that the success of the indigenous government is ultimately the responsibility of governance and diplomatic experts from other departments and agencies in government. This strategy diverges from the past on this specific point. The objective of this IW strategy is the specific displacement of adversarial influence through political actions. The indigenous force is the catalyst for this process, but the strategic objective of influence is not achieved until the indigenous government has assumed control and is fully functional and successful. The indigenous government is the vehicle that delivers stability. It is that stability over the long term that fortifies U.S. influence expansion at the cost of the adversary.

To the victors go the spoils: post-operation partnerships. The fortification of influence is the not the only benefit of the successfully conclusion of an IW campaign. Influence within the indigenous force and government will inevitably remain strong, especially for those forces and personalities from USSOF instrumental in facilitating the successful outcome. Much like our adversaries during the Cold War benefited strategically for decades from the relationships established during their sponsorship of communist and nationalist movements in the developing world, IW strategy sees the same opportunities for the U.S. government in today's environment. It is not hard to imagine the development of a constellation of stable partners that have unique regional influence, expertise, and knowledge created

through the execution and success of IW and, almost more importantly, experience in the conduct and execution of effective IW methodology. These partners will continue to defend mutual interests, illuminate opportunities to expand influence of mutual benefit, and may even be well positioned to contribute to new efforts themselves. While influence is the objective of

The size of the executing element has huge impacts on both the development of the relationship with the indigenous partners as well as the perceived legitimacy of the indigenous partner in the eyes of the population. Through either observed interaction or the natural alignment of policies, the adversary will accuse the indigenous partner of being a puppet of the West or the

> " The adversary will accuse the indigenous partner of being a puppet of the West or the United States in the normal course of the propaganda component of the conflict. "

this strategy, the relationships cultivated through the pursuit of influence will inevitably yield strategic utility and benefit in and of themselves.

The Way Ahead

Truly embracing IW strategy and its methodology as a core USSOF function will require more than simply agreeing to the logic of its application. There are several concepts and principles introduced here that are difficult, if not impossible, for the vast majority of the USSOF community to execute due to structural and authority limitations. This section explores some of the possible structural and authority evolutions that would empower USSOF in the effective and optimal execution of IW.

Form follows function. To optimize for the successful execution of the IW methodology, USSOF would need to alter the composition and disposition of the operational units tasked with its undertaking. Specifically, operational elements would adopt a formation size that inherently minimizes signature and supports the perceived legitimacy and independence of partners, increases the mean level of seniority and experience to a level sufficient to effectively manage a comprehensive IW campaign, and ensures the integration of specialists with expertise not only in indigenous force development, but also political action. Absent these adaptations, USSOF elements tasked with the execution will struggle to manage the IW efforts and to see them through to the desired strategic end state.

United States in the normal course of the propaganda component of the conflict. This accusation will live, ever present, in the minds of the indigenous population. It is the executing element's responsibility to ensure the IW campaign in execution is not playing into the adversary's narrative. Executing-element signature reduction is one of the key tools to address this challenge, and a key component to signature reduction is committing the fewest possible personnel required to meet the operational requirement. A reduced USSOF element size also has the added benefit of creating a situational of mutual dependency between the USSOF element and the indigenous partner. A USSOF element at an optimal size to address primary mission requirements, the development of the indigenous partner, and the protection of the partner's legitimacy will likely be too small to organically address all its support and security needs. Inevitably, this should lead to a situation where the USSOF elements support and security needs are addressed by the indigenous partner. The natural interdependence this encourages supports the cultivation of trust and the strengthening of the relationship. However, this course of action is not without obvious physical and operational risk. USSOF will require competent, empowered operational personnel, trusted to assess the risk effectively and endowed with the discretion to adjust the operation accordingly.

Designing an operational-element structure optimally suited for the execution of IW is not limited solely to considerations over size. The breadth of the

operational element's management and development portfolio, including both indigenous force and government, requires a very high mean level of competency, viewed as a factor of experience and training, within the USSOF executing element. This required mean level of competency is not present in the current USSOF team-level maneuver unit due to the high percentage of relatively junior soldiers. The effective execution of IW will also require an alteration to the USSOF professional development and assignment policies, increasing the percentage of senior, experienced soldiers. This allows the executing USSOF elements to manage the complexities of concurrent indigenous force and indigenous governance development and synchronization. Even if unique expertise not organic to USSOF is brought in specifically to shape and influence political action development, it will remain the responsibility of the USSOF leadership to ensure comprehensive IW strategy consistency through the execution of the campaign, especially during the combat phase.

Lastly, even with a small cadre of experienced and highly trained personnel, the USSOF executing element will lack the organic expertise to influence and shape the development of the indigenous governance structure in a way that ensures long-term compatibility with U.S. policy. There are options for tapping into this experience in both the U.S. military and in other government departments. However, to ensure maximum synchronization, U.S. military advisors with the competency to undertake this role would be preferable. These advisors would be fully integrated into the USSOF element, regardless of their home-station organizational affiliation, and would be under the command of the USSOF element responsible ultimately for the execution of the IW campaign.

Optimization for IW will inevitably require some degree of evolution and adaptation from the USSOF community. While it may be possible for USSOF to assemble a purpose-built element specifically to service an IW requirement, it would be a missed opportunity for organizational modernization. The IW methodology has broad application. IW represents a far more applicable and efficient core employment model for USSOF in the defense of U.S. interests than retaining USSOF maneuver-unit formation construct optimized for USSOF support to conventional forces in a large-scale conventional war against any of our primary adversary-state actors.

Supporting authorizations. Even if USSOF pursues an aggressive modernization and optimization campaign designed to adapt its formation for optimal execution of IW operations, structural changes alone will be insufficient. USSOF is also restricted from the comprehensive execution of this IW strategy by a distinct absence of persistent authorities and funds.

In a declaration of war or authorization of the use of military force, USSOF formations can access appropriated funding to support indigenous forces (albeit not indigenous governments). The initiation of an IW campaign may or may not be a supporting function to a declaration of war or a broader authorization of the use of military force. For the optimal degree of flexibility, USSOF should consider advocating for an authority and appropriation that allows for support of IW campaigns and operations in situations where the broader pursuit or defense of influence is the U.S. national interest. These low-cost, low-intensity IW campaigns would fall well below the threshold of a declaration of war but would allow the United States to defend or expand its national interest when under threat from adversary states or movements. A standing authorization would afford the U.S. military flexibility and would position the U.S. military to act at the speed of opportunity.

In addition to the establishment of funding lines explicitly intended to support IW, the Department of Defense (DOD) must also pursue funds and expertise in the field of political action. While it should remain the intent of the DOD to establish partnerships with other U.S. government departments and agencies to provide personnel to assist in the development and execution of political action, the integration of personnel from other department or agencies is not always circumstantially possible. The DOD should be prepared to address this requirement organically. There is some capability and capacity to address this requirement within the Civil Affairs Branch, but the capability within civil affairs was not designed specifically for this purpose, indicating a need for either adaptation in civil affairs or the need for the establishment of a new USSOF political action cadre altogether. Adopting the tenets of this strategy and optimizing USSOF elements for it will be half measures if the U.S. military is not prepared to address

the concurrent political action requirements critical for long-term stability and influence fortification.

Conclusion

Over the next several decades, we are likely to witness the various protections and deterrents that prevent total war stretched to their limits. In addition to its role in conventional and strategic deterrence, the U.S. military and especially the USSOF community should offer policymakers and senior leaders options that either effectively neutralize an adversary's asymmetric aggression or allow for the application of throttled pressure against an adversary in a manner unlikely to escalate to a direct strategic conflict. While our potential adversaries have high concentrations of conventional capability in their proverbial backyards

developed to address their national security priorities, they all remain highly dependent on their networked global access for economic survival, raw material imports, and influence. This IW concept represents a capability that could be applied to erode our adversary's global access and impose costs proportional to those levied against us. However, effective execution of this concept will require significant evolutions within the USSOF formation including, but not limited to, structural adaptations at the maneuver-unit level, the acquisition of specific authorities and funds, and professional development pathway optimization. Despite the obvious hurdles, the return on the investment would be worth it if we could match, contest, and reverse the success of our adversary's asymmetric campaigns against our interests and influence. ■

Notes

1. Joint Publication (JP) 3-05, *Joint Doctrine for Special Operations* (Washington, DC: U.S. Government Publishing Office [GPO], 22 September 2020), II-7–II-11.

2. Nathaniel L. Moir, "Bernard Fall and the Vietnamese Revolutionary Warfare in Indochina," *Small Wars & Insurgencies* 28, no. 6 (2017): 909–46, https://doi.org/10.1080/09592318.2017.1374594.

3. *Britannica*, "Third International," last updated 12 July 2024, https://www.britannica.com/topic/Third-International.

4. David Kilcullen, *Out of the Mountains: The Coming Age of the Urban Guerrilla* (London: Hurst, 2013).

5. Army Techniques Publication 3-18.1, *Special Forces Unconventional Warfare* (Washington, DC: U.S. GPO, March 2019).

6. Field Manual 27-5, *United States Army and Navy Manual of Military Government and Civil Affairs* (Washington, DC: U.S. Government Printing Office, 22 December 1943). The Military Governance and Civil Affairs Division was based in Charlottesville, Virginia, where officers were prepared to reestablish governance in the wake of Allied military operations.

7. A recent example is the failure of the political action plan of the Syrian Democratic Forces (SDF), which sought to achieve their desired level of international recognition. The SDF implemented a successful political action plan throughout the execution of their combat operations phase designed to attract, integrate, and align Arab tribes and other ethnic minorities within their area of operations. The SDF political action platform included key promises of equality through Western alignment. However, the lack of institutional support from the U.S. military for this political action plan left it highly vulnerable. As a result, international recognition was not forthcoming, and the area remains under significant Turkish pressure today. The unfulfilled political plan of the SDF has left their alliances frayed, creating influence opportunities for the Islamic State and the Syrian regime alike.

8. JP 3-0, *Joint Campaigns and Operations* (Washington, DC: U.S. GPO, 18 June 2022).

Dier-ez-Zor Civil Council engineers and U.S. Army Special Operations Command team members finish installation of discharge pipes February 2019 at Pumping Station #1 on the Euphrates River in Syria. (Photo by project engineer)

Refilling the Suwar Canal

An Irregular Warfare Case Study in Infrastructure Effects

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After decades of kinetic action, the general public is unlikely to associate special operations forces (SOF) with the seemingly plodding work of infrastructure projects. This natural tendency is reinforced in part by a heavy direct-action emphasis in SOF branding and marketing.[1] However, Army doctrine states that these forces are well suited for humanitarian efforts and noncombat projects due to their adaptability, rapid deployability, and effectiveness in austere environments. SOF can bring to bear "their geographic orientation, cultural knowledge, language capabilities, and their ability to work with local, ethnic groups and civilian populations" to be uniquely effective in information gathering and in project execution.[2] SOF has a history of leveraging infrastructure in innovative ways to achieve meaningful effects in competition and conflict. The campaign against the Islamic State (IS), known as Operation Inherent Resolve (OIR), led by SOF and executed "by, with, and through" local partners, provided multiple opportunities for SOF to exhibit problem-solving capabilities alongside its tactical prowess.[3] One such instance was born of a simultaneous humanitarian and tactical requirement during the southward pursuit of IS in central-eastern Syria. Engineers and logisticians in the U.S. Army Special Operations Command (USASOC) partnered with local civil authorities to address an inoperable canal in the mid-Euphrates River Valley in 2018–2019. The expedient bypass repair of destroyed pump stations on the Suwar Canal and the resultant easing of resource strain on both civilian populations and partner forces provides insights useful for niche use of SOF in competition and in conflict. The project highlighted the need for highly enabled SOF-aligned engineers and logisticians and demonstrates the potential of using nonstandard infrastructure as a vector for humanitarian, information, and tactical effects.

Birth and Destruction of the Sabha-Suwar Canal

Located in south-central Syria, the Sabha-Suwar Canal was developed in the 1980s as a component of the Khaor River Basin Project. The project was designed to transform nearly six hundred square miles of Syrian desert into arable land for agriculture. The canal originates on the Euphrates River at the Al Sabha Pumping Station, and flows approximately 42 km northeast, terminating at a booster station for onward transmission in its namesake city of Suwar. The canal once served both irrigation and water lines providing water to anywhere from seventy thousand to three hundred thousand Syrians. The Al Sabha Pumping Station also historically powered the nearby Sahil Canal, which, according to indigenous engineers and civil council liaisons, delivered irrigation water to an additional two hundred thousand people in the mid-Euphrates River Valley (MERV).[4]

The 2013–2014 proliferation of IS saw rapid expansion of the group's physically occupied territory and of their influence over indigenous populations.[5] From 2014 until late 2017, IS manipulated the water architecture of the Khaor River Valley as means of population and resource control. As Syrian Democratic Forces (SDF) moved southward across the MERV in 2017 and 2018, retreating IS forces severely damaged or destroyed pumping stations, canal framework, and power sources servicing the canal. As a result, thousands of acres in a region heavily reliant on agriculture revenue were left barren, and locals faced intermittent access to drinking water. SDF occupied and retained the facilities following their liberation from IS, building outposts

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The Suwar Canal originates on the Euphrates River at the Al Sabha Pumping Station and flows approximately 42 km northeast, terminating at a booster station for onward transmission in its namesake city of Suwar. (Photo provided to author by project engineer)

near the key terrain. Bridge repairs and rubble removal, mostly by local civil councils, laid the groundwork for eventually restoring services to the region. However, the cost and effort required to restore the canal system to initial operating capability, particularly in a semipermissive security environment, were uncertain.[6]

In mid-2018, prospective repair of the Suwar Canal represented an unlikely convergence of unique SOF permissions, authorities, and military necessity that set it apart from other less-suitable projects. Lack of basic services in the region not only imposed hardship on the civilian populace but also significant sustainment strain on partner forces. The same SDF pursuing IS in the MERV relied on costly and inefficient means of procuring their own water and were dedicating valuable manpower to distributing water among locals via tanker trucks. These sustainment challenges introduced friction to an already-complex operation. In late 2017, then Secretary of Defense James Mattis had anticipated

"shifting from an offensive terrain-seizing approach to a stabilizing effort," including "helping civil authorities set up water and electrical systems."[7] In keeping with the secretary's remarks, and based on the significance of the canal to both the humanitarian and tactical situation in the MERV, SOF leaders ordered an infrastructure assessment shortly after the region was reclaimed by SDF in early 2018.[8]

Infrastructure Assessment and Defining the Problem

USASOC engineers and Civil Affairs Team (CAT) 612 conducted a deliberate assessment of canal infrastructure in summer of 2018 from its origin near the town of Deir-ez-Zor on the east bank of the Euphrates River to the third downstream pumping station approximately eight kilometers from the Al Sabha. The team determined that the actual channel of the canal was largely unharmed. The open channel sections had

A sample engineering diagram for the layout of pumps, intake, and discharge pipes at Pumping Station #2. Detailed site planning was essential to navigating the spatial specifics of each distinct site. (Scan of document from U.S. Army Corps of Engineers, Portland District)

been cleared of rubble and otherwise remediated by indigenous forces shortly after seizing the terrain. A milelong underground pressurized pipeline following Station #2 remained uncleared due to fears of explosive hazards, but surface damage was not observed.[9] Assessment was thus focused on the pump stations, where both the complex equipment and the damage were centralized. The resultant report spanned nearly fifty pages, evaluating damage and serviceability of key equipment across the canal's three pumping stations as well as additional infrastructure descended from underground pipelines past the Suwar Pumping Station.

In short, the state of major infrastructure ranged from "poor" to "beyond repair." One pump station had been destroyed by coalition airstrikes. Complex, vital systems at each of the stations—pumps, electrical systems, controllers, storage tanks, filtration systems, sedimentation systems, chlorination equipment, and more—had been severely damaged in the IS withdrawal. Of what remained, parts, equipment, cabling, and materials had seemingly been stripped from the facilities by struggling locals thereafter. The report was

cautious about the prospects of anything less than a complete reconstruction, hedging that "small, hasty bypasses may be made with portable pumps across the pumping stations, but may not create enough flow or velocity to overcome the hydraulic grade increase [across the canal's cross-section]."[10]

Despite the report's pessimism on the success of temporary fixes, USASOC engineers began to analyze potential solutions or mitigations to bridge the time and fiscal gap until Department of State or other agencies could take on a comprehensive repair. Potential courses of action were screened and evaluated based on feasibility, longevity, cost, and speed of execution. The most intensive solution, a complete repair of the organic infrastructure, was quickly discarded as outside the scope of SOF. The assessment team, unable to make productive contact with the original equipment manufacturers, estimated that the in-depth redesign of facilities and installation of complex electrical systems, computer systems, and bespoke pump equipment would "require significant reconstruction efforts that [would] take years to complete … the reconstruction

and repairs of all stations will easily exceed $100 million USD."[11] Instead, the USASOC team devoted efforts to, on its face, the most obvious solution: routing water around the damaged pump stations, rather than through them.

Developing Options and Specialty Procurement

The nature of the budding project (outside the scope of typical troop construction, and at the intersection of "public works" and partner force sustainment) complicated the search for a suitable funding source. The U.S. Agency for International Development (USAID) funded various projects throughout Syria during the opening years of OIR, but the March 2018 funding freeze on Syria stabilization efforts precluded the initiation of any new, major projects. USAID had, in fact, explored the possibility of funding mitigation measures to the canal, but the projected cost of a true fix exceeded the agency's entire annual budget for Syria stabilization, all of which had been allocated for the year.[12] Instead, the USASOC team would focus on requesting military funds, exploring programs like the Department of Defense's (DOD) Overseas Humanitarian Disaster and Civic Aid among other potentially appropriate sources.

Timely request and approval of any funds would rely on the expertise of a multifunctional logistics team, including USASOC lawyers, contracting officers, logisticians, and engineers. In addition, the proposed project would need both a strong engineering backbone and a genuine tactical justification to withstand scrutiny at requirements review boards. For the latter, the logistics benefit of relieving sustainment strain on dispersed partner forces fighting a determined enemy provided a meaningful tactical rationale. To ensure the technical aspects of the project were as thoroughly considered, the USASOC team looked to the broader DOD enterprise for planning assistance.

The broad strokes of a technical solution—an auxiliary system to move water around the damaged permanent pump stations—had taken shape by late summer of 2018. Developing site layouts and bills of material based on pump placement and pipe joinery called for intensive, detail-oriented design. In order to hasten the design process (and, in turn, the formal funding request), USASOC partnered with the U.S. Army Corps of Engineers (USACE) Portland District for site planning. The USASOC team provided a basic concept of the bypass configuration, expected throughput, and other metrics to help guide the design. Portland District returned with a series of site layout sheets, illustrating the expected cut lengths, angles, and supports required to match the particular geometry of each pump station. The concurrent development of these detailed plans with USASOC's efforts trimmed substantial time off the project's early stages, enabling a faster transition to procurement and execution.

As site plans crystalized into more definitive specifications, USASOC engineers and logisticians cast a wide net in search of specialty equipment that could support the unique project requirements. To achieve a fluid throughput comparable to that of the organic infrastructure, from a river basin well below the ground level of Pump Station #1, would require pumps capable of generating immense pressures (total suction head and discharge head), and pipes capable of withstanding those pressures.[13] To replicate the canal system's intended throughput, the bypass at each pumping station would need to move roughly eighty thousand gallons of water per minute, balancing the canal at 33.6 million gallons per day. Adding to the technical complexity of the problem, pumps had to be sourced with components that did not meet current Environmental Protection Agency emissions guidelines, as emissions control fluid would be difficult to sustainably procure in theater, as would the expertise to work on emissions-controlled equipment (which generally requires factory service representatives).

The intended project timeline and constrained budget precluded custom-built pumps, which would otherwise have been the most effective way to achieve the high throughput requirement. Instead, the team used mine dewatering pumps as a starting point to narrow their search to a handful of commercial vendors with similar tech. Representatives of the USASOC team visited vendor test sites to examine the pumps, confirm planning assumptions, and gain platform-specific technical expertise. After a choosing a vendor, a subsequent training-focused visit ensured each member of the team understood the installation and operation of the large, complex machines. Accounting for maintenance downtime and fueling time, each pumping station would require four of the selected pumps, with three running for eight hours a day. To improve system

longevity, the team was able to establish and order a bill of material for three years of maintenance on each pump, as well as maintenance manuals in English, Arabic, and French.

While pumps were sourced domestically, the large volume of required pipe all but prohibited U.S. sourcing, given the cost of shipping materials. Instead, the USASOC team worked alongside Kurdish contractors to seek out and procure a sufficient quantity of pipe, as

a major thoroughfare in the town of Deir-ez-Zor. The USASOC element, even when reinforced by a small partner-force squad, settled for a porous set of security positions. Across the river to the west, a Syrian regime position sat within range to harass the site with sporadic small arms fire for the entirety of the project, further complicating the project.[14]

Construction at Pump Station #1 proved more difficult and required more flexibility than expected.

> Across the river to the west, a Syrian regime position sat within range to harass the site with sporadic small arms fire for the entirety of the project, further complicating the project.

well as a unique "fusion-welding" tool for both cutting and joining large-diameter, deep thickness high-density polyethylene pipe. The team gathered enough pipe for a bypass at the first pump station, with the intent of executing one mission to determine viability before additional procurement. The USASOC team also procured locally built diesel fuel shipping container tanks with a built in pump-and-hose system to supplement the fuel storage organic to the pumps (five hundred gallons for approximately sixteen hours of run time). This additional fuel option would provide local partners, the Deir-ez-Zor Civil Council (DCC), with fuel stability to maintain canal balance.

Installing the Bypass

With pumps successfully shipped to Iraq and the remaining tools and components procured through various area contractors and staged for local shipping, the USASOC team moved personnel and supplies to a forward staging area in eastern Syria. From there, the team, its security element, and local contractors hauling trucks of heavy equipment and construction materials traveled to Pump Station #1 on the Euphrates in early January 2019.

Security on the project site was a concern. The east bank of the Euphrates was under tenuous partner-force control, but the site was unavoidably close to

Usable space for staging and maneuvering materiel and equipment was at a premium at the project's outset, and diminished hour by hour as pumps and newly fusion-welded pipe structures were assembled and emplaced. Constant positioning changes for the large crane and construction of the unwieldy welded pipe sections slowed the project beyond the initial planning estimate, thought to be conservative at the time. Pipe lengths expected through USACE-produced drawings were extremely variable due to the on-site field measurements and larger hydraulic jump. The engineer team had conducted hands-on training with special equipment (the pipe cutter and welder) prior to forward staging, but these spatial challenges, and effects of the wet, freezing conditions, were not adequately accounted for in rehearsals or imagery walkthroughs. The first mission to Pump Station #1 thus served a secondary purpose as a rehearsal for follow-on missions, each of which was demonstrably more efficient and effective based on the lessons learned in January.[15]

While management of the physical space on site proved more challenging than anticipated, rehearsals paid dividends in the user-level technicalities of the project. Every team member was proficient in the use of the pipe cutting and welding systems, as well as the commercial heavy equipment on hand for moving pipe sections and pumps. Coupled with the experience

gained at on-site vendor training for the pumps, the diversity in skillsets of the USASOC team members and DCC engineers enabled quick adaptation to changes in conditions, site layout, and equipment/material performance. Despite delays due to the space management difficulties, the intake portion of the Station #1 system was constructed and operationally tested within seventy-two hours of arrival on the second visit. The output configuration proved more reticent; the pipes and joinery originally selected for output failed to perform under real-world conditions and were unable to handle the pressure and flow requirements of transporting water uphill to the canal output. The team was thus forced to plan and execute a second mission with more suitable output pipe to complete construction at Station #1.[16]

In the weeks following the first, incomplete mission, the team rapidly sourced true high-density polyethylene high-strength intake pipe for use in system outflow. A second mission to Station #1 and additional missions to Stations #2, #3, and #4 were planned and executed based on the lessons learned from the first. Station #1 work was primarily conducted by USASOC engineers with DCC staff receiving equipment familiarization and training. Station #2 work was conducted by both the USASOC engineers and the DCC staff together. Finally, after delivery of the equipment and supplies and a brief two-day mission, Station #3 was entirely constructed by the DCC staff without USASOC assistance. At each pumping station, the equipment was officially divested to the DCC upon completion of the partnered installation. By mid-spring, USASOC and DCC partners had completed construction along the length of the canal, successfully bypassing the devastated permanent infrastructure and supplying water along the length of the canal to Pump Station #4.

Local Project, Regional Outcomes

In May 2019, a DOD media account noted that "U.S. military civil engineers recently assisted the Deir-ez-Zor Civil Council Engineers through the installation and completion of a water pump station near Suwar, Syria … The project was a culmination of six months of planning, procurement, and three months of construction assistance. This water will support the residents of Suwar and the various Syrian Democratic Force outstations in support of ongoing

back clearance operations to prevent the resurgence of Daesh."[17]

On 15 August of the same year, SDF and the DCC hosted a ribbon-cutting ceremony at Pump Station #1. By this time, the hasty bypass solution had been successfully adapted to the peculiarities of each site, installed, and was running the full length of the canal, restoring water access to "more than 70-thousand inhabitants in the Khaor River Valley."[18] Air Force Maj. Gen. Eric Hill, then commander of Special Operations Joint Task Force–Operation Inherent Resolve, noted with regard to the project that the "Coalition's partnership with the SDF and efforts through local military councils bring security to the region … essential to the enduring defeat of Daesh."[19]

Concurrent with the installation of bypasses at each station, the USASOC team worked with local engineers to build a bill of materials for the longer-term project of repairing the original infrastructure. The knowledge and firsthand experience of those engineers was vital to identifying and procuring suitable replacement parts for the aging and severely damaged system. In the intervening years, U.S. agencies and local governments took up the banner on the enduring large-scale water restoration project. Funded by the U.S. Department of State's Bureau of Near Eastern Affairs, the Facilitating Urban Recovery and Transition Plus project partnered with the Executive Council of Jazeera Region and the DCC to take on the broader system of water infrastructure.[20] Through their efforts, the lift stations along the canal, the channel, supplementary pipelines, and the electrical network were repaired or upgraded by the end of 2020, converting the temporary bypasses into standby redundancies in favor of a more sustainable and resilient primary system.[21]

Project Observations

The "by, with, and through" operational approach applied across multiple conflicts in Central Command was unique in Syria due to the nonavailability of a viable partner state. "The lack of host government support complicated logistical support" to chosen-partner forces, "putting a greater reliance on SOF trainers and advisors."[22] In the case of the Suwar Canal, the Syria-specific by, with, and through approach precluded handing complete responsibility of the project over to a U.S. partner. A similar infrastructure project in Iraq, for instance,

U.S. Army Special Operations Command team members receive hands-on training with pumping equipment at a vendor testing location in November 2018. (Photo by author)

could have been more suitable for Government of Iraq execution with U.S. planning-only support, whereas the coalition of chosen-partner forces in Syria were not appropriately organized to pivot midcampaign from tactical operations to major infrastructure. Nor did the partner force maintain organic engineering assets capable of such a mission. A unilateral U.S. military construction project, on the other hand, may produce the desired tactical and humanitarian end state but fail to build postconflict legitimacy for partner forces and local/regional governments in Deir-ez-Zor (to say nothing of its appropriateness amidst the troop drawdown taking place in 2019). Senior SOF leaders see the influence generated by SOF's long-term engagements as key to providing expanded options and preconflict awareness.[23] In this case study, the strength of relationships between various SOF elements and their

local counterparts (such as those between civil affairs teams and the local military/civil councils) was key to finding a solution that balanced the military end state with reticence to take unilateral control of the project. Partnership with the local civil council enabled the USASOC team to provide interim capability through the partnered bypass repair while setting conditions for more protracted permanent repairs via planning and logistics aid. From the project's nascent stages, planning was contingent on the value of the original site assessment: a high quality, technically robust report made by a small team in a degraded semipermissive environment. Consistent with doctrine, the team's ability to rapidly identify and deploy to the scene of the problem and conduct valuable assessment with partner SOF and local engineers undergirded the entire project. Success in planning also relied on bringing together various

Dier-ez-Zor Civil Council engineers and U.S. Army Special Operations Command team members finish installation of discharge pipes February 2019 at Pumping Station #1 on the Euphrates River in Syria. (Photo provided to author by project engineer)

Department of Defense stakeholders. The premium placed on relationship building and cross-enterprise collaboration by SOF organizations was essential to success. The Engineer Regiment lent its robust reach-back capability, and the broader engineer community provided critical planning support via USACE Portland's additional collaboration during the planning phase.

Unique SOF authorities for both procurement and partner force interoperability were essential to mission success and mission haste and were navigated effectively by a coordinated cell of logistics, procurement, and legal experts at USASOC. Execution of the project was joint (including engineers and logisticians from three services) and multinational, with the assistance of local engineers as technical advisors and a local national contractor for specialty equipment operation on site. The USASOC team, though small (five to six people), was nonetheless able to leverage organic language skills, communications capabilities, and relationships with

sister units and local partners to multiply their effectiveness. "Diversity in our SOF formations provides an asymmetric advantage," and, in the case of the Suwar project, proved the value of unique skillsets in providing "innovative solutions to key operational problems."[24]

Setting Conditions for Future Success

The Suwar Canal project encountered hiccups in planning and execution, and fortunate timing played a role in its eventual success. However, there are aspects of the operation that speak to the SOF truth of "humans before hardware" and that suggest the usefulness of nonstandard infrastructure in achieving various military end states.

At an individual level, replicating the success of the Suwar project calls for recruiting, training, and retaining personnel with exceptional diversity in skillsets. The handful of SOF personnel on site brought to bear

The newly refilled Suwar Canal flows northeastward from the Euphrates River in spring of 2019. (Photo from the Special Operations Joint Task Force–Operation Inherent Resolve [SOJTF-OIR] Facebook page)

language skills, significant engineering credentials, and experience with the various materials, machines, and trades that made up the construction site. The global built environment is expanding, and exposure to the full range of infrastructure that underlies contemporary societies will be of increasing importance, both for bespoke SOF missions, and for advising maneuver commanders in more conventional combat operations.[25] Likewise, as SOF shifts its gaze to the broader competition spectrum, multifunctional teams with technical prowess and operational savvy will require recruiting from nontraditional populations, and integrating those skillsets from staff positions to agile assessment teams.[26] It is no revelation that nonmilitary activities can have military outcomes. The wars in Iraq and Afghanistan were replete with construction projects and construction assistance meant to improve regional stability or enhance credibility of local governments. Whether those efforts were effective has been examined by more qualified researchers; instead, the Suwar case study is presented as an example of using infrastructure to achieve acute effects, rapidly, when

conventional forces or governmental partners cannot. Joint doctrine accounts for infrastructure as a planning factor in understanding the operating environment but falls short in providing language or guidance for integrating the ubiquitous built environment into other phases of operational planning.[27] Competing below the threshold of armed conflict, across multiple domains, will require a more sophisticated and creative view of the built environment in both conventional and special operations. The president of the Joint Special Operations University called for SOF to be transdomain problem-solvers, ready to take actions that "may be far removed from the point of effect ... [to] indirectly affect behavioral and decisionmaking calculations."[28] Infrastructure may offer opportunities to convert physical action into positional advantage in other domains.

Our adversaries certainly recognize the potential of infrastructure across the competition spectrum. The People's Republic of China famously uses infrastructure as a means of exercising both tactical and strategic power through their Belt and Road Initiative, wherein construction may be a device of profit, a tool

of coercion, or a venue for future positional advantage.[29] This approach to infrastructure as more than its component concrete and steel lends itself to planning for competition: physical infrastructure is one access point to the systems and networks that we wish to protect, or to target.[30] China's own operating environment is characterized and networked by deepwater ports, manmade islands, terrestrial-based space systems, and many more built components that amplify, or deny, power projection. The Belt and Road Initiative and Chinese military infrastructure are beyond the purview of this paper, but their complexity suggests that our own planners, regardless of doctrinal direction, should examine how infrastructure can be integrated across operations in unexpected ways—as an objective, as a vector for an effect, or as an effect itself. The Suwar Canal project is, at best, an elementary example of this idea. By matching a unique, limited capability (rapid assessment, agile procurement, construction assistance) against a problem tangential to direct combat, leaders were able to leverage infrastructure to change the battlefield in their favor. Future operations may entail less overt use of construction while relying all the same on infrastructure expertise to achieve tactical effects (sabotage, special mobility), information effects

(credible infrastructure assessment), or humanitarian outcomes (expeditionary construction). Mastery of the built environment—the physical domain—will enable SOF leaders to achieve transdomain effects.

In his account of OIR, Michael Douglas, author of *Degrade and Destroy* and a *Wall Street Journal* national security correspondent, concludes, "The U.S. experience in Inherent Resolve also points to the need to formulate a better strategy for reducing harm to civilians. This means reducing civilian casualties as military operations proceed and also mitigating the long-term risk to innocents when their infrastructure is destroyed … The imperative is important not only for humanitarian reasons but also to avoid handing a propaganda victory to the enemy."[31] The Suwar Canal project was one of several instances in the counter-IS campaign where SOF engineers were directly responsible for identifying, assessing, and mitigating major infrastructure failures, in turn mitigating impacts to civilian populations and partner military forces alike. In competition and conflict, applying infrastructure expertise to nonstandard problems can produce outsized military and humanitarian effects. SOF leaders are uniquely positioned and equipped to identify these opportunities and use infrastructure as a vector for their desired tactical and operational outcomes. ■

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U.S. service members, Philippine National Police officers, and local government employees and health practitioners conducted a joint medical outreach project 19 October 2023 on Banaran Island in the Sapa-Sapa Municipality, Tawi-Tawi, Philippines. Command and U.S.-based nonprofit organization Spirit of America funded the medical mission. (Photo courtesy of U.S. Indo-Pacific Command)

Health Security in the Indo-Pacific

A Modern Approach to Irregular Warfare

Lt. Col. Lauren M. Hamlin, U.S. Army

The U.S. Indo-Pacific Command extends over one hundred million square miles of land and ocean territory. It stretches from the west coast of the United States to the eastern coast of Africa, it encompasses vast stretches of ocean, thirty-six countries, 3,200 different languages, and diverse religious, economic, and geopolitical viewpoints. It is home to over half of the world's population and nearly two-thirds of its economy, along with seven of the world's largest military forces; therefore, it is a pivotal area for ensuring the security and prosperity of the United States.

Due to the vastness of the Indo-Pacific region, numerous challenges plague the area, posing significant implications for global security. Governments in the Indo-Pacific grapple with natural disasters, resource depletion, internal strife, and governance issues (see figure 1). Furthermore, the People's Republic of China (PRC) is leveraging its economic, diplomatic, military, and technological prowess to carve out a sphere of influence. This sphere of influence encompasses not only physical territories but also economic, political, and cultural ambitions that would solidify the PRC as a major global power with sway over various aspects of international affairs. At the same time, the Democratic People's Republic of Korea is persistently expanding its nuclear weapon and missile programs, further compounding the security risks in the region.

The United States' Indo-Pacific strategy, unveiled in February 2022, articulates a firm commitment to fostering an Indo-Pacific that is free, open, interconnected, prosperous, secure, and resilient.[1] Achieving this end state further necessitates not only bolstering the United States' own engagement but also strengthening the region to make it unreceptive to competitors' destructive influence. For instance, numerous states within the Association of Southeast Asian Nations (ASEAN) maintain robust economic relations with China; however, they also strategically hedge against China's ambitions for territorial expansion by forging defense partnerships with the United States.[2] Therefore, considering these strategic dynamics, establishing future operations, activities, and investments focused on cooperation will be essential to realizing the U.S. Indo-Pacific's strategic vision.

The COVID-19 pandemic underscored the potential of health security as a potent geopolitical instrument. Although it spurred unprecedented global cooperation toward a shared objective, it also required international organizations to orchestrate a unified response amidst strained relations. Countries with pharmaceutical industry hubs and robust healthcare systems capitalized on their capabilities to supply vaccines, medical equipment, and effective treatments to partners of their choosing. This strategic allocation of resources allowed them to bolster alliances, strengthen diplomatic ties, and assert their influence on the global stage. Therefore, health diplomacy and health security should be regarded as more than humanitarian aid and knowledge exchange. They are nonkinetic, nonprovocative tools capable of influencing populations and shaping geopolitics. Consequently, as international relation dynamics evolve, the integration of health cooperation efforts will be crucial for nations employing an irregular warfare strategy.

What Is Irregular Warfare?

The recent revision of the U.S. definition of irregular warfare (IW) places primary emphasis on its strategic objective: the erosion or establishment of legitimacy and influence. According to volume 1 of Joint Publication 1, *Joint Warfighting*:

> IW is a form of warfare where states and non-state actors campaign to assure or coerce states or other groups through indirect, non-attributable, or asymmetric activities, either as the primary approach or in concert with conventional warfare. …
>
> … The intent of IW is to erode an adversary's legitimacy and influence over a population and to exhaust its political will—not necessarily to defeat its armed forces—while

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SOUTH ASIA

Border Disputes. Long-term border disputes reflect regional tensions, including the world's longest unmarked border between China and India. Following 2020 skirmishes, the PLA increased military presence along the Line of Actual Control.

Refugees. Over 1.2 million Rohingya refugees have fled Burma since 2017 due to civil war. 90% have relocated to Bangladesh and Malaysia, straining government systems and creating the largest refugee camp in the world in the Cox's Bazaar region of Bangladesh.

NORTHEAST ASIA

An increasingly aggressive **PRC** remains the greatest strategic challenge to the region. The PRC seeks to match U.S. global influence, displace alliances and security partnerships, and revise the international order to support Beijing's authoritarian system. The PRC is applying a whole of government approach through mechanisms such as the Belt and Road Initiative, the Asian Infrastructure Bank, Confucius institutes, PLA modernization, unsafe air intercepts, illegal unregulated fishing, and intimidation of Taiwan to pursue both regional and global aspirations.

Russia's unjustified war in the Ukraine has had ripple effects across the Indo-Pacific, while its leaders show signs of expanding a "no limits friendship" with the PRC. Nuclear-armed authoritarian **DPRK's** belligerent behavior – including increased missile testing – underscores the potential for crisis with clear implications for Counter-WMD and Noncombatant Evacuation Operations.

U.S. PACIFIC HOMELAND

Homeland Defense. Our sacred obligation is to protect the U.S. Homeland and keep the American people safe.

Our Homeland includes Hawai'i, Guam, American Samoa, and Commonwealth of Northern Mariana Islands. We also defend Compact of Free Association States: Federated States of Micronesia, Republic of the Marshall Islands, and Palau.

Nine Dash Line

Malacca Strait

Sunda Strait

Lombok Strait

Legend:
- ≋ Flooding
- 🌊 Storm
- ● BRI Projects
- ▬ Border Dispute
- 🏛 Damming
- ⭕ Excessive Claims
- 🚀 Missile Launch

SOUTHEAST ASIA

Mainland Southeast Asia. The Association of Southeast Asian Nations, or **ASEAN,** is a inter-governmental union of 10 member states that plays a central role in regional cooperation and economic integration. The Mekong River supports millions, so continued economic growth depends on the river's health. Dams expand irrigation, generate electricity, and enable regional trade – but at a cost to agriculture. However, intrusive PRC hydropower projects have major potential to alter the river's ecology.

Maritime Southeast Asia features strategic global transit points for international trade. 50% of global commercial shipping passes through the South China Sea. Overlapping and often excessive claims in the SCS and ECS by China and Russia have led Brunei, Indonesia, Japan, Malaysia, the Philippines, Taiwan, and Vietnam to increase emphasis on their territorial defense.

OCEANIA

Rising sea levels and increased **intensity of natural disasters** challenge rapid reaction in crisis and subsequent reestablishment of critical infrastructure and services following a disaster. The recent security agreement between the Solomon Islands and the PRC underscores **increased competition for influence** in these island nations.

(Figure from U.S. Army Pacific, *America's Theater Army for the Indo-Pacific*)

Figure 1. Strategic Environment in the Indo-Pacific

Medical professionals from the Palawan Dental Chapter apply fluoride and provide oral care for local children during a medical civic action program hosted by members of a U.S. Naval Special Warfare unit and U.S. Army civil affairs in Palawan, Philippines, 29 July 2023. Naval Special Warfare is the Nation's elite maritime special operations force, uniquely positioned to extend the fleet's reach and gain and maintain access for the Joint Force in competition and conflict. (Photo by Mass Communication Spc. 1st Class Daniel Gaither, U.S. Navy)

supporting the legitimacy, influence, and will of friendly political authorities engaged in the struggle against the adversary.[3]

In the era of globalization, safeguarding U.S. national security interests requires a comprehensive grasp of IW. Such insight empowers the United States to identify potential collaborative opportunities and adeptly shape operations, activities, and investments that foster mutual benefit and sustainability for partners. However, in the Indo-Pacific region, there exists a notable lack of consensus on the definition of IW among nations. Therefore, to effectively safeguard U.S. national security interests, it is crucial that the entire Department of Defense (DOD) comprehends the foundational definition and meaning of IW as understood by the United States and its allies and partners. Without this shared understanding, divergent perspectives could hinder the integration of health diplomacy and health security within the IW framework.

To facilitate shared language and understanding, the U.S. Irregular Warfare Center released a research report analyzing how IW is understood among U.S. allies and partners in the Indo-Pacific region. The study revealed that many nations predominately define and associate IW with domestic matters and instances of violence.

India: IW is seen as an asymmetric conflict between state and non-state actors (such as insurgents, guerrillas, terrorists, or violent extremists) aiming at challenging the legitimate political structure or overthrowing the government.

Philippines: IW is defined as armed rebellion, insurgency, violent extremism, and terrorism, along with the application of measures to prevent and counter them.

Singapore: IW is defined as a range of covert and overt activities conducted by

Oregon Air National Guard Lt. Col. Chris Webb (*center*) demonstrates airway management skills during an International Trauma Life Support course in Ho Chi Minh City, Vietnam, in February 2023. (Photo courtesy of *Tuoi Tre News*; shared with permission)

non-state actors to challenge the sovereignty and erode the legitimacy of the state by expanding and deepening their influence and control of a population.[4]

The divergence in perspectives, coupled with the recognition of nonstate actors as participants in IW, underscores how the Indo-Pacific states closely associate insurgency and terrorism with their views of IW. Understanding this regional view is a critical first step as the 2020 *Irregular Warfare Annex to the National Defense Strategy* states that America will proactively employ IW capabilities as "means to help expand the competitive space, shape the environment, and prepare for escalation to conflict, if required."[5] Therefore, it is imperative that our partners grasp our perspective of IW and recognize it as a method to strategically position and create dilemmas without necessarily resorting to kinetic actions. Varying interpretations could lead to misalignment in strategic objectives and potentially hinder effective collaboration when addressing shared security challenges.

In a broader context, the United States must recognize the irregular dimension of great-power competition and counter adversaries through legitimacy and influence rather than solely relying on kinetic capabilities for deterrence. Conventional deterrence, which primarily focuses on matching force capabilities, assesses risk to the nuclear triad and adjusts military posture based on the "belief that the cost of action outweighs the perceived benefits" cannot alone counter the malign influence and predatory lending tactics employed by the PRC and Russia.[6] For instance, in 2010, China extended substantial loans for the Sri Lanka Hambantota port's construction, despite doubts regarding its economic viability. When Sri Lanka encountered repayment challenges, China renegotiated the terms, ultimately securing a ninety-nine-year lease on the port in 2017.[7] This maneuver granted China significant control over a strategically situated port in the Indian Ocean, greatly bolstering its maritime influence in the region. In other words, the PRC strategically gained a significant advantage through

Students in the Special Operations Combat Medic Course at the U.S. Army John F. Kennedy Special Warfare Center and School treat a simulated patient during field training at Fort Bragg, North Carolina, 24 March 2020. Enlisted service members who complete the course specialize in trauma management, infectious diseases, cardiac life support, and surgical procedures, and qualify as highly trained combat medics with the skills necessary to provide initial medical and trauma care and to sustain a casualty for up to seventy-two hours. (Photo by K. Kassens, U.S. Army)

irregular means, consistent with its long-term strategic objectives. Therefore, during great-power competition, the United States must consider the fundamental nature of IW, which involves creating dilemmas, escalating risks and expenditures for adversaries, and gaining a strategic advantage, as part of its multifaceted approach to counter adversaries; this includes the strategic domain of global influence.

One of the key means to exert global influence is through health diplomacy. Therefore, it must be integrated as a line of effort within IW campaigning. By addressing global health challenges, the United States and its partners can build goodwill, enhance their reputations, and gain influence among populations worldwide. While our competitors co-opt health diplomacy for malign purposes such as exploiting vulnerabilities, sowing discord, and undermining stability, the United States can leverage the power of health security as a potent tool to build partner legitimacy and garner influence during competition.

While variances in IW definitions presents challenges, recognizing the power of health cooperation to achieve IW objectives transcends regional differences. Adopting a cohesive, multidimensional approach to health security benefits both the United States and partners. Competing without kinetic fighting while simultaneously aiding a host nation in facing insurgency builds legitimacy within the population and ideally reduces the size of the population that joins the insurgency.

Contrasting Health Diplomacy Strategies

The Health Silk Road (HSR) is China's health diplomacy strategy and a key component of its Belt and Road Initiative (BRI). China's objectives are to dominate international health collaboration and position itself as the global leader in health. While the HSR has both positive and negative implications, its underlying motives are strategically targeted and closely align

with the U.S. definition of IW. The initiative includes a spectrum of interests ranging from economic gains and diplomatic leverage to reputation enhancement, regional stability, and bolstering health security.[8] The HSR, with its multilayered approach, places a primary emphasis on public health and international cooperation. While the HSR brings recognized benefits to the partner nation—including healthcare services capability and capacity, advancements in infrastructure, and capacity building—significant challenges and limitations persist, particularly in addressing issues of quality and sustainability. Often, initiatives mandate partnerships with Chinese enterprises and reliance on Chinese financial institutions.

This was particularly evident during the COVID-19 pandemic, when China prioritized distributing vaccines to countries within the BRI and those holding strategic economic or political significance, particularly those rich in natural resources. Another illustration is the financing and construction of Friendship Hospitals in Pakistan, Laos, and Cambodia.[9] While these facilities do enhance partner capacity, they also come with significant partner-nation burdens from loans, sustainability, and maintenance. Despite providing humanitarian assistance, it's essential to recognize that the primary objective of China's HSR program, expanding export markets and positioning China as a dominant supplier of medical goods and services, is an IW tactic. Their strategic health pursuits align with China's broader agenda of exerting influence, coercing, and creating instability to further its interests.

Moreover, while PRC's HSR program exemplifies a utilization of health diplomacy for coercive geopolitical ends, Japan, a closely aligned ally, pursues a contrasting approach. Japan's engagement in global health diplomacy reflects an adaptive response to evolving strategic dynamics. Initially, Japanese aid efforts, dating back to the 1950s, aimed to address the aftermath of World War II, including reparations for war crimes. With the resurgence of its economy in the 1980s, Japan's foreign aid contributions surged, reflecting its commitment to global health initiatives. Japan prioritized diplomatic objectives through peaceful means, directing resources toward pharmaceutical research, infectious disease surveillance, and public health safety.[10] While these efforts are categorized as soft power strategies, it's worth noting that Joseph Nye, former U.S. assistant secretary of defense for international security affairs, believes effective foreign policy advocates for the integration of both soft and hard power—commonly referred to as smart power. Nye contends that true global influence stems from the ability to shape the behavior of others to achieve desired outcomes.[11] Therefore, the contrasting strategies between Japan's health diplomacy, rooted in soft power, and China's more coercive approach underscore the necessity of integrating health diplomacy to achieve effective and sustainable global influence.

In recent years, the United States has strategically invested in smart power initiatives, recognizing the importance of addressing global challenges while strengthening alliances worldwide. This approach aligns with efforts to promote global public goods, address public health challenges linked to climate security, and foster unity among allies. Given the imperatives of addressing climate change, collaboration with hard power remains essential, even amid competition. For example, safeguarding freedom of navigation in the South China Sea through the deployment of the U.S. Navy is crucial to upholding international norms and protecting shared interests. Rather than prioritizing a strategy centered on regime change, our objective should emphasize competitive coexistence within a rules-based international order that safeguards U.S. and allied interests. Sustaining alliances is pivotal for achieving strategic success in the face of evolving geopolitical dynamics. Therefore, as we navigate great-power competition, it is necessary to employ a combination of IW tactics and use health diplomacy to our advantage, reinforcing our commitment to global stability and security.

The U.S. Military Global Health Engagement Strategy

Under the U.S. health diplomacy framework, the Department of Defense plays a pivotal role in executing smart power efforts. Through global health engagements (GHE), the U.S. military advances national security objectives by engaging with international partners on health and medical initiatives. GHE initiatives serve to extend U.S. presence in various countries, cultivate and sustain partnerships, and reinforce mutually beneficial alliances that bolster the Nation's paramount strategic interests.[12] Essentially, GHEs diminish adversaries' legitimacy while strengthening partner interoperability, capacity, and influence—a fundamental element of IW.

Lt. Col. Hope Hashimoto (*right*) reviews medical supplies with Elve Khadine D. Bandrang, a registered nurse assigned to the health unit at the U.S. Embassy in Timor-Leste, on 28 July 2021. Timor-Leste is a remote island nation, and medications common in American pharmacies cannot be found on the local market. (Photo by Sgt. Teresa Cantero, U.S. Army)

GHEs leverage a comprehensive array of health capabilities in military-to-military, military-to-civilian, or multinational operations. These activities aim to establish, revitalize, sustain, or enhance the capabilities of partner nations' military, civilian health sectors, or pertinent governmental agencies such as the Ministry of Defense or the Ministry of Health. While health engagements constitute just one component of the IW strategy, their potency lies in their nonprovocative nature toward adversaries, rapid enhancement of public opinion, and effectiveness as a conduit for influencing the information domain.

In the Indo-Pacific region, the military landscape poses significant challenges, characterized by the presence of only five regional treaty alliances: Australia, Japan, the Republic of Korea, the Philippines, and Thailand. These challenges are compounded by major transnational issues such as glacier melts, rising sea levels, natural disasters, and governance challenges, which render many nations vulnerable. Health diplomacy and GHEs serve as foundational steps toward fostering trust-based relationships and should be employed to achieve IW objectives. GHEs include four primary categories: humanitarian assistance and foreign disaster relief, encompassing medical staff augmentation and donations of medical supplies through civic assistance programs; force health protection, aimed at advancing public health research and development initiatives; building partner capacity and interoperability, which includes training programs and knowledge exchanges; and nuclear, chemical, biological, and defense programs, focusing on collaborative threat reduction and disaster preparedness in conjunction with interagency partners.[13] Successful utilization of GHEs necessitates a comprehensive approach that integrates these categories, tailored to the specific needs of partner countries and underpinned by predefined metrics to assess effectiveness in advancing strategic objectives.

A prime example of humanitarian assistance in action is the annual Pacific Partnership mission, a multinational endeavor led by the Navy. During these missions, military and civilian personnel from various nations and services converge to deliver vital medical assistance, facilitate infrastructure development, and provide disaster response training to communities across the Pacific. These efforts not only strengthen existing healthcare infrastructure but also

foster interoperability among regional partners and enhance disaster response capabilities. GHEs like this are instrumental in achieving overarching strategic objectives, including the promotion of stability, the fortification of alliances, and the advancement of U.S. influence in the region. These objectives align closely with the core principles of IW, which seek to legitimize nations and address security challenges through collaborative approaches.

The biannual Indo-Pacific Military Health Exchange is a force health protection engagement that serves as a crucial platform for fostering collaboration and information sharing among military medical professionals in the region. Through this exchange, participating nations enhance their medical capabilities, share best practices, and build enduring relationships. This exchange not only promotes regional stability and security but also reinforces the collective capacity of Indo-Pacific nations to address health threats and humanitarian crises collaboratively. With over six hundred participants from twenty-six countries, this engagement provides an ideal environment for conducting bilateral discussions, establishing future partnership initiatives, and influencing future posture objectives.

In 2023, an innovative GHE initiative unfolded in Papua New Guinea, spotlighting efforts to bolster partner capacity and promote interoperability. A U.S. Army forward resuscitative and surgical detachment was dispatched to Papua New Guinea, seamlessly integrating into the operations of Port Moresby General Hospital alongside civilian physicians. This collaborative endeavor in the emergency department and operating room facilitated reciprocal learning and skill refinement. U.S. Army providers encountered complex polytrauma cases rarely seen in the United States, significantly enhancing their proficiency. Moreover, when viewed strategically, this engagement closely aligns with IW objectives, as the engagement effectively shaped public opinion within the information domain. Such GHEs not only offer invaluable training opportunities for providers but also underscore U.S. goodwill and dedication to supporting the local community. This engenders trust and fortifies resilience while counteracting potential adversary influence, culminating in a mutually advantageous outcome from both tactical and strategic standpoints.

The COVID-19 pandemic, the Ebola epidemic, and the rising malaria risk worldwide all underscore
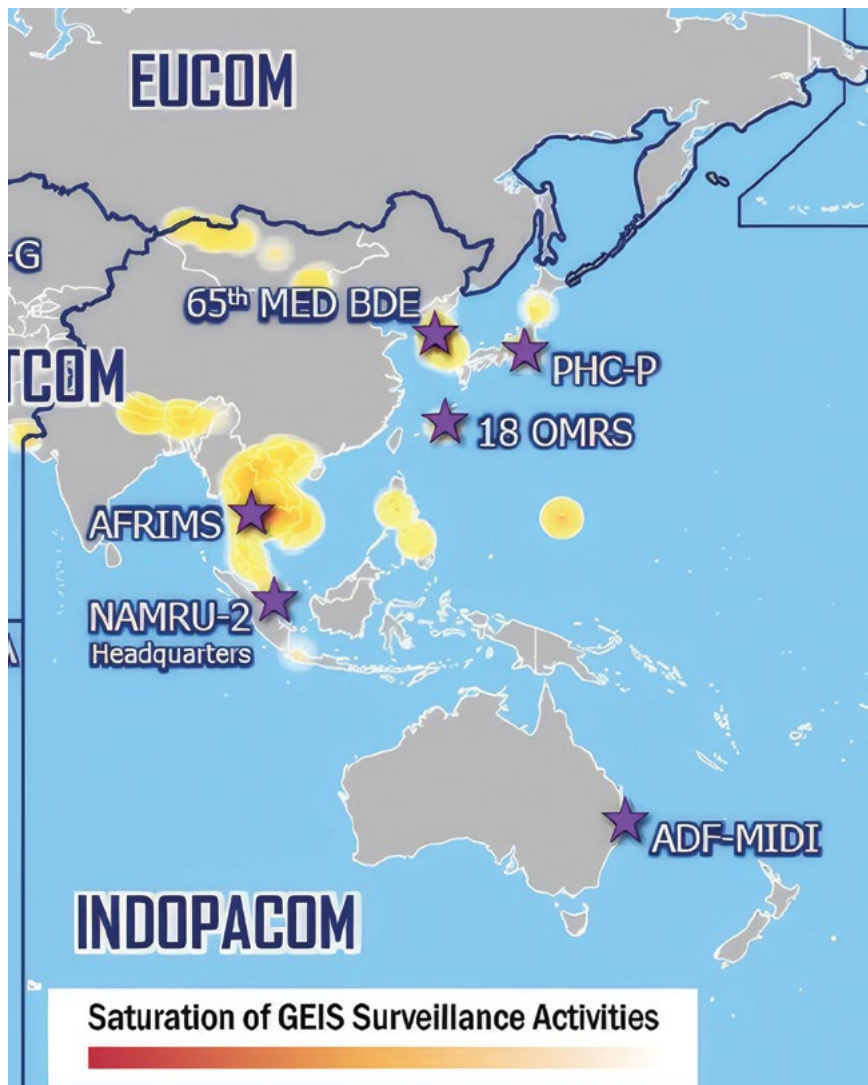
(Figure by the Military Health System)

Figure 2. Global Emerging Infections Surveillance Partner Network

HIV Research Program continues to lead the global fight against HIV, with breakthroughs such as the RV144 vaccine trial, also known as the Thai Study, marking significant milestones in HIV prevention efforts.[14] Similarly, research conducted at other U.S. military labs has contributed to the development of the RTS,S/AS01 malaria vaccine, now recommended by the World Health Organization for widespread use. These biological advancements serve as a form of health diplomacy, fostering goodwill and shaping military relationships, even amidst competition. Therefore, these laboratories are powerful soft-power tools that can be used to achieve IW objectives.

Importance of Assessment, Monitoring, and Evaluation

All security cooperation activities require robust monitoring and evaluation mechanisms, encompassing both qualitative and quantitative assessments. A 2018 RAND study emphasizes the significance of partner nations' feedback, particularly regarding the profound impact infectious diseases have on society, highlighting the importance of biosurveillance and vaccine development. The United States maintains military medical research laboratories and satellite facilities across the Indo-Pacific in Australia, Thailand, Nepal, Singapore, Japan, the Republic of Korea, and the Philippines. These facilities collaborate closely with host nations to support GHE efforts, particularly focusing on nuclear, chemical, biological, and defense programs and emerging infections surveillance. For instance, many infectious disease vaccines trace their roots back to research conducted by Army medical research programs. Notably, the U.S. Military the quantity and consistency of aid. However, achieving true effectiveness necessitates first establishing a baseline assessment to understand partner capabilities, vulnerabilities, and preferences thoroughly.[15] Furthermore, a comprehensive plan must be devised to outline how engagements will achieve specified outcomes, particularly if they are to be used in support of building legitimacy and furthering IW objectives. The DOD policy for assessment, monitoring, and evaluation, as outlined in DOD Instruction 5132.14, *Assessment, Monitoring, and Evaluation Policy for the Security Cooperation Enterprise,* underscores the imperative of monitoring and evaluating all security cooperation efforts as this

practice fosters accurate and transparent reporting to key stakeholders on the outcomes and sustainability of cooperation initiatives.[16]

Given the inherent rigor in quantitatively defining metrics for assessing improvements in combined joint medical readiness, capacity building, and improving public opinion, the Indo-Pacific military health community has devised specific outputs for monitoring and evaluating health engagements. These outputs include blood sharing agreements, medical logistics posture, established health facility credentialing processes, and improved global health partnerships like the ASEAN Expert Working Group on Military Medicine (for example, see figure 2). The overarching strategic objectives are to facilitate trust building, enhance interoperability, and deter adversaries from transitioning to conflict. However, many policy documents lack guidance on effective implementation. Therefore, the Army in the Pacific has developed both quantitative and qualitative approaches to evaluate success. Though not flawless, these methods serve as a critical starting point and will hopefully guide future investment decisions and help evaluate how health security is supporting IW objectives.

Conclusion

The Indo-Pacific region, given its vast expanse and strategic significance, stands as a critical theater for ensuring the security and prosperity of the United States. Amidst numerous challenges and evolving geopolitical dynamics, the U.S. Indo-Pacific Command is tasked with navigating a complex landscape fraught with both conventional and emerging threats. As articulated in

the Indo-Pacific strategy, fostering a region that is free, open, interconnected, prosperous, secure, and resilient requires a multifaceted approach that prioritizes collaboration with like-minded partners. In this endeavor, health cooperation emerges as a powerful tool, capable of exerting influence and shaping geopolitical dynamics without resorting to kinetic or provocative measures.

Health cooperation, which has traditionally served as an avenue for humanitarian assistance, knowledge exchange, and partnership, has since demonstrated its potential as a nonkinetic, nonprovocative instrument capable of influencing public opinion and shaping geopolitics. Within the broader context of IW, health diplomacy and GHEs play an important strategic role. By addressing global health challenges, the United States and its allies can build goodwill, enhance their reputation, build legitimacy in partner nations, and influence populations worldwide.

As the United States navigates great-power competition in the Indo-Pacific, it must be prepared to confront the irregular challenges posed by adversaries and respond through a comprehensive government strategy of integrated deterrence. This means incorporating health diplomacy within the IW framework to enhance the strategy as a holistic security approach. By leveraging health cooperation initiatives, the United States can reinforce its commitment to global stability and security while advancing its interests. Through concerted collaboration with allies and partners, the United States must seize the initiative and harness the power of health diplomacy to shape the geopolitical landscape in the most consequential theater at the most consequential time. ∎

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Legacy *Military Review* Publication of Enduring Relevance

Published in June 2008, the *Interagency Reader* was a supplementary compendium of articles to those already provided in the two previous counterinsurgency special editions published in 2006 and in 2008. The purpose of this edition was to help military personnel then engaged in the Global War on Terrorism develop an understanding of the wider variety of dynamics of instruments of power apart from purely coercive measures that shape the operational environment in which insurgency and irregular warfare emerge and are sustained.

To read online, visit https://www.armyupress.army.mil/Portals/7/military-review/Archives/English/100-Landing/PDFs/Interagency-Reader.pdf.

Pursuing Global Impact

Special Operations Forces' Vital Role in Achieving Objectives Through Global Health Engagement Initiatives

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Choosing the right tools at the right time and for the right problem to be solved is the most imperative gray matter requirement for SOF [Special Operations Forces] leaders today and for the SOF professionals of tomorrow.

—Dr. Isaiah Wilson III, former president of Joint Special Operations University

A December 2022 Congressional Research Service report on Department of Defense (DOD) global health engagement (GHE) raised the idea that Congress should reexamine "the purpose of GHE" and "reevaluate how GHE is used to support military-specific requirements and broader global health objectives."[1] The report also echoed a Center for Strategic and International Studies that said DOD "strategic thinking about global health and security is evolving very slowly."[2] Considering this context, it is appropriate for Army special operations forces (ARSOF) to contribute to posturing the joint force for future conflict. ARSOF's flexibility, mobility, and indigenous approach roots of working by, with, and through populations, directed at future combat strategies through a GHE lens, is a time-tested method with which there is relatively low risk but significant reward.

GHE tools, when applied appropriately with fiscal backing and proper oversight, promote U.S. national interests between allies and partners, ultimately securing prominence on the large-scale combat operations battlefield. The most significant payoff for the United States and DOD is the long-term relationships that enable a forward posture without a large troop presence, empowering integrated allied- and partner-enabled systems, and establishing infrastructure and personnel that promote a timely capability when necessary. These relationships also promote the timely gathering of

A U.S. Army NCO assigned to 3rd Special Forces Group (Airborne) works alongside a soldier from the Army of Burkina Faso to provide medical aid to a Burkinabé local in Bobo-Dioulasso, Burkina Faso, 18 February 2021. Civil Affairs Team 142, Company D, 91st Civil Affairs Battalion, provided medical equipment and training to Burkinabé military doctors in Bobo-Dioulasso. The training supported the medical examinations and treatments of more than four hundred people with the U.S. military assistance focused on building the capacity of Burkina Faso's security forces. (Photo by Spc. Nathan Hammack, U.S. Army)

critical information, which can be used at all echelons, from policymakers to tactical leaders, before, during, and after crisis and conflict. The current and imminent geostrategic situation demands that ARSOF return to its roots, applying the indigenous approach to medicine and healthcare and every facet of ARSOF to codify and scale their GHE efforts for the joint force. The time is now, without delay, to apply these tools as deterrence measures and to gain an advantage in the future global operational environment.

The Changing Global Operational Environment

Health threats and national interests continue to converge, blending global health, foreign policy, and national security. Global health challenges, including diseases like COVID and influenza, and

climate-related disasters—established forces to be reckoned with—have and will adversely impact future operational environments for the DOD's personnel and national interests. Due to the costly economic, human, and national security implications, correlating strategies have adapted with a deterrence and prevention posture. Convergent strategies collectively demand that commanders and their planners possess dual perspectives and postures toward the future operational environment.[3] First, they must think critically, plan for, and employ forces to prevent adverse effects, including health and medically related crises and conflicts. Likewise, they must prepare for and respond to conflict and crisis while supporting future operations, including providing optimal healthcare to forces.

Healthcare delivery in the future operational environment will likely be limited for DOD forces,

particularly special operations forces (SOF), due to less than favorable operational environments. The future global ecosystem will likely comprise geographically dispersed landscapes, finite resources, and complex, denied, and uncertain environments limiting the movement of patients and supplies.[4] During the last two decades, U.S. forces, both conventional and SOF, grew accustomed to a robust and efficient casualty care system, which provided the highest rate of survival from battlefield wounds in the history of warfare. This remarkable feat was attributed to improved point of injury, en route care, and expeditious transportation of casualties to higher echelons of care.[5] Since the focus of the times was on immediate injury treatment and quick evacuation, many special operations medics, including Special Forces ("Green Berets"), "drifted away from complex, long-duration partnerships toward more linear, short-term, transactional combat operations."[6] The future environment though, demands that we reinvest in SOF efforts requiring consistent and sustainable engagements rather than short-lived undertakings.

Historically, U.S. and foreign SOF medics held casualties for long periods and deployed higher medical expertise, such as surgical teams, closer to the point of injury to reduce additional time for resuscitative surgical care.[7] However, the U.S. military has grown accustomed to the rapid movement of the wounded to forward resuscitative surgery within the "golden hour." Therefore, customary procedures of the recent past will challenge commanders and planners to rapidly shift their understanding and assumptions of how to deliver, provide, and sustain commonly practiced and understood healthcare to support the future force.

The United States must glean insight from history while remaining open to the current operational environment and adapt and position for what is likely to ensue. For instance, the present conflict indicates that medical personnel, infrastructure, and transportation, traditionally safeguarded by international law, are now vulnerable to regular attacks. Between February 2022 and July 2024, Russian forces conducted at least 1,474 attacks directed toward Ukraine's health care system. Of those attacks, 760 resulted in damage to or destruction of hospital and clinic facilities.[8] Past, present, and probable future conditions demand intentional and critical thinking, planning, and executing of nontraditional medical support solutions. In the future operational environment, healthcare delivery for SOF may be as primitive as a single medic with limited medical supplies in a remote location or as robust as an austere resuscitative surgical team operating in subterranean conditions. In any case, deliberation must include prolonged operations, functioning in nonmedical infrastructure, and nonstandard patient movement and logistical support

The forecasted global competitive environment also consists of traditional warfare and irregular warfare. Irregular warfare can appear under the guise of "grayzone" competition or hybrid threat activities, favoring indirect, asymmetric, or nonattributable approaches ultimately to influence people.[9] Competitors may also induce medical challenges unfamiliar to military medical personnel like exposure to novel threats including unconventional weapons or tactics. Therefore, competitors are gaining greater abilities in shaping the international order by operating subtly just below the levels of conflict and crisis, between peace and war, while widening their advantage.[10]

Increasing interconnectedness throughout the global system is proliferating mutual impact and reliance. The most obvious example is the COVID-19 pandemic, originating at a distinct location but adversely impacting the global ecosystem. Consequently, strategies have adapted to target and build other nations' capacity and capabilities to, in turn, protect their own security. Nevertheless, despite growing international interconnectedness, competitors are likely to intentionally disconnect, restrict, and manipulate networks, hindering cooperative information and intelligence sharing. However, the U.S. government further exacerbates this disconnect with many fragmented and siloed platforms that hinder streamlined communications and unity of effort. These limitations lead to challenges in tracking and accurately understanding risks associated with threats and responding appropriately to medical issues, making it difficult to rapidly identify and address broader health challenges to prevent global adverse effects.

A Commander's Tool to Achieve Optimal Effects

The DOD's current strategic, and therefore operational and tactical, aim is to apply integrated deterrence—the synchronized, holistic, and deliberate

A Canadian Special Operations Forces Command medic provides instruction to a member of the Niger Armed Forces during medical training as part of Flintlock 2017 in Diffa, Niger, 25 February 2017. The Flintlock exercise series is designed to build the capacity of key partners to provide better security for the civilian population. The 2017 iteration included training involving the Nigerien soldiers provided by special operations forces from the United States, Canada, France, the Netherlands, Norway, and the United Kingdom. (Photo by Spc. Zayid Ballesteros, U.S. Army)

application of an assortment of instruments of national power, including allies and partners, to prevent conflict and keep adversary activities within the desired state of cooperation and competition.[11] Security cooperation (SC) is a primary military means, underscored in national policies to achieve strategic ends. SC stresses the use of noncombative methods to build partnerships through foreign engagements.[12] This approach has evolved from addressing problems reactively (postcrisis and postconflict) to proactively preventing, shaping, and cooperating to deter global dangers and enabling partner-nation mitigation and defense against such threats.[13]

DOD geographic combatant commands are responsible for employing collaborative and cooperative approaches with allies and partners throughout their respective regions.[14] Theater special operations commands (TSOC), under the operational control of the geographic combatant commands, serve as a regional operational nucleus of the SOF network.[15] TSOC commanders, aligning with combatant commanders, play an integral role in accomplishing the combatant command's theater campaign plan. One tool TSOC commanders can utilize is focused activities such as SC to support the combatant command's theater engagement plan and special operations security challenges. To bolster mutual defenses against various threats, the DOD, through combatant commands and TSOCs, must consider other nations' capabilities. Health and medical requirements also provide opportunities for dialogue and cooperation, advancing shared interests and building partner health and medical capacity to deter mutual threats.[16] The DOD's formalized tool, consisting of health-related SC initiatives, entails GHE activities.[17]

For centuries, the military has executed GHE activities in different operational environments. Earliest

U.S. Army personnel pass out donations of medicine and hygienic supplies to local primary school students in Savelugu, Ghana, 7 July 2023. Ghana Air Force and U.S. Army personnel partnered to secure and distribute items that mitigate common medical issues impacting students' ability to consistently attend school. (Photo by Staff Sgt. Amy Younger, U.S. Air Force)

examples include investments in infectious disease research and implementation of measures to protect and mitigate risk to U.S. and foreign forces from vector-borne diseases.[18] Presently, GHE's spectrum of global health activities is vast. Activities include exercises, training, key leader engagements, subject-matter expert exchanges, capabilities and infrastructure development, and medical support to stability operations. SC, coupled with health and medicine focus areas, has broadened the military's defense apparatus from focusing primarily on response and conflict aimed at traditional threats to prevention, competition, and asymmetric approaches to address nontraditional challenges.

Given the complexities of the future operational environment, SOF should serve a significant role in integrated deterrence through GHE initiatives. Historically, policymakers leveraged SOF assets in competitive or irregular warfare conflicts when facing limitations that prevented them from using conventional forces or other instruments of national power.[19] SOF is a regionally aligned network of personnel and assets (means) employed through SOF activities (ways) in complex, uncertain, and nonpermissive environments to obtain an early understanding of trends, emerging transregional threats, and opportunities to achieve effects (ends).[20] Moreover, SOF is appropriately suited for actions requiring an asymmetric approach, with the core concept—irregular warfare—comprising unconventional warfare, foreign internal defense, counterinsurgency, and counterterrorism activities.[21] Combatant commands and TSOCs employ this broad range of SOF capabilities toward influencing and shaping environments and defending the United States and its allies and partners from malicious gray-zone activities.[22] GHE initiatives, employed through SOF assets, could be the optimal and versatile tool to deter and defeat common threats and best position for conflict and crisis in complex and ever-changing environments.

ARSOF's Value Proposition toward Future Operational Environments

ARSOF, the largest of the SOF service components, is astute in addressing complex challenges and navigating the land domain and "human terrain" through the *indigenous approach* of by, with, and through populations.[23] In early 2023, Lt. Gen. Jonathan Braga, commander of the U.S. Army Special Operations Command, shared his vision of a "threat informed, strategically driven, operationally focused, and tactically prepared" ARSOF.[24] His strategy also asserted that ARSOF's strategic value is that it is the enabler of the joint force across the competition continuum. SOF services leverage a variety of domains and hardware, such as aircraft and vessels, as their platform. The platform of the U.S. Army Special Operations Command is its networks of people—through units of action on the ground conducting irregular warfare, forward-postured in complex environments. Furthermore, because ARSOF works with partners at the earliest stages of competition, its access to key leaders and austere parts of a country provides unique insight into events unfolding within an area and how U.S. competitors could be influencing those events to achieve effects.[25] This by no means suggests that ARSOF should be the only SOF entity employing GHE initiatives to achieve effects; achieving strategic objectives requires a collaborative whole-of-government approach. However, ARSOF's inherent capabilities, and roles and responsibilities, best position them to lead the way, tactically and operationally, for the joint force on the application of irregular medical support methods across the spectrum of competition, crisis, and conflict to achieve various strategic pursuits.

ARSOF serve as the lead for most SOF core activities.[26] SF operational detachment alphas (Green Berets), civil affairs teams, and multifunctional teams are the tactical elements best equipped to conduct irregular warfare through engagements across the competition continuum. One of ARSOF's core activities, nested within irregular warfare, is unconventional warfare, or support to movements for resisting or countering adversarial activities or advances.[27] Fundamental medical training has proven effective in the current conflict in Ukraine against Russian adversaries and reinforces the need for SC at all echelons through a comprehensive defense strategy with a whole-of-society response.[28] Commanders apply unconventional warfare before crisis through small footprints and persistent engagements to prevent fires and to prepare the environment if fires ignite.

ARSOF's primary roles and missions also include support to civil-military operations and stability operations.[29] In March 2023, the DOD released a joint statement for a ten-year plan for the U.S. strategy to prevent conflict and promote stability.[30] To achieve this policy, the DOD, including SOF, will collaboratively support civil-military engagement, partner training and equipping, defense institutional capacity building, and the professionalization of security forces.[31] ARSOF civil affairs tactical assets are specially equipped in civil-military operations and stabilization and are most qualified to fulfill this policy for the future operational environment. ARSOF civil affairs have applied medicine and health through civil engagements to identify and mitigate causes of instability. GHE activities include but are not limited to conducting engagements to train and equip local communities to prepare the environment for anticipated conflict (see vignette 1) or leveraging health to partner with local governments by improving veterinary services to counter extremist organizations (see vignette 2). Although ARSOF civil affairs are experts in interacting and solving problems by, with, and through the civil component of the operational environment, their relationship building is more expansive. Civil affairs are master facilitators in coordinating interorganizational approaches, including but not limited to connecting the Department of State, U.S. Agency for International Development, and SOF and conventional assets. ARSOF civil affairs brings inherent capabilities and fosters collaboration with diverse stakeholders, making them essential to the successful implementation and execution of GHE for the joint force. ARSOF is authorized and equipped to conduct certain activities that conventional forces and some other SOF components are not sanctioned to do, like unconventional warfare and civil-military operations.[32] These means and ways support both national and military strategies with effectiveness that is unmatched by other assets across the DOD and the U.S. government.

Managing Risk for Maximizing Effects

In his book *Risk: A User's Guide*, Gen. (Ret.) Stanley McChrystal, former commander of Joint Special Operations Command, introduced the concept of

Nontraditional Medical Support:
The Application of Global Health Engagement Initiatives to Achieve Optimal Effects

Vignette 1, Europe: Increasing and Enhancing Interoperability and Relationships to Posture for Conflict

In 2013, elements from the 10th Special Forces Group (Airborne) in Special Operations Command Europe began intentionally focusing on medical training with their Lithuanian special operations forces partners. What began as simple tactical combat casualty care training evolved into sophisticated and realistic scenarios in which U.S. and Lithuanian operators seamlessly and effectively managed multitrauma patients through Role 1 to surgical care. This biannual event significantly improved interoperability and comradery between U.S. and Lithuanian forces so that the medical training and relationship were coveted by other NATO allies and eventually opened doors to previously denied training opportunities. When Russia invaded Ukraine in 2022, some Lithuanian forces that habitually trained with U.S. special operations forces immediately assisted Ukraine with training and direct medical support, providing a capability to enhance survivability.

Vignette 2, Africa: Countering Insurgency by Leveraging Interorganizational Assets and Applying Nontraditional Approaches

In 2011, Special Operations Command Africa, seeking to combat the spread of violent extremist organizations, utilized a 91st Civil Affairs Battalion veterinary corps officer to identify opportunities to target vulnerable populations where these organizations operated. As a result, the veterinarian partnered with a local Tuareg veterinarian in Mali to identify and manage surra, a parasitic disease of economic importance in the camel herds in the border regions of Algeria, Niger, and Mauritania. The Mauritanian government, with the Civil Military Support Element, sponsored the veterinarian to continue work on surra to help the Mauritanian government increase the robustness of the local veterinary infrastructure, connecting nomadic pastoralist herders to the central government and helping to train the host-nation military to conduct civil-military operations.

On the heels of this success, U.S. Army Special Operations Command shifted other Army special operations forces units to support engagements in Africa. Elements of the 10th Special Forces Group (Airborne) wisely altered their normal training pathway and sent their Special Forces medical sergeants to rotate through a local veterinary teaching hospital. Additionally, in 2013, other Special Forces groups retooled their medical proficiency training rotation to support the 10th Special Forces Group's new focus in Africa. Many medical sergeants rotated through livestock management and husbandry training at subordinate unit barns and later used their veterinary skills on the African continent to support various missions. Included in this training was a module on camel husbandry to assist the teams working with central African nations who use camels on patrols (e.g., Chad Special Forces/Border Patrol).

a "risk immune system."[33] The concept describes an organization's ability to identify, remember, and ward off threats, analogous to the body's immune system. Similarly, a healthy immune system can defend the body from internal and external threats, while a malfunctioning immune system is detrimental to the health of the body. Strengthening the risk immune system can mean the difference between victory and defeat, or life and death. McChrystal also argued that although we may not be able to control the threat or the changing environment, far more lies within our control than outside of it.[34] Appropriately identifying threats and reducing vulnerabilities is essential in providing an accurate understanding of risk.

The UK Ministry of Defence's *Medical Operating Concept* articulates and conceptualizes future environmental challenges and proposes ways to optimize medical capability to achieve effects and reduce risk.[35] The document explicitly states,

> There are risks and challenges that must be understood and addressed, which will require difficult decisions and resource commitments to be made. … Commanders must understand the medical risk that is associated with every operational activity … The risk appetite of senior leaders to sustain casualties must be clearly articulated.[36]

In other words, commanders must understand the internal and external threats and vulnerabilities to understand the risk entirely. Once that risk is identified and articulated, decisions to mitigate or accept that risk must occur. Ultimately, it starts with us.

ARSOF capabilities and correlating activities provide commanders with flexible response options with focused precision regardless of operational environments. However, to reduce U.S. risk to forces and operations, future success in battle requires transformation from a unilateral, U.S.-centric support framework infrastructure to a hybrid model, including health service support. This hybrid health service support model utilizes carefully assessed and coordinated partner-nation capability with the capacity to support and ultimately mitigate the loss of life in a future conflict. The hybrid model also emphasizes the indigenous approach through reliance on U.S. partners' capacity and capability by prepositioning partner-nation supplies and using ARSOF-trained or -validated partner-nation medical providers. This strategy encourages a collaborative approach to deter threats and collectively posture our partner nations and the United States to defend or resist threats cooperatively, ultimately reducing unilateral risk by sharing the risk burden.

The DOD, more specifically U.S. Special Operations Command, must man, train, and equip SOF to employ GHE capability to support theater objectives. As such, there is a need to develop doctrine and training.[37] Consulting company Deloitte emphasized similar shortfalls and gaps within GHE strategy and implementation within DOD and in conjunction with interagency and international partners.[38] To holistically increase the preparedness and resilience of the target nation or a supported resistance to maximize deterrence, both capability and capacity must be increased for three primary supporting efforts. The first is that of the intervening third party, such as the U.S. government or alliance. Once this intervening entity is adequately trained and capable of training, advising, and assisting, it can then correctly prepare its partner resistance force. Together with and through a properly trained partner force, it can prepare the civilian counterparts, the third and most important effort. This will include all civilian infrastructure, including the host nation's security services, fire and rescue, emergency medical services, and hospitals. A secondary goal is to efficiently integrate volunteers, nongovernmental organizations, and private contractors to fill gaps that may not be possible for any of the three primary efforts to accomplish (see the figure). Although ARSOF has notable capability to execute and are fortuitously implementing GHE initiatives, explicit and organized guidance from U.S. Special Operations Command to the service components and TSOCs is necessary to suitably prime capabilities for the future operational environment.

DOD has also grown accustomed to antiquated approaches, likely because of their ease and acceptance. For instance, the military continues to conduct medical, veterinary, and dental civil action programs. Although these initiatives may be beneficial toward achieving short-term effects such as access and placement, they are limited in demonstrating the achievement of sustainable change and benefit to U.S. forces in future operational environments.[39] Aligned and synchronized engagements need focus and direction to reach strategic ends deliberately. The likely resource-constrained future demands proven medical

(Figure by Paul Loos)

Figure. Irregular Medical Support Stakeholder Involvement

concepts to increase survivability, mitigate risk, and enable combat power.[40] Therefore, assessing, monitoring, and evaluating engagements must be at the forefront to capture gaps and measures of effectiveness for initiatives. Likewise, building partner capacity correctly demands multilevel, empirically supported, and synchronized approaches to achieve effective and enduring change.[41]

TSOC and SOF planners also focus primarily on critical leader engagements and combined SOF exercises and training for partner SOF development—often unaware of the other available SC and assistance tools, authorities, and processes.[42] Conversely, embassy SC offices, which balance a country's diverse SC programs and priorities, may lack expertise in SOF or medical subject matter. SOF, medical, and development principles are often not integrated into theater SC planning.[43] The DOD is unlikely to maximize achieving objectives, such as multilevel and sustainable capacity

building, because it neglects to recognize and employ critical development planning.[44]

The future of GHE initiatives among ARSOF directly requires a shift in thinking at the TSOC level. TSOCs must embrace their role in what Rauen coined an "operational integrator."[45] The operational integrator connects, consults, and facilitates communication from tactical to strategic on how the tactical leader affects the strategic outcome and understands how the strategic-level plans and policies affect the tactical leader to achieve GHE initiative objectives. Operational integrators must be well versed in irregular warfare, SOF core activities, national and military strategy, authorities for GHE activities, operations, mission analysis, and planning. They must also decipher and connect to the interorganizational network to joint, intergovernmental, interagency, multinational, and commercial stakeholders. However, this role is not exclusive to TSOCs. Representation at the combatant command level (geographic and functional—e.g., U.S. Indo-Pacific Command and U.S. Special Operations Command, respectively), service component command (e.g., U.S. Army Special Operations Command and U.S. Air Force Special Operations Command), and their respective subordinate commands would best "integrate" plans into operations. A medical operational integrator should be a planner with fluency in systems, global health, foreign policy, and the qualifications like Will Chu and his team proposed for health security advisors.[46] TSOCs provide the best vantage point to identify, synchronize, and deconflict the numerous GHE activities and efforts occurring in respective areas of responsibility to achieve effects and support special operations objectives.

The ubiquity in demand for healthcare globally means that effective GHE initiatives involve several stakeholders. Unfortunately, the historical trademarks of GHE are well-intentioned activities that lack coherence and unity of effort.[47] The U.S. government complicates communication and coordination with the necessary actors who often have the appropriate authorities, resources, or policy backing to support the initiatives. Conversely, fostering effective communication can lead to reducing redundancies, improving mission efficiencies and effectiveness, and strengthening resilience of partnerships and the "risk immune system."

Conclusion

In March 2023, the assistant secretary of defense for special operations and low-intensity conflict published a concept paper on nonstandard medical support. The report identifies the lack of an existing framework for medical support to operations in contested or nonpermissive environments.[48] Proposed solutions, executed through GHE activities, consist of three pillars: shaping the operational environment, building ally and partner medical capability, and enhancing U.S. operational flexibility through increasing nontraditional medical care, nonstandard evacuation, and nonstandard equipment and supplies. The author states that U.S. Special Operations Command is best suited to serve as the proponent for building a nonstandard medical support construct for the DOD. Similarly, ARSOF is ideally suited to lead the joint force in executing the three lines of effort. ARSOF's unique ability to understand and influence the human domain and establish and maintain enduring partnerships sets it apart as a crucial asset for the future global security environment. Failing to engage (or compete) in this space creates accessible opportunities for our strongest competitor to engage potential partners with limited competition or at a low cost. We are making strong progress in competing with a legislative proposal, that if approved, would allow DOD to offer nonlethal medical training and equipment to allied and partner civilians.[49] Gen. Mark A. Milley, former chairman of the Joint Chiefs of Staff, emphasized in the *Joint Concept for Competing*, in the absence of contending, the U.S. joint force will "lose without fighting."[50] Instead, the United States must "tilt the competitive balance" in its favor toward respective strengths. To contend against a sophisticated and critical competitor, the DOD must both draw on strengths and commit and transform now. Our approach must change from U.S.-centric to partner-centric for this transformation to work. Policy and decision-makers, commanders, and planners must also radically shift their mindsets from exclusively preparedness and response to an emphasis on prevention, and they must shift from focusing on materiel platforms to people. The DOD, specifically ARSOF, must remain confident in its abilities and recognize that success will require allies' and partners' expertise and synchronization of interorganizational stakeholders. Lastly, achieving effectively integrated deterrence requires admittance, acceptance, and the desire to change for the

better—which will not be easy. Nonetheless, ARSOF can lead the way for the joint force to serve as a global leader and preferred partner for GHE activities and, with joint, interagency, and allies and partners, prepare for and overcome the challenges that lie ahead. ■

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A twelve-man Special Forces team from the U.S. Army Special Operation Command's 5th Special Forces Group (Airborne) travels on horseback to link up with insurgent Afghan forces opposing the brutal Taliban regime in Afghanistan. Starting 19 October 2001, the team's forty-nine-day campaign, supported by the other services and interagency departments, successfully helped organize and assist indigenous Afghan forces in the overthrow of the Taliban government. At the time, Afghanistan was providing a safe haven to the al-Qaida terrorist organization and its leader Osama bin Laden, the mastermind of the 9/11 attacks against the United States. (Photo courtesy of the U.S. Army)

The Strategic Imperative

USASOC's Role in Advancing Civil Resistance Movements during Irregular Warfare

Maj. Daniel Eerhart, U.S. Army

I hold it that a little rebellion now and then is a good thing, and as necessary in the political world as storms in the physical.

—Thomas Jefferson

As the Army transitions toward prioritizing large-scale combat operations and multidomain operations (MDO), the threshold for entering conventional military conflict rises and calls into question the efficacy of conventional military approaches, particularly in addressing nonstate actors and asymmetric threats. U.S. Army Special Operations Command (USASOC) has emerged as the Army's most pivotal actor in countering complex threats in a dynamic operational environment.

By leveraging USASOC's unique skills and capabilities, the Army can impose costs upon adversaries below the threshold of armed conflict. However, as USASOC trains to remain proficient in its core activities, a capability gap exists within the unconventional warfare enterprise. While Special Forces soldiers are experts in advising guerilla military forces to conduct armed resistance movements, the persistent rise in civil resistance movements to challenge oppressive authority is a domain USASOC cannot ignore. This article advocates for USASOC to integrate a mission to advise civil resistance movements as part of the unconventional warfare strategy.

As part of the irregular warfare mission set, unconventional warfare requires high flexibility and ingenuity to achieve mission success. Following the Arab Spring uprisings in the early 2010s, the ubiquitous nature of technology has lowered the bar for entry to challenge authoritarian regimes. Resistance movements no longer require guerilla militias to operate as the decisive force for overthrowing regimes. On the contrary, according to academic researchers, civil resistance movements are four times more effective than armed resistance movements and create a more sustainable replacement government.[1] This article first contextualizes the problem by demonstrating the capability gap. Then, it explains civil resistance movements and crucial operating concepts such as the mechanisms for change, civil resistance planning structures, tactics, and the Spectrum of Allies. Finally, it identifies the organizations best suited for developing expertise in civil

resistance movements, thereby providing a framework to assume the mission set in a manner that supports and enables unconventional warfare.

Contextualizing the Problem

USASOC has two main challenges to overcome. First, it has trained elite soldiers who are experts in a mission with less than an 8 percent chance of success, and this chance is decreasing yearly.[2] Second, it has no units or experts specializing in civil resistance movements, even though such movements are four times more effective in bringing about regime change.[3]

Special Forces soldiers receive training to help guerilla forces overthrow established governments tactically.[4] The Special Forces Qualification Course includes a culminating exercise called "Robin Sage," in which candidates must evaluate the combat effectiveness of guerilla forces, train them in unconventional warfare doctrine and techniques, and demonstrate their expertise.[5] This model has been successful in the past, particularly in 2001, when Special Forces soldiers worked with the Afghan Northern Alliance to overthrow the Taliban.[6] However, such successful operations are rare. Only 8 percent of attempted armed resistance movements have been successful as of 2019, and even when they succeed, the new regimes often face continued violence, civil war, and challenges to their authority.[7]

Civil resistance movements differ from armed resistance movements by prioritizing nonviolent strategies and weaponizing the information environment to achieve their goals.[8] They employ various tactics such as protests, demonstrations, strikes, and noncooperation to build information networks, create viral content, and increase the reach of their message.[9] The Arab Spring protests are

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examples of civil resistance that began when a fruit stand vendor in Tunisia self-immolated and inspired mobilized demonstrations throughout the Arab world.[10] These protests resulted in governmental overthrow in Tunisia, Egypt, Yemen, and Libya, and led to significant political changes in seventeen countries.[11] However, it is crucial to note that this movement was not uncontrolled chaos but a version of unconventional warfare waged by ordinary citizens who weaponized the information environment to inspire the masses. Despite the considerable doctrine covering tactical operations and training during unconventional warfare, no manuals describe military support to civil resistance movements through a partner force.

Furthermore, no organization within USASOC specializes in developing expertise in civil resistance movements and training to support foreign populations in their efforts. Since the Arab Spring, citizens have noticed that civil resistance allows them to oppose their oppressive governments and mobilize publicly. Protests have even occurred in countries participating in the great power competition like Russia, Iran, and China.[12] In February 2024, even North Koreans working in China staged protests.[13]

As the U.S. military seeks to achieve an information advantage and effectively coordinate MDO, civil resistance movements remain a capability gap. The military expertise in unconventional warfare is valuable. However, as occurrences of civil resistance increase, the ability to compete in a global battlefield dominated by information-centric resistance becomes more important. The Army must adapt its approach to understand civil resistance and commit organizations to harness its power. USASOC must invest in developing expertise in all aspects of irregular warfare, and civil resistance movements are the most significant area for investment.

Civil Resistance Movements Explained

On 25 February 1986, the former president of the Philippines, Ferdinand Marcos, fled the country due to peaceful protests demanding his resignation.[14] Despite Marcos leading his government to perpetrate numerous human rights violations such as torture and extrajudicial killings, it was the citizens, including women, children, and the elderly, who brought an end to his rule.[15] The People Power Revolution of 1986 in the Philippines is one of the case studies examined in

Harvard University professor Erica Chenoweth's 2012 book titled *Why Civil Resistance Works*.[16]

Chenoweth studied 323 mass actions worldwide between 1900 and 2006 in her book, analyzing 160 variables related to success criteria, participant categories, and state capacity.[17] Her dataset included every known resistance movement with at least one thousand participants.[18] Her research produced an astounding result: nonviolent civil resistance was twice as likely to succeed in producing change as violent resistance movements, even in situations dealing with violent authoritarian regimes.[19] By 2019, civil resistance movements grew to four times more likely to succeed than armed resistance movements.[20]

Chenoweth's research further indicates that mobilizing 3.5 percent of a population is a threshold sufficient to overthrow a government regime.[21] Despite USASOC's expertise in waging unconventional warfare and mobilizing insurgencies, there has never been an armed resistance movement that surpassed the 3.5 percent rule.[22] The lack of armed resistance movements reaching the 3.5 percent threshold indicates that while Army Special Forces are proficient in their assigned tasks at the tactical level, USASOC must make adjustments to achieve continued mission success at the operational and strategic levels.

Attempting to fight a violent oppressor through coordinated civil resistance may seem counterintuitive. However, as Gene Sharp stated in his influential book *From Dictator to Democracy*, "By placing confidence in violent means, one has chosen the very type of struggle with which oppressors nearly always have superiority."[23] Not only do the oppressive regimes have the tactical advantage, but armed resistance movements also have a greater reliance on secrecy, which is increasingly becoming difficult to achieve with the ubiquity of technology.[24] While illegal underground radio stations, publications, and social media content will benefit from a degree of secrecy, integrating tactics that rely primarily upon openness will reduce fear and generate an advantage for authentic content generation.

Mechanisms for Change

Sharp's book outlines four mechanisms by which civil resistance movements can produce change.[25] These mechanisms are conversion, accommodation, nonviolent coercion, and disintegration.[26]

In an act of nonviolent civil disobedience in India, Mahatma Gandhi led a twenty-four-day march that lasted from 12 March 1930 to 6 April 1930. Known as the Salt March, it served as a direct-action campaign of tax resistance and nonviolent protest against the British salt monopoly. (Photo courtesy of Wikimedia Commons)

Conversion occurs when nonviolent resisters subjected to suffering and repression emotionally move members of the oppressive regime.[27] In 1989, during the fall of the Berlin Wall, border guards became emotionally moved by the protestors and hesitated to follow orders.[28] Eventually, the guards allowed people to cross, leading to the wall's collapse.[29]

Accommodation occurs when the issues brought about by resistance are limited, and the perception of giving in to the demands is a better solution than continuing to deal with resisters.[30] Mahatma Gandhi's 1930 salt march is an example of accommodation. Gandhi led a march to the Arabian Sea to collect salt, an essential human mineral, in protest of salt taxation.[31] The act did not result in regime change but led to government concessions negotiated with Gandhi and increased support for the Indian independence movement.[32]

Nonviolent coercion occurs when mass noncooperation and defiance change the social and political situations so that the oppressive government can no longer control the economic, social, and political processes.[33] The 2007 Saffron Revolution in Myanmar was an example of nonviolent coercion when Buddhist monks led a movement of public defiance. While the movement didn't achieve all its goals, there was a reduction in the military junta's hold on power, and the government implemented reforms.[34]

Disintegration occurs when noncooperation becomes so severe that the oppressor's bureaucracy refuses to obey.[35] Military and police refuse orders, and assistance from former supporters fades away. The Tunisian Jasmine Revolution, which dissolved the Tunisian government and ousted President Zine al-Abidine Ben Ali from his twenty-three-year rule, exemplifies disintegration.[36] Following the self-immolation of Mohamed Bouazizi, a Tunisian fruit stand vendor, protests erupted throughout the country, resulting in a harsh government response.[37] The government

was fully dissolved by 14 January 2011, and elections occurred within six months.[38]

Civil Resistance Planning

Army doctrine currently outlines USASOC's efforts during unconventional warfare through eight phases.[39] The phases start with the steady state status quo of Phase 0 and escalate through the entire unconventional warfare operation until Phase 7, where unconventional warfare forces revert to national control and shift to regular forces.[40] Civil resistance movements plan through a concept called the "Movement Action Plan (MAP)" developed by Bill Moyer in 1987.[41] The MAP has eight stages for the movement to progress through:

1. Stage one (normal times). In normal times, there may be politically quiet periods where citizens feel frustrated with the systemic oppressor, but there is no organized movement to confront it.[42] Even though the conditions may be against the best interests of society, they are not in the public spotlight or on society's agenda.[43]

2. Stage two (prove the failure of institutions). Civil resistance movements inherently must elicit a strong emotional response from the public. During stage two, the movement seeks to expose the government's hypocrisy and increase outrage at violations of public trust.[44]

3. Stage three (ripening conditions). Discontent among victims and allies, along with historical developments, set the stage for civil resistance movements. During stage three, the movement matures, creating conditions for significant future events.[45]

4. Stage four (social movement take-off). A highly publicized and shocking trigger event brings a previously unrecognized social problem to the forefront of the public spotlight. During stage four, the civil resistance movement begins to participate in dramatic civil disobedience, creating opportunities for various communities to repeat their public displays of opposition.[46]

5. Stage five (identity crisis of powerlessness). After enduring long periods of effort and making many sacrifices, members of a civil resistance movement may start to lose faith in the success of their cause. The perception that those in power hold too much influence can create a feeling of futility. This stage may require focusing on past victories and gathering new members to replenish the movement's energy.[47]

6. Stage six (majority public support). The civil resistance movement needs to gain the support of neutral individuals and expand its base by winning a larger majority of the population to actively support the cause. The sixth stage requires a long and gradual process of utilizing information to influence mainstream and nonpolitical actors to agree with the movement's position.[48]

7. Stage seven (success). Once the new social consensus has shifted against those in power, the success of a movement can be indicated in three ways. First, a dramatic shutdown can occur when a spark among the population suddenly creates an overwhelming coercive force that leads to change.[49] Second, a quiet shutdown can occur when the governing regime makes a face-saving effort to proclaim victory while subtly changing policies.[50] And third, attrition occurs when success is achieved seemingly invisibly through a gradual political process.[51]

8. Stage eight (continuing the struggle). After achieving its goals, the civil resistance movement should continue working toward new demands and building social consensus on various issues.[52]

A unique aspect of the civil resistance planning process is that it accounts for the likelihood of disillusionment. It forces organizers to recognize that, at some point, the movement will not achieve its stated goals and must reorganize and try again. Special operations soldiers assessed for their ability to deal with ambiguity will be able to handle the civil resistance movement planning process and rapidly guide an indigenous force through the steps to overcome adversity. Once the movement has reached the sixth stage and seeks to gain the majority public support, special operations soldiers with expertise in performing influence operations can assist in building the population that opposes the oppressive government.

Civil Resistance Tactics

Effective nonviolent resistance movements integrate a variety of disruptive tactics that rarely find themselves as part of military discourse. However, techniques such as leafleting, banner hanging, hashtag hijacking, and media-jacking might find themselves at home within the John F. Kennedy Special Warfare Center and School's Psychological Operations (PSYOP) Training pipeline.

Just as it would be irrational to assume soldiers with no training or experience could lead a Special Forces

Over one million protesters gather on 9 February 2011 at Tahrir Square in Cairo demanding the removal of Egyptian President Hosni Mubarak and his regime. The protest began 25 January 2011 and focused on legal and political issues including police brutality, civil liberty, freedom of speech, inflation, and low wages. On 11 February 2011, Egypt's vice president announced Mubarak's resignation, with power transferring to the Supreme Council of the Armed Forces. (Photo by Jonathan Rashad, Flickr)

operation advising a tactical guerilla movement, it would be imprudent to assume soldiers can support civil resistance movements without developing the expertise. While civil resistance movements incorporate a wide variety of tactics and military planning, five civil resistance tactics follow that are relevant and easy to immediately integrate into special operations training exercises while building the capability.

App flooding. Appropriation of a politically neutral phone application to the civil resistance by overwhelming it with campaign messages.[53] In 2020, Russian citizens, amid COVID-19 lockdowns, implemented this tactic using the Yandex.Navigator app.[54] Protestors manually reported their locations on the app to show severe congestion in areas under strict lockdown.[55] The protest disrupted police situational awareness and forced the concentration of resources toward content removal.[56]

Clandestine leafleting. The delivery of messages without putting the individual at risk through alternative methods such as floating lanterns.[57] In October 2011, protestors in Damascus, Syria, changed the color of the water in public fountains to blood red and later unleashed hundreds of ping pong balls with messages written on them through the streets.[58]

Hashtag hijack. Using someone else's hashtag to rapidly spread the resistance movement's message to a larger audience.[59] In 2012, protestors in the Maldives coopted the government hashtag "#SunnySideofLife" to disseminate images of the government arresting protestors and using tear gas.[60]

Currency hacking. Stamping resistance messages on local currency, turning money into widely distributed leaflets.[61] In 2011, a Palestinian resistance movement began writing "Free Palestine" on shekel paper notes, causing the Central Bank of Israel to make a formal statement that marked notes would not be accepted.[62] The Central Bank's public statement further increased the reach of the resistance movement to individuals who had yet to see a marked note.[63]

Mass street action. A large public protest in an area likely to disrupt public activities.[64] During the Arab Spring, millions of Egyptians demonstrated mass street action when they occupied Tahrir Square and confronted security forces, resulting in eighteen bloody days of protest.[65]

All civil resistance tactics are part of efforts to pursue the decisive point of public support of 3.5 percent. A large public protest in which a government force uses tear gas and violence to quell public action is a resounding success from the perspective of a civil resistance movement's influence efforts. Violent suppression draws in media attention, viral social media content, and a public consensus that the authoritarian regime has gone too far. The goal of each nonviolent action is to bait the ruling government to respond and overreact, forcing them to invest time and resources while simultaneously functioning as a loudspeaker for the movement's narratives. Large-scale military training exercises such as Robin Sage and combat training center rotations provide resources and opportunities to practice advising civil resistance while coordinating with the tactical elements that engage in armed resistance. A tool called the Spectrum of Allies should be integrated into the civil resistance advisor's vernacular to ensure they understand the scope and progress of their role.

Understanding the Spectrum of Allies

The Spectrum of Allies tool was developed by activist George Lakey to strategically align strategies among different social groups based on their level of support for the cause.[66] The tool aims to categorize target audiences into one of five categories:

1. Active support. These individuals are taking active steps to support the resistance movement, such as participating in protests, handing out leaflets, or operating an underground radio station.[67]

2. Passive support. These individuals ideologically align with the resistance movement but have yet to cross the threshold into active participation.[68] The resistance movement's goal should be to lower the threshold for participation and influence this group into active support.

3. Neutral. This group supports neither the resistance movement nor the oppressive regime.[69] They either need to be more informed or are unaffected by the status quo. The goal of the resistance movement is to

move this group into passive support by exposing them to the brutality of the oppressive regime. Exposing these individuals to social media content, such as the government abuse of civilians, is a priority for influence.

4. Passive opposition. These individuals ideologically support the oppressive government but do not take active steps to demonstrate that support.[70] The civil resistance movement's goal for these individuals is to force them to question their ideological loyalty. Civil resisters can disrupt their perceptions of support by exposing them to instances where the government oppressed its loyalists.

5. Active opposition. These individuals take active steps to support the government regime and are frequently government members, military, or police.[71] The civil resistance movement's goal for these individuals is to generate an emotional response that creates hesitation in their actions. One example is showing active opposition members their children or family who are in protest crowds.

While utilizing the tool, the primary goal is to tailor narratives, messages, and tactics so that individuals move one category group closer to actively supporting the nonviolent resistance group. The model indicates that even for security forces strongly ideologically aligned with the authoritarian government, the goal is to integrate tactics that move them into the passive resistance category and reinforce an unwillingness to enforce government policies. An example of a transition between active and passive opposition occurred in Serbia during the Bulldozer Revolution to overthrow Slobodan Milošević. Police officers were ordered to shoot into the crowd of protestors but refused.[72] Later, one officer indicated that he had refused because he knew his kids were among the protestors.[73] The nonviolent resistance movement did not need to convince the police officers to join their protests actively; they needed the police officers to transition to a passive state and refuse to persecute their orders actively. Terrorist organizations have placed this principle into practice repeatedly by placing their operations inside hospitals, schools, and religious structures, forcing military forces from an active state into a passive one.

Building the Expertise

As USASOC eliminates one of its PSYOP group headquarters and transitions the PSYOP and civil

Several hundred thousand protesters chanting "*Gotov je!*" [He's finished!] gather on 5 October 2000 at the House of the Federal Assembly of the Federal Republic of Yugoslavia in Belgrade as the building burns during what was known as the Overthrow of Slobodan Milošević, or the Bulldozer Revolution. Milošević's government fell the same day. (Photo courtesy of Wikimedia Commons)

affairs battalions under the Special Forces groups, a unified mission set must accompany them.[74] The primary mission of Army Special Forces groups is to lead and train unconventional warfare forces in an occupied nation.[75] Accordingly, the civil affairs and PSYOP battalions must adopt a nested mission to accompany its new position in the table of organization and equipment. A mission that outlines leading and training civil resistance movements in support of unconventional warfare operations is appropriately nested and utilizes the specialized skills within the organization.

The civil affairs branch has civil reconnaissance experts who specialize in assessing, engaging, and influencing civil components and are well-suited to engage with civil resistance movements.[76] Civil affairs medical sergeants are likewise prepared to operate in an irregular warfare environment and generate opportunities to establish rapport and reinforce relationships among nonviolent resisters. While Special Forces soldiers are responsible for developing relationships with guerilla forces, the civil affairs elements within the Special Forces groups should perform simultaneous and

parallel operations to embed with the nonviolent resistance movement. Civil affairs soldiers routinely train to bridge the civil-military divide and build rapport, a skill that will enable linking up and coordinating resistance.

PSYOP soldiers have the expertise and resources required to produce resistance products and enable the execution of nonviolent tactics. Many nonviolent resistance tactics require producing and disseminating leaflets, movies, audio, or internet content, and PSYOP soldiers are well-suited to execute those tasks. Their ability to perform expert-level target audience analysis and ensure the products reflect local customs make them well-suited for support operations. Some civil resistance tactics require advanced technical knowledge that PSYOP soldiers have integrated into their training; they only need to develop the ability to apply this knowledge in a civil resistance context. The civil resistance mission set also enables PSYOP soldiers to utilize the indirect-MISO (military information support operations) series construct, speeding up the bureaucratic processes for mission and product approval.[77] As Army Reserve and active duty PSYOP forces start to train under the

newly established psychological warfare school, there is an opportunity to contextualize the training within a civil resistance framework and build out techniques for mission support.[78] While adding a mission set at a time when the Department of Defense inspector general has determined that the Army does not have enough PSYOP personnel to meet the Department of Defense's growing demand might seem counterintuitive, it is a move for greater efficiency.[79] Developing relationships with civil resistance members creates opportunities to establish mechanisms for product dissemination and methods for determining measures of effectiveness. Rather than linear influence operations, PSYOP soldiers can develop influence networks reinforcing themes and narratives in relevant MISO programs.

Conclusion

As USASOC works to establish itself as a vital component of MDO, it must close the capability gap within civil resistance movements. The USASOC Central Idea and Contributions to MDO construct describes expanding the global special operations forces network and participating in irregular warfare as assets for penetrating and disintegrating great power standoff systems.[80] If USASOC hopes to expand strategic options, it must close capability gaps and expand the capability of its force to integrate civil resistance tactics and progress foreign audiences toward mechanisms for change. While incorporating the Spectrum of Allies helps visualize

the cognitive domain, the Army must go further and formalize the doctrinal change within the DOTMLPF (doctrine, organization, training, materiel, leadership and education, personnel, and facilities) construct.

By understanding the scope and effectiveness of civil resistance movements, USASOC can appropriately prioritize their execution while integrating them as part of mission planning. Developing special operations soldiers with a complete understanding of the mechanisms for change, civil resistance planning process, civil resistance tactics, and the Spectrum of Allies will enable unconventional warfare and irregular warfare planners with the tools necessary for improving the likelihood of mission success. Formalizing the doctrinal mission of civil resistance advisory and support as civil affairs and PSYOP battalions transfer under the Special Forces groups is the most effective method of developing a nested, mutually supportive mission set while taking full advantage of specialized skills. USASOC lives by the special operations forces imperative of understanding the operational environment and, therefore, must recognize that the information-centric interconnected world creates opportunities for cascading information flows that disrupt governments. It is incumbent upon the special operations enterprise to seize the opportunity and become experts in civil resistance movements rather than observing on the sidelines during ordinary citizens' attempts to liberate themselves from oppression. ∎

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Operation Anaconda Virtual Staff Ride

The Army University Press's Operation Anaconda virtual staff ride (VSR) examines the U.S.-led coalition attack into the Shahi Kowt Valley of Afghanistan in 2002. The study encompasses irregular warfare in the employment of special operations forces, multinational operations with Afghan forces, conventional forces, and joint operations.

The Operation Anaconda VSR is a five-to-six-hour study that follows standard staff ride methodology, combining 3D terrain, maps, and historical research into a training event conducted in a classroom environment.

Shahi Kowt Valley

Takur Ghar

To learn more about the Army University Press staff ride program, visit https://www.armyupress.army.mil/Staff-Rides/.

The 2014 Umbrella Movement emerged in Hong Kong as a tool for passive resistance and protest against the Standing Committee of the National People's Congress from the People's Republic of China, which mandated a prescreened list of candidates for the 2017 election of Hong Kong's chief executive. The political movement involved tens of thousands of protestors who then became the targets of Hong Kong police harassment and arrest. The movement adopted the umbrella as a symbol of passive resistance because umbrellas were used by protestors as shields against the pepper spray widely used by the police in an attempt to break up protests. (Photo by Pasu Au Yeung, Flickr)

Civil Resistance and Irregular Warfare Education

Col. Brian Petit, U.S. Army, Retired

To a soldier, the practice of nonviolent resistance might appear disconnected from the study of armed, violent warfare. Surprisingly, the opposite is true. An education on power, the use of force, and tactics achieving strategy is incomplete without an understanding of nonviolent means to undermine, coerce, or contest a more powerful foe. While civil resistance is not needed in all military curricula, its inclusion in an irregular warfare education is essential.

This article reasons *why* and recommends *how* to study nonviolent resistance for irregular warfare practitioners. First, civil resistance is defined and located within irregular warfare. Next, four reasons are given why nonviolent resistance deserves an enduring place in military education and irregular warfare programs. Finally, this article recommends what that education might look like for the military professional.

What Is Civil Resistance?

Civil resistance (used synonymously here with nonviolent resistance) is a "form of collective action that seeks to affect the social, political, or economic status quo without using violence or the threat of violence against people to do so."[1] Civil resistance is a form of confrontation, a mode of conflict, and, when planned properly, a campaign waged by organizations with leadership, training, discipline, and resiliency. Like armed warfare, civil resistance is underpinned by a developed philosophy, a doctrinal framework, and a broad set of tactics that aim to achieve strategy.[2] Civil resistance is a form of subversion.[3]

Civil resistance is undertaken by collective action, absent the use of violence, that confronts, challenges, and confounds an adversary, thereby complicating standard response options. Tactics include boycotts, noncooperation, marches, strikes, sit-ins, emplacement of symbols, protests, hunger strikes, satire, and other subversive acts.[4] The immediate goal is to undermine power structures and create dilemmas for governments, occupiers, or other targets. The long-term goal is to arrange these ways and means to achieve strategic ends.

Who Are the Noted Practitioners?

Well-known theorists and practitioners include Russian author Leo Tolstoy; Indian lawyer Mohandas K. Ghandi; Americans Henry David Thoreau, Gene Sharp, Rosa Parks, and Martin Luther King Jr.; Irish hunger striker Bobby Sands; Serbian activist Srdja Popovic; Hong Kong student Joseph Wong; and Russian punk rock band Pussy Riot.[5] These canonical resistors have no common heritage, origin story, or pedigree. They do, however, share a set of practices that have toppled governments and defeated oppressors. On a lower register, such campaigns have won concessions, deterred actions, and exposed abhorrent behaviors to wider audiences, amplifying a narrative and mobilizing minds to act for a cause.

Theorist Gene Sharp (1928–2018) coalesced the works of Gandhi, King, and others, and published *The Politics of Nonviolent Action* in 1973.[6] Sharp's three-volume work is to civil resistors what Carl von Clausewitz's *On War* is to military practitioners: a cohesive theory, a methodological study, a chronicle of campaigns, and set of practices by which to understand and apply nonviolent power.[7] Sharp's crib sheet, "198 methods of nonviolent action," is the operative playbook for resistors seeking nonviolent tactics.[8] Sharp's menu of tactics is often reduced to singular acts of momentary attention, such as bullhorn blowers, shout-downers, graffiti-taggers, and traffic-stoppers. Such performative acts signal frustration and indignation, hoping to alight like-minded activists but often providing a hazy pathway to effect change. These same tactics, if aligned with a strategic vision, executed by a capable organizational structure, and synchronized with purposeful follow-through, can form an irregular campaign.

Example: The Battle That Wanted to Be a Campaign, Occupy Wall Street

One attempted campaign was Occupy Wall Street, the 2011 sit-in protest that lasted thirty-eight days in Zuccotti Park, New York City.[9] The grievance was the unequal distribution of wealth in the United States as symbolized by the wealthiest 1 percent juxtaposed

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against the remaining 99 percent.[10] Occupy gained viral notoriety, caused disruptions, forged a novel cooperative model, and produced revolutionary appeals to remedy this wealth imbalance. In amplifying this grievance and igniting similar protests, Occupy was a success. Strategically, Occupy failed in that it could not forge a cohesive strategy with achievable objectives.[11] The movement did not transfer anti-elitist sentiment into an enduring campaign. After thirty-eight days in an increasingly unhygienic and disruptive tent city astride Wall Street, the New York Police Department

triggers violent countertactics. No matter the categorization of civil resistance, it is the most frequent, most distributed, and, arguably, the most effective form of asymmetric action.[15] Civil resistance often finds opportunities where there is limited political operating space and where controlling authorities regularly use brutal suppression methods.[16] Even if the U.S. military is not the developer or deliverer of this type of power, ignoring or misunderstanding this energy has proven fatal to many great powers, iron-fisted governments, and competent security forces.

> " The U.S. Army defines irregular warfare as 'the overt, clandestine, and covert employment of military and non-military capabilities across multiple domains by state and non-state actors through methods other than military domination of an adversary, either as the primary approach or in concert with conventional warfare.' "

dismantled the protest in a predawn raid.[12] In military terms, Occupy could be described as a battle briefly won, but a war conclusively lost.

Civil Resistance and Irregular Warfare

The civil resistance definition, when placed next to the U.S. Army or the joint force definition of irregular warfare, shows the likeness. The U.S. Army defines irregular warfare as "the overt, clandestine, and covert employment of military and non-military capabilities across multiple domains by state and non-state actors through methods other than military domination of an adversary, either as the primary approach or in concert with conventional warfare."[13] The Department of Defense's irregular warfare definitions, past and present, contain four common components: populations, power, coercion, and nonstandard methods.[14] These anchor points of irregular warfare are nearly identical to the accepted pillars of civil resistance.

Civil resistance is a method of irregular warfare. Despite its nonviolent approach, these campaigns are often met with violence, suppression, or repression. Thus, civil resistance sits in that definitional gray area: *it does not employ the tactics of violence, but it reliably*

Why Does Civil Resistance Belong in a Military Education?

The study of civil resistance, often called "people power," belongs in an irregular warfare education for four reasons. First, nonviolent resistance is an alternative to or complementary of combined arms power. Second, the U.S. relative combat power advantage over a growing number of adversaries is shrinking, thus making unconventional, and less costly approaches, more useful. Third, U.S. allies and partners are building nonviolent forms of power into their state resistance plans. Finally, examining Chinese, Russian, or Iranian countermeasures to civil resistance gives us insights into their psychology, methods, and vulnerabilities. Each is discussed below.

An alternative form of power. One promise of irregular warfare is to deliver nonstandard forms of power against the vulnerabilities of adversaries. In pursuit of this goal, the data on nonviolent resistance is striking. In a comprehensive and ongoing study compiled by Harvard researcher Erica Chenoweth, nonviolent resistance movements with maximalist aims (i.e., overthrow, expel) against governments or occupiers is statistically more successful than armed violence.[17] This research should interest military strategists and tactical

operators whose primary task is to *win* with force or the threat of force as one of many means to do so.

Chenoweth's dataset contains 627 revolutionary campaigns from 1900 to 2019. Over 50 percent of the nonviolent revolutions succeeded, where 26 percent of the violent campaigns achieved their goals.[18] Though revolution might not be the aim for readers of this article, weaker powers have consistently and successfully contested stronger powers with nonviolent campaigns.

Notably, nonviolent resistance movements have increased in frequency in the last fifteen years yet show a markedly reduced success rate.[19] Chenowith and other researchers point to several trends: challenged governments have co-opted the nonviolence playbook, state "smart repression" tools and strategies are pervasive and technologically advanced, COVID-19 restrictions allowed governments to exert crackdowns in the name of public health and safety, and the "post-truth" era has muddied facts that has reduced the power of nonviolence movements to use truth and justice as a foundation.[20]

Examples of superpowers and despotic governments yielding to nonviolent movements demonstrate that civil resistance is not a feeble alternative or an inferior method used only when armed violence is infeasible. The historical record suggests that the employment of nonviolent resistance, whether successful or not, is a fixed component of war, irregular warfare, and the ongoing tussle between people and those in power. For these reasons, military planners should be grounded in the fundamentals of civil resistance to understand this power and to locate its impact within enemy and friendly approaches.

The disintegrating combat power advantage of the United States. Second, the United States lacks sufficient military power to contest the growing aggregation of global threats. Two major theater wars or a series of roiling conflicts would rapidly exhaust U.S. military resources. In such a scenario, national leaders and policymakers would seek options to deter, defend, contest, or delay on vulnerable fronts. Among the irregular options could be support to nonviolent disruptors possibly tied to disenfranchised populations, agitated social groups, or third-party spoilers.

The idea that the U.S. Department of Defense would purposefully engage in nonviolent, social-movement type resistance is controversial. Structurally, U.S.

national leadership would decree whether the U.S. military, the Department of State, the Central Intelligence Agency, or some other federal agency could (or should) engage in forms of power that could resemble political chicanery. This is warranted. The United States has a checkered history in tinkering with political movements to achieve national security aims.[21]

One successful example of U.S. support to a nonviolent movement is the covert support to the Polish Solidarity organization in the 1980s. Solidarity (*Solidarinosc*), a labor organization movement, challenged the communist Polish and Soviet governments with a yearslong wave of strikes, boycotts, marches, and protests.[22] Solidarity ultimately cracked the Polish Communist government and stymied an effective Soviet response. The stridently anticommunist Reagan administration was wary of contaminating this authentic Polish movement with "U.S. fingerprints."[23] Thus, the United States opted to provide covert, nonlethal support. It worked. Hidden-hand U.S. monetary support helped keep the movement active, assisted in keeping striking workers solvent, and indirectly supported nonviolent underground activities such as printing presses and radio broadcasts.[24] Nonviolence, it can be argued, fueled the tipping point that won the Cold War.

U.S. allies are preparing civil resistance to contest adversaries. Third, a high number of NATO allies have embraced this form of resistance and have formally incorporated it into their national defense strategies.[25] This is not conceptual or theoretical; it is an actual campaign pillar. Its form and function are not tightly scripted, and rehearsals can be impractical. In this way, the use of civil resistance is generally not deterministic in war plans. It is instead the task of a trained cadre and informed citizenry to respond to enemy actions and exploit situational vulnerabilities.

This ambiguity of operational employment brings advantages and disadvantages. With no prescribed templates, putative civil resistors are difficult for enemy forces to identify, template, and target. If attacked, civil resistance is a form of power that changes rapidly, adjusts unpredictably, and contorts itself well to new realities. Leaders quickly replace leaders, fronts rapidly open and close, and innovative methods emerge. A disadvantage is that a military plan cannot squarely account for what this power can and might accomplish against a determined foe. With such uncertainty, it is

We, the people of South Africa, declare for all our country and the world to know:

that South Africa belongs to all who live in it, black and white, and that no government can justly claim authority unless it is based on the will of the people ...

—The "Freedom Charter" of South Africa, 26 June 1955

A photograph of young activist Nelson Mandela taken in Umtata, South Africa, in 1937. (Photographer unknown)

Nelson Mandela prepares to give a lecture 2 November 2009 at the London School of Economics titled "Africa and Its Position in the World." (Photo courtesy of Wikimedia Commons)

Mandela the Disruptor

Nelson Mandela was a lifelong activist against the apartheid government of South Africa, and he was one of the key leaders responsible for the final dismantlement of apartheid and the establishment of South Africa's first democratically elected government. In contrast to other Black African movement groups espousing the mass expulsion of white South Africans mainly through violence, he embraced the concept of a multiracial front employing a diversity of approaches, including a mixture of organized pacifist resistance, legal challenges to the system from within, organized pressure campaigns involving foreign governments and cultural figures from outside, and at times armed insurgency, a conviction for which he spent twenty-seven years in prison. He was an avid reader who drew his ideas from many sources, including concepts dealing with active resistance against established governments by Karl Marx, Vladimir Lenin, Fidel Castro, and Mao Zedong. In formulating his personal philosophical creed shaping his actions, he stated that "he found [himself] strongly drawn to the idea of a classless society which, to [his] mind, was similar to traditional African culture where life was shared and communal."[1] In May 1994, he became the country's first black head of state and the first elected in a fully representative democratic election. During his presidency, his government focused on dismantling apartheid and fostering racial reconciliation.

1. Nelson Mandela, *Long Walk to Freedom, Volume I: 1918–1962* (New York: Little, Brown, 1994), 172.

hard to war game or ascribe a value to something so formless. This haziness can lead to nonviolent methods being reduced, dismissed, or simply forgotten.

Smaller countries such as Estonia, Lithuania, and Latvia acknowledge that Russian forces could quickly penetrate their borders and partially occupy their sovereign territories before NATO could muster a full-throated response. Such countries envision violent and nonviolent responses, acting in tandem, to block, disrupt, delay, or defeat advancing Russian formations.[26] A Latvian citizen readiness pamphlet instructs on actions to take in the event of an enemy occupation: "If you choose to resist, you have the right to exercise civil disobedience, i.e., non-compliance with the laws passed by the occupation forces."[27] If our most geographically vulnerable allies have this in their defense schemes, it follows that U.S. military practitioners should have a fundamental understanding of this form of power to improve our interoperability.

Insights into our adversaries' strategies, methods, and vulnerabilities. Finally, civil resistance provides insight into adversaries' playbooks. Contrary to their stated position, the Russian Federation leadership does not fear NATO invasion; rather, they fear the "color revolutions" that have challenged, disrupted, and toppled autocracies.[28] The Georgian Rose Revolution (2003), Ukrainian Orange Revolution (2004), and Ukrainian Revolution of Dignity ("Euromaidan" 2013) are some of the movements that have discomfited Russian autocrats.

Civil resistance reveals much about the People's Republic of China (PRC). The study of Chinese joint force operations is said to be challenging because China has not engaged in full-spectrum war since 1979.[29] However, the PRC has repeatedly combatted nonviolent movements at home and abroad. Thus, valuable observational learning comes from how the PRC contests nonviolent resistance.

The Umbrella Movement of Hong Kong citizens contesting the Chinese takeover is a revealing "action-reaction-counteraction" case. Initiated in 2014 by Hong Kong citizens, umbrellas were used to defend against the use of pepper spray to disperse protestors. The umbrella soon became a symbol of a population resisting unwanted Chinese-imposed laws on Hong Kong.[30] The movement, a widely inclusive group of citizens and organizations, reached its zenith on 16

June 2019 when approximately two million of the seven million inhabitants of Hong Kong's population took to the streets; often, but not always, peacefully.[31] Their stated goal was to force China to accept the *status quo* terms of Hong Kong self-governance and release incarcerated citizens.

The Umbrella Movement demonstrated the ingenuity and brilliance of Hong Kong resistors contesting a totalitarian takeover of Hong Kong's political, judicial, and commercial sectors. It also showed the strategic patience and tactical acumen of the PRC-aligned Hong Kong leadership at the contact layer of the crisis. Rather than reflexive-response brutality, the PRC absorbed these protests, suitably contained them, and used violence more selectively than past efforts.[32] The PRC then followed with a multiyear campaign (ongoing) to restrict, restrain, arrest, and incarcerate the movement's leading lights.[33] The PRC won—or won this round—via a campaign of asphyxiation. They knitted together surveillance, lawfare, information, suppression of political action, the shuttering of independent media outlets, and exhibited tactical patience. Hong Kong showed how China used *population and resource control measures* to manage restive populations, eradicate dissent, and dodge international scorn.[34] For observers, Hong Kong reveals a possible PRC approach to subjugate Taiwan should the PRC achieve political inroads on the island-nation that favors such a strategy.

What Might a Civil Resistance Education Look Like?

If a curriculum merits civil resistance modules, what might that look like? The basics of nonviolent resistance can be taught in a two-hour lesson reinforced by the conceptualizing and modeling of civil resistance. This can be done in conjunction with maneuver-type warfare in tabletop war games or planning exercises. While more time is required for a complete education, professional military education institutions and qualifying courses already face tough challenges on adding or cutting topics central to tactical competency. Thus, the two-hour recommendation is practically minded and feasible for most education institutions, units, or study programs.

In 2018, I piloted the National Resistance Course at the direction of the Joint Special Operations University and in conjunction with Special

Spc. Tony Kosgei (*right*), a civil affairs specialist with Company C, 418th Civil Affairs Battalion, and Master Sgt. Marius Tudorache, a civil-military cooperation (CIMIC) NCO with the 1st CIMIC, Romanian Land Forces, conduct a key leader engagement with role players during Combined Resolve 18 on 4 May 2023 at the Joint Multinational Readiness Center, Hohenfels Training Area, Germany. Combined Resolve 18 broke through systems, processes, and human and linguistic barriers, allowing partners and allies to conduct operations as one team. (Photo by Sgt. 1st Class Gregory Williams, U.S. Army)

Operations Command Europe. This five-day course educates how states incorporate the principles of resistance into their defense strategies and structures. I have since delivered this education to over 2,500 students in the United States and eleven countries with roughly 65 percent of those attendees from special operations communities.[35] This has led me to two observations on civil resistance.

The first observation is that two hours is sufficient to introduce nonviolent principles, contextualize the meaning for military and civil practitioners, and to provide the basic tools to analyze movements. In exercises, students are required to plan for civil resistance as part of a campaign to become familiar with the principles and to work with the form.[36] Students spend roughly four hours out of fifty-two total hours (classroom and homework), or 7 percent of their time, contending with

civil resistance. Post course, this education conditions students to be critical observers of any number of nonviolent protests that rise to their attention. In this way, the ability to analyze movements becomes a habit of mind outside of military education and four hours can soon become "four hundred" hours.

My second observation is that the U.S. Army civil affairs and psychological operations communities have embraced civil resistance as a part of their professional competencies. While this article stops short of recommending a proponent for civil resistance, these two branches are the natural and logical focal points for the development of civil resistance education and expertise. There are some pockets of excellence in these communities, but admittedly, civil resistance is still a hit-and-miss proposition in their formal education pathways.

Where to Start?

For military minds, Thomas E. Ricks's *Waging a Good War: A Military History of the Civil Rights Movement, 1954–1968,* is an excellent start.[37] Ricks, a former war correspondent and military historian, frames the civil rights movement in a military context that overlays terms common to both: small-unit cohesion, deep operations, disciplined cadres, lines of communication, and decisive points. For those in the profession of arms, this book will illuminate the strategy, training, battles, advances, and retreats that are as harrowing as any war chronicle published. Ricks's analysis comes with the stinging reminder of the injustices and cruelties that compelled such a campaign to develop on U.S. soil.

How to Start a Revolution is a 2011 documentary that profiles Gene Sharp and his work.[38] His controversial legacy should not detract from his analysis of the practice of nonviolent resistance. Will Irwin's *How Civil Resistance Works (and Why it Matters to SOF)* is an exceptional source for special operations forces.[39] For planners, Ivan Marovic's "The Path of Most Resistance: A Step-by-Step Guide to Planning Nonviolent Campaigns" is an eye-opening look into campaign design.[40] Finally, the U.S. Army Special Operations Command's research project "Assessing Revolutionary and Insurgent Strategies" offers a multivolume work on all forms of resistance.[41]

Conclusion

A military education that includes irregular warfare ought to include the study of civil resistance. Deep expertise may not be required for all military professionals, but an introductory grasp of the theory and practice of nonviolent resistance is crucial in irregular domains. Civil resistance is powerful and omnipresent, whether employed for or against one's objectives. We know that our adversaries fear it, anyone can access it, our allies train to it, and so soldiers must understand it. ∎

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Army University Press Invites Your Attention

Army leaders must ensure their units maintain the long-term nonpartisan ethic that has been at the historical core of the profession of arms since the time of George Washington. This chapter by Dr. Heidi A. Urben provides a workshop for leadership at the company and battalion level. A version of "Instilling the Nonpartisan Ethic at the Unit Level" will be included in the forthcoming Army University Press anthology, *The Civ-Mil Primer,* edited by Col. Todd Schmidt and Dr. Trent Lythgoe. It is available online at https://www.armyupress.army.mil/Books/Browse-Books/iBooks-and-EPUBs/Nonpartisan-Ethic/.
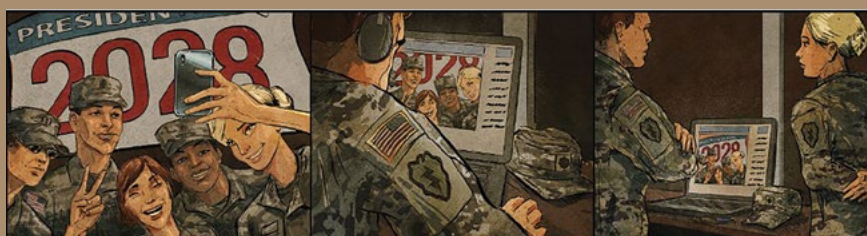
Instilling the Nonpartisan Ethic at the Unit Level

Heidi A. Urben

Lessons from the Underground

How the Joint Multinational Readiness Center Trains Resistance to Occupation

Lt. Col. Daniel Jackan, U.S. Army

Rodrigo Reyes

Ian Rice

We shall fight on the beaches, we shall fight on the landing grounds, we shall fight in the fields and in the streets, we shall fight in the hills, we shall never surrender.

—Winston Churchill

I t was a foggy autumn night in the hills near Hohenfels, Germany. Thirty local guerrillas and their U.S. Army Special Forces (SF) advisors made their final weapons checks before initiating the raid on the "enemy's" command post. After days of negotiations with resistance and town leaders, target reconnaissance, and rehearsals, the raid would finally stick it to the enemy and let them know that an active resistance movement would no longer stand for the occupation of their homes. Though the preparation was long and exhausting, the raid's execution was brief, and only a few minutes were needed to achieve the desired effect. As the unscathed raiders withdrew from their objective and melted into the hills, the enemy's maneuver forces were left blinded without a functioning command-and-control system, and they were now a ripe target for the friendly "Donovian" 11th Mechanized

Infantry Division to punch through the enemy's lines and finally liberate the area.

Though fictitious, this scenario illustrates how SF detachments and their European partners train to resist occupation during large-scale combat operations (LSCO). Since 2010, the U.S. Special Operations Forces (SOF) training team, "Wolverines," has been a critical component to the Joint Multinational Readiness Center (JMRC), a combat training center (CTC), located within the Hohenfels Training Area. JMRC is charged with training U.S. and NATO SOF and European partners in special operations and resistance force (RF) operations.

This article argues JMRC's innovative approach to training resistance to occupation by placing SOF and NATO RF elements on the opposing force (OPFOR) side of maneuver exercises has yielded lessons unique to JMRC and the European area of operations. We make this point in three sections by (1) describing how JMRC supports combined SOF and RF "stay-behind" operations during LSCO training scenarios, (2) giving special attention to how the integration of RF forces and civilians on the battlefield (COB) helps replicate

Special operations forces (SOF) and resistance force members move to an objective area during Combined Resolve 24 at Hohenfels Training Area, Germany. (Photo courtesy of the Joint Multinational Readiness Center SOF Team)

dynamics of warfare trends in today's environment, and (3) illustrating the value of the unique exercise design by offering three irregular warfare (IW) lessons that are not replicated to the same degree at other CTCs.[1]

JMRC and Its Special Operations Training

JMRC provides a unique training experience for SOF with its location in central Europe and the vast array of allies and partners that participate in training. The significantly higher proportion of NATO force involvement supports the validation and exercising of existing NATO and U.S. doctrine and collects lessons learned to evolve tactics, techniques, and procedures for inclusion in future doctrinal concepts.[2] In line with the U.S. Army's Field Manual 3-0, *Operations*, JMRC trains U.S., NATO allies, and Partnership for Peace nation leaders, staffs, and tactical formations up to brigade combat teams in the "combined arms employment of joint and Army capabilities" to conduct ground operations during multidomain operations.[3] Through a simultaneous command post exercise, JMRC also supports maneuver units with a U.S. or NATO division serving as the brigade's higher command to connect the maneuver exercise to the joint force.[4]

The JMRC's SOF Team training objectives leverage the U.S. Army Special Operations Command's *USASOC Strategy-2035* to develop forward-looking

and realistically achievable training objectives for the participating SOF units. The SOF Team nested the strategy's concepts of cyber integration; partner investment; and the need to improve conventional force-special operations forces (CF-SOF) integration, interoperability, interdependence (I3) into the existing LSCO scenario at JMRC.[5]

With an average of four rotations per year, the SOF exercise employs a Special Operations Task Group (SOTG) design focused on improving CF-SOF I3 and providing timely operational support to CF commanders. While operations at JMRC are primarily tactically focused, the SOTG employment enables CF commanders to visualize SOF capabilities like reconnaissance and deep battlespace targeting.[6]

JMRC's central European location allows the SOF Team to provide training for the U.S. Army SOF core competency that is focused on partnered operations: "Living among, training, advising, and fighting alongside people of foreign cultures (operating in the human-centric and personality-dependent domain)."[7] The multinational exercise design is a natural fit for U.S. SOF, allies, and partner rotational training units (RTUs) to work as combined special operations task units (SOTU) and SOTGs. Recent and future participants include SOF from over ten allied and partner nations. Many of the training objectives are often associated with irregular warfare (IW) from U.S. doctrine, while in NATO, the objectives are nested more generally under tasks for combined action as part of the military assistance mission.[8]

JMRC SOF rotations typically include U.S. Army SF operational detachment-alphas and allied SOTUs training, advising, and operating alongside RFs conducting an internal defense against an occupying force (collectively described as "SOF and RF"). Exposure to partner building in a LSCO training environment provides unique opportunities for both U.S. and multinational SOF operators as well as the theater aligned RF partners that are not presently replicated to the same degree at the other two CTCs, the National

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Training Center (NTC) and the Joint Readiness Training Center (JRTC). This is not to say that NTC and JRTC do not train U.S. and multinational SOF operators with a RF. The size of training areas available at NTC and JRTC allows SOF to focus to a greater degree on deep operations. The limited size of the approximately 10 km x 20 km training area of JMRC leads to a greater focus on SOF and RF training in close proximity against an occupying force; the nature of the JMRC training area leads to complimentary efforts for the spectrum of SOF training tasks with NTC and JRTC.

How JMRC Trains Resistance to Occupation

In June 2022, the SOF team developed and implemented an IW training

A special operations forces (SOF) training unit establishes command and control during Combined Resolve 24 at Hohenfels Training Area, Germany. (Photo courtesy of the Joint Multinational Readiness Center SOF Team)

construct that places the U.S. Army SF operational detachment-alphas, allied SOTUs, and the RF on the OPFOR side of the exercise to provide a more challenging and realistic training experience. The design leverages JMRC's force-on-force model that situates a multinational brigade combat team as the Blue Force (BLUFOR) against a free-thinking OPFOR maneuver force replicated by the U.S. Army's 1st Battalion, 4th Infantry Regiment (1-4 IN).[9] Placing the SOF and RF units on the OPFOR side allows the OPFOR to

integrate SOF capabilities into typically conventional force missions, for mutually supporting objectives (where applicable) while still allowing SOF to conduct its IW training with an emphasis on resistance to occupation-specific tasks. SOF's role on the OPFOR side also provides the BLUFOR commanders a series of dilemmas that better replicate the complexity of modern battlespace.

This exercise design sets the stage for the OPFOR commander and the SOF leadership to train on the

CF-SOF I3 tasks to achieve operational success. The use of liaison officers between the SOTG and 1-4 IN has been instrumental in helping commanders develop and visualize a common operating picture that takes both the CF and SOF perspectives into account. The liaison officer exchange has been vital in coordinating SOF-requested indirect-fire missions and providing a timelier operations picture to conventional force commanders.

To simulate the stay-behind nature of resistance movements, the RF is integrated into the JMRC-supported "Red Network" within the training area several days prior to the start of the exercise. This allows RF to complete an area reconnaissance, conduct a series of meetings with the COBs, and assimilate the RF into the social fabric of the towns before the conventional forces enter the training area. The civilian role-players provide the RF with capabilities that are required to support an IW campaign in a denied environment.

For SOF, the rotation is approximately twenty-one days. Each exercise begins with five days for arrival and tactical SOF unit mission planning. SOF units must plan, prepare, execute, and evaluate every move and action in accordance with doctrine and unit standard operating procedures. Thereafter, for the following four days, each unit conducts an infiltration into an "uncertain" environment, performs a linkup with a local RF, conducts area familiarization, and conducts combined SOF and RF training to prepare for execution of the force-on-force period of the exercise.[10]

Following these periods, the ten-day force-on-force exercise begins, as the SOF and RF are positioned to conduct shaping operations in concert with the OPFOR's maneuver force objectives against the BLUFOR. The JMRC SOF free play model simulates a limited communications environment where SOF operates continuously in the enemy's rear area. Without a formalized command relationship between SOF and the RF, the SOF elements try to work alongside their RF counterparts to assess the operational area and organize the RF into an effective fighting force. When the BLUFOR enters the training area, the environment officially becomes contested as the SOF and RF elements are now forward of the OPFOR CF. The SOF and RF must work together and find common objectives to shape the battlespace while working to support the operational-level objectives and limit BLUFOR success.

With continued emphasis on SOF support to LSCO, CF-SOF I3 remains an important SOF training objective, and coordination with the OPFOR remains a constant consideration. JMRC simulates an invading OPFOR division with an abundance of fires and enablers, while 1-4 IN physically replicates up to a maneuver brigade. Though the 1-4 IN's battalion battle staff is considerably smaller than a typical brigade-level staff, it does integrate SOF reconnaissance reports and calls for indirect fire into its respective collection plan and targeting efforts. Operating well behind the forward line of troops among BLUFOR command and control, logistics, and fires formations, SOF and their RF partners have been important interdependent partners to help shape the battlespace for the OPFOR commander's immediate tactical fight.

To support these shaping operations, the SOF and RF formations need to be proficient in various IW tasks that emphasize the challenges of operating forward of CF. This exercise design allows SOF and RF units to "put their money where their mouth is" and truly test and, in turn, refine unit standard operating procedures in the contested environment scenario. Some of these IW tasks include conducting area and partner force assessments, organizing resistance forces, building a support network, training and advising resistance fighters, integrating cyber capabilities into detailed planning, establishing a variety of communication methods, and conducting kinetic small-unit operations such as ambushes and raids.

The Role of Resistance Forces and Civilians on the Battlefield

Since the early 2010s, elements of allies and partner RFs have been a mainstay at JMRC, where the units focused on training to resist occupation by a hostile foreign force.[11] Over time, RF participation by multinationals increased to develop RF capabilities. RF participants provide thirty to forty personnel who operate as all pillars of a resistance movement from the different towns in the training area. These RF elements partner with a respective SOF element throughout the exercise, which provides advice and mentorship on developing a resistance network while conducting small-unit operations. In turn, the RF elements assist their partners with information on key civilian personalities, area familiarization, and access to support, in addition to providing kinetic small-unit actions.

A special operations forces (SOF) training unit conducts an urban raid during Combined Resolve 24 at Hohenfels Training Area, Germany. (Photo courtesy of the Joint Multinational Readiness Center SOF Team)

Integral to IW is the concept that activities take place among local populations. At JMRC, the COBs help provide this needed complexity during the rotation through cultural, linguistic, and scenario background for the BLUFOR, SOF and RF RTUs to interact with throughout the exercise. Typically, at JMRC, German and other European citizens serve as the COBs and role-play as residents of the different towns, creating a realistic setting that cannot be replicated to the same theater focused degree at the other CTCs.

The COBs are essential to simulate the operational environment (OE) in the training area and include both key personalities and common townspeople. Where the townspeople are tasked to serve as the general population and backdrop of a town, by design, key personalities have more detailed biographies as they are expected to interact with the various RTUs more closely. The JMRC OE team develops these biographies for those to play roles such as town mayors, police officers, doctors,

nurses, shipping company employees, café owners, journalists, and so on. Of course, all elements of society cannot be replicated but the intent is for the key personalities to provide the most relevant interactions for RTUs that operate in and around population centers. In addition to COBs, JMRC also supports training of government organizations such as the U.S. Agency for International Development, the U.S. State Department, and the Red Cross to exercise their real-world missions and provide the RTUs with another layer of realism to support their training objectives.

The true value of having COBs participate in the exercise is to help RTUs understand interactions with civilians can have both positive and negative consequences on operations. To simulate these consequences, the COBs react to all RTU decisions and actions within the training area. As RTUs conduct kinetic and non-kinetic actions, the OE team works diligently to develop appropriate responses for the COBs to carry out that

represent changes in the local population's attitudes and support. Essentially, the COBs reinforce that public opinion matters during combat operations and not just during stabilization efforts.

The JMRC SOF Team capitalized on this complex human terrain to enhance its exercise design for SOF and RF participation. Like the conventional RTUs, it is within this OE construct that the SOF and RF RTUs operate. The big difference is that the SOF and RF RTUs must blend into the human terrain to accomplish their training objectives. Essentially, the SOF and RF elements must win over the populations from within the towns to be able to operate.

Prior to implementing the innovation that placed the SOF and RF elements on the OPFOR side, BLUFOR-aligned SOF and RF RTUs mainly trained with complex battlefield injects (CBI) as the primary stimulus to exercise their training objectives. Unfortunately, CBIs have their own labor-intensive problems as they require the reallocation of OPFOR elements away from primary training focus to meet specific BLUFOR training objectives that may not be met through the organic free play force-on-force exercise construct. For example, OPFOR elements may be tasked to conduct raids against BLUFOR logistics and command post sites to help test the security of those units. The OPFOR CBIs that supported BLUFOR SOF units were no different. Therefore, CBI development and execution to support SOF training objectives were deliberately choreographed as the OPFOR could not maintain a constant presence to truly test the SOF and RF RTU's ability to operate forward of CF for the duration of the exercise.

Placing the RF and SOF RTU on the OPFOR side of the exercise eliminates this problem and creates ideal conditions to train IW tasks. Once the BLUFOR occupies portions of the training area, the SOF and RF, operate as "stay-behind" forces, and operate in a more challenging environment. This force-on-force scenario highlights key lessons that are valuable to SOF and RF. Interestingly, if the JMRC SOF Team exercise model continued to support BLUFOR maneuver objectives, the SOF and RF elements would not have had the opportunity to train in a persistently challenging scenario, it is likely these lessons would have gone unnoticed.

Irregular Warfare Lessons Learned during JMRC Rotations

The employment of caches to emplace and recover supplies. The primary source of logistics for SOF and RF in this training scenario is the use of caches where supplies can remain safely hidden from the BLUFOR.[12] Establishing caches help to protect the scarce resources these elements need to successfully operate. The SOF and RF elements begin each training rotation positioned in the various towns prior to the start of the exercise. Once the training begins, BLUFOR tactical units establish traffic control points (TCP) and roving security patrols to control the battlefield, limiting SOF and RF freedom of movement.

The challenge for the SOF and RF elements is to determine cache locations prior to BLUFOR units occupying the battlespace. Ideally, the resistance emplaces caches where they can access the supplies as part of a normal pattern of life. Additionally, the RF should also emplace caches in areas that will support actions. For example, if the RF must transit through an area known to have TCPs, the RF would emplace caches outside of that area so they would not be compromised if stopped and searched at the TCP.

Success during previous exercises required SOF and RF elements to accurately develop and continue to refine potential BLUFOR locations and movements, which enabled SOF and RF to emplace and use their caches.

The challenge of travelling in a contested environment. SOF and RF elements need plausible reasons to move around once the BLUFOR formations occupy portions of the training area. Leveraging JMRC's investment in COBs, the SOF and RF elements employ a variety of civilian vehicles, such as taxis, utility trucks, buses, and sedans to plausibly move around the area during normal working hours. As the exercise progresses, the training area soon becomes subsumed with the main battles where the BLUFOR and OPFOR engage in regular fighting with indirect fires and tactical formations maneuvering across the prominent maneuver corridors. At this point in the exercise, the continued presence of "civilian" vehicle traffic becomes noticeably suspicious. After all, who would continue to attempt to go about their daily business in areas with active maneuver fighting? Truly innocent civilians would flee or at a minimum attempt to avoid the areas with active fighting.

Unfortunately, simulated maneuver combat cannot truly replicate the force of earth-shaking explosions, the volume of visible tracers, and of course the numerous odors of acrid smoke that would signal to anyone that active fighting is occurring nearby. This presents the challenge to SOF and RF to develop an accurate picture of active fighting areas.

Success during previous exercises required SOF and RF to be more deliberate about their movements, plan routes to attempt to avoid BLUFOR formations, and use all available resources to accomplish their training objectives.

Balancing the demands of support and kinetic operations. As evidenced by historical conflicts, resisting occupation is not a short-term operation.[13] With a typical ten-day force-on-force exercise at JMRC, it is challenging for SOF and RF to display tactical patience that would be normal to a long duration campaign. Therefore, SOF and RF elements need to balance COB support with shaping the maneuver space through reconnaissance, calling for indirect fire, and small-scale raids and ambushes.

As an artificial yet effective compromise, the SOF and RF elements organize COB support to conduct small-unit tactical actions. This division of labor helps make the most of the limited time during the exercise to both develop the support to operate and continue to disrupt the BLUFOR through kinetic actions. With that said, security is a paramount consideration to determine when and where to strike the BLUFOR while maintaining survivability.

The SOF and RF are assigned initial locations within the different towns during the exercise. There is no requirement for SOF and RF to remain within those locations. The exercise design affords SOF and RF freedom of choice to make decisions and move as they see fit based on their understanding of the BLUFOR maneuver. If desired, they could move to another town or even a remote patrol base to continue to operate.

Success during previous exercises required SOF and RF elements to consider if their actions were not only visible to the BLUFOR but what effect it had on the civilian population. SOF and RF success used the concept known as the "threshold of violence" to determine if their actions could compromise their forces by the BLUFOR or lose the support of the civilian population.[14] With each passing exercise day SOF and RF are asked to achieve increased effects, and the risk to their force increases. The process used to assess the risk is the real value in attempting to balance support with kinetic operations.

Conclusion

Training at JMRC provides a unique experience for U.S. SOF to advise, assist, and accompany partner resistance forces forward of CF during exercises. It enables SOF and RF to highlight ways to learn what works to meet training objectives. Placing the SOF and RF elements on the OPFOR side of the exercise enabled this complex environment for SOF and RF to navigate. This design has created a completely free-play force-on-force exercise that affords these elements the opportunity to train forward of CF. SOF and RF participants can learn the second- and third-order effects of their actions, such as identifying effective cache locations, travelling in contested environments, and balancing support with kinetic operations.

U.S. Army Special Operations Command and its subordinate commands, the 1st Special Forces Command (Airborne) and U.S. Army John F. Kennedy Special Warfare Center and School, should consider JMRC as an IW training ground for U.S. SOF. Continued (or increased) participation in JMRC's multinational LSCO rotations will only benefit U.S. SOF formations whether they are preparing for operations in the European theater or globally as LSCO scenarios will require participation from various, if not all, U.S. SOF elements. ■

Notes

Epigraph. "Never Surrender," International Churchill Society, accessed 18 September 2024, https://winstonchurchill.org/resources/quotes/famous-quotations-and-stories/. This quote was part of a speech given by Winston Churchill in front of the House of Commons on 4 June 1940, following the evacuation of British and French armies from Dunkirk.

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Escalation and Irregular Warfare

We Need to Be Irregular Warfare Hustlers, Not Just Irregular Warfare World Champions

Dr. Thomas R. Searle

We all had many thoughts as we watched Russia's full-scale invasion of Ukraine unfold in the winter and spring of 2022. One of them should have been, "This is the new price of victory in irregular warfare." Nations do not resort to conventional invasions when they can achieve their goals through irregular warfare (IW). Russia's total and permanent defeat in its IW campaign was evident from Vladimir Putin's decision to escalate from irregular to conventional warfare. For anyone who was unsure about Russia's defeat in IW, Putin announced that he had no other choice; he had to escalate to the largest war in Europe in almost eighty years.[1] On the surface, this claim seems like an odd statement since Putin chose IW as his method for controlling Ukraine throughout the first twenty years of his reign. Thus, Putin's claim that he had no choice did not mean he was ignorant of IW and could not think of other ways to control Ukraine; rather, he was announcing that all his IW efforts had failed. He was escalating to conventional warfare because he was defeated in IW, and conventional warfare was his only option to reverse that defeat.

Ukraine and its European and U.S. backers certainly wanted Ukraine to defeat Putin's IW campaign, but they did not want to force Putin into the full-scale invasion he launched in response to Ukraine's victory in IW. This article explains how things went so badly wrong and then provides a "hustler" strategy to avoid similar mistakes in the future.

Inappropriate Experience and False Assumptions About IW and Escalation

Two factors led the U.S. military, and by extension, U.S. allies and partners, astray concerning IW: inappropriate experience and false assumptions. The inappropriate experience came after the 11 September 2001 terrorist attacks when the United States focused on counterterrorism and counterinsurgency against foes like al-Qaida, the Taliban, al-Shabaab, the Islamic State, and other terrorists and insurgents. This provided a wealth of experience and hard-won knowledge about IW, but these opponents were typically fighting as hard as they could. They did not have vast but unused capability and capacity that needed to be deterred. As a

A U.S. Army Special Forces soldier assigned to 20th Special Forces Group (Airborne) and a Lithuanian National Defence Volunteer Forces (KASP) member conduct mission planning during exercise Saber Junction 2018 at the Joint Multinational Readiness Center in Hohenfels, Germany, on 16 September 2018. In the Saber Junction 18 training scenario, special operations forces worked alongside the KASP to conduct irregular warfare in enemy-occupied territory in support of the Army's 173rd Airborne Brigade as they executed land operations in a joint multinational environment. (Photo by 1st Lt. Benjamin Haulenbeek, U.S. Army)

result, the reasonable goal was to defeat these enemies as quickly and completely as possible, and the desire for rapid and decisive success also fit nicely with the preferences of the U.S. military.[2] The December 2017 *National Security Strategy* officially shifted the focus from counterterrorism to great power competition and later strategic competition with the People's Republic of China (PRC) and Russia.[3] Unlike terrorists, the PRC and Russia have enormous unused capability and capacities that needs to be deterred. The need to deter escalation calls into question the value of a decisive IW success, like that achieved by Ukraine, since that success led to unwelcome escalation in the form of Russia's 2022 full-scale invasion.

The United States also based its approach to IW against the PRC and Russia on a false assumption. The false assumption was that all U.S. adversaries, including Russia and the PRC, choose IW because they believed the United States would defeat them in conventional warfare.[4] If true, this assumption would mean that U.S. conventional forces successfully deter all U.S. adversaries from a conventional war. However, this assumption is problematic in two ways. The first problem is that the PRC and Russia might not accept the notion of total and irreversible U.S. superiority in conventional warfare. For example, U.S. wargames do not indicate that the United States would be certain of defeating the PRC in a war over Taiwan.[5] PRC estimates might well see a PRC victory as possible in the foreseeable future or even today. By the same token, before 2022, the Russians were not particularly awed by U.S. conventional forces. One global survey by U.S. News and World Report even ranked Russia as the world's strongest military with the United States in second place.[6]

Even official U.S. national security documents list Russia and the PRC as "peers" or "near peers," indicating that the United States itself did not believe a decisive U.S. victory over Russian or PRC conventional forces was guaranteed.

The second, and even more serious problem with the assumption of successful conventional deterrence is that even if Russia and the PRC believe their forces are inferior, U.S. conventional forces are irrelevant if they will not enter the fight. When Putin escalated to large-scale conventional warfare in Ukraine, he knew he would not have to fight U.S. forces.[7] The United States and NATO were probably correct in not extending NATO Article 5-type commitments to a non-NATO country like Ukraine since doing so would lower the value of NATO membership.[8] However, escalation to conventional warfare became much less risky for Russia once U.S. forces were off the table.

As they say, the first step in solving a problem is recognizing that we have one. Our experience in IW against terrorists and insurgents left us ill-prepared to discourage escalation since these adversaries had very limited ability to escalate. Russia and the PRC, on the other hand, can escalate to conventional and even nuclear warfare at any time. They pursue their goals through IW because it is a lower-cost option, not because it is their only option. U.S. conventional and nuclear forces, and the certainty of retaliation, make direct conventional or nuclear attack on the United States extremely costly and hence unlikely. However, there will be times and places, like Ukraine in 2022, when U.S. nuclear and conventional forces are "not on the table," to use President Joseph Biden's phrase.[9] How can we discourage escalation to conventional warfare in such cases?

The key to preventing escalations like Russia's escalation in Ukraine will be to stop limiting our thinking to traditional deterrence through superior force. After all, the leaders of the United States and NATO deliberately and explicitly took their forces off the table, making them irrelevant to Putin's calculations. The key to preventing escalation in such cases will not be merely to increase the costs of escalation to conventional warfare but to increase the positive incentives for the adversary to continue his losing IW strategy using a "hustler" approach.

Let's consider an analogy. Imagine a large, violent, short-tempered young man who is an enthusiastic but mediocre pool player. Let's further imagine that on two different nights, two different pool players walk into the bar and play pool against him. On the first night, the player who walks in is a world champion pool player. They will play exactly one game because the world champion will quickly and easily trounce and humiliate our large, violent, short-tempered young man. How will he respond to being humiliated and losing access to the pool table for the rest of the night? He might head home, watch some TV, and go to bed early. However, it is more likely that he will escalate his competition with the pool world champion by using his pool cue as a club, since it was not doing him much good as a pool cue. The best-case scenario for the world champion is that he collects whatever the bet was on the first game, but more likely he will never get that money, ruin a shirt in the scuffle, and he might even break his expensive pool cue or get seriously hurt.

Now let's consider a different person walking into the same bar and challenging that same large, angry young man to a game of pool. This new guy is a good pool player, but he is not a world champion; he is a hustler. Our hustler could quickly and easily defeat the large, angry young man, but he does not do that. Instead, he keeps the game close, and there are follow-on games, and those are close as well. Sometimes the large, angry young man wins. Always, he thinks he could have won, and that he might win the next game, so he keeps playing pool against the hustler. They play all night, and when the bar closes, the hustler has collected a lot more money from the large, angry young man than the world champion did, and the young man did not escalate the competition to violence.

What is the difference between the world champion and the hustler? They are both good pool players.

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In fact, the world champion is better at pool than the hustler is. So how did the hustler make more money than the world champion while also avoiding the risk of escalation and injury? The world champion had the mistaken idea that his goal should be a rapid, decisive victory and forgot the risk of escalation. The hustler, on the other hand, knew the goal was to keep the young man playing pool all night and to slowly take all his

The people of Taiwan who are horrified by the prospect of being ruled by the CCP could attempt a rapid and decisive victory in IW/political warfare by pressing for a binding referendum in which the people of Taiwan would vote on whether they wanted to permanently reject the possibility of being governed by the CCP, outlaw the presence of the CCP on the islands, and enshrine these items in the constitution of

> "The world champion had the mistaken idea that his goal should be a rapid, decisive victory and forgot the risk of escalation. The hustler, on the other hand, knew the goal was to keep the young man playing pool all night and to slowly take all his money while making escalation seem silly and unnecessary."

money while making escalation seem silly and unnecessary. The hustler did this by keeping the games close and letting his opponent win sometimes, so the young man would retain the hope of winning at pool and stay focused on that.

Applying the Hustler Model in Real-World IW

Taiwan is the obvious case for trying out this hustler model in the real world. For decades, opinion polling has indicated fewer than 10 percent of people in Taiwan support immediate or eventual unification with the PRC and rule by the Chinese Communist Party (CCP).[10] The more than 90 percent of Taiwanese who do not want to be ruled by the CCP are in a long-term IW struggle against the CCP and its determination to someday rule over them. The Taiwanese are supported in this struggle, to some extent, by the United States and other freedom-loving nations who hope the people of Taiwan can forever enjoy democracy and self-determination outside the control of the CCP. Some might claim this support constitutes IW against the CCP, or even the PRC. However, since IW does not have to include explicit announcements comparable to a declaration of war, there is room for disagreement over whether the United States is conducting IW against the CCP or merely trying to prevent the success of the CCP's IW against Taiwan.

a new independent nation of Taiwan. But while such an action might represent victory for the anti-CCP faction in IW against the CCP, it might also cause the CCP and PRC to escalate the conflict to a conventional invasion or even a nuclear strike, neither of which would be good for Taiwan. Instead of seeking rapid and decisive victory in IW, and increasing the risk of escalation, Taiwan's anti-CCP majority might be better served by a "hustler" strategy of keeping hope alive in the CCP that peaceful unification is possible in the future. This would mean that there must always be a pro-unification party in Taiwanese politics with nontrivial representation in Taiwan's legislature (the Legislative Yuan). The pro-unification party must retain some hope of increasing its influence or forming a coalition with other parties that might bring Taiwan under CCP rule. It would also mean enough economic interaction that the CCP would believe it had nonmilitary options for pressuring Taiwan, if necessary.

Can the Taiwanese deceive the CCP into continuing its losing IW strategy? The key to successful deception is to find something false the target person already believes and reinforce that belief. In our pool-playing example, the large, angry young man wants to believe he can win at pool, and by making the games close, the hustler keeps him deceived and keeps him playing pool rather than escalating to brawling. Likewise, the key to deceiving the Nazis

Ukrainian soldiers assigned to 1st Battalion, 80th Airmobile Brigade, conduct an enter-and-clear-trenches exercise 2 November 2016 at the International Peacekeeping and Security Center in western Ukraine. Soldiers assigned to 6th Squadron, 8th Cavalry Regiment, 2nd Infantry Brigade Combat Team, 3rd Infantry Division, as part of the Joint Multinational Training Group-Ukraine, were responsible for training Ukrainian Ground Forces to increase their capacity for self-defense. (Photo by Staff Sgt. Elizabeth Tarr, U.S. Army)

about the location of the D-Day landing was to provide enough evidence to confirm their pre-existing expectation that the attack would come in the Pas-de-Calais, where the English Channel is narrowest.[11] This evidence enabled the Nazis to discount the counterevidence and retain their false belief for weeks even after the D-Day landings.[12] In the case of Taiwan, the CCP very much wants to believe that all ethnic Chinese, including those in Taiwan, want to be reunited with the Motherland and ruled from Beijing, that is, by the CCP. In the eyes of the CCP, China's decades of unprecedented economic and technological success make joining the PRC the obvious and logical choice for anyone lucky enough to have the opportunity to do so. The Taiwanese would be well advised to regularly emphasize their cultural connection to the mainland and continuously praise the Chinese Communists for their successes, their efficiency, and their ability to get things done, while remaining politely silent, except among themselves, about China's corruption scandals, oppression, abuse of Hong Kong, party purges, etc.

This approach may sound like a risky strategy for Taiwan. After all, the CCP rightly considers itself the world's expert on united front strategies, that is, using cooperation with noncommunists to advance the goals of the CCP and expand the influence and control of the CCP.[13] Allowing a pro-unification political party to have a nontrivial and legitimate role in Taiwanese politics would effectively bring agents of CCP influence, and even traitors, into position of real, if limited, power and authority. This weakens Taiwan, just as deliberately missing shots puts the hustler in a weaker position for winning pool games. But it decreases the risk of escalation and keeps the CCP playing IW, just as deliberately missing shots keeps the large, angry young man playing pool. The alternatives, such as outlawing pro-unification parties, barring CCP members from

visiting Taiwan, arresting and deporting all CCP members currently on the islands, blocking all PRC media from reaching Taiwan, and all the other measures that would indicate that CCP IW against Taiwan is doomed to fail, would dramatically increase the risk of escalation to conventional invasion or nuclear annihilation.

For generations, the policies of Taiwan and its friends have successfully sustained both Taiwan's independence and the CCP's hope of future peaceful reunification, while not causing the CCP to escalate to conventional or nuclear warfare. This might be due to luck, CCP caution due to the risks of escalation, CCP optimism about the likelihood of peaceful reunification, CCP distraction by other priorities, a successful hustler strategy by Taiwan and its friends, some combination of these factors, or other factors. However, the hustler strategy cannot be discounted as a contributing factor, and hence, the hustler strategy should be part of U.S. thinking about IW now and in the future.

Broader Applicability of the Hustler Model

The hustler model is not just applicable to IW but should be considered in conventional warfare as well. Specifically, it is important to note that since 2022, whenever Russia faces an increased risk of defeat in conventional warfare in Ukraine, the Russians threaten to escalate to nuclear warfare. Since the level of outside support to Ukraine is a key factor in whether or not Russia will be defeated, Russian nuclear threats increase when the battlefield situation gets worse or outside support increases, and threats decrease when the battlefield situation improves and outside support decreases.[14] These threats have been effective in discouraging or deterring the United States and other supporters of Ukraine from providing more effective assistance to Ukraine more rapidly and, arguably, have helped prevent Russia's defeat in conventional warfare.

We should not think the Russian war in Ukraine is a unique case. Instead, we should recall that, during the Korean War, when the United States was the nuclear power facing the prospect of defeat in conventional warfare, it was the United States that started thinking about escalation to nuclear warfare.[15] There were many calls in the United States for escalation to nuclear warfare during the Korean War, just as there are calls in Russia for escalation to nuclear warfare today.

Unfortunately, U.S. military thinkers, planners, and doctrine writers rarely took the lessons of Korea to heart and were left mentally unprepared for Russian nuclear threats in Ukraine. During the Cold War, the United States focused on avoiding conventional military defeat during a Warsaw Pact invasion of West Germany. The prospect of a rapid and decisive U.S. victory over Warsaw Pact forces in conventional warfare was too remote to consider. Instead, questions about escalation to nuclear warfare focused on when, where, and how U.S. conventional defeat might become imminent and how escalation to tactical nuclear weapons could slow the advance of Warsaw Pact forces.[16] There was also a great deal of thought given to how escalation might be managed once nuclear weapons were used on the battlefield.

After the Cold War, U.S. thinking about conventional warfare focused on achieving rapid and decisive victory against adversaries—such as Serbia, the Taliban, Iraq, and Libya—who could not escalate to nuclear warfare. However, as we look at the potential for conventional warfare against nuclear-armed foes, like Russia and China, we need to revisit the question of when and why a nuclear-armed nation might escalate from conventional to nuclear warfare and how that should influence our conventional doctrine.

A full discussion of the issue is outside the scope of this essay, but there is every reason to believe that escalation to nuclear warfare is closely related to whether a nuclear nation's leadership believes they might lose in conventional warfare. The more likely and more costly conventional defeat becomes, the more likely the nation is to consider escalation to nuclear warfare rather than accept defeat. This makes sense logically and coincides with the observed results in the current Ukraine war and in the Korean War. We have seen Russian threats of nuclear warfare against Ukraine wax and wane inversely with Russian prospects for success. The same pattern was visible in Korea under the Truman administration.

From this evidence, it certainly appears there is a need for a hustler strategy in U.S. conventional warfare just as there is in U.S. IW. How do we know when rapid, decisive victory in conventional warfare will lead the adversary to escalate to nuclear warfare, and hence when we must avoid rapid, decisive victory in conventional warfare? In other words, when is it counterproductive to fight like the conventional warfare world champion and when must we be conventional warfare hustlers who keep the

enemy in conventional warfare by keeping their hope of winning alive? Just as importantly, how do we convince a nuclear-armed adversary to accept disappointment or even defeat in conventional warfare rather than escalate to nuclear warfare? In Korea, both sides settled for a stalemate. In Vietnam, the United States settled for a "decent interval" to withdraw its forces before its ally was completely and permanently defeated. In Afghanistan, the Soviets first and later the Americans withdrew their forces and allowed their allies to be defeated. In all these cases it was not rapid and decisive enemy success that convinced the nuclear power to accept disappointment or even defeat rather than escalating to nuclear warfare. The nuclear power was also not deterred from escalating to nuclear warfare by the enemy's nuclear weapons since neither the North Koreans (in the 1950s) nor the Vietnamese, nor the Afghans had nuclear weapons with which they could threaten the United States or the USSR. This suggests that an exhaustion strategy is required to defeat a nuclear power without leading to nuclear escalation. This conclusion requires more research, but it is beyond dispute that the hustler strategy is tailor-made to achieve adversary exhaustion without escalation, and the United States will need such strategies in the new era of strategic competition.

Conclusion

Putin's full-scale invasion of Ukraine was a shock in many ways. One of the shocks we have not fully recognized is that the invasion was Putin's response to being defeated in IW by Ukraine and its partners. Incorporating this lesson into our understanding of IW is a critical next step in pushing our vision of IW beyond our experience in counterterrorism and counterinsurgency and into strategic competition against nuclear-armed peer and near-peer states. This article proposed adding a hustler approach to our current and preferred world champion approach to IW and even extended the hustler approach to conventional warfare. The world champion approach seeks rapid and decisive victory in one form of warfare without considering the adversary's ability to escalate to a more lethal and expensive form of warfare. The hustler approach, on the other hand, seeks to keep the adversary in the game longer, without tempting him to escalate the conflict, by keeping alive his hope of winning, or at least improving his situation, without escalation. The hustler approach does not replace the world champion approach in all cases but instead puts another tool in our conceptual toolbox for strategic competition. ■

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Maj. Richard James "Dick" Meadows

Maj. Richard James "Dick" Meadows was a pivotal figure in the creation of modern-day Special Forces.[1] Enlisting in 1946, at age fifteen, Meadows served with the 187th Airborne Regimental Combat Team during the Korean War. In 1953, then Staff Sgt. Meadows joined the early Special Forces' 77th and later 10th Special Forces Groups (SFG).[2]

In the early 1960s, as an American exchange officer, he served with the British 22nd Special Air Service (SAS) in the United Kingdom and Oman. Afterwards, Sgt. 1st Class Meadows participated in Operation White Star in Laos as part of 7th SFG and subsequently assisted in the activation of the 8th SFG in Panama that was intended to counter aggressive communist insurgent activities in Latin America.[3] He was assigned to in the Military Assistance Command-Vietnam Studies and Observation Group in 1965, an innocuous cover name for an organization conducting clandestine missions throughout Southeast Asia. In the estimation of his superiors, Meadows's contributions to several successful high-priority missions conducted by that group rated a battlefield commission directly to the rank of captain in 1967.[4]

After Meadows's second Vietnam tour and service in the Ranger Department at Fort Benning (now Fort Moore), he served as the assault group commander (the team was code named Blueboy) under Col. Arthur D. "Bull Simons" for the Son Tay prison camp raid in 1970.[5] The Son Tay prison raid operation's objective was to recover American POWs held in North Vietnam near its capital of Hanoi.

Meadows retired in June 1977 but continued to serve the military as a civilian who was crucial to the founding of 1st Special Forces Operational

Maj. Richard J. "Dick" Meadows (Photo courtesy of the U.S. Army)

Detachment-Delta—later known popularly as Delta Force—a unit specializing in counterterrorism.[6] In 1980, as a civilian, Meadows served covertly in Tehran, Iran, during Operation Eagle Claw, which was better known as the attempted Iran hostage rescue mission.

Meadows died on 29 July 1995 and was interred in the Barrancas National Cemetery, Pensacola Naval Air Station, Florida. His awards and honors include the Distinguished Service Cross, Silver Star, Bronze Star for Valor, and the Presidential Citizens Medal, among many others. He was inducted into the Ranger Hall of Fame in 1996 and also received the U.S. Special Operations Command "Bull" Simons Award. In 1997, a statue, dedicated in Meadows's memory and commissioned by Ross Perot, was placed on the U.S. Army Special Operations Command Memorial Field on Fort Bragg (now Fort Liberty).[7] ∎

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